DEPARTMENT OF HUMAN SETTLEMENTS

NO. 2941 20 January 2023

I, Mmamoloko T. Kubayi, Minister of Human Settlements, acting in terms of sections 2, 3(1), 3(2), 3(3), 3(4)(a), and 4(2)(b)(ii) of the Housing Act of 1997 as amended, hereby gives notice of the publication of the norms and standards for rental accommodation as public information. The norms and standards cover all forms of rental including public sector rentals such as hostel development, social housing and, private sector rentals such as small-scale rental and backyard rental.

The norms and standards were extensively consulted, considered, and, approved by the Minister after consultation with Members of the Executive Council responsible for human settlements, the South African Local Government Association (SALGA), and, the Council of the Social Housing Regulatory Authority (SHRA) in term of section 2 and 3 of the Housing Act and is to be incorporated into the Housing and Human Settlements Code.

The norms and standards are available in a summary consolidated form and also as separate volumes. All social housing institutions and other delivery agents are expected to ensure compliance there off.

Ms. M.T. KUBAYI (MP)

Date: 03/11/2002

Enquiries:

Ms. Sindisiwe Ngxongo on email: Sindisiwe.Ngxongo@dhs.gov.za

The Acting Director-General

Department of Human Settlements

Private Bag X644

Pretoria

0001



CONSOLIDATED NORMS AND STANDARDS FOR RENTAL HOUSING September 2022

Table of Contents

1.	Introduction	6
PAF	RT A: OVERALL CONTEXT	8
2.	Overview	8
2.1.	Legislative and policy context	8
2.2.	Size of the rental sector	14
2.3.	Key factors impacting on demand	18
2.4.	Future demand trends	20
2.5.	Funding overview	21
2.6.	Overarching rental sector framework	23
3.	Terminology and Typology	27
3.1.	Guidelines, norms and standards	27
3.2.	The rental market	28
3.2.3	1. Rental Sub-Markets	28
3.2.2	2. Rental accommodation typologies	29
3.2.3	3. Suppliers of rental accommodation	30
3.3.	Rental sub-sectors for purposes of norms and standards	31
3.3.3	1. Public Sector Rental Housing	31
3.3.2	2. Social Housing	33
3.3.3	Community Residential Units (CRU)	34
3.3.4	4. Private Sector Rental Housing	35
3.3.5	5. Backyard Rental Housing	36
4.	Roles and responsibilities	39
5.	Commencement Date	43
PAF	RT B: DETAILED NORMS AND STANDARDS	44
6.	Overall approach	44

7. N	Norms and Standards: Public Sector Rental Housing	45
7.1.	Structure of the Norms and Standards	45
7.2.	Norms and Standards	46
7.2.1.	Level 1: The property and utilities	46
7.2.2.	Level 2: The building and amenities	55
7.2.3.	Level 3: Lease Agreement	73
7.2.4.	Level 4: Environmental Sustainability	75
8. N	Norms and Standards: Social Housing	78
8.1.	Approach to specifications within this document	78
8.2.	Use of Model Preambles for Trades:	79
8.3.	Considerations for Operations and Maintenance	79
8.4.	Practice Notes	80
8.5.	The key principles for quality social housing	83
8.6.	Differentiation between typologies (Greenfield, brownfield, etc)	84
8.6.1.	Greenfield development	84
8.6.2.	Brownfields development	84
8.6.3.	Refurbishment, upgrade, conversion	85
8.6.4.	Newbuild / greenfield mid to high-rise or towers development:	85
8.7.	Approach to document sections	86
8.8.	Conclusion and Matrix of Typologies	87
8.9.	Norms and Standards	92
8.9.1.	Level 1: External environment	92
8.9.2.	Level 2: The Building	105
8.9.3.	Level 3: The Building: Common Areas	118
8.9.4.	Level 4: Unit Design	138
8.10.	Norms and Standards for Communal Housing	166
9. N	Norms and standards: Community Residential Units (CRU)	170
9.1.	Approach to specifications within this document	170

9.2.	Use of Model Preambles for Trades:	. 171
9.3.	Considerations for Operations and Maintenance	. 172
9.4.	The key principles for quality CRU housing	. 173
9.5.	Differentiation between typologies (Greenfield, brownfield, etc)	. 174
9.5.1.	Greenfield development	. 175
9.5.2.	Brownfields development	. 175
9.5.3.	Refurbishment, upgrade, conversion	. 175
9.5.4.	Newbuild / greenfield mid to high-rise or towers development	. 176
9.6.	Interventions that may in certain cases apply prior to re-development of existing properties	. 177
9.6.1.	Stabilisation	. 177
9.6.2.	Demolition and rehabilitation	. 178
9.7.	Approach to document sections	. 179
9.8.	Conclusion and Matrix of Typologies	. 180
9.9.	Norms and Standards	. 185
9.9.1.	Level 1: External environment	. 185
9.9.2.	Level 2: The Building	. 199
9.9.3.	Level 3: The Building: Common Areas	. 212
9.9.4.	Level 4: Unit Design	. 231
9.10.	Norms & Standards for Communal Housing	. 259
9.11.	Development Options and Indicative Typologies	. 263
9.11.1.	Development Options	. 263
9.11.2.	Design guidelines for indicative housing typologies	. 264
9.11.3.	Design guidelines: Example floor plans of unit typologies	. 265
10. N	orms and Standards: Private Sector Rental Housing	272
10.1.	Overall approach	. 272
10.2.	Structure of the Norms and Standards	. 273
10.3.	Norms and Standards	. 274
10.3.1.	Level 1: The property and utilities	. 274
10.3.2.	Level 2: The building and amenities	. 282

10.3.3.	Level 3: Lease Agreement	300
10.3.4.	Level 4: Environmental Sustainability	302
11. N	orms and Standards: Backyard Rentals	.306
11.1.	Overall Approach	306
11.2.	Structure of the norms and standards	308
11.3.	Norms and Standards	310
11.3.1.	Level 1: The property and utilities	310
11.3.2.	Level 2: The building and amenities	319
11.3.3.	Level 3: The Building Environment: Occupational Health & Safety	332
11.3.4.	Level 4: Tenant – Landlord Obligations: Maintenance & Lease Agreement	335
11.4. develop	Appendix 1: SANS 10400 – 0: Difference in performance of Category 1 developments and other oments.	338
11.5.	Appendix 2: Section 4.57 of SANS 10400 Part T	339
11.6.	Appendix 3: Lease Agreement	341
Annex	ure A: Policy and legislation	.350
NOTES	S AND REFERENCES	.365

1. Introduction

Good design matters. South Africa's history of spatial exclusion and inequality remains stubbornly entrenched in the urban fabric of South Africa's cities. Spatial transformation is intrinsically linked to place making and the provision of quality housing environments that are healthy, safe and secure.

Well designed and well-located housing enhances the social and economic value of housing. Therefore, it is important that housing is not only well constructed, meeting a set of building standards and material specifications, but should also meet a set of qualitative standards that address issues such as space standards, typologies and environmental issues. Challenges that are occurring due to climate change also require consideration in terms of ensuring that buildings can cope with rapidly changing temperatures and that the use of scarce resources such as water is optimised.

The National Department of Human Settlements and the Social Housing Regulatory Authority have developed national norms and standards for key categories of rental housing accommodation in the South African rental sector.

The requirements to develop norms and standards is specified in the Rental Housing Amendment Act, 35 of 2014, which amends the Rental Housing Act, 50 of 1999. The Rental Housing Act applies to all rental housing and thus affects both privately owned and state-owned rental housing.

The stated objectives of the Rental Housing Amendment Act, 2014 are, in summary, to:

- promote the provision of rental housing;
- ensure a functioning rental housing market;
- facilitate sound relations between tenants and landlords; and
- provide legal mechanisms to protect the rights of tenants and landlords respectively.

The Amendment Act also empowers the Minister of Human Settlements to institute regulations and specifically obliges the Minister to issue regulations regarding norms and standards of rental housing that are aligned with the policy framework. These regulations must *inter alia* address safety, health and hygiene; basic living conditions including access to basic services; size; overcrowding; and in respect to the poor and vulnerable, affordability.

Norms and standards are in place for some of the different categories of rental stock making up the rental sector, but not all sectors. The purpose of this report is to review existing policy and documentation and to formulate revised norms and standards that appropriately provides for the different categories of rental and ensures logical alignment within the sector.

Accordingly, this document sets out norms and standards for various categories of rental housing. The norms and standards are not intended to be prescriptive but rather to provide a framework of guidelines and principles that give effect to the Rental Housing Amendment Act No. 35 of 2014 while taking cognisance that there is a range of other existing legislation, regulations, town planning ordinances and municipal by-laws that would also directly or indirectly apply to dwellings and

buildings in which people live, whether owned or leased.

This report is divided into two parts:.

- Part A provides the overall context, including an overview of the legislative and policy context and the rental housing sector, terminology and typology and roles and responsibilities.
- Part B provides detailed norms and standards for: Public Sector Rental Housing; Social Housing; Community Residential Units; Private Sector Rental Housing; and Backyard Rentals

PART A: OVERALL CONTEXT

2. Overview

2.1. Legislative and policy context

Rental tenure has always been part of the South African housing market. Rental in the form of low, medium and high-rise apartment buildings, housing and townhouses and flats and rooms on the properties of formal residential houses has been consistently available for middle to high income households.

During apartheid rental tenure for low income households was the predominant form by which government provided housing for the poor.¹ From 1950 to 1970, the purpose of the **public rental housing programme** was to fill the gap between supply and demand for formal housing. The typical products of these programmes were tenement blocks of two to three flats or individual single-storey dwellings of a relatively high standard. Much of this stock was transferred to the occupants' post-1994 as part of the Discount Benefit Housing Scheme, although a limited number remains in the ownership of provincial and municipal governments.²

Since 1994, while the main focus of South Africa's housing policy has been on ownership tenure, rental has been part of the policy from its commencement. The Constitution of South Africa (1996) and the Housing Act (1997) are the framing documents of South Africa's housing policy (see Annexure A for details). These documents establish South African's right to have access to adequate housing and do not prioritise one form of tenure above another, but indicate that a wide range of housing tenure options should be provided.

The first National Housing Code (2001) introduced the first rental subsidy (the **Institutional Subsidy**) offered after the democratic elections of 1994 for low income households which provided funding to institutions (both public and non-governmental) to provide affordable rental or instalment sale housing units (for details on the National Housing Code see Annexure A).

Prior to 1999 common law (case law passed down by judges) was used to govern the relationship between landlords and tenants. However, although the common law is still used in South Africa, the Rental Housing Act 50 of 1999 was introduced as the main piece of legislation to regulate the relationship between landlords and tenants for all rental types and income categories.³ The Rental Housing Act defined the responsibility of Government in respect of rental housing property and created mechanisms to **promote the provision of rental housing by the private sector**. The Act created mechanisms to ensure the proper function of the rental housing market through making provisions for the establishment of Rental Housing Tribunals and laying down general principles governing relations between tenants and landlords and the basis by which conflict resolution in the rental housing sector should occur (for more details see Annexure A).

In 2004, the Comprehensive Plan for the Development of Sustainable Human Settlements introduced **social housing** as a concept in South Africa (for details see Annexure A). This policy document was significant in that it shifted government's emphasis from the provision of housing to

sustainable human settlements focusing on creating integrated neighbourhoods, densification and sustainable cities. Rental tenure (and particularly social housing) was seen by policymakers as enabling choice, mobility and an alternative for poor households who did not qualify for an ownership subsidy. Social Housing is defined as a rental for low to medium income households at a level of scale and built form which requires institutionalised management and which is provided by Social Housing Institutions (SHI's) or other delivery agents in approved projects in designated Restructuring Zones, with the benefit of public funding.⁴

The focus on social housing was reinforced with the introduction of the Social Housing Policy (2005) and the Social Housing Act (2008). Both of these documents aimed to contribute to the national priority of restructuring South African society and to improve and contribute to the overall functioning of the housing sector (for details see Annexure A). The Social Housing Act established the Social Housing Regulatory Authority (SHRA) with the purpose of regulating SHIs and overseeing the disbursement of the Restructuring Grant.

The Housing Code 2009 further refined the type of rental to be provided by government including:

- The Institutional Subsidy was refined to support the implementation of social housing, to
 provide a range of creative and affordable special needs and niche market options to
 people with very low incomes (R1 500 to R3500) and to promote densification (transitional
 and communal housing).
- Community Residential Units (CRU) were introduced to provide affordable good quality rental accommodation to very low income households (income range of R1,500 to R3,500), and support the integration of public housing into the broader housing market and environment. The programme includes public hostels, public/privately owned hostels and public stock.

Following a comprehensive review of the Social Housing and CRU Programmes commissioned by the National Department of Human Settlements (NDHS) in 2015, certain recommendations were accepted by the Department. The main recommendations relating to CRU were included in a submission to Human Settlements MinMEC and approved by said MinMEC on 9 June 2017.

The main recommendations approved in the June 2017 MinMEC resolution are that the CRU new built option be transferred to the Social Housing Programme, and "...that the CRU Programme will only entail the redevelopment of public sector hostels and the upgrading of existing higher density state rental housing". Following the 2015 CRU Programme Review, most of the recommendations were written into a revision of PART 3: Community Residential Units of the national Housing Code. This revision of the Code has not yet been officially published.

From 1 April 2017, Cabinet approved that there should be a single social housing capital funding stream, located at the SHRA to be called the **Consolidated Capital Grant (CCG)**. The Institutional Subsidy and CRU were shifted from the provincial departments responsible for human settlements to the SHRA.

The role of the private sector has been recognized in housing policy since its inception. However

other than regulation through the Rental Housing Act of 1999 which has been amended twice, once in 2007 and in 2014, support from government has been limited. Outcome 8 (2010) set a target for **formal private sector rental** but no policy was put in place. Likewise, in the last five years there has also been increasing recognition of the **informal rental market (backyard rental)**. However attempts to put in place a policy to enable this typology were not successful. Despite this the private sector has thrived providing a range of rental types by a range of different actors.

With respect to the future, there is a growing realisation that South Africa's housing programme in its current form cannot be sustained. Government cannot financially afford a commitment to the eradication of informal settlements and the provision of fully subsidised, stand-alone houses for low-income households. Meeting this demand alone will require the government to build at least 1,8 million houses at a current cost of R 343 billion.⁵

Accordingly, Government is shifting its policy emphasis towards informal settlement upgrading, site and service schemes, affordable housing for ownership, social housing and affordable rental including **shared one room/shared ablutions, smaller units etc**. A greater role by the private sector, individuals and households is envisaged.

This shift is policy is reinforced in the National Development Plan (NDP, 2012) and the Integrated Urban Development Framework (IUDF) (2016). The IUDF in particular articulates the importance of rental housing in South Africa (see Annexure A). These documents indicate that a range of demographic and economic factors are driving rental housing demand, including growing urban migration particularly into metropolitan cities, insufficient delivery of housing on an ownership basis and difficulties in accessing mortgage loans due to high levels of indebtedness.

The key legislative and policy documents that frame governments approach to the rental sector are listed below, but are described in greater detail in **Annexure A**:⁶

- The Constitution of South Africa, 1996 [Act No. 108 of 1996] [the Constitution]
- The Housing Act, 1997 [Act No. 107 of 1997 as amended in 2001] [the Housing Act]
- The Residential Landlord and Tenant Act, 1997 [Act No. 3 of 1997]
- The Rental Housing Act [Act No 50 of 1999]
- The Comprehensive Plan 'Breaking New Ground in Housing Delivery', National Department of

Housing, 2004 [Comprehensive Housing Plan]

- The Social Housing Policy, 2005
- Social Housing Programme Guidelines, November 2006
- The Social Housing Act [Act No. 16 of 2008]

- The National Housing Code, 2009
- · Outcome 8, Sustainable Human Settlements and an improved quality of household life, 2010
- The National Development Plan, 2030 (2012)
- The Medium-Term Strategic Framework (2014 2019)
- Integrated Urban Development Framework (IUDF), Department of Co-Operative Governance (DECOG), 2016
- Spatial Planning and Land Use Management Act (SPLUMA) [Act 16 of 2013]

The Rental Housing Act in Chapter 2 affords the Minister of Human Settlements the right to introduce a rental housing subsidy programme or other assistance measures to stimulate the supply of 'rental housing property' for low income earners. The definition of 'rental housing property' is given as including one or more dwellings and the definition of 'dwelling' is given as including any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated garage space which is leased as part of the lease. It does not give a definition for a 'low income earner' although it is given that these are to be covered in a National Policy Framework and where the Minister of Human Settlements may define the criteria for the poor or low income earners and groups.

The more recent National Housing Code (2009), the Neighbourhood Planning and Design Guide (2019) (the revised version of the Guidelines for Human Settlement Planning and Design known as the 'Red Book') and the National Home Builders Registration Council (NHBRC) Home Building Manual do, to varying degrees of detail, contain guidelines or standards in respect of human settlements and housing in general.

The revised Red Book's stated purpose is to "provide practical information related to the planning and design of the range of services and infrastructure typically provided as part of a neighbourhood development project. The application of the guidelines should ultimately result in the delivery of infrastructure and services that are effective and efficient and that contribute to the creation of sustainable human settlements." Generally these guidelines are not intended to be prescriptive, or to be regarded as suggesting minimum standards or regulations.

Figure 1, taken from the Neighbourhood Planning and Design Guide (the Red Book), illustrates the relationship between the broader policy framework and specific instruments to achieve the outcomes of the framework.

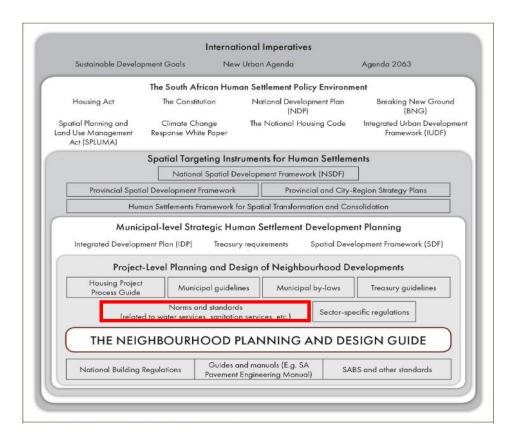


Figure 1: Relationship between broader policy framework and specific instruments.

Source: www.redbook.gov.za

In all cases, the National Housing Code, Red Book and NHBRC Home Building Manual make some reference to the National Building Regulations and Building Standards (NBR) Act, 103 of 1977. In applying the NBR and to ensure 'deemed to satisfy' compliance, there is also the supplementary Codes of Practice, the National Building Regulations, SANS 10400. They set out the requirements to ensure that buildings are designed, built and maintained in such a way that their intended use or habitation provides a healthy and safe environment to users and occupants. It is acknowledged in the Codes that there are other aspects to buildings that affect the level of comfort and/or convenience of users and/or occupants (for example, should parking be a norm as part of the leased property and if so, open or covered), but as these are very subjective in nature, specific guidelines or codes of practice have not been prescribed and even if there were, they would be very difficult to tangibly measure and thus control or enforce through legislation and regulations.

While the aspect of 'habitability' is quite comprehensively dealt with in the NBR, The Rental Housing Amendment Act has now also introduced 'habitability' to the Act and given a definition of 'habitability' as a dwelling that is safe and suitable for living in and includes:

adequate space;

- protection from the elements and other threats to health;
- physical safety of the tenant, the tenant's household and visitors; and
- a structurally sound building.

While not too dissimilar to that defined in the NBR, the NBR (SANS 10400) has provided substantially more tangible descriptive and measurable technical detail for 'habitable' so as to avoid the notion of 'habitable' falling into the realm of the subjective and unmeasurable. Linked to the above, the Rental Housing Amendment Act has further defined maintenance being the repair and upkeep as may be required to ensure that a dwelling is in a habitable condition. Further, in its section of rights and obligations of the landlord, the landlord must provide a tenant with a habitable dwelling, maintain the existing structure of the dwelling and where possible facilitate the provision of basic services to the dwelling.

Given the use of words of 'building' and 'structure' in the above, it is implied, or could reasonably be interpreted, that the physical rental accommodation is 'fixed' and of a 'permanent' nature.

For the purposes of this norms and standards document, all 'rental property', irrespective of whether single room or house or a multi-unit building, is taken as being a fixed property/site with permanent improvements/building.

Despite the common edict in most of the social housing specific instruments that projects must conform to the NBR and NHBRC technical requirements, and the norms and standards of the Housing Code (which strictly speaking apply to stand alone individual dwellings only), there appears to be no consistent set of technical/dimensional norms for social housing, with the existing regulations of the Act limiting the flexibility required to offer a greater range of options that could reduce costs, increase demand responsiveness, affordability and reach in the deep down market segment.

There is currently no explicit legislation or policy in place relating to Backyard Rental as a particular sub-market of private sector rental. However, both within existing policy and legislation there is increasing recognition of Backyard Rental as a sub-market of the rental sector, the need for spatial transformation and justice and the need for relaxed norms and standards being applied to specific sub-markets such as Backyard Rental as set out below. Of specific relevance in this regard are the following legislative and policy instruments (see relevant endnotes for detail):

- A Comprehensive Plan for the Development of Sustainable Human Settlements⁷
- The Integrated Urban Development Framework (IUDF)⁸
- SANS 10400-0⁹
- Spatial Planning and Land Use Management Act (SPLUMA), Act 16 of 2013¹⁰
- Land Use Management Schemes (LUMS)11

The current document, with the objective of developing consistent and comprehensive norms and standards for the rental housing sector, is aimed at bridging the fragmentation/gap that exists and bring all norms and standards for rental housing together under one roof, as far as possible within the rules of the existing legislative and regulatory framework, while at the same time ironing out constraining inconsistencies and perceptions about what is allowed and what not.

2.2. Size of the rental sector

Figure 1 and Figure 3 below provide a comparative analysis of housing circumstance as reflected in the Census of 2001, the Community Survey of 2007, the Census of 2011 and the Community Survey of 2016. As indicated in Figure 1, the size of the formal rental sector is generally one fifth of the housing market ranging from 25% in 2001 to 21% in 2016. In the 2011 Census the size of the rental sector was higher comprising 32% of the total market. On the basis of the 2016 Census 3,6 million households occupy formal rental accommodation. The reduction of the rental sector in size in the Community Survey of 2016 is a concern but could be due to a change in the way in which tenure and house type are categorised within the survey.

The backyard rental sector has comprised 5% of the housing market consistently over the period. However, the number of households has grown with just under one million households (919,000) occupying this form of accommodation in 2016.

In total the rental sector comprises 4,47 million households (formal and backyard rental).

Figure 3 and Figure 4 show the size of the rental sector in each province and metro, as well as the percentage of households that rent formal accommodation and backyard rental in each of the provinces and metro cities as reflected in the 2016 Community Survey.

As indicated in figure 3 Gauteng has the highest percentage of rental accommodation (39%) of the total rental sector in South Africa comprising 1,76 million households. This is followed to a lesser extent by the Western Cape and Kwa Zulu Natal which have 12% respectively of the total rental sector comprising 531,000 households and 537,000 households respectively. Rental is found least in the Northern Cape (2% of the sector), Free State (5%), Mpumalanga (6%) and Limpopo (7%).

Of the total housing sector within the province, Gauteng has the highest percentage of formal rental accommodation (27%) followed by the Western Cape (22%), North West (21%), Northern Cape (20%) and Free State (20%). The provinces with the lowest percentage of formal rental are Kwa Zulu Natal (15%), Eastern Cape (17%), Mpumalanga (18%) and Limpopo (18%).

Of the total housing sector within the province, Gauteng and North West have the highest percentage of backyard rental (8% respectively). Eastern Cape (2%), Limpopo (3%), Kwa Zulu Natal (4%) and Mpumalanga (4%) have the lowest percentage of backyard rental.

As indicated in figure 4 the metro cities have 2,3 million households living in rental accommodation making up just over half (52%) of the total rental sector in South Africa. The metros that have the highest percentage of rental in terms of the total rental sector in South Africa is the City of Johannesburg (16%), Ekurhuleni (10%) and Cape Town (7%). The cities with the least rental are

Mangaung (1%), Buffalo City (2%) and Nelson Mandela Bay 2%).

Of the total housing sector within the metro, Gauteng has the highest percentage of formal rental (30%), Followed by Ekurhuleni (28%), Buffalo City (26%) and the City of Tshwane. The city with the smallest formal rental sector is eThekwini (16%).

Of the total housing sector within the metro, the City of Johannesburg has the highest percentage of backyard rental (9%) followed by Ekurhuleni (7%). Nelson Mandela Bay (2%) and Mangaung (4%) have the lowest percentage of backyard rental.

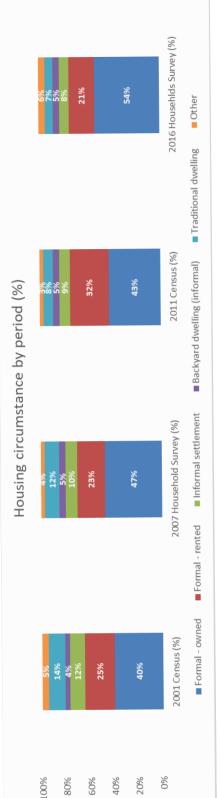


Figure 2: Comparative analysis of housing circumstance 2001 to 2016(%)

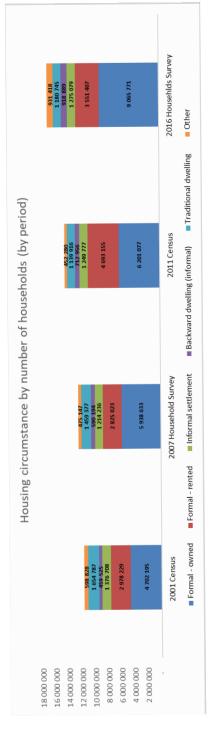
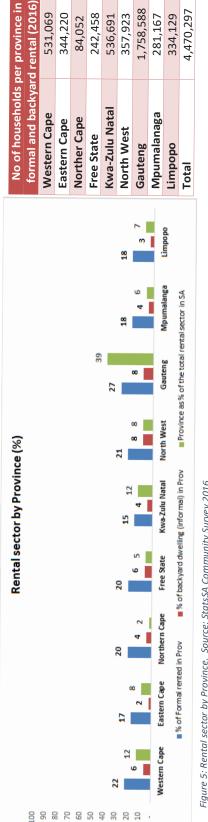


Figure 3: Comparative analysis of housing circumstance 2001 to 2016 (number of households)



1,758,588 281,167

4,470,297

334,129

84,052 242,458

531,069

344,220

536,691 357,923

9	
01	
2	
>	
8	
5	
Sı	
\geq	
ij	
3	
3	
Ž.	
0	
Ö	
Ä	
5.5	
β	
St	
9	
3	
70	
S	
oi	
ŭ	
.≒	
5	
2	
_	
q	
7	
5	
2	
S	
Ö	
ent	
e l	
4	
5.	
g	
ure	
23	

		forms forms forms	r metro in
		City of Case Territor 221 804	221 004
		City of Cape Town	331,8U4
		Buffalo City	78,842
		Mangaung	61,654
		eThekwini	239,203
		Ekurhuleni	463,302
	ş	City of Johannesburg	726,187
0	6	City of Tshwane	345,140
0	2 2	Nelson Mandela Bay	79,235
		Total	2,325,367
	Nelson Mandela Bay		

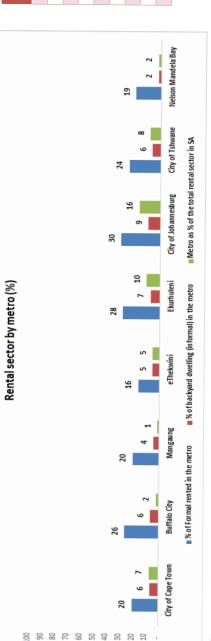


Figure 4: Rental sector by Metro. Source: StatsSA, Community Survey 2016

Using the Community Survey 2016, the figure below shows the different typologies making up the rental sector. As is evident in the figure 54% comprises a house on a separate stand, 21% informal backyard dwelling, 13% formal backyard dwellings and 9% flats.

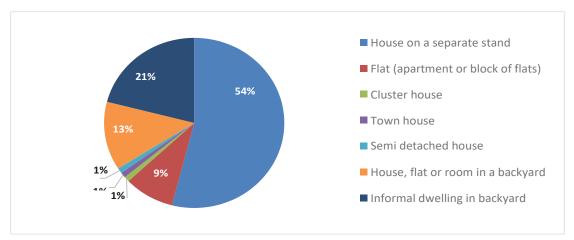


Figure 6: Rental typologies (%). Source: StatsSA Community Survey 2016

2.3. Key factors impacting on demand¹²

Rental markets are premised on a willing landlord / willing tenant relationship, centred on a monetary exchange for access to living space and services. Therefore, tenants' income levels, affordability, ability and willingness to pay are the critical parameter defining the prevalence, scale and sustainability of rental markets.

Rhizome Management Services in 2012¹³ argue that rental provides a vital accommodation safety net for many low and middle-income households, providing reasonable, affordable and appropriate accommodation that meets many households' and individuals' needs. The rental market also provides accommodation for many who are unable to obtain subsidized accommodation. When disaggregated into its component parts, even poor-quality backyard rental provides significantly better accommodation outcomes than the alternative, informal settlement. These component parts include relatively secure tenure, relatively good locations and access to urban amenities and access to basic services (water, sanitation, electricity). In addition to this, a proportion of the stock also meets basic international norms and standards, specifically in relation to smaller household structures that form a large proportion of this market.

In a multifaceted study of the South African rental housing market in 2002, Martin and Nell conclude that a presumed linear progression from tenant to owner is a fallacy and rather individuals occupy accommodation with various types of tenure at various times in their lives, depending on their own socio- economic circumstances. Consequently, a range of tenure options is important for a functioning housing market. Martin and Nell conclude that many tenants who can afford to

purchase a home simply choose not to, preferring to remain in rental.

Demand within the rental sector in addition to a lifestyle or location choice by a household is also attributed to two key factors namely a shortage of home ownership options and difficulties in accessing finance for home ownership due to affordability limitations. An example of how an increasing number of low and lower-middle households are increasingly shut out of the bonded-ownership market is illustrated by research undertaken by Eighty20 in 2015. In this regard Eighty20 found that mortgage bonds in South Africa become more and more common the further up the "income pyramid" a household is. A total of 72% of households that earn R30 000 or more per month hold a mortgage. However, for households earning between R3 500 and R10 000 the figure is only 8%.

The Tenant Profile Network in 2017 argued that in the land-scarce Western Cape upward pressure on house prices has contributed to a major affordability for many including younger aspirant first time buyers and has for many made the rental option relatively more attractive in the province. The TPN (2017) also cites FNB's Estate Agent Survey which, in late 2016/17 showed a particularly low estimate of first-time home buyer levels in the City of Cape Town.

A range of researchers over the last decade have argued that the rapidly expanding phenomenon of backyard rental is an important response to increasing demand for rental and that this form of accommodation must be considered a part of the broader rental housing market. Shapurjee and Charlton (2013:1), for example, assert that: "South Africa's backyard dwellings resonate with similar forms of self- funded and managed rental stock across the global South. As a quick, flexible and regenerative housing asset, cumulative acceptance of such rental markets is necessary—along with viewing the driving actors as astute innovators in shelter and livelihood provision."

Rhizome Management Services in 2012¹⁴ indicate that many households in South Africa do aspire to own their own accommodation and live in rental accommodation through lack of choice. However, many have legitimate reasons to prefer, and actively seek out, rental opportunities. Many people have had legitimate cause to rent some form of accommodation at some stage of their housing life cycle. Some of the primary motivations for the choice of rental accommodation are listed below.

- Rental markets can provide access to affordable, well-located accommodation, with good access to urban amenities.
- Many households prefer rental to owned accommodation as it allows greater flexibility and mobility, or because they may already own accommodation elsewhere (dual house households). Rental can be better suited to young people, small households and people with dual houses and households.
- Rental stock plays a critical role for those who cannot purchase accommodation due to affordability or supply constraints, or the inability to procure finance.
- Rental markets generate income for landlords, and can leverage the asset values of owned land or accommodation assets.

- Many households do not want to bear the costs of ownership, require smaller accommodation due to their household structure or are not eligible for subsidized housing
- Rental housing provides valuable accommodation options for people unable to access subsidized housing (young people and families, foreigners)

2.4. Future demand trends¹⁵

A 2014 study published by the Financial and Fiscal Commission (FFC) entitled *Understanding Housing Demand in South Africa* identifies important trends and shifts which are extremely relevant for the rental housing sector, its future development and management. Using a standardised questionnaire, a total of 544 households were surveyed to understand housing demand. Households were asked about housing type and tenure (what kind of house they are living in now and what kind of house they aspire to), and housing location (why they move from one area).

The FFC (2014) developed a housing demand model for the study through which they determined that demand for rental housing is highest in inner urban areas (CBD and inner/intermediate suburbs), and that rental is the most appropriate and most aspired form of housing in such locations. Highly significant for the rental housing sector was the finding that there has been a shift from freestanding houses to flats or townhouses in terms of the preferred typology.

In June 2016 the Centre for Affordable Housing Finance (CAHF) presented findings which indicated, inter alia, that since 1994 South Africa has experienced substantial diversification in the rental housing market. CAHF asserts that the broad proliferation of small-scale landlordism, the building of new rental accommodation, conversion to rental, rooms for rent in formal houses and backyard rental strongly indicates substantially dramatically increased demand for rental housing, particularly accommodation among low- to middle-income households.

CAHF (2016) asserts that the country has severe under-supply of affordable rental accommodation in relation to demand and notes that, in response, delivery of rental housing by the private sector has rapidly escalated in recent years. CAHF also underline the importance of facilitating a greatly increased supply of affordable stock as this, inter alia, is critical for a well-functioning housing market.

In terms of the trends in rental the FFC (2014) predict that South Africa will experience a steady, continuing shift from ownership to rental as the preferred form of housing tenure. Rental as a form of tenure is projected to increase between 2011 and 2030. However, it is noted that the reduction in the number of households in rental tenure in respect of the Community Survey of 2016 (see section 3.1 above) might mean that this prediction needs to be qualified.

Additionally, recent evidence from Payprop indicates the sector is under significant pressure (specifically related to municipal rates costs). Over the last two years, rental growth rates have decreased essentially by 50%, with net income levels stagnating over the 2018 financial year. With incomes growing more slowly than inflation and the continued pressure from increases in municipal rates, the sector faces strong headwinds going into the new decade.

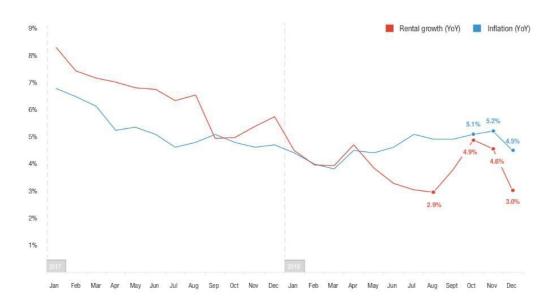


Figure 7: Weighted average national rental growth rate (YoY) vs inflation, 2017 & 2018. Source: Payprop, 2019

An important recent investment trend was identified by TUHF which found that private sector rental suppliers are increasingly focusing more and more on conversion of buildings from non-housing use to rental housing use. Opportunities such as this promote a higher return on lettable areas and maximise return on cost of acquisition. Investors are basing this strategy on locating under-valued industrial space and office buildings and taking advantage of the open-plan nature of the building to provide significant numbers of units.

2.5. Funding overview

The type of funding used in developing rental accommodation varies depending on the type of rental accommodation. Generally funding includes government subsidies, equity and debt finance. An overview of each of these types of funding is set out below.

1) Government subsidies: Currently government subsidy is only available for social housing and CRU. Subsidy funds are provided through the Consolidated Capital Grant (CCG) administered by the SHRA and which includes the former Restructuring Capital Grant, the Institutional Subsidy and CRU. In terms of the 2019 National Treasury Human Settlements Vote (38) an amount of R2.3 billion is allocated for social housing over the MTEF period, which is expected to fund the delivery of 62 489 social housing units (2017/18 to 2020/21). The funds are provided to accredited projects and SHIs and private sector landlords in specified Restructuring Zones in terms of specified procedures. The procedures include specifications as to the incomes of tenants accommodated in the buildings funded, as well as rentals charged.

In order to secure the CCG, a project must be financially viable, fully and properly structured, with matching funding (debt and / or equity) secured. All major approvals must be in place, and

the project should be ready to be implemented imminently. Financial viability is checked against a full set of key performance indicators specified by SHRA.

The project must comply with specific social housing policy, standards, restructuring and environmental objectives as determined by SHRA. Projects must be well integrated into their precinct and should be of a high design standard. The size of units, materials used, environmental standards and efficiencies must meet set benchmarks. Adequate maintenance to keep the building in good condition must be provided for in the project feasibility and there must be clear indications that the project is designed to meet the needs of tenants and to be sustainable.¹⁶

- 2) **Equity:** Equity comprises capital investment made by the landlord into the project usually comprising personal savings or company profits.
- 3) Loan finance: Loan finance is provided by a commercial lender or a development finance institution. Either a mortgage loan is raised over the full property, or a medium to long-term finance facility is granted to the landlord. For Small Private Landlords and Individual Landlords personal loans and unsecured short terms loans are key financial instruments that are used. Key financiers include the following:
 - The National Housing Finance Corporation: The NHFC was established in 1996, by the then National Department of Housing (NDoH), to offer housing finance, project facilitation and technical assistance to private and public entities ensuring availability of housing stock for the target market. The NHFC provides funding to SHI's and TUHF. The NHFC is currently being consolidated with the National Urban Reconstruction and Development Agency (NURCHA) and the Rural Housing Loan Fund (RHLF) as part of the process towards the establishment of a new Human Settlements Development Institution.
 - The Gauteng Partnership Fund: Was established with equity provided by the Gauteng
 Department of Human Settlements with the purpose of providing finance to facilitate rental
 accommodation in the province. The GPF was the custodian for, and coordinates the
 Institutional Subsidy programme on behalf of the Gauteng Provincial Government.
 Responsibility of the institutional subsidy has recently been transferred to the SHRA.
 - TUHF Pty Limited: TUHF is a leading funder and facilitator of private sector small scale
 landlords. TUHF is a specialised commercial property financier that drives inner city
 investment by providing access to finance for entrepreneurs from all walks of life, to
 purchase and subsequently convert or refurbish buildings in the inner cities of South Africa
 to deliver affordable residential units available for rental. TUHF has been in operation for
 15 years and is building a strong track record on how to build and finance rental housing in
 inner cities through emerging entrepreneurs who do not have an existing portfolio or track
 record in property development.
 - Commercial lenders: Certain commercial banks have provided and continue to provide loan
 finance to delivery agents in the rental sector both in respect of bridging and mortgage
 loans. Short term unsecured loans and personal loans are also key instruments that are

used.

• International financiers: International financiers take the form of Development Finance Institutions and have played an important role in the rental sector particularly in respect of social housing. Generally, these entities provide soft loans and grants.

The figure below shows the relationship between the different types of funding, household income and rental typologies.

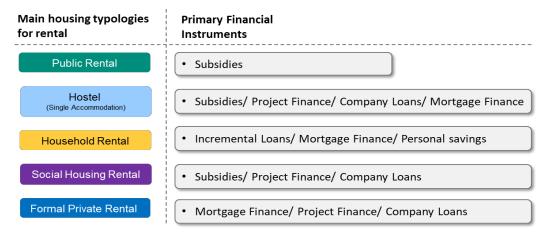


Figure 8: Funding as applied to household income and rental typologies

2.6. Overarching rental sector framework

Set out below is a framework for South Africa's rental sector outlining the different rental top structure typologies, the delivery agents and the key funding sources. The point of departure is premised primarily on the rental sub-markets defined in the 2012 *A Framework to Inform a National Rental Research Agenda* for the Department of Human Settlements, but with some modifications based on recent policy changes in the sector.

The basis for segmenting the market against top- structure typologies is to highlight that funding mechanisms and government programmes have application across a number of typologies. The above means that any development of norms and standards or guidelines would have to cater for a range of typologies. These typologies have different funding and financing requirements that helps distinguish them from each other and should be considered in the development of Norms and Standards or guidelines.

Table 1: Framework for the rental sector in South Africa

Top structure	Description	Supply Characteristics and	Demand	Relevant	Funding	What level of government regulation
Typology		Main delivery agent	Characteristics	government		should be applied
				legislation		
Backyard rental	Flats or rooms built in	Household landlords	All	Municipal By	 No national public funding 	Guidelines to support
	the backyard of an		households	laws and	support	municipal by-laws and
	existing property in		(from small	Regulations		regulations
	relatively well-		room lets in		 Private savings 	
	located areas such as		townships to		b	
	existing suburbs and		high-end		• Personal loans	
	townships at no		additions to			
	discernible direct		households)		Short term magain	
	cost to government.					
	These projects an be					
	both formal or				• MOT tgages	
Small walk-ups	Rental projects	Small private landlords,	Households	Municipal	Grants from the SHRA	 Guidelines for private sector
	characterized as one	Social Housing	with incomes	Bylaws and	(Consolidated Capital Grant)	projects (no government
	to three storeys- not	Institutions	of R7,500+	Regulations /		funding input)
	requiring lifts- and			Social Housing	Equity from SHI/private	
	with units ranging			Act, 2008	developer	Norms and Standards for
	from bachelor to					
	three-bedroom flats					projects with government
					Bridging loans / Commercial	tunding

Guidelines for private sector	projects (no government	funding input)	-	Norms and Standards for	projects with government	funding		
loans from a financial	institution		Private equity from	developers/ financial	institutions		Loans from the Trust for	Urban Housing Finance
Municipal	with incomes Bylaws and	Regulations/	Social Housing	Act, 2008			•	
Households Municipal	with incomes	of R3,500		(Private	sector) or	R5,500		(Social
Social Housing	Institutions, Private	corporate landlords						
Rental projects Social	comprising more	than four floors -	requiring lifts and	with units ranging	from bachelor to	three-bedroom flats		
Medium to High Rental	rise rental							

Top structure	Description	Supply Characteristics and	Demand	Relevant	Funding	What level of government regulation
Typology		Main delivery agent	Characteristics	government		should be annied
				legislation		
					 Short term unsecured loans 	
					Mortgages	
Student	Rental projects that	Institutions (such as Students	Students	Municipal	NAFAS funding mechanicms	Now Charles
Accommodation focus		universities)	who qualify	Bylaws and		violins and Standards 10r
	single/double rooms	corporate landlords	for funding	SC	Bridging Loans / Commorcial	finding contribution
	with shared facilities		from the	Unique	loans from a financial	
	or one bedroom		National	Institutional	institution	
	units – with an		Student Aid	Requirements/		
	emphasis on student		Financial	DHET		
	4:					

Norms and Standards for	projects that utilize CRU or	Institutional Subsidy	instrument							
•										
CRU or Institutional Subsidy	instrument as allocated via	SHRA		Private savings		Personal loans		Short term unsecured loans		
				•		•		•		
Households Municipal By	laws and	Regulations /	Community	Residential	Unit (CRU)	Subsidy as	with incomes detailed in the	of R1,500 to Housing Code,	2009, and	allocated via
Households	that meet laws	the CRU or Regulations	Institutional	subsidy	qualification	requirements	with incomes	of R1,500 to	R3,500.	
Private corporate	landlords / Municipal	delivery agents								
Rooms, hostels, Rental projects that Private	shared facilities focus on single landlords /	rooms with shared	facilities or one	bedroom units -with	an emphasis on adult	accommodation.				
Rooms, hostels,	shared facilities									

3. Terminology and Typology

3.1. Guidelines, norms and standards

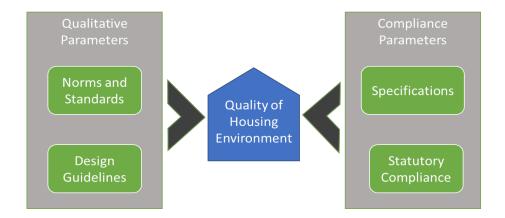
Encouraging quality delivery within the housing environment can be approached in various ways, some focused on prescriptive dictates while others aimed at providing broad parameters for guidance. Set out below are the different types of mechanisms used:

- 1. **Design guidelines**: Design guidelines identify the broad qualitative parameters required to guide the design of developments and are inter-related to norms and standards.
- 2. **Norms and standards**: Norms and standards typically refer to documents that specify and define a set of common criteria, methods and procedures that must be used to achieve a benchmark in terms of compliance.
- 3. **Technical specifications**: Specifications typically refer to a range of standards for materials to be used, quality of workmanship, methodologies and tests to be performed and so on. Technical specifications are applied to achieve compliance with core standards.
- 4. Statutory compliance: Building Regulations establish a set of minimum standards that must be achieved in the design and construction of buildings. They are supported by a series of approved documents that provide guidance about how the regulations can be satisfied in common building situations, and these in turn are supported by a wide range of reference documents. Statutory compliance is made up of:
 - Core standards: It is a given that all developments must demonstrate compliance in terms of the National Building Regulations and Building Standards Act 1997, SANS 10400, as well as a series of Normative References and Standards as issued by the SABS Standards Division such as SANS2001. SANS 10400 sets out a series of compliance routes; deemed to satisfy requirements, functional regulations and prescriptive regulations including for example:
 - Deemed to Satisfy Requirement: This is a non-mandatory requirement, the compliance with which ensures compliance with a functional regulation
 - Functional Regulation: This is a regulation that sets out in qualitative terms what is required of a building or building element or building component in respect of a particular characteristic, without specifying the method of construction, dimensions or materials to be used.
 - Prescriptive Regulation: This is a regulation which describes in some detail an
 operation to be performed, or the dimensions of a building, building element or
 building component and the materials and method of construction to be used in
 such building, building element or building component.

• **Certifications:** Certifications that utilise a rating system such as the GBCSA Green Star or EDGE Programmes create a platform for measurement of green or resource efficient buildings. The rating systems and tools create a common language and standard of measurement for green buildings, promoting integrated, whole-building design.

Design guidelines, norms and standards and specifications all work together to achieve statutory compliance at along different dimensions (see figure below). In principle, Guidelines are intended to assist decision making, whereas standards are normally considered as measurable, enforceable limits. This document focuses largely on Norms and Standards, with some elaboration on design guidelines, specifications, and statutory compliance as deemed necessary.

Figure 1: Qualitative and Compliance Parameters



3.2. The rental market

Rental accommodation in this document refers to the consensual occupation of accommodation by one party (individual, household or group, known as the lessee or tenant) that is controlled by another party (individual, group or institution, known as the lessor or landlord). The occupation of this accommodation is on an agreed basis (either verbal or written) and is generally based on the regular exchange of money, goods or services from tenant to landlord.¹⁸

3.2.1. Rental Sub-Markets

Rhizome Management Services has identified the following rental sub- markets.¹⁹ These sub-markets are not a continuum of rental options, but rather specific parts of the rental sector that operate according to different parameters, driven by different actors and motivations, for the benefit of different target groups.

 Formal Private Rental Sub- Sector: This market comprises formal accommodation stock, generally task-built primarily in inner- and near-city higher density areas and medium density secondary nodes. The types of rental units included in this sector are free standing houses, flats, townhouses and cluster houses. It is generally developed by Private Corporate Landlords, Small Private Landlords and Individual (Enterprise) Landlords.

- Social Rental Housing Sub-Sector: This includes all social housing stock managed by accredited SHIs generally in Restructuring Zones.
- Public Rental Sub-Sector: This includes all 'council housing' and un-transferred Discount Benefit
 Scheme stock under the control of Public Rental Institutions. This stock is mostly located in
 near-city and township areas.
- Hostel / Single Accommodation Sub-Sector: This comprises hostels, single rooms with communal facilities and one-bedroom accommodation. Units developed in respect of CRU fall into this category. In addition, student accommodation falls into this category. It is generally developed by Private Corporate Landlords, Small Private Landlords and Individual (Enterprise) Landlords.
- Household Rental Sub-Sector: This includes all rental stock created on private households' land.
 This occurs in existing residential areas and includes formally constructed rooms / flatlets both formal and informal.

Error! Reference source not found. shows the relationship between the rental sub-sectors detailed above to household income.

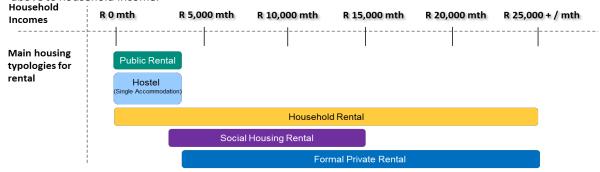


Figure 9: Rental sub-sectors as applied to household income. Source: Rebel Group analysis

3.2.2. Rental accommodation typologies

Rhizome Management Services defines two categories of rental typologies namely primary accommodation units and secondary accommodation units as set out below.²⁰

- 1) **Primary Accommodation Units**: This category includes:
 - **High-rise** accommodation units (formally constructed flats / apartments of over four storeys). These are mainly located in inner and near-city areas.

- Medium-rise accommodation units (formally constructed two, three and four storey walk-ups). These are generally located in inner-city, near-city and on the urban periphery.
- Attached permanent accommodation units (formally constructed single or double storey semi- detached houses, row houses / 'townhouses'). These are generally located in nearcity, urban periphery and suburbs.
- Freestanding permanent accommodation units (formally constructed houses, cluster houses / townhouses). These are generally located in suburbs, townships and on the urban periphery.
- 2) Secondary Accommodation Units: This category includes:
 - Subsequent Self-contained Dwelling Units. Generally located in lower-density suburbs / townships, including second dwellings, cottages, 'granny cottages', etc.
 - Backyard Rooms / shared ablutions: Located in low and medium-density low-income townships and middle-income suburbs
 - Backyard Shacks: Generally located in low-income townships

3.2.3. Suppliers of rental accommodation

Rhizome Management Services define two categories of landlords namely formal rental sector and informal rental sector. The different types of landlords within these categories is set out below.²¹

- 1) Formal Rental Sector Landlords: These landlords generally operate within legal frameworks, providing rental accommodation that complies with all required legislative provisions. These types of landlords include:
 - Private Corporate Landlords: either listed or privately owned companies that procure, hold and manage large numbers of rental units held in wholly owned buildings and rent these for the aim of making profit. Generally focused on middle to upper income groups.
 - Small Private Landlords: Single owner, or small shareholder corporate entities procuring, managing and generating a primary source of income from holding and managing rental stock for the aim of making profit. Generally focused on middle to upper income groups.
 - Individual (Enterprise) Landlords:²² Private individuals or households generating a primary or secondary source of income from purchasing, holding and renting limited numbers of rental units for profit. This could be in the backyards of a property they own or on a separate property. Generally focused on low, middle to upper income groups.

- Social Housing Institutions: Specially constituted non-profit institutions that procure, hold and manage rental stock with the aim of creating managed portfolios of affordable rental accommodation for lower to middle-income households. These institutions need to be accredited by the Social Housing Regulatory Authority in order to access public funding.
- Public Rental Institutions: Generally municipalities with inherited State Rental stock (unsold Discount Benefit Scheme stock) and are required to hold and manage such stock.
 Welfare accommodation providers and managers would also fall under this category.
- 2) **Informal Rental Sector Landlords:** These landlords generally do not comply with legislated norms and standards. These types of landlords include:
 - Individual (Homeowner) Landlords²³: Individual households that utilise their primary property asset (land or accommodation) to generate (primary or secondary) income.
 Generally this is in the form of second dwellings, backyard rooms or shacks, or rental of rooms in the house.
 - Inner-City Informal Landlords ("Slumlords") (ICIL): Landlords procuring buildings in medium and high density built-up areas, and utilising these to offer accommodation for rent that does not comply with existing legal frameworks for residential accommodation.

3.3. Rental sub-sectors for purposes of norms and standards

The norms and standards in Part B below have been divided into the following subsectors:

- (a) Public sector rental
- (b) Social housing
- (c) Community residential units (CRU)
- (d) Private sector rental
- (e) Backyard rental.

These subsectors are described in detail below, to facilitate application of the norms and standards.

3.3.1. Public Sector Rental Housing

The Rental Housing Act and its amendments do not specifically define 'Public Sector Rental Housing'. Notwithstanding, Chapter 2 of the Act does afford the Minister of Human Settlements to introduce a rental housing subsidy programme or other assistance measures to stimulate the supply of 'rental housing property' for low income earners. Although the development of new public rental stock, or the re-development of existing public rental stock is intended to happen mainly through the re-defined Community Residential Unit (CRU) Programme, it is possible however, that new affordable public sector rental stock may be developed by government through other instruments in future. For this reason these norms and standards are not limited to the maintenance, upkeep,

repair and refurbishment of existing public rental stock, but also provides principles, guidelines, norms and standards for the development of new public rental stock.

The definition of 'rental housing property' is given as including one or more dwellings and the definition of 'dwelling' is given as including any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated garage space which is leased as part of the lease. It does not give a definition for a 'low income earner' or 'the poor' although it is given that these are to be covered in a National Policy Framework and where the Minister of Human Settlements may define the criteria for the poor or low income earners and groups.

Given the above, by logical extrapolation and for the purposes of developing 'Public Sector Rental Housing' norms and standards, 'Public Sector Rental Housing' is defined as:

- Residential rental accommodation developed, owned, and managed by National, Provincial
 and Municipal Government, or any state-owned entity other than municipally owned social
 housing institutions, for rental to either employees of Government or such entities, or
 members of the public entitled to be accommodated in such rental by virtue of meeting
 various forms of eligibility criteria
- The above would include all government-owned residential stock transferred to Provinces
 and Municipalities and not yet transferred to sitting tenants or other eligible beneficiaries
 under the Discount Benefit Scheme or its successive iterations or the Department of
 Human Settlements Title Deeds Programme
- The accommodation may be, or have been subject to direct or indirect Government funding or Government assistance such as municipal indigency or other forms of social and financial support.
- Public sector rental may include a range of Unit/dwelling typologies, including for instance:
 - o a farmstead, or farm-worker housing on state-owned farms
 - a single residential house
 - o a single family unit in a single-storey or multi-storey multiple unit rental block or estate or complex
 - o a room or bed-space in a building (for instance in short stay emergency/transitional housing)
 - o a room in a residence, hostel, old age or other special needs/institutional facility
- Public sector rental accommodation is based on the principles of eligibility, economic cost recovery rental, with indigency and other forms of support for very low income and vulnerable households and individuals, and mutual agreement by and between both

tenant and landlord.

The Rental Housing Amendment Act has also introduced the notion of 'habitability' to the Act and given a definition of 'habitability' as a dwelling that is safe and suitable for living in and includes:

- adequate space;
- protection from the elements and other threats to health;
- physical safety of the tenant, the tenant's household and visitors; and
- a structurally sound building.

Linked to the above, the Rental Housing Amendment Act has further defined maintenance as being the repair and upkeep as may be required to ensure that a dwelling is in a habitable condition. Further, in its section of rights and obligations of the landlord, the landlord must provide a tenant with a habitable dwelling, maintain the existing structure of the dwelling and where possible facilitate the provision of basic services to the dwelling.

Specifically, this may oblige the public sector landlord, from time to time, to embark on capital refurbishment of stock to bring it in line with the statutory requirements and other guidelines governing habitability as defined herein.

3.3.2. Social Housing

The Social Housing Act (No 16 of 2008) states that, "social housing' means a rental or co-operative housing option for low to medium income households at a level of scale and built form which requires institutionalised management and which is provided by social housing institutions or other delivery agents in approved projects in designated restructuring zones with the benefit of public funding."

By definition therefore, key differentiators between social housing and commercial / developer driven multi-unit residential developments is an underlying socio-economic imperative to deliver managed housing in specific localities. The "social" aspect of social housing is implied through a qualitative agenda – in accepting public funding the compact is to enable delivery beyond a certain qualitative threshold.

Accordingly, the key differentiators between social housing and other forms of rental accommodation are:

- Location
- The qualitative aspect of the unit in terms of space norms

- The provision of social amenities
- Management

The successful design of a good quality sustainable social housing project depends on achieving a balance between a range of factors. These include issues such as accessibility, safety and security, access to services and amenities and the provision of adequate space. A sustainable housing project should also contribute to its environment by becoming part of its neighbourhood context and fostering a social network between residents and the community. The dwelling unit must meet the needs of the lifecycle of a family from children to adults, to older people and people with forms of special needs or disability that don't require specialised institutional care, therefore designs should be flexible and adaptable to meet these demands over the life of the building.

3.3.3. Community Residential Units (CRU)

Clause 1.1 of the revised PART 3 of the National Housing Code states "The Community Residential Units (CRU) Programme provides grant funding to provinces and municipalities for the upgrading, conversion, or complete redevelopment of existing State-owned rental stock including hostels and existing occupied inner city or township buildings already owned or to be taken over by a provincial or municipal government"

Clause 1.3 of PART 3 states: "The Revised CRU Programme will however continue to fund greenfield new build projects and Greenfield infill schemes only where these projects are directly linked to the re-development of public sector hostels or state-owned rental stock where de-densification is required or where the existing buildings are to be demolished and replaced with new rental housing stock".

Clause 1.4 of PART 3 states: "The revised CRU Programme will also in extraordinary circumstances fund the redevelopment of existing inner city building that are taken over by Municipalities as an option of last resort. These buildings are abandoned and/or relinquished by the property owners and are in a state of disrepair and pose a threat to health and safety. The funding will be limited to the redevelopment cost only, as there is no acquisition cost."

The CRU Programme comprises the following primary development options for the redevelopment of existing rental stock, hostels, and occupied buildings owned or intended to be taken over by the municipality or provincial government, and to which the norms and standards will apply:

- Option 1: Stabilisation to make safe existing buildings
- Option 2: Demolitions
 - Simple demolition
 - o Medium complex demolition
 - Complex demolition

- Option 3: Refurbishment of existing hostels or buildings:
 - o Basic refurbishment (no specification upgrade)
 - Upgrade refurbishment
- Option 4: Conversions:
 - Hostel conversions
 - Simple building conversions (residential to residential)
 - Complex building conversions (non-residential to residential)
- Option 5: Newbuild infill:
 - New build on existing sites, flats or rooms with shared facilities –single storey
 - New build infill for densification or replacement of demolished buildings on existing hostel sites, state-owned rental stock sites, or other occupied sites owned or intended to be taken over (flats or rooms with shared facilities—two to four storey walk-ups.
- Option 6:Newbuild greenfield (related to hostel upgrade/re-development):
 - New build on greenfields vacant sites to accommodate de-densification needs of hostel redevelopment projects (flats or rooms with shared facilities—two to four storey walkups).

3.3.4. Private Sector Rental Housing

The Rental Housing Act and its amendments do not specifically define 'Private Sector Rental Housing'. Notwithstanding, Chapter 2 of the Act does afford the Minister of Human Settlements to introduce a rental housing subsidy programme or other assistance measures to stimulate the supply of 'rental housing property' for low income earners.

The definition of 'rental housing property' is given as including one or more dwellings and the definition of 'dwelling' is given as including any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated garage space which is leased as part of the lease. It does not give a definition for a 'low income earner' or 'the poor' although it is given that these are to be covered in a National Policy Framework and where the Minister of Human Settlements may define the criteria for the poor or low-income earners and groups.

Given the above, by logical extrapolation and for the purposes of developing 'Private Sector Rental Housing' norms and standards, 'Private Sector Rental Housing' is defined as:

- Rental accommodation that does not have any direct or indirect Government funding or Government assistance.
- Tenants, dwellings and landlords are not subject to any specific Government qualification criteria and approval (e.g. tenant income thresholds or landlord to be a Social Housing Institution (SHI)).
- Private sector rental includes a range of:
 - Unit/dwelling typologies, from a farmstead to a single residential house to a single unit in a single-storey or multi-storey sectional title scheme to a multiple unit commercial owned rental complex.
 - Landlords, from a commercial entity to private individual.
 - Tenants, from all persuasions and incomes
- Private sector rental accommodation is based on the principles of 'freedom of choice' and mutual agreement by and between both tenant and landlord.

The Rental Housing Amendment Act has also introduced the notion of 'habitability' to the Act and given a definition of 'habitability' as a dwelling that is safe and suitable for living in and includes:

- adequate space;
- protection from the elements and other threats to health;
- physical safety of the tenant, the tenant's household and visitors; and
- a structurally sound building.

Linked to the above, the Rental Housing Amendment Act has further defined maintenance as being the repair and upkeep as may be required to ensure that a dwelling is in a habitable condition. Further, in its section of rights and obligations of the landlord, the landlord must provide a tenant with a habitable dwelling, maintain the existing structure of the dwelling and where possible facilitate the provision of basic services to the dwelling.

3.3.5. Backyard Rental Housing

Backyard rental is a sub-market of the private sector rental market. It is of a substantial size in that there were approximately 919,000 households living in backyard rental units in South Africa in 2016 making up an estimated 26% of the total rental market and 5% of the total housing accommodation arrangements in South Africa.²⁴

Backyard units are found in high, middle and low income proclaimed urban areas, across old and new subsidised and unsubsidised housing estates, rural areas and in informal settlements. Backyard

units vary greatly in terms of their size, type and quality of construction materials (both formal and informal). A high proportion have access to basic services (water, toilet and electricity), but the nature and quality of this access is highly variable. Access can be internal, on-site (shared) or offsite (communal). Service connections vary from fully reticulated to illegal connections. There is variance in the willingness and ability of landlords to comply with building regulations. Some landlords go through the formal channels of building application and approvals, and build to legislatively required specifications, while others are either ignorant of, cannot afford to or choose to ignore existing planning frameworks, building regulations and by-laws.²⁵

Despite a lack of regulation, research shows that relations between owners and renters are relatively good. Evictions are relatively rare. Renters are often extended family members or are part of broader social networks.²⁶

The Backyard unit sub-market is important for four reasons:

- It provides rental accommodation across income groups but particularly into the affordable housing market where there are shortages of accommodation;
- It offers entrepreneurial and job creation opportunities for low income households;
- It plays a key role in compaction and densification of cities, as well as better utilisation of existing infrastructure investments; and
- It is usually in well located areas and as such offers access to urban amenities for low income households thereby enhancing their financial sustainability.²⁷

The South African Local Government Association (SALGA) notes that 'Backyard dwellings are one of the largest housing sub-sectors in South Africa and make a significant contribution to the provision of rental housing to households whose needs are not addressed by government subsidy programmes or the formal private market. Largely without any government intervention/support, the sector successfully provides accommodation to non-qualifiers, migrants or temporary workers not seeking home ownership, and any other households wishing to rent but who cannot afford the formal rental accommodation that is available. Backyard rental has become one of the fastest growing sectors in South Africa. Between 2007 and 2011, backyard dwellings absorbed two thirds of new households, twice as many as those absorbed into informal settlements.²⁸

Notwithstanding the positive aspects of Backyard Rental, it can have some negative aspects. In certain areas where engineering bulk capacity is limited it can place pressure on existing infrastructure. In addition it can undermine the quality of living environments as a result of overcrowding and tenants not having access to basic services.²⁹

Given the above, the following definition of Backyard Rental is assumed for the purposes of these Norms and ${\rm Standards}:^{30}$

• It is developed on an existing residential property either on privately owned land31 or

- state-owned land (notably government-owned rental stock).32
- It is a small-scale activity, seldom exceeding a few units per property.
- Units are developed and managed by private individuals or micro enterprises.
- Accommodation is occupied by separate households or by extended family members.
- The tenant-landlord relationship is governed by a private agreement, which may be a formal (written) contract or an informal (verbal) agreement. It may or may not include monetary payment.
- Units are utilised for residential habitation.
- Backyard rental is based on the principles of 'freedom of choice' and mutual agreement by and between both tenant and landlord.
- Backyard rental comprises the following types of residential units:
 - Stand alone rooms having access to external, generally-shared ablutions;
 - Stand alone, self-contained one room units (having private access to basic services such as toilet and basin);
 - Stand alone, self contained one room units (having private access to a kitchenette, toilet, shower and basin)
 - Two storey walk-ups comprising either rooms with communal ablutions, rooms with toilet, shower and basis or rooms with kitchenette, toilet, shower and basin).

This definition excludes rental in an informal settlement. The housing and service needs of such tenants should be addressed via the process of upgrading the informal settlement as a whole¹⁰.

For the purposes of these norms and standards the following additional definitions are assumed 11:

- A 'backyard tenant' is defined as a person occupying a backyard residential unit under some type of rental agreement with the main homeowner which may or may not include monetary payment for the right to occupy the unit, and may or may not be set out in a formal written agreement.
- The 'backyard landlord' is defined as the person who occupies the main house, controls
 access to the backyard unit and services, and enters into a rental agreement with the
 backyard tenant (which may or may not include monetary payment for the right to occupy
 the unit, and may or may not be set out in a formal written agreement).

4. Roles and responsibilities

The key stakeholders making up the rental sector include policy makers; regulators; delivery and management agents; financiers; sector and capacity developers. The entities within each of these categories are shown in the figure below.³³

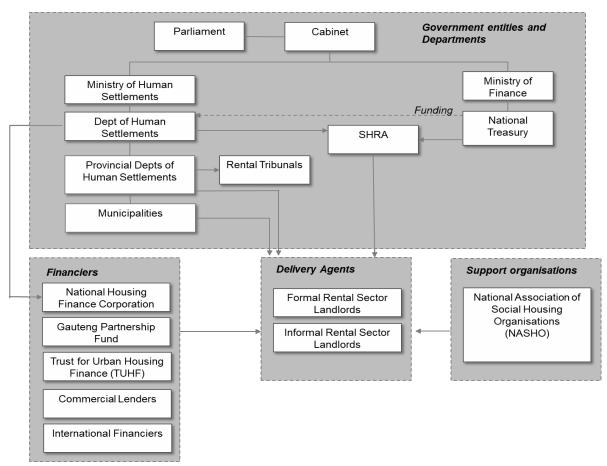


Figure 10: Overview of the key stakeholders in the rental sector

Table 2 below provides an overview of the roles of each of these stakeholders.

Table 2: Role of key stakeholders in the rental sector

Role Player	Key functions/role
Government entities	and Departments
Ministry and Department of Human Settlements	Overall role: Oversight, legislation and regulation, ensuring compliance and funding frameworks. • Create and uphold an enabling environment by providing the legislative, regulatory, financial and policy framework;
	Ensure compliance with its constitutional responsibilities;
	Address issues that affect the growth, development or sustainability of the rental sector;
	Institute and fund the social housing programme;
	 Allocate funds from the Department's budget for the operational costs and commitments of the SHRA;
	 Determine norms and standards to be adhered to by provinces and municipalities;
Ministry of Finance and National	 Monitor the SHRA Provide funding for the Department of Human Settlements (see funding instruments below);
Treasury	Monitor the Department of Human Settlements
Provincial Government	• Ensure fairness, equity and compliance with national and provincial norms and standards;
	 Ensure the protection of consumers by creating awareness of consumers rights and obligations;
	Facilitate sustainability and growth in the rental sector;
	Mediate in cases of conflict between stakeholders;
	Submit proposed restructuring zones to the Minister;
	 Monitor social housing projects to ascertain compliance with prescribed norms and standards;
Municipalities	Encourage the development of new rental stock;
	 Provide access to municipal rental stock, land and buildings for social housing development in designated restructuring zones and to municipal infrastructure and services for approved projects,
	Initiate and motivate the identification of restructuring zones.

SHRA The Social Housing Regulatory Authority's (SHRA's) mandate is to capacitate, invest in and regulate the social housing sector. The primary intention of social housing is twofold: firstly, to deliver affordable rental housing for low to middle income groups and secondly, to achieve spatial, economic and social integration of the urban environments in South Africa. Towards that end the SHRA is focused on facilitating the delivery of quality, sustainable social housing at scale to advance the needs of low- and middle-income groups in support of spatial, economic and social restructuring. Its functions include to: Advise and inform the Department of Human Settlements; Register and accredit SHIs; Recommend Restructuring Zones; Set principles for, regulate compliance and accreditation and act on noncompliance: Regulate the investment public funds in social housing projects and programmes; and **Rental Tribunals** Resolve disputes between landlords and tenants **Financiers** National Housing The NHFC provides housing finance to intermediaries, mainly Retail Finance **Finance Corporation** Intermediaries, Property Practitioners/Developers and Social Housing (NHFC) Institutions. The NHFC also supports and capacitates emerging housing intermediaries, through partnerships with other local and international organisations. The NHFC offers a range of wholesale housing finance options through two core Funding Programs, namely projects and Commercial Divisions. Gauteng The Gauteng Partnership Fund (GPF) was established by the Gauteng **Partnership Fund** Department of Housing to address funding challenges in the affordable (GPF) housing sector. On a project-by-project basis, GPF will assist rental housing entities to procure finance at the most favourable terms in order to promote affordable, quality accommodation that is well managed for the target market GPF also offers a Rental Housing Fund which was developed for rental housing entities that require additional funding in to a project. The equity type loan enhances the debt to equity ratio for projects to enable lenders to finance, on favourable terms.

Trust for Urban Housing Finance (TUHF)	TUHF is a leading funder and facilitator of private sector small scale landlords. TUHF is a specialised commercial property financier that drives inner city investment by providing access to finance for entrepreneurs from all walks of life, to purchase and subsequently convert or refurbish buildings in the inner cities of South Africa to deliver affordable residential units available for rental.
	TUHF Financial products are:
	 Property Finance: A single loan facility over 15 years for acquisition and development of affordable rental units. A prime-linked interest rate is applied with a once-off raising fee. There is no monthly service fees. Financial structuring is applied such as grace periods to accommodate the property development and tenanting stages. The financing can be applied for acquisition of the property only, or acquisition plus construction or refurbishment.
	 Bridging finance: Short term unsecured loans that assist borrowers to cover short term expenses while acquiring a property. It can be used for example to obtain rates and clearance certificates, covering the payment balance of the purchase price, to fund construction and for the rehabilitation of sectional title projects in the medium term.
	 Equity support (the Inthuthuko Equity Fund): Supports previously disadvantaged individuals by contributing to the 20% deposit or equity necessary for loan approval of a business in the residential property sector.
	 Apart from providing access to finance for purchase and refurbishment TUHF will support entrepreneurs throughout the entire process from negotiating a purchase price to construction and then renting and management
Commercial Lenders	Certain commercial banks have provided and continue to provide loan finance to delivery agents in the rental sector. Loans include mortgages, bridging finance and unsecured and secured small loans.
International Financiers	International financiers take the form of Development Finance Institutions and have played an important role in the rental sector particularly in respect of social housing. Generally, these entities provide soft loans and grants.
Delivery Agents	
Social Housing Institutions (SHI's)	Not for profit entities that develop and manage social housing units. Such entities are registered with and access government subsidies from the SHRA.
Household landlords (Enterprise and Homeowner Landlords)	Private individuals generating a primary or secondary source of income from purchasing, holding and renting limited numbers of rental units for profit, often on the property that they occupy themselves. Can provide both formal and informal housing stock
Small private landlords	Single owner, or small shareholder corporate entities procuring, managing and generating a primary source of income from holding and managing rental stock for the aim of making profit.

Private corporate landlords	Either listed or privately-owned companies that procure, hold and ma large numbers of rental units held in wholly owned buildings and rent to the aim of making profit.	_
Public Rental Institutions	Generally, municipalities which inherited state rental sock which manage	they
Management entities	Usually private sector entities that provide management services inclucion of rentals and maintenance of buildings	uding
Support organisations		
National Association of Social Housing Organisations (NASHO)	Was formed in 2002 and is a membership-based federation of 17 established SHIs in South Africa. Its mission is to represent the interest its members providing information, advocacy, and other areas of sup NASHO also undertakes capacity building amongst provincial and munhousing functionaries responsible for Social Housing.	sts of port.

Sources: Department of Planning, Monitoring and Evaluation, Impact and Implementation Evaluation of the Social Housing Programme, Literature review and theory of change, 2015 and Social Housing Regulatory Authority, State of the Social Housing Sector, 2011/12 – 2012/13.

5. Commencement Date

These norms and standards will take effect on a date to be determined in the Government Gazette by the Minister responsible for human settlements. Different dates may apply in respect of different rental sub-sectors.

PART B: DETAILED NORMS AND STANDARDS

6. Overall approach

"This Norms and Standards document is viewed as a starting point for the sector, aimed to be updated regularly through a process to be established by regulators, private sector stakeholders, and sector advocacy bodies. This document should be viewed as a "living document," one that acknowledges the complexities of built environment development, the regular occurrence of innovations, and the challenges of market dynamics all require iteration on a frequent basis.

Technical specifications for building and construction projects typically refer to a range of standards for materials to be used, quality of workmanship, codes of practice and methodologies and tests to be performed in order to achieve compliance with core standards.

National, Provincial Departments, municipalities and state entities/agencies involved in the development and/or management of public rental stock should develop standard minimum specifications for their developments in line with their own standards and in response to the unique requirements of their development and operating environments. Yet, they should also strive to develop products in accordance with these Norms and Standards. Specifications should be developed with a view to being outcomes based, and flexible in order to promote responsiveness to context and innovation. To this end, standard specifications must be amended and/or augmented with supplementary preambles to meet the unique needs of every new project. Standard and supplementary preambles should be submitted together with the business plan and feasibility study for each development or re-development in accordance with the norms and standards.

As with the norms and standards, the specifications are not intended to be a prescriptive list of building methods and technologies, materials and finishes for social housing developments, but rather to provide a framework of guiding principles that will enable public rental housing to be developed that meets the mandate of the Department of Human Settlements, while at the same time is flexible and enables rental stock to be developed in a manner that is responsive to the demand, open to innovation, and enhances the lives of the tenants living in the units.

Development and application of specifications should follow the approach of the National Building Regulations (NBR) (SANS 10400 series). The content of these and other regulatory prescripts are not repeated or summarised in the body of this document, and no reference is made to specific regulations, codes and standards. Where deemed necessary to draw the attention of designers, developers and constructors of social housing to specific regulations or codes, such references are made in the Norms and Standards in relation to specific sections.

Specifications for construction, materials to be used, fittings, internal and external plumbing and electrical installation and finishes must be basic, but robust, and provide a sensible balance between upfront costs and life cycle maintenance and operating costs to avoid being a burden on owners of the stock.

7. Norms and Standards: Public Sector Rental Housing

7.1. Structure of the Norms and Standards

The norms and standards are structured in a hierarchy, starting at the site and contextual framework level and working through to the detailed requirements of the unit. Four levels are provided for:

- Level 1: The Property and Utilities
- Level 2: The Building and Amenities
- Level 3: The Lease Agreement
- Level 4: Environmental Sustainability

The norms and standards are set out in a table that includes the following:

- **Overarching item**: This term refers to specific thematic elements within the levels defined. (For example, the overall context of a development).
- **Sub-item:** This element refers to a specific area of focus within themes and provides more detail on particular components of overarching items.
- **Principles:** These are the high-level key outcomes desired by the particular sub-item.
- **Guidelines**: Applicable good practice on a particular topic informed by knowledge, understanding and experience of practitioners in the field and their professional advisors. This is an explanation of how the general principles are to be achieved.
- Norm and standard: This is the compliance levels that must be achieved.

7.2. Norms and Standards

The below sections provide detail on both overarching and sub-items of relevance to Norms and Standards of Public Sector Rental Housing.

7.2.1. Level 1: The property and utilities

	REFERENCE TO ACTS AND LEGISLATION	an Not applicable (n/a) ey	f N/a	se N/a
Overarching Item 1.1 Property Rights and Designated Uses	1.1.1 Location and Residential Use Rights	Public Sector Rental Housing is not restricted to any specific locality other than it is to be located on properties that are for residential purposes, namely, they have residential zoning or have been granted residential consent use by the municipality.	The property owner is responsible to ensure that the occupation and use of the property comply with the relevant municipal zoning and consent use bylaws and/or township ordinance.	The Rental Housing facility must have residential zoning and/or residential use rights in terms of the municipal by-laws that govern property zoning and consent rights.
Overarching Item	Sub-Item	Principles	Guidelines	Norm and Standard

Overarching Item	Overarching Item 1.1 Property Rights and Designated Uses	
Sub-Item	1.1.2 Classification and designation of occupancy	REFERENCE TO ACTS AND LEGISLATION
Principles	Buildings used for Public Sector Rentals are to be habitable.	H3 – Domestic residence. Occupancy consisting of two or more dwelling units on a single site. NBR A20 table 1
Guidelines	As a guideline, The Public Sector Residential Rental Facility would be classified and designated as "residential" with either an occupancy of H3 or H4 as detailed in The National Building Regulations- Part A20-table1. This categorises the full spectrum of residence and occupancy that apply to various building typologies, from single stand alone/detached units to multistorey attached units. Accordingly, for multi-unit complexes, it is irrespective of whether the landlord is the owner of the entire complex or a single unit in the complex	H4 - Dwelling house - Occupancy consisting of a dwelling unit on its own site, including a garage and other domestic outbuilding, if any. NBR A20 table 1 This classification shall reflect the primary function of such building, provided that, in any building divided into two or more areas not having the same primary function, the occupancy of each such area shall be separately classified. NBR - A20/1 Notwithstanding the requirements of the above, any area in any building which is used for any purpose ancillary to that of any occupancy

Norm and Standard	The Residential Rental Facility shall be classified and designated as classification contemplated in above shall, subject to adequate facilities "residential" with an occupancy of H3 or H4 as detailed in the National Building and safety measures being provided, not be classified as a separate Regulations- PART A20-table1.	Facility shall be classified and designated as classification contemplated in above shall, subject to adequate facilities spancy of H3 or H4 as detailed in the National Building and safety measures being provided, not be classified as a separate occupancy. NBR - A20/2.
	The rental buildings shall comply with the primary function and ancillary uses as detailed in NBR – PART A20 / 1-2. No person shall use any building or cause or permit any building to be used for a purpose other than the purpose shown on the approved plans of such building, or for a purpose which causes a change in the class of occupancy as contemplated in these regulations, whether such plans were approved	No person shall use any building or cause or permit any building to be used for a purpose other than the purpose shown on the approved plans of such building, or for a purpose which causes a change in the class of occupancy as contemplated in these regulations, whether such plans were approved
	The use and purpose of the residential rental building shall be used as detailed in NBR – PART A25.	in terms of the Act or in terms of any law in force at any time before the date of commencement of the Act, unless such building is suitable, having regard to the requirements of these regulations, for such first-mentioned purpose or for such changed class of occupancy. NBR A25/1.
		The Rental Housing Amendment Act, 2014 has a definition for 'habitable' but where it is quite broad and can be interpreted in many different ways. Thus the suggested norm is per that of the NBR which gives measurable detail to components that make up 'habitability' - such as health, safety, privacy, comfort and as further detailed in the items to follow.

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.1 Sanitation and disposal of sewerage	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – health perspective: residential accommodation is such that residents are not exposed to contamination and disease due to the ongoing presence of untreated sewerage or dirty water.	(1) (a) Where in respect of any building a suitable means of disposal of water-
Guidelines	The rental building shall be provided with a suitable means of sewer and drainage disposal. The building owner shall ensure that the drainage and sewerage system is operational and functioning properly.	borne sewage is available the owner of such building shall provide auralinge installation. (b) Where there is no such means of disposal, sewage shall be disposed of in accordance with Part Q of these regulations.
Norms and Standards	Every residential rental building shall be provided with a suitable drainage system which complies with NBR – Sans 10400 - Part P The design of the drainage system to a building shall comply with NBR – SANS local authority for the connection to such sewer. 10400 Part P2.	(a) Where a sewer is or becomes available for the drainage of such building the owner of such building shall, at his own cost, lay, alter or extend anydrain serving such building to terminate at a location and level as prescribed by the local authority for the connection to such sewer.
	Where there is no such means of water borne sanitary disposal, other means of disposal shall be permitted by the Local authority provided it complies with NBR – SANS 10400 Part Q	P2 DESIGN OF DRAINAGE INSTALLATIONS (1) Any drainage installation in any building shall be so designed and constructed that —
		 (a) an adequate number of sanitary fixtures is provided in relation to the population and class of occupancy of such building; (b) such installation is capable of carrying the design hydraulic load;
		(c) such installation is capable of discharging into any common drain, connecting sewer or sewer provided to accept such discharge;(d) all components and materials used in such installation are watertight;(e) no nuisance or danger to health will be caused as a result of the operation

to which it may normally be subjected and that it is, where necessary,
protected against any drainage;
(g) all sanitary fixtures are so located that they are easily accessible to those persons they are intended to serve;
(h) any necessary inspection, cleaning and maintenance required, may be performed through the means of access provided.
PART Q - NON-WATER-BORNE MEANS OF SANITARY DISPOSAL Q1 MEANS OF DISPOSAL
Where water-borne sewage disposal is not available other means of sewage disposal shall be permitted by the local authority: Provided that:
(a) it stores, conveys, processes and disposes of human body wastes and wastewater in such a way that the pathogens, pollutants and contaminants
associated therewith do not compromise the health and safety of the original user or others; and
(b) in the case of chemical or toilet a satisfactory means is available for the removal and disposal of sewage from such closets;
Q2 PERMISSION

20

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.2 Electricity	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – safety perspective: residential accommodation such that occupants are not exposed to dangerous electrical installation and consequential electrocution.	Refer to SANS10142
Guidelines	Any fixed electrical installation to the property and building (dwellings) is to be done by a certified competent electrician and in accordance with the provisions of SANS10142. This also applies to alternative power sources, such as PV panels and generators (clauses 5.7.4 and 7.12)	
Norms and Standards	Any electrical supply and installation are to comply with SANS10142 and any applicable municipal by-laws.	

	REFERENCE TO ACTS AND LEGISLATION		ps, solar, b) if solar water heating systems are used, these shall comply with SANS 10252-1:2004; and ficiencies 1307, SANS 10166, SANS 10254 and SANS 10252-1. 4.1.2 Requirements for water installations in buildings shall be in accordance with SANS 10252-1 and SANS 10254. 4.1.3 All hot water service pipes shall be clad with insulation with a minimum R-value in accordance with table 1. 4.1.4 Thermal insulation, if any, shall be installed in accordance with the applying manufacturer's instructions. 5. off grid water value in accordance with the installed in accordance with the applying manufacturer's instructions.	510400
Overarching Item 1.2 Services/Utilities	1.2.3 'Hot' Water Provision	Habitable – health perspective: residential accommodation such that residents are not exposed to contamination and disease due to the lack of potable water for drinking, washing and cleaning.	Potable water supply to each accommodation unit. Hot water may be provided by a variety of systems such as heat pumps, solar, magnetic induction geysers, gas and hybrid systems. In all cases the efficiencies of the system should be evaluated in relation to the cost of producing hot water. The building owner to ensure that all plumbing in regard to water supply is functional. Within the broader parameters of environmental sustainability and resilience, non/un-conventional approaches to service provision may be considered wholly or partially. These could be at a macro level for example applying localised black or grey water treatment. Or at a micro level such as off grid solutions provided to elements within a development for example dry /waterless toilets in certain building types like a guardhouse or community facility.	Potable water to be supplied to each accommodation unit and if accommodation is in a proclaimed township, in accordance with the applicable municipal by-laws. If hot water is also provided, it is to be in accordance with NBR - SANS10400 PART XA
Overarching Item	Sub-Item	Principles	Guidelines	Norms and Standards

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.4 Stormwater disposal	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – safety and health perspective: residential accommodation such that residents and accommodation are not exposed to flooding which may render the accommodation either structurally unsafe or unhealthy as a result of water ingress or ongoing dampness.	(1) The owner of any site shall provide suitable means for the control and disposal of accumulated stormwater which may run off from any earthworks, building or paving.
Guidelines	The rental property shall be provided with stormwater systems – surface or underground depending on the design or circumstances - so that no undue damage may be caused to either the interior of the building or its structural elements e.g. walls which render the building either uninhabitable or unsafe. Stormwater systems shall be maintained on an ongoing basis by the building owner.	(4) such means of stormwater disposal may be in addition to or in combination with any drainage works required in terms of regulation F4(2). (3) The requirements of sub-regulation (1) shall be deemed to be satisfied where such means of stormwater disposal is provided in accordance with SANS 10400-R: Provided that where a local authority is of the opinion that the conditions on any site render it essential for stormwater disposal to be the subject of an acceptable rational design prepared by an approved competent person, such local authority shall, in writing, notify the owner of curry cite of its rescore for the processity for such design and may require
Norms and Standards	A residential rental building shall be provided with a suitable means for the control and disposal of accumulated stormwater run-off which stormwater system shall comply with NBR – SANS 104400 Part R as well as any applicable municipal bylaws and town planning ordinances.	such site of its reasons for the necessity for such design, and may require such owner to submit for approval plans and particulars of a complete stormwater control and disposal installation for such site and for any building erected thereon, based on such design. R2 SAVING (1) These regulations shall not be construed as requiring the installation in any building of any roof gutter or downpipe where other suitable means has been provided to ensure the disposal or dispersal away from such building of rainwater from the roof of such building. (2) The regulations in this Part shall not apply to any site used exclusively for the erection of any dwelling house or any building appurtenant thereto, building that the read of the formula of the disperse.

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.5 Refuse Disposal	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – health perspective: residential accommodation is such that residents are not exposed to contamination and disease due to the buildup of refuse.	NBR - U1 PROVISION OF STORAGE AREAS Any building, excluding a dwelling house, in which refuse is or will be generated shall be provided with an adequate storage area for refuse containers.
Guidelines	A central refuse storage area should be located close to the entrance of NBR - U2 ACCESS TO STORAGE AREAS development with an adequate area for bins and for the cleaning of bins. A waterpoint and drain should be provided within the refuse storage area. The size and location of this area should be in compliance with local authority the satisfaction of the local authority. NBR - U3 REFUSE CHUTES Where any refuse container receives	NBR - U2 ACCESS TO STORAGE AREAS The location of any area contemplated in regulation U1 shall be such that access thereto from any street for the purpose of removing the refuse, is to the satisfaction of the local authority. NBR - U3 REFUSE CHUTES Where any refuse container receives refuse from any chute such chute shall
Norms and Standards	Any building, excluding a dwelling house, shall be provided with refuse facilities as stipulated in NBR – PART U1. The refuse facility for any building excluding a dwelling house shall be located in accordance with NBR – PART U2. Where refuse chutes are provided these shall be designed and erected in terms of NBR – PART U3.	a dwelling house, shall be provided with refuse be designed and erected so as to be safe in operation. NBR — PART U1. th NBR — PART U2 provided these shall be designed and erected in

7.2.2. Level 2: The building and amenities

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.1 Building Standards	REFERENCE TO ACTS AND LEGISLATION
Principles	The constitution states that everybody has a right to "an environment that is not harmful to their health or wellbeing. (1) Any building and any structural element or component thereof shall be Rental Accommodation must be designed to attain the requirements associated with habitability — acceptable safety, protection from the elements and undue health hazards, privacy and comfort. (2) Any such building shall be so designed that In the event of accidental	PART B - 1 DESIGN REQUIREMENT (1) Any building and any structural element or component thereof shall be designed to provide strength, stability, serviceability and durability in accordance with accepted principles of structural design, and so that it will not Impair the integrity of any other building or property. (2) Any such building shall be so designed that In the event of accidental
Guidelines	The external envelope of the building must not allow the penetration of rainwater or another surface water into its interior. The building must be lockable and secure. The construction of any building or element shall be such that the building or element as constructed does not compromise the design intent of any design that satisfies the requirements of a functional regulation. (NBR A14/1a)	overloading the structural system will not suffer disastrous or progressive collapse which Is disproportionate to the original cause. (3) The requirements of sub-regulations (1) and (2) shall be deemed to be satisfied where such building is designed in accordance with Part B of section 3 of SABS 0400.
Norms and Standards	The design and construction of residential rental dwellings for human occupation must comply with all components of the National Building Regulations and its Deemed to Satisfy Rules.	Note: In the Rental Housing Act and its amendments (section 4B (11)) it states that the landlord/owner "must provide a tenant with a dwelling that is in a habitable condition, as well as maintain the existing structure of the dwelling". Dwellings are defined as "any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated parking space which is leased as part of the lease".

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.2 Structural Design	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes for habitability, any building and any structural element or component should be designed and built to provide strength, stability, serviceability and durability under all foreseen actions which can reasonably be expected to occur. In terms of the erection of a building for rental purposes, a rational design or assessment is required as well as a geotechnical investigation which is to be undertaken by a suitably qualified person.	As for 2.1.1 above. In addition: A19 APPOINTMENT OF PERSONS RESPONSIBLE FOR DESIGN, INSPECTION AND ASSESSMENT DUTIES (1) Wherein terms of these regulations and in respect of the erection of any building: (a) a rational design or rational assessment, is required in terms of: (i) Regulations Z4(1)(b)(ii), A1(3), A23(4), G1(3), O4, P2(2), Q3, R(3),
Guidelines	Buildings shall be designed to be structurally sound. Any structural elements within a building shall be designed and materials sourced and specified in terms of NBR Part A4 and A13.	11(2), W4 in respect of a system, measure, facility, parameter, or installation, as relevant, or (ii) a part of SANS 10400; or (b) a geotechnical investigation is required in terms of regulation F3, the owner of the building shall subject to the provisions of sub-regulations(4) and (5) appoint and retain one or more approved competent persons to
Norms and Standards	Any building shall be designed by a suitably qualified person (NBR SANS 10400 Part A19) which design shall comply with NBR – Sans 10400 Part B. Any designs and Materials utilised within a building shall comply with NBR SANS 10400 Part A4 and Part A14.	undertake responsibility for the work associated with such regulations including any inspections and certifications that may be required. 413 BUILDING MATERIALS AND TESTS (1) (a) Material used in the erection of a building shall be suitable for the purpose for which it is to be used. (b) All timber used in the erection of a building shall be treated against termite and wood horer attack and fundal decay in accordance with the

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.3: Walls	REFERENCE TO ACTS AND LEGISLATION
Principles Guidelines	For the purposes for habitability, any wall within a building shall be designed and constructed to safely sustain any actions which can reasonably be expected to occur a penetration of water into any part of the building. Walls should be designed and constructed to be as energy efficient as possible. External walls must be designed and constructed to adequately prevent external walls must be designed and constructed to adequately prevent and constructed to adequately prevent water penetration. The external walls must be designed and constructed to adequately prevent walls must be designed and constructed of suitable material to any part of the building. All walls within buildings must provide adequate provision for the fixing of trusses or beams. All walls must achieve a minimum R rating. PARY wall shall be designed and constructed to occur a boreland social constructed and constructed to as energy efficient approvance of any structural wall. be such actions to the foundations supporting such actions and windows or penetration of water into any part of the building. All walls must achieve a minimum R rating. PARY wall shall be designed and constructed to as energy efficient approval walls must achieve a minimum R rating. PAIN walls within buildings must achieve a minimum R rating. All walls must achieve a minimum R rating. PAIN wall shall be designed and constructed to adequately prevent which are reasonably be expected to occur a boreland constructed to as energy efficient above and constructed to adequate provision for the fixing of (2) where a building includes a basement authority may, if it considers that condition building is to be erected necessitate in penetration of water into such basement or all construction should be designed and constructed to adequate provision for the fixing of such designed and constructed to corrulation of water into any part of the building is to be erected necessitate in penetration of water into any part of the building includes a basement or any walls with the ca	rhabitability, any wall within a building shall be designed safely sustain any actions which can reasonably be wall within a building shall be designed and constructed to adequately resist the signed and constructed to be as energy efficient as pening and closing of doors and windows or the weather tightness of the wall and in the case of any structural wall, be capable of safely transferring such and constructed to adequately prevent dong-term maintenance. Read and constructed to adequately prevent dong-term maintenance. Be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed of suitable material to detrimental to the health of occupants or to the durability of such building. Can be designed and constructed of suitable material to detrimental to the health of occupants or to the durability of such building. Can be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed to adequately prevent dong-term maintenance. Can be designed and constructed to adequately prevent dong-termination of water into any part of the building where it would be penetration of water into such basement or semi-basement, the local authority may, if it considers that conditions on the site on which the building is to be erected necessitate integrated designs for the building is to be erected necessitate integrated designs for the building is to be erected necessitate integrated designs for approval. Components thereof, require the submission of such basement or semi-basement applicable to all construction elements or components thereof, require the submission of such basement or semi-basement applicable to all construction element

requirements of the approved design.	K3 ROOF FIXING	The design and construction of all walls must comply with NBR - SANS 10400 Where any roof truss, rafter or beam is supported by any wall provision	shall be made to fix such truss, rafter or beam to such wall in a secure	manner that will ensure that any actions to which the roof may normally	be subjected will be transmitted to such wall.	K4 BEHAVIOUR IN FIRE	Any wall shall have combustibility and fire resistance characteristics	appropriate to the location and use of such wall.	
Norms and Standards Construction of external walls must comply with relative "R" Values as per requirements of the approved design.	NBR – SANS 10400 XA.	The design and construction of all walls must comply with NBR - SANS 1040C	Part K.						
Norms and Standards									

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.3: Walls	REFERENCE TO ACTS AND LEGISLATION
		a) climatic zones 1 and 6:2,2
		b) climatic zones 2, 3, 4 and 5:1,9.
		4.4.3.2 The following types of masonry walling comply with the R-value
		requirements:
		a) double-skin masonry with no cavity, plastered internally, or rendered externally $^{35}\cdot$ or
		b) single-leaf masonry walls with a nominal wall thickness greater than or equal to 140 mm (excluding plastering and rendering), plastered internally and rendered externally.
		The requirements refer to the external walls of the habitable portions of the building fabric only.
		4.4.3.3 For masonry walling typesnot covered in 4.4.3.2, such walls shall achieve a minimum total R-value of 0,35. The total R-value shall be
		determined by means of a test conducted in accordance with ASTM C 1363, ASTM C 518 or ASTM C 177. Surface film resistance shall be in
		accordance with SANS 6946.
		4.4.3.4 Other walling requirements shall be in accordance with SANS 10400-K. SANS 10400XA 4.4.3

Overarching Item 2.1	Sub-Item 2.1	Principles Win spee	Guidelines In n	Norms and Win
Overarching Item 2.1 External Building Envelope	2.1.4 Windows and Glazing and Fenestration	Window Glazing and fenestration shall be of correct and adequate specification to ensure reasonable thermal comfort within units so that they are habitable.	 In new build projects: Glazing must comply with SANS 10400XA. All fenestration shall have adequate air infiltration. In existing buildings and where windows and glazing are existing: The glazing rationale needs to be justified in terms of existing building conditions and other factors such as heritage, as the replacement of façade glazing could be a prohibitive cost centre. Safety of persons is to be considered in relation to opening windows and heights of openings with the provision of safety bars. 	Window frames and glazing should comply with NBR SANS 10400XA with as simple a solution to glazing as possible.
	REFERENCE TO ACTS AND LEGISLATION	4.4.4 Fenestration4.4.4.1 Buildings with up to 15 % fenestration area to nett floor area per storey comply with the minimum energy performance requirements.4.4.4.2 Buildings with a fenestration area to nett floor area per storey that	exceeds 15 % shall comply with the requirements for fenestration in accordance with SANS 204. 4.4.4.3 All fenestration air infiltration shall be in accordance with SANS	

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.5 Roof Construction / Insulation / Guttering / Waterproofing	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes for habitability, the roof of the building shall be designed and constructed to resist any forces and must be durable, waterproof and not allow any water to accumulate on it.	L1 GENERAL REQUIREMENT The roof of any building shall be so constructed that It will - (a) resist any forces to which it is likely to be subjected;
Guidelines	 In terms of SANS10400 Part I, the roof of any building shall be so designed and constructed that it: safely sustains any actions which can reasonably be expected to occur is adequately anchored against wind uplift; is durable and does not allow the penetration of rainwater or any other surface water to its interior; does not allow the accumulation of any water upon its surface; and as part of a roof and ceiling assembly, provides adequate height in any room immediately below such assembly. The fire resistance of any roof or roof and ceiling assembly complete with light fittings or any other component which penetrates the ceiling, shall be appropriate to its use. A roof assembly shall achieve the minimum total R-value specified as detailed in table 7 SANS 10400XA On buildings with pitched roofs, guttering should be provided, the purpose of which is to direct stormwater run-off from roofs away from buildings where damage to facades and foundations can occur. Flat roofs must be considered in relation to the design of 	(c) not allow the accumulation of any rainwater upon Its surface; and (d) as part of a roof and ceiling assembly provide adequate height Inany room immediately below such assembly. 1.2 FIRE RESISTANCE AND COMBUSTIBILITY The fire resistance of any roof or roof and ceiling assembly complete with light fittings or any other component which penetrates the ceiling, shall be appropriate to its use and where necessary such roof or roof and ceiling assembly shall be non-combustible. 4.4.5.1 A roof assembly shall achieve the minimum total R-value specified in table 7 for the direction of heat flow. 4.5.2 A roof assembly that has metal sheet roofing fixed to metal purlins, metal rafters or metal battens shall have a thermal break consisting of a material with an R-value of not less than 0,2 installed between the metal sheet roofing and its supporting member. SANS 10400XA 4.4.5.2 4.4.5.3 Metal sheeting types of roofing assembly construction shall achieve the minimum total R-value in accordance with 4.4.5.1, with the installation of insulation that has an R-value as specified in table 8 of SANS 10400 XA 4.4.5.3.
	stormwater removal, insulation and waterproofing. If the roof is to a trafficable area, the waterproofing must be guaranteed for this purpose.	

	 Gutters and paved splashbacks around buildings to manage stormwater run-off. 	The roof overhang to the northern wall shall be sufficient to shade the windows from midday summer sunshine in accordance with SANS 204. Windows facing east and west should be limited in number and confined to the minimum required for daylight and ventilation. SANS 10400XA 4.4.1.2
Norms and Standards	The design and construction of the building's roof shall comply with the regulations as detailed in NBR – SANS 10400 – Part L and its thermal design and criteria shall comply with NBR – SANS 10400 Part XA	

	REFERENCE TO ACTS AND LEGISLATION	or in a safe and as M1 GENERAL REQUIREMENT (1) Any stairway, including any wall, screen, railing or balustrade to such	stairway, shall be capable of safely sustaining any loads to which It Is likely to be subjected and shall permit safe movement of persons from floor to floor. (2) Any such stairway shall have dimensions appropriate to its use. M2 FIRE REQUIREMENT A stairway contemplated in regulation M1 shall comply with the relevant requirements in Part T of these regulations.	
Overarching Item 2.1 External Building Envelope	2.1.6 Staircase, Building Entrances and Thresholds	Staircases must allow pedestrian movement from floor to floor in a safe and as M1 GENERAL REQUIREMENT easy as possible manner.	Any stairway shall be designed to safely sustain any load it is subjected to. Any stairway shall be fit for purpose and safely permit movement of physically able and disabled persons from floor to floor. Any Stairway used for emergency escape purposes shall have correctly sized dimensions and shall be fire resistant.	All staircase within a building shall comply with NBR – SANS 10400 – Part M.
Overarching Item	Sub-Item	Principles	Guidelines	Norms and Standards

Overarching Item	Overarching Item 2.2 Unit Design and Occupancy	
Sub-Item	2.2.1 Unit Size, dimensions, heights and areas	REFERENCE TO ACTS AND LEGISLATION
Principles	All buildings and rooms should be fit for purpose as a rental unit to allow tenants to enjoy privacy in a secure and safe environment. Floor area of a home must be habitable and building not a threat to public safety.	C1 ROOMS AND BUILDINGS (1) Any room or space shall have dimensions that will ensure that such room or space is fit for the purpose for which it is intended.
Guidelines	 SANS 10400 Part c prescribes the following: Minimum floor to underside of ceiling, or roof covering or underside of structural element: Minimum heights in bedrooms and other habitable rooms = 2.4m Passages entrance halls, bathrooms shower and mezzanine = 2.1m Minimum total floor area of a dwelling houses with Occupation of H4 = 30m2 Min room size of 6sqm (provided min wall length is 2m and no built-in cupboards). Min dwelling size of 24sqm and 16sqm for a temporary dwelling. 	the following: of ceiling, or roof covering or underside of structural of ceiling, or roof covering or underside of structural necessary to provide one habitable room and a separate room containing toilet facilities. bedrooms and other habitable rooms = 2.4m area of a dwelling houses with Occupation of H4 = m (provided min wall length is 2m and no built-in m (browided min wall length is 2m and no built-in m).
Norms and Standards	All buildings and rooms shall comply with dimensions and areas as stipulated in NBR – SANS 10400 – PART C	

Overarching Item	2.2 Unit Design and Occupancy	
Sub-Item	2.2.2 Unit Occupancy	REFERENCE TO ACTS AND LEGISLATION
Principles	Occupancy of any unit is subject to firstly, the unit design and intended number of occupants and secondly, to the level of desired comfort and privacy by the occupants.	A21 POPULATION (1) The population of any room or storey or portion thereof shall be taken as the actual population of such room, storey or portion thereof where such
Guidelines	The maximum occupancy on a permanent basis, for rental units with an occupancy of H3 and H4 shall be limited to 2 persons per bedroom.	on a permanent basis, for rental units with an population is known or, where such population is not known, the population II be limited to 2 persons per bedroom. Shall be calculated from the criteria given in Table 2.
Norms and Standards	Occupancy of any rental building shall be limited as detailed in NBR –SANS 10400 Part A21 Table 2 and the Rules of the Body Corporate in the case of sectional title schemes	H4 - 2 persons per bedroom

Overarching Item	2.3 Material Specifications	
Sub-Item	2.3.1 General Building Materials	REFERENCE TO ACTS AND LEGISLATION
Principles	Material used in the erection of a buildings shall be suitable for the purpose for human occupation (1) (a) Material used in the erection of a building shall be suitable for the purpose for which it is to be used. (NBR A13/1a), in this case, for human occupation (habitability). (habitability).	413 BUILDING MATERIALS AND TESTS (1) (a) Material used in the erection of a building shall be suitable for the purpose for which it is to be used.
Guidelines	All Materials used within the building fit for purpose. All timber used in the erection of a building shall be treated against termite and wood borer attack and fungal decay in accordance with the requirements of by the South African National Accreditation Systems. SANS 10005. (NBR A13/1b).	(b) All thinsel used in the election of a building shall be treated against termine and wood borer attack and fungal decay in accordance with the requirements of SANS 10005 and shall bear the product certification mark of a body certified by the South African National Accreditation Systems.
Norms and standards	All materials used within a building shall comply with NBR – SANS 10400 – Part A13.	

Overarching Item	2.3 Material Specifications	
Sub-Item	2.3.2 Floors	REFERENCE TO ACTS AND LEGISLATION
Principles	Floors to be fit for their respective purposes.	PART J - FLOORS 11 GENERAL REQUIREMENT
Guidelines	Floors to comply with the following:	(1) Any floor of any building shall -
	 Be designed and constructed to safely support its own weight and any actions which can reasonably be expected to apply. 	(a) be designed and constructed to safely support its own weight and any actions which can reasonably be expected to occur and in such a manner
	 Fire resistant, irrespective of room type. 	that any local damage (including cracking), deformation or vibration do not
	 The floor of any laundry, kitchen, shower-room, bathroom or room containing a toilet pan or urinal shall be water-resistant. 	compromise the efficient use of the building or the functioning of equipment supported by such floor; and
	 Timber floors shall not be exposed to the elements and have adequate under floor ventilation. 	(b) have a fire resistance appropriate to its use and where required, be noncombustible.
	 Where any concrete floor slab is supported on ground or filling, such floor shall be so constructed that any moisture present in such 	(2) The floor of any laundry, kitchen, shower-room, bathroom or room containing a toilet pan or urinal shall be water-resistant.
	ground or filling is prevented from penetrating such concrete floor slab.	(3) Any suspended timber floor in a building shall be provided with adequate under-floor ventilation.
	Be robust and hard wearing.	(4) Where any concrete floor slab is supported on ground or filling, such
Norms and Standards	ALL floor within a room shall comply with the minimum requirements as stipulated in NBR – SANS 10400 – PART J	filling is prevented from penetrating such concrete floor slab.

Overarching Item	2.3 Material Specifications	
Sub-Item	2.3.3 Walls: Construction and Finishes	REFERENCE TO ACTS AND LEGISLATION
Principles	Walls to be strong and stable enough to support loads/roof, be waterproof and fire resistant so as no undue safety risk to occupants or to render internal rooms uninhabitable.	PART K - WALLS K1 STRUCTURAL STRENGTH AND STABILITY Any wall shall be designed and constructed to safely sustain any actions which
Guidelines Norms and Standards	 Any wall shall be designed and constructed to safely sustain any actions which can reasonably be expected to occur. Any wall shall be so constructed that it will adequately resist the penetration of water into any part of the building. Basements and rooms below ground level, might necessitate the integrated designs for the penetration of water approval by the local authority. All walls shall have combustibility and fire resistance characteristics. Where any roof truss, rafter or beam is supported by any wall provision shall be made to fix such truss, rafter or beam to such wall in a secure manner. All walls shall be durable of construction and finish. Separating walls must be compliant with required fire ratings. Walls must be acoustically fit for purpose. All wall finishes specified shall be robust, hard wearing, easily maintained Walls should be designed and constructed in accordance with NBR - SANS 10400 - PART K 	can reasonably be expected to occur and in such a manner that any local damage (including cracking) or deformation do not compromise the opening and closing of doors and windows or the weather tightness of the wall and in the case of any structural wall, be capable of safely transferring such actions to the foundations supporting such wall. K2 WATER PENETRATION (1) Any wall shall be so constructed that it will adequately resist the penetration of water into any part of the building where it would be detrimental to the health of occupants or to the durability of such building. (2) Where a building includes a basement or semi-basement, the local authority may, if it considers that conditions on the site on which the building is to be erected necessitate integrated designs for the penetration of water into such basement or semi-basement applicable to all construction elements or components thereof, require the submission of such designs for approved design. K3 ROOF FIXING Where any roof truss, rafter or beam is supported by any wall provision shall be made to fix such truss, rafter or beam to such wall in a secure manner that will ensure that any actions to which the roof may normally be subjected will be transmitted to such wall. K4 BEHAVIOUR IN FIRE Any wall shall have combustibility and fire resistance characteristics appropriate to the location and use of such wall.

Overarching Item	2.4 Occupational Health and Safety	
Sub-Item	2.4.1 Fire and smoke safety, equipment and escape.	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes of habitability and safety, residential rental buildings shall be designed and built to withstand smoke and fire and be provided with the necessary fire-fighting equipment and signage.	T1 GENERAL REQUIREMENT (1) Any building shall be so designed, constructed and equipped that in case of fire-
Guidelines	Buildings shall be designed and constructed to limit the spread of fire and smoke. Buildings are to be designed to facilitate the safe evacuation of occupants. Adequate fire detection equipment and firefighting equipment shall be provided within a building. Adequate statutory fire signage shall be provided.	 (a) the protection of occupants or users therein is ensured and that provision is made for the safe evacuation of such occupants or users; (b) the spread and Intensity of such fire within such building and the spread of fire to any other building will be minimized; (c) sufficient stability will be retained to ensure that such building will not endanger any other building: Provided that in the case of any multistorey building no major failure of the structural system shall occur; (d) the generation and spread of smoke will be minimized or controlled
Norms and Standards	All buildings used for residential rental purposes excluding single residential units shall be designed and constructed to comply with the fire regulations as stated in NBR – SNAS 10400 – Part T	 (e) adequate means of access, and equipment for detecting, fighting, controlling and extinguishing such fire, Is provided. (2) The requirements of sub-regulation (1) shall be deemed to be satisfied where the design, construction and equipment of any building- (a) Is the subject of an acceptable rational design prepared by a professional engineer or other approved competent person; or (b) complies with Part T of section 3 of SABS 0400: Provided that where any Local authority Is of the opinion that such compliance would not comply with all the requirements of sub-regulation (1), such local
		authority shall in writing notify the owner of the huilding of Its reasons

Overarching Item	Overarching Item 2.4 Occupational Health and Safety	
Sub-Item	2.4.2 Public Safety - Ground conditions, entrances, ramps, trees etc	REFERENCE TO ACTS AND LEGISLATION
Principles	All building components that are accessible to its habitants and/or the general public should not be a threat to public safety.	are accessible to its habitants and/or the general D1 CHANGE IN LEVEL - The protection of the edge of any balcony, bridge, flat to public safety. Toof of similar place shall be designed to prevent any person from falling from such balcony, bridge, flat roof or similar place.
Guidelines	Public safety considerations are changes in ground level and ground conditions (dolomite), entrances, ramps, swimming pools, tree damaging walls.	D2 PEDESTRIAN ENTRANCES TO PARKING AREAS IN BUILDINGS - Where any pedestrian entrance is provided to a vehicle parking area in any building, such entrance shall be so positioned, marked or protected that no pedestrian can unintentionally walk into the path of any moving vehicle.
Norms and Standards	All buildings shall be designed and constructed to comply with NBR — SANS D3 RAMPS - Any ramp or driveway shall be so designed that it is safe when used and is fit for the purpose for which it is intended. 10400 PART D D4 SWIMMING POOLS AND SWIMMING BATHS - (1) The owner of any site which contains a swimming pool shall ensure that access to such swimming pool is controlled.	D3 RAMPS - Any ramp or driveway shall be so designed that it is safe when used and is fit for the purpose for which it is intended. D4 SWIMMING POOLS AND SWIMMING BATHS - (1) The owner of any site which contains a swimming pool shall ensure that access to such swimming pool is controlled.

CONTINUES ON PAGE 130 OF BOOK 2

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001 Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za Publications: Tel: (012) 748 6053, 748 6061, 748 6065



Vol. 691

20

January **Januarie**

2023

No. 47883

PART **2** OF **4**

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes





AIDS HELPLINE: 0800-0123-22 Prevention is the cure

Overarching Item	2.4 Occupational Health and Safety	
Sub-Item	2.4.3 Maintenance and Operation	REFERENCE TO ACTS AND LEGISLATION
Principles	All property and building components and installations which require maintenance to render the accommodation functional and habitable are to be maintained in a safe and proper manner.	415 MAINTENANCE AND OPERATION (1) (a) The owner of any building shall ensure that any mechanical equipment, facility or any service installation provided in or in connection with such building, bursuant to these regulations or pursuant to any building.
Guidelines	The owner of a building is obligated to ensure that the property, building and all equipment is operational and fit for purpose. The owner of the building must ensure that all measures are undertaken to resist the penetration of rainwater and passage of moisture into the building.	bylaw which was in operation prior to the coming into operation of the Act, shall be maintained in a safe and functional condition. (b) Such owner or any person appointed by such owner to be in control of such building shall ensure that where such equipment, facility or installation is designed to be kept operating during the times of normal occupancy of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in these regulations or in any by- law for such equipment or installation.
Norms and Standards	The maintenance and operation of all parts in the building shall be maintained by the owner in terms of the NBR - SNAS 10400 – Part A15. The owner of a building shall ensure maintenance of the relevant functional regulations contained in the NBR SANS 10400 Parts B, H, J, K and L.	 (2) The owner of any building shall ensure that pursuant to these regulations or pursuant to any building by-law that was in operation prior to the coming into operation of the Act, the following is maintained in accordance with the requirements of the relevant functional regulations contained in Regulations B, H, J, K and L: (a) the structural safety performance (behaviour of buildings under all actions that can be reasonably expected to occur); (b) the measures taken to resist the penetration of rainwater and the passage of moisture into the interior of a building.

71

	REFERENCE TO ACTS AND LEGISLATION	onnection) in addition s in' is an 'added extra' t to render the rental andlord/tenant and a and tenant.	type of rental d whether the enities. ific house rules for pplicable. enity but likely to also and Conditions in the House Rules are to be d and tenant.	property are to be d and tenant as per
2.5 Building Amenities	2.5.1 General	Any physical facility (e.g. garage) or service (e.g. Wi-Fi connection) in addition to the dwelling that is to be occupied by the tenant to 'live in' is an 'added extra' amenity. Any added extra amenity is not a requirement to render the rental accommodation acceptable, but rather a choice of the landlord/tenant and a function of the agreed rental amount between landlord and tenant.	Fixed/physical amenities would vary depending on the type of rental accommodation (single house, multi-storey res 3 etc) and whether the tenant/occupant has exclusive or shared use of such amenities. For the latter, notionally being 'common property', specific house rules for the use of these amenities would likely be in place and applicable. The above would also apply to ongoing service type amenity but likely to also include a 3 rd party service provider with additional Terms and Conditions in the performance of the ongoing services. All the above as well as any 3 rd party service charges, or House Rules are to be described and included in the lease between the landlord and tenant.	Any amenities and services included as part of the rental property are to be described and included in the lease between the landlord and tenant as per the Rental Housing Amendment Act, 2014.
Overarching Item	Sub-Item	Principles	Guidelines	Norms and standards

7.2.3. Level 3: Lease Agreement

Overarching Item	3.1 Rental terms and conditions	
Sub-Item	3.1.1 Lease agreement	REFERENCE TO ACTS AND LEGISLATION
Principles	A mutually rewarding relationship between landlord and tenant.	There is a plethora of legislation that in one way or another could impact on the 'norms and standards' of public sector
Guidelines	The lease is a record of what has been agreed and 'governs' the relationship between the lease is a record of what takes precedence is required.	rental and in particular the lease agreement provisions. A legal view on what takes precedence is required.
	 A detailed description of the rental property/accommodation – what's included and 	
	excluded – and a list of accepted defects upon occupation by tenant.	
	 Detailed particulars of the landlord and tenant. 	
	 The lease and notice periods. 	
	 The amount of rental and any other additional costs payable by the tenant and terms of payment. 	
	Annual escalation.	
	 Amount of deposit payable and its purpose (defray repair expenses if any). 	
	 Detailed information on what the rights and obligations of the landlord are, with specific focus on maintenance and repairs and arrangements for access by landlord into the premises. 	
	 Detailed information on what the rights and obligations of the tenant are, with specific focus on use/abuse of the premises, fittings and fixtures, any applicable complex or Body Corporate Rules and subletting. 	

Norms and Standards

The lease agreement is to be in writing and signed by both parties. The provisions of the lease are to comply with the Rental Housing Amendment Act, 2014, the Formalities in Respect of Leases of land Act, 1969, the applicable provisions of the Consumer Protection Act, 2008 and its final Regulations of 2011, The Sectional Title Scheme management Act as amended, any prevailing Municipal by-laws, the Estate Agency Affairs Act, 1976 (if estate agent is the landlord), the Prevention of Illegal Eviction From and Unlawful Occupation of Land Act, 1998 and the Immigration Act 13 of 2002.

74

7.2.4. Level 4: Environmental Sustainability

Overarching Item	4.1 Environmental Sustainability	
Sub-Item	4.1.1 Orientation: Solar Heat Gain and Shading	REFERENCE TO ACTS AND LEGISLATION
Principles	Example 3 shall be orientated to optimise occupiers thermal comfort levels. Thermal comfort is a means of describing occupant comfort levels which take into account a series of factors such as air temperature, radiant temperature, humidity, accordance with the requirements of SANS 204 or Appropriate orientation, solar heat gain and solar bear	SANS 10400 XA 4.2.1 b) - in any building of occupancy classified in terms of Regulation A20 as A1, A2, A3, A4, C1, C2, E1, E2, E3, E4, F1, F2, F3, G1, H1, H2, H3, H4, and H5, the orientation and shading are in accordance with the requirements of SANS 204 or Appropriate orientation of buildings optimises sun penetration, solar heat gain and
Guidelines	Buildings should where possible be orientated in accordance with NBR – SANS 10400 XA. Living spaces should be arranged in terms of NBR - SNAS 10400 XA. Roof overhangs shall be in accordance with SANS – 10400 XA.	The majority of buildings should face north (where other weather or topography conditions do not supersede the solar gain). SANS 10400 XA 4.4.1.1 Living spaces should be arranged so that the rooms where people spend most of their hours are located on the northern side of the unit.
Norms and Standards	None	Uninhabited rooms, such as bathrooms and storerooms, can be used to screen unwanted western sun or to prevent heat loss on the southfacing facades. SANS 10400 XA4.4.1.1 Living rooms should ideally be placed on the northern side. The longer axis of the dwelling should be orientated so that it runs as near east/west as possible. SANS 10400 XA4.4.1.1 The roof overhang to the northern wall shall be sufficient to shade the windows from midday summer sunshine in accordance with SANS 204. Windows facing east and west should be limited in number and confined to the minimum required for daylight and ventilation. SANS 10400 XA 4.4.1.2.

Overarching Item	4.1 Environmental Sustainability	
Sub-Item	4.1.2 Ventilation	REFERENCE TO ACTS AND LEGISLATION
Principles	To ensure that any habitable room within a building is adequately ventilated with enough fresh air to enable that room to be used without detriment to health and safety or causing any nuisance for the purpose for which it was designed. NBR — SANS 10400 Part 0 (1).	01 LIGHTING AND VENTILATION REQUIREMENT (1) Any habitable room, bathroom, shower-room and room containing a urinal, or any room which Is a parking garage shall be provided with a means of lighting and ventilation which will enable such room to be used without detriment to health or safety or rausing any nuisance
Guidelines	To ensure that common areas are adequately ventilated. To encourage designs that provide ample amounts of fresh air to reduce indoor temperatures and counteract the build-up of indoor pollutants and moisture build up. Where this is not possible by design, in for example an existing building with a double loaded passage configuration, suitable mechanical fresh air and extraction systems are required. Buildings should have adequate airflow and be cross ventilated wherever possible. Where natural ventilation cannot be achieved, mechanical ventilation / extraction must be specified and installed. All buildings should be adequately ventilated and comply with SANS 10400 – Part O	for the purpose for which It Is designed. (2) The requirement of subregulation (1) shall be deemed to be satisfied where- (a) subject to the requirements of subregulation (3), such room Is provided with one or more openings for natural light and ventilation in accordance with Part 0 of section 3 of SABS 0400; or (b) such room is provided with artificial lighting and ventilation in accordance with the provisions of Part 0 of section 3 of SABS 0400. b) Notwithstanding the provision of openings for natural ventilation in accordance with subregulation (2)(a) any room subject to the Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983), shall in terms of the said Act be provided with artificial ventilation as
		prescribed by such Act, and any room contemplated In subregulation (1) which Is - (I) a room which, due to conditions of high temperature, may be dangerous to safety or health; (II) a room where there will be dust, gas, vapour or volatile matter which may be dangerous to safety or health; or (III) used for any purpose for which natural ventilation Is not suitable, shall be provided with a means of artificial ventilation.

Overarching Item	4.1 Environmental Sustainability	
Sub-Item	4.1.3 Lighting Internal to Unit	REFERENCE TO ACTS AND LEGISLATION
Principles	Any habitable room including any form of bathroom within a building shall be provided with adequate and appropriate lighting. NBR – SANS 10400 Part 0 (1).	01 LIGHTING AND VENTILATION REQUIREMENT (1) Any habitable room, bathroom, shower-room and room containing
Guidelines	Rooms shall where possible be provided with Natural lighting. Window sizes shall be provided in terms of SANS – 10400 Part O. Energy efficient lamps should be utilised to reduce total energy usage.	a means of lighting and ventilation which will enable such room to be used, without detriment to health or safety or causing any nuisance, for the purpose for which It Is designed. (2) The requirement of subregulation (1) shall be deemed to be
Norms & Standards	Any habitable room as well as all forms of toilets and bathrooms shall have adequate windows to provide natural light and provision of artificial light shall comply with the provisions of NBR - SANS 10400 Part O. Other efficient technologies are also available. If another technology is used, documentation must be provided to demonstrate that the light fixtures achieve at least 90 lm/W. Therefore this metric can also be demonstrated by showing energy savings through evidence provided by a competent professional.	(a) subject to the requirements of subregulation (3), such room is provided with one or more openings for natural light and ventilation in accordance with Part 0 of section 3 of SABS 0400; or (b) such room is provided with artificial lighting and ventilation in accordance with the provisions of Part 0 of section 3 of SABS 0400. NATURAL LIGHTING Where for the purposes of natural lighting a room is provided with one or more openings, such opening or openings shall be situated in an external wall, or in a suitable position in the roof of the building. 002. O02.1: Where such opening is glazed it shall be glazed with transparent or approved translucent glazing material. O02.3 The area of such opening, or total area of such openings, inclusive of frames and glazing bars, shall be not less than 10 % of the floor area of the room or rooms served by it, or 0,2 m2, whichever is the greater.

8. Norms and Standards: Social Housing

8.1. Approach to specifications within this document

Technical specifications for building and construction projects typically refer to a range of standards for materials to be used, quality of workmanship, codes of practice and methodologies and tests to be performed in order to achieve compliance with core standards.

These minimum specifications, forming part of, and taken together with other parts of this document constituting the social housing norms and standards, and all associated external documents are intended to assist the Social Housing Regulatory Authority (SHRA) and the sector with:

- Ease of regulating the sector by providing a set of rules and guidelines that are easily understood by both the regulator and the sector
- Bringing social housing practice in line with constantly changing environments and innovation in design and construction, including introducing green initiatives to enhance sustainability through more resource-efficient design and construction practices

In addition, the minimum specifications will serve as legal and contractual obligation between the SHRA and delivery and managing agents operating in the sector.

Social Housing delivery agents (SHIs and ODAs) should develop standard minimum specifications for their developments in line witah their own standards and in response to the unique requirements of their development and operating environments. Yet, they should also strive to develop products in accordance with these Norms and Standards. Specifications should be developed with a view to being outcomes based, and flexible in order to promote responsiveness to context and innovation. To this end, standard specifications must be amended and/or augmented with supplementary preambles to meet the unique needs of every new project. Standard and supplementary preambles must be submitted with each application to the SHRA for project approval and funding for assessment in accordance with the norms and standards.

As with the norms and standards, the specifications are not intended to be a prescriptive list of building methods and technologies, materials and finishes for social housing developments, but rather to provide a framework of guiding principles that will enable high quality social housing to be developed that meets the mandate of the SHRA and the Department of Human Settlements, while at the same time is flexible and enables social housing to be developed in a manner that is responsive to the market, open to innovation, and enhances the lives of the tenants living in the units.

In this way a relationship is set up between the Norms and Standards at a SHRA level and the response by the SHI. This allows SHI's to develop project specific specifications and even organisational specific specifications that are contextually and market driven.

Development and application of specifications should follow the approach of the National Building Regulations (NBR) (SANS 10400 series). The content of these and other regulatory prescripts are not repeated or summarised in the body of this document, and no reference is made to specific regulations, codes and standards. Where deemed necessary to draw the attention of designers, developers and constructors of social housing to specific regulations or codes, such references are made in the Norms and Standards in relation to specific sections.

8.2. Use of Model Preambles for Trades:

These minimum specifications should be used in conjunction with the latest available edition of Model Preambles for Trades published by the Association of South African Quantity Surveyors, and any preambles supplementary to it, or similar industry-based Model Preambles, and included in the project tender and contract documentation. The Model Preambles augment these minimum specifications with comprehensive references to South African National Standards (SANS), and compiling Specifications for particular materials or methods where SANS Specifications or Codes do not exist.

8.3. Considerations for Operations and Maintenance

Although the NBR deals mainly with design and construction, it also has a section on maintenance after occupation, placing responsibility on the owner to maintain the buildings in the same safe and healthy state as approved for construction originally.

Due to the importance and general ignorance and neglect of this provision, attention is drawn specifically to the following excerpt from the NBR (NBR Section A15 Maintenance and Operation):

(1)

- A. The owner of any building shall ensure that any mechanical equipment, facility or any service installation provided in or in connection with such building, pursuant to these regulations or pursuant to any building by- law which was in operation prior to the coming into operation of the Act, shall be maintained in a safe and functional condition.
- B. Such owner or any person appointed by such owner to be in control of such building shall ensure that where such equipment, facility or installation is designed to be kept operating during the times of normal occupancy of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in

these regulations or in any by-law for such equipment or installation.

- . (2) The owner of any building shall ensure that pursuant to these regulations or pursuant to any building by-law that was in operation prior to the coming into operation of the Act, the following is maintained in accordance with the requirements of the relevant functional regulations contained in Regulations B, H, J, K and L:
 - A. the structural safety performance (behaviour of buildings under all actions that can be reasonably expected to occur);
 - B. the measures taken to resist the penetration of rain water and the passage of moisture into the interior of a building.
- . (3) The local authority may serve a notice on such owner or person requiring him to comply with sub regulation (1) or (2) within the time specified in such notice.
- . (4) The local authority may, by notice, in writing to the owner, order the evacuation of such building where the state of such building, equipment, installation or facility will cause conditions which in the opinion of the local authority may be detrimental to the safety or health of the occupiers or users of such building.
- . (5) Any owner or person who contravenes the requirements of sub-regulation (1) or (2) or fails to comply with any notice served in terms of sub-regulation (3) or (4) shall be guilty of an offence.

The above is important to note when designing and preparing construction specifications as thought should be given to the longevity of items specified, the maintenance requirements and lifecycle costing. This regulation places a clear legal liability on all building owners to maintain their buildings in a state of safe habitability. Normal wear and tear is permitted, but when it gets to the point where it affects structural and fire safety, health of occupants and all the other aspects regulated for construction, repairs must be carried out, otherwise the owner will be in breach of the statute and the original occupancy certification, as well as most likely rendering the building and the owner's third party liability towards occupants and the public uninsurable.

8.4. Practice Notes

Practice Notes are aimed at providing guidance on aspects that require significant consultation and discussion with the sector. The objective is to encourage a structured approach to introduce innovations into the document as well as ensure the sector is provided opportunity to develop consensus on contentious issues. It is proposed that this done through a community of practice on key thematic concerns and ensure the Norms and Standards remain relevant to developments and changes within the sector. This would allow the sector to develop common approaches to specific challenges thereby developing and sharing experiences in relation to complex challenges and methodologies (for example developing a calculator for lifecycle costing or hot water systems) and to respond to new technologies, materials and approaches (for example green technologies which are swiftly changing).

Accordingly, a series of Practice Notes is proposed. These Practice notes would be aimed at:

- a) providing guidance on aspects that require significant consultation and discussion with the sector. The objective is to encourage a community of practice on key thematic concerns and ensure the Norms and Standards remain relevant to developments and changes within the sector
- b) Providing specific guidance on how to approach specific items.

The areas provisionally identified that will be appropriate for practice notes include the following:

Table 1: Items for Practice Notes

Overarching item	Sub-item	Practice Note Reference
1.3 Overall Building design in relation to site & context	1.3.1 Hierarchy of Spaces & Place making	Practice note on "place-making" to be
2.1 Building Design	2.1.2 Orientation: Solar Heat Gain & Shading	Practice Note on solar orientation to be developed.
2.3 Maintenance and management	2.3.1 Operations Manual	Practice Note on Operations Manuals should be provided.
2.3 Maintenance and management	2.3.2 Maintenance schedules	Practice Note on maintenance planning to be developed
3.3 Services	3.3.2 Services: Hot Water Provision	Choosing and evaluating a hot water system
3.4 Maintenance & Management	3.4.1 Material Specifications: Common Areas, Lobbies, Passages	Practice Note on materiality to be developed
3.6 Sustainability	3.6.1 Lighting	Practice note on lighting to be developed
4.1 Design: Space norms and standards	4.1.1 Unit Design	Practice note to be developed on unit mix and principles per unit type.
4.1 Design: Space Norms & Standards	4.1.2 Unit Size	Practice Note to be developed on unit sizes and design parameters within unit types and definition of the method of measurement.
4.1 Design: Space Norms & Standards	4.1.3 Mix of unit types & sizes	Practice note to be developed on unit mix and principles per unit type.
4.2 Design of Unit	4.2.1 Unit Plans: Space Planning	Practice Note to be developed on planning for retrofits

4.2 Design of Unit	4.2.3 Kitchen Area: Space Planning: Self Contained Unit	Practice Note to be developed on kitchen design and elements.
4.2 Design of Unit	4.2.5 Bedroom (main)	Practice Note to be developed on bedroom requirements
4.2 Design of Unit	4.2.6 Bedroom (second)	Practice Note to be developed on bedroom requirements.
4.3 Materiality: Specifications	4.3.1 Floors	Practice Note to be developed
4.3 Materiality: Specifications	4.3.6 Materials: Finishes	Practice Note on specifications techniques to be developed
4.5 Maintenance & Management	4.5.1 Building User / Occupants Guide	Practice Note to be developed on
4.6 Accessibility	4.6.1 Bathroom Design	Practice Note to be developed: Accessibility Retrofitting Guidelines
4.6 Accessibility	4.6.2 Accessible Kitchens	Practice Note to be developed
4.7 Sustainability	4.7.1 Lighting Internal to Unit	Practice Note to be developed
4.7 Sustainability	4.7.4 Use of sustainable Materials	Practice Note to be developed
5.1 Communal Amenities	5.2.2 Kitchens	Practice note on ratio to number of units to be developed.

The above could be consolidated into specific thematic areas, along the proposed following lines:

- Building Orientation and Placemaking: reconciling optimal orientation with placemaking
- Space Planning and planning for retrofitting
- Accessible Design for Persons with Disabilities and Accessibility Retrofitting Guidelines
- Materiality and Specifications: Methodologies for specifying materials / services etc, sustainability, lifecycle costing methodologies
- Choosing & evaluating hot water systems
- Guidance: Maintenance Planning / Operations Manuals / Building User Guides

8.5. The key principles for quality social housing

The key principles for good quality sustainable social housing developments are set out below. These principles form the guiding framework for the norms and standards sets out in the sections that follow.

- Socially and environmentally appropriate: The type of units, services and amenities should be appropriate to the people to be accommodated. The mix of dwelling type and size should support the social, environmental and economic sustainability objectives of the development.
- 2. **Architecturally appropriate:** The development should provide a pleasant living environment which responds to its context, enhances its neighbourhood and respects its heritage.
- Functional: The design should best meet the requirements of the intended purpose. Units
 must accommodate the everyday needs of residents in terms of accommodating their
 furniture and their requirements in terms of cooking, eating, sleeping, washing and
 socialising.
- 4. **Accessible and adaptable**: Dwellings should be capable of adaptation to meet the changing needs of residents. There should be ease of access and circulation for all residents to move through the development and to use the services and amenities provided.
- Safe, secure and healthy: The development should be a safe and healthy place in which to live.
- 6. **Affordable:** The development should be able to be built, managed and maintained within the cost parameters of providing affordable rentals.
- 7. **Durable:** Construction techniques and materials should have a service life of that provides acceptable performance over the life of the building without the need for abnormal repair or replacement at intervals shorter than general industry benchmarks.

The balance between lifecycle costing and initial capital outlay must always be balanced.

8. **Resource Efficient:** Efficient use must be made of land, infrastructure, water and energy. The building should optimise the benefits of orientation, daylight and solar gain. The use of scarce natural resources in the construction, maintenance and management of the buildings should be minimised.

The above principles are utilised in each sub-section of the document to inform and shape the approach and content of each sub-item with regard to the underpinning Principles, the Guidelines and the recommended Norms and Standards pertaining to the sub-item.

8.6. Differentiation between typologies (Greenfield, brownfield, etc)

Increasingly, social housing projects are undertaking brownfield inner city conversions and refurbishments. This trend is largely a function of better utilization of valuable and strategic inner-city properties through redevelopment in the form of mid-rise newbuilds with lifts (in some instances, this also covers towers or apartment tower blocks).

For this reason, it is intended that these Norms and Standards will apply to all types of social housing development as described below.

Different authors, commentators and practitioners attach slightly different attributes to the terms "greenfield" and "brownfield" respectively. Rather than trying to arrive at a universal definition, we have defined the terms as follows for the purposes of these Norms and Standards:

8.6.1. Greenfield development

Construction of new buildings on vacant sites, usually requiring legal conversion of development rights (township establishment, rezoning or other formal town planning procedure), new connections to external bulk infrastructure services grids of the local authority, and varying levels of installing new internal infrastructure services.

A common perception is that greenfields projects are always located in uninhabited and undeveloped areas at the urban periphery. In this Norms and Standards document however, greenfields can also refer to undeveloped parcels or pockets of parcels of infill land in already developed and inhabited areas.

These parcels are deemed completely vacant, but in some cases may have rudimentary or dilapidated structures on them that need to be demolished and the land rehabilitated in preparation for new construction.

8.6.2. Brownfields development

The re-development of existing properties, either for the same use or for conversion to a different use. For our purposes these properties are almost always located in the midst of areas that are already well developed and inhabited, with existing connections to the bulk infrastructure services grids of the local authority, and often, but not always, with pre-existing development rights that will cater for the proposed new form of use.

The redevelopment may take the form of refurbishment for the same or similar use, or conversion to a new use, and although in the main the existing buildings on the site will be retained, projects may in some instances involve partial demolition, alteration and addition.

8.6.3. Refurbishment, upgrade, conversion

Acquiring existing buildings and preparing them for residential dwelling purposes can take one of two basic forms, or a combination of both:

- 1. Refurbishing or rehabilitating existing residential buildings (blocks of flats, townhouses, etc.) for continued residential use, in other words no change in use is brought about. Depending on the state of the building, this could entail minor rehabilitation or repair (repainting, fixing broken components, replacing worn carpets, etc.), or more extensive renovation or upgrade/refurbishment. Renovation or refurbishment results in an essentially new building within the framework of an old one. The latter may require changes in layout and new services installations to comply with new fire safety regulations and building codes, and usually involves complete or partial tenant evacuation
- 2. Adaptive re-use or conversion, where a building that was originally designed for another type of use (offices, schools, etc.) is turned into a residential building.

Some buildings were originally built for mixed use, for instance a block of flats with shops or offices at ground level. The SHI may decide to retain the mix and simply renovate, or it may decide that it is more appropriate to convert all or some of the shops and offices into dwelling units as well.

In this report we will use the term *refurbishment* interchangeably for repair, upgrade and renovation of existing residential buildings (no change in use), and *conversion* for all cases where a change in use is affected.

In rare cases there may also be elements of *restoration* involved, that is an attempt to restore the original design or historical concept of the building by stripping it of later additions and putting back or repairing original details and materials. This Norms and Standards document does not address restoration projects.

8.6.4. Newbuild / greenfield mid to high-rise or towers development:

Greenfield medium density social housing development to date has been mainly in the form of two to four storey walk-up rows, clusters and blocks with no lifts and access to upper floors via external pedestrian stairs and walkways, open or covered. The main reasons for the four-storey upper limit have been land use zoning considerations and the fact that when a building rises beyond four storeys it becomes a legal requirement to install a lift or lifts, which has significant cost implications.

Although some brownfield refurbishments and conversions have been done on high-rise buildings or towers, there have been very few cases of newbuild towers social housing in South Africa. It is expected that newbuild mid to high-rise towers will increasingly become a form of social housing in the future, and these Norms and Standards are therefore, intended to apply

to such building types as well.

8.7. Approach to document sections

The norms and standards are structured in a hierarchy, starting at the site and contextual framework level and working through to the detailed requirements of the unit. Four levels are provided for:

Figure 2: Norms and Standards Levels



The norms and standards are set out in a table that includes the following:

- Overarching item: This term refers to specific thematic elements within the levels defined. (For example, the overall context of a development).
- **Sub-item:** This element refers to a specific area of focus within themes and provides more detail on particular components of overarching items.
- **Principles:** These are the high-level key outcomes desired by the particular sub-item.
- **Guidelines**: Applicable good practice on a particular topic informed by knowledge, understanding and experience of practitioners in the field and their professional advisors. This is an explanation of how the general principles are to be achieved.
- Norm and standard: This is the compliance levels that must be achieved. Within this section it
 - is noted whether this item is a "Conditional Requirement" for funding by the SHRA.
- Required documentation for evidence: This lists the required evidence that must be submitted in order to show how the project achieves compliance with the norms and standard.
- Practice Note Reference: A Practice Note gives guidance on how to achieve compliance
 as well as additional explanatory information. These shall relate, provisionally, to the
 areas identified in the individual sheets following, and as listed in Section 2.4 above.
 These may be issued from time to time.

8.8. Conclusion and Matrix of Typologies

A summary of the overarching items and sub-items covered in the norms and standard (per building typology) are shown in Table 2 overleaf

The table is a matrix indicating for ease of reference the applicability of each sub-item in the sheets that follow to each of the possible social housing typologies, both greenfield newbuilds and brownfield refurbishments and conversions. Where a capital letter "C" in bold red font appears next to a dot in the matrix, it indicates a conditional requirement which is further explained in the relevant sub-item on the sheet referred to

Table 2: Summary of overarching items and sub-items by level

								Communal Housing	99
	Overarching item	Sub-item	Greenfielo	Greenfield or Infill Newbuilds	Refurbishment of existing residential	Adaptive Re-use	/ Conversion	As component of social housing development or as stand-alone building	ocial housing s stand-alone
			Walk up no lifts	Mid to high rise towers – with lifts		Conversion of existing other residential	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
			•	•	•		•	•	
		1.1.2. Urban Design & Strategic Area Frameworks	•	•	•		•	•	
		1.1.3. Efficient use of land & resources: Building Typologies & Densities							
		1.1.4. Bulk Services	• C	0					
		1.1.5. Environment & Ecology) •	0				•	
		1.1.6. Mixed Use, Tenure and Income	•	•	•		•	•	
		1.1.7. Heritage	•		•		•	•	
	1.1. Overall context	1.1.8. Entrance to development and perimeter treatment							
J		ir and pedestrian movement through site						•	
	1.2. Accessibility	1.2.2. Parking	•	•	•		•	•	
		1.3.1. Hierarchy of spaces and place making	•				•	•	
		1.3.2. Architectural diversity and building massing	•	•			•	•	
1. Level 1: The	1.3. Overall building		•	•	•		•	•	
1	site and context	1.3.4. Scale of project: Unit Numbers	•	•	•		•	•	
		2.1.1. Adaptability and building re-use			•		•	•	
		2.1.2. Orientation: Solar heat gain and shading	•	•				•	
		2.1.3. Building entrances, thresholds and staircases	•		•		_	•	
		2.1.4. Design of buildings: Cross ventilation	•	•	•		•	•	
		2.1.5. Building envelope: Walls		•				•	
		2.1.6. Building envelope: Windows and glazing	•	•				•	
		2.1.7. Building envelope: Roof Construction / Insulation							
1		2.2.1. Electrical, water, other	0	O •					
l							-		

88

		2.2.2. Lighting	•	•	•	•	•	•	•
	2.3. Maintenance and	2.3. Maintenance and 2.3.1. Operations Manual	•	•	•	•	•	•	•
	management	2.3.2. Maintenance schedules	•	•	•	•	•	•	•
2. Level 2: The	2. Level 2: The 2.4. Sustainability	2.4.1. Rainwater collection	•	•					•

89

Level	Overarching item	Sub-item	Greenfield	Greenfield or Infill Newbuilds	Refurbishment of existing residential	Adaptive Re-use / Conversion	/ Conversion	Communal Housing As component of social housing development or as stand-alone building	g ocial housing s stand-alone
			Walk up no lifts	Mid to high rise towers – with lifts		Conversion of existing other residential	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
		2.4.2. Energy efficiency	•		•		•	•	
		3.1.1. Building entrance and Lobby	•		<u>.</u>		•	•	
	3.1 Common areas	ል Provision of Lifts	•				•	•	
	3.1. Collinoi aleas	3.1.3. Internal passages / External walkways	•		•			•	
		3.1.4. Ratios			•		•	•	
		3.2.1. Laundry areas	•		•		•	•	
		3.2.2. Refuse areas	•		•		•	•	
	3.2. Provision of	3.2.3. Provision of open space	•					•	
	amenities	3.2.4. Recreational and play areas	•		•		•	•	
3. Level 3: The		3.2.5. Other amenities	•				•	•	
Building:		3.3.1. Services reticulation	•		•		•	•	
Common Areas		3.3.2. Hot water provision	•		•		•	•	
	3.3. Services	3.3.3. Ventilation	•		•		•	•	
		3.3.4. Fire equipment	•		•		•	•	
		3.3.5. Safety and security: Monitoring: CCTV	•		•		•	•	
	3.4. Maintenance and management	d 3.4.1. Material Specifications: Common Areas: Lobbies & Passages	•		•			•	
	3.5. Accessibility	3.5.1. Access to units	•		•		•	•	
	3.6. Sustainability	3.6.1. Lighting	•		•		•	•	
		eas: Metering and sub metering	•		•		•	•	
		4.1.2. Unit design	•		•		•	•	
	4.1. Design: space norms 4.1.3. Unit size	ns 4.1.3. Unit size) •	U •	•	U •) •	•	
	and standards	4.1.4. Mix of unit types and sizes			•		•	•	
		4.1.5. Shape	•				•	•	
4. Level 4: Unit		4.2.1. Unit plans: space planning	•		•		•	•	
			•				•	•	
	4.2. Design of unit	4.2.3. Kitchen area: space planning: self-contained unit	•		•		•	•	
			•		•		•	•	
		4.2.5. Bedroom (main)	•		•		•	•	

Level	Overarching item	Sub-item	Greenfield or Infill Newbuilds	Refurbishment of Residential residential	of Adaptive Re-use / Conversion	/ Conversion	Communal Housing As component of social housing development or as stand-alone building	g social housing s stand-alone
			Walk up Mid to high rise no lifts towers – with lifts	gh rise ith lifts	Conversion of existing other residential	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
		4.2.6. Bedroom (second) 4.2.7. Access to outdoor space and balconies		•	•	•	•	
		4.3.1. Floors 4.3.2. Walls: construction and finishes		•	•		•	
	4.3. Materiality:				•	_		
	specifications	4.3.4. Bathroom		•	•			
		4.3.5. Kitchen fittings	•	•	•	•	•	
		4.3.6. Materials: finishes	•	•	•	•	•	
		4.4.1. Ventilation	•		•	•	•	
	4.4. Services	4.4.2. TV/Satellite/IT/Fibre	•	•	•	•	•	
	4.5. Maintenance and management	and 4.5.1. Building user/occupants guide	•	•	•	•	•	
	:	4.6.1. Bathroom design	•	•	•	•	•	
	4.6. Accessibility	4.6.2. Accessible kitchens	•	•	•	•	•	
		4.7.1. Lighting internal to unit	•	•	•	•	•	
	4.7. Sustainability	4.7.2. Water use	•	•	•	_	•	
		4.7.3. Metering	•	•	•	•	•	
		4.7.4. Use of sustainable materials	•	•	•	_	•	
N	5.1. Rooms with shared 5.1.1. Unit Design Amenities	d 5.1.1. Unit Design					•	
		5.2.1 Bathrooms					•	
Communal Housing	5.2 Common Amenities	5.2.2 Kitchens					•	
0		5.2.3 Common Area Amenities					•	

8.9. Norms and Standards

The below sections provide detail on both overarching and sub-items of relevance to Norms and Standards of Social Housing.

8.9.1. Level 1: External environment

Overarching Item	1.1 Overall Context
Sub-Item	1.1.1 Location of Project
Principles	Social Housing should be well located within existing CBDs or urban nodes and within an approved urban edge.
Guidelines	Social Housing projects should be well located with easy access to existing economic and social infrastructure and in a manner that enables spatial and social transformation. In this regard: • Social housing should be located in established CBDs and urban nodes. • Social housing should not be located outside the urban edge of an urban area. ³⁶
Norm and Standard	 The following locational attributes to be demonstrated: Access in close proximity (less than 500m) to established public transport routes and stops. Within a 10 minute walk (+/- 800mradius) of site show location and access to at least 3 of the following:
	 Public Transport: bus, taxi, train etc [Mandatory] Schools: Pre-school / Public Junior + Senior Schools Established economic activities and employers such as office parks, industrial areas etc Retail and convenience e.g. ATMs, Pay points for municipal accounts Healthcare Facilities Leisure & Recreational Facilities Open Space And/or access to affordable Public Transport: bus, taxi, train etc., that will take a person to all of the above within 15 minutes of travel time In the case of a new build development within a newly developed area subject to an approved Urban Design Framework, show that key amenities such as schools, open space and recreational facilities are planned and will be developed within a finite timescale.
Conditional Requirement	 This Item is a Conditional Requirement for funding by the SHRA. Project to be with Restructuring Zones as defined by the Social Housing Act (Act No 16 of 2008).

Required documentation for evidence	Locality plans and mapping showing site location, entrance to development and location of the amenities listed above.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.2 Urban Design Frameworks 1.1.4 Environment & Ecology
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	1.1.2 Urban Design & Strategic Area Frameworks
Principles	The creation of viable integrated neighbourhoods is a key goal in spatial transformation. New social housing developments should contribute to neighbourhood formation through positive spatial integration in existing urban areas.
Guidelines	In addition to the brief for the development -which should provide guidance on proposed densities, mix of unit types and proposed tenant profile, an Urban Design Framework (UDF) may be in place for major new build developments which comprises of a larger land parcel. An urban design framework (UDF) refers to the pattern, structure or arrangement of streets, buildings and landscape that make up urban areas. The interrelationship between these elements and their individual characteristics come together to make a 'place' and ultimately a neighbourhood. In many instances specific city strategic area frameworks are in place which define the development vision of specific area and translate city scale policy frameworks into area specific frameworks. The mix of buildings, streetscape and open spaces are important to the quality of residential developments and neighbourhoods. A UDF creates a structure for the design of developments within an area and would take the following into consideration; movement frameworks, hierarchy of spatial development, density, diversity and mix of uses, public open space and landscape design.
Norm and Standard	The development must be compliant with the Strategic Area Frameworks and /or Urban Design Framework for the relevant area where applicable. Large scale (mega) developments comprising of a larger land parcels with +500 units must have an Urban Design Framework which illustrates how the project is broken up into sub-precincts with a diversity of building types and identities.
Required documentation for evidence	 Copy of Urban Design Framework / Strategic Area Framework Design Report from Urban Designer or Architect demonstrating compliance with Framework.

Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.2.1 Hierarchy of Spaces & Place making
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	1.1.3 Efficient use of land & resources: Building Typologies & Densities
Principles	The development should contribute to efficient use of land, environment and services through appropriate building typologies and densities.
Guidelines	Urban sprawl threatens the efficient use of urban infrastructure. Urban consolidation is a principle that recognises designs that make use of compact development patterns to increase efficient land use utilisation. The redevelopment of previously used or unused sites contributes to city regeneration and stimulates economic and social investment in communities. This efficient use of land is directly correlated to the typologies of buildings. Therefore, densification through the use of brownfields and infill sites is encouraged. Developments on land that has not been previously promulgated for development and is outside of existing urban nodes or edge is discouraged. The building typology is a key factor in determining densities that contribute to efficient land utilisation.
Norm and Standard	The Building Typology to be used should be specified for example, 3-4 walk up / medium to high rise etc. The development should enable sufficient density in relation to the building typology and location. Where densities permitted in terms of existing town planning schemes/site zoning are considered inappropriate, an application and motivation for increased densities should be submitted, provided this is supported by local authority planning departments and will not unduly delay approvals.
Required documentation for evidence	Design report from Architect / Town Planner showing building typology and density calculations in relation to contextual benchmarks and Strategic Area Frameworks.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.1.2 Urban Design and Strategic Area Frameworks
Practice Note Reference	Practice Note to be developed on general suggested densities per contextual conditions.

Overarching Item	1.1 Overall Context
Sub-Item	1.1.4 Bulk Services
Principles	New developments should be in areas where sufficient bulk capacity already exists, or where not, aligned with short to medium-term municipal infrastructure and spatial development strategies, plans and capital budgets.
Guidelines	None
Norms & Standards	Development should not proceed unless there is adequate capacity of bulk services to ensure a continued and ongoing supply.
Conditional Requirements	Existing capacity available to meet the demands of the project, or firm commitments that such capacity will be available in time for the project to be habitable on completion.
Required	Engineering Services Reports
documentation for evidence	2. Information from Local Authority
Corresponding	This sub-item should be read in conjunction with sub-item:
References	1.1.5 Environment & Ecology
Practice Note	None
Reference	

Overarching Item	1.1 Overall Context
Sub-Item	1.1.5 Environment & Ecology
Principles	Reduce impact of greenfields development on ecological systems and biodiversity.
Guidelines	The development should not be located on prime agricultural land or land that has a high ecological value / has evidence of threatened species or within the buffer zones of watercourses or ridges Developments should be located within established urban boundaries and aligned to City and Metro Spatial Development Frameworks.
Norm and Standard	The development should be aligned with the relevant Spatial development Frameworks. Development should not be on land that has high ecological value – this includes land used for agricultural production, as well as land currently designated and used as open space or parkland

Conditional Requirement	No development on land that is still zoned as agricultural land and where Bulk Services are not available
Requirement	Services are not available
Required documentation for	Confirmation of project location in relation to Spatial Development Frameworks.
evidence	2. Evidence of compliance with municipal by-law and national legislation related to built environment environmental considerations such as confirmation that an Environmental Impact Assessment (EIA) is not required, or when required has achieved a positive Record of Decision (ROD).
	3. Submit copy of EIA and Environmental Authorisation (RoD) if required in terms of Statutory Compliance
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.1.2 Urban Design & Strategic Area Frameworks 1.1.4 Bulk Services 1.1.7 Heritage
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	1.1.6 Mixed Use, Tenure and Income
Principles	To encourage mixed use housing developments that promote economic and neighbourhood sustainability
Guidelines	Mixed use developments that incorporate uses other than housing such as retail, working spaces and community facilities such as crèches contribute to the economic and social sustainability of the development.
	Lettable retail and working spaces can contribute to cross subsiding the operational income stream of the development.
	Saleable for profit options such as sectional title, FLISP and open market units can contribute cross subsidies to capex through profit sharing.
	Mixed income residential development also promote social diversity and integration, greater sustainability and avoids large ghetto-like concentrations of low income rentals
	Community Facilities such as crèches that can be used by both residents and the broader community engage the development into a neighbourhood amenity.
Norm and Standard	Dependent on location, feasibility and typology a percentage of the development should be allocated for uses other than social housing.

Required documentation for evidence	 Plans showing areas allocated for mixed use. Inclusion of rental returns from other uses into feasibility model.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.2 Urban Design and Strategic Area Frameworks
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	1.1.7 Heritage
Principles	The conservation and protection of our cultural heritage is recognised in terms of our cultural identity.
Guidelines	Heritage may be identified in terms of the value and age of the built environment but it also may be in terms of the social history of the site and archaeological value. No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority. This is relevant to developments on brownfields sites even when currently vacant and within existing buildings. However, heritage does not only apply to the built environment; a development may be subject to an impact assessment, specifically in cases where the development or other activity which will change the character of a site exceeding 5 000 m2 in extent; or involving the consolidation of three or more existing erven.
Norm and Standard	Development should be compliant with heritage requirements where relevant.
Required documentation for evidence Corresponding	 Demonstrate compliance with the National Heritages Resources Act of 1999 and any relevant municipal by-laws. Heritage Report Heritage Impact Assessment Permits This sub-item should be read in conjunction with sub-item:
References	1.1.5 Environment & Ecology
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	1.1.7 Entrance to Development and Perimeter Treatment
Principles	The perimeter treatment of the development is an important factor in the integration of the development within the existing urban fabric. Safety & security of both residents and the neighbourhood are affected by the perimeter treatment of developments.
Guidelines	To provide a secure perimeter design to development that supports street surveillance and active monitoring of grounds. The development should have clearly defined entrance with separate vehicular and pedestrian access. Design should ensure a primary point of access control. In large scale developments, consideration should be given to taxi pickup and drop off zones adjacent to entrances. Secure perimeter and entrance/s to development with a gatehouse in case of
Norm and Standard	estates, and with access control / facilities for guards for both estates and buildings. Points of site ingress/egress should be designed to ensure smooth and efficient flow of both pedestrian and vehicular traffic for both residents and visitors, especially at peak times
Required documentation for evidence Corresponding	 Site Plan / Site Development Plan showing: Location of buildings in relation to site and the "built edge' condition Location of entrance to development or building Correlation to location of transportation links as stipulated in sub-item 1.1.1 This sub-item should be read in conjunction with sub-item:
References	1.1.2 Urban Design and Strategic Area Frameworks
Practice Note Reference	None

Overarching Item	1.2 Accessibility
Sub-Item	1.2.1 Vehicular and pedestrian movement through the site
Principles	Provide a safe environment for residents and ground floor accessibility for all residents.
Guidelines	Vehicular and pedestrian movement should enable ease of movement and a safe environment for residents.
	Vehicular traffic to be separated from pedestrian traffic as far as possible. Speedbumps should be provided to slow traffic down
	Parking areas to be clearly be delineated from landscaped open areas.
	Paved or surfaced paths to be provided to facilitate movement through the development between buildings.
Norm and Standard	The entire ground floor of the development should be accessible for wheelchairs and push chairs through the use of mountable kerbs and ramps.
	Walkways to be adequately sized in terms of width. The surface finish should be slip resistant, easily cleanable and have longevity.
Required documentation for evidence	Site Plan showing location of parking and pedestrian paths through development
Corresponding	This sub-item should be read in conjunction with sub-item:
References	1.2.2 Parking
Practice Note Reference	None

Overarching Item	1.2 Accessibility
Sub-Item	1.2.2 Provision of Parking
Principles	Adequate suitably located parking to be provided on site for residents and visitors. There should be parking that is appropriate for disabled residents and visitors
Guidelines	Determine appropriate parking ratios required in relation to context, locality, access to reliable and affordable public transport, and apply to municipality to have these reduced if necessary, where the reduction is supported by the planning and roads departments and will not unduly delay approvals for the project.
	In existing buildings or inner city building conversions with limited or no parking – no additional parking would be required

Norm and Standard	Parking areas must be compliant with minimum required or maximum allowed parking ratios. The Parking Ratio for new build projects should not exceed 0.5 bays / unit unless specifically motivated in terms of specific local policy requirements. Provision should be made of adequately sized parking bays for disabled residents and visitors in close proximity to building entrances.
Required documentation for evidence	Site Plan Town Planning Compliance Tables: Parking ratios
Corresponding	This sub-item should be read in conjunction with sub-item:
References	1.2.2 Vehicular & pedestrian movement through site.
Practice Note Reference	None

Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	1.3.1 Hierarchy of Spaces & Place making
Principles	The design of building types, the relationships between them, their relationships to streets and the spaces created around them will influence the character of the overall site and its surroundings and contribute to the quality and identity of the new environment.

Guidelines	In preparing overall scheme layouts, consideration should be given to the following factors: • Integration of the development into the existing context through
	respecting existing street patterns, landscape and urban markers. • Siting of buildings to take into account relationship to street edge,
	building scale and size, and orientation.
	Creating identity of place through design of spaces between buildings
	Encouraging 'social living'
	The layout design should aim to create an identity of place which helps foster residents' sense of 'ownership' and responsibility for the development thereby contributing to the creation of a sustainable community.
	Example:
	The design on the left utilises a standard block design which is repeated across the site. On the right the same development is redesigned to a more efficient layout achieving a higher density and creating a stronger relationship of units to a street based landscape. Reference: NASHO: Framework for improving the design of Social Housing projects
Norms & Standards	The layout should engender a sense of place and community through spatial differentiation within the development
Required documentation for evidence	Site Plan demonstrating within the design layouts of the buildings, spatial differentiation between open spaces, garden areas, parking areas allowing privacy as well as surveillance of public spaces.
Corresponding	This sub-item should be read in conjunction with sub-items:
References	1.1.2 Urban Design and Strategic Area Frameworks
	1.1.3 Efficient use of land & resources
Practice Note Reference	Practice note on "place-making" to be developed.

Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	1.3.2 Architectural Diversity & Building Massing
Principles	The design of building types, the relationships between them influences the character of the overall site and its surroundings and contributes to the quality and identity of the new environment.
Guidelines	In preparing overall scheme layouts consideration should be given to the following factors: • Siting of buildings to take into account relationship to street edge, building scale and size, and orientation. • Creating identity of place through design of spaces between buildings • Avoiding monotony associated with developments with a single repetitive building type or a singular wall surface treatment. Consideration to be given to external wall treatment in terms of diversity of surface treatments and elevational design. • Consideration to be given to varying heights of buildings and marking key elements such as entrances and corners. Consider to what extent ground floor units, top floor units and units at the ends of building blocks could be differentiated from the more typical floors, or amongst the units in the middle of building? To what extent have these special opportunities should be harnessed in order to create diversity and interest and in order to overcome the monotony ordinarily associated with mass housing? Example: Massing Diagram from Newtown North Urban Design Framework: Brickfields Social Housing 2004: GAPP Architects
Norms & Standards	The development's architecture should be diverse including different building types, heights and facade treatments. Developments must demonstrate a diversity of building type that is responsive to site conditions in line with the Urban Design Framework.
Required documentation for evidence	Design Report by Architect with plans, sections, elevations and massing models demonstrating how the norm & standard is achieved.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.2 Urban Design and Strategic Area Frameworks 1.2.1 Hierarchy of spaces and placemaking

Practice Note Reference	None
Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	1.3.3 Hard and soft Landscaping
Principles	Landscaping and open space contribute to the health and wellbeing of residents whilst also contributing to climate resilience.
Guidelines	In greenfields and brownfields developments: Example of sufficiency: Landscaping could include: • Soft Landscaping: Trees, grassed and planted areas. • Urban Agriculture such as planting for Food Gardens • Hard Landscaping: Paving and permeable paving. All planting must be considered in terms of indigenous and water wise plants Seating and other amenities such as playgrounds must be correlated to the landscape plan in terms of shading. All surfacing must be considered in terms of permeability for stormwater attenuation and soak away and possible water collection in terms of climate resilience Play area surfacing must comply with relevant fall safety standards. Playgrounds should comply with SANS51176: Playground Equipment & Surfacing The maintenance of all landscaped areas must be considered in terms of maintenance, water use etc. In existing buildings which do not have open space consideration could be given to planting in limited planting in containers in suitable areas which have sufficient sun. This could also for instance include rooftop and/or courtyard food gardens
Norms & Standards	Landscaping should be provided depending on the size and type of development and erf, as well as the surrounding area.
Required documentation for evidence	 Site Plan showing areas of soft and hard landscaping. Specifications of surfacing etc shown in specification documentation.
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.3 Provision of Open Space.
Practice Note Reference	None

Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	1.3.4 Scale of Project: Unit Numbers
Principles	The objective of this item is to demonstrate operational scale and the correlation between unit numbers and amenities provided.
Guidelines	Whilst the size of the project is based on the size of the erf and market demand, the number of units should be at a scale that enables the development to operate effectively.
Norms & Standards	Unit numbers must be appropriate for the size of the erf and market demand taking into consideration unit size
Required documentation for evidence	 Provide breakdown of overall unit numbers & unit typologies. Overall population density based on unit typologies. The above should be cross referenced to amenities provided on site as a percentage against unit area or list amenities against unit numbers or area of open space (excluding parking) as a ratio to occupancy numbers.
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.1.3 Mix of unit types and sizes.
Practice Note Reference	None

8.9.2. Level 2: The Building

Overarching Item	2.1 Building Design
Sub-Item	2.1.1 Adaptability and Building re-use
Principles	The re-use and adaptation of existing building stock for housing is an effective strategy for optimising unused or under-utilised assets within cities.
Guidelines	Adaptive re-use refers to the process of reusing an existing building for a purpose other than which it was originally built or designed for. As construction waste accounts for approximately 30% of all waste generated
	which ultimately goes into landfill, re-using existing buildings minimises material consumption and is beneficial to the environment.
	A building will need to be assessed for its potential to be re-used for housing in terms of:
	The condition of the building
	The floorplate configuration and its suitability for a residential configuration The position of circulation cores: lifts and staircases
	The façade of the building, its window configuration or façade make up
	The construction of the building: its load bearing capacity and floor slab construction. For example, can areas of the slab be cut out if required
	The Existing Rights: can the building be added to in terms of its area (additions) or FAR (building height)?
	Existing older residential building stock should also be considered within similar evaluation parameters. Many older buildings require complete replacement of building services and refurbishment of the units. In some cases, the unit sizes may be incompatible with current requirements and may need to be resized. This could mean combining 2 units into a single unit or breaking larger units into smaller units.
Norms & Standards	Every building conversion will have slightly different parameters and will be assessed on its own merits according to the viability of the project and compliance with unit space norms and standards and unit mixes.
Required documentation for evidence	Pre-feasibility assessments incorporating indicative analyses of contextual factors and risks such as market and urban development trends, socioeconomic issues, cost estimates and financial viability.
	 Building Condition Reports describing the condition of the existing building, structural integrity, the existing and available development rights, the condition of services by Architect and Engineering Team.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.6 Heritage
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	2.1.2 Orientation: Solar Heat Gain & Shading
Principles	To optimise resident thermal comfort levels within buildings.
·	Thermal comfort is a means of describing occupant comfort levels which take into account a series of factors such as air temperature, radiant temperature, humidity, draughts, clothing value and activity rates.
Guidelines	Appropriate orientation of buildings optimises sun penetration, solar heat gain and shading.
	The majority of buildings should face north (where other weather or topography conditions do not supercede the solar gain).
	It is noted that this may not be possible in a perimeter block development and that elevations that are not optimally orientated should be provided with adequate shading devices.
	The optimum orientation needs to be balanced against other factors such as topography and place making.
	Q ————————————————————————————————————
	Example: This development on a flat site places all the units in rows facing north achieving good orientation. However, the placement of units in relation to the site, street edge, landscaping etc does not show any elements of placemaking. This would not be a good example of the balance between orientation and overall design.
Norms & Standards	The majority of buildings should face north, or at least within 15 degrees west or east of north.
	With perimeter block developments at least 50% of all facades should face north, or at least within 15 degrees of west or east of north
	It is noted that within developments not all elevations can be optimally orientated. Elevations that are subject to solar heat gain e.g. West facing should be provided with adequate shading devices and/or solar control glass as per the glazing rationale
Required documentation for evidence	Site Layouts showing all buildings and amenities with orientation clearly denoted.
Corresponding	This sub-item should be read in conjunction with sub-items:
References	1.2.1 Hierarchy of spaces and placemaking
Practice Note Reference	Practice Note on solar orientation to be developed.

Overarching Item	2.1 Building Design
Sub-Item	2.1.3 Building Entrances, Thresholds and Staircases
Principles	The design, location and materiality of entrances to individual buildings and location of staircases is key to accessibility, legibility, safety and the creation of community networks within developments and buildings.
Guidelines	Building Entrances should be designed so that a limited group of units share an entrance or staircase. There must be a clear distinction between public, semi-private and private space and a strong sense of security for everybody who will use the area. Consideration should be given to planning for safety and security of residents in terms of the design. Staircases should have a roof covering where possible on low rise walk-ups and definitely on high rise buildings. This is not only to provide protection from the environment but also to assist with cleaning, maintenance and safety.
Norms & Standards	Thresholds to entrances to buildings and entrance doors should be provided with paved areas and covers to doors where possible. Buildings must be accessible to persons with disabilities with step free or ramped access. Thresholds and Staircases should conform to disability requirements in relation to changes of texture, tactile indicators etc. Entrance areas and staircases should be well lit. Access control may not necessarily be required at individual buildings within multiunit larger developments with a single gated entrance.
Required documentation for evidence	Project design documentation (Site Plan / Building Plans)
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.1 Building Entrance & Lobby 3.1.2 Lift Lobbies
Practice Note Reference	None

Overarching Item	2.1 Building Desi	ign	
Sub-Item	2.1.4 Design of B	Buildings: Cros	s Ventilation
Principles	_		de ample amounts of fresh air to reduce indoor build-up of indoor pollutants and moisture build
Guidelines	of dual aspects and The depth of space dependent on the openings. The preferred typ enables passive ve In the conversion of	d cross ventilating that can be verified to ceiling ology in this resultation and cross of other buildings used, consider	esign of buildings should maximise opportunities on for habitable rooms. entilated using a cross-flow ventilation strategy is ng height and the number and location of the espect is a single loaded passage typology which oss ventilation. g types to residential use, where a double loaded ration must be given to ventilation of passages by
	Table 27: Types of natura	l ventilation	
	Туре	Image	Description
	Single-sided Ventilation	*	Single-sided ventilation relies on the pressure differences between different openings within a single space. It is more predictable and effective than if there is only a single opening, and can therefore be used for spaces with greater depth. For spaces that only have a single opening the ventilation is driven by turbulence. This turbulence creates a pumping action on the single opening, causing small inflows and outflows. As this is a less predictable method, the room depth for single opening, single-sided ventilation is reduced.
	Cross-ventilation - Single Spaces		Cross ventilation of single spaces is the simplest and most effective approach. Cross-ventilation is driven by pressure differences between the windward and leeward sides of the space.
			approach. Cross-ventilation is driven by pressure differences between the
	Cross-ventilation - Double-Banked Spaces Reference: https://		approach. Cross-ventilation is driven by pressure differences between the windward and leeward sides of the space. Cross-ventilation with banked rooms can be achieved by creating openings in the corridor partition. It is only acceptable where a room has ownership of both windward and leeward sides of the building, as the ventilation of the leeward space relies on the occupant of the windward space. The

Required documentation for evidence	Building Design Documentation: Plans and Sections
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.4.1 Natural Ventilation which describes the ventilation requirements at the unit level
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	2.1.5 Building Envelope: Walls
Principles	The external materiality of a building needs to balance environmental considerations, durability and aesthetics.
Guidelines	Environmental: the external envelope: wall construction must be of suitable material that is compliant in terms of SANS10400. Materiality: the materiality of the building must be considered in terms of durability and long term maintenance. Aesthetics: the elevations of large scale housing buildings can be repetitive and require design thought as to creating individuality and interest in a housing development. For example in relation to the use of conventional materials exterior of buildings could be mix of face brick and plaster + painted areas. Plastered areas should be located in areas where they are accessible for future maintenance. The materials and building systems considered could be conventional such as brick, concrete etc or non/un-conventional.
Norms & Standards	External building materiality must comply with SANS10400XA: Wall and Roof. Where non/un-conventional materials or building systems are selected the performance of these must be demonstrated in terms of the required Test Reports & Certification (such as agreement certification) as per SANS 10400 Part A. Building materiality should take into account longevity of materials and maintenance.
Required documentation for evidence	 Building Design Documentation: Elevations Specification Document Design Report Materials Specifications with specific reference to durability & maintenance plans and any Test Reports or Certifications if required Maintenance Plans

Corresponding References	This sub-item should be read in conjunction with sub-item: 1.3.2 Architectural diversity and building massing.	
Practice Note Reference	None	

Overarching Item	2.1 Building Design
Sub-Item	2.1.6 Building Envelope: Windows & Glazing
Principles	Adequate specification of windows in terms of their frames and glazing contributes to good thermal comfort within units.
Guidelines	In new build projects, windows & glazing must comply with SANS 10400XA. However this does not necessarily mean an expensive solution which could be over specified in terms of performance glazing. A balance must be found between adequate window sizes for achieving thermal
	comfort for occupants in terms of good light and ventilation and the requirements of SANS10400 Part XA in terms of solar heat gain and heat loss.
	A glazing rationale or modelling regarding the requirements for glazing in relation to orientation and shading of facades can result in a nuanced solution to the specification of windows and glazing.
	In existing buildings and conversions where windows and glazing are existing, the glazing rationale needs to be justified in terms of existing building conditions and other factors such as heritage, as the replacement of façade glazing could be a prohibitive cost centre.
	Safety of children is to be considered in relation to opening windows and heights of openings with the provision of safety bars.
Norms & Standards	Window frames and glazing should comply with SANS 10400XA with as simple a solution to glazing as possible.
Required documentation for	 Building Design Documentation Window Glazing Rationale: Describe glazing rational in terms of window
evidence	frames and glazing specified (not necessarily glazing calcs). 3. Specification Document
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.4.1 Natural Ventilation
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	2.1.7 Building Envelope: Roof Construction / Insulation / Guttering / Waterproofing
Principles	The roof of the building is an important element in relation to managing thermal comfort through insulation as well as weather protection and rainwater run-off.
Guidelines	The roof construction may vary in different building types from pitch roofs to flat roofs on higher rise buildings. On new build projects with pitched roofs, guttering should be provided. The purpose of providing guttering is to direct stormwater run-off from roofs away from buildings where damage to facades and foundations can occur. Guttering and downpipes also allow for rain water collection that can be used for garden irrigation and possible greywater use in some instances. Flat roofs must be considered in relation to the design of stormwater removal, insulation and waterproofing. If the roof is a trafficable area, the waterproofing must be guaranteed for this purpose. The use of concrete waterproofing admixtures could be considered which have no maintenance and longer guarantee periods. In existing buildings, the roof waterproofing must be evaluated and serviced or replaced as required. The specification of waterproofing must be evaluated in terms of the guarantee offered and the maintenance required by the SHI for the guarantee to be validated. Consideration should be given to the length of guarantee that will be given with no maintenance requirements. For example; 5 year guarantee with no maintenance required 10 year guarantee may require a service every 2 years
Norms & Standards	Roof material: covering and insulation to comply with regulations and be adequately specified in terms of lifecycle costing and aesthetic considerations. Evidence of rainwater and stormwater management such as gutters and paved splashbacks around buildings to manage stormwater run-off into retention areas and soak aways.
Required documentation for evidence	Building Design Documentation Specification Document
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.5.1 Rainwater collection
Practice Note Reference	None

Overarching Item	2.2 Services
Sub-Item	2.2.1 Electrical / water / other
Principles	Adequate services (water, sanitation, electricity) available within existing area or building. Adequate capacity available to take additional demand.
Guidelines	Within the locational specifications of the social housing policy it is generally assumed that conventional approaches to services will apply to developments. However within the broader parameters of environmental sustainability and resilience, non/un-conventional approaches to service provision may be considered wholly or partially. These could be at a macro level for example applying localised black or grey water treatment. Or at a micro level such as off grid solutions provided to elements within a development for example dry /waterless toilets in certain building types like a guardhouse or community facility.
Norms & Standards	Services including water, sanitation and electricity should be provided on an affordable and ongoing basis.
Conditional Requirement	Existing capacity must be available
Required documentation for evidence Corresponding References	 Project Inception Report: Engineering Services Reports Information from Local Authority and /or Engineering Consultants: location and availability of services, positions of tie-ins to municipal connections Building services rationale: services to be provided Where non/un-conventional materials or building systems are selected the location and specification of these must be provided. In the case of existing buildings: Building Condition Report in relation to availability and condition of existing services. This sub-item should be read in conjunction with sub-item: 2.2.1 Bulk Services and 3.3.1 Services Reticulation
Practice Note Reference	None

Overarching Item	2.2 Services
Sub-Item	2.2.2 Lighting
Principles	To ensure adequate lighting at a site level to ensure safety and security whilst minimising light pollution and light overspill in to units.
Guidelines	Public areas and walkways between buildings to be lit. Provide timers and / or sensors on appropriate light fixtures. Light fitting choice to reduce light pollution into sky and into units. Light fitting choice to reduce light pollution into sky and into units. Illustrations of acceptable and unacceptable external lighting (Institute of Lighting Engineers : Green Star SA Multi Use Residential Tool V1 2011)
Norms & Standards	All units and common areas must be sufficiently lit to ensure safety and security of residents in a manner that is affordable in respect of the ongoing sustainability of the development.
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.1 Vehicular & pedestrian movement through site and items relating to common areas.
Practice Note Reference	None

Overarching Item	2.3 Maintenance and management
Sub-Item	2.3.1 Operations Manual
Principles	Operations Manuals are key to providing information of maintenance, guarantees and service information to building management and should be in place for each development.
Guidelines	These manuals should contain all the as built documentation, information on finishes and technical service information that are required to maintain the buildings. Provide service manuals, integrated operations manuals for all services.
	Provide service manuals, integrated operations manuals for all materials with guarantees, cleaning directions etc.
Norms & Standards	Specify within professional service agreements and construction contracts the requirements for Operations Manuals and the handover of all Warranties / Guarantees.
Required documentation for evidence	This is a guideline for project completion
Corresponding	This sub-item should be read in conjunction with sub-item:
References	2.3.2 Maintenance Schedules
Practice Note Reference	Practice Note on Operations Manuals should be provided.

Overarching Item	2.3 Maintenance and management
Sub-Item	2.3.2 Maintenance schedules
Principles	A maintenance schedule should be provided within the Operations Manual. This summarises all the key information on servicing and maintaining elements and equipment within the building.
Guidelines	Provide maintenance schedules for ad hoc, annual, 5, 10, 20 years cycles.
	Service Periods for all plant and services must be specified upfront in the tender documentation with specific attention paid to the alignment of Practical Completion Dates and the Start dates of Warranty Periods.
	In some cases, warranties can be voided if the required maintenance is not done by the owner with specified periods.
Norms & Standards	None for Social Housing but Sectional Title schemes are required to have a 10 year maintenance plan for major capital items.
Required	This is a guideline for project completion
documentation for evidence	Provide Schedules related to Building materials and services in terms of required scheduled maintenance.
Corresponding	This sub-item should be read in conjunction with sub-item:
References	2.3.1 Operations Manuals
Practice Note	
Reference	Practice Note on maintenance planning to be developed.

Overarching Item	2.4 Sustainability
Sub-Item	2.4.1 Rainwater Collection
Principles	Rainwater collection should be considered in order to reduce the use of potable water for garden watering / car washing etc.
	In water stressed areas the collection of rain water is a critical part of ensuring building resilience.
Guidelines	In new build projects, consideration should be given to rainwater discharge and rainwater collection.
	The location of rainwater collection tanks should be considered in relation to the usage of the water. For example, a rainwater tank located adjacent to an entrance gatehouse could be used locally around the building and could possibly be used for greywater toilet flushing to the building at very little capital cost in relation to the savings in water usage.
	Rainwater collection tanks should be fitted with lockable taps and clear visual warnings (words and images) that the water is not safe for human consumption
	Where possible such systems should be fitted with leaf catchers and first flush diverters to minimise ingress of organic material, dust and run-off pollutants into the tanks
Norms & Standards	None
Norms & Standards	Notice
Required documentation for evidence	None
Corresponding	This sub-item should be read in conjunction with sub-item:
References	2.1.7 Roofs & Guttering
Practice Note Reference	None

Overarching Item	2.4 Sustainability
Sub-Item	2.4.2 Energy Efficiency
Principles	To promote energy efficient designs that reduce overall energy consumption in social housing developments.
Guidelines	Describe any specific environmental and energy efficiency elements related to: The Building envelope: wall thermal resistance / thermal mass and roof insulation, Heating & Cooling systems if any, Services such as Hot Water, Lighting New developments should aim to achieve a 20% reduction in projected operational energy consumption as compared to typical local practices.
Norms & Standards	None
Required documentation for evidence	 Building Design Documentation Specifications Technical Data Sheets
Corresponding References	This sub-item should be read in conjunction with sub-items related to lighting and 3.3.2 Hot Water provision.
Practice Note Reference	None

8.9.3. Level 3: The Building: Common Areas

Overarching Item	3.1 Building Design
Sub-Item	3.1.1 Building Entrance & Lobby
Principles	The building entrance is the first impression a visitor or resident gets of the building.
	The emphasis is on a friendly, welcoming feel, and this can be conveyed through careful consideration of materials, finishes, design and layout. Light, colour and openness are important.
	The safety and security of residents in building entrances is of paramount importance.
Guidelines	The building entrance must accommodate access control turnstiles and escape gate.
	The access control barriers must provide security but must also allow easy furniture moving and disabled access.
	Security should manage building entrances including for example: Access Control (e.g. Biometric), CCTV, Security Guard. Adequate facilities should be provided for staff including a designated toilet / change room with locker and area for making refreshments during his/her shift.
	Building Directional Signage: The entrance lobby should have information signage for residents that is neatly displayed and incorporated into the design of the entrance area.
Norms & Standards	The building entrance should be welcoming and have sufficient security to ensure that access to the building is controlled.
Required documentation for evidence	None
Corresponding	This sub-item should be read in conjunction with sub-item:
References	3.2.4 Common Area Ratios
Practice Note Reference	None

Overarching Item	3.1 Building Design
Sub-Item	3.1.2 Common Areas : Lift Lobbies & Provision of Lifts
Principles	Common areas are defined as any structure or areas that lies outside of the individual space of the unit. These are managed by the SHI / managing entity. The quality of these spaces and the management of the services and cleaning of these areas is important in maintaining a quality environment that is safe and secure for all residents.
Guidelines	Adequate lifts must be provided calculated on the number of residents and the average trip cycle. Lift lobbies should be: Well lit, ventilated and have clear and legible signage. Lifts must have hard wearing floor and wall surfaces and must be able to be protected when used for furniture moving.
Norms & Standards	Where lifts are provided or are required to be provided in multi storey buildings (new build and retrofit), a minimum of 2 lifts to be provided unless only 1 shaft is available or specifically motivated otherwise in terms of a rational design by a lift consultant or relevant engineering professional.
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios
Practice Note Reference	None

Overarching Item	3.1 Building Design
Sub-Item	3.1.3 Internal Passages / External Walkways
Principles	Common areas are defined as any structure or areas that lies outside of the individual space of the unit. These are managed by the SHI / managing entity. The quality of these spaces and the management of the services and cleaning of these areas is important in maintaining a quality environment that is safe and secure for all residents
Guidelines	Internal passages in buildings can become spaces of conflict if not designed and managed well. Consideration should be given to the design of internal passages in relation to the placement of doors, lighting and signage. The width of passages in should be a have a width range between 1000 and 1500 with allowances for wheelchair turning areas at some points along the length of a passage. The passage width will vary in relation to the building typology. For example a new build walk up with a single loaded access gallery may be 1000 wide, but a double loaded passage in a building conversion should be a minimum of 1200. It is noted that where facilities are provided for persons with disabilities the minimum passage width is 1500. Techniques that can be considered in relation to providing visual relief and breaking up long areas of wall are indenting doors, introducing areas colour. External walkways need to be considered as safe circulation spaces and as shared social spaces. Design aspects to be taken into account are adequate walkway widths, limiting the length of walkways, durable finishes, balustrade design.
Norms & Standards	Compliance with Part T of SANS10400 with design aspects to be taken into account: adequate passage / walkway widths in relation to building typology, limiting the length of passages /walkways, durable finishes, balustrade design.
Required documentation for evidence	Building Plans / Elevations
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios
Practice Note Reference	None

Overarching Item	3.1 Building Design
Sub-Item	3.1.4 Common Area Ratios
Principles	Efficient common area to unit area utilisation
Guidelines	A balance is required between common area space and space dedicated to units. Developments should consider common area space in terms of the allocation and sizing of passage and circulation spaces and the adequate provision of common area amenities.
	Note that the efficiency of common area ratios within buildings needs to be correlated to the efficiency of the open space walkway network between buildings. Achieving efficient common areas in buildings only does not mean that the overall development will be efficient. This is particular relevant to developments with repeated blocks which multiply circulation cores.

Norms & Standards

The net common area for circulation and other common uses to gross unit area benchmark targets to be applied are :

- Low rise walk-up : Average 20 %
- Mid / High Rise : Average Range 25 30%

In new build projects:

The target should be as close to 15 - 20% as possible. However, this may increase in relation to the number of social amenities that are provided within buildings themselves such as laundry spaces and common rooms. Mid & High Rise buildings have more requirements for lift/lobby and service areas.

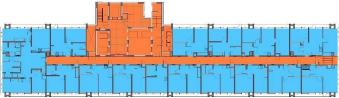
Ratios at the higher end should be substantiated in relation to this and must be factored in the project viability



Example : Walk up Block : Ratio 18 - 20% dependent on number of units sharing staircase

In adaptive re-use / building conversions :

In these buildings the existing cores may contain areas such as toilets that can be used as communal spaces and multiple lifts some of which may not be recommissioned. In these cases the ratio may even exceed 25%.



Example: Office conversion of 12m wide building results in efficient unit layout but a large circulation core with multiple lifts and toilets results in a large common

space ration of 30% - this is offset against the provision of community amenities within these redundant spaces. ©Savage + Dodd Architects

	within these redundant spaces. Savage + Dodd Architects
Required documentation for evidence	Building Design Documentation Area Tables
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.2 Common Areas: Lift Lobbies & Provision of Lifts 3.2.3 Passages & Walkways
Practice Note Reference	None

Overarching	
Item	3.2 Provision of Amenities
Sub-Item	3.2.1 Laundry Areas
Principles	To support the well-being and health of residents through the provision of safe and accessible areas for clothes drying.
Guidelines	Provide areas for clothes drying that are centrally located, easily accessible and have visual openness and transparency. These areas, as well as pathways to and from them should be provided with sensor controlled security lighting for after dark collection of laundry. Consider locating laundry areas near to play areas. Laundry areas must be provided with suitable facilities and services including: • Access to adequate services to allow laundry such as metered water / wash troughs. • Token operated machines & dryers as a maximum Ensure drying yards and wash lines are fully exposed to sunlight for largest part of the day. Special consideration to be given for projects in zones with winter rainfall and limited winter daylight such as the Southern Cape Coastal Condensation Area. Consideration could be given to the provision of washing lines either on a balcony — low level screened by wall or internal to bathroom. However, the biggest source of air moisture content leading to condensation and mould growth is drying of clothes indoors. In new build walk up developments drying yards should be placed in areas in close proximity to units. Drying yards attached to circulation cores could also be considered. In mid to high rise building, new build or conversions, consideration should be given to laundry areas and drying areas within the building. In adaptive re-use buildings, the opportunity to re-use existing former toilet areas as laundries spaced through the building can be considered.
Norms & Standards	Laundry areas must be provided with suitable facilities and services. The development should provide Drying Yards and Laundry Facilities on the basis of 0.5-1 linear metre of washing line per unit
Required documentation for evidence	 Building Design Documentation Specification Document Site Plan showing the location, size and specification of Drying Yards and
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.2 Common Areas: Lift Lobbies & Provision of Lifts 3.2.3 Passages & Walkways
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.2 Refuse Areas
Principles	To support the wellbeing and health of residents through the provision of sufficient refuse and recycling areas
Guidelines	A central refuse and recycling area should be located close to the entrance of development with an adequate area for bins and for the cleaning of bins. A waterpoint and drain should be provided. The size and location of this area should be in compliance with local authority waste management requirements. In inner city contexts, existing buildings and conversions, refuse areas may be located in basement areas and ground floor yards. In addition, areas should be provided for refuse bins within buildings including: Refuse areas on each floor for general refuse collection (wheely bins) and recycling bins. This area should be easily accessible and be able to be cleaned. Cleaners store equipped with sink or slophopper to be provided
Norms & Standards	Refuse and recycling areas must be provided. The size should be determined by the number of bins required as a ratio to the number of units as determined by the Local Authority. A water point and drain are recommended within refuse areas.
Required documentation for evidence	 Building Designs: Show on Site plan and Floorplans the location, size and specification of Refuse Areas Recycling Areas documentation
Corresponding References	
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.3 Provision of Open Space
Principles	The provision of communal open green space contributes to the health and well-being of residents.
	It provides the physical setting for the development and provides environmental and climate resilience in terms of water run-off and cool environments.
Guidelines	When providing for open space, consider any existing landscape features and trees and stormwater attenuation and permeable surfaces.
Norms & Standards	Provide both hard and soft landscaped areas within the development.
Required documentation for evidence	 Site Plan showing trees, landscaped / planted areas, paving and parking areas. Specification of hard surfacing
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.3 Hard & Soft Landscaping
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.4 Recreational and Play Areas
Jub Helli	John Need California and Tilay Tileas
Principles	To support the well- being and health of residents and children through the provision of a range of communal outdoor and indoor amenities.
Guidelines	The provision of play areas is context specific and is motivated by best practice.
	A large percentage of social housing residents are children and therefore all developments, new builds as well as refurbishments and conversions should provide some playground and recreational facilities for children of varying ages.
	Play areas should be located in areas where there is safe and easy access for children and which are overlooked by adjoining dwellings or other common facilities such as laundry areas.
	Seating for adults should be provided adjacent to the play area.
	In larger scaled developments, play areas (outdoor or indoor) should be provided for children of different ages e.g. defined playground area with play equipment for younger children and area for older children for ball play / skateboarding or a homework or study room etc.
	Indoor play areas should be equipped with suitable play equipment. They must be easily accessible, open with visibility from inside to outside. Where possible they should be monitored by CCTV.
	Recreational exercise equipment could be considered for adult use in sufficiently sized developments.
Norms & Standards	One playground to be provided for every 200 units that is sufficiently sized to allow play by groups of at least 20 children.
	Differentiation between recreational facilities for younger children (under 8) and older children (pre-teen / teenagers)
	Cross Reference with unit space norms: developments with higher percentages of smaller units must show a larger percentage of amenities.
	Cross Reference with communal amenities provided internally to buildings
	Playgrounds should comply with SANS51176 : Playground Equipment & Surfacing
	They need to be safe and secure e.g. If on a roof level a fence provided onto the parapet wall to prevent children from accidentally falling
	Developments with space constraints can motivate for a different mix of amenities.
	Developments that are located in the immediate proximity to a public park / playground / community centre that can be safely accessed by residents may motivate for a reduction in the facilities provided on site.
Required documentation for evidence	Site Plan showing suitable located play & recreation areas
Corresponding	This sub-item should be read in conjunction with sub-items:
References	3.2.3 Provision of Open Space

	1.1.1 Location of the project 3.2.5 Other Amenities 4.1.2 Unit Size
Practice Note Reference	None

Overarching	3.2 Provision of Amenities				
Item					
Sub-Item	3.2.5 Other Amenities				
Principles	To support the well-being and health of residents through the provision of other amenities such as community meeting rooms, braai areas, storage and facilities for cultural observances etc.				
Guidelines	Depending on the size of the development community amenities should be provided such as: space for early childhood centre, Community Hall, Braai Areas, storage facilities and Facilities for cultural observances etc. These areas should be provided with the requisite supportive services and infrastructure as required e.g. toilets, wash up areas etc. Housing Conversions often have underutilised spaces within the circulation cores, for example, former office toilets and redundant service areas that are easily adaptable for a range of community facilities. Where possible these spaces should be monitored by CCTV. Example of recreation area in former mechanical plant area of tower development ©Savage + Dodd Architects UrbanWorks				
Norms & Standards	New Build Developments (walk up / mid rise) Developments with over 400 units should provide a multi-purpose community meeting room for meetings with 20-30 adults. Developments with more than 1000 units should provide a larger scale hall or meeting facility or show that such a facility is available and easily accessible within the immediate environment. Refurb / Conversion: Show how redundant spaces within the building are being fully utilised.				
Required documentation for evidence	1. Site Plan				
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.4 Recreational and Play Areas 4.1.2 Unit Size				
Practice Note Reference	None				

Overarching Item	3.3 Services				
Sub-Item	3.3.1 Services Reticulation				
Principles	The reticulation of services can have an impact on the long-term maintenance of the building in terms of access for maintenance, meter reading and efficiency of delivery of services for example hot water.				
Guidelines	Show plant areas for services: hot water, electrical, Information Technology etc.				
	Describe how services are reticulated in common areas and into units e.g. vertical ducts, surface mounted, cable trays etc.				
	Services should be grouped for efficiencies and ducts must be adequately designed for access for maintenance				
	Consideration should also be given to how services may be reticulated in the future, for example fibre roll outs without impacting on existing finishes.				
	Consideration to be given to requirements for cabling and IT points for access control				
	/ hold open doors (fire) / metering systems as may be required				
Norms & Standards	Services should be grouped for efficiencies and considered in terms of access for maintenance and metering in relation to common areas / walkways.				
Required	Services layout showing notional services reticulation or;				
documentation for evidence	2. Building Services Report				
Corresponding References	This sub-item should be read in conjunction with sub-items related to services.				
Practice Note Reference	None				

Overarching Item	3.3 Services					
Sub-Item	3.3.2 Services: Hot Water Provision					
Principles	Demonstrate Compliance with SANS10400 XA: Hot water provision					
Guidelines	Hot water may be provided by a variety of systems such as heat pumps, solar, magnetic induction geysers, gas and hybrid systems. In all cased the efficiencies of the system should be evaluated in relation to the cost of producing hot water Demonstrate Compliance with SANS10400 XA: Hot water provision: Describe how hot water will be provided Provide COP efficiency of system if relevant* Describe where plant is located Describe how system is reticulated in building. Note that a significant amount of energy can be lost in a system due to heat loss in the storage tank and distribution system. It is therefore critical that the system is designed efficiently in order to reduce these losses. * With Heat Pumps: The coefficient of performance (COP) is a measure of the heat pump's efficiency. It is determined by dividing the energy output of the heat pump by the electrical energy needed to run the heat pump, at a specific temperature. The higher the COP, the more efficient the heat pump. Typical heat pump water heaters are two to three times more efficient than standard electric water heaters.					
Norms & Standards	Compliance with SANS10400 XA					
Required documentation for evidence	1. Design / Services Report					
Corresponding References	This sub-item should be read in conjunction with sub-items: 2.2.1, Services Reticulation 2.4.2, Energy Efficiency 4.7.3 Metering.					
Practice Note Reference	Choosing and evaluating a hot water system					

Overarching Item	3.3 Services				
Sub-Item	3.3.3 Ventilation				
Principles	To ensure that common areas are adequately ventilated				
Guidelines	Where possible all common area passages should be naturally ventilated. Where this is not possible by design, in for example an existing building with a double loaded passage configuration, suitable mechanical fresh air and extraction systems are required. Ventilation is important not only for the passage / walkway areas themselves but also because rooms facing onto these areas, often bathrooms and kitchens may ventilate onto them.				
Norms & Standards	Compliance with SANS 10400 Part O.				
Required documentation for evidence	None				
Corresponding References	This sub-item should be read in conjunction with sub-items: 2.2.1 Service Reticulation 2.1.4 Design of Buildings: Cross ventilation.				
Practice Note Reference	None				

Overarching Item	3.3 Services				
Sub-Item	3.3.4 Fire Equipment				
Principles	Provision of safe environments				
Guidelines	Fire equipment to be located in common areas easily visible and accessible locations. The security of fire equipment should also be considered in terms of lockable cabinets for fire extinguishers if deemed a theft risk.				
Norms & Standards	As determined by statutory requirements.				
Required documentation for evidence	Compliance with SANS10400 unless a Rational Plan by a competent person supplied. Rational Fire Design (not required to be submitted at design stage but required for plan approval)				
Corresponding References					
Practice Note Reference	None				

Overarching Item	3.3 Services					
Sub-Item	3.3.5 Safety & Security: Monitoring : CCTV					
Principles	Safety and security of residents though surveillance and monitoring of common areas where possible.					
Guidelines	The safety of residents especially women and children should be considered especially in common areas and open areas. This can be done through a variety of passive techniques such as locating play areas where they are overlooked but CCTV should be considered in other areas. CCTV provided to monitor common areas.					
Norms & Standards	None					
Required documentation for evidence	None					
Corresponding References						
Practice Note Reference	None					

Overarching Item	3.4 Maintenance & Management				
Sub-Item	3.4.1 Material Specifications : Common Areas, Lobbies, Passages				
Principles	This item relates to the material specification required for common area lobbies, passages and circulation areas in relation to durability and safety.				
Guidelines	Consideration needs to be given to the following when specifying materials & finishes: • Uniformity of floor surface • Slip resistant flooring • Colour (in relation to lighting and sight / cleaning) • Conformance to Disability requirements in relation to changes of texture, colour (partially sighted), tactile indicators etc. • Maintenance of wall finishes in relation to high wear areas All materials supplied should be readily available locally on an ongoing basis. Materials should be SABS Approved. Stock / Product Ranges and spares should be readily available locally. Specifications should be performance based and should be specified by make and type of item as closely as possible. Guarantees & Warranties on products must be available.				
Norms & Standards	None				
Required documentation for evidence	 Specifications Product Data Sheets Where non/un-conventional materials or building systems are selected the performance of these must be demonstrated in terms of the required Test Reports & Certification (such as agreement certification) as per SANS 10400 Part A. 				
Corresponding References	This sub-item must be cross referenced to Items: 3.1 Common Areas 3.2 Provision of Amenities				
Practice Note Reference	Practice Note on materiality and specifications to be provided				

Overarching Item	3.5 Accessibility					
	3.3 Accessionity					
Sub-Item	3.5.1 Access to units					
Principles	Units must be accessible to persons with mobility issues.					
Guidelines	All new builds to have step free access to building entrances and entrances to units. Ramps to be provided if required in terms of change of level.					
	Care needs to be taken at entrance thresholds and to make sure there are no steps along the route to the lift lobby.					
	In passages and lobbies: wall mounted fire hose-reels etc must not impede mobility of partially sighted people.					
Required documentation for evidence	Building Plans					
Corresponding	This sub-item must be cross referenced to Item:					
References	3.1 Common Areas					
Practice Note Reference	Accessibility Guidelines to be developed					

Overarching Item	3.6 Sustainability				
Sub-Item	3.6.1 Lighting				
Principles	Energy Efficient Lighting to reduce lighting energy use and common area costs.				
Guidelines	Lighting accounts for a significant proportion of total energy use in residential building Efficient lamps, that produce more light with less power compared to standar incandescent bulbs, reduce the building's energy use for lighting. Maintenance cost are reduced as the service life of these types of bulbs is longer than that of incandescer bulbs. Energy Efficient Lighting should be specified in all projects. Common area lighting to be controlled with presence detection and/or daylight control.				
Norms & Standards	90% of light bulbs used in the project use either compact fluorescent (CFL), LED, or T5, or other types of light fixtures that achieve 90 lm/W or greater. At least 90% of the lamps must be of the efficient type. Other efficient technologies are also available. If another technology is used, documentation must be provided to demonstrate that the light fixtures achieve at least 90 lm/W. Therefore this metric can also be demonstrated by showing energy savings through evidence provided by a competent professional.				
Required documentation for evidence	 Schedules: demonstrate that CFL, LED, or T5 lamps have been specified Product Data Sheets 				
Corresponding References	This sub-item must be cross referenced to Items relating to Common Areas and passages				
Practice Note Reference	Practice note on lighting to be provided				

Overarching Item	3.6 Sustainability				
Sub-Item	3.6.2 Common Areas : Metering & Sub Metering				
Principles	Metering is an integral part of conserving energy and resources during a buildings operational life. Information from metering and sub-metering as a building level allows building managers to monitor and evaluate building efficiencies.				
Guidelines	Common areas electrical use to be monitored in terms of sub-metering and an effective monitoring system of this should be put in place by the SHI.				
Norms & Standards	A strategy for metering is to be provided that takes into account bulk metering, sub metering and individual metering of both electricity, water and any other services such as gas that may be provided. Metering to be provided to the development / building and to separate buildings and areas as required to provided adequate information to the SHI.				
	Residential and retail areas or uses that have different rating tariffs must be metered separately.				
Required documentation for evidence	None				
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.2 Hot Water System				
Practice Note Reference	None				

8.9.4. Level 4: Unit Design

Overarching Item	4.1 Design: Space norms and standards		
Sub-Item	4.1.1 Unit Design		
Principles	All units should be fit for purpose as a home to allow residents to enjoy privacy in a secure and safe environment.		
Guidelines	Internal environments should be comfortable and capable of accommodating the necessary furniture and equipment associated with specific room activities and be suitable for the needs of intended user groups.		
	A development should contain a mix of units appropriately sized to allow a diversity of household sizes in relation to context and market demand.		
Norms &	Units must comply with unit size norms and minimum room sizes.		
Standards	Unit planning must demonstrate space planning in relation to the required fittings and furnishings per room type.		
Required documentation for evidence	Unit Plans of all typologies with dimensions and dimensions shown		
Corresponding	This sub-item must be cross referenced to sub-item:		
References	4.2.1 Space Planning		
Practice Note Reference	Practice note to be developed on unit mix and principles per unit type.		

Overarching					
Item	4.1 Design: Space Norms & Standards				
Sub-Item	4.1.2 Unit Size				
Principles	To provide guidance of a range of unit sizes per typology.				
Guidelines	The smaller the unit the more attention must be paid to layout of furniture, fittings and storage. For example if a micro-unit / bachelor unit at the lowest end of the size range is proposed, the design must show how the unit is furnished and how kitchen and clothes storage are accommodated The larger the percentage of smaller units (specifically micro units of less than 20m2) in the overall mix, the more communal amenities must be provided				
Norms & Standards	- The same state of the same s				
	Type of Unit	Optimum Size (m2)	Minimum size (m2)	Occupancy *	
	Room	12	10	1b1p	
	Bachelor / Studio	25	18	1b2p	
	1 Bedroom	35	25	1b2p / 2b3p	
	2 Bedroom	48	42	3b3p / 4b4p	
	3 Bedroom	60	52	3b4p / 5b6p	
Conditional	Compliance with minimum average unit size				
Requirements	Compliance with minimum average unit size				
Required documentation for evidence	 Design Layouts of all floors / buildings: Typical floor plans with all units showing relationship between units, circulation, servicing Table of unit sizes and percentages of different unit typologies Demonstration of compliance with minimum average unit size 				
Corresponding References	This sub-item must be cross referenced to sub-item: 4.1.3 Mix of Unit types & sizes				
Practice Note Reference	Practice Note to be developed on unit sizes and design parameters within unit types and definition of the method of measurement.				

Overarching Item	4.1 Design: Space Norms & Standards
Sub-Item	4.1.3 Mix of unit types & sizes
Principles	The overall development must demonstrate a mix of unit typologies that are responsive to varying family types and affordability levels.
Guidelines	Unit mix to be substantiated by market demand studies or analysis of similar developments within the SHI portfolio. If a development with only 1 type of housing typology is proposed this must be substantiated by relevant target market data.
Norms & Standards	The average size of a unit across all units aggregated should aim to equal or exceed 30m² except in specialist housing models, unless specifically motivated in terms of project typology, context and location.
Required documentation for evidence	Schedule of Unit Types and Sizes Market Demand Analysis which must include evidence of demand for specific product sizes based on availability within area and location, waiting lists specifically highlighting family types and demographics of area.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.1.2 Unit Size
Practice Note Reference	Practice note to be developed on unit mix and principles per unit type.

Overarching	
Item	4.1 Design: Space Norms & Standards
Sub-Item	4.1.4 Shape
Principles	To achieve an efficient unit external wall to unit depth ratio.
Guidelines	Consideration to be given to unit width and length ratios in relation to natural ventilation and sun penetration BEDROOM 1 BEDROOM 1 BEDROOM 1 BEDROOM 2 BALCONY NARDS NARD BATH BATH BATH BATH BATH BATH BATH BATH
Norms &	narrow building width conversions. None
Standards	
Required documentation for evidence	1. Unit Designs showing dimensions; length to width ratios
Corresponding References	This sub-item must be cross referenced to sub-item: 2.1.4 Design of buildings: Cross ventilation 4.2.1, Unit Plans: Space Planning

Practice Note Reference	None
Overarching Item	4.2 Design of Unit
Sub-Item	4.2.1 Unit Plans: Space Planning
Principles	Units must be designed with resident's requirements in mind as well as allowance for future retrofitting. This produces flexible units that cater for future retrofitting as well that allow possible product differentiation for differing income bands.
Guidelines	Unit Plans to show all fittings and furniture layouts including electrical (Lighting and power points in relation to furniture).
Norms & Standards	None
Required documentation for evidence	Unit plans showing base kitchen fittings and possible layouts for future extension of kitchen units and bedroom cupboards.
Corresponding References	This sub-item must be cross referenced to sub-items: 4.1.4 Shape 5.2.1 – 5.2.6
Practice Note Reference	Practice Note to be developed on planning for retrofits.

Overarching	
Item	4.2 Design of Unit
Sub-Item	4.2.2 Entrance
Principles	Ensure that entrances are considered as part of space planning in units.
Guidelines	Due to space constraints, units may not necessarily have specific entrance areas. The area into which one enters the unit must have an easily accessible light switch. Moreover, consideration should be given to entrance areas and any likely impediments to access.
Norms & Standards	None
Required documentation for evidence	1. Unit Layouts
Corresponding References	This sub-item must be cross referenced to sub-item items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	None

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.3 Kitchen Area: Space Planning: Self Contained Unit
Principles	Ensure that kitchen areas are considered as part of space planning in units.
Guidelines	Show designated kitchen area which makes allowances for: A kitchen surface of minimum length 1200 but preferably, at least 1500 – 2100 length with single bowl sink and drainer Consideration should be given to a deeper bowl (pot) sink which can be provided within similar cost parameters to standard sink units and allows laundry to be done in the kitchen area. Adequate area for food preparation Space for a 2 plate surface stove or microwave Kitchen cupboard: wall mounted or under counter Allowable area and service points for a stove and a single door fridge. Service points: Water and drain hook up for future installation of washing machine Electrical plug points sufficient to service dedicated points such as fridge / stove as well as small appliances such as kettle etc. The kitchen design should make allowances for a future retrofitting of additional work surfaces and cupboards. Illustrate how kitchen area can be retrofitted with future space for stove, washing machine and additional work surface The kitchen should have adequate light and ventilation.
Norms & Standards	Minimum compliance status: Kitchen unit of 1200 with single bowl sink and drainer. Stove point as per municipal by-law requirements and SANS requirements Allowance for washing machine point connection to plumbing
Required documentation for evidence	Unit Layout Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	Practice Note to be developed on kitchen design and elements.

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.4 Living Room
Principles	Ensure that differentiation of living spaces is considered as part of space planning in units.
Guidelines	The living room must be adequately sized to accommodate the following with adequate circulation space between rooms. Double seater couch, table / TV unit. Provision for at least a small table within the living or kitchen area. Show adequate electrical points to service TV and lighting points. Circulation through the room should be considered so as to maximise the usable area for furniture.
Norms & Standards	None
Required documentation for evidence	 Unit Layout showing furniture positions and services points Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	None

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.5 Bedroom (main)
Principles	Ensure that bedrooms are considered as part of space planning in units.
Guidelines	Bedroom should be sized adequately to allow circulation around furniture Minimum room width for bedrooms should be at minimum 2.4m to ensure adequate circulation space within the room The main bedroom should be able to contain a double bed or 2 single beds, side table and a space for a cupboard. Bedroom must have allowable space for cupboards to be fitted All bedrooms must have natural light and ventilation.
Norms & Standards	Room sizes should exceed the minimum habitable room size.
Required documentation for evidence	Unit Layout showing furniture positions and services points Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub- items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	Practice Note to be developed on bedroom requirements.

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.6 Bedroom (second)
Principles	Ensure that bedrooms are considered as part of space planning in units.
Guidelines	The second bedroom should be able to accommodate a single bed or single bunkbed. It should be possible to arrange the bed in at least 2 possible positions. Minimum room width for bedrooms should be at minimum 2.4m to ensure they exceed minimum habitable room size. Bedroom must have space for cupboards to be fitted
Norms & Standards	Room sizes should exceed the minimum habitable room size.
Required documentation for evidence	 Unit Layout showing furniture positions and services points Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub- items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	Practice Note to be developed on bedroom requirements.

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.7 Access to outdoor space and balconies
Principles	Ensure that residents have access to outdoor spaces and balconies.
Guidelines	If possible, ground floor units should have access to outdoor space directly from the unit. In new build walk up developments consideration to be given to unit differentiation through a percentage of units to be provided with balconies.
Required documentation for evidence	1. Building Plans Layouts
Corresponding References	This sub-item must be cross referenced to sub-item: 1.2.2 Architectural Diversity & Building Massing
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.1 Floors
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Floor Finishes specified should meet the following requirements: 1. Be robust and hard wearing 2. Easily maintained and cleaned 3. Considered in terms of lifecycle costing
Norms & Standards	None
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals
Practice Note Reference	Practice Note to be developed

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.2 Walls : Construction & Finishes
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	All wall materials (conventional or non/un-conventional) should be considered in terms of: Durability of construction & finish Separating walls must be compliant with required Fire ratings Acoustically fit for purpose All wall finishes specified should meet the following requirements: Be robust and hard wearing Easily maintained and cleaned Considered in terms of aesthetic and quality of light Considered in terms of lifecycle costing Tile splashbacks should be provided in bathroom and kitchen areas
Norms & Standards	Finishes should have 7-10 year warranty
Required documentation for evidence	 Finishes Schedule Where non/un-conventional materials or building systems are selected the performance of these must be demonstrated in terms of the required Test Reports & Certification (such as agreement certification) as per SANS 10400 Part A.
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.3 Ceilings
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Ceiling and soffits specified should meet the following requirements: Be robust and hard wearing Easily maintained Easily serviced in terms of lighting Considered in terms of lifecycle costing Have a fire rating if required Ceilings to have adequate insulation
Norms & Standards	None
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.1.7 Building Envelope: Roofs 2.3.1 Operations Manuals
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.4 Bathroom
Principles	To ensure that bathroom are adequately designed with durable finishes and fittings
Guidelines	The bathroom needs to have a bath or shower, basin and toilet with toilet roll holder, towel rails, mirror and a medicine cabinet / shelf Consideration to be given to the choice between showers or baths in relation to water use. If budget allows, baths may have showers over or showers may have an additional low level tap to allow for filling a tub for washing children or laundry Bathroom to have adequate floor and wall finishes that are slip resistant, durable and easily cleanable. Finishes to be considered in relation to water and steam ingress and mould formation. If space allows consideration may be given to allowing space for a washing machine within the bathroom areas rather than the kitchen Taps, mixers, valves, WC cistern flushing mechanisms should be easily serviced with locally available spare parts
Norms & Standards	Sanitaryware to have 10 year warranty Taps to have 10 year warranty
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals
Practice Note Reference	None

Overarching	
Item	4.3 Materiality : Specifications
Sub-Item	4.3.5 Kitchen Fittings
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Kitchen worktops must of a durable and long lasting material and finish and not prone to damage by water ingress or placing of hot utensils on them. Kitchen cupboards either under counter or wall mounted must be of a sturdy and
	durable material and construction especially in relation to door construction / materiality and hinges.
Norms & Standards	None
Required documentation for evidence	1. Finishes Schedule
Corresponding	This sub-item must be cross referenced to sub-item:
References	2.3.1 Operations Manuals
	4.23 Kitchen space planning
Practice Note	
Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.6 Materials : Finishes
Principles	Material Selection to be considered against a series of requirements and outcomes
Guidelines	All materials supplied should be readily available locally on an ongoing basis. Materials should be SABS Approved or have an Agrement Certificate Spares should be readily available locally Specifications should be performance based and should be specified by make and type of item as closely as possible. Guarantees & Warranties must be available Service Periods must be specified
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals 2.3.2 Maintenance Schedules
Practice Note Reference	Practice Note on specifications techniques to be developed

Overarching Item	4.4 Services
Sub-Item	4.4.1 Ventilation
Principles	To ensure that units are adequately ventilated with enough fresh air to counteract the build-up of indoor pollutants and moisture
Guidelines	Cross ventilation should be a core consideration in designing units. All rooms to be naturally ventilated wherever possible. Bedrooms must have natural ventilation Bathroom Ventilation: Ventilation of bathrooms to be considered in relation to natural or mechanical ventilation In single loaded passage typologies bathrooms should be located on the walkway side of the unit and ventilate to the walkway. In conversions where bathrooms may be internal without the option of an external window, they must be provided with an extract fan or mechanical extraction. Kitchen areas should have a window to an outside ventilated passage / walkway Ventilation to be considered in relation to mould prevention in both bathrooms and kitchens
Norms & Standards	With natural ventilation is not achieved, mechanical ventilation / extraction must be specified
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.1 Ventilation
Practice Note Reference	None

Overarching Item	4.4 Services
Sub-Item	4.4.2 TV / Satellite / IT / Fibre
Principles	Services to be designed for centralised systems to prevent the multiple individual connections within buildings
Guidelines	Unit to should be centrally cabled so as prevent multiple satellite dishes being installed by tenants. Ensure allowance for cabled point to living room The service backbone and routing to be considered for future retrofitting of services such as fibre etc
Norms & Standards	Centrally cabled satellite TV
Required documentation for evidence	None
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.1 Services Reticulation
Practice Note Reference	None

Overarching Item	4.5 Maintenance & Management
Sub-Item	4.5.1 Building User / Occupants Guide
Principles	A Building User / Occupants Guide gives the resident guidance on how to use and maintain the unit.
Guidelines	The Building User / Occupants Guide should give guidance to the resident on the use of unit including; How to use the services (metering, refuse, etc) Cleaning Replacement of light bulbs Fitting a washing machine Safety requirements: fire and emergency procedures Energy and water saving measures
Norms & Standards	None
Required documentation for evidence	1. On completion of Project
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manual
Practice Note Reference	Practice Note to be developed on Tenant's guide

Overarching Item	4.6 Accessibility
Sub-Item	4.6.1 Bathroom Design
Principles	Design that enables retrofitting for people with disabilities and mobility issues.
Guidelines	Accessible bathrooms to be designed to be retrofitted in a percentage of units as required by the SHI. This would include: Adequate door width to bathroom within minimum clear opening of 900mm with door opening outwards Accessible showers rather than baths Grabrails Suitable taps etc
Required documentation for evidence	Unit Plan of accessible unit type fully compliant with SANS10400 PartS and relevant accessibility guidelines
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.4 Bathrooms
Practice Note Reference	Practice Note to be developed : Accessibility Retrofitting Guidelines

Overarching	
Item	4.6 Accessibility
Sub-Item	4.6.2 Accessible Kitchens
Principles	Design that enables retrofitting for people with disabilities and mobility issues.
Guidelines	Accessible kitchen units to be designed to be retrofitted in a percentage of units as required by SHI.
Norms & Standards	As per Accessibility Retrofitting Guidelines
Required documentation for evidence	Unit Plan of accessible unit type fully compliant with SANS10400 Part S and relevant accessibility guidelines
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.5 Kitchen fittings
Practice Note Reference	Practice Note to be developed

Overarching Item	4.7 Sustainability
Sub-Item	4.7.1 Lighting Internal to Unit
Principles	Units to have energy efficient lighting to minimise lighting energy use and costs
Guidelines	Lighting accounts for a significant proportion of total energy use in residential buildings. Efficient lamps, that produce more light with less power compared to standard incandescent bulbs, reduce the building's energy use for lighting. Maintenance costs are reduced as the service life of these types of bulbs is longer than that of incandescent bulbs. Light Fittings should take CFL lamps at a minimum but preferably should be LED Luminaires. Bulbs should be easily available to tenants for purchase
Norms & Standards	At least 90% of the lamps must be of the efficient type in all habitable spaces. No light fittings that use incandescent light bulbs to be specified.
Required documentation for evidence	1. Lighting Schedule : Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 3.6.1 Lighting
Practice Note Reference	Practice Note to be developed

Overarching Item	4.7 Sustainability
Sub-Item	4.7.2 Water Use
Principles	To reduce water usage
Guidelines	Taps:
	By specifying low-flow taps kitchen sinks and bathroom fittings, water use is reduced without adversely affecting the functionality. Hot water use is also reduced, reducing energy consumption for heating the water.
	Many different taps are available that meet the flow rate required. To maintain user satisfaction at the lower flow rates, some manufacturers mix water with air to cause turbulence in the flow; this in turn gives an increased sense of pressure without increasing the flow rate. Flow restrictors or aerators can be added on to the specified faucets to reduce the flow rate, which may be a cheaper alternative to purchasing a low-flow faucet.
	It is important to note that the flow rate of a tap is dependent on the water pressure and manufacturers often provide a chart that plots the flow rate at different pressures.
	Toilets and cisterns:
	Toilets can either be specified with a dual flush cistern or a single flush cistern. If the use of a dual flush cistern is not clearly understood the water saving measures may not be achieved.
	Guidance on Water Efficient Fittings :
	Low flow showerheads 8L/min
	Low flow taps for kitchens sinks 6L/min Low flow taps for Bathrooms sinks 6L/min
	Dual Flush toilet cisterns in bathrooms 6L/first flush and 3L/second flush Single Flush cisterns 6L/flush
Norms & Standards	The specification of water efficient fittings that achieve the flow rates as stipulated above or those stipulated by a metric such as the GBCSA Green Buildings Tool / Edge Rating Tool or by the municipal entity.
Required documentation for evidence	1. Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.4 Bathrooms 4.3.5 Kitchen fittings
Practice Note Reference	None

Overarching Item	4.7 Sustainability
Sub-Item	4.7.3 Metering
Principles	Installation of smart metering
Guidelines	The metering of services allows tenants to monitor and manage their services consumption and bills. The location of meters should be related to services ducts and plant areas.
	The metering of water should be considered in terms of hot and cold water metering in relation to the revenue collection of the SHI.
Norms & Standards	All units to have individual water and electricity metering Consideration should be paid to the type of metering : smart metering, prepaid etc
Required documentation for evidence	1. Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 3.6.2 Metering & sub metering
Practice Note Reference	None

Overarching Item	4.7 Sustainability
Sub-Item	4.7.4 Health & Safety: Hazardous Materials
Principles	To reduce health risks to residents by removing materials with hazardous content such as Asbestos and Lead.
Guidelines	An assessment should be made of existing properties before construction commences to ensure that no hazardous materials are present within the building or environment. This includes the safe disposal of items such as fluorescent tubes. Hazardous
	materials much be removed by a specialist.
Norms & Standards	Certification of removal by approved contractor.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials

Overarching Item	4.7 Sustainability
Sub-Item	4.7.5 Use of sustainable Materials
Principles	To encourage the use of materials that minimise the impact on the environment in terms of their embodied energy values To reduce health risks to residents by reducing the use of material with hazardous content.
	content.
Guidelines	Embodied energy is the energy consumed by all of the processes associated with the production of a building specifically building materials from the mining and processing of natural resources to the manufacturing, transport and delivery.
	Materials should be locally sourced wherever possible
	Volatile Organic Compounds (VOC) are organic compounds that produce vapours (off gassing) readily at room temperature and normal atmospheric pressure. Most commonly recognised with the strong smells in newly painted rooms or the smell of glues used in flooring adhesives
	Use of interior finishes that minimise the levels of Volatile Organic Compounds (VOC) should be specified. These are floor and wall coverings, and in particular, paints. All paints specified should be low VOC paints.
Norms & Standards	The use of interior finishes that minimise the levels of Volatile Organic Compounds (VOC) should be specified. These are floor and wall coverings, and in particular, paints where low or no VOC paints should be specified.
Required documentation for evidence	1. Specifications
Corresponding	This sub-item must be cross referenced to sub-item:
References	4.3.6 Materials
Practice Note Reference	Practice Note to be developed

Overarching item	4.8 Lease Agreement
Sub-Item	4.8.1 Lease agreement
Principles	A mutually rewarding relationship between landlord and tenant.
Guidelines	 The lease is a record of what has been agreed and 'governs' the relationship between the landlord and tenant. The lease agreement must cover: A detailed description of the rental property/accommodation – what's included and excluded – and a list of accepted defects upon occupation by tenant. Detailed particulars of the landlord and tenant. The lease and notice periods. The amount of rental and any other additional costs payable by the tenant and terms of payment. Annual escalation. Amount of deposit payable and its purpose (defray repair expenses if any). Detailed information on what the rights and obligations of the landlord are, with specific focus on maintenance and repairs and arrangements for access by landlord into the premises. Detailed information on what the rights and obligations of the tenant are, with specific focus on use/abuse of the premises, fittings and fixtures, any applicable complex or Body Corporate Rules and subletting.
Norms and Standards	The lease agreement is to be in writing and signed by both parties. The provisions of the lease are to comply with the Rental Housing Amendment Act, 2014, the Formalities in Respect of Leases of land Act, 1969, the applicable provisions of the Consumer Protection Act, 2008 and its final Regulations of 2011, The Sectional Title Scheme management Act as amended, any prevailing Municipal by-laws, the Estate Agency Affairs Act, 1976 (if estate agent is the landlord), the Prevention of Illegal Eviction From and Unlawful Occupation of Land Act, 1998 and the Immigration Act 13 of 2002.

8.10. Norms and Standards for Communal Housing

The following norms and Standards apply to the provision of rooms with shared bathroom & kitchen amenities which may be provided as a component of a social housing development, communal housing,/ 'SRO- single room occupancy' typology, special needs or supported housing, transitional or temporaryemergency housing.

Reference should be made to the matrix in section 2.8 for compliance criteria in terms of Levels 1-4 in addition to the Items below.

Overarching Item	5.1 Rooms with shared amenities
Sub-Item	5.1.1 Unit Design
Principles	To ensure that rooms within a communal environment are adequately sized and designed to allow residents to enjoy privacy in a secure and safe environment.
Guidelines	Rooms must be adequately sized to allow a cooking area separate from the sleeping / bed area. The room width should be adequately sized to allow space for a double bed with circulation space. There should be enough space to allow a cupboard The cooking area should have a built in surface adequately sized for food preparation and a 2 plate surface stove or microwave and an area for a fridge. A double plug should be provided located so that the fridge plug and stove can use it.
Norms & Standards	Exceed statutory minimum room size
Required documentation for evidence	 Unit Layout showing furniture positions and services points Finishes Schedule
Corresponding References	This sub-item must be cross referenced to the sub-items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	

Overarching	
Item	5.2 Communal Amenities
Sub-Item	5.2.1 Bathrooms
Principles	This requirement is relative to buildings with single rooms and communal facilities.
	Where single rooms are provided in developments. Common area bathrooms must be provided for both male and female tenants.
	Designs should not allow direct sightlines from passages into bathrooms.
Guidelines	Consideration to be given to safety and security of residents: where possible install CCTV outside bathroom entrance door.
	The number of ablutions to be provided is in accordance with the tables contained in SANS10400.
Norms & Standards	Notwithstanding, consideration should be given to the following:
	 The provision of bathroom facilities for different genders should be designed to ensure privacy and the safety of users.
	 The facilities should not only be designed as communal facilities but include a mix of standalone bathrooms with bath or shower, basin and toilet suitable for family use
	 Access to some 'family' bathroom units should be accessible from a common passage i.e. not from either a male or female bathroom area
	Showers should have a change area within the cubicle
	Toilets with a basin within the cubicle
	To be provided with hot and cold water
	Strategies for metering of water to be considered i.e. is hot and cold water metered
Required documentation	1. Building plan
for evidence	Evidence of calculation method for number of bathrooms in relation to number
	of rooms in development
	This sub-item must be cross referenced to sub-items items:
Corresponding	4.1.4 Shape
References	4.2.1 Unit Plans: Space Planning
Practice Note	
Reference	None

Overarching Item	5.1 Communal Amenities
Sub-Item	5.2.2 Kitchens
Principles	This requirement is relative to buildings with single rooms and communal facilities.
	Where single rooms are provided in developments, common kitchens should be provided. It is noted that most tenants may choose to cook within their individual spaces.
	Common area kitchens must be provided with suitable areas for washing and cleaning dishes and well as cooking if required. Moreover, seating should be provided in these areas
Guidelines	Kitchen areas must be suitably ventilated. Electrical Points to be provided.
	Consideration to be given to safety and security of residents: where possible install CCTV
Norms & Standards	Size and number of kitchen areas to be prescribed as ratio of unit numbers.
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials
Practice Note Reference	Practice note on ratio to number of units to be developed.

Overarching	
Item	5.1 Communal Amenities
Sub-Item	5.1.2 Common Area Amenities
Principles	This requirement is relative to buildings with single rooms and communal facilities.
Guidelines	Developments with single rooms sharing communal bathroom and kitchen facilities should be provided with additional communal facilities as these are not provided internally within the unit. The range of these facilities will depend of the target market of the tenant and may include any / all of the following: Laundry Areas as per sub item 3.2.1 Recreational & play areas as per item 3.2.4 Communal kitchen areas with access to stoves and fridges Leisure Areas such as communal lounges, TV areas and games rooms The provision of work rooms, study areas etc
Norms & Standards	Common area amenities to be related to the scale of the development, the location of the development and the nature of the integration within a campus.
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to sub-items: 3.1.3 Provision of Open Space 3.1.4 Provision of Play areas
Practice Note Reference	

9. Norms and standards: Community Residential Units (CRU)

9.1. Approach to specifications within this document

Technical specifications for building and construction projects typically refer to a range of standards for materials to be used, quality of workmanship, codes of practice and methodologies and tests to be performed in order to achieve compliance with core standards.

These minimum specifications, forming part of, and taken together with other parts of this document constituting the Community Residential Units norms and standards, and all associated external documents are intended to assist with:

- Ease of regulating the sector by providing a set of rules and guidelines that are easily understood by both the regulator and the sector.
- Bringing Community Residential Unit housing practice in line with constantly changing
 environments and innovation in design and construction, including introducing green
 initiatives to enhance sustainability through more resource-efficient design and
 construction practices.

Provincial Departments and municipalities should develop standard minimum specifications for their developments in line with their own standards and in response to the unique requirements of their development and operating environments. Yet, they should also strive to develop products in accordance with these Norms and Standards. Specifications should be developed with a view to being outcomes based, and flexible in order to promote responsiveness to context and innovation. To this end, standard specifications must be amended and/or augmented with supplementary preambles to meet the unique needs of every new project. Standard and supplementary preambles should be submitted together with the business plan and feasibility study with each application to the Provincial Department for project approval and funding for assessment in accordance with the norms and standards.

As with the norms and standards, the specifications are not intended to be a prescriptive list of building methods and technologies, materials and finishes for developments, but rather to provide a framework of guiding principles that will enable high quality CRU housing to be developed that meets the mandate of the Department of Human Settlements, while at the same time is flexible and enables CRU to be developed in a manner that is responsive to the demand, open to innovation, and enhances the lives of the tenants living in the units.

Development and application of specifications should follow the approach of the National Building Regulations (NBR) (SANS 10400 series). The content of these and other regulatory prescripts are

not repeated or summarised in the body of this document, and no reference is made to specific regulations, codes and standards. Where deemed necessary to draw the attention of designers, developers and constructors of CRU housing to specific regulations or codes, such references are made in the Norms and Standards in relation to specific sections.

Specifications for construction, materials to be used, fittings, internal and external plumbing and electrical installation and finishes must be basic, but robust, and provide a sensible balance between upfront costs and life cycle maintenance and operating costs to avoid being a burden on municipal owners of the stock.

In respect of coastal areas susceptible to corrosion of ferrous metals, rain penetration and excessive humidity leading to condensation and mildew growth, certain extra precautions are indicated. In view of the fact that the demarcation of "coastal areas" has not been undertaken and mapped, except with regard to the Southern Cape Coastal Condensation Area (SCCCA) which is under review, an interim definition for these areas is applied for purposes of this document. The following interim definition is therefore applicable:

"All areas within cities or towns directly adjacent to, or within 15km of the coastline, and not separated from the coastline by a mountain range".

Inevitably some discretion by competent professionals would come into play here from time to time and to avoid misuse, the provision would be that coastal provinces develop their own lists of such areas. Even that could be open to too much latitude and discretion and it is recommended that proper maps be developed that demarcate "coastal areas" on the basis of defensible scientific climatic criteria.

9.2. Use of Model Preambles for Trades:

It is recommended that these minimum specifications should be used in conjunction with the latest available edition of Model Preambles for Trades published by the Association of South African Quantity Surveyors, and any preambles supplementary to it, or similar industry-based Model Preambles, and included in the project tender and contract documentation. The Model Preambles augment these minimum specifications with comprehensive references to South African National Standards (SANS), and compiling Specifications for particular materials or methods where SANS Specifications or Codes do not exist.

9.3. Considerations for Operations and Maintenance

Although the NBR deals mainly with design and construction, it also has a section on maintenance after occupation, placing responsibility on the owner to maintain the buildings in the same safe and healthy state as approved for construction originally.

Due to the importance and general ignorance and neglect of this provision, attention is drawn specifically to the following excerpt from the NBR (NBR Section A15 Maintenance and Operation:

(1)

- A. The owner of any building shall ensure that any mechanical equipment, facility or any service installation provided in or in connection with such building, pursuant to these regulations or pursuant to any building by- law which was in operation prior to the coming into operation of the Act, shall be maintained in a safe and functional condition.
- B. Such owner or any person appointed by such owner to be in control of such building shall ensure that where such equipment, facility or installation is designed to be kept operating during the times of normal occupancy of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in these regulations or in any by-law for such equipment or installation.
- . (2) The owner of any building shall ensure that pursuant to these regulations or pursuant to any building by-law that was in operation prior to the coming into operation of the Act, the following is maintained in accordance with the requirements of the relevant functional regulations contained in Regulations B, H, J, K and L:
 - A. the structural safety performance (behaviour of buildings under all actions that can be reasonably expected to occur);
 - B. the measures taken to resist the penetration of rain water and the passage of moisture into the interior of a building.
- . (3) The local authority may serve a notice on such owner or person requiring him to comply with sub regulation (1) or (2) within the time specified in such notice.
- . (4) The local authority may, by notice, in writing to the owner, order the evacuation of such building where the state of such building, equipment, installation or facility will cause conditions which in the opinion of the local authority may be detrimental to the safety or health of the occupiers or users of such building.
- . (5) Any owner or person who contravenes the requirements of sub-regulation (1) or (2) or fails to comply with any notice served in terms of sub-regulation (3) or (4) shall be guilty of an offence.

The above is important to note when designing and preparing construction specifications as thought should be given to the longevity of items specified, the maintenance requirements and lifecycle costing. This regulation places a clear legal liability on all building owners to maintain their buildings in a state of safe habitability. Normal wear and tear is permitted, but when it gets to the point where it affects structural and fire safety, health of occupants and all the other aspects regulated for construction, repairs must be carried out, otherwise the owner will be in breach of the statute and the original occupancy certification, as well as most likely rendering the building and the owner's third party liability towards occupants and the public uninsurable.

9.4. The key principles for quality CRU housing

The key principles for good quality sustainable CRU housing developments are set out below. These principles form the guiding framework for the norms and standards sets out in the sections that follow.

- 1. **Socially and environmentally appropriate:** The type of units, services and amenities should be appropriate to the people to be accommodated. The mix of dwelling type and size should support the social, environmental and economic sustainability objectives of the development.
- 2. **Architecturally appropriate:** The development should provide a pleasant living environment which responds to its context, enhances its neighbourhood and respects its heritage.
- Functional: The design should best meet the requirements of the intended purpose. Units
 must accommodate the everyday needs of residents in terms of accommodating their
 furniture and their requirements in terms of cooking, eating, sleeping, washing and
 socialising.
- 4. **Accessible and adaptable**: Dwellings should be capable of adaptation to meet the changing needs of residents. There should be ease of access and circulation for all residents to move through the development and to use the services and amenities provided.
- 5. **Safe, secure and healthy:** The development should be a safe and healthy place in which to live.
- 6. **Affordable:** The development should be able to be built, managed and maintained within the cost parameters of providing affordable rentals to the target market.
- 7. Durable: Construction techniques and materials should have a service life of that provides acceptable performance over the life of the building without the need for abnormal repair or replacement at intervals shorter than general industry benchmarks.

The balance between lifecycle costing and initial capital outlay must always be balanced.

8. Resource Efficient: Efficient use must be made of land, infrastructure, water and energy. The

building should optimise the benefits of orientation, daylight and solar gain. The use of scarce natural resources in the construction, maintenance and management of the buildings should be minimised.

The successful design of a good quality sustainable housing project depends on achieving a balance between a range of factors. These include issues such as accessibility, safety and security, access to services and amenities and the provision of adequate space. A sustainable housing project should also contribute to its environment by becoming part of its neighbourhood context and fostering a social network between residents and the community. The dwelling unit must meet the needs of the lifecycle of a family from children to adults, to older people and people with forms of special needs or disability that don't require specialised institutional care, therefore designs should be flexible and adaptable to meet these demands over the life of the building.

The following general provisions will apply:

- Designs must take into account minimum maintenance cost;
- Designs must take into account the provisions of the National Building Regulations and in particular the provisions of SANS 10400 XA Energy Efficiency Requirements (provision and installation of water heating devices provided separately);
- Must provide for full electrical installation; and
- Adhere to design requirements as provided in Sectional Title legislation and all municipal by-laws.

The above principles are utilised in each sub-section of the document to inform and shape the approach and content of each sub-item with regard to the underpinning Principles, the Guidelines and the recommended Norms and Standards pertaining to the sub-item.

9.5. Differentiation between typologies (Greenfield, brownfield, etc)

CRU housing projects can take a wide range of forms, from brownfield conversions and refurbishments, low-rise or high-rise blocks with lifts, to newbuild greenfield developments under certain conditions.

For this reason, it is intended that these Norms and Standards will apply to all types of housing development as described below.

Different authors, commentators and practitioners attach slightly different attributes to the terms "greenfield" and "brownfield" respectively. Rather than trying to arrive at a universal definition, we have defined the terms as follows for the purposes of these Norms and Standards:

9.5.1. Greenfield development

Construction of new buildings on vacant sites, usually requiring legal conversion of development rights (township establishment, rezoning or other formal town planning procedure), new connections to external bulk infrastructure services grids of the local authority, and varying levels of installing new internal infrastructure services.

A common perception is that greenfields projects are always located in uninhabited and undeveloped areas at the urban periphery. In this Norms and Standards document however, greenfields can also refer to undeveloped parcels or pockets of parcels of infill land in already developed and inhabited areas. These parcels are deemed completely vacant, but in some cases may have rudimentary or dilapidated structures on them that need to be demolished and the land rehabilitated in preparation for new construction.

9.5.2. Brownfields development

The re-development of existing properties, either for the same use or for conversion to a different use. For our purposes these properties are almost always located in the midst of areas that are already well developed and inhabited, with existing connections to the bulk infrastructure services grids of the local authority, and often, but not always, with pre-existing development rights that will cater for the proposed new form of use.

The redevelopment may take the form of refurbishment for the same or similar use, or conversion to a new use, for instance from dormitory hostels to family units, and although in the main the existing buildings on the site will be retained, projects may in some instances involve partial demolition, alteration and addition.

9.5.3. Refurbishment, upgrade, conversion

Acquiring existing buildings and preparing them for residential dwelling purposes can take one of two basic forms, or a combination of both:

- 1. Refurbishing or rehabilitating existing residential buildings (blocks of flats, townhouses, etc.) for continued residential use, in other words no change in use is brought about. Depending on the state of the building, this could entail minor rehabilitation or repair (repainting, fixing broken components, replacing floor finishes etc.), or more extensive renovation or upgrade/refurbishment. Renovation or refurbishment results in an essentially new building within the framework of an old one. The latter may require changes in layout and new services installations to comply with new fire safety regulations and building codes, and usually involves complete or partial tenant evacuation
- 2. Adaptive re-use or conversion, where a building that was originally designed for another type of use (offices, schools, etc.) is turned into a residential building.

Some buildings were originally built for mixed use, for instance a block of flats with shops or offices at ground level. The municipality may decide to retain the mix and simply renovate, or it may decide that it is more appropriate to convert all or some of the shops and offices into dwelling units as well.

In this report we will use the term *refurbishment* interchangeably for repair, upgrade and renovation of existing residential buildings (no change in use), and *conversion* for all cases where a change in use is affected.

In rare cases there may also be elements of *restoration* involved that is an attempt to restore the original design or historical concept of the building by stripping it of later additions and putting back or repairing original details and materials. This Norms and Standards document does not address restoration projects.

9.5.4. Newbuild / greenfield mid to high-rise or towers development

This option is not provided for in the CRU Programme as the funding model does not cover the costs

9.6. Interventions that may in certain cases apply prior to re-development of existing properties

9.6.1. Stabilisation

Stabilisation is applied, after assessment, to facilities that are not in a condition that warrants demolition, but where they pose potential threats to the health and safety of occupants.

Minimum intervention to get the facility health and safety compliant (not necessarily in terms of NBR, by-laws, town planning scheme, NHBRC, OHSA).

Applies mainly to activities such as making safe of electrical installations and structural aspects in danger of collapse, and emergency repairs to dysfunctional water and sanitary installations.

It is assumed that stabilisation will be followed quickly by one of the other permanent redevelopment options (e.g. refurbishment, conversion), and that it will therefore, be done with minimal community facilitation involving only communication and co-ordination of activities with the resident community, the cost of which is included in the rate for feasibility studies below. More comprehensive facilitation, as well as temporary re-location and accommodation will only happen in the subsequent redevelopment phase, and the cost of these will be included in the rates for those options

Stabilisation Works comprise the following where applicable:

- · Minimum repair to leaking and blocked sewers on site;
- · Minimum repair to leaking water pipes only where threat of flooding exists;
- Repair/replace dysfunctional sanitary fittings;
- Make electrical installation safe (repair/replace power sockets, light fittings, ensure no open live wiring, repair/install earth leakage/ trip switches, etc);
- Take minimum measures to prevent flooding of buildings (grading, open channels, stabilised earth berms or sandbag barriers);
- Remove items that may pose immediate hazards to health and safety such as broken glass and other sharp objects, toxic substances, rotting organic materials, in or near occupied buildings and commonly used walkways;
- Repair and/or temporarily support and/or barricade damaged and rusting steel fire escape stairs, walkway and balcony balustrading;
- Provide temporary support to parts of structure (e.g. roofs) in danger of collapse;

- Vacate and barricade parts of buildings where structure is unsafe, and where it is not practical to provide temporary support or repairs;
- Barricade broken/malfunctioning lifts in multi-storey buildings;
- Provide/supplement/repair basic fire-fighting equipment (extinguishers, hydrants and hose reels);
- Clear fire escape routes of obstructions such as locked or barricaded escape doors, accumulated rubble, or structures put up by landlords or residents; and
- Compile and provide house rules, and train residents in basic health and safety conduct with regard to use/abuse of electricity, sanitary facilities, littering and waste disposal, maintaining fire safety, including instituting systems for maintaining all theabove.

9.6.2. Demolition and rehabilitation

Demolition, after assessment is applied to existing facilities to remove buildings, structures and services (where applicable) that are derelict and unsafe, and which are no longer structurally or economically viable i.e. too costly and unpractical to maintain and/or repair, and to rehabilitate the site for use as open space, or in preparation for immediate or future in fill new build.

The demolitions may take various forms such as: Simple demolition-

- · Single storey structures;
- Demolition to just below ground level only no removal of foundations, underground services;
- · Limited breaking up of paving and roads, boundary walls, etc; and
- No major rehabilitation of site required. Medium complex demolition-
 - Double storey structures no structural frame, slabs on load-bearing masonry walls only;
 - Demolition to just below ground level only no removal of foundations, underground services
 - Limited breaking up of paving and roads, boundary walls, etc; and
- No major rehabilitation of site required. Complex demolition-

- Low-rise walk up structures (2-4 storeys) with reinforced concrete or steel structural frame within fill walls;
- No major installations that need removal such as lifts, boilers, air conditioning plant, strong rooms and safes, central kitchens and laundries with stacks; and
- No major rehabilitation of site required.

All demolition work to be carried out in a safe and workmanlike manner, after obtaining all necessary municipal and other statutory permits, and in accordance with all Health & Safety Construction regulations.

9.7. Approach to document sections

The norms and standards are structured in a hierarchy, starting at the site and contextual framework level and working through to the detailed requirements of the unit. Four levels are provided for:

Figure 2: Norms and Standards Levels



The norms and standards are set out in a table that includes the following:

- **Overarching item:** This term refers to specific thematic elements within the levels defined. (For example, the overall context of a development).
- **Sub-item:** This element refers to a specific area of focus within themes and provides more detail on particular components of overarching items.
- **Principles**: These are the high-level key outcomes desired by the particular sub-item.
- **Guidelines:** Applicable good practice on a particular topic informed by knowledge, understanding and experience of practitioners in the field and their professional advisors. This is an explanation of how the general principles are to be achieved.
- Norm and standard: This is the compliance levels that must be achieved. Within this

section it is noted whether this item is a "Conditional Requirement" for funding by the SHRA.

9.8. Conclusion and Matrix of Typologies

Housing typologies that could be delivered through the Programme could range from rooms with shared communal facilities, bachelor units, one and two bedrooms units and are flexible enough to allow for the possibility of multiple tenancies per unit.

No provision is made for 3 bedroom units as in terms of policy these are regarded too expensive and unaffordable to the fiscus.

Housing typologies must be designed to provide a wide range of options to meet diverse needs and affordability profiles and allow flexibility of configuration (block layouts) to suit varying site conditions (size, shape, topography, etc). In line with this, a range of options up to two bedrooms will be considered for approval under the Programme funding.

A summary of the overarching items and sub-items covered in the norms and standard (per building typology) are shown in Table 2 overleaf.

The table is a matrix indicating for ease of reference the applicability of each sub-item in the sheets that follow to each of the possible CRU housing typologies, both greenfield newbuilds and brownfield refurbishments and conversions.

Table 1: Summary of overarching items and sub-items by level

using tU housing tand-alone	New Build Projects				•	•	•	•	•		•	•	•		•	•
Communal Housing As component of CRU housing development or as stand-alone building	Refurbishments and Conversions															
Adaptive Re-use / Conversion	Conversion of existing non residential						•		•		•					•
Adaptive Re-us	Conversion of existing dormitory hostels and other residential buildings		•			•	•		•			•	•			•
Refurbish ment of existing residential	Hostels or buildings											•				
Greenfield or Infill Newbuilds	Walk up no lifts					•	•	•	•	•	•	•	•			•
Sub-item		1.1.1. Location of the project 1.1.2. Urban Design & Strategic Area Frameworks	1.1.3. Efficient use of land & resources: Building Typologies & Densities	1.1.5. Environment & Ecology	1.1.6. Mixed Use, Tenure and Income	1.1.7. Heritage	1.1.8. Entrance to development and perimeter treatment	1.2.1. Vehicular and pedestrian movement through site	1.2.2. Parking	1.3.1. Hierarchy of spaces and place making	1.3.2. Architectural diversity and building massing	1.3.3. Hard and soft landscaping	1.3.4. Scale of project: Unit Numbers	2.1.1. Adaptability and building reuse	2.1.2. Orientation: Solar heat gain and shading	2.1.3. Building entrances, thresholds and staircases
Overarching item				=	1.1. Overall context			1.2 Acrescibility	T. C.		1.3. Overall building	design in relation to	פורב מווח רסוורבער		2.1. Building design	
Level								Level 1: The external environment							2. Level 2: The	a a a a a a a a a a a a a a a a a a a

181

00	ŕ	٠	ı
		Į	

Communal Housing As component of CRU housing development or as stand-alone building	Refurbishments New Build and Conversions Projects	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	,
	l of	•		•	•	•	•	•		•	•	•	•	•	•	•	-	•	•	•	•	•
Adaptive Re-use / Conversion	conversion of existing domitory hostels and existing residential residential buildings	•		•	•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•
Refurbishment of existing residential	C e e h Hostels or buildings o n	•		•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
Greenfield or Infill Newbuilds	Walk up no lifts	•		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
Sub-item		2.1.4. Design of buildings: Cross ventilation	2.1.5. Building envelope: Walls 2.1.6. Building envelope: Windows and glazing	2.1.7. Building envelope: Roof Construction / Insulation / Guttering / Waterproofing	2.2.1. Electrical, water, other	2.2.2. Lighting	2.3.1. Operations Manual	2.3.2. Maintenance schedules	2.4.1. Rainwater collection	2.4.2. Energy efficiency	3.1.1. Building entrance and Lobby	3.1.2. Common Areas: Lift lobbies & Provision of Lifts	3.1.3. Internal passages / External walkways	3.1.4. Ratios	3.2.1. Laundry areas	3.2.2. Refuse areas	3.2.3. Provision of open space	3.2.4. Recreational and play areas	3.2.5. Other amenities	3.3.1. Services reticulation	3.3.2. Hot water provision	3 3 Ventilation
Overarching item						2.2. Services	2.3. Maintenance and	management		2.4. Sustainability			3.1. Common areas				3.2. Provision of	ımenities			3.3. Services	
Level																	3. Level 3: The Building: Common	Areas				

r	Υ		
r	٧	٦	
3	۰	۲,	

Level	Overarching item	Sub-item	Greenfield or Infill Newbuilds	Refurbishment of existing residential	Adaptive Re-us	Adaptive Re-use / Conversion	Communal Housing As component of CRU housing development or as stand-alone building	sing U housing and-alone
			Walk up no lifts	Hostels or buildings	Conversion of existing dormitory hostels and other residential buildings	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
		3.3.4. Fire equipment	•	•	•	•		•
		3.3.5. Safety and security: Monitoring: CCTV			•			
	3.4. Maintenance and management	3.4.1. Material Specifications: Common Areas: Lobbies & Passages	•		•	•		•
	3.5. Accessibility	3.5.1. Access to units		•		•		
	3.6. Sustainability	3.6.1. Lighting	•		•			•
		eas: Metering tering	•	•	•	•		•
		4.1.2. Unit design	•	•	•	•		•
	4.1. Design: space norms and	4.1.3. Unit size	•	•		•		•
	sp	4.1.4. Mix of unit types and sizes	•	•	•	•		•
		4.1.5. Shape	•			•		•
		4.2.1. Unit plans: space planning	•	•		•		•
			•			•		•
		4.2.3. Kitchen area: space planning: self-contained unit	•		•	•		
	4.2. Design of unit	4.2.4. Living room	•		•	•		•
		4.2.5. Bedroom (main)	•		•	•		•
 Level 4: Unit design 		4.2.6. Bedroom (second)	•			•		•
•		4.2.7. Access to outdoor space	•		•			•
		4.3.1. Floors	•	•	•	•		•
		4.3.2. Walls: construction and finishes	•		•	•		•
	4.3. Materiality: specifications	4.3.3. Ceilings	•	•	•	•		•
		4.3.4. Bathroom	•	•	•	•		•
		4.3.5. Kitchen fittings	•	•	•	•		

using RU housing tand-alone	New Build Projects	•	_	•	•	•	•	•	•	•	•	•	•	•	•
Communal Housing As component of CRU housing development or as stand-alone building	Refurbishments and Conversions	•	•	•	•	•	•	•	•	•	•				
Adaptive Re-use / Conversion	Conversion of existing non residential	•		•	•	•	•	•	•	•	•				
Adaptive Re-us	Conversion of existing dormitory hostels and other residential buildings	•	•	•	•	•	•	•	•	•	•				
Refurbishment of existing residential	Hostels or buildings	•		•	•	•	•	•	•	•	•				
Greenfield or Infill Newbuilds	Walk up no lifts	•	•	•	•	•	•	•	•	•	•				
Sub-item		4.3.6. Materials: finishes	4.4.1. Ventilation	4.4.2. TV/Satellite/IT/Fibre	and 4.5.1. Building user/occupants guide	4.6.1. Bathroom design	4.6.2. Accessible kitchens	4.7.1. Lighting internal to unit	4.7.2. Water use	4.7.3. Metering	4.7.4. Use of sustainable materials	5.1.1. Unit Design	5.2.1 Bathrooms	5.2.2 Kitchens	5.2.3 Common Area Amenities
Overarching item				4.4. Services	4.5. Maintenance and management		4.6. Accessibility		4.7 Sustainability			5.1. Rooms with shared Amenities		5.2 Common Amenities	
Level												5. Norms &	Standards for	Communal	

9.9. Norms and Standards

The below sections provide detail on both overarching and sub-items of relevance to Norms and Standards of CRU Housing.

9.9.1. Level 1: External environment

Overarching Item	1.1 Overall Context
Sub-Item	1.1.1 Location of Project
Principles	CRU are not restricted to any specific locality other than being located on properties designed for residential use. Housing should generally be well located within existing CBDs or urban nodes and within an approved urban edge.
Guidelines	Although the location of CRU projects will most often be determined by the location of existing hostels or bad buildings in need of re-development, consideration should wherever possible, also be given to the guidelines below. Housing projects should ideally be considered in terms of their location in relation to access to existing economic and social infrastructure and in a manner that enables spatial and social transformation. In this regard the following locational attributes are ideally required • Access to Public Transport: bus, taxi, train etc • Schools: Pre-school / Public Junior + Senior Schools • Established economic activities and employers such as office parks, industrial areas etc • Retail and convenience e.g. ATMs, Pay points for municipal accounts • Healthcare Facilities • Leisure & Recreational Facilities • Open Space
Norm and Standard	None

Corresponding	This sub-item should be read in conjunction with sub-items:	
References	1.1.2 Urban Design Frameworks	
	1.1.4 Environment & Ecology	

Overarching Item	1.1 Overall Context
Sub-Item	1.1.2 Urban Design & Strategic Area Frameworks
Principles	CRU is not restricted to any specific locality other than being located on properties designed for residential use. However, the creation of viable integrated neighbourhoods is a key goal in spatial transformation. CRU refurbishments and redevelopments should therefore aim to contribute to neighbourhood formation through positive spatial integration in existing urban areas.
Guidelines	In addition to the brief for the development -which should provide guidance on proposed densities, mix of unit types and proposed tenant profile, an Urban Design Framework (UDF) may be in place for major redevelopments and infill developments which comprises of a larger land parcel. An urban design framework (UDF) refers to the pattern, structure or arrangement of streets, buildings and landscape that make up urban areas. The interrelationship between these elements and their individual characteristics come together to make a 'place' and ultimately a neighbourhood. In many instances specific city strategic area frameworks are in place which define the development vision of specific areas and translate city scale policy frameworks into area specific frameworks. The mix of buildings, streetscape and open spaces are important to the quality of residential developments and neighbourhoods. A UDF creates a structure for the design of developments within an area and would take the following into consideration; movement frameworks, hierarchy of spatial development, density, diversity and mix of uses, public open space and landscape design.
Norm and Standard	The development must be compliant with the Strategic Area Frameworks and /or Urban Design Framework for the relevant area where applicable.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.2.1 Hierarchy of Spaces & Place making

Overarching Item	1.1 Overall Context
Sub-Item	1.1.3 Efficient use of land & resources: Building Typologies & Densities
Principles	The development should contribute to efficient use of land, environment and services through appropriate building typologies and densities.
Guidelines	Urban sprawl threatens the efficient use of urban infrastructure. Urban consolidation is a principle that recognises designs that make use of compact development patterns to increase efficient land use utilisation. The redevelopment of previously used, under-utilised or unused sites contributes to urban regeneration and stimulates economic and social investment in communities. This efficient use of land is directly correlated to the typologies of buildings. Therefore, densification through the use of brownfields and infill sites is encouraged. The building typology is a key factor in determining densities that contribute to efficient land utilisation.
Norm and Standard	 Building Typologies to be used should be specified in relation to new build hostel redevelopment or infill projects, or conversion from dormitory hostels to other forms of housing as provided for in the Programme: Rooms with shared communal amenities Walk up units with a mix of bachelor, 1 and 2 bedroom units, or multi-bedroom, multiple tenancy self-contained units as provided for in the Programme. The development should enable sufficient density in relation to the building typology and location. Where densities permitted in terms of existing town planning schemes/site zoning are considered inappropriate, an application and motivation for increased densities should be submitted, provided this is supported by local authority planning departments and will not unduly delay approvals.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.1.2 Urban Design and Strategic Area Frameworks

Overarching Item	1.1 Overall Context
Sub-Item	1.1.4 Bulk Services
Principles	New developments should be in areas where sufficient bulk capacity already exists, or where not, aligned with short to medium-term municipal infrastructure and spatial development strategies, plans and capital budgets.
Guidelines	None
Norms & Standards	Development should not proceed unless there is adequate capacity of bulk services to ensure a continued and ongoing supply.
Corresponding References	None

Overarching Item	1.1 Overall Context
Sub-Item	1.1.5 Environment & Ecology
Principles	Reduce impact of greenfields development on ecological systems and biodiversity.
Guidelines	The development should not be located on prime agricultural land or land that has a high ecological value / has evidence of threatened species or within the buffer zones of watercourses or ridges. Developments should be located within established urban boundaries and aligned to City and Metro Spatial Development Frameworks.
Norm and Standard	The development should be aligned with the relevant Spatial development Frameworks. Development should not be on land that has high ecological value – this includes land used for agricultural production, as well as land currently designated and used as open space or parkland.
Conditional Requirement	No development on land that is still zoned as agricultural land and where Bulk Services are not available.
Required documentation for evidence	 Confirmation of project location in relation to Spatial Development Frameworks. Evidence of compliance with municipal by-law and national legislation related to built environment environmental considerations such as confirmation that an Environmental Impact Assessment (EIA) is not required, or when required has achieved a positive Record of Decision (ROD). Submit copy of EIA and Environmental Authorisation (RoD) if required in terms of Statutory Compliance
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.1.2 Urban Design & Strategic Area Frameworks 1.1.4 Bulk Services 1.1.7 Heritage
Practice Note Reference	None

Overarching Item	1.1 Overall Context			
Sub-Item	1.1.7 Heritage			
Principles	The conservation and protection of our cultural heritage is recognised in terms of our cultural identity.			
Guidelines	Heritage may be identified in terms of the value and age of the built environment but it also may be in terms of the social history of the site and archaeological value. No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority. This is relevant to developments on brownfields sites even when currently vacant and within existing buildings. However, heritage does not only apply to the built environment; a development may be subject to an impact assessment, specifically in cases where the development or other activity which will change the character of a site exceeding 5 000 m2 in extent; or involving the consolidation of three			
	or more existing erven.			
Norm and Standard	Development should be compliant with heritage requirements where relevant.			
Corresponding References	None			

Overarching Item	1.1 Overall Context			
Sub-Item	1.1.7 Entrance to Development and Perimeter Treatment			
	The perimeter treatment of the development is an important factor in the integration of the development within the existing urban fabric.			
Principles	Safety & security of both residents and the neighbourhood are affected by the perimeter treatment of developments.			
	To provide a secure perimeter design to development that supports street surveillance and active monitoring of grounds.			
	The development should have a perimeter enclosure (wall/ fencing) of adequate strength and height that provides a safe interior environment for the development.			
	The development should have clearly defined entrance with separate vehicular and pedestrian access.			
Guidelines	Design should ensure a primary point of access control.			
	In large scale developments, consideration should be given to taxi pickup and drop off zones adjacent to entrances.			
Norm and Standard	Secure perimeter and entrance/s to development with a gatehouse in case of estates, and with access control / facilities for guards for both estates and buildings. Points of site ingress/egress should be designed to ensure smooth and efficient flow of both pedestrian and vehicular traffic for both residents and visitors, especially at peak times			
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.2 Urban Design and Strategic Area Frameworks			

Overarching Item	1.2 Accessibility			
Sub-Item	1.2.1 Vehicular and pedestrian movement through the site			
Principles	Provide a safe environment for residents and ground floor accessibility for all residents.			
Guidelines	Vehicular and pedestrian movement should enable ease of movement and a safe environment for residents.			
	Vehicular traffic to be separated from pedestrian traffic as far as possible. Speedbumps should be provided to slow traffic down			
	Parking areas to be clearly be delineated from landscaped open areas.			
	Paved or surfaced paths to be provided to facilitate movement through the development between buildings.			
Norm and	The entire ground floor of the development should be accessible for			
Standard	wheelchairs and push chairs through the use of mountable kerbs and ramps.			
	Walkways to be adequately sized in terms of width. The surface finish should be slip resistant, easily cleanable and have longevity.			
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.2 Parking			

Overarching Item	1.2 Accessibility			
Sub-Item	1.2.2 Provision of Parking			
Principles	Adequate suitably located parking to be provided on site for residents and visitors. There should be parking that is appropriate for disabled residents and visitors			
Guidelines	Determine appropriate parking ratios required in relation to context, locality, access to reliable and affordable public transport, and apply to municipality to have these reduced if necessary, where the reduction is supported by the planning and roads departments and will not unduly delay approvals for the project.			
	In existing buildings or inner city building conversions with limited or no parking – no additional parking would be required			
Norm and Standard	Parking areas must be compliant with minimum required or maximum allowed parking ratios, but should take account of very low car ownership in the target market, and application should be made for relaxations accordingly. Provision should be made of adequately sized parking bays for disabled residents and visitors in close proximity to building entrances.			
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.2 Vehicular & pedestrian movement through site.			

Overarching Item	1.3 Overall Building design in relation to site & context			
Sub-Item	1.3.1 Hierarchy of Spaces & Place making			
Principles	The design of building types, the relationships between them, their relationships to streets and the spaces created around them will influence the character of the overall site and its surroundings and contribute to the quality and identity of the new environment.			
Guidelines	In preparing overall scheme layouts for new build infill projects, consideration should be given to the following factors:			
	 Integration of the development into the existing context through respecting existing street patterns, landscape and urban markers. 			
	 Siting of buildings to take into account relationship to street edge, building scale and size, and orientation. 			
	 Strengthening of weak urban relationships through designed spatial initiatives. 			
	 Creating identity of place through design of spaces between buildings 			
	Encouraging 'social living'			
	The layout design should aim to create an identity of place which helps foster residents' sense of 'ownership' and responsibility for the development thereby contributing to the creation of a sustainable community.			
Norms & Standards	The layout should engender a sense of place and community through spatial differentiation within the development			
Corresponding	This sub-item should be read in conjunction with sub-items:			
References	1.1.2 Urban Design and Strategic Area Frameworks			
	1.1.3 Efficient use of land & resources			

CONTINUES ON PAGE 258 OF BOOK 3

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001 Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za Publications: Tel: (012) 748 6053, 748 6061, 748 6065



Vol. 691

20

January **Januarie**

2023

No. 47883

Part 3 of 4

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes



AIDS HELPLINE: 0800-0123-22 Prevention is the cure

Overarching Item	1.3 Overall Building design in relation to site & context		
Sub-Item	1.3.2 Architectural Diversity & Building Massing		
Principles	The design of building types, the relationships between them influences the character of the overall site and its surroundings and contributes to the quality and identity of the new environment.		
Guidelines	In preparing overall scheme layouts consideration should be given to the following factors: • Siting of buildings to take into account relationship to street edge,		
	 building scale and size, and orientation. Creating identity of place through design of spaces between buildings 		
	 Avoiding monotony associated with developments with a single repetitive building type or a singular wall surface treatment. Consideration to be given to external wall treatment in terms of diversity of surface treatments and elevational design. 		
	 Consideration to be given to varying heights of buildings and marking key elements such as entrances and corners. 		
	Consider to what extent ground floor units, top floor units and units at the ends of building blocks could be differentiated from the more typical floors, or amongst the units in the middle of building? To what extent have these special opportunities should be harnessed in order to create diversity and interest and in order to overcome the monotony ordinarily associated with hostel buildings.		
Norms & Standards	The development's architecture should be diverse including different building types, heights and facade treatments. Developments must demonstrate a diversity of building type that is responsive to site conditions in line with the Urban Design Framework.		
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.2 Urban Design and Strategic Area Frameworks 1.2.1 Hierarchy of spaces and placemaking		

Overarching Item	1.3 Overall Building design in relation to site & context			
Sub-Item	1.3.3 Hard and soft Landscaping			
Principles	Landscaping and open space contribute to the health and wellbeing of residents whilst also contributing to climate resilience.			
Guidelines	In greenfields and brownfields developments: Example of sufficiency: Landscaping could include: • Soft Landscaping: Trees, grassed areas and planted areas. • Urban Agriculture such as planting for Food Gardens. • Hard Landscaping: Paving and permeable paving. All planting must be considered in terms of indigenous and water wise plants Seating and other amenities such as playgrounds must be correlated to the landscape plan in terms of shading. All surfacing must be considered in terms of permeability for stormwater attenuation and soak away and possible water collection in terms of climate resilience Play area surfacing must comply with relevant fall safety standards. Playgrounds should comply with SANS 51176: Playground Equipment & Surfacing The maintenance of all landscaped areas must be considered in terms of maintenance, water use etc. In existing buildings which do not have open space consideration could be given to planting in limited planting in containers in suitable areas which have sufficient sun. This could also for instance include rooftop and/or courtyard food gardens			
Norms & Standards	Landscaping should be provided depending on the size and type of development and erf, as well as the surrounding area.			
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.3 Provision of Open Space.			

Overarching Item	1.3 Overall Building design in relation to site & context		
Sub-Item	1.3.4 Scale of Project: Unit Numbers		
Principles	The objective of this item is to demonstrate operational scale and the correlation between unit numbers and amenities provided in relation to new build and infill developments		
Guidelines	Whilst the size of the project is based on the size of the erf and relevant CRU typologies, the number of units should be at a scale that enables the development to operate effectively.		
Norms & Standards	Unit numbers must be appropriate for the size of the erf and building typologies taking into consideration unit size		
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.1.3 Mix of unit types and sizes.		

9.9.2. Level 2: The Building

Overarching Item	2.1 Building Design		
Sub-Item	2.1.1 Adaptability and Building re-use		
Principles	The re-use and adaptation of existing building stock for housing is an effective strategy for optimising unused or under-utilised assets.		
Guidelines	Adaptive re-use refers to the process of reusing an existing building for a purpose other than which it was originally built or designed for. As construction waste accounts for approximately 30% of all waste generated which ultimately goes into landfill, re-using existing buildings minimises material consumption and is beneficial to the environment. A building will need to be assessed for its potential to be re-used for housing in terms of: The condition of the building The floorplate configuration and its suitability for a residential configuration The position of circulation cores: lifts and staircases The façade of the building, its window configuration or façade make up The construction of the building: its load bearing capacity and floor slab construction. For example, can areas of the slab be cut out if required The Existing Rights: can the building be added to in terms of its area (coverage /additions) or FAR (building height)? Existing older residential building stock should also be considered within similar evaluation parameters. Many older buildings require complete replacement of building services and refurbishment of the units. In some cases, the unit sizes may be incompatible with current requirements and may need to be resized. This could mean combining 2 units into a single unit or breaking larger units into smaller units.		
Norms & Standards	Every building conversion will have slightly different parameters and will be assessed on its own merits according to the viability of the project and compliance with unit space norms and standards and unit mixes.		
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.6 Heritage		

Overarching Item	2.1 Building Design			
Sub-Item	2.1.2 Orientation: Solar Heat Gain & Shading			
Principles	To optimise resident thermal comfort levels within buildings. Thermal comfort is a means of describing occupant comfort levels which take into account a series of factors such as air temperature, radiant temperature, humidity, draughts, clothing value and activity rates.			
Guidelines	Appropriate orientation of buildings optimises sun penetration, solar heat gain and shading. In new build projects: The majority of buildings should face north (where other weather or topography conditions do not supercede the solar gain). It is noted that this may not be possible in a perimeter block development and that elevations that are not optimally orientated should be provided with adequate shading devices. The optimum orientation needs to be balanced against other factors such as topography and place making. In building upgrades and retrofits where orientation is not optimised; shading, insulation and draft exclusion should be considered.			
Norms & Standards	The majority of buildings should face north, or at least within 15 degrees west or east of north. With perimeter block developments at least 50% of all facades should face north, or at least within 15 degrees of west or east of north It is noted that within developments not all elevations can be optimally orientated. Elevations that are subject to solar heat gain e.g. West facing should be provided with adequate shading devices and/or solar control glass as per the glazing rationale			
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.2.1 Hierarchy of spaces and placemaking			

Overarching Item	2.1 Building Design			
Sub-Item	2.1.3 Building Entrances, Thresholds and Staircases			
Principles	The design, location and materiality of entrances to individual buildings and location of staircases is key to accessibility, legibility, safety and the creation of community networks within developments and buildings.			
Guidelines	Building Entrances should be designed so that a limited group of units share an entrance or staircase. There must be a clear distinction between public, semi-private and private space and a strong sense of security for everybody who will use the area. Consideration should be given to planning for safety and security of			
	residents in terms of the design.			
	Staircases should have a roof covering where possible on low rise walk-ups and definitely on high rise buildings. This is not only to provide protection from the environment but also to assist with cleaning, maintenance and safety.			
Norms & Standards	Thresholds to entrances to buildings and entrance doors should be provided with paved areas and covers to doors where possible.			
	Buildings must be accessible to persons with disabilities with step free or ramped access.			
	Thresholds and Staircases should conform to disability requirements in relation to changes of texture, tactile indicators etc.			
	Entrance areas and staircases should be well lit.			
	Access control may not necessarily be required at individual buildings within multi-unit larger developments with a single gated entrance.			
Corresponding	This sub-item should be read in conjunction with sub-items:			
References	3.1.1 Building Entrance & Lobby 3.1.2 Lift Lobbies			
	5.5.2 5.0 555555			

Overarching Item	2.1 Building Design			
Sub-Item	2.1.4 Design of Buildings: Cross Ventilation			
Principles	To encourage designs that provide ample amounts of fresh air to reduce indoor temperatures and counteract the build-up of indoor pollutants and moisture build up.			
Guidelines	In new build developments the design of buildings should maximise opportunities of dual aspects and cross ventilation for habitable rooms. The depth of space that can be ventilated using a cross-flow ventilation strategy is dependent on the floor to ceiling height and the number and location of the openings. The preferred typology in this respect is a single loaded passage typology which enables passive ventilation and cross ventilation. In the conversion of other building types to residential use, where a double			
	loaded passage typology is used, consideration must be given to ventilation of passages by passive or mechanical means.			
	Table 27: Types of natural ventilation Type Image Description			
	Single-sided Ventilation	← ↑	Single-sided ventilation relies on the pressure differences between different openings within a single space. It is more predictable and effective than if there is only a single opening, and can therefore be used for spaces with greater depth. For spaces that only have a single opening the ventilation is driven by turbulence. This turbulence creates a pumping action on the single opening, causing small inflows and outflows. As this is a less predictable method, the room depth for single opening, single-sided ventilation is reduced.	
	Cross-ventilation - Single Spaces		Cross ventilation of single spaces is the simplest and most effective approach. Cross-ventilation is driven by pressure differences between the windward and leeward sides of the space.	
	Cross-ventilation - Double-Banked Spaces		Cross-ventilation with banked rooms can be achieved by creating openings in the corridor partition. It is only acceptable where a room has ownership of both windward and leeward sides of the building, as the ventilation of the leeward space relies on the occupant of the windward space. The openings also provide a route for noise to travel between spaces.	
	Reference: https://www.edgebuildings.com/wp-content/uploads/2018/12/EDGE-User-Guide-for-All-Building-Types-Version-2.1-Release-B.pdf			
Norms & Standards	All buildings – units should be passively ventilated. Common areas should be adequately ventilated by passive or mechanical ventilation Buildings should have adequate airflow and be cross ventilated wherever possible			

Overarching Item	2.1 Building Design
Sub-Item	2.1.4 Design of Buildings: Cross Ventilation
Required documentation for evidence	Building Design Documentation: Plans and Sections
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.4.1 Natural Ventilation which describes the ventilation requirements at the unit level
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	2.1.5 Building Envelope: Walls
Principles	The external materiality of a building needs to balance environmental considerations, durability and aesthetics. Walls must be constructed to adequately resist water penetrations into any part of the building. Walls must be designed and constructed to be as energy efficient as possible
Guidelines	Environmental: the external envelope: wall construction must be of suitable material that is compliant in terms of SANS10400. Materiality: the materiality of the building must be considered in terms of durability and long term maintenance. Aesthetics: the elevations of large scale housing buildings can be repetitive and require design thought as to creating individuality and interest in a housing development.

Norms & Standards	The design and construction of all walls must comply with SANS 10400 Part K External building materiality must comply with SANS10400XA: Wall and Roof. Building materiality should take into account longevity of materials and maintenance.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.3.2 Architectural diversity and building massing.

Overarching Item	2.1 Building Design
Sub-Item	2.1.6 Building Envelope: Windows & Glazing
Principles	Window glazing and fenestration shall be of correct and adequate specification to provide reasonable thermal comfort within units as well as the required safety levels.
Guidelines	Adequate specification of windows in terms of their frames and glazing contributes to good thermal comfort within units. In new build projects, windows & glazing must comply with SANS 10400XA. However this does not necessarily mean an expensive solution which could be over specified in terms of performance glazing. A balance must be found between adequate window sizes for achieving thermal comfort for occupants in terms of good light and ventilation and the requirements of SANS10400 Part XA in terms of solar heat gain and heat loss. A glazing rationale or modelling regarding the requirements for glazing in relation to orientation and shading of facades can result in a nuanced solution to the specification of windows and glazing. In existing buildings and conversions where windows and glazing are existing, the glazing rationale needs to be justified in terms of existing building conditions and other factors such as heritage, as the replacement of façade glazing could be a prohibitive cost centre. Safety of children is to be considered in relation to opening windows and heights of openings with the provision of safety bars.
Norms & Standards	Window frames and glazing should comply with SANS 10400XA.
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.4.1 Natural Ventilation

Overarching Item	2.1 Building Design
Sub-Item	2.1.7 Building Envelope: Roof Construction / Insulation / Guttering / Waterproofing
Principles	The roof of the building is an important element in relation to managing thermal comfort through insulation as well as weather protection and rainwater run-off. For the purposes of habitability, the roof of the building shall be designed and constructed to resist any forces and must be durable, waterproof and not allow any water to accumulate on it.
Guidelines	The roof construction may vary in different building types from pitch roofs to flat roofs on higher rise buildings. On new build projects with pitched roofs, guttering should be provided. The purpose of providing guttering is to direct stormwater run-off from roofs away from buildings where damage to facades and foundations can occur. Guttering and downpipes also allow for rain water collection that can be used for garden irrigation and possible greywater use in some instances. Flat roofs must be considered in relation to the design of stormwater removal, insulation and waterproofing. If the roof is a trafficable area, the waterproofing must be guaranteed for this purpose. The use of concrete waterproofing admixtures could be considered which have no maintenance and longer guarantee periods. In existing buildings, the roof waterproofing must be evaluated and serviced or replaced as required. The specification of waterproofing must be evaluated in terms of the guarantee offered and the maintenance required for the guarantee to be validated. Consideration should be given to the length of guarantee that will be given with no maintenance requirements. For example; 5 year guarantee with no maintenance required 10 year guarantee may require a service every 2 years
Norms & Standards	The design and construction of the building's roof shall comply with the regulations as detailed in SANS10400 Part L and its thermal design and criteria shall comply with SANS 10400 Part XA
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.5.1 Rainwater collection

Overarching Item	2.2 Services
Sub-Item	2.2.1 Electrical / water / other
Principles	Adequate services (water, sanitation, electricity) available within existing area or building.
	Adequate capacity available to take additional demand.
Guidelines	Within the broader parameters of environmental sustainability and resilience, non/un-conventional approaches to service provision may be considered wholly or partially. These could be at a macro level for example applying localised black or grey water treatment. Or at a micro level such as off grid solutions provided to elements within a development for example dry /waterless toilets in certain building types like a guardhouse or community facility.
Norms & Standards	Services including water, sanitation and electricity should be provided on an affordable and ongoing basis.
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.2.1 Bulk Services and 3.3.1 Services Reticulation

Overarching Item	2.2 Services
Sub-Item	2.2.2 Lighting
Principles	To ensure adequate lighting at a site level to ensure safety and security whilst minimising light pollution and light overspill in to units.
Guidelines	Public areas and walkways between buildings to be lit. Provide timers and / or sensors on appropriate light fixtures. Light fitting choice to reduce light pollution into sky and into units. Illustrations of acceptable and unacceptable external lighting (Institute of Lighting Engineers : Green Star SA Multi Use Residential Tool V1 2011)
Norms & Standards	All units and common areas must be sufficiently lit to ensure safety and security of residents in a manner that is affordable in respect of the ongoing sustainability of the development.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.1 Vehicular & pedestrian movement through site and items relating to common areas.

Overarching Item	2.3 Maintenance and management
Sub-Item	2.3.1 Operations Manual
Principles	Operations Manuals are key to providing information of maintenance, guarantees and service information to building management and should be in place for each development.
Guidelines	These manuals should contain all the as built documentation, information on finishes and technical service information that are required to maintain the buildings.
	Provide service manuals, integrated operations manuals for all services.
	Provide service manuals, integrated operations manuals for all materials with guarantees, cleaning directions etc.
Norms &	Specify within professional service agreements and construction contracts
Standards	the requirements for Operations Manuals and the handover of all Warranties / Guarantees to the Managing Entity.
Corresponding	This sub-item should be read in conjunction with sub-item:
References	2.3.2 Maintenance Schedules
	4.5.1 Building User / Occupant Guide

Overarching Item	2.3 Maintenance and management
Sub-Item	2.3.2 Maintenance schedules
Principles	A maintenance schedule should be provided within the Operations Manual. This summarises all the key information on servicing and maintaining elements and equipment within the building.
Guidelines	Provide maintenance schedules for ad hoc, annual, 5, 10, 20 years cycles. Service Periods for all plant and services must be specified upfront in the tender documentation with specific attention paid to the alignment of Practical Completion Dates and the Start dates of Warranty Periods. In some cases, warranties can be voided if the required maintenance is not done by the owner with specified periods.
Norms & Standards	None.
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.3.1 Operations Manuals

Overarching Item	2.4 Sustainability
Sub-Item	2.4.1 Rainwater Collection
Principles	Rainwater collection should be considered in order to reduce the use of potable water for garden watering / car washing etc and to mitigate the effects of rainwater runoff on buildings edges and sites. In water stressed areas the collection of rain water is a critical part of ensuring building resilience.
Guidelines	In new build projects, consideration should be given to rainwater discharge and rainwater collection.
	The location of rainwater collection tanks should be considered in relation to the usage of the water. For example, a rainwater tank located adjacent to an entrance gatehouse could be used locally around the building and could possibly be used for greywater toilet flushing to the building at very little capital cost in relation to the savings in water usage. Rainwater collection tanks should be fitted with lockable taps and clear
	visual warnings (words and images) that the water is not safe for human consumption
	Where possible such systems should be fitted with leaf catchers and first flush diverters to minimise ingress of organic material, dust and run-off pollutants into the tanks
Norms &	
Standards	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.1.7 Roofs & Guttering

Overarching Item	2.4 Sustainability
Sub-Item	2.4.2 Energy Efficiency
Principles	To promote energy efficient designs that reduce overall energy consumption in housing developments.
Guidelines	Building upgrades / retrofits and new build construction should comply with the relevant regulations determining energy efficiency in relation to: The Building envelope: wall thermal resistance / thermal mass and roof insulation, Heating & Cooling systems if any, Services such as Hot Water, Lighting New developments should aim to achieve a 20% reduction in projected operational energy consumption as compared to typical local practices.
Norms & Standards	All buildings that are upgraded and all new builds to comply with SANS10400 Part XA
Corresponding References	This sub-item should be read in conjunction with sub-items related to lighting and 3.3.2 Hot Water provision.

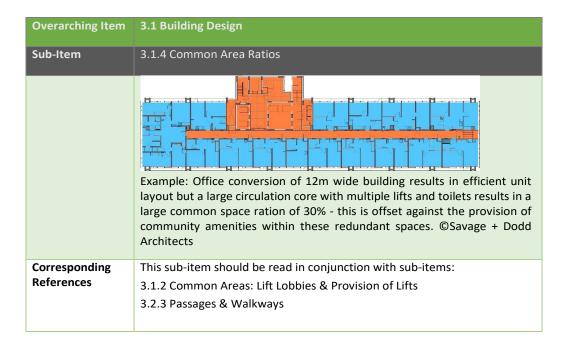
9.9.3. Level 3: The Building: Common Areas

Overarching Item	3.1 Building Design
Sub-Item	3.1.1 Building Entrance & Lobby
Principles	The building entrance is the first impression a visitor or resident gets of the building. The safety and security of residents in building entrances is of paramount importance. The emphasis is on a friendly, welcoming feel, and this can be conveyed through careful consideration of materials, finishes, design and layout. Light, colour and openness are important.
Guidelines	The building entrance must accommodate access control turnstiles and escape gate. The access control barriers must provide security but must also allow easy furniture moving and disabled access. Security should manage building entrances including for example: Biometric access, CCTV, Security Guard. Adequate facilities should be provided for staff including a designated toilet / change room with locker and area for making refreshments during his/her shift. Building Directional Signage: The entrance lobby should have information signage for residents that is neatly displayed and incorporated into the design of the entrance area.
Norms & Standards	The building entrance should have sufficient security measures to ensure that access to the building is controlled.
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios

Overarching Item	3.1 Building Design
Sub-Item	3.1.2 Common Areas : Lift Lobbies & Provision of Lifts
Principles	Common areas are defined as any structure or areas that lies outside of the individual space of the unit. These are managed by the managing entity. The quality of these spaces and the management of the services and cleaning of these areas is important in maintaining a quality environment that is safe and secure for all residents.
Guidelines	Adequate lifts must be provided calculated on the number of residents and the average trip cycle. Lift lobbies should be: Well lit, ventilated and have clear and legible signage. Lifts must have hard wearing floor and wall surfaces and must be able to be protected when used for furniture moving.
Norms & Standards	Where lifts are provided in multi storey buildings (new build and retrofit), a minimum of 2 lifts to be provided unless only 1 shaft is available or specifically motivated otherwise in terms of a rational design by a lift consultant or relevant engineering professional.
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios

Overarching Item	3.1 Building Design
Sub-Item	3.1.3 Internal Passages / External Walkways
Principles	Common areas are defined as any structure or areas that lies outside of the individual space of the unit. These are managed by the managing entity. The quality of these spaces and the management of the services and cleaning of these areas is important in maintaining a quality environment that is safe and secure for all residents
Guidelines	Internal passages in buildings can become spaces of conflict if not designed and managed well. Consideration should be given to the design of internal passages in relation
	to the placement of doors, lighting and signage. The width of passages should be a have a width range between 1000 and 1500 with allowances for wheelchair turning areas at some points along the length of a passage. The passage width will vary in relation to the building typology. For example a new build walk up with a single loaded access gallery may be 1000 wide, but a double loaded passage in a building conversion should be a minimum of 1200. It is noted that where facilities are provided for persons with disabilities the minimum passage width is 1500. External walkways need to be considered as safe circulation spaces and as shared social spaces. Design aspects to be taken into account are adequate walkway widths, limiting the length of walkways, durable finishes, balustrade design.
Norms & Standards	Compliance with Part T of SANS10400 with design aspects to be taken into account: adequate passage / walkway widths in relation to building typology, limiting the length of passages /walkways, durable finishes, balustrade design.
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios

Overarching Item	3.1 Building Design
Sub-Item	3.1.4 Common Area Ratios
Principles	Efficient common area to unit area utilisation
Guidelines	A balance is required between common area space and space dedicated to units. Developments should consider common area space in terms of the allocation and sizing of passage and circulation spaces and the adequate provision of common area amenities. Note that the efficiency of common area ratios within buildings needs to be correlated to the efficiency of the open space walkway network between buildings. Achieving efficient common areas in buildings only does not mean that the overall development will be efficient. This is particular relevant to developments with repeated blocks which multiply circulation cores.
Norms & Standards	The net common area for circulation and other common uses to gross unit area benchmark targets to be applied are: • Low rise walk-up: Average 20 % • Mid / High Rise: Average Range 25 - 30% In new build projects: The target should be as close to 15 - 20% as possible. However, this may increase in relation to the number of social amenities that are provided within buildings themselves such as laundry spaces and common rooms. Mid & High Rise buildings have more requirements for lift/lobby and service areas. Ratios at the higher end should be substantiated in relation to this and must be factored in the project viability Example: Walk up Block: Ratio 18 - 20% dependent on number of units sharing staircase In adaptive re-use / building conversions: In these buildings the existing cores may contain areas such as toilets that
	In these buildings the existing cores may contain areas such as toilets that can be used as communal spaces and multiple lifts some of which may not be re-commissioned. In these cases the ratio may even exceed 25%.



Overarching	
Item	3.2 Provision of Amenities
Sub-Item	3.2.1 Laundry Areas
Principles	To support the well-being and health of residents through the provision of safe and accessible areas for clothes drying.
Guidelines	Provide areas for clothes drying that are centrally located, easily accessible and have visual openness and transparency. These areas, as well as pathways to and from them should be provided with security lighting preferably on sensor controlled, for after dark collection of laundry. Consider locating laundry areas near to play areas. Laundry areas must be provided with suitable facilities and services including: • Access to adequate services to allow laundry such as metered water / wash troughs that can be managed. • Token operated machines & dryers as a maximum Ensure drying yards and wash lines are fully exposed to sunlight for largest part of the day. Special consideration to be given for projects in zones with winter rainfall and limited winter daylight such as the Southern Cape Coastal Condensation Area. Consideration could be given to the provision of washing lines either on a balcony — low level screened by wall or internal to bathroom. However, the biggest source of air moisture content leading to condensation and mould growth is drying of clothes indoors. In new build walk up developments drying yards should be placed in areas in close proximity to units. Drying yards attached to circulation cores could also be considered. In mid to high rise building, new build or conversions, consideration should be given to laundry areas and drying areas within the building.
Norms & Standards	Development should be provided with laundry areas with suitable facilities and services such as washing lines, wash troughs etc. Washing lines must be provided in adequate quantities (lengths) to provide sufficient drying space in relation to the number of units in a development.
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.2 Common Areas: Lift Lobbies & Provision of Lifts 3.2.3 Passages & Walkways

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.2 Refuse Areas
Principles	To support the wellbeing and health of residents through the provision of sufficient refuse and recycling areas
Guidelines	A central refuse and recycling area should be located close to the entrance of development with an adequate area for bins and for the cleaning of bins. A (managed) waterpoint and drain should be provided. The size and location of this area should be in compliance with local authority waste management requirements. In inner city contexts, existing buildings and conversions, refuse areas may be located in basement areas and ground floor yards. In addition, areas should be provided for refuse bins within buildings including:
	 Refuse areas on each floor for general refuse collection (wheely bins) and recycling bins. This area should be easily accessible and be able to be cleaned. A water point and floor drain are recommended Cleaners store equipped with sink or slophopper to be provided
Norms & Standards	Refuse and recycling areas must be provided. The size should be determined by the number of bins required as a ratio to the number of units as determined by the Local Authority.
Corresponding References	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.3 Provision of Open Space
Principles	The provision of communal open green space contributes to the health and well- being of residents.
	It provides the physical setting for the development and provides environmental and climate resilience in terms of water run-off and cool environments.
Guidelines	When providing for open space, consider any existing landscape features and trees, stormwater attenuation and permeable surfaces.
Norms & Standards	Hard and soft landscaped areas should be designed within the development.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.3 Hard & Soft Landscaping

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.4 Recreational and Play Areas
Principles	To support the well- being and health of residents and children through the provision of a range of communal outdoor and indoor amenities.
Guidelines	The provision of play areas is context specific and is motivated by best practice. A large percentage of CRU housing residents are children and therefore all developments, new builds as well as refurbishments and conversions should provide some playground and recreational facilities for children of varying ages. Play areas should be located in areas where there is safe and easy access for children and which are overlooked by adjoining dwellings or other common facilities such as laundry areas. Seating for adults should be provided adjacent to the play area. In larger scaled developments, play areas (outdoor or indoor) should be provided for children of different ages e.g. defined playground area with play equipment for younger children and area for older children for ball play / skateboarding or a homework or study room etc.
Norms & Standards	Sufficient playground areas to be provided within all developments that differentiate between recreational facilities for younger children (under 8) and older children (pre-teen / teenagers) For example: One playground to be provided for every 200 units that is sufficiently sized to allow play by groups of at least 20 children. Playgrounds should comply with SANS51176: Playground Equipment & Surfacing They need to be safe and secure e.g. If on a roof level a fence provided onto the parapet wall to prevent children from accidentally falling.
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.3 Provision of Open Space 1.1.1 Location of the project 3.2.5 Other Amenities 4.1.2 Unit Size

Overarching Item	3.2 Provision of Amenities
Sub-Item	3.2.5 Other Amenities
Principles	To support the well-being and health of residents through the provision of other amenities such as community meeting rooms, braai areas, storage and facilities for cultural observances etc.
Guidelines	Depending on the size of the development community amenities should be provided such as: space for early childhood centre, Community Hall, Braai Areas, storage facilities and Facilities for cultural observances etc. These areas should be provided with the requisite supportive services and infrastructure as required e.g. toilets, wash up areas etc. Housing Conversions often have underutilised spaces within the circulation cores, for example, former office toilets and redundant service areas that are easily adaptable for a range of community facilities. Where possible these spaces should be monitored by CCTV.
Norms & Standards	CRU developments should aim to provide a range of communal social amenities in relation to the scale of the development. For example: New Build Developments (walk up / mid-rise): Developments with over 400 units should provide a multi-purpose community meeting room for meetings with 20-30 adults. Developments with more than 1000 units should provide a larger scale hall or meeting facility unless such a facility is available and easily accessible within the immediate environment.
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.4 Recreational and Play Areas 4.1.2 Unit Size

Overarching Item	3.3 Services
Sub-Item	3.3.1 Services Reticulation
Principles	The reticulation of services can have an impact on the long-term maintenance of the building in terms of access for maintenance, meter reading and efficiency of delivery of services for example hot water.
Guidelines	Show plant areas for services: hot water, electrical, information technology etc.
	Describe how services are reticulated in common areas and into units e.g. vertical ducts, surface mounted, cable trays etc.
	Services should be grouped for efficiencies and ducts must be adequately designed for access for maintenance
	Consideration should also be given to how services may be reticulated in the future, for example fibre roll outs without impacting on existing finishes.
	Consideration to be given to requirements for cabling and IT points for access control / hold open doors (fire) / metering systems as may be required
Norms & Standards	Services should be grouped for efficiencies and considered in terms of access for maintenance and metering in relation to common areas / walkways.
Corresponding References	This sub-item should be read in conjunction with sub-items related to services.

Overarching	
Item	3.3 Services
Sub-Item	3.3.2 Services: Hot Water Provision
Principles	Demonstrate Compliance with SANS10400 XA: Hot water provision
Guidelines	Hot water may be provided by a variety of systems such as heat pumps, solar, magnetic induction geysers, gas and hybrid systems. In all cased the efficiencies of the system should be evaluated in relation to the cost of producing hot water
	Demonstrate Compliance with SANS10400 XA: Hot water provision:
	Consider how hot water will be provided and the most cost effective and efficient system.
	Provide COP efficiency of system if relevant
	Consider where plant is located and how system is reticulated in the building(s).
	Note that a significant amount of energy can be lost I a system due to heat loss in the storage tank and distribution system. It is therefore critical that the system is designed efficiently in order to reduce these losses.
	* With Heat Pumps: The coefficient of performance (COP) is a measure of the heat pump's efficiency. It is determined by dividing the energy output of the heat pump by the electrical energy needed to run the heat pump, at a specific temperature. The higher the COP, the more efficient the heat pump. Typical heat pump water heaters are two to three times more efficient than standard electric water heaters.
Norms & Standards	Compliance with SANS10400 XA
Corresponding References	This sub-item should be read in conjunction with sub-items: 2.2.1, Services Reticulation 2.4.2, Energy Efficiency 4.7.3 Metering.

Overarching Item	3.3 Services
Sub-Item	3.3.3 Ventilation
Principles	To ensure that common areas are adequately ventilated
Guidelines	Where possible all common area passages should be naturally ventilated. Where this is not possible by design, in for example an existing building with a double loaded passage configuration, suitable mechanical fresh air and extraction systems are required. Ventilation is important not only for the passage / walkway areas themselves but also because rooms facing onto these areas, often bathrooms and kitchens ventilate onto them.
Norms & Standards	Compliance with SANS 10400 Part O.
Corresponding References	This sub-item should be read in conjunction with sub-items: 2.2.1 Service Reticulation 2.1.4 Design of Buildings: Cross ventilation.

Overarching Item	3.3 Services
Sub-Item	3.3.4 Fire Safety: Provision of Fire Equipment / Smoke Detection
Principles	Provision of safe environments
Guidelines	Fire equipment to be located in common areas easily visible and accessible locations. The security of fire equipment should also be considered in terms of lockable cabinets for fire extinguishers if deemed a theft risk.
Norms & Standards	Fire equipment to be provided in ratios and locations as determined by statutory requirements.
Corresponding References	None

Overarching Item	3.3 Services
Sub-Item	3.3.5 Safety & Security : Monitoring : CCTV
Principles	Safety and security of residents though surveillance and monitoring of common areas where possible.
Guidelines	The safety of residents especially women and children should be considered especially in common areas and open areas. This can be done through a variety of passive techniques such as locating play areas where they are overlooked but CCTV should be considered in other key common areas.
Norms & Standards	None
Corresponding References	None

Overarching Item	3.4 Maintenance & Management
Sub-Item	3.4.1 Material Specifications : Floors & Walls : Common Areas, Lobbies, Passages
Principles	This item relates to the material specification required for common area lobbies, passages and circulation areas in relation to durability and safety.
Guidelines	All floors should have a floor covering. Consideration needs to be given to the following when specifying materials & finishes: Uniformity of floor surface Slip resistant flooring Colour (in relation to lighting and sight / cleaning) Conformance to Disability requirements in relation to changes of texture, colour (partially sighted), tactile indicators etc. Maintenance of wall finishes in relation to high wear areas All materials supplied should be readily available locally on an ongoing basis. Materials should be SABS Approved. Stock / Product Ranges and spares should be readily available locally. Specifications should be performance based and should be specified by make and type of item as closely as possible. Guarantees & Warranties on products must be available.
Norms & Standards	All Floors shall comply with the minimum requirements as stipulated in SANS 10400 Part J
Corresponding References	This sub-item must be cross referenced to Items: 3.1 Common Areas 3.2 Provision of Amenities

Overarching Item	
Item	3.5 Accessibility
Sub-Item	3.5.1 Access to units
Principles	Units must be accessible to persons with mobility issues.
Guidelines	All new builds to have step free access to building entrances and entrances to units.
	Ramps to be provided if required in terms of change of level.
	Care needs to be taken at entrance thresholds and to make sure there are no steps along the route to the lift lobby.
	In passages and lobbies: wall mounted fire hose-reels etc must not impede mobility of partially sighted people.
Norms & Standards	Compliance with SANS 10400 Part S
Corresponding	This sub-item must be cross referenced to Item:
References	3.1 Common Areas

Overarching Item	3.6 Sustainability
Sub-Item	3.6.1 Lighting
Principles	Energy Efficient Lighting to reduce lighting energy use and common area costs.
Guidelines	Lighting accounts for a significant proportion of total energy use in residential buildings. Efficient lamps, that produce more light with less power compared to standard incandescent bulbs, reduce the building's energy use for lighting. Maintenance costs are reduced as the service life of these types of bulbs is longer than that of incandescent bulbs. Energy Efficient Lighting should be specified in all projects. Common area lighting to be controlled with presence detection and/or daylight control.
Norms & Standards	90% of light bulbs used in the project use either compact fluorescent (CFL), LED, or T5, or other types of light fixtures that achieve 90 lm/W or greater. At least 90% of the lamps must be of the efficient type.
Corresponding References	This sub-item must be cross referenced to Items relating to Common Areas and passages

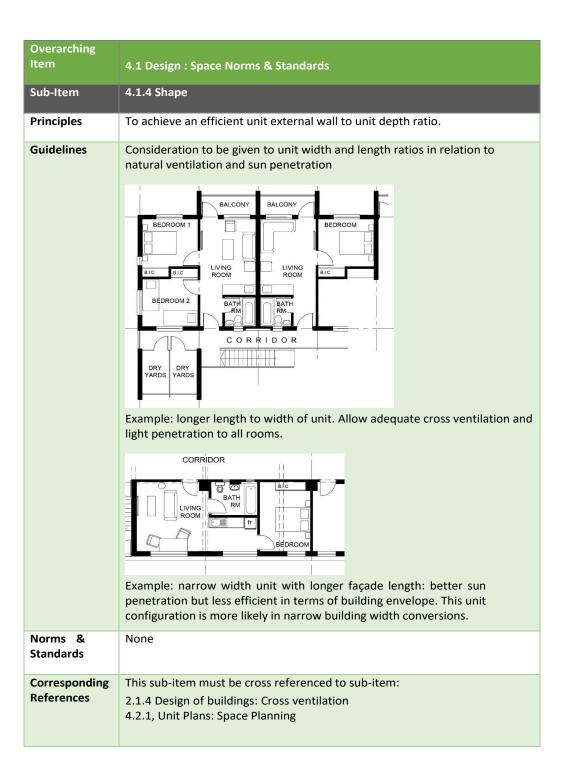
Overarching Item	3.6 Sustainability
Sub-Item	3.6.2 Common Areas : Metering & Sub Metering
Principles	Metering is an integral part of conserving energy and resources during a building's operational life. Information from metering and sub-metering as a building level allows building managers to monitor and evaluate building efficiencies.
Guidelines	Common areas electrical use to be monitored in terms of sub-metering and an effective monitoring system of this should be put in place by the Managing Entity.
Norms & Standards	A strategy for metering is to be provided that takes into account bulk metering, sub metering and individual metering of both electricity, water and any other services such as gas that may be provided. Metering to be provided to the development / building and to separate buildings and areas as required to provided adequate information to the SHI. Residential and retail areas or uses that have different rating tariffs must be metered separately.
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.2 Hot Water System

9.9.4. Level 4: Unit Design

Overarching Item	4.1 Design : Space norms and standards
Sub-Item	4.1.1 Unit Design & Occupancy
Principles	All units should be fit for purpose as a home to allow residents to enjoy privacy in a secure and safe environment.
Guidelines	Internal environments should be comfortable and capable of accommodating the necessary furniture and equipment associated with specific room activities and be suitable for the needs of intended user groups. A development should contain a mix of units appropriately sized to allow a diversity of household sizes in relation to context and market demand.
Norms & Standards	Units must comply with unit size norms and minimum room sizes. The Occupancy of any building shall be limited as detailed in SANS 10400 Part A Table 2.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.2.1 Space Planning

Overarching Item	4.1 Design : Space Norms & Standards
Sub-Item	4.1.2 Unit Size
Principles	To provide guidance of a range of unit sizes per typology.
Guidelines	The smaller the unit the more attention must be paid to layout of furniture, fittings and storage. For example if a micro-unit / bachelor unit at the lowest end of the size range is proposed, the design must show how the unit is furnished and how kitchen and clothes storage are accommodated The larger the percentage of smaller units (specifically micro units of less than 20m2) in the overall mix, the more communal amenities must be provided
Norms & Standards	Compliance with table below: Unit Size per unit type and occupancy The method of determining unit areas is defined as the Floor Area measured within the finished surfaces of the exterior bounding walls of the unit Unit Size Range per unit type and occupancy
Corresponding References	This sub-item must be cross referenced to sub-item: 4.1.3 Mix of Unit types & sizes

Overarching Item	4.1 Design: Space Norms & Standards
Sub-Item	4.1.3 Mix of unit types & sizes
Principles	The overall development must demonstrate a mix of unit typologies that are responsive to varying family types and affordability levels.
Guidelines	Unit mix to be substantiated by demand as manifested in existing tenant audit.
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 4.1.2 Unit Size



Overarching Item	4.2 Design of Unit
Sub-Item	4.2.1 Unit Plans: Space Planning
Principles	Units must be designed with resident's requirements in mind as well as allowance for future retrofitting.
	This produces flexible units that cater for future retrofitting as well that allow possible product differentiation for differing income bands.
Guidelines	Unit Plans to show all fittings and furniture layouts including electrical (Lighting and power points in relation to furniture).
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-items: 4.1.4 Shape 5.2.1 – 5.2.6

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.2 Entrance
Principles	Ensure that entrances are considered as part of space planning in units.
Guidelines	Due to space constraints, units may not necessarily have specific entrance areas. The area into which one enters the unit must have an easily accessible light switch. Moreover, consideration should be given to entrance areas and any likely impediments to access.
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.3 Kitchen Area: Space Planning: Self Contained Unit
Principles	Ensure that kitchen areas are considered as part of space planning in units.
Guidelines	Show designated kitchen area which makes allowances for: A kitchen surface of minimum length 1200 but preferably, at least 1500 – 2100 length with single bowl sink and drainer Consideration should be given to a deeper bowl (pot) sink which can be provided within similar cost parameters to standard sink units and allows laundry to be done in the kitchen area. Adequate area for food preparation Space for a 2 plate surface stove or microwave Kitchen cupboard: wall mounted or under counter Allowable area and service points for a stove and a single door fridge. Service points: Water and drain hook up for future installation of washing machine Electrical plug points sufficient to service dedicated points such as fridge / stove as well as small appliances such as kettle etc. The kitchen design should make allowances for a future retrofitting of additional work surfaces and cupboards. Illustrate how kitchen area can be retrofitted with future space for stove, washing machine and additional work surface The kitchen should have adequate light and ventilation.
Norms & Standards	Minimum compliance status: Kitchen unit with single bowl sink and drainer. Stove point as per municipal byelaw requirements and SANS requirements.
Corresponding References	This sub-item must be cross referenced to sub-item items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.4 Living Room
Principles	Ensure that differentiation of living spaces is considered as part of space planning in units.
Guidelines	The living room must be adequately sized to accommodate the following with adequate circulation space between rooms. Double seater couch, table / TV unit. Provision for at least a small table within the living or kitchen area. Show adequate electrical points to service TV and lighting points. Circulation through the room should be considered so as to maximise the usable area for furniture.
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.5 Bedroom (main)
Principles	Ensure that bedrooms are considered as part of space planning in units.
Guidelines	Bedroom should be sized adequately to allow circulation around furniture Minimum room width for bedrooms should be at minimum 2.4m to ensure adequate circulation space within the room The main bedroom should be able to contain a double bed or 2 single beds, side table and a space for a cupboard. Bedroom must have allowable space for cupboards to be fitted All bedrooms must have natural light and ventilation.
Norms & Standards	Room sizes should exceed the minimum habitable room size.
Corresponding References	This sub-item must be cross referenced to sub- items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.6 Bedroom (second)
Principles	Ensure that bedrooms are considered as part of space planning in units.
Guidelines	The second bedroom should be able to accommodate a single bed or single bunkbed. It should be possible to arrange the bed in at least 2 possible positions. Minimum room width for bedrooms should be at minimum 2.4m to ensure they exceed minimum habitable room size. Bedroom must have space for cupboards to be fitted
Norms & Standards	Room sizes should exceed the minimum habitable room size.
Corresponding References	This sub-item must be cross referenced to sub- items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning

Overarching Item	4.2 Design of Unit
Sub-Item	4.2.7 Access to outdoor space and balconies
Principles	Ensure that residents have access to outdoor spaces.
Guidelines	If possible, ground floor units should have access to outdoor space directly from the unit.
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 1.2.2 Architectural Diversity & Building Massing

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.1 Floors
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Floor Finishes specified should meet the following requirements: 1. Be robust and hard wearing 2. Easily maintained and cleaned 3. Considered in terms of lifecycle costing The floor of any laundry, kitchen, shower room, bathroom or room containing a toilet pan or urinal shall be water resistant.
Norms & Standards	Floor construction and floor coverings should meet the requirements of SANS10400 Part K
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals

Overarching	
Item	4.2 Machanialita y Consciliantiana
iteiii	4.3 Materiality : Specifications
Sub-Item	4.3.2 Walls : Construction & Finishes
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	All wall materials should be considered in terms of : Durability of construction & finish
	Separating walls must be compliant with required Fire ratings Acoustically fit for purpose
	All wall finishes specified should meet the following requirements : Be robust and hard wearing
	Easily maintained and cleaned
	Considered in terms of aesthetic and quality of light
	Tile splashbacks should be provided in bathroom and kitchen areas
Norms & Standards	Walls should comply with SANS 10400 Park K and applied finishes should have a 7-10 year warranty where possible.
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.3 Ceilings
Principles	Specifications of finishes should be of good quality and durability. Ceilings contribute to energy efficient building envelopes
Guidelines	Ceiling and soffits specified should meet the following requirements: Be robust and hard wearing Easily maintained Easily serviced in terms of lighting Considered in terms of lifecycle costing Have a fire rating if required Ceilings to have adequate insulation
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 2.1.7 Building Envelope: Roofs 2.3.1 Operations Manuals

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.4 Bathroom
Principles	To ensure that bathrooms are adequately designed with durable finishes and fittings
Guidelines	The bathroom needs to have a bath or shower, basin and toilet with suitable accessories such as a toilet roll holder, towel rails, mirror etc. Consideration to be given to the choice between showers or baths in relation to water use. Bathroom to have adequate floor and wall finishes that are slip resistant, durable and easily cleanable. Finishes to be considered in relation to water and steam ingress and mould formation. Taps, mixers, valves, WC cistern flushing mechanisms should be easily serviced with locally available spare parts
Norms & Standards	Sanitaryware to have 10 year warranty Taps to have 10 year warranty
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.5 Kitchen Fittings
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Kitchen worktops must of a durable and long lasting material and finish and not prone to damage by water ingress or placing of hot utensils on them. Kitchen cupboards (under surface) or wall mounted must be of a sturdy and durable material and construction especially in relation to door construction / materiality and hinges. Joints between cupboards and walls should be adequately sealed to prevent the ingress of moisture and insect infestation.
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals 4.23 Kitchen space planning

Overarching Item	4.3 Materiality : Specifications
Sub-Item	4.3.6 Materials : Finishes
Principles	Material Selection to be considered against a series of requirements and outcomes
Guidelines	All materials supplied should be readily available locally on an ongoing basis. Materials should be SABS Approved Spares should be readily available locally Specifications should be performance based and should be specified by make and type of item as closely as possible. Guarantees & Warranties must be available Service Periods must be specified
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals 2.3.2 Maintenance Schedules

Overarching Item	4.4 Services
Sub-Item	4.4.1 Ventilation
Principles	To ensure that units are adequately ventilated with enough fresh air to counteract the build-up of indoor pollutants and moisture
Guidelines	Cross ventilation should be a core consideration in designing units. All rooms to be naturally ventilated wherever possible. Bedrooms must have natural ventilation Bathroom Ventilation: Ventilation of bathrooms to be considered in relation to natural or mechanical ventilation In single loaded passage typologies bathrooms should be located on the walkway side of the unit and ventilate to the walkway. In conversions where bathrooms may be internal without the option of an external window, they must be provided with an extract fan or mechanical extraction. Kitchen areas should have a window to an outside ventilated passage / walkway Ventilation to be considered in relation to mould prevention in both bathrooms and kitchens
Norms & Standards	With natural ventilation is not achieved, mechanical ventilation / extraction must be specified. Ventilation must be in compliance with SANS 10400 Part O
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.1 Ventilation

Overarching Item	4.4 Services
Sub-Item	4.4.2 TV / Satellite / IT / Fibre
Principles	Services to be designed for centralised systems to prevent the multiple individual connections within buildings
Guidelines	Unit to should be centrally cabled so as prevent multiple satellite dishes being installed by tenants. Ensure allowance for cabled point to living room
	The service backbone and routing to be considered for future retrofitting of services such as fibre etc
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.1 Services Reticulation

Overarching Item	4.5 Maintenance & Management
Sub-Item	4.5.1 Building User / Occupants Guide
Principles	A Building User / Occupants Guide gives the resident guidance on how to use and maintain the unit.
Guidelines	The Building User / Occupants Guide should give guidance to the resident on the use of unit including; How to use the services (metering, refuse, etc) Cleaning Replacement of light bulbs Fitting a washing machine Safety requirements: fire and emergency procedures Energy and water saving measures
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manual

Overarching Item	4.6 Accessibility
Sub-Item	4.6.1 Bathroom Design
Principles	Design that enables retrofitting for people with disabilities and mobility issues.
Guidelines	Accessible bathrooms to be designed to be retrofitted in a percentage of units as required by the SHI. This would include: Adequate door width to bathroom within minimum clear opening of 900mm with door opening outwards Accessible showers rather than baths Grabrails Suitable taps etc
Norms & Standards	Compliance with SANS 10400 Part S and relevant accessibility guidelines
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.4 Bathrooms

Overarching Item	4.6 Accessibility
Sub-Item	4.6.2 Accessible Kitchens
Principles	Design that enables retrofitting for people with disabilities and mobility issues.
Guidelines	Accessible kitchen units to be designed to be retrofitted in a percentage of units as required by SHI.
Norms & Standards	As per Accessibility Retrofitting Guidelines
Required documentation for evidence	Compliant with SANS10400 Part S and relevant accessibility guidelines
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.5 Kitchen fittings

Overarching Item	4.7 Sustainability
Sub-Item	4.7.1 Lighting Internal to Unit
Principles	Units to have energy efficient lighting to minimise lighting energy use and costs
Guidelines	Lighting accounts for a significant proportion of total energy use in residential buildings. Efficient lamps, that produce more light with less power compared to standard incandescent bulbs, reduce the building's energy use for lighting. Maintenance costs are reduced as the service life of these types of bulbs is longer than that of incandescent bulbs. Light Fittings should take CFL lamps at a minimum but preferably should be LED Luminaires. Bulbs should be easily available to tenants for purchase
Norms & Standards	At least 90% of the lamps must be of the efficient type in all habitable spaces. No light fittings that use incandescent light bulbs to be specified. Compliance with SANS10400 Part O Other efficient technologies are also available. If another technology is used, documentation must be provided to demonstrate that the light fixtures achieve at least 90 lm/W. Therefore this metric can also be demonstrated by showing energy savings through evidence provided by a competent professional.
Corresponding References	This sub-item must be cross referenced to sub-item: 3.6.1 Lighting

Overarching Item	4.7 Sustainability
Sub-Item	4.7.2 Water Use
Principles	To reduce water usage
Guidelines	Taps: By specifying low-flow taps kitchen sinks and bathroom fittings, water use is reduced without adversely affecting the functionality. Hot water use is also reduced, reducing energy consumption for heating the water. Many different taps are available that meet the flow rate required. To maintain user satisfaction at the lower flow rates, some manufacturers mix water with air to cause turbulence in the flow; this in turn gives an increased sense of pressure without increasing the flow rate. Flow restrictors or aerators can be added on to the specified faucets to reduce the flow rate, which may be a cheaper alternative to purchasing a low-flow faucet. It is important to note that the flow rate of a tap is dependent on the water pressure and manufacturers often provide a chart that plots the flow rate at different pressures. Toilets and cisterns: Toilets can either be specified with a dual flush cistern or a single flush cistern. If the use of a dual flush cistern is not clearly understood the water saving measures may not be achieved. Guidance on Water Efficient Fittings: Low flow showerheads 8L/min Low flow taps for kitchens sinks 6L/min Dual Flush toilet cisterns in bathrooms 6L/first flush and 3L/second flush Single Flush cisterns 6L/flush
Norms & Standards	The specification of water efficient fittings that achieve the flow rates as stipulated above or those stipulated by a metric such as the GBCSA Green Buildings Tool / Edge Rating Tool or by the municipal entity.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.4 Bathrooms 4.3.5 Kitchen fittings

Overarching Item	4.7 Sustainability
Sub-Item	4.7.3 Metering
Principles	Installation of smart metering
Guidelines	The metering of services allows tenants to monitor and manage their services consumption and bills.
	The location of meters should be related to services ducts and plant areas.
	The metering of water should be considered in terms of hot and cold water metering in relation to the revenue collection of the SHI.
Norms &	All units to have individual water and electricity metering
Standards	Consideration should be paid to the type of metering : smart metering, prepaid etc
Corresponding References	This sub-item must be cross referenced to sub-item: 3.6.2 Metering & sub metering

Overarching Item	4.7 Sustainability
Sub-Item	4.7.4 Health & Safety : Hazardous Materials
Principles	To reduce health risks to residents by removing materials with hazardous content such as Asbestos and Lead.
Guidelines	An assessment should be made of existing properties before construction commences to ensure that no hazardous materials are present within the building or environment. This includes the safe disposal of items such as fluorescent tubes. Hazardous materials much be removed by a specialist.
Norms & Standards	Certification of removal by approved contractor.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials

Overarching Item	4.7 Sustainability
Sub-Item	4.7.5 Use of sustainable Materials
Principles	To encourage the use of materials that minimise the impact on the environment in terms of their embodied energy values
	To reduce health risks to residents by reducing the use of material with hazardous content.
Guidelines	Embodied energy is the energy consumed by all of the processes associated with the production of a building specifically building materials from the mining and processing of natural resources to the manufacturing, transport and delivery.
	Materials should be locally sourced wherever possible
	Volatile Organic Compounds (VOC) are organic compounds that produce vapours (off gassing) readily at room temperature and normal atmospheric pressure. Most commonly recognised with the strong smells in newly painted rooms or the smell of glues used in flooring adhesives
	Use of interior finishes that minimise the levels of Volatile Organic Compounds (VOC) should be specified. These are floor and wall coverings, and in particular, paints.
	All paints specified should be low VOC paints.
Norms & Standards	The use of interior finishes that minimise the levels of Volatile Organic Compounds (VOC) should be specified. These are floor and wall coverings, and in particular, paints where low or no VOC paints should be specified. This should be able to be achieved without any additional cost premium.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials

Overarching item	4.8 Lease Agreement
Sub-Item	4.8.1 Lease agreement
Principles	A mutually rewarding relationship between landlord and tenant.
Norms and Standards	The lease is a record of what has been agreed and 'governs' the relationship between the landlord and tenant. The lease agreement must cover: • A detailed description of the rental property/accommodation — what's included and excluded — and a list of accepted defects upon occupation by tenant. • Detailed particulars of the landlord and tenant. • The lease and notice periods. • The amount of rental and any other additional costs payable by the tenant and terms of payment. • Annual escalation. • Amount of deposit payable and its purpose (defray repair expenses if any). • Detailed information on what the rights and obligations of the landlord are, with specific focus on maintenance and repairs and arrangements for access by landlord into the premises. • Detailed information on what the rights and obligations of the tenant are, with specific focus on use/abuse of the premises, fittings and fixtures, any applicable complex or Body Corporate Rules and subletting. The lease agreement is to be in writing and signed by both parties. The provisions of the lease are to comply with the Rental Housing Amendment Act, 2014, the Formalities in Respect of Leases of land Act, 1969, the applicable provisions of the Consumer Protection Act, 2008 and its final Regulations of 2011, The Sectional Title Scheme management Act as amended, any prevailing Municipal by-laws, the Estate
	Consumer Protection Act, 2008 and its final Regulations of 2011, The Sectional Title

9.10. Norms & Standards for Communal Housing

The following norms and Standards apply to the provision of rooms with shared bathroom & kitchen amenities which may be provided as a component of a CRU housing development, communal housing, / 'SRO- single room occupancy' typology, special needs or supported housing, transitional or temporary emergency housing.

Reference should be made to the matrix in section 2.8 for compliance criteria in terms of Levels 1-4 in addition to the Items below.

Overarching Item	5.1 Rooms with shared amenities
Sub-Item	5.1.1 Unit Design
Principles	To ensure that rooms within a communal environment are adequately sized and designed to allow residents to enjoy privacy in a secure and safe environment.
Guidelines	Rooms must be adequately sized to allow a cooking area separate from the sleeping / bed area.
	The room width should be adequately sized to allow space for a double bed with circulation space.
	There should be enough space to allow a cupboard
	The cooking area should have a built-in surface adequately sized for food preparation and a 2 plate surface stove or microwave and an area for a fridge.
	A double plug should be provided located so that the fridge plug and stove can use it.
Norms & Standards	Exceed statutory minimum room size
Corresponding	This sub-item must be cross referenced to the sub-items:
References	4.1.4 Shape
	4.2.1 Unit Plans: Space Planning

Overarching Item	5.2 Communal Amenities
Sub-Item	5.2.1 Bathrooms
Principles	This requirement is relative to buildings with single rooms and communal facilities.
	Where single rooms are provided in developments. Common area bathrooms must be provided for both male and female tenants.
	Designs should not allow direct sightlines from passages into bathrooms.
Guidelines	Consideration to be given to safety and security of residents: where possible install CCTV outside bathroom entrance door.
Norms & Standards	The number of ablutions to be provided is in accordance with the tables contained in SANS10400.
	Notwithstanding, consideration should be given to the following:
	 The provision of bathroom facilities for different genders should be designed to ensure privacy and the safety of users.
	 The facilities should not only be designed as communal facilities but include a mix of standalone bathrooms with bath or shower, basin and toilet suitable for family use
	 Access to some 'family' bathroom units should be accessible from a common passage i.e. not from either a male or female bathroom area
	Showers should have a change area within the cubicle
	Toilets with a basin within the cubicle
	To be provided with hot and cold water Strategies for metering of water to be considered i.e. is hot and cold water metered on a smart card basis or services covered within the room rental
	This sub-item must be cross referenced to sub-items items:
Corresponding References	4.1.4 Shape 4.2.1 Unit Plans: Space Planning

Overarching Item	5.1 Communal Amenities
Sub-Item	5.2.2 Kitchens
Principles	This requirement is relative to buildings with single rooms and communal facilities.
	Where single rooms are provided in developments, common kitchens should be provided.
	It is noted that most tenants may choose to cook within their individual spaces.
	Common area kitchens must be provided with suitable areas for washing and cleaning dishes and well as cooking if required. Moreover, seating should be provided in these areas
Guidelines	Kitchen areas must be suitably ventilated. Electrical Points to be provided.
	Consideration to be given to safety and security of residents: where possible install CCTV
Norms & Standards	Size and number of kitchen areas to be prescribed as ratio of unit numbers.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials

Overarching Item	5.1 Communal Amenities
Sub-Item	5.1.2 Common Area Amenities
Principles	This requirement is relative to buildings with single rooms and communal facilities.
Guidelines	Developments with single rooms sharing communal bathroom and kitchen facilities should be provided with additional communal facilities as these are not provided internally within the unit. The range of these facilities will depend of the target market of the tenant and may include any / all of the following: Laundry Areas as per sub item 3.2.1 Recreational & play areas as per item 3.2.4 Communal kitchen areas with access to stoves and fridges Leisure Areas such as communal lounges, TV areas and games rooms The provision of work rooms, study areas etc
Norms & Standards	Common area amenities to be related to the scale of the development, the location of the development and the nature of the integration within a campus.
Corresponding References	This sub-item must be cross referenced to sub-items: 3.1.3 Provision of Open Space 3.1.4 Provision of Play areas

9.11. Development Options and Indicative Typologies

9.11.1.Development Options

The CRU programme has the following development guidelines

OP'	TION NO	INTERVENTION
STABILIZ	1	To address minimum Health and Safety aspects of the existing buildings. Making safe all dangerous electrical installations, address collapse sanitation systems etc.
	2.1	Simple demolition of single-storey buildings, and site rehabilitation to rid sites of undesirable structures and/or to prepare for new build on the site.
DEMOLITION	2.2	Medium complex demolition of double storey buildings with flat slabs on load- bearing brickwork, and site rehabilitation to rid sites of undesirable structures and/or to prepare for new build on the site.
DE	2.3	Complex demolition of multi- storey buildings (2-4 storey) with reinforced concrete framed structures, and site rehabilitation to rid sites of undesirable structures and/or to prepare for new build on the site.
HMENT	3.1	Basic refurbishment – no upgrade (repair and re-decorate existing buildings without upgrade) following stabilisation where required.
REFURBISHMENT	3.2	Upgrade refurbishment, (repair and re-decorate existing buildings and facilities, including simultaneous upgrade of specifications where required), following stabilisation where required.
IILDING	4.1	Hostel conversion into normal self contained sustainable rental housing units or rooms with shared facilities.
OTHER BU	4.2	Simple conversion of existing occupied inner city or township buildings already owned, or intended to be taken over by the municipality or province (residential to residential e.g. hotels to flats or rooms with shared facilities).
NEW BUILD INFILL HOSTEL AND OTHER BUILDING NEW BUILD INFILL N	4.3	Complex conversion of existing occupied inner city or township buildings already owned, or intended to be taken over by the municipality or province (other use to residential e.g. offices to flats or rooms with shared facilities).
NFILL -	5.1	New build on existing sites, flats or rooms with shared facilities –single storey.
NEW BUILD IF	5.2	New build infill for densification or replacement of demolished buildings on existing hostel sites, state-owned rental stock sites, or other occupied sites owned or intended to be taken over (flats or rooms with shared facilities—two to four storey walk-ups.
		New build on greenfields vacant sites to accommodate de-densification needs of hostel redevelopment projects (flats or rooms with shared facilities—two to four storey walk-ups.

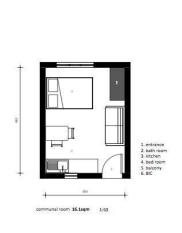
9.11.2. Design guidelines for indicative housing typologies

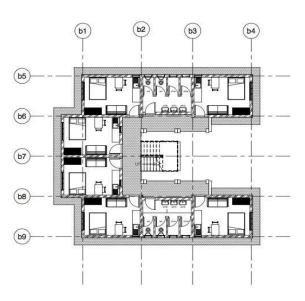
Housing typologies must be designed to provide a wide range of options to meet diverse needs and affordability profiles and allow flexibility of configuration (block layouts) to suit varying site conditions (size, shape, topography, etc). In line with this, the following range of options up to two bedrooms will be considered for approval under the Programme funding:

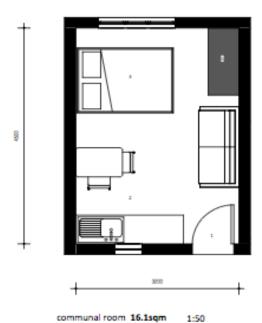
Proposed unit type	Unit features	Possible built forms (all 2-3 storey walk- ups)	Possible tenancy arrangements
1B: Rooms with communal facilities	Sink and top for cooking in unit, space for double bed/2 single beds, kitchen sink units	U-shape, courtyards, rows, clusters	1 single, single with child, couple, 2 singles sharing
1C: Bachelor unit	Fully self-contained	U-shape, courtyards, rows, clusters	1 single, single with child, couple, 2 singles sharing
2A, 2B, 2C: One bedroom units	Fully self-contained	Rows, clusters	1 single, single with child, couple, couple with child, 2 singles sharing
3A, B, C, D: Two rooms with shared facilities	Self-contained, but shared facilities within unit	U-shape, courtyards, rows, clusters	Multiple lease – 2 singles (with or without child), 2 couples, 1 single and 1 couple
3F, 3G: Two bedroom units	Fully self-contained	Rows, clusters	Single with child, couple, couple with 1-2 children, 2-4 singles sharing

9.11.3. Design guidelines: Example floor plans of unit typologies

9.11.3.1. Unit type 1B: Rooms with communal shared facilities $-16.1m^2$

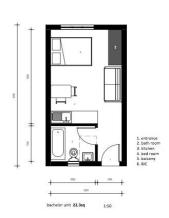


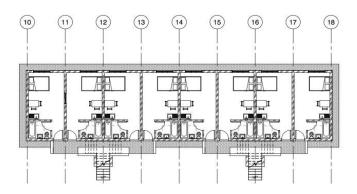




- The unit can be used for a single tenancy (single, single with child, couple)
- The kitchen sink could also be moved to a communal area, allowing for more bed space
- The configuration shown here is for a semi- courtyard U-shape block, but could be varied into rows, L-shapes, and full enclosed court yards by adding a mirrored U-shape to the existing one
- 4. The plan shown here is for a two-storey block, but could also be varied for three storeys

9.11.3.2. Unit type 1C: Bachelor unit, self-contained $-22.3m^2$

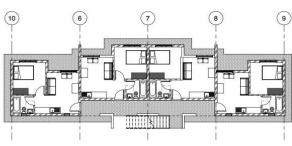




- The unit can be used for a single tenancy (single, single with child, couple)
- 6. The unit can also be used for shared tenancy (2 singles with separate leases)
- The bath can be replaced with a shower (this could also include moving the bathroom wall slightly to increase sleepingspace)
- 8. Blocks can be two or three storeys
- Blocks could be arranged in rows, Lshapes, H-shapes front to front with central connecting stairs (some potential; problems with orientation though), U-shapes and courtyards with slight modifications

9.11.3.3. Unit type 2A: One bedroom unit, self-contained – $29.3m^2$

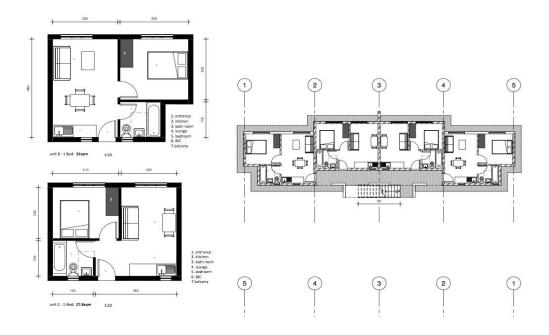


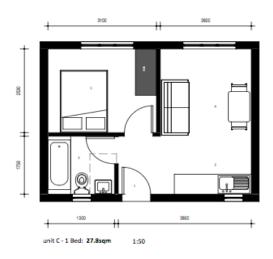




- The unit can be used for single tenancy (single, single with child, couple, couple with 1 child)
- 2. unit can also be used for shared tenancy (2 singles)
- 3. The bath can be replaced with a shower
- 4. Blocks could be arranged in rows, L- shapes, H-shapes front to front with central connecting stairs (some potential; problems with orientation though), U-shapes and courtyards with slight modifications

9.11.3.4. Unit type 2B, 2C: One bedroom unit, self-contained – 31.0m2, 27.8m²





- 5. The unit can be used for single tenancy (single, single with child, couple, couple with 1 child)
- 6. The unit can also be used for shared tenancy (2 singles)
- 7. The bath can be replaced with a shower
- Blocks could be arranged in rows, L-shapes, H-shapes front to front with central connecting stairs (some potential; problems with orientation though), U-shapes and courtyards with slight modifications

9.11.3.5. Unit types 3A-D: Two rooms for separate tenancies, sharing facilities contained within the unit $-40.0m^2$, $40.0m^2$, $40.0m^2$, $40.0m^2$



- 1. Units are specifically designed for shared tenancy (2 singles, 2 couples, 1 single and 1 couple, etc), but could also be used for single tenancy)
- ${\tt 2.} \qquad {\tt Different\ bathroom/kitchen\ configurations\ are\ possible\ with\ slight\ effects\ on\ cost}$
- 3. Baths and showers are interchangeable in all the options
- 4. Blocks can be two or three storeys
- 5. Blocks can be H-shapes as shown, or rows, L-shapes, U-shapes and courtyards with small modifications and effects on costs



9.11.3.6. Unit types 3F & 3G: Two bedroom unit, self-contained, Type 3F with main bedroom and smaller second bedroom $-41.0m^2$, Type 3G with equal size bedrooms

- 1. Type 3F is a conventional family unit with one main bedroom and one secondary bedroom. It could however be used for either single, or shared tenancy, with a lower rental for the smaller room (couple, couple with 1-2 children, single with 1-2 children, 2 singles, 2 couples).
- 2. Type 3G, with equal size bedrooms, is more specifically designed for shared tenancy same rental for either room (tenancy as 3F)
- 3. Baths and showers interchangeable
- 4. Blocks can be two or three storeys, and can also be arranged in rows, L-shapes, U-shapes or full courtyards with minimal modifications and cost effects

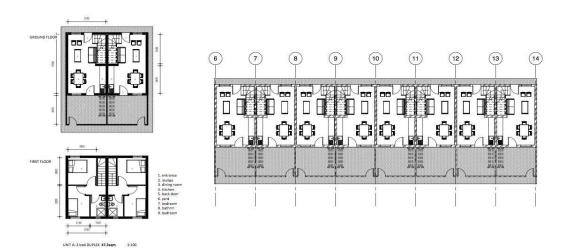
9.11.3.7. Individual family units with access to own yards

Provide for individual family homes with access to their own yards (e.g. play spaces or children). This should be higher density duplex row houses on undivided land.

These units should be limited to two bedroom duplexes (no three bedroom units which could either lead to sense of entitlement or demands for ownership), as in the table below:

Proposed unit type	Unit features	Possible built forms (all 2-4 storey walk- ups)	Size m²	Possible tenancy arrangements
5A: Two bedroom duplex unit	Fully self- contained	Rows, clusters, courtyards	47.3	Family with 1-2 children

9.11.3.8. Unit type 5: Two bedroom duplex family unit -47.0m²



10. Norms and Standards: Private Sector Rental Housing

10.1. Overall approach

For Private Sector Rental, the Norms and Standards are based on the very simple and clear edict of statutory compliance.

Building Regulations establish a set of minimum standards that must be achieved in the design and construction of buildings. They are supported by a series of approved documents that provide guidance about how the regulations can be satisfied in common building situations, and these in turn are supported by a wide range of reference documents.

All developments must demonstrate compliance in terms of the National Building Regulations and Building Standards Act 1997, SANS 10400, as well as a series of Normative References and Standards as issued by the SABS Standards Division such as SANS2001. SANS 10400 sets out a series of compliance routes; deemed to satisfy requirements, functional regulations and prescriptive regulations including for example:

- Deemed to Satisfy Requirement: This is a non-mandatory requirement, the compliance with which ensures compliance with a functional regulation.
- Functional Regulation: This is a regulation that sets out in qualitative terms what is required of a building or building element or building component in respect of a particular characteristic, without specifying the method of construction, dimensions or materials to be used.
- Prescriptive Regulation: This is a regulation which describes in some detail an operation to be performed, or the dimensions of a building, building element or building component and the materials and method of construction to be used in such building, building element or building component.

The basis of the approach is that 'residential rental accommodation' has three components:

- The 'property' (the land on which the dwelling/s are situated on) and where predominantly applicable legislation/regulations are municipal ordinance and by-laws and the NBR (SANS 10400 that includes 'deemed to satisfy' codes of practice).
- The 'building' and where the predominantly applicable legislation/regulation is again the
 NBR (SANS 10400), as well as SANS10142 for electricity. Depending on both the building
 type e.g. single dwelling, sectional title or even a rural farmstead, other legislation and
 regulations may also apply (for example the Sectional Title Scheme Management Act).
- The 'lease' which regulates the relationship between the landlord and tenant and where,

in addition to the Rental Act (applicable to all three components to varying degrees but most applicable to the relationship/lease) and Sectional Title Scheme Act (where accommodation rented is in a sectional title scheme), other legislation such as the Consumer protection Act or Immigration Act (person allowed 'legal residence') may also apply.

While all of the provisions of all the different acts and regulations may not be applicable, some inconsistencies in either the provisions or in the way they could be interpreted seem apparent. To this end, it is unclear which legislation would take precedence in the event of an inconsistency or conflict. Until there is further clarity on this, for the purposes of this document, where reference is made to a specific act, regulation or guideline in the following 'norms and standards' sections, the intention is that compliance with the referenced item is the required norm and/or standard.

10.2. Structure of the Norms and Standards

The norms and standards are structured in a hierarchy, starting at the site and contextual framework level and working through to the detailed requirements of the unit. Four levels are provided for:

- Level 1: The Property and Utilities
- **2** Level 2: The Building and Amenities
- 2 Level 3: The Lease Agreement
- 2 Level 4: Environmental Sustainability

The norms and standards are set out in a table that includes the following:

- ② **Overarching item**: This term refers to specific thematic elements within the levels defined. (For example, the overall context of a development).
- **Sub-item:** This element refers to a specific area of focus within themes and provides more detail on particular components of overarching items.
- **Principles:** These are the high-level key outcomes desired by the particular sub-item.
- Guidelines: Applicable good practice on a particular topic informed by knowledge, understanding and experience of practitioners in the field and their professional advisors. This is an explanation of how the general principles are to be achieved.
- 2 Norm and standard: This is the compliance levels that must be achieved.

10.3. Norms and Standards

The below sections provide detail on both overarching and sub-items of relevance to Norms and Standards of Private Sector Rental Housing.

10.3.1. Level 1: The property and utilities

Overarching Item	Overarching Item 1.1 Property Rights and Designated Uses	
Sub-Item	1.1.1 Location and Residential Use Rights	REFERENCE TO ACTS AND LEGISLATION
Principles	Private Sector Rental Housing is not restricted to any specific locality other than it is to be located on properties that are for residential purposes, namely, they have residential zoning or have been granted residential consent use by the municipality.	Not applicable (n/a)
Guidelines	For any new township development, the property owner or developer is responsible to ensure that the township is established in accordance with the municipalities' conditions of approval. The property owner is responsible to ensure that the occupation and use of the property comply with the relevant municipal zoning and consent use bylaws and/or township ordinance.	Any proposed new developments for rental housing need to be approved by the municipality and, where required, comply with the provisions of the Red Book and any other adopted & documented guidelines and by-laws of the municipality
Norm and Standard	The Rental Housing facility must have residential zoning and/or residential use rights in terms of the municipal by-laws that govern property zoning and consent rights.	N/a

Sub-Item 1.1	1.1.2 Classification and designation of occupancy	REFERENCE TO ACTS AND LEGISLATION
Principles Buil	Buildings used for Private Sector Rentals are to be habitable .	H3 – Domestic residence. Occupancy consisting of two or more dwelling units on a single site. NBR A20 table 1
Guidelines As class (184 H44 H44 H44 H44 H44 H44 H44 H44 H44 H	As a guideline, The Private Sector Residential Rental Facility would be classified and designated as "residential" with either an occupancy of H3 or H4 as detailed in The National Building Regulations- Part A20-table1. This categorises the full spectrum of residence and occupancy that apply to various building typologies, from single stand alone/detached units to multistorey attached units. Accordingly, for multi-unit complexes, it is irrespective of whether the landlord is the owner of the entire complex or a single unit in the complex	H4 - Dwelling house - Occupancy consisting of a dwelling unit on its own site, including a garage and other domestic outbuilding, if any. NBR A20 table 1 This classification shall reflect the primary function of such building, provided that, in any building divided into two or more areas not having the same primary function, the occupancy of each such area shall be separately classified. NBR - A20/1 Notwithstanding the requirements of the above, any area in any building which is used for any purpose ancillary to that of any occupancy
Standard The Reg The Reg as c as c det	The Residential Rental Facility shall be classified and designated as "residential" with an occupancy of H3 or H4 as detailed in the National Building Regulations- PART A20-table1. The rental buildings shall comply with the primary function and ancillary uses as detailed in NBR – PART A20 / 1-2. The use and purpose of the residential rental building shall be used as detailed in NBR – PART A25.	classification contemplated in above shall, subject to adequate raclifities and safety measures being provided, not be classified as a separate occupancy. NBR - A20/2. No person shall use any building or cause or permit any building to be used for a purpose other than the purpose shown on the approved plans of such building, or for a purpose which causes a change in the class of occupancy as contemplated in these regulations, whether such plans were approved in terms of the Act or in terms of any law in force at any time before the date of commencement of the Act, unless such building is suitable, having regard to the requirements of these regulations, for such first-mentioned purpose or for such changed class of occupancy. NBR A25/1. The Rental Housing Amendment Act, 2014 has a definition for 'habitable' but where it is quite broad and can be interpreted in many different ways. Thus the suggested norm is per that of the NBR which gives measurable detail to components that make up 'habitability'- such as health, safety, privacy, comfort and as further detailed in the items to follow.

Overarching Item	Overarching Item 1.2 Services/Utilities ³⁷	
Sub-Item	1.2.1 Sanitation and disposal of sewerage	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – health perspective: residential accommodation is such that residents are not exposed to contamination and disease due to the ongoing presence of untreated sewerage or dirty water.	P1 COMPULSORY DRAINAGE OF BUILDINGS (1) (a) Where in respect of any building a suitable means of disposal of water-
Guidelines	The rental building shall be provided with a suitable means of sewer and drainage installation. (b) Where there is no such means of disposa accordance with Part Q of these regulations. (c)	borne sewage is available the owner of such building shall provide a drainage installation. (b) Where there is no such means of disposal, sewage shall be disposed of in accordance with Part Q of these regulations.
Norms and Standards	Every residential rental building shall be provided with a suitable drainage system which complies with NBR – Sans 10400 - Part P The design of the drainage system to a building shall comply with NBR – SANS 10400 Part P2.	(a) Where a sewer is or becomes available for the drainage of such building the owner of such building shall, at his own cost, lay, alter or extend any drain serving such building to terminate at a location and level as prescribed by the local authority for the connection to such sewer.
	Where there is no such means of water borne sanitary disposal, other means of disposal shall be permitted by the Local authority provided it complies with NBR – SANS 10400 Part Q	P2 DESIGN OF DRAINAGE INSTALLATIONS (1) Any drainage installation in any building shall be so designed and constructed that –
		(a) an adequate number of sanitary fixtures is provided in relation to the population and class of occupancy of such building;
		(c) such installation is capable of discharging into any common drain, connecting sewer or sewer provided to accept such discharge;
		 (d) all components and materials used in such installation arewatertight; (e) no nuisance or danger to health will be caused as a result of the operation

(f) any drain in such system is of such strength, having regard to the manner
in which it is bedded or supported, that it is capable of sustaining theactions
to which it may normally be subjected and that it is, where necessary,
protected against any drainage;
(g) all sanitary fixtures are so located that they are easily accessible to those
persons they are intended to serve;
(h) any necessary inspection, cleaning and maintenance required, may be
performed through the means of access provided.
PART O - NON-WATER-BORNE MEANS OF SANITARY DISPOSAL 0.1
MEANS OF DISPOSAL
Where water-borne sewage disposal is not available other means of sewage
disposal shall be permitted by the local authority. Provided that:
(a) it stores, conveys, processes and disposes of human body wastes and
wastewater in such a way that the pathogens, pollutants and contaminants
associated therewith do not compromise the health and safety of the original
user or others; and
(b) in the case of chemical or toilet a satisfactory means is available for the
removal and disposal of sewage from such closets;
Q2 PERMISSION

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.3 'Hot' Water Provision	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – health perspective: residential accommodation such that residents are not exposed to contamination and disease due to the lack of potable water for drinking, washing and cleaning.	4.1 Hot water supply 4.1.1 In order to comply with functional regulation XA2, contained in part XA of the National Building Regulations, the following guidance is provided:
Guidelines	Potable water supply to each accommodation unit. Hot water may be provided by a variety of systems such as heat pumps, solar, magnetic induction geysers, gas and hybrid systems. In all cases the efficiencies of the system should be evaluated in relation to the cost of producing hot water. The building owner to ensure that all plumbing in regard to water supply is functional. Within the broader parameters of environmental sustainability and resilience, non/un-conventional approaches to service provision may be considered wholly or partially. These could be at a macro level for example applying localised black or grey water treatment. Or at a micro level such as off grid solutions provided to elements within a development for example dry /waterless toilets in certain building types like a guardhouse or community facility.	a) the volunte of the affilial average not water heading requirements shall be calculated in accordance with tables 2 and 5 of SANS 10252-1:2004; and b) if solar water heating systems are used, these shall comply with SANS 1307, SANS 10106, SANS 10254 and SANS 10252-1. 4.1.2 Requirements for water installations in buildings shall be in accordance with SANS 10252-1 and SANS 10254. 4.1.3 All hot water service pipes shall be clad with insulation with a minimum R-value in accordance with table 1. 4.1.4 Thermal insulation, if any, shall be installed in accordance with the manufacturer's instructions.
Norms and Standards	Potable water to be supplied to each accommodation unit and if accommodation is in a proclaimed township, in accordance with the applicable municipal by-laws. If hot water is also provided, it is to be in accordance with NBR - SANS10400 PART XA	

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.4 Stormwater disposal	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – safety and health perspective: residential accommodation such that residents and accommodation are not exposed to flooding which may render the accommodation either structurally unsafe or unhealthy as a result of water ingress or ongoing dampness.	R1 STORMWATER DISPOSAL REQUIREMENT (1) The owner of any site shall provide suitable means for the control and disposal of accumulated stormwater which may run off from any earthworks, building or paving.
Guidelines	The rental property shall be provided with stormwater systems – surface or underground depending on the design or circumstances - so that no undue damage may be caused to either the interior of the building or its structural elements e.g. walls which render the building either uninhabitable or unsafe. Stormwater systems shall be maintained on an ongoing basis by the building owner.	(4) such means of stormwater disposal may be in addition to or in combination with any drainage works required in terms of regulation F4(2). (3) The requirements of sub-regulation (1) shall be deemed to be satisfied where such means of stormwater disposal is provided in accordance with SANS 10400-R: Provided that where a local authority is of the opinion that the conditions on any site render it essential for stormwater disposal to be the subject of an acceptable rational design prepared by an approved competent person, such local authority shall, in writing, notify the owner of competent for the processity for such design and may require
Norms and Standards	A residential rental building shall be provided with a suitable means for the control and disposal of accumulated stormwater run-off which stormwater system shall comply with NBR – SANS 104400 Part R as well as any applicable municipal bylaws and town planning ordinances.	such site of its reasons for the necessity for such design, and may require such owner to submit for approval plans and particulars of a complete stormwater control and disposal installation for such site and for any building erected thereon, based on such design. R2 SAVING (1) These regulations shall not be construed as requiring the installation in any building of any roof gutter or downpipe where other suitable means has been provided to ensure the disposal or dispersal away from such building of rainwater from the roof of such building. (2) The regulations in this Part shall not apply to any site used exclusively for the erection of any dwelling house or any building appurtenant thereto,
		provided that where, due to special site features, the discharge of

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.5 Refuse Disposal	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – health perspective: residential accommodation is such that residents are not exposed to contamination and disease due to the build-up of refuse.	NBR - U1 PROVISION OF STORAGE AREAS Any building, excluding a dwelling house, in which refuse is or will be generated shall be provided with an adequate storage area for refuse containers.
Guidelines	A central refuse storage area should be located close to the entrance of development with an adequate area for bins and for the cleaning of bins. A waterpoint and drain should be provided within the refuse storage area. The location of any area contemplate access thereto from any street for the access	NBR - UZ ACCESS TO STORAGE AREAS The location of any area contemplated in regulation U1 shall be such that access thereto from any street for the purpose of removing the refuse, is to the satisfaction of the local authority. NBR - U3 REFUSE CHUTES Where any refuse container receives refuse from any chute such chute shall
Norms and Standards	Any building, excluding a dwelling house, shall be provided with refuse facilities as stipulated in NBR – PART U1. The refuse facility for any building excluding a dwelling house shall be located in accordance with NBR – PART U2 Where refuse chutes are provided these shall be designed and erected in terms of NBR – PART U3	a dwelling house, shall be provided with refuse be designed and erected so as to be safe in operation. NBR — PART U1. th NBR — PART U2 provided these shall be designed and erected in

10.3.2. Level 2: The building and amenities

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.1 Building Standards	REFERENCE TO ACTS AND LEGISLATION
Principles	The constitution states that everybody has a right to "an environment that is not harmful to their health or wellbeing. Rental Accommodation must be designed to attain the requirements associated with habitability – acceptable safety, protection from the elements and undue health hazards, privacy and comfort.	PART B - 1 DESIGN REQUIREMENT (1) Any building and any structural element or component thereof shall be designed to provide strength, stability, serviceability and durability in accordance with accepted principles of structural design, and so that it will not Impair the integrity of any other building or property. (2) Any such building shall be so designed that In the event of accidental
Guidelines	The external envelope of the building must not allow the penetration of rainwater or another surface water into its interior. The building must be lockable and secure. The construction of any building or element shall be such that the building or element as constructed does not compromise the design intent of any design solution that satisfies the requirements of a functional regulation. (NBR A14/1a)	overloading the structural system will not suffer disastrous or progressive collapse which is disproportionate to the original cause. (3) The requirements of sub-regulations (1) and (2) shall be deemed to be satisfied where such building is designed in accordance with Part B of section 3 of SABS 0400.
Norms and Standards	The design and construction of residential rental dwellings for human occupation must comply with all components of the National Building Regulations and its Deemed to Satisfy Rules.	Note: In the Rental Housing Act and its amendments (section 4B (11)) it states that the landlord/owner "must provide a tenant with a dwelling that is in a habitable condition, as well as maintain the existing structure of the dwelling". Dwellings are defined as "any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated parking space which is leased as part of the lease".

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.2 Structural Design	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes for habitability, any building and any structural element or component should be designed and built to provide strength, stability, serviceability and durability under all foreseen actions which can reasonably be expected to occur. In terms of the erection of a building for rental purposes, a rational design or assessment is required as well as a geotechnical investigation which is to be undertaken by a suitably qualified person.	As for 2.1.1 above. In addition: A19 APPOINTMENT OF PERSONS RESPONSIBLE FOR DESIGN, INSPECTION AND ASSESSMENT DUTIES (1) Wherein terms of these regulations and in respect of the erection of any building: (a) a rational design or rational assessment, is required in terms of: (i) Regulations Z4(1)(b)(ii), A1(3), A23(4), G1(3), O4, P2(2), Q3, R(3),
Guidelines	Buildings shall be designed to be structurally sound. Any structural elements within a building shall be designed and materials sourced and specified in terms of NBR Part A4 and A13.	 11(2), W4 in respect of a system, measure, facility, parameter, or installation, as relevant, or (ii) a part of SANS 10400; or (b) a geotechnical investigation is required in terms of regulation F3, the owner of the building shall subject to the provisions of sub-regulations(4) and (5) appoint and retain one or more approved competent persons to
Norms and Standards	Any building shall be designed by a suitably qualified person (NBR SANS 10400 Part A19) which design shall comply with NBR – Sans 10400 Part B. A13 BULLDING MATERIALS AND TESTS AND TESTS SANS 10400 Part A4 and Part A14. (b) All timber used in the erection of purpose for which it is to be used. (c) All timber used in the erection of purpose for which it is to be used.	undertake responsibility for the work associated with such regulations including any inspections and certifications that may be required. 413 BUILDING MATERIALS AND TESTS (1) (a) Material used in the erection of a building shall be suitable for the purpose for which it is to be used. (b) All timber used in the erection of a building shall be treated against termite and wood horer attack and fundal decay in accordance with the

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.3: Walls	REFERENCE TO ACTS AND LEGISLATION
Principles		K1 STRUCTURAL STRENGTH AND STABILITY Any wall shall be designed and constructed to safely sustain any actions which can reasonably be expected to occur and in such a manner that any local damage (including cracking) or deformation do not compromise the opening and closing of doors and windows or the weather tightness of the wall and in the case of any structural wall, be capable of safely transferring such actions to the foundations supporting such wall.
Guidelines	External walls must be structurally sound. External walls must be designed and constructed to adequately prevent water penetration. The external wall construction must be constructed of suitable material to ensure durability and long-term maintenance. All walls within buildings must provide adequate provision for the fixing of roof trusses or beams. All walls must be compliant from a fire rating perspective. All walls must achieve a minimum R rating.	K2 WATER PENETRATION (1) Any wall shall be so constructed that it will adequately resist the penetration of water into any part of the building where it would be detrimental to the health of occupants or to the durability of such building. (2) Where a building includes a basement or semi-basement, the local authority may, if it considers that conditions on the site on which the building is to be erected necessitate integrated designs for the penetration of water into such basement or semi-basement applicable to all construction elements or components thereof, require the submission of such designs for approved design.
Norms and Standards	Construction of external walls must comply with relative "R" Values as per NBR – SANS 10400 XA. NBR – SANS 10400 XA. The design and construction of all walls must comply with NBR - SANS 10400 be made to fix such truss, rafter or beam to such wall in a secure manner that any actions to which the roof may normally be subjected will be transmitted to such wall. K4 BEHAVIOUR IN FIRE	K3 ROOF FIXING Where any roof truss, rafter or beam is supported by any wall provision shall be made to fix such truss, rafter or beam to such wall in a secure manner that will ensure that any actions to which the roof may normally be subjected will be transmitted to such wall. K4 BEHAVIOUR IN FIRE

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.3: Walls	REFERENCE TO ACTS AND LEGISLATION
		Any wall shall have combustibility and fire resistance characteristics appropriate to the location and use of such wall.
		4.4.3 External walls
		4.4.3.1 Non-masonry walls shall achieve a minimum total R-value of
		a) climatic zones 1 and 6: 2,2
		b) climatic zones 2, 3, 4 and 5: 1,9.
		4.4.3.2 The following types of masonry walling comply with the R-value requirements:
		a) double-skin masonry with no cavity, plastered internally, or rendered externally, 2 ; or
		b) single-leaf masonry walls with a nominal wall thickness greater than or equal to 140 mm (excluding plastering and rendering), plastered internally and rendered externally.
		The requirements refer to the external walls of the habitable portions of the building fabric only.
		4.4.3.3 For masonry walling types not covered in 4.4.3.2, such walls shall achieve a minimum total R-value of 0,35. The total R-value shall be determined by means of a test conducted in accordance with ASTM C
		1363, ASTM C 518 or ASTM C 177. Surface film resistance shall be in accordance with SANS 6946.
		4.4.3.4 Other walling requirements shall be in accordance with SANS 10400-K. SANS 10400XA 4.4.3

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.4 Windows and Glazing and Fenestration	REFERENCE TO ACTS AND LEGISLATION
Principles	Window Glazing and fenestration shall be of correct and adequate specification to ensure reasonable thermal comfort within units so that they are habitable.	4.4.4 Fenestration 4.4.4.1 Buildings with up to 15 % fenestration area to nett floor area per storey comply with the minimum energy performance requirements. 4.4.4.2 Buildings with a fenestration area to nett floor area per storey that
Guidelines	 In new build projects: Glazing must comply with SANS 10400XA. All fenestration shall have adequate air infiltration. In existing buildings and where windows and glazing are existing: The glazing rationale needs to be justified in terms of existing building conditions and other factors such as heritage, as the replacement of façade glazing could be a prohibitive cost centre. Safety of persons is to be considered in relation to opening windows and heights of openings with the provision of safety bars. 	exceeds 15 % shall comply with the requirements for fenestration in accordance with SANS 204. 4.4.4.3 All fenestration air infiltration shall be in accordance with SANS
Norms and Standards	Window frames and glazing should comply with NBR SANS 10400XA with as simple a solution to glazing as possible.	

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.5 Roof Construction / Insulation / Guttering / Waterproofing	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes for habitability, the roof of the building shall be designed and constructed to resist any forces and must be durable, waterproof and not allow any water to accumulate on it.	L1 GENERAL REQUIREMENT The roof of any building shall be so constructed that It will - (a) resist any forces to which it is likely to be subjected; (b) be durable and waterproof;
Guidelines	In terms of SANS10400 Part L, the roof of any building shall be so designed and constructed that it: • safely sustains any actions which can reasonably be expected to occur • is adequately anchored against wind uplift; • is durable and does not allow the penetration of rainwater or any other surface water to its interior; • does not allow the accumulation of any water upon its surface; and as part of a roof and ceiling assembly, provides adequate height in any room immediately below such assembly. • The fire resistance of any roof or roof and ceiling assembly complete with light fittings or any other component which penetrates the ceiling, shall be appropriate to its use. • A roof assembly shall achieve the minimum total R-value specified as detailed in table 7 SANS 10400XA • On buildings with pitched roofs, guttering should be provided, the purpose of which is to direct stormwater run-off from roofs away from buildings where damage to facades and foundations can occur. • Flat roofs must be considered in relation to the design of stormwater removal, insulation and waterproofing.	(c) not allow the accumulation of any rainwater upon Its surface; and (d) as part of a roof and ceiling assembly provide adequate height In any room immediately below such assembly. L2 FIRE RESISTANCE AND COMBUSTIBILITY The fire resistance of any roof or roof and ceiling assembly complete with light fittings or any other component which penetrates the ceiling, shall be appropriate to Its use and where necessary such roof or roof and ceiling assembly shall be non-combustible. 4.4.5.1 A roof assemblies 4.5.2 A roof assembly shall achieve the minimum total R-value specified in table 7 for the direction of heat flow. 4.5.2 A roof assembly that has metal sheet roofing fixed to metal purlins, metal rafters or metal battens shall have a thermal break consisting of a material with an R-value of not less than 0,2 installed between the metal sheet roofing and its supporting member. SANS 10400XA 4.4.5.2 4.4.5.3 Metal sheeting types of roofing assembly construction shall achieve the minimum total R-value in accordance with 4.4.5.1, with the installation of insulation that has an R-value as specified in table 8 of SANS 10400 XA 4.4.5.3
	 If the roof is to a trafficable area, the waterproofing must be 	

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.5 Roof Construction / Insulation / Guttering / Waterproofing	REFERENCE TO ACTS AND LEGISLATION
	 Gutters and paved splashbacks around buildings to manage stormwater run-off. 	The roof overhang to the northern wall shall be sufficient to shade the windows from midday summer sunshine in accordance with SANS 204. Windows facing east and west should be limited in number and confined to the minimum required for daylight and ventilation. SANS 10400XA 4.4.1.2
Norms and Standards	The design and construction of the building's roof shall comply with the regulations as detailed in NBR – SANS 10400 – Part L and its thermal design and criteria shall comply with NBR – SANS 10400 Part XA	

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.6 Staircase, Building Entrances and Thresholds	REFERENCE TO ACTS AND LEGISLATION
Principles	Staircases must allow pedestrian movement from floor to floor in a safe and as M1 GENERAL REQUIREMENT easy as possible manner.	M1 GENERAL REQUIREMENT (1) Any stairway, including any wall, screen, railing or balustrade to such
Guidelines	Any stairway shall be designed to safely sustain any load it is subjected to. Any stairway shall be fit for purpose and safely permit movement of physically able and disabled persons from floor to floor. Any Stairway used for emergency escape purposes shall have correctly sized dimensions and shall be fire resistant.	stairway, shall be capable of safely sustaining any loads to which It Is likely to be subjected and shall permit safe movement of persons from floor to floor. (2) Any such stairway shall have dimensions appropriate to its use. M2 FIRE REQUIREMENT A stairway contemplated in regulation M1 shall comply with the relevant requirements in Part T of these regulations.
Norms and Standards	All staircase within a building shall comply with NBR – SANS 10400 – Part M.	The requirements of regulations M1 and M2 shall be deemed to be satisfied where the design of any stairway complies with part M of section 3 of SASS 0400.

Overarching Item	Overarching Item 2.2 Unit Design and Occupancy	
Sub-Item	2.2.1 Unit Size, dimensions, heights and areas	REFERENCE TO ACTS AND LEGISLATION
Principles	All buildings and rooms should be fit for purpose as a rental unit to allow tenants to enjoy privacy in a secure and safe environment. Floor area of a home must be habitable and building not a threat to public safety.	C1 ROOMS AND BUILDINGS (1) Any room or space shall have dimensions that will ensure that such room or space is fit for the purpose for which it is intended.
Guidelines	SANS 10400 Part c prescribes the following: Minimum floor to underside of ceiling, or roof covering or underside of structural element: Minimum heights in bedrooms and other habitable rooms = 2.4m Minimum total floor area of a dwelling houses with Occupation of H4 = 30m2 Min dwelling size of 30sqm and 15sqm for a temporary dwelling.	(2) The floor area of any dwelling unit shall not be less than that necessary to provide one habitable room and a separate room containing toilet facilities.
Norms and Standards	All buildings and rooms shall comply with dimensions and areas as stipulated in NBR – SANS 10400 – PART C	

Overarching Item	2.2 Unit Design and Occupancy	
Sub-Item	2.2.2 Unit Occupancy	REFERENCE TO ACTS AND LEGISLATION
Principles	Occupancy of any unit is subject to firstly, the unit design and intended number of occupants and secondly, to the level of desired comfort and privacy by the occupants.	A21 POPULATION (1) The population of any room or storey or portion thereof shall be taken as the actual population of such room, storey or portion thereof where such
Guidelines	The maximum occupancy on a permanent basis, for rental units with an occupancy of H3 and H4 shall be limited to 2 persons per bedroom.	on a permanent basis, for rental units with an population is known or, where such population is not known, the population II be limited to 2 persons per bedroom. Shall be calculated from the criteria given in Table 2.
Norms and Standards	Occupancy of any rental building shall be limited as detailed in NBR –SANS 10400 Part A21 Table 2 and the Rules of the Body Corporate in the case of sectional title schemes	Crass of Occupancy of Founds (1977) 197, 199, 199, 199, 199, 199, 199, 199,

Overarching Item	2.3 Material Specifications	
Sub-Item	2.3.1 General Building Materials	REFERENCE TO ACTS AND LEGISLATION
Principles	Material used in the erection of a buildings shall be suitable for the purpose for which it is to be used. (NBR A13/1a), in this case, for human occupation (1) (a) Material used in the erection of a building shall be suitable for the purpose for which it is to be used. (habitability).	413 BUILDING MATERIALS AND TESTS (1) (a) Material used in the erection of a building shall be suitable for the purpose for which it is to be used.
Guidelines	All Materials used within the building fit for purpose. All timber used in the erection of a building shall be treated against termine and wood borer attack and fungal decay in accordance with the requirements of by the South African National Accreditation Systems. SANS 10005. (NBR A13/1b).	(b) An united used in the election of a building shall be treated against termine and wood borer attack and fungal decay in accordance with the requirements of SANS 10005 and shall bear the product certification mark of a body certified by the South African National Accreditation Systems.
Norms and standards	All materials used within a building shall comply with NBR – SANS 10400 – Part A13.	

Overarching Item	2.3 Material Specifications	
Sub-Item	2.3.2 Floors	REFERENCE TO ACTS AND LEGISLATION
Principles	Floors to be fit for their respective purposes.	PART J - FLOORS 11 GENERAI REOLIIREMENT
Guidelines	Floors to comply with the following:	(1) Any floor of any building shall -
	 Be designed and constructed to safely support its own weight and any actions which can reasonably be expected to apply. 	(a) be designed and constructed to safely support its own weight and any actions which can reasonably be expected to occur and in such a manner
	 Fire resistant, irrespective of room type. 	that any local damage (including cracking), deformation or vibration do not
	 The floor of any laundry, kitchen, shower-room, bathroom or room containing a toilet pan or urinal shall be water-resistant. 	compromise the efficient use of the building or the functioning of equipment supported by such floor; and
	 Timber floors shall not be exposed to the elements and have adequate under floor ventilation. 	(b) have a fire resistance appropriate to its use and where required, be noncombustible.
	 Where any concrete floor slab is supported on ground or filling, such floor shall be so constructed that any moisture present in such 	(2) The floor of any laundry, kitchen, shower-room, bathroom or room containing a toilet pan or urinal shall be water-resistant.
	ground or filling is prevented from penetrating such concrete floor slab.	(3) Any suspended timber floor in a building shall be provided with adequate under-floor ventilation.
	Be robust and hard wearing.	(4) Where any concrete floor slab is supported on ground or filling, such
Norms and Standards	ALL floor within a room shall comply with the minimum requirements as stipulated in NBR – SANS 10400 – PART J	filling is prevented from penetrating such concrete floor slab.

Norms and	Walls should be designed and constructed in accordance with NBR - SANS design.	design.
Standards	10400 – PART K	K3 ROOF FIXING
		Where any roof truss, rafter or beam is supported by any wall provision shall
		be made to fix such truss, rafter or beam to such wall in a secure manner that
		will ensure that any actions to which the roof may normally be subjected will
		be transmitted to such wall.

295

Overarching Item	2.4 Occupational Health and Safety	
Sub-Item	2.4.1 Fire and smoke safety, equipment and escape.	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes of habitability and safety, residential rental buildings shall be designed and built to withstand smoke and fire and be provided with the necessary fire-fighting equipment and signage.	T1 GENERAL REQUIREMENT (1) Any building shall be so designed, constructed and equipped that in case of fire-
Guidelines	Buildings shall be designed and constructed to limit the spread of fire and smoke. Buildings are to be designed to facilitate the safe evacuation of occupants. Adequate fire detection equipment and firefighting equipment shall be provided within a building. Adequate statutory fire signage shall be provided.	 (a) the protection of occupants or users therein is ensured and that provision is made for the safe evacuation of such occupants or users; (b) the spread and intensity of such fire within such building and the spread of fire to any other building will be minimized; (c) sufficient stability will be retained to ensure that such building will not endanger any other building: Provided that in the case of any multistorey building no major failure of the structural system shalloccur; (d) the generation and spread of smoke will be minimized or controlled
Norms and Standards	All buildings used for residential rental purposes excluding single residential units shall be designed and constructed to comply with the fire regulations as stated in NBR – SNAS 10400 – Part T	 (e) adequate means of access, and equipment for detecting, fighting, controlling and extinguishing such fire, Is provided. (2) The requirements of sub-regulation (1) shall be deemed to be satisfied where the design, construction and equipment of any building. (a) Is the subject of an acceptable rational design prepared by a professional engineer or other approved competent person; or (b) complies with Part T of section 3 of SABS 0400: Provided that where any Local authority Is of the opinion that such compliance would not comply with all the requirements of sub-regulation (1), such local
		authority shall in writing notify the owner of the huilding of Its reasons

Overarching Item	2.4 Occupational Health and Safety	
Sub-Item	2.4.2 Public Safety - Ground conditions, entrances, ramps, trees etc	REFERENCE TO ACTS AND LEGISLATION
Principles	All building components that are accessible to its habitants and/or the general public should not be a threat to public safety.	are accessible to its habitants and/or the general D1 CHANGE IN LEVEL - The protection of the edge of any balcony, bridge, flat to public safety. to public safety. such balcony, bridge, flat roof or similar place.
Guidelines	Public safety considerations are changes in ground level and ground conditions (dolomite), entrances, ramps, swimming pools, tree damaging walls.	D2 PEDESTRIAN ENTRANCES TO PARKING AREAS IN BUILDINGS - Where any pedestrian entrance is provided to a vehicle parking area in any building, such entrance shall be so positioned, marked or protected that no pedestrian can unintentionally walk into the path of any moving vehicle.
Norms and Standards	All buildings shall be designed and constructed to comply with NBR – SANS D3 RAMPS - Any ramp or driveway shall be so designed that it is safe when used and is fit for the purpose for which it is intended. D4 SWIMMING POOLS AND SWIMMING BATHS - (1) The owner of any swhich contains a swimming pool shall ensure that access to such swimm pool is controlled.	D3 RAMPS - Any ramp or driveway shall be so designed that it is safe when used and is fit for the purpose for which it is intended. D4 SWIMMING POOLS AND SWIMMING BATHS - (1) The owner of any site which contains a swimming pool shall ensure that access to such swimming pool is controlled.

Overarching Item	2.4 Occupational Health and Safety	
Sub-Item	2.4.3 Maintenance and Operation	REFERENCE TO ACTS AND LEGISLATION
Principles	All property and building components and installations which require maintenance to render the accommodation functional and habitable are to be maintained in a safe and proper manner.	415 MAINTENANCE AND OPERATION (1) (a) The owner of any building shall ensure that any mechanical equipment, facility or any service installation provided in or in connection with such building pursuant to these regulations or pursuant to any building
Guidelines	The owner of a building is obligated to ensure that the property, building and all equipment is operational and fit for purpose. The owner of the building must ensure that all measures are undertaken to resist the penetration of rainwater and passage of moisture into the building.	bylaw which was in operation prior to the coming into operation of the Act, shall be maintained in a safe and functional condition. (b) Such owner or any person appointed by such owner to be in control of such building shall ensure that where such equipment, facility or installation is designed to be kept operating during the times of normal occupancy of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in these regulations or in any by- law for such equipment or installation.
Norms and Standards	The maintenance and operation of all parts in the building shall be maintained by the owner in terms of the NBR - SNAS 10400 – Part A15. The owner of a building shall ensure maintenance of the relevant functional regulations contained in the NBR SANS 10400 Parts B, H, J, K and L.	 (2) The owner of any building shall ensure that pursuant to these regulations or pursuant to any building by-law that was in operation prior to the coming into operation of the Act, the following is maintained in accordance with the requirements of the relevant functional regulations contained in Regulations B, H, J, K and L: (a) the structural safety performance (behaviour of buildings under all actions that can be reasonably expected to occur); (b) the measures taken to resist the penetration of rainwater and the passage of moisture into the interior of a building.

Overarching Item	2.5 Building Amenities	
Sub-Item	2.5.1 General	REFERENCE TO ACTS AND LEGISLATION
Principles	Any physical facility (e.g. garage) or service (e.g. Wi-Fi connection) in addition to the dwelling that is to be occupied by the tenant to 'live in' is an 'added extra' amenity. Any added extra amenity is not a requirement to render the rental accommodation acceptable, but rather a choice of the landlord/tenant and a function of the agreed rental amount between landlord and tenant.	
Guidelines	Fixed/physical amenities would vary depending on the type of rental accommodation (single house, multi-storey res 3 etc) and whether the tenant/occupant has exclusive or shared use of such amenities. For the latter, notionally being 'common property', specific house rules for the use of these amenities would likely be in place and applicable. The above would also apply to ongoing service type amenity but likely to also include a 3 rd party service provider with additional Terms and Conditions in the performance of the ongoing services. All the above as well as any 3 rd party service charges, Body Corporate or House Rules are to be described and included in the lease between the landlord and tenant.	
Norms and standards	Any amenities and services included as part of the rental property are to be described and included in the lease between the landlord and tenant as per the Rental Housing Amendment Act, 2014.	

10.3.3.Level 3: Lease Agreement

Overarching Item	3.1 Rental terms and conditions	
Sub-Item	3.1.1 Lease agreement	REFERENCE TO ACTS AND LEGISLATION
Principles	A mutually rewarding relationship between landlord and tenant.	There is a plethora of legislation that in one way or another could impact on the 'norms and standards' of private sector
Guidelines	The lease is a record of what has been agreed and 'governs' the relationship between the lease is required. Igaal view on what takes precedence is required.	rental and in particular the lease agreement provisions. A legal view on what takes precedence is required.
	 A detailed description of the rental property/accommodation – what's included and 	
	excluded – and a list of accepted defects upon occupation by tenant.	
	 Detailed particulars of the landlord and tenant. 	
	 The lease and notice periods. 	
	 The amount of rental and any other additional costs payable by the tenantand terms of payment. 	
	Annual escalation.	
	 Amount of deposit payable and its purpose (defray repair expenses if any). 	
	 Detailed information on what the rights and obligations of the landlord are, with specific focus on maintenance and repairs and arrangements for access bylandlord into the premises. 	
	 Detailed information on what the rights and obligations of the tenant are, with specific focus on use/abuse of the premises, fittings and fixtures, any applicable complex or Body Corporate Rules and subletting. 	

_	
◩	ď
a	č
	_
S	ę
⊱	ĕ
ă	~
ž	ţ
_	•

The lease agreement is to be in writing and signed by both parties. The provisions of the lease are to comply with the Rental Housing Amendment Act, 2014, the Formalities in Respect of Leases of land Act, 1969, the applicable provisions of the Consumer Protection Act, 2008 and its final Regulations of 2011, The Sectional Title Scheme management Act as amended, any prevailing Municipal by-laws, the Estate Agency Affairs Act, 1976 (if estate agent is the landlord), the Prevention of Illegal Eviction From and Unlawful Occupation of Land Act, 1998 and the Immigration Act 13 of 2002.

301

10.3.4. Level 4: Environmental Sustainability

Overarching Item	4.1 Environmental Sustainability	
Sub-Item	4.1.1 Orientation: Solar Heat Gain and Shading	REFERENCE TO ACTS AND LEGISLATION
Principles	Buildings shall be orientated to optimise occupiers thermal comfort levels. SANS 10400 XA 4.2.1b) - in any building of occupancy classified in terms Thermal comfort is a means of describing occupant comfort levels which take into account a series of factors such as air temperature, radiant temperature, humidity, draughts, clothing value and activity rates. SANS 10400 XA 4.2.1b) - in any building of occupancy classified in terms of E3, E3, E4, F1, F2, F3, E3, E4, F1, F2, F3, E3, E4, F1, F2, F3, F3, F4, F1, F2, F3, F4, F1, F2, F3, F3, F4, F1, F2, F3, F4, F1, F2, F3, F3, F4, F1, F2, F3, F4, F1, F2, F3, F3, F4, F1, F2, F3, F4, F1, F2, F3, F3, F4, F1, F2, F3, F4, F1, F2, F3, F4, F1, F2, F3, F4, F1, F2, F3, F3, F4, F1, F2, F3, F3, F4, F1, F2, F3, F3, F3, F4, F1, F2, F3, F3, F3, F4, F1, F2, F3, F3, F3, F3, F3, F3, F3, F3, F3, F3	SANS 10400 XA 4.2.1b) - in any building of occupancy classified in terms of Regulation A20 as A1, A2, A3, A4, C1, C2, E1, E2, E3, E4, F1, F2, F3, G1, H1, H2, H3, H4, and H5, the orientation and shading are in accordance with the requirements of SANS 204 or Appropriate orientation of buildings optimises sun penetration, solar heat gain and
Guidelines	Buildings should where possible be orientated in accordance with NBR – SANS 10400 XA. Living spaces should be arranged in terms of NBR - SNAS 10400 XA. Roof overhangs shall be in accordance with SANS – 10400 XA.	shading: SAINS 10400 XA 4.2 The majority of buildings should face north (where other weather or topography conditions do not supersede the solar gain). SANS 10400 XA 4.4.1.1 Living spaces should be arranged so that the rooms where people spend most of their hours are located on the northern side of the unit.
Norms and Standards	None	Uninhabited rooms, such as bathrooms and storerooms, can be used to screen unwanted western sun or to prevent heat loss on the southfacing facades. SANS 10400 XA4.4.1.1 Living rooms should ideally be placed on the northern side. The longer axis of the dwelling should be orientated so that it runs as near east/west as possible. SANS 10400 XA4.4.1.1 The roof overhang to the northern wall shall be sufficient to shade the windows from midday summer sunshine in accordance with SANS 204. Windows facing east and west should be limited in number and confined to the minimum required for daylight and ventilation. SANS 10400 XA 4.4.1.2.

Overarching Item	4.1 Environmental Sustainability	
Sub-Item	4.1.2 Ventilation	REFERENCE TO ACTS AND LEGISLATION
Principles	To ensure that any habitable room within a building is adequately ventilated with enough fresh air to enable that room to be used without detriment to health and safety or causing any nuisance for the purpose for which it was designed. NBR – SANS 10400 Part 0 (1).	01 LIGHTING AND VENTILATION REQUIREMENT (1) Any habitable room, bathroom, shower-room and room containing a urinal, or any room which is a parking garage shall be provided with a means of lighting and ventilation which will enable such room to be used, without detriment to health or safety or causing any nuisance,
Guidelines	To ensure that common areas are adequately ventilated. To encourage designs that provide ample amounts of fresh air to reduce indoor temperatures and counteract the build-up of indoor pollutants and moisture build up. Where this is not possible by design, in for example an existing building with a double loaded passage configuration, suitable mechanical fresh air and extraction systems are required. Buildings should have adequate airflow and be cross ventilated wherever possible. Where natural ventilation cannot be achieved, mechanical ventilation / extraction must be specified and installed.	provide ample amounts of fresh air to reduce indoor provide ample amounts of fresh air to reduce indoor pollutants and moisture build by design, in for example an existing building with a figuration, suitable mechanical fresh air and extraction cannot be achieved, mechanical ventilation / extraction lled. (2) The requirement of subregulation (1) shall be deemed to be satisfied whereat of subregulation (1) shall be deemed to be satisfied whereat build satisfied whereat or satisfied whereat possible. (2) The requirement of subregulation (1) shall be deemed to be satisfied whereat or satisfie

Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983), shall	in terms of the said Act be provided with artificial ventilation as	prescribed by such Act, and any room contemplated	In subregulation (1) which is -	(I) a room which, due to conditions of high temperature, may be	dangerous to safety or health;	(II) a room where there will be dust, gas, vapour or volatile matter	which may be dangerous to safety or health; or	(III) used for any purpose for which natural ventilation Is not suitable,	shall be provided with a means of artificial ventilation.	
All buildings should be adequately ventilated and comply with SANS 10400 – Part O Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983), shall										
rms & Standards										

Overarching Item	4.1 Environmental Sustainability	
Sub-Item	4.1.3 Lighting Internal to Unit	REFERENCE TO ACTS AND LEGISLATION
Principles	Any habitable room including any form of bathroom within a building shall be provided with adequate and appropriate lighting. NBR – SANS 10400 Part 0 (1).	01 LIGHTING AND VENTILATION REQUIREMENT (1) Any habitable room, bathroom, shower-room and room containing
Guidelines	Rooms shall where possible be provided with Natural lighting. Window sizes shall be provided in terms of SANS – 10400 Part O. Energy efficient lamps should be utilised to reduce total energy usage.	a means of lighting and ventilation which will enable such room to be used, without detriment to health or safety or causing any nuisance, for the purpose for which It Is designed. (2) The requirement of subregulation (1) shall be deemed to be
Norms & Standards	Any habitable room as well as all forms of toilets and bathrooms shall have adequate windows to provide natural light and provision of artificial light shall comply with the provisions of NBR - SANS 10400 Part O. Other efficient technologies are also available. If another technology is used, commentation must be provided to demonstrated that the light fixtures achieve at a commentation must be provided by a competent professional. In accordance with Part 0 of section 3 of SABS 0400; or accordance with	as are also available. If another technology is used, ovided to demonstrate that the light fixtures achieve at a competent professional. NATURAL LIGHTING Where for the purposes of natural lighting a room is provided with none or more opening is glazed it shall be glazed with transparent or approved translucent glazing material. OO2.1: Where such opening, or 10,2 m2, whichever is the greater. of the room or rooms served by it, or 0,2 m2, whichever is the greater.

11. Norms and Standards: Backyard Rentals

11.1. Overall Approach

For Private Sector Rental, the Norms and Standards are based on the very simple and clear edict of statutory compliance. Building Regulations establish a set of minimum standards that must be achieved in the design and construction of buildings. They are supported by a series of approved documents that provide guidance about how the regulations can be satisfied in common building situations, and these in turn are supported by a wide range of reference documents. In terms of private sector rental, developments must demonstrate compliance in terms of the National Building Regulations and Building Standards Act 1997, SANS 10400, as well as a series of Normative References and Standards as issued by the SABS Standards Division such as SANS2001.

On the basis of studies undertaken and anecdotal evidence most Backyard Rental units are unlikely to comply with the above norms and standards. In addition requiring that Backyard Rental should comply will undermine the ability of the sub-market to service lower income households, as it currently does.

Findings from studies reveal that Backyard Rental is a very complex, fragile, but normally operating housing sub-market. The factors driving demand within this sub-market are the current limited stock of affordable rental options and insufficient delivery of subsidised housing in general, coupled with low effective demand for purchased housing due to financing constraints, low affordability and inadequate supply.

It is very important that any norms and standards that are introduced enhance rather than undermine the Backyard Rental sub-market. Norms and standards for this sub-market must take into consideration the funding constraints under which this market operates. If the norms and standards are too restrictive it will mean that landlords will not have sufficient funding to provide the housing units and that current tenants will not be able to afford them.

Accordingly given that there is no explicit policy framework for the Backyard Rental sub-market in place and using the currently policy and legislation that exists (as set out in section 1.4.2 above) the following approach is proposed and forms the basis for the norms and standards as set out in this document.

- 1) The norms and standards as specified in this document are of a lower standard than those specified for private sector rental and are based on and expand the Category 1 classification as specified in SANS 10400-0. In this regard:
 - i. It is noted that the physical rental accommodation provided for in these norms and standards is 'fixed' and of a 'permanent' nature and therefore informal dwellings or shacks are not considered to be acceptable habitable accommodation.

- *ii.* The norms and standards focus on ensuring the safety and health of tenants, as well as defining responsibilities of the tenant and landlord.
- 2) Any stand alone backyard unit, in any area, can be designated as a Category 1 building and should comply with the requirements of this classification as indicated in section 1.4.2 (3) above, as well as the norms and standards indicated in this document.
- 3) In addition Municipalities can designate specific areas where Backyard Rental will be supported. Such areas should include:
 - Areas where there is existing backyard rental and the Municipality would like to encourage an improvement in the quality of the rental units, or
 - Well located areas where the Municipality would like to encourage the development of backyard rental stock.

In designating such areas municipalities should take into consideration the following:

- The bulk services in the area either have sufficient capacity to accommodate the increased density or the municipality increases capacity to meet the increased density.
- The area is sufficiently well located so as to provide affordable access to economic opportunities, access to public transport and education, health and social facilities or where additional facilities can be viably provided to meet increased demand.

In these designated areas Municipalities are encouraged to enable Landlords to comply over time with the norms and standards as specified in this document through consideration of the provision of the following support mechanisms:

- i. Clear and simple set of requirements: Municipalities should specify in respect of an area designated for Backyard Rental units, clear and simple requirements that can be accessed by existing property owners, who are or wish to become landlords of Backyard Rental units. This should clearly state the rules and translate them into site and building plans that can be easily applied (see point iii below).
- ii. Simplified planning approval: This should include a simplified planning approval process that enables home owners to submit either existing buildings for planning approval (without being penalised) or new plans for approval. The process should be within a reduced time frame and cost than the current planning approval process.
- *iii.* **Backyard rental plans free of charge:** The municipality should make available plans for backyard units in compliance with these norms and standards, free of charge to home owners in the designated area.
- iv. Additional service connections to the backyard unit/s: The municipality should make

available at a reduced cost or at no cost, additional service connections to the backyard units in the designated areas. National government should consider a funding window or section of the Housing Code that provides municipalities with a grant per service connection to existing designated densification areas. This grant should include a contribution to increasing bulk services capacity.

- v. Dedicated support capacity: The municipality should make available dedicated capacity to inspect units and regulate compliance to the norms and standards. This should be on the basis of supporting, encouraging and enabling home owners to comply, rather than penalising or charging a monetary or other fine for noncompliance.
- vi. Creating an enabling and support sector: The municipality should encourage and invite non- governmental and private sector entities that would support homeowners to upgrade or build backyard rental units, to offer their services in the designated areas. This could include finance entities that offer loan finance, building material suppliers, draftspersonsetc.
- 4) It is acknowledged that a significant portion of the current Backyard Rental accommodation that currently exists is unlikely to meet the norms and standards as specified in this document. Municipalities are strongly encouraged not to enforce the norms and standards in a manner that will undermine the Backyard Rental sub-markets that already exist in their areas, but rather to designate areas as indicated in 3) above and encourage the upgrading of the stock over time.

11.2. Structure of the norms and standards

The norms and standards are structured in a hierarchy, starting at the site and contextual framework level and working through to the detailed requirements of the unit. Four levels are provided for:

- Level 1: The Property and Utilities
- Level 2: The Building and Amenities
- Level 3: The Building Environment : Occupational Health and Safety
- Level 4: Tenant Landlord Obligations: Maintenance and the Lease Agreement

The norms and standards are set out in a table that includes the following:

- Overarching item: This term refers to specific thematic elements within the levels defined. (For example, the overall context of a development).
- **Sub-item:** This element refers to a specific area of focus within themes and provides more detail on particular components of overarching items.
- Principles: These are the high-level key outcomes desired by the particular sub-item.
 - Guidelines: Applicable good practice on a particular topic informed by knowledge, understanding and experience of practitioners in the field and their professional

advisors. This is an explanation of how the general principles are to be achieved.

• Norm and standard: This is the compliance levels that must be achieved.

11.3. Norms and Standards

The below sections provide detail on both overarching and sub-items of relevance to Norms and Standards of Backyard Rental Housing.

11.3.1.Level 1: The property and utilities

Overarching Item	Overarching Item 1.1 Property Rights and Designated Uses	
Sub-Item	1.1.1 Location and Residential Use Rights	REFERENCE TO ACTS AND LEGISLATION
Principles	Backyard Rentals are defined as subsidiary units to the main dwelling unit. Backyard Rental for the purposes of these norms and standards is restricted to units classified as a Category 1 unit (and meet the requirements of this classification) or must be located in a designated area defined by the Municipality. Backyard Rental units must be on properties that have residential zoning within the relevant land use scheme and in areas where provision has been made in the LUMS for backyard rental or have been granted residential specific consent use by the municipality.	There is precedent for Municipalities to declare designated areas. This can be undertaken either through: - the Land Use Management Scheme of a Municipality, or - could be enabled through national policy
	All other Backyard Rental not provided for as above must comply with the norms and standards specified for Private Sector Rental (see separate document).	
Guidelines	The municipality must encourage densification and the Category 1 classification, N/a as well as designate areas for Backyard Rental units.	N/a
Norm and Standard	The property on which the Backyard Rental unit is located must have residential N/a zoning and/or residential use rights in terms of the municipal by-laws.	N/a

Overarching Item	1.1 Property Rights and Designated Uses	
Sub-Item	1.1.2 Classification and Designation of Occupancy / Definition of Subsidiary Dwelling Units	REFERENCE TO ACTS AND LEGISLATION
Principles	Buildings used for Private Sector Rentals are to be habitable .	H3 – Domestic residence. Occupancy consisting of two or more dwelling units on a single site. NBR A20 table 1
Guidelines	Designation of Occupancy: As a guideline, Private Sector Residential Rental Units would be classified and designated as "residential" with either an occupancy of H3 or H4 as detailed in The National Building Regulations- Part A20-Table 1. This categorises the full spectrum of residence and occupancy that apply to various building typologies, from single stand alone/detached units to multi-storey attached units.	H4 - Dwelling house - Occupancy consisting of a dwelling unit on its own site, including a garage and other domestic outbuilding, if any. NBR A20 table 1 This classification shall reflect the primary function of such building, provided that, in any building divided into two or more areas not having the same primary function, the occupancy of each such area shall be separately classified. NBR - A20/1
	Backyard Rental units are considered as subsidiary dwelling units to a primary dwelling unit on an Erf. This includes 2 and 3 storey developments.	Notwithstanding the requirements of the above, any area in any building which is used for any purpose ancillary to that of any occupancy classification contemplated in above shall, subject to adequate facilities
Norm and Standard	The Residential Rental Facility shall be classified and designated as "residential" with an occupancy of H3 or H4 as detailed in the National Building Regulations-PART A20-Table1.	and safety measures being provided, not be classified as a separate occupancy. NBR - A20/2. No person shall use any building or cause or permit any building to be used for a purpose other than the purpose shown on the approved plans of such
	The rental buildings shall comply with the primary function and ancillary uses as detailed in NBR $-$ PART A20 $/$ 1-2.	building, or for a purpose which causes a change in the class of occupancy as contemplated in these regulations, whether such plans were approved in terms of the Act or in terms of any law in force at any time before the
	The use and purpose of the residential rental building shall be used as detailed in NBR – PART A25.	date of commencement of the Act, unless such building is suitable, having regard to the requirements of these regulations, for such first-mentioned purpose or for such changed class of occupancy. NBR A25/1.
	Subsidiary dwelling units may be attached to or detached from the main dwelling house but may not be interconnected. A subsidiary dwelling unit may consist of interconnected rooms or stand-alone rooms and may be self-contained or share	The Rental Housing Amendment Act, 2014 has a definition for 'habitable' but where it is quite broad and can be interpreted in many different ways. Thus the suggested norm is per that of the NBR which gives measurable detail to components that make up 'habitability'- such as

п	г	١

Overarching Item	Overarching Item 1.1 Property Rights and Designated Uses	
ub-Item	1.1.2 Classification and Designation of Occupancy / Definition of Subsidiary Dwelling Units	REFERENCE TO ACTS AND LEGISLATION
	The individual rooms within the subsidiary dwelling should not exceed the area of the primary dwelling.	health, safety, privacy, comfort and as further detailed in the items to follow.
	The total coverage of both the main dwelling and the subsidiary dwelling units should not exceed 70% of the total property unless otherwise allowed by municipal zoning.	

Overarching Item 1.2 Services/Utilities ³⁸	Sub-Item 1.2.1 Availability of Bulk Services REFERENCE TO ACTS AND LEGISLATION	Principles Building density must be supported by adequate availability of Bulk Services. Bulk Services or External Services are the responsibility of the Local Municipality to provide and include water reservoirs and distribution networks, sewerage treatment works, refuse landfill sites and main roads and storm water.	Guidelines Municipalities must estimate the anticipated increased density as a result of zoning an area for Backyard Rental and must then ensure that there is sufficient bulk capacity to service the expected increased density.	Norm and An area can only be declared a special designated area for Backyard Rental if the municipality has determined that there is adequate bulk services to meet the increased density.
	LEGISLATION	ion in respect of water, sanitation, wernwater and electricity.		

Overarching Item	1.2 Services/Utilities	
Sub-Item	1.2.2 Sanitation and disposal of sewerage	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable: Access to basic services: Residential accommodation is such that residents are not exposed to contamination and disease due to the ongoing presence of untreated sewerage or dirty water.	(1) (a) Where in respect of any building a suitable means of disposal of water-
Guidelines	All ablution and washing facilities will be provided with a suitable means of sewer and drainage disposal. The building owner shall ensure that the drainage and sewerage system is operational and functioning properly.	borne sewage is available the owner of such building shall provide a drainage installation. (b) Where there is no such means of disposal, sewage shall be disposed of in accordance with Part Q of these regulations.
Norms and Standards	Every residential rental building shall be provided with a suitable drainage system which complies with NBR – Sans 10400 - Part P The design of the drainage system to a building shall comply with NBR – SANS 10400 Part P2. Where there is no such means of water borne sanitary disposal, other means of disposal shall be permitted by the Local authority provided it complies with NBR – SANS 10400 Part Q	 (a) Where a sewer is or becomes available for the drainage of such building the owner of such building shall, at his own cost, lay, alter or extend any drain serving such building to terminate at a location and level as prescribed by the local authority for the connection to such sewer. P2 DESIGN OF DRAINAGE INSTALLATIONS (1) Any drainage installation in any building shall be so designed and constructed that— (a) an adequate number of sanitary fixtures is provided in relation to the population and class of occupancy of such building; (b) such installation is capable of carrying the design hydraulicload; (c) such installation is capable of discharging into any common drain, connecting sewer or sewer provided to accept such discharge; (d) all components and materials used in such installation are watertight; (e) no nuisance or danger to health will be caused as a result of the operation of any such installation; (f) any drain in such system is of such strength, having regard to the manner in which it is bedded or supported, that it is capable of sustaining the actions
		to which it may normally be subjected and that it is, where necessary, protected against any drainage;

Where water-borne sewage disposal is not available other means of sewage No narcon chall conctruct any nit toilat without the narmiccion of the local wastewater in such a way that the pathogens, pollutants and contaminants associated therewith do not compromise the health and safety of the original (a) it stores, conveys, processes and disposes of human body wastes and (b) in the case of chemical or toilet a satisfactory means is available for the PART Q - NON-WATER-BORNE MEANS OF SANITARY DISPOSAL Q1 disposal shall be permitted by the local authority: Provided that: removal and disposal of sewage from such closets; **MEANS OF DISPOSAL** user or others; and Q2 PERMISSION

315

	REFERENCE TO ACTS AND LEGISLATION	Refer to SANS10142		
1.2 Services/Utilities	1.2.3 Provision of Services : Electricity	Habitable – safety perspective: Residential accommodation such that occupants are not exposed to dangerous electrical installation and consequential electrocution.	Any electrical installation to the property and building (dwellings) is to be done by a certified competent electrician and in accordance with the provisions of SANS10142. This also applies to alternative power sources, such as PV panels and generators (clauses 5.7.4 and 7.12)	Any electrical supply and installation are to comply with SANS10142 and any applicable municipal by-laws. Each habitable room should have at least a light point and a plug point.

Norms and Standards

Sub-Item

Principles

Guidelines

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.4 Provision of Services : Water	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – access to basic services: Residential accommodation such that residents are not exposed to contamination and disease due to the lack of potable water for drinking, washing and cleaning.	4.1 Hot water supply 4.1.1 In order to comply with functional regulation XA2, contained in part XA of the National Building Regulations, the following guidance is provided:
Guidelines	Potable water supply must be available to all subsidiary units. The building owner to ensure that all plumbing in regard to water supply is by if solar water heating systems are used, these shall comply with SANS 10106, SANS 10254 and SANS 10252-1. 1307, SANS 10106, SANS 10254 and SANS 10252-1.	a) the volunte of the affilial average not water freating requirements shall be calculated in accordance with tables 2 and 5 of SANS 10252-1:2004; and b) if solar water heating systems are used, these shall comply with SANS 1307, SANS 10106, SANS 10254 and SANS 10252-1.
Norms and Standards	Potable water to be available to each accommodation unit and if accommodation is in a proclaimed township, in accordance with the applicable municipal by-laws. Self-contained units should have their own water supply to ablutions and sinks Rooms must have access to a water point within a communal ablution facility. If hot water is also provided, it is to be in accordance with NBR - SA NS10400 PART XA	with SANS 10252-1 and SANS 10254. 4.1.3 All hot water service pipes shall be clad with insulation with a minimum R-value in accordance with table 1. 4.1.4 Thermal insulation, if any, shall be installed in accordance with the manufacturer's instructions.

Overarching Item	Overarching Item 1.2 Services/Utilities	
Sub-Item	1.2.5 Refuse Disposal	REFERENCE TO ACTS AND LEGISLATION
Principles	Habitable – health perspective: residential accommodation is such that residents are not exposed to contamination and disease due to the buildup of refuse.	NBR - U1 PROVISION OF STORAGE AREAS Any building, excluding a dwelling house, in which refuse is or will be generated shall be provided with an adequate storage area for refuse containers.
Guidelines	All units should have access to a refuse bin which is cleared and cleaned at regular intervals.	NBR - U2 ACCESS TO STORAGE AREAS The location of any area contemplated in regulation U1 shall be such that access thereto from any street for the purpose of removing the refuse, is to the satisfaction of the local authority.
Norms and Standards	Any building, excluding a dwelling house, shall be provided with refuse facilities as stipulated in NBR – PART U1.	

11.3.2.Level 2: The building and amenities

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.1 Building Standards	REFERENCE TO ACTS AND LEGISLATION
Principles	The constitution states that everybody has a right to "an environment that is not harmful to their health or wellbeing. Rental Accommodation must be designed to attain the requirements associated with habitability – acceptable safety, protection from the elements and undue health hazards, privacy and comfort.	See Category 1 classification as specified in SANS 10400-0.
Guidelines	The external envelope of the building must not allow the penetration of rainwater or another surface water into its interior. The building must be lockable and secure.	
Norms and Standards	Backyard rental units may be designated as 'Category 1' buildings in terms of the application of SANS10400-0. If a backyard rental unit would like to be designated as a 'Category 1' building but would like to exceed 1 storey in height then an engineer's certificate for foundations and walls must be provided. Where building plans have been submitted to a local authority, an Occupation Certificate should be obtained on completion of construction.	

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.2 Building Design : Structural Design	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes for habitability, any building and any structural element or component should be designed and built to provide strength, stability, serviceability and durability under all foreseen actions which can reasonably be expected to occur. In terms of the erection of a building for rental purposes, a rational design is required undertaken by a suitably qualified person.	As for 2.1.1 above. In addition: A19 APPOINTMENT OF PERSONS RESPONSIBLE FOR DESIGN, INSPECTION AND ASSESSMENT DUTIES (1) Wherein terms of these regulations and in respect of the erection of any building: (a) a rational design or rational assessment, is required in terms of:
Guidelines	Buildings shall be designed to be structurally sound. Any structural elements within a building shall be designed and materials sourced and specified in terms of NBR Part A4 and A13.	(i) regulations 24(1)(9)(1), 71(5), 72(4), 51(5), 52, 72(5), 53, 7(7), 71(2), W4 in respect of a system, measure, facility, parameter, or installation, as relevant, or (ii) a part of SANS 10400; or (b) a geotechnical investigation is required in terms of regulation F3, the owner of the building shall subject to the provisions of sub-regulations(4)
Norms and Standards	Structural Design shall be designed by a suitably qualified person (NBR SANS 10400 Part A19) which design shall comply with NBR — Sans 10400 Part B or can use plans provided by a municipality in respect of areas designated for Backyard Rental Any designs and materials utilised within a building shall comply with NBR SANS 10400 Part A4 and Part A14.	and (5) appoint and retain one or more approved competent persons to undertake responsibility for the work associated with such regulations including any inspections and certifications that may be required. A13 BUILDING MATERIALS AND TESTS (1) (a) Material used in the erection of a building shall be suitable forthe purpose for which it is to be used. (b) All timber used in the erection of a building shall be treated against termite and wood horer attack and fungal decay in accordance with the

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.2 Building Orientation: Solar Heat Gain and Shading	REFERENCE TO ACTS AND LEGISLATION
Principles	Buildings shall be orientated to optimise occupiers thermal comfort levels. Thermal comfort is a means of describing occupant comfort levels taking into account a series of factors such as air temperature, radiant temperature, humidity, draughts, clothing value and activity rates.	SANS 10400 XA 4.2.1b) - in any building of occupancy classified in terms of Regulation A20 as A1, A2, A3, A4, C1, C2, E1, E2, E3, E4, F1, F2, F3, G1, H1, H2, H3, H4, and H5, the orientation and shading are in accordance with the requirements of SANS 204 or Appropriate orientation of buildings optimises sun penetration, solar heat gain and
Guidelines	Buildings should where possible be orientated in accordance with SANS 10400 XA The majority of buildings should face north (where other weather or existing site constraints. The majority of buildings should face north (where other weather or existing site constraints). SANS 10400 XA 4.4.1.1 Good practice: Roof overhangs shall be in accordance with SANS – 10400 XA.	shading. SANS 10400 XA 4.2 The majority of buildings should face north (where other weather or topography conditions do not supersede the solar gain). SANS 10400 XA 4.4.1.1 Living spaces should be arranged so that the rooms where people spend
Norms and Standards	None	Uninhabited rooms, such as bathrooms and storerooms, can be used to screen unwanted western sun or to prevent heat loss on the southfacing facades. SANS 10400 XA4.4.1.1 Living rooms should ideally be placed on the northern side. Living rooms should ideally be placed on the northern side. The longer axis of the dwelling should be orientated so that it runs as near east/west as possible. SANS 10400 XA4.4.1.1 The roof overhang to the northern wall shall be sufficient to shade the windows from midday summer sunshine in accordance with SANS 204. Windows facing east and west should be limited in number and confined to the minimum required for daylight and ventilation. SANS 10400 XA 4.4.1.2.

CONTINUES ON PAGE 386 OF BOOK 4

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001 Contact Centre Tel: 012-748 6200. eMail: info.egazette@gpw.gov.za Publications: Tel: (012) 748 6053, 748 6061, 748 6065



Vol. 691

20

January **Januarie**

2023

No. 47883

PART 4 OF 4

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes



AIDS HELPLINE: 0800-0123-22 Prevention is the cure

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.3 Foundations & Floors	REFERENCE TO ACTS AND LEGISLATION
Principles	Dwellings are required to have adequately designed and constructed PARTH: FOUNDATIONS foundations to ensure structural stability of the unit. Reference should be material stability of the stable of the single stores dwelling the stores dwelling the starts of the stable stores dwelling the stores dwelli	PART H: FOUNDATIONS Reference should be made to Annex A in relation to design of foundations for single storey dwellings.
Guidelines	Foundations to be designed and constructed in relation to the founding conditions requiring some assessment of the soil conditions and geotechnical conditions of the location. Particular care must be taken in areas developed on dolomite land. Dwelling Units constructed from alternate building technologies or prefabricated buildings must have suitable foundations / footings or surface beds appropriate to the design materiality and loading of the unit. The floor of a dwelling unit must be designed and constructed to support its own weight and the functional use of the unit, it must be adequately constructed to prevent moisture ingress into the unit. All floors of bathrooms and kitchens must be water resistant or have a suitable floor covering to prevent water ingress and damage.	PART J: FLOORS Any floor of any building shall — (a) be designed and constructed to safely support its own weight and any actions which can reasonably be expected to occur and in such a manner that any local damage (including cracking), deformation or vibration do not compromise the efficient use of the building or the functioning of equipment supported by such floor, and (b) have a fire resistance appropriate to its use and where required, be non-combustible. (2) The floor of any laundry, kitchen, shower-room, bathroom orroom containing a toilet pan or urinal shall be water-resistant.
Norms and Standards	Foundations to comply with SANS 10400 Part H and SANS200-CM2	adequate under-floor ventilation. (4) Where any concrete floor slab is supported on ground or filling, such floor shall be so constructed that any moisture present in such ground or

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.4 Walls	REFERENCE TO ACTS AND LEGISLATION
Principles Guidelines	For the purposes for habitability, any wall within a building shall be designed and constructed to safely sustain any actions which car reasonably be expected to occur. The wall must be constructed to be as energy efficient adequately resist the penetration of water into any part of the building. Walls should be designed and constructed to be as energy efficient and in the case of any structural wall, be capable of safely sustain any actions which can reasonably be expected to occur and in such a manner that any wall should be designed and constructed to be as energy efficient as popening and closing of doors and windows or the weather rightness of the possible. External walls must be designed and constructed to adequately prevent (1) Any wall should have adequate waterproofing; bamp proof courses of penetration of water into any part of the building water penetration. External walls must be designed and constructed to adequately prevent (1) Any wall shall be so constructed that it will adequately resist the penetration of water into any part of the building water penetration. External walls must be designed and constructed to adequately prevent (1) Any wall shall be so constructed that it will adequately resist the penetration of water into any part of the building where it would be penetration of water into any part of the building of such building. External walls must be designed and constructed to adequately prevent (1) Any wall shall be so constructed that it will adequately resist the penetration of water into any part of the building where it would be penetration of water into any part of the building of such building. External walls must be designed and constructed to adequately prevent (1) Any wall shall be copused water in within buildings must provide adequate provision for the fixing of doors and windows or the will wall formation of water into any part of the building of such designs for approval. Construction shall be in accordance with the requirements, and constructed to safely transferrin	re habitability, any wall within a building shall be ructed to safely sustain any actions which can are to cocur. The wall must be constructed to penetration of water into any part of the building such actions with can constructed to be as energy efficient as opening and closing of doors and windows or the weather tightness of the wall and in the case of any structural wall. Be capable of safely transferring such actions to the foundations supporting such wall. **R. WATER PENETRATION** **B. Water and in the case of any structural wall.* **R. WATER PENETRATION** **B. Water and in the case of any structural wall.* **R. WATER PENETRATION** **B. WATER PENETRATION** **A. WATER PENETRATION** **B. WATER PENETRATION** **A. WATER PENETR

The design and construction of all walls must comply with NBR - SANS 10400 manner that will ensure that any actions to which the roof may normally

Norms and Standards

Ĭ		istics	
<u></u>		aracter	
		ance ch	
		resista I.	
	5	nd fire ach wall	
to such		bility a use of su	
mitted		mbusti on and u	
he subjected will be transmitted to such wall	I FIRE	Any wall shall have combustibility and fire resistance characteristics appropriate to the location and use of such wall.	s
at will be	K4 BEHAVIOUR IN FIRE	shall he to the	4.4.3 External walls
subject	BEHAV	/ wall propriat	.3 Exter
9			4.4
	boundar	or detai	
, HON	ith the l	'art⊤(f	
h will	mply wi	10400 F	
ilding	ihall cor	SANS i	
2 ≔	ngs s	.57 of	
ry 1 B	<u> </u>	4	
Category 1 B	ry 1 buildi	ents of 4	
action of all wails fill ed as a Category 1 Bi	Category 1 buildi	quirements of 4	
esignated as a Category 1 Bi	storey Category 1 buildi	ance requirements of 4 !)	
Part Kinless designated as a Category 1 Ruilding	Walls in single-storey Category 1 buildings shall comply with the boundary	and fire-resistance requirements of 4.57 of SANS 10400 Part T (for details see Appendix 2)	

÷	-
	d
С	

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.4 Walls	REFERENCE TO ACTS AND LEGISLATION
		a) climatic zones 1 and 6: 2,2 h) climatic zones 2 3 4 and 5: 1 9
		b) curriance cores z, s, 4 and 3. z, s. 4.4.3.2. The following types of masonry walling comply with the R-value requirements:
		a) double-skin masonry with no cavity, plastered internally, or rendered externally, 39 or
		b) single-leaf masonry walls with a nominal wall thickness greater than or equal to 140 mm (excluding plastering and rendering), plastered internally and rendered externally.
		The requirements refer to the external walls of the habitable portions of the building fabric only.
		4.4.3.3 For masonry walling types not covered in 4.4.3.2, such walls shall achieve a minimum total R-value of 0,35. The total R-value shall be determined by means of a test conducted in accordance with ASTM C 1363, ASTM C 518 or ASTM C 177. Surface film resistance shall be in accordance with SANS 6946.
		4.4.3.4 Other walling requirements shall be in accordance with SANS 10400-K. SANS 10400XA 4.4.3

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.5 Windows, Fenestration and Glazing	REFERENCE TO ACTS AND LEGISLATION
Principles	Window sizes and positions must be designed to allow adequate light and PART N:GLAZING ventilation.	PART N : GLAZING
	Glazing and shall be of correct and adequate specification to ensure reasonable (1) Any material used in the glazing of the g	N1 TYPE AND FIXING OF GLAZING (1) Any material used in the glazing of any building shall be of a secure and durable type and shall be fixed in a manner and position that will ensure that it will—
Guidelines	Backyard rental units with up to 15% fenestration area (window area) to nett (b) not allow penetration of water to the interior of the building; and son area comply with the minimum energy performance requirements of (b) not allow penetration of water to the interior of the building; and SANS10400 Part XA.	nup to 15% fenestration area (window area) to nett (a) safely sustain any wind actions which can reasonably be expected; che minimum energy performance requirements of (b) not allow penetration of water to the interior of the building; and (c) be apparent, in the case of clear glazing, to any person approaching such glazing.
	Buildings with a fenestration area to nett floor area per storey that exceeds 15 % shall comply with the requirements for fenestration in accordance with SANS 204.	PART XA: ENERGY USAGE IN BUILDINGS 4.4.4 Fenestration
	All windows and glazing should be correctly installed to ensure building safety and be properly maintained without any cracked or broken panes of glass.	4.4.1. Buildings with up to 15% fenestration area to nett floor area per storey comply with the minimum energy performance requirements.4.4.2.2 Buildings with a fenestration area to nett floor area per storey that exceeds 15% shall comply with the requirements for fenestration in
Norms and Standards	The placement of windows and glazing must comply with the safety requirements of SANS 10400 Part N	accordance with SANS 204. 4.4.4.3 All fenestration air infiltration shall be in accordance with SANS
	Window frames and glazing should comply with NBR SANS 10400XA.	

Overarching Item	2.1 External Building Envelope	
Sub-Item	2.1.6 Roof Construction / Insulation / Guttering / Waterproofing	REFERENCE TO ACTS AND LEGISLATION
Principles	For the purposes for habitability, the roof of the building shall be designed and constructed to resist any forces and must be durable, waterproof and not allow any water to accumulate on it.	L1 GENERAL REQUIREMENT The roof of any building shall be so constructed that It will - (a) resist any forces to which it is likely to be subjected;
Guidelines	Roofs consisting of the roof structure and roof covering must be designed and constructed to; • be adequately anchored against wind uplift. • Have an adequate pitch in relation to the roof covering so as to not allow the accumulation of water on its surface or hail accumulation to allow water penetration into the interior. • Provide an adequate floor to ceiling height in compliance with SANS 10440 Part C Table 2. • prevent the penetration of rainwater into the interior of the building. • Be capable of being repaired in the event of being damaged Good building practice would include: • Sufficient roof overhangs to protect the wall surfaces from rain penetration and to provide shading • Gutters and paved splashbacks around buildings to manage stormwater run-off. • A ceiling and insulation to provide adequate thermal resistance in compliance with SANS10440 Part XA.	(c) not allow the accumulation of any rainwater upon Its surface; and (d) as part of a roof and ceiling assembly provide adequate height Inany room immediately below such assembly. 1.2 FIRE RESISTANCE AND COMBUSTIBILITY The fire resistance of any roof or roof and ceiling assembly complete with light fittings or any other component which penetrates the ceiling, shall be appropriate to Its use and where necessary such roof or roof and ceiling assembly shall be non-combustible. 4.4.5 Roof assemblies 4.4.5.1 A roof assembly shall achieve the minimum total <i>R</i> -value specified in table 7 for the direction of heat flow. 4.5.2 A roof assembly that has metal sheet roofing fixed to metal purlins, metal rafters or metal battens shall have a thermal break consisting of a material with an <i>R</i> -value of not less than 0,2 installed between the metal sheet roofing and its supporting member. SANS 10400XA 4.4.5.2 4.4.5.3 Metal sheeting types of roofing assembly construction shall achieve the minimum total <i>R</i> -value in accordance with 4.4.5.1, with the installation of insulation that has an <i>R</i> -value as specified in table 8 of SANS 10400XA

z.	
"	١

Overarching Item	Overarching Item 2.1 External Building Envelope	
Sub-Item	2.1.6 Roof Construction / Insulation / Guttering / Waterproofing	REFERENCE TO ACTS AND LEGISLATION
Norms and Standards	The design and construction of the building's roof shall comply with the regulations as detailed in SANS 10400 – Part L as relevant to Category 1 buildings.	4.4.5.3 The roof overhang to the northern wall shall be sufficient to shade the windows from midday summer sunshine in accordance with SANS 204.

	2.2 Unit Design and Occupancy	
Sub-Item 2	2.2.1 Unit Size, dimensions, heights and areas	REFERENCE TO ACTS AND LEGISLATION
Principles A el	All buildings and rooms should be fit for purpose as a rental unit to allow tenants to enjoy privacy in a secure and safe environment. Floor area of a home must be habitable and building not a threat to public safety.	C1 ROOMS AND BUILDINGS (1) Any room or space shall have dimensions that will ensure that such room or space is fit for the purpose for which it is intended.
Guidelines S. A A h	 SANS 10400 Part C prescribes the following: Minimum floor to underside of ceiling, or roof covering or underside of structural element: Minimum heights in bedrooms and other habitable rooms = 2.4m Passages entrance halls, bathrooms shower and mezzanine = 2.1m Minimum room size of 6sqm (provided min wall length is 2m and no builtin cupboards) and assuming an occupancy of 2 people. A subsidiary dwelling unit may be attached to or detached from the main dwelling house but in the former instance may not be interconnected; A subsidiary dwelling unit may consist of interconnected rooms or unconnected rooms. The unconnected rooms. The unit may be rented or may share communal ablution and/or kitchen facilities. In an interconnected subsidiary dwelling unit, the unit may be rented out to a household or single bedrooms may be rented to individual persons. In an unconnected subsidiary unit, rentable rooms, the minimum size of a habitable space shall not be less than 9m², excluding ablutions and kitchens, or 6m² per person for more than one person.⁴⁰ Rentable rooms may be self-contained (including ablutions and kitchens) provided that the room may not exceed 35m². 	e of ceiling, or roof covering or underside of structural necessary to provide one habitable room and a separate room nederooms and other habitable rooms = 2.4m halls, bathrooms shower and mezanine = 2.4m halls, bathrooms shower and mezanine = 2.4m halls, bathrooms shower and mezanine = 2.4m and no built- assuming an occupancy of 2 people. Bassuming an occupancy of 2 people. Basuming and a separate room and a separate room and welling to period of a people. Basuming and a separate room and a separate room and welling unit the unit may be rented out individual persons. Basidiary dwelling unit, the unit may be rented out individual persons. Basidiary dwelling unit, the unit may be rented out individual persons. Basidiary dwelling unit, the unit may be rented out individual persons. Basidiary dwelling unit, the unit may be rented or individual persons. Basidiary dwelling unit the unit may be rented or individual persons. Basidiary dwelling unit the unit may be rented or individual persons. Basidiary dwelling unit shift have a person and well of the less than any experted to individual a

Overarching Item	Overarching Item 2.2 Unit Design and Occupancy	
Sub-Item	2.2.1 Unit Size, dimensions, heights and areas	REFERENCE TO ACTS AND LEGISLATION
Norms and Standards	All buildings and rooms shall comply with dimensions and areas as stipulated in SANS 10400 – PART C	

Overarching Item	2.2 Unit Design and Occupancy	
Sub-Item	2.2.2 Unit Occupancy	REFERENCE TO ACTS AND LEGISLATION
Principles	Occupancy of any unit is subject to firstly, the unit design and intended number of occupants and secondly, to the level of desired comfort and privacy by the occupants.	A21 POPULATION (1) The population of any room or storey or portion thereof shall be taken as the actual population of such room, storey or portion thereof where such
Guidelines	The maximum occupancy on a permanent basis, for rental units with an occupancy of H3 and H4 shall be limited to 2 persons per bedroom.	on a permanent basis, for rental units with an population is known or, where such population is not known, the population II be limited to 2 persons per bedroom.
Norms and Standards	Occupancy of any rental building shall be limited as detailed in SANS 10400 Part A21 Table 2.	Crass of Occupanty of room of storey of polition dielectrical for E., E.S., N.L., N.S., H.A 2 persons per bedroom

Overarching Item	2.2 Unit Design and Occupancy	
Sub-Item	2.2.3 Common Areas	REFERENCE TO ACTS AND LEGISLATION
Principles	Subsidiary dwelling units consisting of rooms only require communal shared SANS Part A : Table 5 amenities	SANS Part A : Table 5
Guidelines	The following shared amenities must be provided: Bathrooms / Ablution Facilities	
	 Access to a wash trough or sink for laundry 	
	 Access to a sink for food preparation and washing of dishes. 	
	 Access to an outdoor yard area 	
	 Access to an area suitable for hanging laundry for drying 	
	Bathrooms / Ablution Facilities	
	Shared Ablutions must be provided in sufficient numbers in relation to the number of rooms sharing the bathrooms.	
	Consideration should be given to having separate toilet and washing (shower/basin) facilities.	
	Consideration should be given to privacy of bathroom facilities Bathrooms should be secure and able to be locked internally during use	
Norms and		
Stalidards	to potable water and utaliage arrangements.	

 $11.3.3. Level\ 3.\ The\ Building\ Environment:\ Occupational\ Health\ \&\ Safety$

Sub-Item Principles Guidelines	3.1.The Building Environment: Occupational Health and Safety 3.1.1 Fire and smoke safety, equipment and means of escape. For the purposes of habitability and safety, residential rental buildings shall be designed and built to withstand smoke and fire and be provided with the necessary fire-fighting equipment and signage. Buildings shall be designed to facilitate the safe evacuation of occupants. Adequate fire detection equipment and firefighting equipment shall be provided within a building. Adequate statutory fire signage shall be provided.	SANS 10400 PART T Notwithstanding the General Requirements contained in Part T1 single storey category 1 buildings for H3 and H4 Classifications shall be designed in accordance with the requirements of Item 4.57 Single-storey category 1 buildings for H3 and H4 occupancies
Norms and Standards	All buildings used for residential rental purposes excluding single residential units shall be designed and constructed to comply with the fire regulations as stated in 4.57 of SANS 10400 Part T (for details see Appendix 2) Dwelling Units with subsidiary units therefore require additional compliance in relation to fire resistance of materials, separating walls, external escape doors into a yard area and simple fire-fighting equipment such as fire extinguishers located in a common area or adjacent any area where cooking takes place.	

Sub-Item Sub-Item Principles Guidelines Norms and Standards	3.1.2 Lighting from areas and units is essential for safety and security. Lighting accounts for a significant proportion of total energy use in residential buildings. Consideration should be given to using energy efficient light fittings where economically feasible as this saves on long term operational and maintenance expenses with bulb replacement costs. Common Areas: The yard area should have lighting for residents' safety and security. This should be located in relation to amenities such as common area and ablution s: should have internal lighting. Lighting decounts for a significant proportion of total energy use in residential at 2.1.1 Where, for the purposes of natural lighting, a room is provided with connection in the roof of the building, and shall be extend in an excendance with the requirements of 4.2.1.2. Where such opening is glazed, it shall be glazed with transparent or security. This should be located in relation to amenities such as common area should have internal lighting. Common Areas: Ablutions: should have internal lighting. Lighting fitting. A.2.1.1 Where, for the purposes of natural lighting, a room is provided with equal or more openings, sall be situated in an equirements on more opening. Such opening or more opening or more openings, and shall be glazed with transparent or or more opening. A.2.1.1.2 Where such opening is glazed, it shall be glazed with transparent or or some or more opening, and shall be glazed with transparent or or more opening, so the total area of such opening. Common Areas: Ablutions: should have internal lighting the provided translucent glazing bars, shall be not essent or cling/soffit mounted light. Each room should have an occupancy class of F2, H3 or H4; and the provided translucent or cling/soffit mounted light are an occupancy class of F2, H3 or H4; and the provided translucent or provided with transpect of category 1 buildings that	nent: Occupational Health and Safety REFERENCE TO ACTS AND LEGISLATION and units is essential for safety and security. SANS 10400 PART O: LIGHTING & VENTILATION 4.2.1.1 Where, for the purposes of natural lighting, a room is provided with sis as es on long term operational and maintenance external wall, or in a suitable position in the roof of the building, and shall be provided with a zone of space outside it in accordance with the requirements of 4.2.1.2. area should have lighting for residents' safety and external wall, or in a suitable position in the roof of the building, and shall be provided with a zone of space outside it in accordance with the requirements of 4.2.1.2. 4.2.1.1.2 Where such opening is glazed, it shall be glazed with transparent or approved translucent glazing material, in accordance with the requirements of SANS 10400-N. 4.2.1.1.3 The area of such opening, or the total area of such openings, inclusive of frames and glazing bars, shall be not less than an inclusive of frames and glazing bars, shall be situated in an external lighting. 4.2.1.1.2 Where such opening is glazed, it shall be glazed with transparent or approved translucent glazing material, in accordance with the requirements of SANS 10400-N. 4.2.1.3 The area of such opening, or the total area of such openings, inclusive of frames and glazing bars, shall be not less than all the part of category 1 buildings that have an occupancy class of F2, H3 or H4; and
		b) 10 % of the floor area of the room(s) in respect of other buildings, or 0,2 m2, whichever is the greater.
		NOTE The requirements of 4.2.1 do not apply to ventilated improved pit toilets.

Overarching Item	3.1 The Building Environment: Occupational Health and Safety	
Sub-Item	3.1.2 Ventilation	REFERENCE TO ACTS AND LEGISLATION
Principles	Adequate ventilation and airflow in buildings reduced indoor temperatures and prevents to build up of indoor pollutants and moisture build up.	SANS 10400 PART O: LIGHTING & VENTILATION 4.3 Ventilation
Guidelines	Rooms should have adequately sized windows and opening sections to allow natural lighting and ventilation. If possible windows should be placed in adjacent or opposite walls to allow for cross ventilation.	4.3.1. Natural ventilation 4.3.1.1 General 4.3.1.1.1. Where, for the purposes of natural ventilation, a room is provided with an opening or openings,
Norms and Standards	All habitable rooms and ablution facilities shall be provided with a window a joint position of such opening or opening or opening in relation to the floor area of the room to allow adequate light and internal doors to such room shall be such as to enable such room to be ventilated, and The area of the room to allow adequate light and internal doors to such room shall be such as to enable such room to be ventilated, and The area of the opening shall not be less that 5% of the floor area of the room or 0.1 m2 in respect of category 1 buildings that have an Occupancy class of H3, H4. 4.3.1.1.2 Every such opening shall be either a) an opening or door in an external wall, or b) an opening or door in an external wall or in a suitable position in the roof, or c) an opening in the ceiling or at the top of an internal wall, connected directly to a vertical ventilating flue. 4.3.1.1.3 The total area of an opening, a door or an openable glazed window that room in the room of that room in the room of the that room in the room of the that room in the room of the room of the that room in the room of t	a) the position of such opening or openings in relation to each other and to internal doors to such room shall be such as to enable such room to be ventilated, and b) the arrangement and sizes of such openings in a garage shall be such that the quantity of noxious fumes or gases in such garage does not exceed a safe limit. 4.3.1.1.2 Every such opening shall be either a) an opening or door in an external wall, or b) an openable glazed window in an external wall or in a suitable position in the roof, or c) an opening in the ceiling or at the top of an internal wall, connected directly to a vertical ventilating flue. 4.3.1.1.3 The total area of an opening, a door or an openable glazed window that complise with the road integration.
		5% of the floor area of the room, or a first have an occupancy class of by main borney class of all 0,1 m2 in respect of category 1 buildings that have an occupancy class of

11.3.4.Level 4: Tenant – Landlord Obligations: Maintenance & Lease Agreement

Overarching Item	4.1 Tenant – Landlord Obligations: Rental terms and conditions	
Sub-Item	4.1.1 Lease agreement	REFERENCE TO ACTS AND LEGISLATION
Principles	A mutually rewarding relationship between landlord and tenant.	Rental Housing Act, Act 50 of 1999, Chapter 3, Clause 6 Rental Housing Amendment Act, Act 35 of 2014, Section 8
guidelines	The lease is a record of what has been agreed and 'governs' the relationship between the landlord and tenant. It is acknowledged that generally lease agreements between landlords and tenants are encouraged to sign a written lease agreement which should cover the following: • The names of the tenant and the landlord and their addresses • A description of the unit being rented • The rental amount to be paid, how often it will be paid and how it is increased and paid. • The deposit amount and when and how it is repaid when the lease is terminated • The period over which the Landlord agrees to rent the unit and how the period can be extended • How services such as water and electricity will be paid for • How maintenance will be undertaken • How maintenance will be undertaken • Responsibilities of the landlord and tenant A draft lease agreement is attached as Appendix 3. Should a verbal agreement be in place between a landlord and tenant and there is a dispute then Non-Statutory Law (Common Law) requirements will apply.	

	REFERENCE TO ACTS AND LEGISLATION	
Overarching Item 4.1 Tenant – Landlord Obligations: Rental terms and conditions	4.1.1 Lease agreement	The lease agreement is to be in writing and signed by both parties.
Overarching Item	Sub-Item	Norms and Standards

Overarching Item	4.2 Tenant – Landlord Obligations: Maintenance	
Sub-Item	4.2.1 Maintenance and Operations	REFERENCE TO ACTS AND LEGISLATION
Principles	All property and building components and installations which require maintenance to render the accommodation functional and habitable are to be maintained in a safe and proper manner.	A15 MAINTENANCE AND OPERATION (1) (a) The owner of any building shall ensure that any mechanical equipment, facility or any service installation provided in or in connection with such building, oursuant to these regulations or pursuant to any building.
Guidelines	The owner of a building is obligated to ensure that the property, building and all equipment is operational and fit for purpose. The owner of a building is obligated to ensure that the structural safety and	bylaw which was in operation prior to the coming into operation of the Act, shall be maintained in a safe and functional condition. (b) Such owner or any person appointed by such owner to be in control of
	Such building shall ensure that all measures are undertaken to resist is designed to be kept operating during the times of normal occupancy of the penetration of rainwater and passage of moisture into the interior of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in these regulations or in any by- law for such equipment or installation.	such building shall ensure that where such equipment, Taclinty or installation is designed to be kept operating during the times of normal occupancy of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in these regulations or in any by- law for such equipment or installation.

Norms & Standards	Morms & Standards The maintenance and operation of all parts in the building shall be maintained by the owner in terms of the SANS 10400 – Part A15. The owner of a building shall ensure maintenance of the relevant functional regulations contained in the NBR SANS 10400 Parts B, H, J, K and L: The maintenance and operation of a purishing shall pursuant to the coming into operation of the Act, the following is maintained in regulations accordance with the requirements of the relevant functional regulations contained in the NBR SANS 10400 Parts B, H, J, K and L: The owner of a building shall ensure maintenance of the relevant functional regulations contained in the NBR SANS 10400 Parts B, H, J, K and L: Contained in Regulations S, H, J, K and L:	(2) The owner of any building shall ensure that pursuant to these regulations or pursuant to any building by-law that was in operation prior to the coming into operation of the Act, the following is maintained in accordance with the requirements of the relevant functional regulations contained in Regulations B, H, J, K and L:
		(a) the structural safety performance (behaviour of buildings under all actions that can be reasonably expected to occur);(b) the measures taken to resist the penetration of rainwater and the passage of moisture into the interior of a building.

11.4. Appendix 1: SANS 10400 – 0: Difference in performance of Category 1 developments and other developments.

Clause 3.6 note 2: A building may be classified as a category 1 building for the purposes of one or more parts of SANS 10400. Additional limitations may accordingly be imposed on category 1 buildings. For example, a category 1 building in terms of SANS 10400-T (Fire protection) will be restricted to a single storey.

Table 1: Differences in performance between category 1 buildings and other buildings

Technical aspect	Differences between user performance levels	
Size and type of building	Category 1 buildings are restricted to those which have no basements, have floor areas of less than 80 m ² , and have a maximum length of 6,0 m between intersecting walls or members providing lateral support.	
Maintenance cycles	Category 1 buildings might require more frequent maintenance.	
Earthquakes	Not applicable.	
Windstorms	Not applicable.	
Deflection and deviation from the horizontal and vertical	Deflections and deviation from the horizontal and vertical are greater in category 1 buildings than those associated with non-category 1 buildings and might be visible/noticeable to a trained eye, although structural performance and safety is not impaired.	
Expected damage in walls and floors	The degree of expected damage will generally be greater in category 1 buildings; such damage will nevertheless be of a minor nature and be repairable during the course of normal redecoration.	
Behaviour in fire	Restrictions will be placed on the size and layout of the building in category 1 buildings.	
Severe condensation and consequential mold growth	No prohibition is placed on the use of category 1 buildings with poor thermal performance in areas with high winter rainfall and humidity such as the Southern Cape Condensation Problem Area, provided that it can be demonstrated that the building is upgradable to a non- category 1 building without having to rebuild the structure.	
Attack by biological agents	Not applicable.	
Rising damp	Not applicable.	
Resistance of walls and roofs to rain penetration	Minor ingress might be experienced in infrequent major storms but not to the extent that any permanent damage might be caused.	
Hail resistance	Elements other than normal glazing in category 1 buildings might be more susceptible to hail damage in severe hail storms.	
Resistance to local damage/soft body impact	The resistance to local damage when struck by sharp-edged objects and the ability hold fittings and the impact resistance to soft body impacts will be lower in the case category 1 buildings than that for non-category 1 buildings. The reduction performance does not compromise the safety of the structure in any way under a normal circumstances of use.	
Accuracy of construction	Tolerances will be greater (i.e. relaxed) in category 1 buildings.	
Lighting and ventilation	Reduction in category 1 buildings in size of openings for occupancy classes E3, H3 and H4 only.	

Source: SANS 10400 – 0, Annex B, Table B1.

11.5. Appendix 2: Section 4.57 of SANS 10400 Part T

This section provides more detail in respect of both materiality and fire management of Category 1 buildings. The additional details are set out below.

- 4.57.1 The minimum distances from an external wall of attached and detached single-storey category 1 buildings for H3 and H4 occupancies to the lateral and rear boundary of the site shall not be less than
 - a) 0,0 m for walls with no openings and a fire resistance (stability, integrity and insulation) of at least 30 min;
 - b) 0,5 m for walls with no openings, constructed with non-combustible external cladding and a surface area of not more than 7,5 m2, where such walls have a fire resistance of less than 30 min but which, when tested, comply with the requirements for stability and integrity for a period of not less than 30 min;
 - c) 1,0 m for walls as described in (b) but with a surface areagreater than 7,5 m2;
 - d) that given in table 19 for walls similar to those described in (a), (b) and (c) above, but with openings, provided that the openings in walls at right angles to the boundary are at least 500 mm away from the boundary; and
 - e) 4,5 m where walls have combustible external cladding, or non-combustible external cladding which does not have a fire rating of 30 min for stability or integrity, the entire facade should be regarded as an opening and the minimum boundary should be at least as tabled in table 2, column 2 (low fire load).

Table 19 – Minimum boundary distances

1		2
	Area of openings in elevation m²	Minimum boundary distance m
	<5	1,0
5		1,5
	7,5	2,0
	10	2,4

- 4.57.2 Where the roof cladding is combustible, the distance from the boundary to the edge of the combustible material shall be in accordance with the requirements for combustible roofs, unless the roofing system is the subject of an Agrément certificate, in which case the assessed safety distances shall apply.
- 4.57.3 Detached single-storey category 1 buildings for H3 and H4 occupancies constructed with internal

walls that do not have a 20 min fire resistance, shall have

- a. external doors located such that an occupant does not have to move through more than one room to reach an external door or escape routes; and
- b. boundary distances appropriate to the type of cladding used in the roofs and walls.
- 4.57.4 Attached single-storey category 1 buildings for H3 and H4 occupancies shall either have
 - c. external walls with a fire resistance of 30 min (stability and integrity) and a separation wall between buildings extending to the underside of the roof covering with a fire resistance of 30 min (stability, integrity and insulation) of 30 min; or
 - d. external walls of combustible material, or non-combustible walls with a fire resistance of less than 30 min, and a separation wall between buildings extending to the underside of the roof covering with a fire resistance of 30 min (stability, integrity and insulation of 30 min) with projections of at least 500 mm beyond the faces of external walls and above the roof.

11.	6.Appendix 3: Lease Agreement ⁴¹
1.	Parties
1.1	The Parties to this agreement are:
	1.1.1
	Landlord (Owner of the property on which a Backyard Rental units is located); and
	1.1.2
	Tenant (Person who is renting a Backyard rental unit)
1.2	Property
	Through the signing of this document the Landlord agrees to rent to the Tenant the following unit:
	Describe unit:
-	
-	Address of unit:
•	

- 2. Lease Agreement
- 3.1 The Landlord rents a Backyard rental unit on his/her Property to the Tenant on the terms and conditions of this agreement.
- 3.2 The Tenant, for the lease period, has the right to use and enjoy the Backyard rental unit as agreed.
- 4. Duration

4.1 This agreement will commence on	
(insert date) and will continue for	(insert number of year/s) year/s
and	(insert number of months)
months.	

5. Rent

5.1 The Rent will be:								
	5.1.1	R	(insert valu	ıe)				
		(insert words)						
	5.1.2	The rent will be pa					(insert how	often i.e.
	5.1.3	The rent shall in	ncrease an	nnually, by_		% (in:	sert percen	tage)
5.2	An inc	crease in Rent requir	es the Landlo	rd to give th	e Tenant 3	30 Days writte	en notice of	the increase
	- whi	ch will take effect o	on the first d	ay of the N	onth afte	er the Tenan	t receives	the notice.
5.3	The (spec	Tenant cify day and or mor	must nth)	pay	the	rent	as	follows
6.	Addi	tional Charges						
6.1	1 The following additional charges will apply:							
		ify how electricity, w e paid)	vater and san	itation will l	e charge	d for and the	basis by wh	ich they
7.	Paym	nents						
7.1		yments due by the ronically into the f				his agreem	ent must b	e made
	Bank	:				_(insert Land	dlord's nam	e of bank)
	۸۵۵۵	int number		(in	ert I andl	ord's accour	nt number)	

wear and tear.

	Branch code:(ins	(insert Landlord's branch code)			
	Account type:	Landlord's account type)			
	Name(ins	eert Landlord's full name)			
	Reference(in:	sert Landlord's reference)			
	If the payment will not be done electronically spe	cify how payment will be made			
7.2	2 The Landlord will provide the Tenant with a writter Tenant.	n receipt for all payments made by the			
7.3	The Tenant must not withhold, defer, set-off, or m s/he owes the Landlord.	ake any deduction from a payment			
7.4	The Tenant will be liable for interest on all over agreement at a rate per annum of % (insert per date of the outstanding amount until the amount is	centage), commencing from the			
8.	Deposit				
8.1	On the commencement of this agreement (per cl Landlord a deposit of R(insert value) (insert words).				
8.2	2 Once the Lease Period has lapsed, the Landlord m	nust refund the deposit to the Tenant			

unless the Landlord can prove that the deposit is needed to restore the Property to the condition it was in on the date this agreement started, taking into account reasonable

- 9. Roles and responsibilities
- 9.1 The Tenant may not sublet the Property
- 9.2 The Tenant must:
 - 9.2.1 keep the Property clean and tidy;
 - 9.2.2 use the Property for private dwelling only;
 - 9.2.3 take care of the Property (and other items belonging to the Landlord);
 - 9.2.4 protect the Property from abuse, damage, destruction, and theft;
 - 9.2.5 respect the Property's neighbours;
 - 9.2.6 leave refuse in the refuse bins provided;
 - 9.2.7 enable the Landlord to carry out his duty of maintenance and repair;
 - 9.2.8 allow no more than _____ (insert number of persons) persons to reside on the Property during the Lease Period;
 - 9.2.9 keep no more than _______(insert number of animals) animals on the Property during the Lease Period, and maintain control of them at all times;
 - 9.2.10 prevent blockages and obstructions in the drains, sewerage pipes and water pipes on the Property; and
 - 9.2.11 provide light bulbs when required on the Property.
- 9.3 The Landlord must at his expense:
 - 9.3.1 maintain the Property including repair and replacement of the roof and walls of the Building/s; including the structure, systems, and installations of the Building/s.
 - 9.3.2 repair damage to the Property regardless of the cause of such damage.
- 9.4 The Tenant must notify the Landlord in writing within 30 Days after having taken possession of the Property that specific items need to be repaired or replaced. The Landlord must repair or replace the defective item/s at his own expense, without recourse from the Lessee.
- 9.5 The Tenant may not make alterations or improvements to the Property without the

Landlord's prior written consent.

- 9.6 The Tenant cannot claim against the Landlord for compensation for alterations or improvements to the Property, unless the Landlord has given his prior written consent.
- 9.7 Alterations and improvements made to the Property will belong to the Landlord and may not be removed from the Property.
- 9.8 The Landlord (including his agent or third party acting on his instruction) may enter the Property to perform repairs, replacements, or other necessary maintenance services.

9.9	Prior to entry, the Landlord must give notice to the Tenant to ensure that there is minimum interference to the Property.				
10.	General				
10.1	This agreement constitutes the whole agreem	ent between the Parties.			
10.2	This agreement may only be amended if the amendment in writing, and sign the written do – which must be attached to this agreement a	cument, in ink by hand			
11.	Signatories				
Sign	ed at	on	20		
As v	vitnesses for the Landlord:				
1.	-				
	Signature				
	Full name				
2.	_				
	Signature				
	Full name				
	247				

	Lessor:	
	Signature	Full name
1.	-	
	Signature	-
	Full name	
2.	-	
	Signature	
	Full name	
enant:		

Annexure A: Policy and legislation

The key legislative and policy documents that frame governments approach to the rental sector are:

- The Constitution of South Africa, 1996 [Act No. 108 of 1996] [the Constitution]
- The Housing Act, 1997 [Act No. 107 of 1997 as amended in 2001] [the Housing Act]
- The Residential Landlord and Tenant Act, 1997 [Act No. 3 of 1997]
- The Rental Housing Act [Act No 50 of 1999]
- The Comprehensive Plan 'Breaking New Ground in Housing Delivery', National Department of Housing, 2004 [Comprehensive Housing Plan]
- The Social Housing Policy, 2005
- · Social Housing Programme Guidelines, November 2006
- The Social Housing Act [Act No. 16 of 2008]
- The National Housing Code, 2009
- · Outcome 8, Sustainable Human Settlements and an improved quality of household life, 2010
- The National Development Plan, 2030 (2012)
- The Medium Term Strategic Framework (2014 2019)
- Integrated Urban Development Framework (IUDF), Department of Co-Operative Governance (DECOG), 2016
- Spatial Planning and Land Use Management Act (SPLUMA) [Act 16 of 2013]

An overview of each of these documents is set out below.

- 1) The Constitution of South Africa, 1996: The Constitution is the supreme law of the country and therefore has a fundamental impact on National Housing Policy. In respect of housing the following two principles apply:
 - Housing as a Basic Human Right: Section 26 of the Constitution states that all South
 Africans have the right to have 'access to adequate housing'. It is the government's duty to
 take reasonable legislative and other measures, within its available resources, to achieve
 the realisation of this right on a progressive basis. Adequate housing is measured in terms

of certain core factors including legal security of tenure, the availability of services, materials, facilities and infrastructure, affordability, accessibility and location.

The Constitution allows that the right to adequate housing cannot be achieved immediately but must be achieved over time. Nevertheless Government must show that it has worked as effectively as possible to achieve this right.

- Defining the powers of National and Provincial Government and Municipalities: Schedule
 4 of The Constitution broadly sets out the powers of the different spheres of Government as follows:
 - National Government has the power to develop laws that deal with matters that apply at a national level.
 - Provincial Government has the power to make specific laws for the Province in terms of all functional areas including housing. These laws must be in accordance with the national laws.
 - Municipalities [local government] have the power to administer matters such as housing and all other related matters like building regulations, municipal planning and service provision within their area of jurisdiction
- 2) The Housing Act, 1997: The Housing Act is the supreme housing law in South Africa. The President assented to the Act on the 27 November 1997. The Housing Act was then published in the Government Gazette on the 19 December 1997 and commenced on 1 April 1998. The Act was amended in 2001. Following a preamble and a section on definitions the Housing Act is split into seven parts. These are:
- Part 1 General principles.
- Part 2 National Government.
- Part 3 Provincial Government.
- Part 4 Municipalities.
- Part 5 Financing of housing development.
- Part 6 Termination of housing arrangements.
- Part 7 General provisions.

The Housing Act is based on two points of departure:

- The Housing Act upholds Section 26 of the Constitution which provides that all South Africans
 have the right to access adequate housing and Government is required to take reasonable
 legislative and other measures within its resources to achieve the progressive realisation of this
 right.
- The Housing Act recognises that housing:
 - Fulfils a basic human need.
 - Is a product of human endeavour and enterprise
 - Is a vital part of integrated development planning
 - · Is a key sector of the national economy
 - Is vital to the socio-economic well-being of the nation.

In addition the Housing Act outlines the following general principles applicable to housing development which National and Provincial Government and Municipalities must adhere to, encourage and promote:

- The needs of the poor must be prioritised.
- The housing process should provide a wide choice of housing and tenure options, be
 economically and financially affordable and sustainable and be administered in a transparent
 and equitable manner.
- Housing development should occur in an integrated manner that creates socially and economically viable communities.
- Government should encourage and support all individuals and community based bodies in fulfilling their own housing needs in a way that ensures skills transfer and community empowerment.
- The active participation of all relevant stakeholders in housing development should be facilitated.
- Individuals and communities affected by housing development should be meaningfully consulted.
- The gearing of Government investment in housing by additional finance and other investment by the private sector and individuals should be facilitated.
- The sustained protection of the environment should be promoted.

The Housing Act specifies the roles and responsibilities of the different spheres of Government. The Housing Act was amended twice in 1999 and 2001. The amendments included:

- Housing Amendment Act, No 28 of 1999: This Act amended the Housing Act, 1997, so as to:
 - Recognise the Social Housing Foundation as a national institution (see below)
 - Provide for committees for the South African Housing Development Board and for the co- option of persons to that Board;
 - Further regulate the transfer of movable and immovable property to the provincial housing development boards and the phasing out of certain housing subsidies
- Housing Amendment Act, Act 4 of 2001: The Housing Amendment Act amended the Housing Act, 1997, so as to provide for:
 - The abolition of the South African Housing Development Board and Provincial Housing Development Boards
 - Establishing advisory panels
 - The determination of a procurement policy in respect of housing development
 - The publication in the Gazette of lists of national housing programmes and national institutions
 - That the National Housing Code is binding on all spheres of Government
 - This Act introduces the regulation of the sale of state-funded housing
- 3) The Residential Landlord and Tenant Act, Act No 3 of 1997: This Act was promulgated by the Gauteng Provincial Government. It is significant because it was the first legislation of its kind in the country that focused on issues in the rental sector. The act focused on managing landlord and tenant relations in Gauteng and set the parameters for the Rental Housing Act (see below). The Act indicated an increasing recognition of the importance of the rental sector within the human settlements sector.
- 4) Rental Housing Act, No. 50 of 1999: The Rental Housing Act defines the responsibility of Government in respect of rental housing property and creates mechanisms to promote the provision of rental housing. The Act creates mechanisms to ensure the proper function of the rental housing market through making provisions for the establishment of Rental Housing Tribunals and laying down general principles governing relations between tenants and landlords and the basis by which conflict resolution in the rental housing sector should occur.

5) The Comprehensive Plan for the Development of Sustainable Human Settlements: Popularly known as "Breaking New Ground", was the key document that emphasized the formal recognition by the government of social housing and defined the current role that it is performing in the housing sector. As a policy document, "Breaking New Ground" shifted Government's emphasis from the provision of housing to the creation of sustainable human settlements, in a manner that is responsive to the demands of particular segments of society and local situations.

"Breaking New Ground" focuses on the promotion of more efficient cities, towns and regions. In support of spatial restructuring, the plan highlights the need to "integrate previously excluded groups into the city and the benefits it offers." The plan flags the need to promote densification, including "housing products which provide adequate shelter to households, whilst simultaneously enhancing flexibility and mobility."

"Breaking New Ground" indicates that **social housing is the key mechanism to achieving these objectives**. Importantly social housing was also linked to other municipal initiatives such as municipal redevelopment projects and the Urban Development Zone (UDZ) tax incentive offered by the South African Revenue Services (SARS). The existing funding mechanisms for social housing were also identified as being "inadequate" and a new funding mechanism was identified whereby "funding support will thus shift away from the current emphasis on uniform individual subsidies, towards equity support for social institutions determined as a percentage of the total capital cost of the project."

- 6) The Social Housing Policy, 2005: The policy framework as set out in the Social Housing Policy presented a new and bold indication of government's commitment to making the social housing sector work, because of the benefits that it brings to the country. The policy document had a major impact on shaping the current programme as reflected in the Housing Code and the Social Housing Act (see below). The policy indicates that the social housing programme has two primary objectives:
 - Firstly, to contribute to the national priority of restructuring South African society in order to address structural, economic, social and spatial dysfunctionalities thereby contributing to Government's vision of an economically empowered, non-racial, and integrated society living in sustainable human settlements.
 - Secondly, to improve and contribute to the overall functioning of the housing sector and in particular the rental sub-component, especially in so far as social housing is able to contribute to widening the range of housing options available to the poor.

The following principles are specified as underpinning the social housing policy. Social housing must:-

• Promote urban restructuring within urban restructuring zones, to be defined by the local authority and supported at provincial level.

- Social housing developments must influence and be influenced by integrated development
 planning, and should therefore be in line with local Integrated Development Plans (IDPs)
 and other related plans created for the promotion of integrated development in urban
 areas.
- Promote the establishment of well-managed, quality rental housing options for the poor.
- Respond to local housing demand.
- Deliver housing for a range of income groups (including, inter alia, middle income, emerging middle class, working class and the poor) in such a way as to allow social integration and financial cross subsidisation.
- Support the economic development of low income communities
- Foster the creation of quality living environments for low-income persons.
- Promote a safe, harmonious, and socially responsible environment both internal to the project and in the immediate urban environs.
- Promote the creation of sustainable and viable projects.
- Encourage the involvement of the private sector where possible.
- Facilitate the involvement of residents in the project.
- Ensure secure tenure for the residents of projects.
- Be facilitated, supported and/or driven by all spheres of government.
- Ensure transparency, accountability and efficiency in the administration and management of social housing stock.
- Promote the use of public funds in such a manner that stimulates and/or facilitates private sector investment and participation in the social housing sector.

The policy introduced a number of new mechanisms, processes and institutions including the following:

- With regard to delivery, SHIs are envisaged to be a key delivery agent of social housing units (either as SHIs or via PPPs). In addition, the possibility of the private sector as a deliverer of social housing via accredited projects is introduced.
- A major conceptual shift was made from linking subsidy allocations to units provided to subsidizing projects, as a mechanism for allowing greater delivery flexibility, but primarily for allowing a more holistic approach to providing sustainable living environments and

promoting quality. The policy emphasises the establishment and promotion of viable and sustainable housing projects on the basis that viable projects are the building blocks to sustainable institutions.

- A new concept of subsidizing accredited projects is introduced.
- With respect to debt financing the policy indicates that the National Housing Finance Corporation and the private sector will play the key roles.

Section 4.1 of the policy, dealing with the Target Market for social housing that the typical nuclear family is not a predominant household in South Africa, and thus, the Policy acknowledges that the "...demand for social housing implies a wide product range, including rooms with shared facilities, communal housing, short stay accommodation..."

The policy acknowledges the need for units that are "unavoidably small out of financial necessity...", and stresses the importance of the overall environment for relief in this regard. It furthermore states that projects will "conform to and exceed the norms and standards set by the Minister..., the National Building Regulations...and the NHBRC", but envisages that "...best practice benchmarks will be continually developed...that the sector itself will develop and which the regulator will enforce." The policy does not therefore, explicitly set space norms, nor excludes non self-contained units such as communal housing.

Social Housing Policy has since been incorporated into the 2009 National Housing Code, and it is this document, together with the 2008 Social Housing Act and its accompanying Regulations that one should look to for guidance in this regard.

7) Social Housing Programme Guidelines, November 2006: These were interim operational guidelines to support the operational roll-out of the Social Housing Policy prior to the revised 2009 National Housing Code, the 2008 Social Housing Act and 2012 Regulations, and establishment of the SHRA, and are not regulations.

For instance, Annexure 5.5, "Minimum Specifications for Social Housing Units", prescribe that social housing units must be at least 30m² in size for newbuilds, refurbishments and conversions, and "self-contained, i.e. have a separate bathroom and, at least a kitchen area if it is a bachelor unit"

Since there was no prescription that units must have lounges, dining areas, etc., presumably one could also have units with one or more bedrooms only without living areas, as long as the unit is self-contained with its own bathroom and kitchen area.

The effect of these guidelines was that the following more affordable options were excluded from the Programme:

· Smaller and more affordable bachelor/studio units that can be quite effectively designed

with floor areas of 18 to 25m2

 communal forms of accommodation where ablution and other facilities are shared by a number of rooms or flatlets

There is a reference in the Social Housing Act that may be deemed to link the Housing Design Criteria directly to the Minimum Specifications in these Guidelines, namely clause 14(2)(b) which says that SHIs must comply with provisions of government programmes and guidelines, as updated. It is these last words "as updated" that leads to the reasonable conclusion that the Social Housing Act in 2008, the Regulations under it (2012), and the National Housing Code, 2009 have superseded these 2006 Guidelines. Thus, these guidelines from 2006, since never gazetted as regulations, are deemed as no longer binding on social housing norms and standards. The prescript of a 30m² minimum unit size no longer exists in any current regulatory rules.

- 8) The Social Housing Act (Act No 16 of 2008): The Social Housing Act provides the regulatory framework that reinforces government's support to the social housing sector and sets the framework through which social housing is currently implemented, funded and regulated. The purpose of the Social Housing Act is to create an environment in which social housing is a viable and substantial component of the housing sector in which the public sector is empowered to act and the private sector is confident to invest. Specifically, the Social Housing Act provides the legislative framework for the following key areas of importance to the social housing sector.
 - · To establish and promote a sustainable social housing environment;
 - To define the functions of national, provincial and local governments in respect of social housing;
 - To provide for the establishment of the Social Housing Regulatory Authority (SHRA) in order to promote, regulate and guide the investment of public money in the social housing sector;
 - To provide the basis through which, and govern the use of public money for Social Housing by delivery agents in social housing projects;
 - To give statutory recognition to, and regulate, SHIs; and
 - To provide for the creation of Restructuring Zones.

Clause 2(1)(a) states that spheres of government and SHIs must "ensure their respective housing programmes are responsive to local housing demands, and special priority must be given to the needs of women, children, child-headed households, persons with disabilities and the elderly"

Although not explicitly stated, this implies that forms of communal and special needs housing must be provided. This principle is further reinforced in many parts of the 2009 National Housing Code.

Clause 14(2) states that SHIs must function in compliance with:

- provisions of social housing programmes and guidelines of government (b)
- ministerial norms and standards in respect of permanent residential structures (c)
- the NBR and technical standards of the NHBRC (d) and (e)

It has already been shown above that neither the NBR, nor the NHBRC technical requirements contain any prescriptions with regard to unit types and sizes. The ministerial norms referred to are contained in the Housing Code and apply to the construction of standalone residential dwellings on individual erven (BNG) rather than multi-unit multilevel buildings, and this reference is therefore, considered inappropriate for social housing. It should be amended to refer to norms and standards

to be developed by the sector and SHRA specifically for social housing, which is the objective of the current assignment. The Act contains no further references to technical elements.

9) The National Housing Code, 2009: The National Housing Code compiles all housing policy into one document and provides an overview of National Housing Policy and the Housing Act, as well as an implementation manual on the Housing Subsidy programme. The Code sets out in one comprehensive document the national housing policy of South Africa and most significantly sets out the rules and regulations pertaining to the National Subsidy Programmes. It sets the underlying policy principles, guidelines and norms and standards which apply to Government's various housing assistance programmes introduced since 1994. It is considered reasonable to conclude, from the language in the National Housing Code, that this document supersedes other prior documentation. The National Housing Code (2009) is aimed at simplifying the implementation of housing projects by being less prescriptive while providing clear guidelines.

The code is revised on an ongoing basis by the National Department of Housing. The Housing Code was first developed in March 2000. The latest edition of the Housing Code was published in 2009. An overview of the chapters of the revised Housing Code and the different subsidies offered is set out below:

- Simplified Guide and Policy Context: The guide provides an easy to understand overview
 of the various housing subsidy instruments available to assist low income households to
 access adequate housing. The detailed description of the policy principles, guidelines,
 qualification criteria and norms and standards are available in the other sections of the
 National Housing Code (as described below).
- Technical and General Guidelines: The Technical and General Guidelines deal with the
 provisions pertaining to housing subsidies and include the criteria for eligibility, types of
 tenure to which the subsidies apply, the quantum of the subsidies, beneficiary contribution

requirements, hidden subsidies and the basis by which value added tax is dealt with. In addition there are technical provisions which include national norms and standards for the construction of dwellings financed through the national housing programme, as well as environmental guidelines and the application of the Expanded Public Works Programme. Issues relating to the management, evaluation and reporting are also covered.

- Financial interventions: The following Financial Interventions are specified including accreditation of municipalities, the enhanced extended discount benefit scheme, the individual subsidy programme, operational capital budget OPS/CAP, Housing Chapters of the IDP, social and economic facilities and rectification of certain residential properties created under the pre-1994 housing dispensation
- Incremental Housing Interventions: The following Incremental Interventions are specified: the consolidation subsidy programme, emergency housing programme, Integrated Residential Development Programme, informal settlements upgrading and People's Housing Process.
- Rural Housing Interventions: The following Rural Interventions are specified: rural subsidy informal land rights
- Social and rental housing interventions: The following Interventions are specified:
- Community residential units programme: The Community Residential Units Programme aims to provide secure, stable rental accommodation for very low income households. The programme comprises a grant for the development of existing and new public rental housing assets including both capital and maintenance costs. The stock developed should remain in public ownership and cannot be sold or transferred to individual residents.
 - Institutional subsidies: This mechanism is targeted at housing Institutions that provide tenure arrangements alternative to immediate ownership (such as rental, instalment sale, share block or co-operative tenure) to subsidy beneficiaries.
 - Social Housing Programme: The Social Housing Programme provides grant funding to
 establish, capacitate and capitalize social housing institutions which may develop, hold
 and administer affordable rental units within identified restructuring zones. A
 precondition for receiving capital grants is that social housing institutions need to be
 accredited by the Social Housing Regulatory Authority and also access own capital
 contributions.

The only specific reference in the Code to technical norms and standards is Section 3, "Technical and General Guidelines" containing the "Revised Technical Norms and Standards for Stand Alone Residential Dwellings". Thus, the above norms and standards cannot be applied to medium density multi-unit, multi-level buildings. The statement in the section of the Code on Institutional Subsidies, that these Norms and Standards apply is therefore, somewhat incongruous.

In Part 3, Volume 6 of the Code, Social and Rental Interventions, Social Housing Policy, Section

4.1 clearly allows for the programme to benefit a range of people, from singles, singles cohabiting to different kinds of households. The Housing Code therefore, as it pertains to social housing, contains no specific prescripts with regard to unit types, sizes, layouts, space norms or any other dimensional aspects of design.

10) Outcome 8: Sustainable Human Settlements and Improved Quality of Life: During 2010, the South African Government agreed on 12 outcomes as a key focus of work between 2010 and 2014. Cabinet ministers signed performance agreements for outcomes linked to their department's areas of focus, and they are accountable for the achievement of these to the president. Each outcome has a limited number of measurable outputs with targets. Each output is linked to a set of activities that will help achieve the targets and contribute to the outcome. Each of the 12 outcomes has a delivery agreement, which in most cases involves all spheres of government and a range of partners outside government. Combined, these agreements reflect government's delivery and implementation plans for its foremost priorities.

Outcome 8 focuses on Sustainable Human Settlements and Improved Quality of Household Life. All public entities within the housing and social housing sector are required to, and have aligned their activities to achieve the targets specified in Outcome 8, as the Minister for Human Settlements is accountable for these to the president. Outcome 8 comprises four outputs, and the performances of departments are evaluated by the extent to which they achieve these targets:

- Output 1: Accelerated Delivery of Housing Opportunities
- Output 2: Access to basic services
- Output 3: Efficient Utilisation of Land for Human Settlements Development
- Output 4: Improved property market

The social housing sector falls under Output 1. In terms of this output **government aimed to provide 80,000 units of well-located and affordably priced rental accommodation units by 2014** (20,000 units per annum). The target is broken down in terms of different types of rental accommodation of which social housing is one. These are as follows:

- Social Housing Programme: 24,312 units by 2014
- Institutional Housing Subsidy Programme:8,487 units by 2014
- Community Residential Unit Programme: 20,000 units by 2014
- Private Sector Rental Housing (including small scale and larger corporate sector landlords):26,600 units by 2014

11) The National Development Plan, 2030: The need for and government's support of social housing was further reinforced by the National Development Plan 2030. In addition the Plan has implications for the way in which social housing is delivered in the future. The National Development Plan was developed by the National Planning Commission which was appointed in May 2010 by President Jacob Zuma. The Commission is an advisory body consisting of 26 people drawn largely from outside government chosen for their expertise in key areas. The Commissions Diagnostic Report was released in June 2011 and set out South Africa's achievements and shortcomings since 1994. This led to the development of a draft National Development Plan, released in November 2011. After a period of public engagement and refinement, the plan was approved by Cabinet in 2012.

The Plan aims to eliminate poverty and reduce inequality in South Africa by 2030. The plan recognizes the significant achievements that South Africa has made since the transition from apartheid to democracy. In addition it recognizes the significant challenges that South Africa still faces. The Plan acknowledges the positive direction that human settlement policy has taken since the introduction of "Breaking New Ground" and believes that the full implementation of Outcome 8 will make a major contribution to housing delivery. In addition the Plan makes the following proposals in respect of the housing sector:

- Develop a more coherent and inclusive approach to land: The plan proposes that
 municipalities should formulate a land policy as part of their Integrated Development Plan
 (IDP) and should support poorer people to access land. Administrative procedures for land
 development should be revised to eliminate delays.
- Radically revise the housing finance regime: The plan proposes that state support for housing in poorly located areas should be prevented and development in inner cities and around transport hubs etc. should be prioritised. State investment should be shifted from support for top structures to incentivize the acquisition of well-located land and supporting the development of the public environment needed for sustainable human settlements. Housing funding should be shifted away from building single houses to supporting the development of a wide variety of housing types with different tenure arrangements (including affordable rental and social housing). Mixed use development should be encouraged.
- The regulations and incentives for housing and land management should be revised: The plan proposes that the link between public transportation and land use management should be strengthened with the introduction of incentives and regulations to support compact mixed use development. New private housing developments should be incentivised to include a proportion of affordable housing. Addressing obstacles in supply and demand should encourage the growth of housing in the gap market. All new developments should be required to be consistent with a set of sustainability criteria. All local spatial development frameworks should be required to incorporate a growth management approach that would align areas of population and economic growth with investment in bulk infrastructure. A proactive element into land use management systems

- should be introduced by allowing municipalities to proactively rezone land to achieve objectives such as densification.
- The role played by informal settlements should be recognised and the existing national programme for informal settlement upgrading should be enhanced, by developing a range of tailored responses to support their upgrading.
- 12) **The Medium Term Strategic Framework:** The MTSF is government's strategic plan for the 2014 to 2019 electoral term and sets out the actions government will take and targets to be achieved. To achieve the vision of sustainable human settlements and an improved quality of household life, the priorities include:
 - 1.4 million more households living in new or improved housing conditions by 2019
 - 110 000 new housing units delivered in the affordable gap market by 2019
 - 49 municipalities assigned or accredited with the housing function
 - · A multi-segmented social-rental housing programme, which includes backyard rentals.
- 13) The Integrated Urban Development Framework: The IUDF is a response to Chapter 8 of the National Development Plan (NDP) 'Transforming human settlements and the national space economy'. The policy framework aims to guide the development of inclusive, resilient and liveable urban settlements, while squarely addressing the unique conditions and challenges facing South Africa's cities and towns. It provides a new approach to urban investment by the developmental state, which in turn guides the private sector and households. Its vision is: 'Liveable, safe, resource- efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life'. These goals inform the priority objectives of the following seven policy levers:
 - Integrated transport and mobility
 - Integrated sustainable human settlements
 - · Integrated infrastructure planning
 - Inclusive economic development
 - Efficient land governance and management
 - Empowered active communities
 - Effective urban governance

The ultimate goal of sustainable human settlement design and constructions is a decent standard of living, which includes access to transport, safety and security, adequate health care, nutrition, housing, water, electricity and sanitation services, among others. To achieve this requires finding the right mechanisms and levers to bring out fundamental spatial transformation.

The short-medium term recommendations are:

- Finalise the Human Settlements White Paper
- Prioritise the regeneration of the inner cities
- Accelerate the upgrading of informal settlements
- · Finalise the devolution of the housing function
- Promote densification, including supporting back-yarding in townships and low-cost housing neighbourhoods
- Improve integrated planning and management
- · Redevelop townships
- Develop a national policy on inclusionary housing

The longer term recommendations are:

- The focus could be on monitoring and review of policies where required, based on the implementation of various programmes, with the intention of advancing options for more integrated and inclusive human settlements.
- NUSP should be completed and evaluated.
- The concepts and ideas for human settlements need to continue to be well informed by developmental thinking and research, and partnerships and alliances with key national and international role-players.
- 14) The Spatial Planning and Land Use Management Act: SPLUMA is a national framework legislation that sets out a new spatial planning and land use management system regime for South Africa. It gives guidance to provincial planning laws and to municipal planning by-laws so that they will be consistent and aligned to SPLUMA. Broadly SPLUMA provides:
 - Development principles and norms and standards;

- Guidance on the spatial planning system by indicating the different kinds of spatial plans, or spatial development frameworks (SDFs) and their content;
- Guidance on the land use management system (LUMS);
- Limited guidance on land development applications (LDAs) and procedures as these must be detailed in the provincial planning laws and implemented by municipalities.

SPLUMA takes a clearly supportive position on informal settlements and incremental upgrading. Its provisions make explicit reference to informal settlements, unlike any pre-1994 planning legislation, creating a set of legally-binding obligations on government.

SPLUMA requires a municipality to have a land use scheme that covers all the land within the municipality, including informal settlements. This means that the municipality will have to play a role in regulating and offering land use management services in informal settlement areas. Informal settlements will have zoning applying to them. Zoning is important because it legalises the land use and it sets out development rules for that zoning. The informal settlement is then legally recognised.

Thus an opportunity exists when the zoning of an informal settlement is determined, for the zoning rules and conditions to include a number of aspects to secure tenure, for example:

- A local register of occupants, so that residents are formally listed on an official record.
- An occupation permit/certificate to give residents evidence of occupation.
- Shelters linked to a spatial plan and a register through the GPS points of the shelter.
- A services card as proof that the informal settlement receives services or may even pay a nominal amount for services.

NOTES AND REFERENCES

- ¹ This section adapted from the Department of Planning, Monitoring and Evaluation, Impact and Implementation Evaluation of the Social Housing Programme, Literature review and theory of change, 2015, unless otherwise indicated.
- ² Department of Planning, Monitoring and Evaluation, Impact and Implementation Evaluation of the Social Housing Programme, Literature review and theory of change, 2015.
- ³ Centre for Urbanism and Built Environment Studies, A landlords guide to rental housing in South Africa, no date
- ⁴ Department of Human Settlements, Department of Performance Monitoring and Evaluation, Impact and Implementation Evaluation of the Social Housing Programme, Summary Report, March 2016
- ⁵ Social Housing Regulatory Authority (SHRA), State of the Social Housing Sector (2017/18)
- ⁶ Social Housing Regulatory Authority (SHRA), State of the Social Housing Sector (2017/18)
- ⁷ Department of Human Settlements, A Comprehensive Plan for the Development of Sustainable Human Settlements, 2014, p 3: 'Backyard rental accommodation in the form of backyard shacks, student accommodation and granny flats, is increasingly recognized as an important component of the overall private rental sector and it plays a significant role in the residential property market'
- ⁸ Department of Cooperative Development and Traditional Affairs, Integrated Urban Development Framework, 2016, p 46: 'Backyard rentals provide affordable rental accommodation for lower-income groups and for people not needing permanent accommodation. These rentals also offer owners income assets. Cities need to develop strategies to extend basic services to backyarders, assist with creating more permanent structures and enhance tenant security.'
- ⁹ SANS 10400-0 in the 2011 edition (edition 3) introduces a Category 1 building to which a lower level of standards are specified. Clause 3.6 note 2 indicates: 'A building may be classified as a category 1 building for the purposes of one or more parts of SANS 10400. Additional limitations may accordingly be imposed on category 1 buildings. Category 1 buildings are defined in Clause 3.6 (p4) as: 'Building which:
- a) is designated as being of class... H2, H3, or H4 occupancy,
- b) has no basements,
- C) has a maximum length of 6,0 m between intersecting walls or members providing lateral support, and
- d) has a floor area that does not exceed 80 m²

The definitions of the classes (see point a) above) are H2 (Dormitory), H3 (Domestic residence), or H4 (Dwelling house). The difference in performance between Category 1 buildings and other buildings is shown in Annexure A attached as provided in SANS 10400-0.

- ¹⁰ SPLUMA supports the notion of Backyard Rental particularly in respect of the principles on spatial justice set out in Chapter 2 and the specifications set out in respect of Spatial Development Frameworks.
- a) In respect of the spatial justice principles, the following is indicated:
 - Section 7 (a)
 - i. past spatial and other development imbalances must be redressed through improved access to and use of land;
 - **ii.** SDFs and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis......on areas characterised by widespread poverty and deprivation;
 - **iii.** spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons:
 - N. land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas
 - These provisions set the basis and points of departure to identify areas and to include plans, policies and regulations that will be suitable to manage areas that were previously disadvantaged.
 - Section 8 (2) discusses norms and standards relating to land use management and development indicating the following:
 - (a) The norms and standards must promote social inclusion, spatial equity, desirable settlement patterns, rural revitalisation, urban regeneration and sustainable development;..... and

- (f) differentiate between geographic areas, types of land use and development needs
- b) In respect of the provisions relating to SDFs, the following is specified in Chapter 4 (General provisions relating to SDFs)
 - Section 12(1): the national and provincial sphere of government and each municipality must prepare spatial development frameworks that-
 - (h) include previously disadvantaged areas,and address their inclusion and integration into the spatial, economic, social and environmental objectives of the relevant sphere
 - (k) provide direction for strategic developments, infrastructure investment, promote efficient, sustainable and planned investments by all sectors and indicate priority areas for investment in land development
 - Section 12(2)(b): An SDF adopted in terms of this Act must guide and inform the exercise of any discretion or
 of any other law relating to land use and development of land by that sphere of government
 - Section 12(6): SDFs must outline specific arrangements for prioritising, mobilising, sequencing and implementing public and private infrastructural and land development investment in the priority spatial structuring areas identified in SDFs

¹¹ Municipalities are required by SPLUMA to prepare a Land Use Scheme to cover their entire municipality and this is promulgated in terms of the by law and SPLUMA. It is this document that sets out the zoning, building plans, definition of land uses, floor areas, coverage, building lines, subsidiary dwellings, site development plans, consent use applications and so forth. It also says what happens if use of land is contravened or used illegally.

Generally LUMS permit subsidiary dwellings on Res 1 sites for example granny flat and quarters for domestic workers. However some of the LUMS are more explicit in enabling Backyard Rental. For example Section 21 of the Johannesburg LUMs is instructive as set out below.

Example: City of Johannesburg LUMS: Section 21(1). SUBSIDIARY DWELLING UNIT: Notwithstanding the provisions of the land development requirements of the erf, as contained in the Land Use Scheme.

- (a) An owner may erect and use a maximum of two subsidiary dwelling units on an erf zoned "Residential 1", subject to the following conditions: In the event of a subsidiary dwelling unit/s being in excess of one storey, the written consent of the Council shall be required; such written consent shall include the notification of the neighbours; informing the neighbours of the intent of the owner; indicating that any objections / representations shall be made to the Council and the owner in writing within twenty-eight (28) days from the date of notification.
- (b) The two (2) subsidiary dwelling units shall be inclusive of staff accommodation.
- (c) The total combined floor area of the subsidiary dwelling units shall not exceed 160m² or 90% of the main dwelling house whichever is the lesser.
- (d) A subsidiary dwelling unit may only be erected in relation to an existing dwelling house.
- (e) A subsidiary dwelling unit may be attached to or detached from the main dwelling house but in the former instance may not be interconnected.
- (f) A subsidiary dwelling unit may consist of interconnected rooms or unconnected rooms.
 - (i) The unconnected rooms may be self-contained or may share communal ablution and/or kitchen facilities.
 - (ii) In an interconnected subsidiary dwelling unit, the unit may be rented out to a household or three (3) bedrooms may be rented to individual persons.
 - (iii) In an unconnected subsidiary unit, rentable rooms, the minimum size of a habitable space shall not be less than 9m², excluding ablutions and kitchens, or 6m² per person for more than one person.
 - (iv) Rentable rooms may be self-contained (including ablutions and kitchens) provided that the room may not exceed 25m².
 - (v) A subsidiary dwelling unit is equivalent to three (3) rentable rooms which may share a kitchen and/or ablution facilities or three (3) self-contained rentable rooms.
- (g) Parking shall be provided to the satisfaction of the Council;
- (h) No outbuildings may be erected in relation to the subsidiary dwelling units other than a garage/s;
- (i) The access, positioning and design of the subsidiary dwelling units shall be to the satisfaction of the Council:
- (j) The screening of the subsidiary dwelling units shall be to the satisfaction of the Council;

- (k) The amenity of the area shall not be disturbed at the sole discretion of the Council;
- (I) Where an owner of a "Residential 1" property exercised the right of a subsidiary dwelling unit, neither the subsidiary dwelling unit nor the dwelling house may be sectionalized;
- (m) In the event of subdivision in accordance with the prevailing density guidelines a newly created portion may contain the detached subsidiary dwelling unit, which may now be re-defined as an existing dwelling house;
- (n) When an owner exercises the right for the subsidiary dwelling units, engineering services contributions in terms of the prevailing policies for engineering services, may be payable on submission of the building plan as determined by the Council.
- ¹² This section from Alcari Consulting (undertaken for National Treasury), Appendix 5, South African Rental Housing Market Report, Performance and expenditure review, Provincial Government Housing Rental Stock, May 2018
- 13 Rhizome Management Services, A Framework to Inform a National Rental Research Agenda for the Department of Human Settlements, 2012
- 14 Rhizome Management Services, A Framework to Inform a National Rental Research Agenda for the Department of Human Settlements, 2012
- 15 This section from Alcari Consulting (undertaken for National Treasury), Appendix 5, South African Rental Housing Market Report, Performance and expenditure review, Provincial Government Housing Rental Stock, May 2018
- 16 This is considered to be an annual amount of at least 1.02% of the capital cost of the project in real terms.
- 17 Department of Planning, Monitoring and Evaluation, Impact and Implementation Evaluation of the Social Housing Programme, Literature Review, January 2015
- 18 Rhizome Management Services, A Framework to Inform a National Rental Research Agenda for the Department of Human Settlements, 2012
- 19 Rhizome Management Services, A Framework to Inform a National Rental Research Agenda for the Department of Human Settlements, 2012
- 20 Rhizome Management Services, A Framework to Inform a National Rental Research Agenda for the Department of Human Settlements, 2012
- 21 Rhizome Management Services, A Framework to Inform a National Rental Research Agenda for the Department of Human Settlements. 2012
- 22 Robert McGaffin, John Spiropoulous & Luke Boyle, Micro-developers in South Africa: a Case Study of Micro-property Developers in Delft South and Ilitha Park, Cape Town, Published Online, 20 October 2018
- 23 ibid
- 24 Community Survey, Stats SA, 2016
- 25 David Gardner and Margot Rubin, The 'other half' of the backlog: (Re)considering the role of backyarding in South Africa.

December 2013

- 26 See Shisaka Development Management Services (Pty) Ltd in Association with CSIR Building and Construction Technology, Final Report: Small Scale Landlords: Research Findings and Recommendations, 2006
- 27 SALGA, Local Government Position on Municipal Responses to Backyarders and Backyard Dwellings, May 2014
- 28 SALGA, Local Government Position on Municipal Responses to Backyarders and Backyard Dwellings, May 2014, page 2
- 29 SALGA, Local Government Position on Municipal Responses to Backyarders and Backyard Dwellings, May 2014
- 30 Adapted from SALGA, Local Government Position on Municipal Responses to Backyarders and Backyard Dwellings, May 2014, page 7
- 31 This includes privately-held or owned land, with a wide range of tenure types including freehold, leasehold, rental, allocated by traditional authority, or a part of a phased tenure process.

- 32 Including for example municipal housing estates in Cape Town and Johannesburg
- 33 Adapted from Social Housing Regulatory Authority, State of the Social Housing Sector, 2011/12 2012/13

34 In the Rental Housing Act and its amendments (section 4B (11)) it states that the landlord/owner "must provide a tenant with a dwelling that is in a habitable condition, as well as maintain the existing structure of the dwelling and "where possible facilitate the provision of basic services to the dwelling". While dwellings are defined as "any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated parking space which is leased as part of the lease", it does not define basic services nor does it require that basic services actually have to be provided by the owner/landlord.

35 NOTE: The cavity and grouted cavity walling systems exceed the minimum R-value of 0,35.

36 An urban edge is defined as a line drawn around an urban area as a growth boundary i.e. the outer limit of urban areas. This urban edge marks the transition between rural and urban land use i.e. generally between urban areas serviced by municipal services to land uses predominantly agricultural, nature and conservation areas.

³⁷ In the Rental Housing Act and its amendments (section 4B (11)) it states that the landlord/owner "must provide a tenant with a dwelling that is in a habitable condition, as well as maintain the existing structure of the dwelling and "where possible facilitate the provision of basic services to the dwelling". While dwellings are defined as "any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated parking space which is leased as part of the lease", it does not define basic services nor does it require that basic services actually have to be provided by the owner/landlord.

38 15 In the Rental Housing Act and its amendments (section 4B (11)) it states that the landlord/owner "must provide a tenant with a dwelling that is in a habitable condition, as well as maintain the existing structure of the dwelling and "where possible facilitate the provision of basic services to the dwelling". While dwellings are defined as "any house, hostel room, hut, shack, flat, apartment, room, outbuilding, garage or similar structure which is leased, as well as any storeroom, outbuilding, garage or demarcated parking space which is leased as part of the lease", it does not define basic services nor does it require that basic services actually have to be provided by the owner/landlord.

39 NOTE: The cavity and grouted cavity walling systems exceed the minimum R-value of 0,35.

40 This indicates a minimum unit size of 15m² for a self contained unit comprising 6m² for the bedroom (occupancy 2 people) and a further 9m² for a separate bathroom and kitchen area.

41 The lease agreement provided in this Appendix has been adapted from Legalwise Standard agreements available on https://www.legalwise.co.za/