

W:\SERVER01\Project\2021\21B09 - RPX 6000014614 SANS TENDER\8. DRAWINGS\MCH\FIRE\SIGNAGE\21B09-F-508-01-LAHAE LA SANS BLOCK G\PROPOSED FIRE SERVICE LAYOUT\_2022-07-11.dwg, 2022/07/11 11:55:32 AM, L5

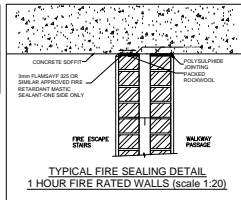
FIRE SIGNS & EQUIPMENT COUNT (EXISTING)							
SYMBOL	E1	E2	F5	F6	F13	F19	FHR
REFERENCE	E1	E2	F5	F6	F13	F19	FHR
QUANTITY	3	3	1	1	2	1	2

FIRE SIGNS & EQUIPMENT COUNT (NEW)													
SYMBOL	E1	E2	E3	E6	F4	F5	F6	F1	F13	F45	F31	FHR	EXT
REFERENCE	E1	E2	E3	E6	F4	F5	F6	F1	F13	F45	F31	FHR	EXT
QUANTITY	2	2	4	3	2	4	2	2	4	2	3	1	8

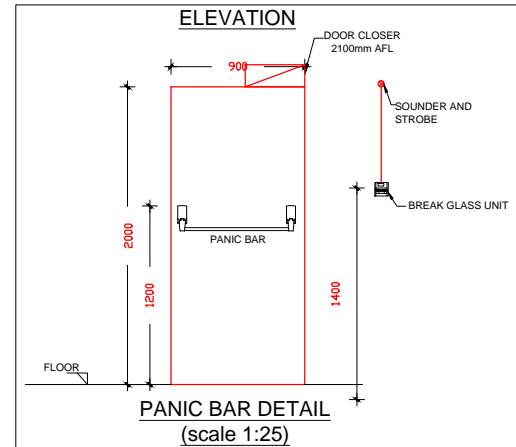
FIRE DOOR SCHEDULE									
DOOR TAG	SWING	FIRE RATING	DOOR SIZE		NORMAL DOOR		PANIC BAR	DOOR CLOSER	HOLD OPEN
			WIDTH (mm)	HEIGHT (mm)	OPEN	CLOSED			
FD_1	ONE WAY	60 minute	815	2100	N/A	YES	NO	YES	NO
FD_2	ONE WAY	60 minute	815	2100	N/A	YES	NO	YES	NO
FD_3	ONE WAY	60 minute	814	2100	N/A	YES	NO	YES	NO
FD_4	ONE WAY	60 minute	1200	2100	N/A	YES	NO	YES	NO
FD_5	ONE WAY	60 minute	1200	2100	N/A	YES	NO	YES	NO

FIRE SERVICES DESIGN SUMMARY SCHEDULE			
1. OCCUPANCY INFORMATION			
1.1 FLOOR AREA:	1118	m <sup>2</sup>	OCCUPIED
1.2 OCCUPANCY CLASS:	G1		OFFICE
1.3 POPULATION:	1/ SEAT = 166		NUMBER OF PEOPLE
1.4 ROUTES OF ESCAPE require:	2		1-off 1280mm & 1-off 1360mm wide
2. FIRE PROTECTION EQUIPMENT			
2.1 FIRE HYDRANT:	1/ 1000	m <sup>2</sup> = 3	REQUIRED, 90 METERS APART (1-OFF OUTSIDE)
2.2 FIRE HOSE REEL:	1/ 500	m <sup>2</sup> = 2	REQUIRED, WITH 30 METER LONG HOSES (3-OFF INSTALLED, 1-OFF NEW OUTSIDE, 1-OFF NEW INSIDE & 1-OFF EXISTING INSIDE)
2.3 EXTINGUISHERS:	1/ 200	m <sup>2</sup> = 6	REQUIRED, 4.5 KG DCP TYPE (12-OFF INSTALLED, 5-OFF NEW DCP, 2-OFF EXISTING DCP & 5-OFF 2.5 KG CO2)
2.4 SPRINKLER PROTECTIONS:	NO		NOT REQUIRED
3. RELATED SERVICES			
3.1 FIRE DETECTION:	YES		THROUGHOUT THE BUILDING IN ACCORDANCE WITH SANS 10139:2021 (Category L1)
3.2 SMOKE VENTILATION:	NO		COMPARTMENTALISED

FIRE EQUIPMENT COUNT		
ITEM	DESCRIPTION	QTY
1	FIRE HYDRANT	1
2	FIRE HOSE REEL	3
3	FIRE EXTINGUISHER	12
3.1	CO2	2
3.2	DCP	10



CLOUDED INDICATES EXISTING EQUIPMENT



**FIRE INSTALLATION NOTES**

**PORTABLE FIRE EXTINGUISHERS**  
FIRE EXTINGUISHERS SHALL BE 4.5kg DRY CHEMICAL POWDER TYPE AND 5.0kg CO<sub>2</sub> TYPE AND SHALL COMPLY WITH SABS 810. ALL FIRE EXTINGUISHERS SHALL BE MOUNTED ON WOODEN BACKING BOARDS.

**FIRE HOSE REELS**  
FIRE HOSE REELS SHALL CONFORM TO SABS 543. ALL FIRE HOSE REELS SHALL BE COMPLETE WITH 30 METERS OF HOSE AND SHALL HAVE A MINIMUM FLOW RATE OF 0.5 l/s AT 300 kPa.

**FIRE HYDRANTS**  
FIRE HYDRANTS SHALL COMPLY WITH SABS 543 AND HAVE A MINIMUM FLOW RATE OF 20 l/s AT 300 kPa.

**PIPING**  
NO PIPEWORK TO BE EMBEDDED IN SCREED OR CONCRETE FLOORS. ALL PIPEWORK SHALL CONFORM TO SABS 62 (STEEL, MEDIUM). THE DISTANCE BETWEEN PIPE SUPPORT BRACKETS FOR THE HORIZONTAL & VERTICAL PIPEWORK, SHALL NOT EXCEED THE FOLLOWING:  
NOMINAL DIAMETER      MAXIMUM SPACING  
< 65 MM      4M  
> 65MM      <100MM      6.1M

PIPING SHALL BE PROPERLY CLEANED OFF SITE, FROM RUST & LOOSE MILL SCALE WITH A HARD WIRE, & DECREASED PRIOR TO APPLICATION OF A RED OXIDE PRIMER, FINAL COATS OF PAINT TO BE 2 OFF SIGNAL RED, HIGH GLOSS ENAMEL TO SABS 630. ALL BRACKETS, SUPPORTS & FITTINGS TO BE GALVANIZED. ALL SCREWED JOINTS TO COMPLY WITH BS 21 OR SIMILAR. SEALING OF JOINTS WILL BE WITH HEMP, STOGG OR PTFE TAPE. HYDRAULIC PRESSURE TESTING SHALL BE DONE TO 15 BAR FOR A PERIOD OF 24 HOURS.

**SYMBOLIC SAFETY SIGNAGE**  
SYMBOLIC SAFETY SIGNAGE SHALL COMPLY WITH SABS 1186 PART V AND SHALL BE OF THE PHOTOLUMINESCENT TYPE. SIGNAGE SHALL BE INSTALLED SUCH AS TO CLEARLY INDICATE THE POSITIONS OF ALL FIRE EQUIPMENT AND ESCAPE ROUTES. EACH FLOOR LEVEL SHALL BE NUMBERED IN THE ESCAPE STAIRS. FINAL SIGNAGE TO BE DETERMINED ON SITE. ADDITIONAL SIGNAGE TO BE ADDED SHOULD IT BE REQUESTED BY THE LOCAL AUTHORITIES. FINAL FIRE SIGNAGE IS TO BE DETERMINED ON SITE WITH THE COUNCIL'S FIRE OFFICER.

**FIRE DOORS**  
FIRE DOORS OF THE RATING AND WIDTH AS INDICATED ON THE DRAWINGS, SHALL BE INSTALLED AND SHALL COMPLY WITH SANS 1253. ALL FIRE DOORS TO BE FITTED WITH SELF CLOSING MECHANISMS.

**FIRE ALARM / DETECTION**  
FIRE DETECTION AND ALARM SYSTEM SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH SANS 10139.

**ESCAPE DOORS**  
ALL ESCAPE DOORS SHALL BE COMPLETE WITH FIRE ESCAPE IRONMONGERY.

**FIRE ESCAPE ROUTES**  
FIRE ESCAPE ROUTES, INCLUDING CORRIDORS AND STAIRWAYS SHALL HAVE MINIMUM WIDTH OF 1500mm UNLESS SHOWN OTHERWISE. ALL ESCAPE ROUTES SHALL HAVE A FIRE RESISTANCE AS INDICATED. ALL EMERGENCY ROUTES SHALL HAVE A FIRE RESISTANCE AS INDICATED ON THE DRAWINGS.



#### SCOPE OF WORKS CLARIFICATION

- FIRE CONTRACTOR**
  - SERVICE AND RE-USE EXISTING FIRE EXTINGUISHERS AND 1-OFF FIRE HOSE REELS.
  - SUPPLY & INSTALL NEW FIRE FIGHTING EQUIPMENT AS INDICATED ON PLAN.
  - SUPPLY & INSTALL NEW FIRE SIGNAGE AS INDICATED ON PLAN.
  - NEW EVACUATION PLANS & PROCEDURES.
- ELECTRICAL CONTRACTOR**
  - SUPPLY AND INSTALL EMERGENCY LIGHTING THROUGHOUT THE SPACE AS SHOWN ON PLAN, c/w BATTERY BACKUP.
- BUILDER**
  - SUPPLY AND INSTALL PANIC BARS c/w WHITE ON GREEN "PUSH BAR TO OPEN" SIGN
  - PROVIDING PENETRATIONS THROUGH CEILINGS AND WALLS AND MAKING GOOD THEREOF.
  - FIXING OF EXTINGUISHER BACKING BOARDS TO WALLS SUPPLIED BY FIRE CONTRACTOR.
  - SUPPLY & INSTALL NEW FIRE DOORS c/w 25mm STEEL FRAME AND DOOR CLOSER.
  - FIRE SEALING OF PENETRATIONS THROUGH FIRE WALLS.

