DEPARTMENT OF EMPLOYMENT AND LABOUR

NO. 5653 **13 December 2024**

OCCUPATIONAL HEALTH AND SAFETY ACT, (ACT 85 OF 1993) AS AMENDED

INCORPORATION OF THE NATIONAL CODE OF PRACTICE FOR INSPECTION AND TESTING OF LIFT, ESCALATOR AND PASSENGER CONVEYOR INTO LIFT, ESCALATOR AND PASSENGER CONVEYOR REGULATIONS 2010

I Millysind E. Ruiters, appointed as Chief Inspector in terms of Section 27(1) of the Occupational Health and Safety Act, (Act 85 of 1993) as amended , and by virtue of the power delegated to me by the Minister of Employment and Labour, in terms of Section 42(1) of the Act and after consultation with the Advisory Council for Occupational Health And Safety hereby, under Section 44 of the Occupational Health and Safety Act, (Act 85 of 1993), as amended, incorporate the National Code of Practice for Inspection and testing of Lift, Escalator and Passenger Conveyor into the said regulations.

Millysind E. Ruiters

Chief Inspector

FOREWORD

This Code of Practice is to provide clarity and direction to all stakeholders directly or indirectly related to the inspection and testing of lift in to the lift, Escalator and Passenger Conveyor Regulations. This document consists of annexures on the commission and inspection of the lift, escalator and passenger conveyor.

Content

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DEPARTMENT OF EMPLOYMENT AND LABOUR

Annexure A

Doc No

OCCUPATIONAL HEALTH AND SAFETY ACT 85 OF 1993

LIFT, ESCALATOR AND PASSENGER CONVEYOR REGULATIONS

ALL TESTS IN ACCORDANCE WITH SANS 50081- 41

Commissioning Report for Vertical Lift Platform

NOTE: Statements and replies to all relevant questions should be annotated in the appropriate boxes. Where multiple questions are posed, only one of the alternate boxes should be ticked)

Description of installation **Date**

Name of User (Owner or Occupier):

Building Name:

Building Address:

Equipment Manufacturer name

Date Manufactured:

Model:

Installation mounting method?

Length of travel Meters

No. of levels served: Front

Rear

Side

Official installation number:

Vendor Identification S/N:

Functional name and/or location:

General Information:

DA Roped/No Ropes:

Rope Ø: mm:

Number of rope grips:

Ram Ø: (Type/Manufacturer)

Hose Ø: (Test pressure) mm: Kpa:

Shaft enclosure

a) Enclosed b) Semi enclosed c) Open d) Glazed

Type of drive

Drum drive Traction drive Hydraulic Chain drive Screw

Lift Car Load / Speed

Rated load Kg

Number of persons:

Rated Speed m/s

Lift Platform Dimensions

a) Internal width (wall-to-wall) mm

b) Internal depth (front return to rear wall) mm

c) Platform Area m²

Electrical Power supply:

Volts supply: V

Max Amps: A

Power rating: kW

Speed: rpm

Electrical supply :

Permanent:

(during construction) Temporary:

If temporary -the power supply section needs to be re-measured and recorded

Pump & valve make: Serial Number:

RCD device: Earth continuity:

Insulation test: Motor: M__ Mains: M__ Safety: M__

Car Loading:	Pressure (kPa)	Lift Speed (m.s)	Lift motor readings	
			V	A
Empty:				
Rated:				
			Manual lowering speed:	m/s

Journey time: (Total travel up with full lo[ ] s. TR1 setting: [ ] s. Trip time: [ ] s.

Motor protection settings:

Stall current: [ ] A. Trip time: [ ] s. Overload setting: [ ] A.

Rapture valve operation:

Rupture valve adjuster bolt settings: [ ] mm.

Safety gear operation:

Distance travelled upon operation : [ ] mm.

X2 pressure: [ ] kPa

Static pressure:

Empty: [ ] kPa

Rated: [ ] kPa

Presure switch: [ ] kPa

Relief Valve: [ ] kPa Secured from unauthorized interference [ ]

Pipework:

Oil level with lift at top floor : [ ]

Anti-creep operation full load: [ ]

Overtravels:

Top O/T: [ ] mm.

Top U/L: [ ] mm.

Bottom O/T: [ ] mm.

Floor level deviation:

Full Load +-: [ ] mm.

No Load +-: [ ] mm.

Clean ram: [ ] mm.

Contacts and circuits:

Limits: [ ] Ultimate limit latching: [ ] Car stop switch: [ ]

Pit stop switch:

Pit prop switch: [ ] Landing locks: [ ] Safety gear switch: [ ]

Anti-creep

Pit prop switch: [ ] Landing locks: [ ] Safety gear switch: [ ]

Indicators:

Alarm: [ ] Remote alarm: [ ] Key switches: [ ]

Key number/s [ ]

SANS approved type test marks:

Car: [ ] Locks: [ ] Buffers: [ ]

Rapture valve: [ ] Safety gear: [ ]

Landing door type:

Fire rated: [ ]

Fire Rating: [ ] min.

Powered:

Manufacturer:

Test complete:

Yes No

H/Over:

Yes No

Items:

Contract electrical supply: V Phase: Hz

Travel: m Number of levels served:

Rated load: kg Rated speed: m/s

Examination and test
Earthing arrangements

a. Is all metal work that encloses live electrical conductors bonded to the main earthing terminal by protective conductors? Yes No

b. Is the platform bonded to earth by a separate protective conductor? Yes No

c. Does the resistance of the earth protective path exceed 0,1/Ω? Yes No

Insulation resistance to earth

a. Power circuits M/Ω

b. Safety circuits M/Ω

Electrical tests:

a. Main voltage, at time of test V

b. Control circuit voltage, at full load V

c. Key wiring diagram numbers

d. Motor data plate details PH/ V/ A

e. What is the actual running current with full load? A

f. Type of motor overload?

Sensitive edges

a. Does the platform sensitive edge prevent upward movement of the lift when operated at both ends and at mid point? Yes No

b. Does the platform sensitive edge prevent upward movement of the lift when operated on all three sides of the platform?	Yes		No	
Isolation keyswitch				
a. Does the isolation keyswitch disable the lift?	Yes		No	
b. Do the landing isolation keyswitches disable the adjacent call button?	Yes		No	
Levelling accuracy				
a. With the rated load on the platform, does it level to within ± 1 mm of the landings served?	Yes		No	
Liftway protection				
a. Is the liftway protection recommended in_____ adequate?	Yes		No	
b. Is a stop switch provided in the pit and on the carriage?	Yes		No	
c. Do the stop switches prevent movement of the car when operated?	Yes		No	
Doors and Interlocks				
a. Are all enclosure doors/gates fitted with interlocks?	Yes		No	
b. Do the interlocks operate correctly?	Yes		No	
c. With the platform between floors (out-of-door zones), are the doors/gates prevented from opening via the normal platform and landing controls?	Yes		No	
d. With any door of the lift open, will the lift travel in either direction?	Yes		No	
Clearances				
a. Are the liftway clearances as recommended in ?	Yes		No	
Notices				
a. Is the "emergency lowering" notice fitted to the hydraulic pump unit?	Yes		No	
b. Is the correct load plate fitted on the platform?	Yes		No	
c. Is the "electrical" warning notice fitted to the controller cabinet door?	Yes		No	
d. Is the notice fitted to the switch fuse box "Switch off only when the platform is at the lowest level"?	Yes		No	
e. Is the emergency release label fitted to both manual door locks?	Yes		No	
Isolation keyswitch				
a. Is the manually operated scotching device available?	Yes		No	
b. If so, does the device operate correctly?	Yes		No	
Emergency back-up supply				
a. Does the battery back-up supply lower the lift and unlock the door?	Yes		No	
b. Is the platform alarm operational?	Yes		No	
Limit switches				
a. Do the terminal stopping switches stop the lifting platform at terminal levels?	Yes		No	
b. Does the ultimate limit switch stop the lifting platform when operated?	Yes		No	
c. State the overtravel of the platform when the ultimate limit switch is operated.	Yes		No	
Hydraulic drive unit tests				
a. With rated load in the car and at highest floor level, state the static hydraulic fluid pressure:	Yes		No	
b. Provide the following details of the pump unit (as stated on data plate):	Yes		No	

(1) Manufacturer:

(2) Serial or reference number:

(3) Type: Motor/screw pump

c. Measure and record the following normal running operational data:

Platform loading condition	Hydraulic pressure (see note) kPa	Journey time s	Lift speed m/s
Empty, down			
Empty, up			
Rated, down			
Rated, up			

NOTE : Take pressure readings between check valve or down direction valve and the supply line to the ram.

d. Is the motor run timer set at the longest upward journey time + 10 s? Yes No

e. What is the recorded trip time?

f. What is the setting of the lift pause timer (PT)?

g. What is the pressure at which the relief valve operates (5 500 kPa nominal)?

h. Is the integrity of the pipework acceptable? Yes No

i. Is the relief valve secured against unauthorized interference? Yes No

j. Does the rupture valve stop the lift when the platform is empty? Yes No

k. Does the manual lowering valve function correctly and lower the car at a slow speed not exceeding 0,15 m/s? Yes No

l. When held stationary over a period of 10 min under full load conditions at the upper level, does the platform creep more than 0,5 % of the maximum lift travel? Yes No

m. Does the anti-creep device operate at the upper landing level? Yes No

n. Does the cabin overload device operate when the maximum load is exceeded by 75 kg? Yes No

Conclusions

18.1) Is the lift installation complete?

18.2) Does this installation comply with all relevant Regulations and Standards?

18.3) If the answer to any question in this document was**No,** then it must be explained / substantiated in the space provided below.

19 Declaration of Registered ECSA lift inspector & Overseeing SANAS registered inspector.

I certify that on the equipment was examined and tested in accordance with SANS 50081-41

Registered Lift Inspector @ ECSA registration Number

Name in Block Letters : Signature: Date of inspection:

Name and address of company responsible for installation

Position(s), in the above organisation, of the person(s)

who conducted the installation	
Qualifications of installer	

20 Declaration of Overseeing SANAS registered lift inspector.

I certify that on _____ the installation was checked/overseen and verified by my self

Registered Lift Inspector @ ECSA registration Number _____

Registered SANAS inspection body Number _____

Name in Block Letters :	Signature:	Date of issue:

Comp Reg. No:

ANNEXURE B (normative)

Report Reference Number	Department of Employment & Labour
JOB NO:	LEPC ISP:

COMPREHENSIVE REPORT FOR Vertical Lift Platform

Report for New Installations, Modifications, Periodic Inspection and Testing of Vertical Platform Lift

Inspection Service Provider details:
Physical Address:
SANAS registration number:
Postal Address:
Telephone:
E-Mail:
Web:

NOTE: Statement and replies to the relevant questions should be noted in the appropriate box. Where "YES" OR "NO" is indicated; the appropriate box shall be ticked and deemed to be an actionable item.

1. User and Premises information:

1.1 User	
1.2 Name and address of premises	

2. Lift Data

2.1 Name of manufacturer		2.9 Official Identification	
2.2 Name of installation company		2.10 Serial number	
2.3 Year of Installation		2.11 Unit Identification (e.g A or B)	
2.4 Installed to S.A.N.S standard		2.12 Functional location	
2.5 Year of modification		2.13 Rated Load & Persons	
2.6 Modification installation company		2.14 Rated Speed	
2.7 Equipment modified		2.15 Date of Previous Report	
2.8 Maintenance service Provider		2.16 Type of Previous Report	

3 Condition of Lift

3.1 Were the following parts of the lift tested to verify that they are safe, compliant and in good working order:	**YES**	**NO**	**Test result**
a) Emergency light, alarm & intercom system (if applicable)			
b) Landing doors & car door: closing effort, kinetic energy device & reversal devices?			
c) Landing doors & car door: Locks & interlocking mechanisms ? (Mechanical & electrical)			
d) Safety circuit (e.g Over-running devices (Final limit switch), E-stops.....)			
e) Overspeed governor & safety gear system ?			
f) Brakes and traction ? (Including dynamic breaking if applicable)			
g) Load test with weights every 48 months cycles			
h) Lighting level - Access, machine room compartment, shaft, pit & lift car?			
i) Emergency release operation?			

3.2 Were the following parts of the lift inspected to verify that they are safe, compliant and in good working order:	**YES**	**NO**	**Inspection condition / result**
a) All required Annex documents, phone plates, drawings, certificates & signage are present in the			
b) Landing & car door: frames, railings, panels, sills, shoes, closing devices & surrounds			
c) Enclosure of machine compartment, lift well & car?			
d) Car & counterweight: guides, foxing, shoes,rollers, buffers ?			
e) Car floor to landing floor levels?			
f) Machine drive, suspension ropes/belts or chains and attachments?			

g) Condition of the brake and traction			
h) All electrical equipment? (Also incuding circuit protection)			
i) if present, the hydraulic condition of jack and piping			

Other parts?

3.3 All non-conformances of measurement, conditions or adjustments and defects found are substantiated and recorded in section 5.

4 Documentation

	YES	NO	Refer to item 5 Non conrfomances
4.1) Are all relevant records in place in accordance with lift,escalator and passenger conveyor regulations?			
4.2) Is the commissioning document complete and present in the machinery compartment			

5. Non-conformances of regulatory requirements, non-conformances, repairs, renewals, alterations or safety

5.1 The following safety items shall be attended to immediately (before the lift can be used with safety):

5.2 The following items shall be attended to within a specified period not exceeding item 60 days. Items Listed (below) that are not rectified within 60 days render this report invalid and shall be reported by the inspection service provider as required.

6 Declaration by the Registered Lift Inspector

I, certify that on _____ I thoroughly inspected, tested (or both) this lift and that the above is a true comprehensive report of the result

Registration Category _____ ECSA Registration Number: _____

Physical address: _____ Signature

Postal Address: _____

Name of Registered Lift Inspector: _____

Contact Telephone Number _____

Technical Signatory: Signature

Name of Technical Signatory: _____

Registration Category: _____

ECSA Registration Number: _____

Date: (yyyy-mm-dd) _____

7 Verification of clause 5

Name of Registered Lift Inspector **Signature**

I ,certify that on the ..... day.....month.....year verified and confirm the completion of all iterms raised in clause 5 to my satisfaction.This report/certificate is valid for a period of 24 months from the date of issue, provided that this section is stamped and signed.

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Annexure A

Doc No

OCCUPATIONAL HEALTH AND SAFETY ACT 85 OF 1993

LIFT,ESCALATOR AND PASSENGER CONVEYOR REGULATIONS

ALL TESTS IN ACCORDANCE WITH SANS 50081-2(SANS 50081-50 & SANS 50081-31

Commissioning Report for Passenger and Goods Access Only Lifts

NOTE: Statements and replies to all relevant questions should be annotated in the appropriate boxes. Where multiple questions are posed, only one of the alternate boxes should be ticked X

1. Description of Installation

Date

Name of User (Owner / User):

Building Name:

Building Address:

Equipment Manufacturer name

Country of manufacture and factory address

Sold & Installed by (Vendor)

State if this Annexure is applicable to New building, full replacement upgrade/modification (extend)

Length of travel Meters

No. of levels served: Front

Rear

Main Floor: (e.g.. B2, B1, G, 1, 2, 3)

Official Installation number:

Vendor Identification No:

Functional name and/or location:

Lift Type:

Traction Drive Positive Drive

Hydraulic Worm

Lift Car Load / Speed

Rated load Kg

Number of persons:

Rated Speed m/s

Lift Car Dimensions

a) Internal width (wall-to-wall) mm

b) Internal depth (front return to rear wall) mm

c) Car Area -Refere to 5.4.2.3.1 Table 8 0 m²

Shaft enclosure

a) Enclosed b) Semi enclosed c) Open d) Glazed

Machine Room / Compartment - Location

a) Above well: b) Below well: c) at side: d) No machine room: (MRL)

Electrical Power supply:

Volts supply V

Amps rating of C/B A

Electrical supply :

Permanent:

(during construction) Temporary:

If temporary -the power supply section needs to be re-measured and recorded accordingly

Type of supply:

3 phase + E ☐ 3 phase+N+E ☐

Single Phase + E ☐

Have the correct circuit breakers / fuses been fitted ?
Yes ☐ No ☐

Have the correct circuit breakers / fuses been fitted ?

Yes ☐ No ☐

Lock out and tag out possible ☐

Supply marked where power is fed from ☐

Main circuitbreaker/isolator within arm's reach ☐

2. Suspension means (Ropes, Belts, Chains, Screw, Hydraulic)

a) Type of suspension

b) Number: ☐ c) Nominal diameter / width : ☐ mm

d) lay and construction :

e) Certificate present & in order Yes ☐ No ☐

Governor Rope/s

a) Nominal diameter ☐ mm

b) Lay and construction ☐

c) Certificate/s in order Yes ☐ or No ☐

2.1 Suspension

a) Are the suspension anchorages in accordance with relevant SANS standard Yes ☐ No ☐

b) are the grips & springs correctly fitted if present? Yes ☐ No ☐

c) Is compensation provided? Yes ☐ No ☐ Type ☐
if yes, in accordance with relevant SANS standard

2.2 Flat belt suspension:

a) Monitoring system provided Yes ☐ No ☐ Type ☐

3. Over speed governor/s

3.1 *Has the governor been certified as complying with 5.4 of SANS 50081 - 50* Yes ☐ No ☐

3.2 *Is the data plate in accordance with 5.6.2.2.1.8 of SANS 50081 - 20* Yes ☐ No ☐

3.3 *Is the governor sealed?* Yes ☐ No ☐

3.4 Over speed governor rope
Does the governor rope comply with 5.6.2.2.1.3 of SANS 50081 -20 Yes ☐ No ☐

3.5 Are there safe means of testing the over speed governor
in accordance with 5.6.2.2.1.4 of SANS 50081-20 Yes ☐ No ☐

3.6 Car governor
Complete the following:

a) Governor Type: b) Serial No:

c) State if the Governor system is SANS50081-20 compliant or by means of an directive?

d) Can the Governor safely be tested for operation as per SANS 50081-20

Device	Tripping Speed			Does it operate effectively?	
	Marked	Measured			
		Car, up	Car, down	Yes	No
Electrical		m/s	m/s		

Mechanical	m/s	m/s	m/s		

b) State how the car governor was tested at the installation:

c) Over speed governor rope
State the nominal diameter of the rope appropriate to the governor. mm

3.7 Counterweight governor (if fitted)

Complete the following:

a) governor type: b) serial No.:

Device	Tripping Speed			Does it operate effectively?	
	Marked	Measured			
		Counterweight, up	Counterweight, down	Yes	No
Electrical		m/s	m/s		
Mechanical	m/s		m/s		

b) Over speed governor rope
State the nominal diameter of the rope appropriate to the governor. mm

b) State how the counter weight governor was tested at the installation:

4. Safety Gear

a) *Has the safety gear been certified as complying with SANS 50081-50* Yes No

b) *If the answer to 4(a) is YES, does the data plate indicate, in positive terms, whether the safety gear complies with the criteria for type test certification?* Yes No

c) Are all the Safety Gears adjustable parts sealed? Yes No

4.1 Car safety gear tests

NOTE: The test shall be made while the car is descending, with the required load uniformly distributed over the car area, with the machine running until the ropes slip or become slack.

4.1.1 *Progressive safety gear*

4.1.1.1 *Does the safety gear operate correctly ?* in accordance with 6.3.4 of SANS50081-20 Yes No

4.1.1.2 *Is the car floor horizontal or does it slope less than 5% from the horizontal after the safety gear test has been conducted ?* Yes No

4.1.2 Instantaneous safety gear

4.1.2.1 Does the safety gear operate correctly? in accordance with 6.3.4 of SANS50081-20 Yes No

4.1.2.2 *Is the car floor horizontal or does it slope less than 5% from the horizontal after the safety gear test has been conducted ?* Yes No

4.2 Counterweight safety gear tests (if Fitted)

NOTE: The test shall be made while the counter weight is descending and with the car empty until the ropes slip or become slack.

4.2.1 Progressive safety gear

4.2.1.1 *Does the safety gear operate correctly ?* in accordance with 6.3.5 of SANS50081-20 — Yes ☐ No ☐

4.2.2 Instantaneous safety gear

4.2.2.1 *Does the safety gear operate correctly ?* in accordance with 6.3.5 of SANS50081-20 — Yes ☐ No ☐

4.3 Ascending car over speed protection for geared machines

a) State the speed monitoring means in accordance with 5.6.6.10.of SANS 50081-20: 20xx

b) State the speed reducing device (e.g.. Rope gripper, double acting safety gear .. Etc.)

4.3.1 Has the ascending car over speed protection means been certified as complying with 5.7 of SANS 50081 - 50 — Yes ☐ No ☐

4.3.2 Does the ascending car over speed protection means operate in accordance with 5.6.6 of SANS 50081 - 20 — Yes ☐ No ☐

4.4 Unintended car movement

a) Has the lift been provided with a means to prevent or stop the car from moving away from the landings ? in accordance with 5.6.7 of SANS 50081 - 20 — Yes ☐ No ☐

b) Describe the device provided to prevent or stop the car to move away from the landings

c) Does the unintended car movement device operate in accordance with 5.6.7 of SANS 50081 -20 — Yes ☐ No ☐

d) If applicable, was the Dynamic braking tested and found to be working? — Yes ☐ No ☐

5. Buffers

5.1 Energy dissipation buffers (e.g. oil)

5.1.1 Have the buffers been filled to the correct levels? — Yes ☐ No ☐

5.1.2 *Have the buffers been certified as complying with 5.5.4 of SANS 50081 -50* — Yes ☐ No ☐

5.1.3 *If YES, do the data plates indicate, in positive terms, whether the buffers comply with the criteria for type test certification?* — Yes ☐ No ☐

5.1.4 If NO, are they suitable for testing in accordance with item 5.2 below? — Yes ☐ No ☐

5.1.5 *Is the total possible stroke of each buffer in accordance with 5.8.2.2 of SANS 50081 -20* — Yes ☐ No ☐

5.1.6 *a) Is there reduced stroke buffering?* — Yes ☐ No ☐

5.1.6 b) If the answer in 5.1.6 a) is "Yes" does it comply with 5.8.2.2 of SANS 50081-20 — Yes ☐ No ☐

5.2 Buffer Tests

5.2.1 Energy accumulation buffers

Note: Type of energy accumulating buffers — Spring ☐ Rubber ☐

a) *when the car with rated load and the counter weight was brought into contact with the buffers,was the operation satisfactory?* — Yes ☐ No ☐

b) do the buffers comply with applicable SANS standard — Yes ☐ No ☐

5.2.2 Energy dissipation type (e.g. oil)	Yes		No	
a) *when the car with rated load and the counter weight was brought into contact with the buffers at rated speed, or at a speed for which the stroke of the buffers has been calculated, was the operation satisfactory?*	Yes		No	
b) *do the buffers recover automatically after operation?*	Yes		No	
c) *Is the car interior in place after the buffer test ?*	Yes		No	
d) *Has it been ascertained, after the test, that no deteriation has occured which could adversley affect the normal use of the lift? Visual check is considered to be sufficient*	Yes		No	
5.2.3 Buffer to impact plate	Yes		No	
a) Car impact plate to top of buffer distance	mm		Stroke	mm
b) Counterweight impact plate to top of buffer distance	mm		Stroke	mm

6. Brake / Traction Test

6.1 Does the brake sustain the static car, in the lower part of its travel, at the rated load plus 25%?	Yes		**No**	
6.2 Does the brake stop the machine when the car travels downward at rated speed and with rated load plus 25%?	Yes		**No**	
6.3 *Does the car stop under emergency conditions,*				
a) *with the car empty when travelling upwards at the rated speed?*	Yes		**No**	
b) *with the rated load plus 25% when travelling downwards in the lower part of the well at the rated speed?*	Yes		**No**	
6.4 *With the counterweight resting on its compressed buffers, is it impossible for the empty car to be raised under power?*	Yes		**No**	

7. Lighting - Illuminance

7.1 Lighting in well

Is the well provided with permanently install lights complying with the following lux readings?

	Measured		Comply		
a) at least 50 lux 1,0 m above the car roof everywhere	lux	Yes		No	
b) at least 50 lux 1,0 m above the pit floor everywhere	lux	Yes		No	
c) at least 20 lux outside the locations defined in a) and b)	lux	Yes		No	

7.2 Machinery Spaces and pulley rooms

a) at least 300 lux measured at the working plaine OHS Act 1993: Environmental Regulations for Workplaces for Lifts	Yes		No
b) at least 50 lux at floor level to move between working areas	Yes		No
c) at least 50 lux for access ways to machinery spaces and pulley rooms	Yes		No
d) at least 200 lux at machinery cabinet (panels) measured at the devices	Yes		No

7.3 Landings

a) at least 75 lux at floor level in vicinity of landing doors OHS Act 1993: Environmental Regulations for Passages & lobbies	Yes		No

7.4 Lift Car

a) at least 100 lux at 1 m above floor at any point not less than 100 mm from	Yes		No

any wall

b) at least two (2) lamps connected in parallel — Yes ☐ No ☐

c) emergency light in car at least 5 lux for one(1) Hour automatically rechargeable — Yes ☐ No ☐

d) emergency light on top of car at least 5 lux for one(1) Hour automatically rechargeable — Yes ☐ No ☐

d) All Lighting protected against mechanical damage — Yes ☐ No ☐

8. Clearances and run-bys

8.1 Will the car and counterweight clear all obstacles when driven at slow speed?

a) with the car and the rated load compressing the car buffers? — Yes ☐ No ☐

b) with the car empty and the counterweight compressing its buffers? — Yes ☐ No ☐

8.2 What is the distance to the first striking point above the car with the counterweight on the compressed buffer? Noting buffer distances noted under section 5 ☐ mm

Does this comply with relevant SANS standard — Yes ☐ No ☐

8.3 a) **Traction drives -** What is the estimated distance to the first striking point above the counterweight with the car on the compressed buffers? ☐ mm

8.3 b) **Positive drives** - What is the distance to the first striking point above the car when the car hit the top buffers? (Must have top of car buffer) ☐ mm

8.4 With the car on its fully compressed buffers, is there sufficient space to accommodate the rectangular block specified in 5.2.6.4.4 of SANS 50081 -20 and a space of at least 0,5 m between the bottom of the pit and the lowest point of the car? — Yes ☐ No ☐

9. Landing doors and surrounds

9.1 Glass doors/ Glass Car panels / Glass Well enclosure

9.1.1 Do the glass landing / car door comply with 5.3.5.3.4 of SANS 50081-20 — Yes ☐ No ☐

9.1.2 Do the glass panels of the car comply with 5.4.3.2.3 of SANS 50081-20: 20 xx — Yes ☐ No ☐

If 9.1.1 and or 9.1.2 is no then

The glass panels for landing doors, car doors, car walls and walls of the well shall be tested and a test report submitted in accordance with 5.3.5.3.2 of SANS 50081-20 — Yes ☐ No ☐

9.1.3 Do the glass door panels avoid the dragging of children hands on automatic power operated sliding doors as stated in 5.3.6.2.1 (i) of SANS 50081-20 — Yes ☐ No ☐

9.1.4 Do the glass panels of the well comply with 5.2.1.8.2&3 of SANS 50081-20 — Yes ☐ No ☐

9.2 Entrance clearances

9.2.1 Is the horizontal distance between the sill of the car and the sills of all landing doors 35 mm or less? — Yes ☐ No ☐

9.2.2 Is the running clearance between door panels and between panels and uprights, lintels or sills 6 mm or less? — Yes ☐ No ☐

9.2.3 Has it been established that no recess or projection on the face of a sliding door panel exceeds 3 mm? — Yes ☐ No ☐

9.2.4 Is the distance between the inner surface of the well and the sill or framework of the car entrance or door 0,15 m or less, or 0,2 m if over a height not exceeding 0,5 m? 5.2.5.3 of SANS 50081-20 — Yes ☐ No ☐

9.2.5 If the answer to item 9.2.4 above is NO, is the car door mechanically locked when away from the unlocking zone? — Yes ☐ No ☐

9.2.6 Do the landing doors have an automatic mechanical self-closing mechanism and working? Yes ☐ No ☐

9.2.7 Is each set of landing doors capable of being unlocked from the outside with an emergency key? (Triangle key) Yes ☐ No ☐

10. Dynamic tests - Safety contacts/circuits

10.1 *Have the contacts at each landing entrance been proved so that when the contacts are broken, there is no movement of the car?* Yes ☐ No ☐

10.2 *Have the mechanical locks at each landing entrance been proved for positive locking?* Yes ☐ No ☐

10.3 *Have the car door/gate contacts been proved so that when the contacts are broken, there is no movement of the car?* Yes ☐ No ☐

10.4 *Do the final limit switches remove the motor supply before the car or counterweight makes contact with the buffers?* Yes ☐ No ☐

10.5 *Have the stopping switches on the car top, and in the pulley room and pit, been proved so that when the switches are activated , there is no movement of the lift?* Yes ☐ No ☐

10.6 *Have all the other switches in the safety circuits been proved so that when the switches are activated, there is no movement of the car?* Yes ☐ No ☐

11. Door tests -Horizontal Sliding Doors

NOTE Where appropriate, the following tests should be carried out with the car and landing doors coupled

11.1 How are the doors operated?

a) Car doors Manually ☐ Powered ☐

b) Landing doors Manually ☐ Powered ☐

c) Landing doors linked to Power operated car doors Yes ☐ No ☐

11.2 Is the measured maximum force to prevent closing of the doors 150 N or less? Yes ☐ No ☐

State the figure recorded. ☐ N

11.3 Is the measured kinetic energy 10 J or less? Yes ☐ No ☐

State the figure recorded. ☐ J

11.4 Does the protective device reverse the doors in accordance with relevant SANS standard Yes ☐ No ☐

11.5 If the protective device is made inoperative,

a) do the doors remain open? Yes ☐ No ☐

b) do the doors close with a kinetic energy not exceeding 10 J? Yes ☐ No ☐

c) Is the final protection devices kinetic energy less than 4 J? Yes ☐ No ☐

11.6 Is the unlocking zone less than 0,2 m above and below the landing levels *(or 0.35 m in the case of simultaneously operated car and landing doors)?* in accordance with 5.3.8.1 of SANS 50082-20 Yes ☐ No ☐

11.7 Do the landing doors have an automatic self-closing mechanism? Yes ☐ No ☐

11.8 Do the door locks comply with relevant SANS standard Yes ☐ No ☐

11.9 Type of electrical protection provided for the door motor/drive :

a) three-phase circuit-breaker ☐ b) overloads in each phase ☐ c) timing relays ☐ d) Thermistors ☐

e) other (specify): ☐

State the relevant characteristics:

11.10) time to operate: open ☐ sec close ☐ sec b) trip current (if applicable) ☐ A

11.11 Does the contract require that the landing doors and surrounds satisfy

appropriate fire rating requirements? Yes ☐ No ☐

11.12 If YES, what is the fire rating requirement? ____ h

11.10 If the car stop outside the unlocking zone, the force required to open the car doors when outside the unlocking zone is 300 N or greater? Yes ☐ No ☐

11.11 Are the car doors locked when the car is outside the unlocking zone in normal operation? Yes ☐ No ☐

11.12 If glass car doors are fitted do they comply with 5.3.6.2.2.1 h &I of SANS 50081 - 20 Yes ☐ No ☐

12 Main Motor / Drive Data

12.1 State the drive type ____

12.2 Provide the following details of the lift motor (as stated on the data plate):

a) manufacturer ____ e) current rating ____ A

b) serial No. ____ f) speed ____ r/min

c) type ____ g) class of insulation ____

d) power rating ____ kW h) duty rating ____

12.3 Quote the type of, and the following data on, the associated energy converter(s), pump set nameplate (if applicable):

a) type: ____ kW A V r/min c) serial No: ____ kW A V r/min

b) input: ____ ____ ____ ____ d) output: ____ ____ ____ ____

13 Measurements and Data

13.1 Measure and record the following operational data when the car is at midpoint of travel:

High Speed Operation											
Car loading condition		Lift motor speed (note 1)	Lift speed (note 1)	Lift motor input (note 2)			System input (note 3)			Levelling deviation (+ or -) (note 4)
				Running		Start	Running		Start	
		r/min	m/s	V	A	A	V	A	A	mm
Empty	Up									
	Down									
Balanced	Up									
	Down									
Rated	Up									
	Down									

Low Speed Operation (if applicable)								
Car loading condition		Lift motor speed (note 1)	Lift speed (note 1)	Lift motor input (note 2)		System input (note 3)		Levelling deviation (+ or -) (note 4)
				Running		Running		
		r/min	m/s	V	A	V	A	mm
Empty	Up							
	Down							
Balanced	Up							
	Down							
Rated	Up							
	Down							

Methodology of Testing

NOTE 1 Complete either the lift motor speed or the lift speed column in its entirety and make one entry only in the alternative column for the "rated up" condition.

NOTE 2 Take the motor current readings on conductors adjacent to the motor terminal block, while the motor is running steadily.

NOTE 3 Energy converter or equivalent. Measure the system input to the controller from the main supply.

NOTE 4 State the maximum deviation in the appropriate box (i.e. one entry only).

14 Main Drive

14 State type of application e.g. Ward Leonard , VVVF etc.

14.1 Measure and record the following (as appropriate):

Type of device	Manual reset	Automatic reset	Time to operate (s)	Trip current A
Circuit breaker				
Fuses				
Overloads, in each phase				
Timing relay				
Thermistor				

14.2 Have these been found to be satisfactory? Yes ☐ No ☐

15 Converter input or MG set drive motor (where applicable)

15.1 Measure and record the following (as appropriate):

Type of device	Manual reset	Automatic reset	Time to operate Sec	Trip current A
Circuit breaker				
Fuses				
Overloads, in each phase				
Timing relay				
Thermistor				

15.2 Have these been found to be satisfactory? Yes ☐ No ☐

16 Balance and levelling

16.1 From the measurements recorded in item 13, is the balance satisfactory in accordance with manufacturers data? Yes ☐ No ☐

16.2 State the percentage of the balance:

a) design : ☐ % b) actual: ☐ %

16.3 Does the lift stop within the levelling accuracy recommended by the manufacturer? Or Yes ☐ No ☐

16.4 Does the run time limiter work in accordance with 6.3.12 of SANS 50081-20 Traction 5.9.2.7 and Hydraulic 5.9.3.10 of SANS 50081-20 Yes ☐ No ☐

17 Insulation Resistance to earth

NOTE This value should not be less than 0,5 MΩ at 250 V when measured using a calibrated instrument.

as per 5.10.1.2.3 Table 16 of SANS 50081-20

17.1 Lift motor ☐ MΩ

17.2 MG set Ward-Leonard system fitted in accordance to 5.9.2.5.3 of SANS 50082 -20 Yes ☐ No ☐

a) Motor ☐ MΩ b) Generator (If Fitted) ☐ MΩ

17.3 Power systems ☐ MΩ

17.4 Safety circuits ☐ MΩ

18 Earthing

18.1 Is the maximum continuity resistance to earth less than 0,5 ohms? Yes ☐ No ☐

18.2 Is the car connected to the controller earthing terminal by a separate conductor ? Yes ☐ No ☐

18.3 If the insulated protective conductor of the mains supply has a cross section of < 10 mm²
A second insulated protective conductor (for example from lighting supply) with at least

the same cross section is connected. Yes ☐ No ☐

18.3 Does the earthing of the most remote contact (lock or push button) operate a fuse or trip a circuit-breaker without delay? Yes ☐ No ☐

19 Protection of conductors

19.1 Is the fixed wiring in conduit (or in trunking, or in fittings that ensure equivalent protection) throughout? In compliance with relevent standard Yes ☐ No ☐

19.2 Does the electrical wiring comply with relevant SANS standard Yes ☐ No ☐

20 Lighting and Socket outlets

20.1 Is the electrical supply to the car , well, machinery spaces, pully rooms, emergency and tests panel(s) independent from the supply to the machine comply with 5.10.7.1 of SANS 50081-20 Yes ☐ No ☐

20.2 Are all socket outlets on top of car, machine compartment and in pit fed from an independent supply comply with 5.10.7.2 of SANS 50081-20 and comply with SANS 164-2 Yes ☐ No ☐

20.3 Are all socket outlets fed from a "earthleakage deivce" (RCD) with a maximum tripping current of 30mA comply with 5.10.1.2.3 of SANS 50081-20 also refer to 5.1.3.2.2 of SANS 10142 Yes ☐ No ☐

a) Tripping current of E/L Unit for socket outlet on top of car ☐ mA

b) Tripping current of E/L Unit for socket outlet in pit ☐ mA

c) Tripping current of E/L Unit for socket outlet in machine compartment / room ☐ mA

20.4 Phase reversal and phase failure device

20.4.a The phase reversal and phase failure device operate correctly? Yes ☐ No ☐

20.4.b Return to service / operation is only possible by manual resetting in case of Earth Fault. Yes ☐ No ☐

21 Inspection control stations

21.1 Inspection Speed up ☐ m/s Inspection Speed down ☐ m/s
refer to 5.12.1.5.2.1 (e) of SANS 50081-20 (Max 0.63 m/s)

21.2 Are there inspection controls present on top of car, in the pit , on platform and in the controller Yes ☐ No ☐

21.3 Does the design and the operation of the inspection control stations comply with applicable SANS standard Yes ☐ No ☐

NOTE 1 Where required, the car roof shall be fitted with a balustrade.

21.4 Does the car roof fulfil the requirements of applicable SANS standard Yes ☐ No ☐

21.5 Is the return to normal service (electrical reset) after exiting the pit present and operational Yes ☐ No ☐

22 Duty cycle test

Does the lift operate satisfactorily for a period of at least 0,5 h when running with the rated load, full travel and intermediate stops in both detections at a rate at least equal to the number of starts per hour? Yes ☐ No ☐

If the answer is NO, state the reasons. ☐

NOTE It might be necessary to omit the operation of the doors to achieve the required number of motor starts per hour.

23 General

23.1 a) Is the: (Factory serial number, Maximum load, Number of persons, Rated Kg, Official Government Identification No) indicated in the lift car? Yes ☐ No ☐

23.1 b) Is the official installation number indicated in the lift car? Yes ☐ No ☐

23.2 Is the year of construction indicated in the lift car? Yes ☐ No ☐

23.3 Is an overload monitoring device (sound & light indication) fitted in accordance with Yes ☐ No ☐

applicable SANS standard

23.4 Does the fire control system (if provided) comply with the local and National requirements?	Yes ☐	No ☐
23.5 Are the emergency rescue instructions displayed in the machine room /spaces and in accordance with 5.2.6.2.3 of SANS 50081-20 and to the relevant equipement used on site	Yes ☐	No ☐
23.6 Are the required ventilation means supplied to the machine room space are per manufacturer	Yes ☐	No ☐
23.7 List other SANS standards of compliance at time of installation. (Eg. Part 70, Part 21,.....)		
23.8 List if there is any IP rated equipment required and what the IP rating applied is		
23.9 Does the emergency operation system(s) function correctly, in accordance with SANS standard	Yes ☐	No ☐
23.10 Are the machine room compartments conditions satisfactory ? in accordance with SANS standard	Yes ☐	No ☐
If the answer is NO, state the reasons:		
23.11 Are the provisions for ventilating the machine room compartment adequate?	Yes ☐	No ☐
23.12 Are the machine room doors or trap doors or control panels placed elsewhere than a lockable machine room fitted with a suitable lock complying with SANS standard	Yes ☐	No ☐
23.13 Does the emergency (ALARM SYSTEM) communication comply ?	Yes ☐	No ☐
23.14 Do the emergency communications / intercom systems work between the lift car and the on site rescue centre?	Yes ☐	No ☐
Type (e.g. intercom /GSM)		
Should the system be GSM, state the cell number and where it dials to		
Intercom make / supplier		
23.15 Does the emergency lighting of the car comply with SANS stabdard (5 lux for 1 hr)	Yes ☐	No ☐
23.16 Is there a means of access to all items of lift equipment, in accordance with applicable SANS standard	Yes ☐	No ☐
23.17 Are the safety notices/instructions specified in SANS standard	Yes ☐	No ☐
a) Machine space / room?	Yes ☐	No ☐
b) Machine space / room door ?	Yes ☐	No ☐
c) Head room?	Yes ☐	No ☐
d) Top of car ?	Yes ☐	No ☐
e) All landing doors marked with corresponding floor designations?	Yes ☐	No ☐
f) Pit area?	Yes ☐	No ☐
g) Group of lifts. Are the lifts marked in the machineroom compartment, top of car and pit	Yes ☐	No ☐
23.19 Has a counterweight screen in the pit been fitted?	Yes ☐	No ☐
23.20 Should the answer of 23.14 be "No", has the correct compliant alternative been applied?	Yes ☐	No ☐
23.21 Is the distance required between counterweight to buffer displayed in the pit area?	Yes ☐	No ☐
23.22 Is the car to buffer manufacturers distance required distance displayed in the pit area?	Yes ☐	No ☐
23.23 Have the car and landing apron's been fitted?	Yes ☐	No ☐
23.24 More than one lift sharing a shaft, is the shaft dividing screen fitted & compliant?	Yes ☐	No ☐

24 Conclusions

24.1 Is the lift installation complete and does it comply with the requirements of SANS standard Yes ☐ No ☐

24.2 Are there any other matters that require attention before the installation can be put into service? Yes ☐ No ☐

NOTE Such matters might not form part of the contract for the lift but might form part of the installation and be the responsibility of others.

24.3 If the answer to item 24.2 is YES provide the details.

25 Declaration of Registered ECSA Lift Inspector & Overseeing SANAS Registered Inspector.

I certify that on _____ the equipment was examined and tested in accordance with SANS 50081-20 and 50

Name in Block Letters :	Signature:	Date of inspection:

Name and address of company responsible for examination	
Position(s), in the above organisation, of the person(s) who conducted the examination	
Qualifications of the examiner	

26 Declaration of Overseeing SANAS registered Lift Inspector.

I certify that on _____ the installation was checked/overseen and verified by myself

Registered Lift Inspector @ ECSA registration Number _____

Registered SANAS inspection body Number _____

Name in Block Letters :	Signature:	Date of issue:

DEPARTMENT OF EMPLOYMENT AND LABOUR

Annexure A

Doc No

OCCUPATIONAL HEALTH AND SAFETY ACT 85 OF 1993

LIFT,ESCALATOR AND PASSENGER CONVEYOR REGULATIONS

ALL TESTS IN ACCORDANCE WITH SANS 1545-6

Commissioning Report for Rack and Pinion Lift

NOTE: Statements and replies to all relevant questions should be annotated in the appropriate boxes. Where multiple questions are posed, only one of the alternate boxes should be ticked X

1. Description of Installation

Date

Name of User (Owner or Occupier):

Building Name:

Building Address:

Equipment Manufacturer name

Country of manufacture and factory address

Sold & installed by (Vendor)
Is this a permanent installation?

Is this a temporary installation for builders work?

State if Annexure is applicable to New building, full replacement upgrade/modification (extend)

Length of travel Meters

No. of levels served: Front

Rear

Main Floor: (e.g. B2, B1, G, 1, 2)

Official Installation number:

Vendor Identification No:

Functional name and/or location:

Rack and Pinion Material:

Rack material:

Pinion material:

Number of pinions:

Process (rolled or hardened):

Nominal diameter of pinion/s: mm:

Lift Car Load / Speed

Rated load Kg

Number of persons:

Rated Speed m/s

Lift Car Dimensions

a) Internal width (wall-to-wall) mm

b) Internal depth (front return to rear wall) mm

c) Car Area 0 m²

Electrical Power supply:		Electrical supply :	
Volts supply:	V	Permanent:	
Amps rating of C/B:	A	(during construction) Temporary:	
Hertz rating:	HZ	If temporary -the power supply section needs to be re-measured and recorde	
Wires:			

2. Safety Gear

Safety Gear serial number: Expiry Date:

2.1)	Has the safety gear been type tested?	Yes		No
2.2)	If the answer ito 2.1 is 'yes', does the data plate indicate, in positive terms, whether the safety gear complies with the criteria for type test certificate?	Yes		No
2.3)	Was the a drop test done and the result satisfactorily?	Yes		No
2.4)	Are the safety gear adjustable parts sealed?	Yes		No

3. Brake/s

3.1)	Does the brake/s sustain the static car, in the lower part of its travel, with the rated load plus 35%?	Yes		No
3.2)	Does the brake stop the machine when the car travel downward at rated speed and with rated load plus 15%?	Yes		No
3.3)	Where more than one brake is used, does the total number of brakes,minus one brake, stop the car when it moves down with its rated load and at rated speed?	Yes		No

4. Buffers

4.1)	Are the buffers correctly installed under the car striking plates?	Yes		No
4.2)	Is the buffer test satisfactory?	Yes		No

5. Clearances and run-bys

5.1)	Will the car clear all obstacles when driven at slow speed?	Yes		No
5.2)	Is there sufficient refuge space in the pit for a mechanic when the lift is on its fully compressed buffer/s?	Yes		No
5.3)	If the answer in 5.2 is no, is there a rack-lock installed or? available in the pit area?	Yes		No
5.4)	Is there sufficient refuge space on top of the car for a mechanic when the lift is on its	Yes		No
5.5)	Is the horizontal distance between the car and any platform or stairs 500 mm or more where there is no shaft enclosure?	Yes		No
5.6	Does the lift have a pit	Yes		No

6. Landing doors and surrounds

State	the type of doors	Yes	Yes

6.1)	Is the horizontal distance between the sill of the car and sill of all landing doors 35 mm or less?	Yes ☐	No ☐
6.2)	Is the distance between the inner surface of the well and the sill or framework of the car entrance or door 0.15 m or less, or 0.2 m if over aheight not exceeding 0.5 m?	Yes ☐	No ☐
6.3)	If the answer to 6.2. above is No, is the car door mechanically locked when away from the unlocking zone?	Yes ☐	No ☐
6.4)	Is the horizontal distance between the car and the landing doors 120 mm or less?	Yes ☐	No ☐
6.5)	Is each set of the landing doors capable of being unlocked from the outside with an emergency dislocking key?	Yes ☐	No ☐

7. Dynamic tests - Safety contacts/circuits

7.1)	Have the contacts at each landing entrance been proved so that when the contacts are broken, there is no movement of the car?	Yes ☐	No ☐
7.2)	Have the mechanical locks at each landing entrance been proved for positive locking?	Yes ☐	No ☐
7.3)	Have the car door/gate contacts been proved so that when the contacts are broken, there is no movement of the car?	Yes ☐	No ☐
7.4)	If separate terminal stopping switches are fitted, do they operate satisfactorily?	Yes ☐	No ☐
7.5)	Do the final limit switches remove the motor supply before the car comes into contact with its buffers?	Yes ☐	No ☐
7.6)	Have the stopping devices on the car top, and in the pit been proved so that when the devices are operated, there is no movement of the car?	Yes ☐	No ☐
7.7)	Have all other switches/contacts in the safety circuits been proved so that when they are broken, there is no movement of the car?	Yes ☐	No ☐
7.8)	Does the phase reversal and phase failure device operate correctly?	Yes ☐	No ☐
7.9)	Does the lift stop within the levelling accuracy recommended by the manufacturer?	Yes ☐	No ☐

8. Insulation resistance to earth

These values should not be less than 0,5 M Ohms at 500 V when measured using a calibrated instrument.

8.1)	Lift motor	M Ohm
8.2)	Power systems	M Ohm
8.3)	Safety circuits	M Ohm

9. Earthing

9.1)	Is the maximum continuity resistance to earth less than 0.5 Ohm?	Yes ☐	No ☐

9.2) Is the car connected to the controller earthing terminal by a separate conductor greater or equal to 0.75 mm square? Yes ☐ No ☐

9.3) Does the earthing of the most remote contact (lock or push button) operate a fuse or trip a circuit breaker without delay? Yes ☐ No ☐

10. Protection of conductors

10.1) Is the fixed wiring in conduit (or in trunking, or in fittings that ensure equivalent protection) throughout? Yes ☐ No ☐

10.2) If not, do the cables comply with the relavant SANS specification? Yes ☐ No ☐

11. Measurements of the electrical system

11.1) State power system: ☐

11.2) Provide the following details of the lift motor (as stated on the data plate):

a) Manufacturer ☐

b) serial number ☐

c) type ☐

d) power rating ☐ kW

e) current rating ☐ A

f) speed ☐ r/min

g) class of insulation ☐

h) duty rating ☐

12. Measure and record the following operational data

High speed operation											
Car loading condition		Lift motor speed (note 1)	Lift speed (note 1)	Lift motor input (see note 2)			System input (see note 3)			Leveling deviation (+ or -) (note 4)
				Running		Start	Running		Start	
		r/min	m/s	V	A	A	V	A	A	mm
Empty	Up									
	Down									
Rated	Up									
	Down									

NOTE 1 Complete either the lift motor speed or the lift speed column in its entirety and make one entry only in the alternative column for the "rated up" condition.

NOTE 2 Take the motor room current readings on conductors adjacent to the motor terminal block, while the motor is running steadily.

NOTE 3 Energy convertor or equivalent. Measure the system input to the controller form the main supply.

NOTE 4 State the maximum deviation in the appropriate box (i.e. one entry only).

Quote the following data on, the associated energy convertor(s) nameplate (if applicable)

a)	type:				
b)	serial no.:				
c)	input:	kW	A	V	rpm
d)	output:	kW	A	V	rpm

13. Lift motor overcurrent protective devices - Main windings

13.1) Measure and record the following (as appropriate):

Type of device	Manual reset	Automa reset	Time to operate s	Trip current A
Circuit-breaker		-		
Overloads, in each phase		-		
Timing relay		-		Full load
Thermistor				

13.2) Have these been found to be satisfactory? Yes ☐ No ☐

14. Convertor input

14.1) Measure and record the following (as appropriate):

Type of device	Manual reset	Automa reset	Time to operate s	Trip current A
Circuit-breaker		-		
Overloads, in each phase		-		
Timing relay		-		Full load
Thermistor				

14.2) Have these been found to be satisfactory? Yes ☐ No ☐

15. Car roof control station

15.1) Speed up : ☐ m/s Speed down : ☐ m/s

15.2) Do the design and the operation of the car roof station comply with the relevant SANS Specification? Yes ☐ No ☐

Where required, the car roof shall be fitted with a ballustrade, which complies with the SANS Specification

The car roof shall fulfill the requirements of the relevant SANS Specification.

16. Duty cycle test

Does the lift operate satisfactorily for a period of at least 0.5 h when running with rated load, full travel and intermediated stops Yes ☐ No ☐

at a rate of starts at least equal to the number of starts per hour as specified?

If the answer is **NO**, state reasons: ☐

17. General

17.1)	Is the maximum load (e.g. number of persons, kg and identification no.) indicated in the car?	Yes ☐	No ☐
17.2)	Does it comply with the relevant SANS Specification?	Yes ☐	No ☐
17.3)	Is an overload monitoring device fitted in accordance with the relevant SANS Specification?	Yes ☐	No ☐
17.4)	Does the fire control system (if provided) comply with the local Building Regulations?	Yes ☐	No ☐
17.5)	Are the emergency instructions displayed anywhere?	Yes ☐	No ☐
17.6)	Does the emergency operation system(s) function correctly, in accordance with the relevant SANS Specification?	Yes ☐	No ☐
17.7)	Has the functioning of the emergency operation system(s) been demonstrated?	Yes ☐	No ☐
	If the answer is **YES**, to whom has it been demonstrated?	Yes ☐	No ☐
	Name: Organization:		
17.8)	Is the artificial lighting in the machine room adequate for maintenance purposes?	Yes ☐	No ☐
17.9)	Does the artificial lighting in the well (if required) comply with the relevant Regulations and Standards?	Yes ☐	No ☐
17.10)	In the case of an installation without a machinery room, are the machine spaces satisfactory and safe?	Yes ☐	No ☐
17.11)	What are the means of emergency communication for passengers?	☐	
17.12)	Do the emergency communications work?	Yes ☐	No ☐
17.13)	Does the emergency lighting of the car comply with the relevant Regulations and Standards?	Yes ☐	No ☐

18. Conclusions

18.1) Is the lift installation complete?

18.2) Does this installation comply with all relevant Regulations and Standards?

18.3) If the answer to any question in this document was **No,** then it must be explained / substantiated in the space provided below.

19 Declaration of Registered ECSA Lift Inspector & Overseeing SANAS Registered Inspector.

I certify that on _____ the equipment was examined and tested in accordance with SANS 50081-20 and 50

Name in Block Letters :	Signature:	Date of inspection:

Name and address of company responsible for examination	
Position(s), in the above organisation, of the person(s) who conducted the examination	
Qualifications of the examiner	

20 Declaration of Overseeing SANAS Registered Lift Inspector.

I certify that on _____ the installation was checked/overseen and verified by my self

Registered Lift Inspector @ ECSA registration Number	
Registered SANAS inspection body Number	

Name in Block Letters :	Signature:	Date of issue:

Registered Lift Inspector @ ECSA registration Number	

Name in Block Letters :	Signature:	Date of issue:

ANNEXURE B

Report Reference Number

Comp Reg. No: | Job No. | Department of Employmen Labour Registration No. LEPC ISP:

COMPREHENSIVE REPORT FOR ELECTRIC LIFTS

Report for New Installations, Modifications, Periodic Inspection and Testing of Electric Lifts

Inspection Service Provider details:
Physical Address: SANAS registration number:
Postal Address: Telephone
E-Mail
Web

NOTE: Statement and replies to the relevant questions should be noted in the appropriate box. Where "YES" OR "NO" is indicated; the appropriate box shall be ticked and deemed to be an actionable item.

1. User and Premises information:

1.1 User	
1.2 Name and address of premises	

2. Lift Data

2.1 Name of OEM		2.9 Official Identification	
2.2 Name of installation company		2.10 Serial number	
2.3 Year of Installation		2.11 Unit Identification (e.g A or B)	
2.4 Installed to S.A.N.S standard		2.12 Functional location	
2.5 Year of modification		2.13 Rated Load & Persons	
2.6 Modification installation company		2.14 Rated Speed	
2.7 Equipment modified		2.15 Date of Previous Report	
2.8 Maintenance service Provider		2.16 Type of Previous Report	

3 Condition of Lift

3.1 Were the following parts of the lift tested to verify that they are safe, compliant and in good working order:	YES	NO	Test result
a) Emergency light, alarm & intercom system (if applicable)			
b) Landing doors & car door: closing effort, kinetic energy device & reversal devices?			
c) Landing doors & car door: Locks & interlocking mechanisms ? (Mechanical & electrical)			
d) Safety circuit (e.g Over-running devices (Final limit switch), E-stops.....)			
e) Overspeed governor & safety gear system ?			
f) Brakes and traction ? (Including dynamic breaking if applicable)			
g) Load test with weights every four (4) years			
h) Lighting level - Access, machine room compartment, shaft, pit & lift car?			
i) Emergency release operation?			

3.2 Were the following parts of the lift inspected to verify that they are safe, compliant and in good working order:	YES	NO	Inspection condition / result
a) All required Annex documents, phone plates, drawings, certificates & signage are present in the machine compatment			
b) Landing & car door: frames, railings, panels, sills, shoes, closing devices & surrounds			
c) Enclosure of machine compartment, lift well & car?			
d) Car & counterweight: guides, foxing, shoes,rollers, buffers ?			
e) Car floor to landing floor levels?			
f) Machine drive, suspension ropes/belts or chains and attachments?			
g) Condition of the brake and traction			
h) All electrical equipment? (Also incuding circuit protection)			
i) if present, the hydraulic condition of jack and piping			
Other parts?			

3.3 All non-conformances of measurement, conditions or adjustments and defects found are substantiated and recorded in section 5.

4 Documentation

	YES	NO	Refer to item 5 Non confomances
4.1) Are all relevant records in place in accordance with and lift,escalator and passenger conveyor regulations?			
4.2) Is the commissioning document complete and present in the machine compartment			

5. Non-conformances of regulatory requirements, non-conformances, repairs, renewals, alterations or safety

5.1 The following safety items shall be attended to immediately (before the lift can be used with safety):

5.2 The following items shall be attended to within a specified period not exceeding item 60 days. Items Listed below) that are not rectified within 60 days render this report invalid and shall be reported by the inspection service provider as required

6 Declaration by the Registered Lift Inspector

I, certify that on _____ I thoroughly inspected, tested (or both) this lift and that the above is a true comprehensive report of the result

Registration Category : _____ ECSA Registration Number: _____

Physical address: _____ Signature

Postal Address: _____

Name of Registered Lift Inspector: _____

Contact Telephone Number _____

Technical Signatory: Signature

Name of Technical Signatory: _____

Registration Category: _____

ECSA Registration Number: _____

Date: (yyyy-mm-dd) _____

7 Verification of clause 5

Name of Registered Lift Inspector	Signature

I ,certify that on the ..... day.....month.....year verified and confirm the completion of all iterms raised in clause 5 to my satifacfory.This report/certificate is valid for a period of 24 months from the date of issue, provided that this section is stamped and signed.

DEPARTMENT OF EMPLOYMENT AND LABOUR

Annexure A

Doc No

OCCUPATIONAL HEALTH AND SAFETY ACT 85 OF 1993

LIFT,ESCALATORS AND PASSENGER CONVEYOR REGULATIONS

ALL TESTS IN ACCORDANCE WITH SANS 1543 / SANS 115

Commissioning Report for Escalators and Travelators (motorised walkways)

NOTE: Statements and replies to all relevant questions should be annotated in the appropriate boxes. Where multiple questions are posed, only one of the alternate boxes should be ticked X

1. Description of Installation **Date :**

Name of User (Owner / User):	Equipment Manufacturer name
	Country of manufacture and factory address
Building Name:	
Building Address:	Sold & Installed by (Vendor)
	State if Annexure is applicable to New building, full replacement upgrade/modification (extend)
Floor to floor vertical height mm	Official Installation number:
Travel direction if set permanent	Vendor Identification No:
Inclination angle o	Functional name and/or location:
Environment (Indoor, out-door..)	Type:
Serving floor (e.g.. G - 1)	Direct star Delta / Soft start
	V3F Slow down / V3F Slow stop/start

Escalator / travelator duty & speed

Segment (office, mall...)

Duty rating / people move persons / hour

Rated Speed m/s

Steps

a) Step or rubber belt

b) Step / belt width mm

c) Amount of flat steps at return station

d) Total amount of steps

Truss enclosure

a) Stainless steel b) Glazed c) Steel plate d) Concrete / brick

Balustrade

a) Stainless steel ☐ b) Glazed ☐ c) Steel plate ☐ d) Other ☐

Electrical Power supply:

Volts supply ☐ V

Amps rating of C/B ☐ A

Type of supply:

3 phase + E ☐ 3 wire+N+E ☐

Single Phase + E ☐

Have the correct circuit breakers / fuses been fitted ?

Yes ☐ No ☐

Electrical supply :

Permanent: ☐

(during construction) Temporary: ☐

If temporary -the power supply section needs to be re-measured and recorde accordingly

Have the correct circuit breakers / fuses been fitted ?

Yes ☐ No ☐

Lock out and tag out possible ☐

Supply marked where power is fed from ☐

Main circuitbreaker/isolator within arm's reach ☐

2. Chains

a) Step chain length per ☐ mm

b) Step chain serial number ☐

c) Normal or lubrication free ☐

e) Manufacturer info present Yes ☐ No ☐

3. Handrail

a) Handrail type vynil / rubber ☐

b) Handrail length (per unit) ☐ mm

2.1 Structure

a) Is the exterior cladding provided and are the panels securely fixed?	Yes ☐	No ☐
b) Is the cladding protected from oil spills by means of trays throughout it length?	Yes ☐	No ☐
c) Is it readily possible to clear fire hazardous material from the drive-end ar No	Yes ☐	No ☐
d) Can drive-end & return-end enclosure doors/covers only be opened by a special key/tool?	Yes ☐	No ☐
e) Do the landing floor plates have a non-slip surface?	Yes ☐	No ☐
f) Do the landing floor plates have switches to prevent the unit from operating if not in place	Yes ☐	No ☐
g) Should bollards be required, are they compliant and fitted in the correct position (Not on the escalator platform itself)	Yes ☐	No ☐
h) Are the protection plates between the escalator steps and pit standing area present in the top and bottom pits?	Yes ☐	No ☐
i) Are there safe and practical means (step plate) for the technician to climb safely in and out the top and bottom pits?	Yes ☐	No ☐
j) If applicable - Is a mid-support required & in order (due to escalator length and design)	Yes ☐	No ☐

3. Drive

3.1 Are the landings level and securely fastened to the support beams?	Yes		No	
3.2 Is the drive machine adequately secured and the drive chain equipped with a broken chain stopping device and switch?	Yes		No	
3.3 Is the return-end equipped with an affective chain tensioning device(s) and effective switches in the safety circuit?	Yes		No	
3.4 Is the overspeed device operative as designed?	Yes		No	
3.5 Is the operational main brake on the drive motor-set effective?	Yes		No	
3.6 Should the vertical travel exceed 6 meters, is a secondary brake present and operational?	Yes		No	
3.7 What is the stopping distance in the down direction with the prescribed test load?		mm		
3.8 What is the stopping distance in the down direction with no load?		mm		
4. Steps and combs (Top and bottom return station)				
4.1 Are the steps properly aligned with the comb plates	Yes		No	
4.2 Is the comb plate equipped with an effective safety switch?	Yes		No	
4.3 What is the running clearance between the comb plate and step	UL			
	LL			
4.4 Is the required step demarcation in place per the requirement of the standard?	Yes		No	
4.5 What is the maximum gap between steps, measured at the top flat step at 4 points approximately evenly spaced?	Point 1	mm		
	Point 2	mm		
	Point 3	mm		
	Point 4	mm		
4.6 Are the landings adequately lit by the general lighting?	Yes		No	
4.7 Are comb plate lights fitted and in working order ?	Yes		No	
5. Balustrade and Skirting				
5.1 Is the skirting smooth and butt-jointed without protruding screws or other obstruction?	Yes		No	
5.2 What is the maximum clearance, step to skirting, on any one side? What is the total of both sides?		mm		
5.3 Are inner profile joints smooth & butt-jointed without protruding screws or other obstruction?	Yes		No	
5.4 Of what material is the balustrade made?				
5.5 Is it firmly secured without obstruction and proper gaps or cover strips to panels?	Yes		No	
5.6 Is the handrail decking properly fitted without hazard to hands?	Yes		No	
5.7 Is balustrade lighting provided & in good order and does it have earth leakage protection?	Yes		No	
5.8 Are there skirt brushes fitted per requirement?	Yes		No	

5.9 Are anti-climb devices fitted and in accordance with the requirements of the standards?	Yes ☐	No ☐
6. Handrail (Top and bottom return)		
6.1 Is the handrail free-running and properly tensioned?	Yes ☐	No ☐
6.2 Are the handrail entry points provided with protective devices & effective safety switches?	Yes ☐	No ☐
6.3 Is the handrail drive system sound and in good working order, with provision to take up future stretch in handrail system?	Yes ☐	No ☐
6.4 Is the unit provided with a broken handrail switch?	Yes ☐	No ☐
6.5 Are the distances between the escalator handrail & the building balustrade in accordance with the minimum and maximum distances as stipulated in the standard?	Yes ☐	No ☐
6.6 Should there be a risk of a person's bodypart getting stuck between the escalator handrail and the passing floor, are there compliant devices in place to prevent this from happening. (running clearances in general to be adhered to)	Yes ☐	No ☐
7 Controls		
7.1 Are control panels effective at both landings and with "start" operation key, switches with detachable lever, and lockable protective caps for switches operated, and with stop button readily accessible?	Yes ☐	No ☐
7.2 Are control panels so positioned that the operator can have a clear view of the entire escalator?	Yes ☐	No ☐
7.3 Are plugs provided in drive and return stations for portable inspection units?	Yes ☐	No ☐
7.4 Are portable inspection units equipped with a "stop" function which locks into position and prevents start operation form any other source? (Require one unit per escalator)	Yes ☐	No ☐
7.5 Are there permanent fixed emergency stop switches in the top and bottom pit? Not referring to the stop switch on the controller itself (can be removed out of pit)	Yes ☐	No ☐
8 Notices		
8.1 Are the following mandatory notices (fault codes) displayed for		
a) Absence of control voltage	Yes ☐	No ☐
b) Control circuit fault to earth	Yes ☐	No ☐
c) Overload detection of motor	Yes ☐	No ☐
d) Overspeed control	Yes ☐	No ☐
e) Non-reversal switch	Yes ☐	No ☐
f) Operation of auxiliary brake	Yes ☐	No ☐
g) Prevention of obstruction under comb plate	Yes ☐	No ☐
h) Operation of handrail guard	Yes ☐	No ☐
i) Stopping of successive escalators	Yes ☐	No ☐

9 Accessibility

What parts, if any, were inaccessible?

10. Brake / Traction Test

10.1 Does the brake sustain the static escalator & adjustments, according manufacturer settings Yes ☐ No ☐

10.2 Should the vertical floor to floor distance exceed 6000mm, is a secondary brake system available and working Yes ☐ No ☐

11. Lighting - Illuminance

11.1 Landings

a) at least 75 lux at floor level at the top and bottom return station
OHS Act 1993: Environmental Regulations for Passages & lobbies Yes ☐ No ☐

11.2 Top and bottom pit compartment

b) Light including light switch present. Min 50 Lux Yes ☐ No ☐

12. Dynamic tests - Safety contacts/circuits

12.1 Have the contacts at each handrail entry point been proved so that when the contacts are broken, there is no movement of the escalator? Yes ☐ No ☐

12.2 Have the main brake lifting switches been proved so that when the contacts are broken, the escalator will stop from operating? Yes ☐ No ☐

12.3 Have the step chain carriage switches been proven so that when the contacts are broken, there is no movement of the escalator? Yes ☐ No ☐

12.4 Have the main drive chain switches been proven so that when the contacts are broken, there is no movement of the escalator? Yes ☐ No ☐

12.5 Have the broken step & missing step devices been proven so that when the contacts are broken, there is no movement of the escalator? Yes ☐ No ☐

12.6 Have the broken handrail & platform devices been proven so that when the contacts are broken, there is no movement of the escalator? Yes ☐ No ☐

13. Main Motor / Drive Data

13.1 State the drive type

13.2 Provide the following details of the escalator motor (as stated on the data plate):

a) manufacturer
b) serial No.
c) type
d) power rating kW
e) current rating A
f) speed r/min
g) class of insulation
h) duty rating

13.3 Quote the type of, and the following data on, the associated energy converter(s):

a) type:
c) serial No:

	kW	A	V	r/min		kW	A	V	r/min
b) input:					d) output:				

14 Measurements and Data

14.1 Measure and record the following operational data:

High Speed Operation										
Escalator condition		motor speed (note 1)	speed (note 1)	motor input (note 2)			System input (note 3)			
				Running		Start	Running		Start	
		r/min	m/s	V	A	A	V	A	A	
	Up									
	Down									

15 Main Drive

15.1 State type of application e.g. Star / Delta , VVVF etc.

15.2 Measure and record the following (as appropriate):

Type of device	Manual reset	Automatic reset	Time to operate (s)	Trip current A
Circuit breaker				
Fuses				
Overloads, in each phase				
Timing relay				
Thermistor				

15.3 Have these been found to be satisfactory? Yes ☐ No ☐

16 Insulation Resistance to earth

NOTE This value should not be less than 0,5 MΩ at 250 V when measured using a calibrated instrument.

16.1 Escalator motor ____ MΩ

16.2 Power systems ____ MΩ

16.3 Safety circuits ____ MΩ

17 Earthing

17.1 Is the maximum continuity resistance to earth less than 0,5 ohms? Yes ☐ No ☐

17.2 If the insulated protective conductor of the mains supply has a cross section of < 10 mm² A second insulated protective conductor (for example from lighting supply) with at least the same cross section is connected. Yes ☐ No ☐

17.3 Does the earthing of the most remote contact operate a fuse or trip a circuit-breaker without delay? Yes ☐ No ☐

18 Protection of conductors

18.1 Is the power supply (Isolator / DB) marked where fed from in the building Yes ☐ No ☐

18.2 Is the fixed wiring in conduit (or in trunking, or in fittings that ensure equivalent protection) throughout? Yes ☐ No ☐

18.3 Does the electrical wiring comply with SANS Yes ☐ No ☐

19 Lighting and Socket outlets

19.1 Is the electrical supply to the top and bottom well, machinery & tests panel(s) independent from the supply to the machine comply with SANS — Yes ☐ No ☐

19.2 Are there 220 V SANS compliant plug socket outlets present in the top and bottom pit — Yes ☐ No ☐

19.3 Are all socket outlets fed from a "earthleakage deivce" (RCD) with a maximum tripping current of 30mA comply with 5.10.1.2.3 of SANS 50081-20 also refer to 5.1.3.2.2 of SANS 10142 — Yes ☐ No ☐

b) Tripping current of E/L Unit for socket outlet in the escalator pit ☐ mA

20 Phase reversal and phase failure device

20.a The phase reversal and phase failure device operate correctly? — Yes ☐ No ☐

20.b Return to service / operation is only possible by manual resetting in case of Earth Fault. — Yes ☐ No ☐

21 General

21.1 Is the: (Factory serial number & Official Government Identification No) indicated on the escalator? — Yes ☐ No ☐

21.2 Are there a means of access to all items of escalator equipment — Yes ☐ No ☐

22 Conclusions

22.1 Is the escalator installation complete and does it comply with the requirements of applicable SANS standard — Yes ☐ No ☐

22.2 Are there any other matters that require attention before the installation can be put into service? — Yes ☐ No ☐

NOTE Such matters might not form part of the contract for the lift but might form part of the installation and be the responsibility of others.

22.3 If the answer to item is YES provide the details.

23 Declaration of Registered ECSA lift & escalator inspector & Overseeing SANAS Registered Inspector.

I certify that on ☐ the equipment was examined and tested in accordance with SANS 115

Registered Lift Inspector @ ECSA registration Number ☐

Name in Block Letters :	Signature:	Date of inspection:

Name and address of company ☐

responsible for examination	
Position(s), in the above organisation, of the person(s) who conducted the examination	
Qualifications of the examiner	

24 Declaration of Overseeing SANAS Registered Lift & Escalator Inspector.

I certify that on _____ the installation was checked/overseen and verified by my self

Registered Lift Inspector @ ECSA registration Number _____

Registered SANAS inspection body Number _____

Name in Block Letters :	Signature:	Date of issue: