

# INSULATED FIRE RATED CURTAIN

IFRC120

IFRC240

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# INSULATED FIRE RATED CURTAIN



UP TO  
**240** | FIRE  
minutes | Resistance &  
Insulation

## Introduction

Our Delta Technology Insulated Fire Rated Curtain (IFRC) is tested to SS 489 : 2001 at TUV SUD PSB to 4 hours fire rating integrity and 4 hours fire insulation. We are listed with TUV SUB PSB and Setsco Services in Singapore. Our double layer curtains are design to compartmentalize and seal off the toughest fire outbreak; offering maximum protection against fire. During normal circumstances, the IFRC is always in the open position to allow traffic to pass. When there is a fire outbreak, the curtains are closed via gravity through fusible link or fire alarm activation. Our IFRC is suitable to be installed in any commercial, industrial, residential and public buildings. Note IFRC is not suitable for daily operation, it should only be activated in an event of fire.



Model	Fire Rating Integrity[E]	Fire Rating Insulation[I]
IFRC 120	4 Hours Integrity	2 Hours Insulation
IFRC 240	4 Hours Integrity	4 Hours Insulation



Before Test



After Test



## Distinctive Features



### High Standard of Fire-Rating

Ensues highest standard of fire safety in the industry with Fire integrity and insulation up to 4 hours. Tested to SS489:2001/BS 476. IFRC compartmentalizes and isolate fire.



### Bigger, Larger, Wider

Single span up to 15 m X 8 m in dimension, this caters to any large openings in the market.



### Fire Activation Via Fusible Link

IFRC has a fusible link that melts at 69 °C, thereby causing the shutter to slide down freely under gravity. This is a fail-safe mechanism.



### Operation Versatility

IFRC can be manually or automatically operated by using hand chain or control box respectively.



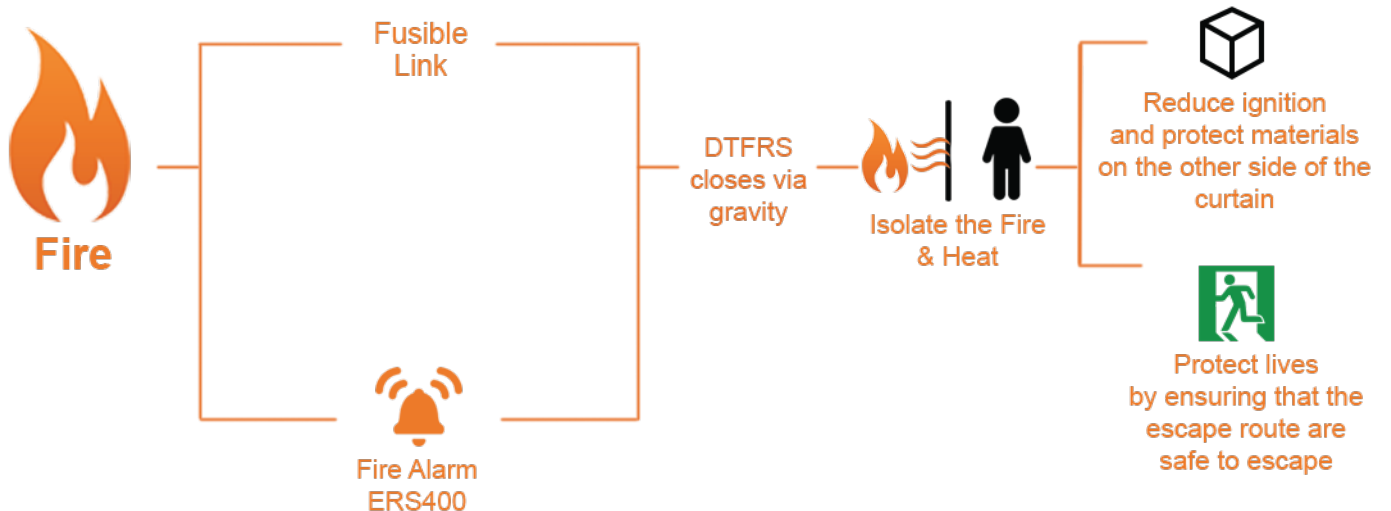
### Fire Activation Via Alarm

Upon activation of fire alarm (ERS400), the alarm will release the brake, thus allowing the shutter to close down freely under gravity.



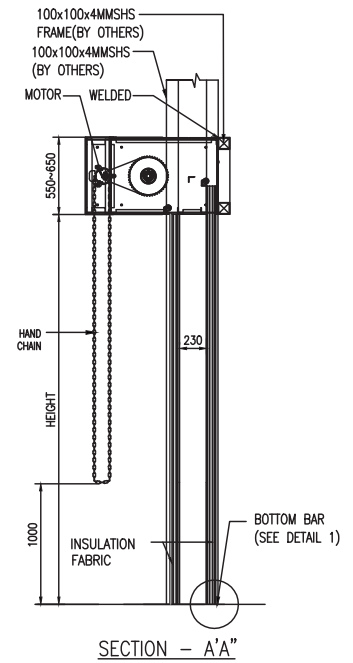
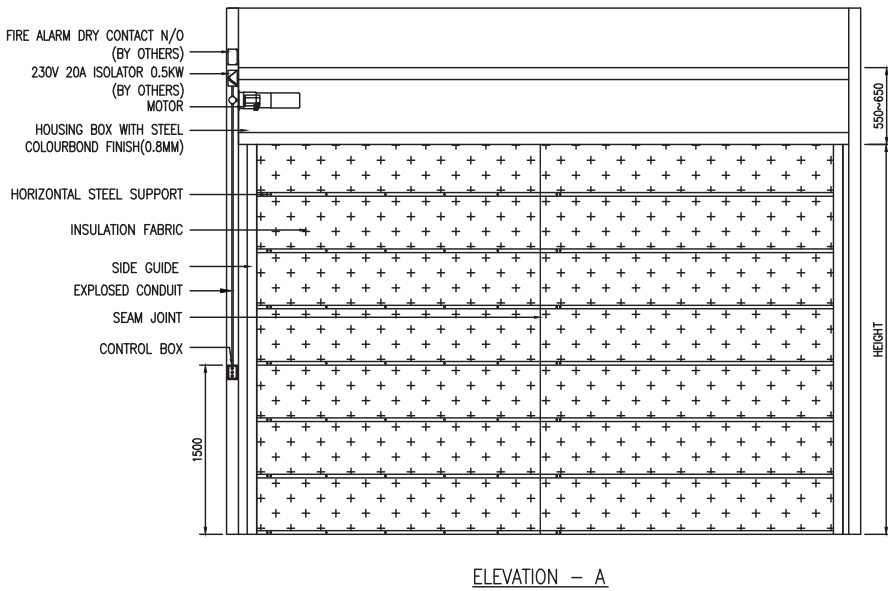
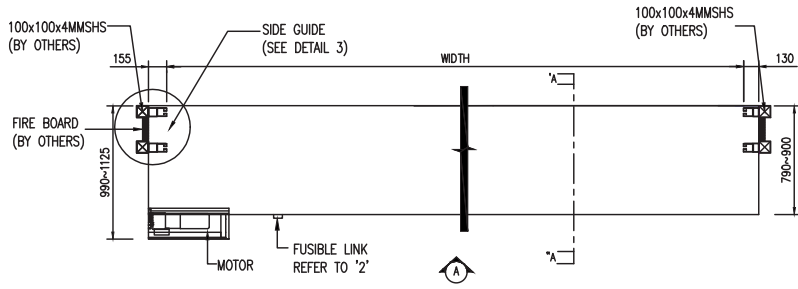
### Intelligent System(IS)

IS has a built-in Brake Renagement Device that stops the shutter once it touches the ground, this will protect the shutter and the ground from any damages. In addition, IS will automatically reset itself after the fire alarm is switched off, this conveniences the user as no physical reset is required.

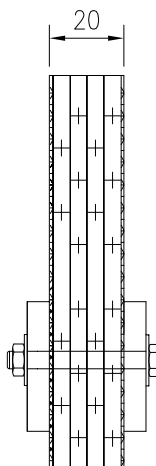


# Typical Drawing

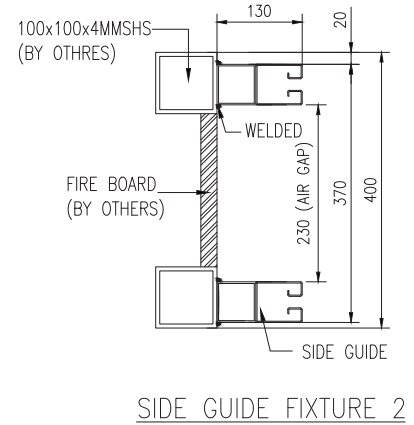
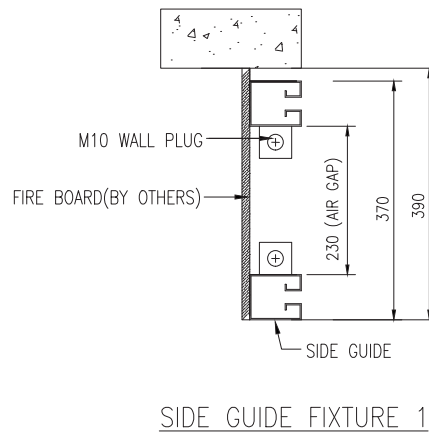
## Insulated Fire Rated Roller Curtain Components



### Slat Profile



### Side Guide Fixing Position



## Material & Finish Details

Part	Material	Coating
Curtain	20mm Thick Ceramic cloth and ceramic wool	No Coating, White colour & Grey
Side Guide	2mm Thick Mild Steel, SUS304	Electro-galvanized, Colourbond, Powder Coated, Fluorocarbon
Bottom Bar	Mild Steel, SUS304	Electro-galvanized, Powder Coated, Fluorocarbon
Shutterhood Cover	Mild Steel, SUS304	Electro-galvanized, Colourbond, Powder Coated, Fluorocarbon
Motor Cover	Mild Steel, SUS304	Colourbond, Powder Coated, Fluorocarbon

\*Refer DNT Chart for fluorocarbon colour options

\*Refer to oxyplast chart for powder coating colour option

## Motor Specifications

Model	DT-300	DT-400	DT-500	DT-700	DT-1000
Direct Lifting Load (kg)	300	400	500	700	1000
Operation mode	Electric, AC				
Manual Function	Hand Chain Pulley				
Power (hp)	0.20	0.28	0.42	0.47	1.00
Power (W)	150	210	310	350	750
Current (A)	0.63	0.88	1.29	1.46	3.13
Poles (P)	4P				
Rating Time	5 minutes				
Rotation R.P.M	1720				
Gear Transmission	Single-Row-Off-Centre Gear			Double-Layer Planetary Gear	
Gear Ratio	45:1			68:1	
Brake and Clutch System	Autonomous Unit			Dual Brake	
Bracket	Chain Driven				
Sprocket	9T	9T	9T	10T	11T
Chain	#50			#60 / #80	#60 / #80
Length (mm)	445	445	470	570	615
Position Control	Built-in upper and lower limit switches				

\*Thermal Overload 100°C

## Shutter Specifications

Item	Model	IFRC 120	IFRC 240
		Fire Integrity	4 Hours
Fire Insulation		2 Hours	4 Hours
Maximum Single Span		15000 (Width)	
		8000 (Height)	
Main Body	Side Guide	W70 x L80 (2mm thickness)	
	Shutterhood	550~650	
	Curtain	20mm, Double layer	
	Bottom Bar	"I" Shape	

\*All dimensions in mm.

# Components

## Basic Components



Push Button Box  
Electrically operate  
(Mechanical)



Fusible Link  
Fire activation



Motor  
Roller shutter  
motorised operator

## Optional Components



UPS  
For emergency  
back-up battery  
power



Remote  
Handheld controller  
to operate shutter



Motor Cover  
Protection Cover for  
motor



BMS  
To monitor the  
shutter position  
(open/ close/ fault)  
from BCC/FCC

Others  
Wind Lock  
Explosion Proof  
Remote Interfacing System

### Remarks:

- Due to the properties of printing ink, the colour of the product may differ from the actual color.
- The specifications are subject to change without notice for improvements.
- All items are subjected to Delta Tech Group Terms & Conditions (available at our website, <http://www.deltatech.com.sg>)

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