

# **TECHNICAL SPECIFICATION**

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## **SUPPLY AND INSTALLATION OF SAFE DOORS AT RELAY ROOMS.**

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### Scope of work

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**TABLE OF CONTENTS**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>PAGE</b>
1.0	Scope	3
2.0	Appendices	3
3.0	Design and Construction	3
3.1	Safe doors	3
3.2	Door frames	3
3.3	Locks	3
3.4	Concrete	4
4.0	Painting	4
	Appendix 1	
	Appendix 2	

## 1.0 Scope

- 1.1 This specification covers Transnet Freight Rail's requirements for the supply and installation of steel safe-doors and frames at entrances to signal relay rooms sites on the Iron Ore Corridor

## 2.0 Appendices

The following appendices form part of this specification:

Appendix 1 - Bill of Quantities

Appendix 2 - Measurements of doors

## 3.0 Design and Construction

### 3.1 Safe Doors

- 3.1.1 The overall door thickness shall not be less than 85mm. This includes a fire pan, locking case and outer door plate.
- 3.1.2 The door shall be constructed of mild steel, with the outer plate having a minimum thickness of 6mm.
- 3.1.3 Each door shall have 8 locking bolts with a diameter of 40mm each.
- 3.1.3.1 Four of these shall be fixed back bolts and the other four shall be movable front bolts.
- 3.1.4 **Opening of doors shall be by means of fixed/mounted T-handles.**
- 3.1.5 Doors must be hung on heavy duty hinges, which must include a bush and bearing to avoid sagging.
- 3.1.6 All the doors shall allow opening from inside.
- 3.1.7 The main door shall also allow opening from outside.
- 3.1.8 All the doors not fitted with the key operated locks shall have a mechanism that allows locking and unlocking from inside.
- 3.1.9 If a building has more than 1 door leading into a room, only 1 main door shall be fitted with a lock according to clause 3.3.1 and be possible to open from inside and outside. The other doors shall be according to clause 3.1.8.

### 3.2 Door frames

- 3.2.1 The doorframe shall be constructed of angle iron (80x80x8) mm and must be **vermin proof**.
- 3.2.2 The doorframe shall be secured to the wall using a minimum of 6 (six) grip plugs.
- 3.2.3 The slots for the locking pins shall align automatically with the locking pins from the safe door when the door is closed.
- 3.2.4 The gap between the door frame and the door shall not exceed 5mm.

### 3.3 Locks

- 3.3.1 Each key operated door shall be fitted with a seven (7) lever high security lock. The key hole must be covered with a movable disc.
- 3.3.2 All key operated locks shall be operated by using Transnet Freight Rail **specified keys**.

- 3.3.3 Transnet Freight Rail shall supply copies of each key (i.e. one for substations, one for signal relay rooms and one for telecommunication sites) to the successful tenderer/s, for purposes of this contract.
- 3.3.4 Each of the keys mentioned in clause 3.3.3 shall be able to operate locks on all designated sites i.e. the substation key shall operate all locks fitted at substations with this contract, so shall the signal relay room and telecommunication site keys.
- 3.3.5 A design for the proposed lock shall be submitted with the tender for consideration.
- 3.3.6 Anti tamper facilities shall be provided for all the locks installed and the design shall be submitted with the tender for consideration.

#### **3.4 Concrete**

- 3.4.1 Any concrete work required shall comply with the requirements of specification S420.

#### **4.0 Painting**

- 4.1 The doors and frames shall be prepared according to specification HE9/2/9 and painted using Noxide paint. Hot deep galvanized

