FIRE FIGHTING & ALARM INSTALLATION

SCHEDULE 4 - SCHEDULE OF RATES

Prior approval must be obtained from the Head of Project Group before any alterations are made to this preamble. This preamble is common for all the M & E services and any alterations to this preamble for one service shall also be applicable to all the other M & E services.
30/11/95

Preamble

The prices (in S$) as entered in the Schedule of Rates for the various works as detailed hereinafter will be used for any variation which may constitute adjustment (addition or subtraction) to the Sub-Contract Sum.

The rates quoted shall be for the 'Supply and Fixing' and shall cover all works to comply fully with the Sub-Contract (i.e. specifications, drawings, Conditions of Sub-Contract, etc.) and shall include all costs for incidental work, e.g. administration, project supervision, design, etc. and profits. The rates quoted shall deem to cover all associated items necessary for the completeness of the works inclusive of any wastage, etc.

(a) Prices for pipework shall include hangers, supports, union flanges, reducers, guides, anchors, elbows, tees, sleeves, etc.

(b) Prices for valves, strainers, couplings shall include matching flanges and all accessories.

(c) Prices for cables shall include also conduit, trunking or tray, where appropriate, cable boxes, glands, lugs, earth wire, jointings and connections, etc.

(d) Prices for ductwork shall include hangers, supports, bracing, flanges, bends, offsets, turning vanes, splitter dampers for branch take-off, transformation, flexible connections, sleeves, etc.

The rates quoted shall not include Goods & Services Tax

S4.1 **Sprinkler Control Valve:** supplied and installed price per assembly (inclusive of main stop valve, alarm valve, water alarm and gong, etc.

100mm diameter ... ... S$ ……

150mm diameter ... ... S$ ……

S4.2 **Sprinklers and Ceiling Plates**

(a) **Sprinklers:** supplied and installed price per sprinkler without pipework.

Finish Type	Satin Chromed		Bronze	
	10mm	15mm	10mm	15mm
Universal				
Upright				
Pendant				
Concealed Flush				

(b) **Ceiling Plates:** supplied and installed price per unit

(i) Satin Chromed finish flush with false ceiling S$ ……

(ii) Satin Chromed finish recessed into false ceiling S$ ……

S4.3 **Sprinklers, Ceiling Plates and Pipework:** supplied and installed price per sprinkler head:

Item	Description	Unit Rates (S$)
a.	Supply and install sprinkler head inclusive of pipework (up to 50 dia.) and painting: (i) exposed sprinkler head c/w ceiling plate (ii) concealed sprinkler head (iii) concealed flush sprinkler head	
b.	Deletion of sprinkler head inclusive of pipework (up to 50 dia.) and painting: (i) exposed sprinkler head c/w ceiling plate (ii) concealed sprinkler head (iii) concealed flush sprinkler head	
c.	Relocation of sprinkler head inclusive of pipework (up to 50 dia.) and painting: (i) exposed sprinkler head c/w ceiling plate (ii) concealed sprinkler head (iii) concealed flush sprinkler head	

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Item	Description	Unit Rates (S$)
d.	Deletion of completed sprinkler head and plugged-off pipework (up to 50 dia.): (i) exposed sprinkler head c/w ceiling plate (ii) concealed sprinkler head (iii) concealed flush sprinkler head	

S4.4 **Pipework:** supplied and installed price per metre run (measured as total linear length inclusive of elbows, tees, painting, etc).

Pipe dia (mm)	Galvanised Mild Steel Pipe as specified		Black Mild Steel Pipe as specified	
	Heavy Gauge (S$)	Medium Gauge (S$)	Heavy Gauge (S$)	Medium Gauge (S$)
20				
25				
32				
40				
50				
65				
80				
100				
150				
200				
250				
300				

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S4.5 **Valves, Strainers & Anti-Vibration Couplings:** supplied and installed price per piece (inclusive of painting, etc.)

Pipe Dia. (mm)	Gate (S$)	Check (S$)	Strainer (S$)	Anti-Vibration Coupling (S$)
20				
25				
32				
40				
50				
65				
80				
100				
125				
150				
200				
250				
300				

Pressure Gauge c/w gauge cock & snubbers S$ …… per piece as installed.

S4.6 **Pressure Reducing Valves:** supplied and installed price per piece (inclusive of painting, etc).

... ... S$ ……

S4.7 **Hosereel:** supplied and installed price per assembly (inclusive of stop valve, reel, hose, guides, nozzle, etc).

... ... S$ ……

S4.8 **Water Storage Tank:** supplied and installed price per panel (inclusive of painting, bolts and nuts, sealants, stays etc.)

(a) 4.5mm thick panel ... ... S$ ……

(b) 6mm thick panel ... ... S$ ……

S4.9 **Draining and Charging of Sprinkler Controlled by One Installation Valve**

(a) Rate for draining ... ... S$ ……

(b) Rate for charging ... ... S$ ……

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S4.10 Fire Extinguishers: supplied and installed per fitting complete with bracket.

Type	Weight	Make & Model No.	Price S$
Carbon Dioxide (CO_2)	2.3 4.5		
Dry Chemical	2.5 4.5 9.0		

S4.11 Dry Riser

(a) Landing Valves: supplied and installed price per assembly (inclusive of plug, chain, strap, padlock, etc.)

... ... S$ ……

(b) Breeching Inlets: supplied and installed price per assembly (inclusive of box, etc.)

2-way type ... ... S$ ……

4-way type ... ... S$ ……

S4.12 Wet Riser Landing Valve: supplied and installed price per assembly (inclusive of plug, chain, strap, padlock, etc.)

Standard type ... ... S$ ……

Pressure Reducing Type ... ... S$ ……

S4.13 Fire Alarm System

(a) Sub-Fire Indicator Board (SIB), inclusive of internal wiring, accessories, etc.

(i) 8 zones ... ... S$ ……

(ii) 12 zones ... ... S$ ……

(iii) 16 zones ... ... S$ ……

(b) 1 No. smoke detector inclusive of accessories etc. c/w wiring

... ... S$ ……

(c) 1 No. heat detector inclusive of accessories etc. c/w wiring

... ... S$ ……

(d) 1 No. manual call point inclusive of accessories etc. c/w wiring

... ... S$ ……

(e) 1 No. alarm bell (weatherproof type) c/w wiring

... ... S$ ……

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S4.14 Addressable System

(a) 1 No. addressable smoke detector inclusive of accessories etc. c/w wiring ... ... S$ ……

(b) 1 No. addressable heat detector inclusive of accessories etc. c/w wiring
... ... S$ ……

(c) 1 No. addressable manual call point inclusive of accessories etc. c/w wiring
... ... S$ ……

(d) 1 No. alarm bell (weatherproof type) c/w wiring
... ... S$ ……

(e) 1 No. mimic panel ... ... S$ ……

(f) 1 No. interface module inclusive of accessories etc. c/w wiring
... ... S$ ……

(g) 1 No. control module inclusive of accessories etc. c/w wiring
... ... S$ ……

(h) 1 No. addressable loop card ... ... S$ ……

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S4.15 Electric Motors & Starters: supplied and installed price ($) per piece as per Specification.

Rating		Electric	Type of Starter				
kW	Hp	TEFC Motor	D.O.L.	Star/Delta	Auto Transformer	Soft Starter	Frequency Converter
0.75	1						
1.1	1.5						
1.5	2						
2.2	3						
4	5						
5.5	7.5						
7.5	10						
11	15						
15	20						
18.5	25						
22	30						
30	40						
37	50						
45	60						
55	75						

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S4.16 Electrical Wiring - supplied and installed price (S$) per metre run.

(a) 450/750 volt grade PVC cables in GI conduit/trunking run on surface or concealed inclusive of conduit/trunking accessories, earth wire, terminations, etc.

2 x 1.5mm^2/1C	$ ……
2 x 2.5mm^2/1C	$ ……
3 x 2.5mm^2/1C	$ ……
2 x 4.0mm^2/1C	$ ……
3 x 4.0mm^2/1C	$ ……
2 x 6.0mm^2/1C	$ ……
3 x 6.0mm^2/1C	$ ……
2 x 10mm^2/1C	$ ……
3 x 10mm^2/1C	$ ……
3 x 16mm^2/1C	$ ……
3 x 25mm^2/1C	$ ……
3 x 50mm^2/1C	$ ……

(b) 600/1000 volt grade FR cables on vertical/horizontal cable tray or in GI conduit/trunking run on surface or concealed inclusive of supporting brackets, tray, fixing cleats, cable lugs, terminations, jointing and accessories, earth wire etc.

3 x 25mm^2/1C	$ ……
3 x 35mm^2/1C	$ ……
3 x 50mm$_2$/1C	$ ……
3 x 70mm^2/1C	$ ……

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