

INSULATED FIRE STEEL SHUTTER

IFSS 120

Delta Tech Group



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INSULATED FIRE STEEL SHUTTER



UP TO
120 minutes
FIRE Resistance & Insulation

Under our Delta Tech Group, IFSS series Insulated Fire Steel Shutter is tested to BSEN 1634-1: 2008 & SS 489: 2015 with 4 hours fire rating integrity and 2 hours insulation value. We are listed with SETSCO Services Pte Ltd. Our single layer panels are designed to compartmentalize and seal off the toughest fire outbreak; offering maximum protect and isolate against fire and heat. The unique design only required single barrel and single panel which only required minimum guide space. During normal circumstances, the IFSS is always in open position to allow traffic to pass and only to closed via gravity through fusible link or fire alarm activation upon fire outbreak.

IFRS is commonly installed in places such as schools, industrial opening, stalls, malls and car parks where fire hazard can be a concern.



Model	Fire Rating Integrity [E]	Fire Rating Insulation (I)
IFSS	4 Hour	2 Hour



Before Test



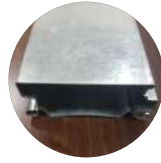
After Test

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/ BSEN1634-1:2008. IFSS compartmentalizes and isolate the fire



Bigger, Larger, Wider

Single span up to 14.5 x 7.5 in dimension, this caters to any large openings in the market.



Fire Activation Via Fusible Link

IFSS 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

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



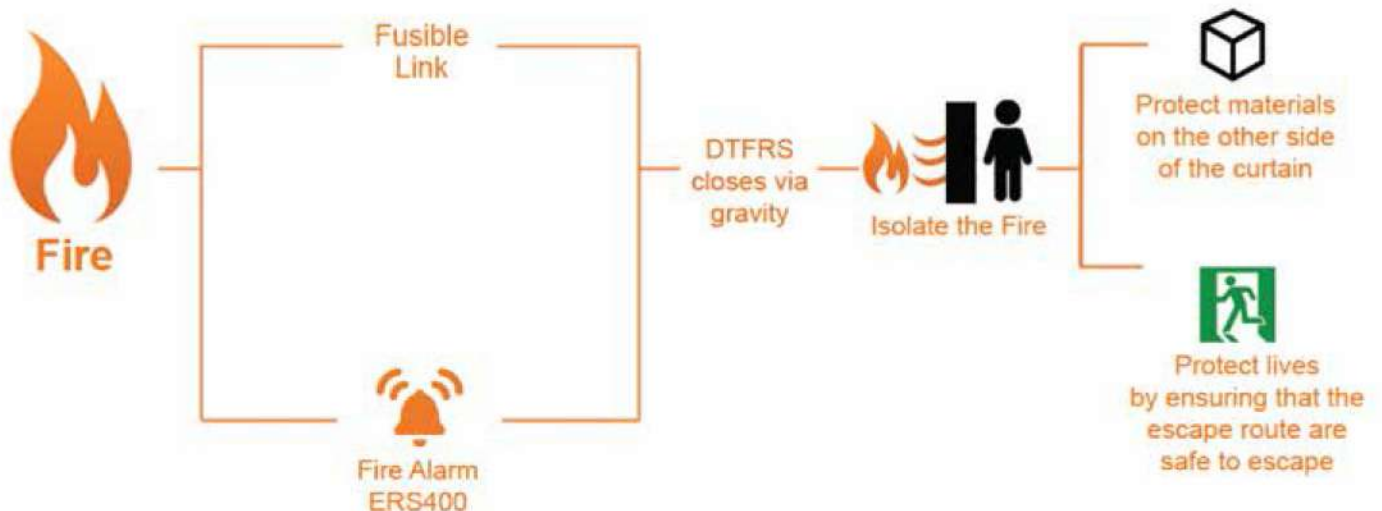
Fire Activation Via Alarm

Upon activation of fire alarm (ERS400), the alarm will activate the shutter to operate and close to the end.



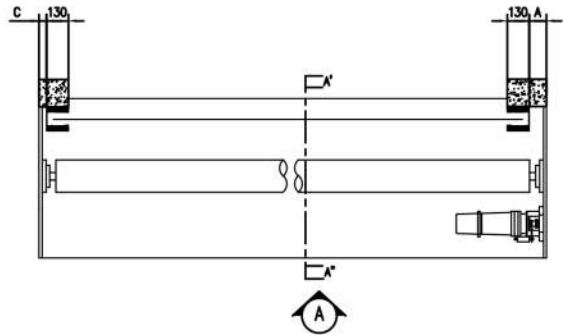
Intelligent System (IS)

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.

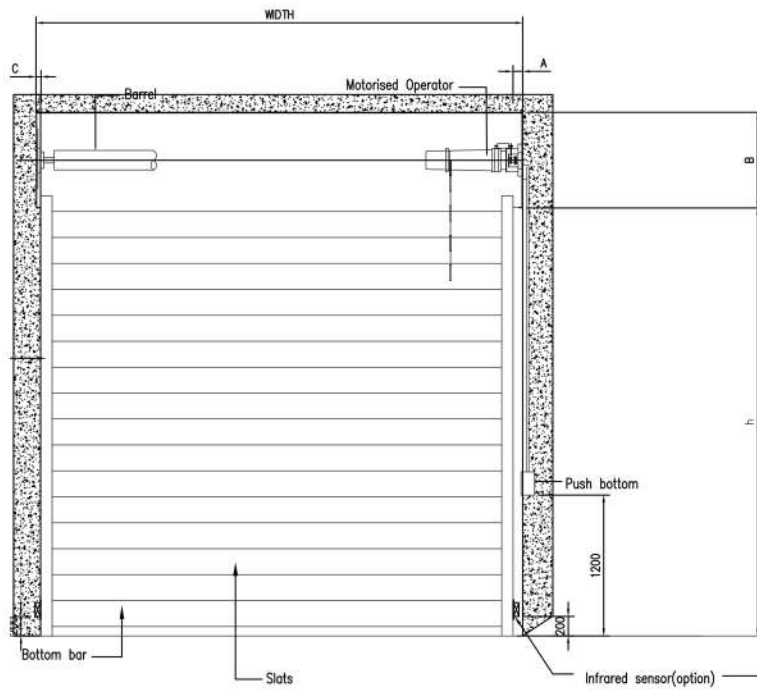


Typical Drawing

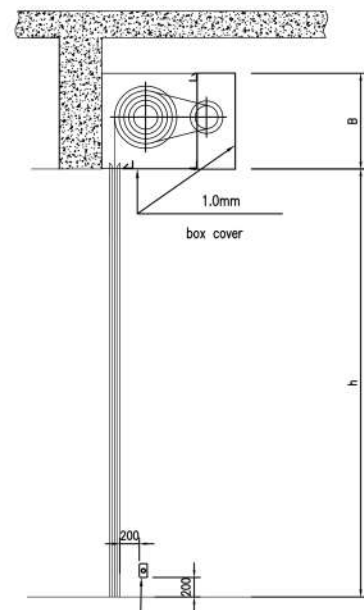
Insulated Fire Steel Shutter Component



PLAN OF MOTORISED INSULATED FIRE STEEL SHUTTER (IFSS)

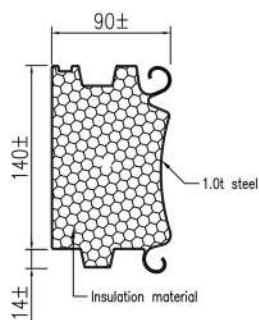


ELEVATION A



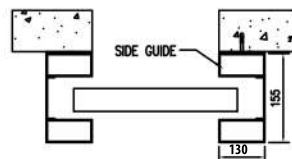
SECTION - A'A"

Slat Profile

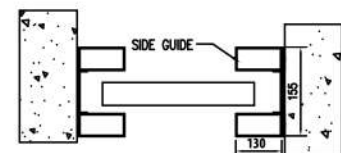


SLAT PROFILE

Side Guide Fixing Position



BEHIND WALL INSTALLATION



BETWEEN WALL INSTALLATION

Material & Finish Details

Part	Material	Coating
Slat	90mm width steel slat with insulation in fill	Galvalume, Colourbond, Powder Coated, Fluorocarbon
Side Guide	1.5mm Thick Mild Steel SUS304	Electro-galvanized, Colourbond, 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	DT-1500	DT-2000	DT-3000
Direct Lifting Load (kg)	300	400	500	700	1000	1500	2000	3000
Operation mode	Electric, AC							
Manual Function	Hand Chain Pulley							
Power (hp)	0.20	0.28	0.42	0.47	1.00	1.50	2.00	3.00
Power (W)	150	210	310	350	750	1000	1500	2200
Voltage (V)	230(V)	230(V)	230(V)	230/415(V)	230/415(V)	415(V)	415(V)	415(V)
Current (A)	0.63	0.88	1.29	1.46	3.13	3.3	3.5	5
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	11T	11T	11T
Chain	#50		#60 / #80	#60 / #80	#80	#80 / #100	#100	
Length (mm)	445	445	470	570	615	635	660	690

*Thermal Overload 100°C

Shutter Specifications

Item	Model	IFSS 120
Fire Integrity and Fire Insulation		4 Hours Fire Integrity and 2 Hours Fire Insulation
Maximum Single Span		14500 (Width) 7500 (Height)
Main Body	Side Guide	W155 x L130 (1.5mm thick)
	Shutterhood	710 x 980 to 1170 x 1440
	Panel	90
	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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