DEPARTMENT OF TRADE AND INDUSTRY

11 June 2010 No. R. 504

NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS ACT (ACT 103 OF 1977)

PROPOSED INTRODUCTION OF A REGULATION FOR THE ENVIRONMENTAL SUSTAINABILITY OF BUILDINGS

This section XA deals with Energy Efficiency of buildings.

It is hereby made known under section 20 (1) (f) of the National Building Regulation and Building Standards Act (Act 103 of 1977) that the Minister of Trade and Industry intends to introduce a sub-regulation for the Energy Efficiency of Buildings as set out in the attached Schedule.

Any person who wishes to make comments on the intention of the Minister to introduce the building regulation concerned shall submit their comments, in writing, to the Chief Executive Officer, National Regulator for Compulsory Specifications, Private Bag X25, Brooklyn, 0075, on or before the date two (2) months after publication of this notice.

Dr Rob Davies, MP

Minister of Trade and Industry

DEPARTMENT OF TRADE AND INDUSTRY

NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS ACT 2008 (ACT NO. 103 OF 1977)

SCHEDULE

AMENDMENTS TO THE NATIONAL BUILDING REGULATIONS TO INTRODUCE REQUIREMENTS FOR THE ENERGY USAGE IN BUILDINGS

1 Regulation A7 is amended as follows:

A7 Layout Drawing

Add the following additional requirements:

- (m) where provided, the location and capacity of water heating installations; and
- (n) where provided, details of insulation required to satisfy energy usage requirement of Regulation XA.

2 Regulation A19 is amended as follows:

A19 Competent persons

Add the following additional requirement to sub-regulation A19 (1):

(c) The requirements of Regulation XA are satisfied by a competent person in accordance with SANS 10400 - XA,

Add the following additional requirement to sub-regulation A19(12):

- (c) Where regulation XA is satisfied by a competent person in accordance with the requirements of SANS 10400 Part XA, the competent person who is responsible for such determination shall on completion of the construction and commissioning of the building submit to the local authority a fully completed Form 4 as contained in SANS 10400-A.
- 3 Renumber Regulation X (Repeal of regulations) as Regulation AZ5 (Repeal of regulations)

Delete Part X Repeal of regulations and add the following AZ5:

AZ5 Repeal of regulations

The National Building Regulations published under Government Notice no. R 1081 of 10 June 1988, as amended by Government Notice No. R 1726 of 26 August 1988 are repealed from the date of the coming into operation of these regulations.

4 Add the following new regulation Part X:

PART X: Environmental sustainability

X1 Definitions

"building envelope" means the elements of a building that separate a habitable room from the exterior of a building or a garage or storage area;

"certified thermal calculation software" means software certified by the Board of Agrément South Africa in terms of Agrément South Africa's Energy Software Protocols as being fit for thermal modelling or calculation purposes in terms of these regulations;

"reference building" means a hypothetical building that is used to determine the maximum allowable heating load for the proposed building.

REGULATION

XA: Energy usage in buildings

Buildings having A1, A2, A3, A4, C1, C2, E1, E2, E3, E4, F1, F2, F3, G1, H1, H2, H3, XA1 H4 and H5 occupancy or building classifications in accordance with regulation A20, excluding garage and storages areas contained within such occupancies shall be designed and constructed so that buildings

- are capable of using energy efficiently while fulfilling user needs in relation to vertical a) transport, if any, thermal comfort, lighting and hot water; or
- b) have features and services which facilitate the efficient use of energy appropriate to their function and use, internal environment and geographical location,
- XA2 At least 50% by volume of the annual average hot water heating requirement shall be provided by means other than electrical resistance heating including but not limited to solar heating, heat pumps, heat recovery from other systems or processes and renewable combustible fuel.
- XA3 The requirements of sub-regulations XA1 shall be deemed to be satisfied when such building is designed and constructed in accordance with the following requirements:
- Has an orientation, shading, services and building envelope in accordance with a) SANS 10400 Part XA; or
- b) Is the subject of a rational design by a competent person, which demonstrates that the energy usage of such building is equivalent to or better than which would have been achieved by compliance with the requirements of SANS 10400 XA, or

c) Has a theoretical energy usage performance determined using certified thermal calculation software, less than or equal to that of a reference building in accordance with SANS 10400 Part XA.