

# DOOR SYSTEMS

“The SMOKE & FIRE CONTAINMENT People”

UL 10B Hose Stream Rated Curtains

Deployable Fabric Fire Walls

Floor Opening Protection

A photograph showing three workers in safety gear (hard hats, jackets) handling a large white hose in a smoky environment. The hose is being pulled from a wall on the left. The background is filled with thick, grey smoke, suggesting a fire containment or testing scenario. The workers are positioned in the lower half of the frame, with the hose curving across the foreground.

The **SMOKE** and **FIRE CONTAINMENT** People  
[doorsysinc.com](http://doorsysinc.com)

# LETTER FROM THE PRESIDENT

Door Systems®, is a full-service smoke and fire curtain company dedicated to provide innovative solutions to your existing smoke and fire protection needs as well as assisting in concept, design and layout of all future projects.

Whether you are an architect seeking consultation on a new construction project or a building owner/engineer looking to bring your existing smoke and fire control system up to code while reducing maintenance cost and energy expense, the Door Systems staff is here to assist.

Door Systems has created a revolutionary new product line of UL10B fire curtain products that have passed the ASTM E2226 Hose Stream structural integrity test. Based on a specialty designed fire curtain with multiple layers, these new products incorporate the cutting-edge technology of our UL10D curtain products but with the advantage of being code compliance as opening protectives in any fire wall rated for up to 2 or 3 hours (depending on curtain product used).

These new fire curtain products offer distinct advantages over traditional steel shutter products. Advantages include: cost effective, 75% less in overall weight, less side room or head room required, can be built much larger than tradition steel doors, egress options available, battery back up and gravity fail safe standard, can be almost completely hidden in your architectural design scheme, code compliant without the requirement of smoke seals.

Our curtain systems are designed to be discreet, robust and simple to operate and maintain, so we can find a solution to the most challenging architectural demands.

This globally recognized technology is gaining rapid acceptance here in the USA. The manufacturing processes and quality control procedures of our products are certified to meet the full requirements of ISO 9001:2015. Every smoke curtain and fire curtain from Door Systems is Certified and Listed by an approved UL listed agency. All our DSI Smoke and Fire Protective curtains are rigorously tested and comply with all relevant UL standards allowing their incorporation into design throughout the United States.

I invite you to review the full array of products and services we have to offer and look forward to assisting you with any questions you might have regarding your future door needs.

Please take a moment to look through our applications and see how our products can be advantageous to your building design and help solve your smoke and fire containment issues.

Sincerely,



Jeff Bonnema, President  
Door Systems



## MODEL DSI-HS10B

### *Hose Stream Rated Smoke and Fire Curtain*



The DSI-HS10B Hose Stream Rated Smoke and Fire Curtain incorporates the cutting-edge technology of our UL 10D curtain products but with the advantage of being code compliant in any fire wall rated up to 3 hours.

With a UL10B 3-hour fire rating, the DSI-HS10B Fire Curtain can be used in fire walls and fire barrier walls as a replacement solution to traditional Coiling Steel Fire doors.

The assembly is comprised of a proprietary multi layered fire rated fiberglass/stainless steel fabric wound around a roller which is encased in a compact head box that is typically installed above the ceiling with side guides that are buried in the wall. This makes the system virtually invisible until activated.

#### Compliant with...

Code	Description
UL 10B	With Hose Stream – 180 minutes
UL 1784	Air leakage test of door assemblies
UL 864	Control Units for Fire Protective Signaling Systems



#### **GUARANTEED QUALITY**

Door Systems guarantee high quality products, tested to both UL and BS standards.

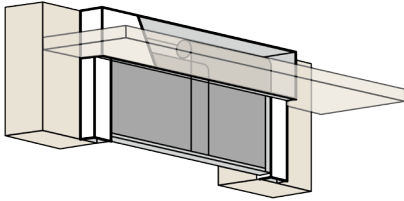
## ADVANTAGES VS STEEL FIRE DOORS

- Cost effective
- Lightweight – 75% lighter than overhead steel fire doors
- Compact headbox – as little as 9” but no more than 12” of headroom required for larger sizes.
- Minimal Side room required -- 4” for any size
- No size restrictions – Almost unlimited in size
- Various egress options available
- 24-volt system with Battery backup standard
- Gravity Failsafe System with Auto reset
- No exposed mechanisms, gears, chains, or motor parts
- Can be almost completely hidden in your architectural design scheme.
- Code Compliant - Tested and Labeled to UL 10B 180 minutes with hose stream. UL1784 “S” label

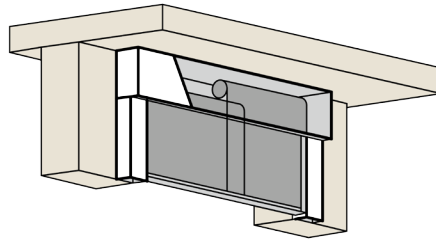
# MODEL DSI-HS10B

## Hose Stream Rated Smoke and Fire Curtain

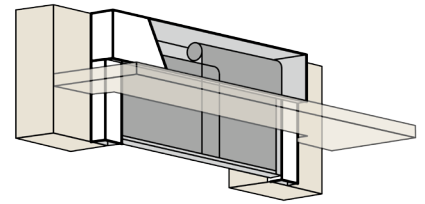
### HEADBOX FINISHING OPTIONS



Flush to Ceiling (HBFC\_01)

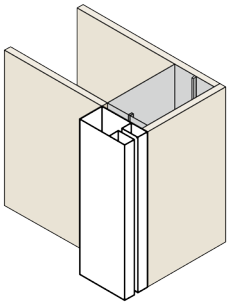


Exposed Mount (HBEM\_01)

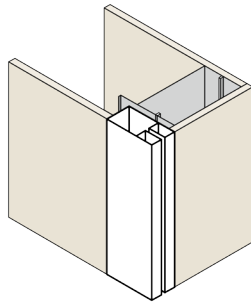


Shadow Gap (HBSG\_01)

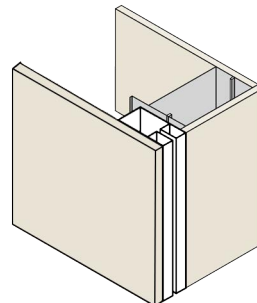
### SIDE GUIDE MOUNTING OPTIONS



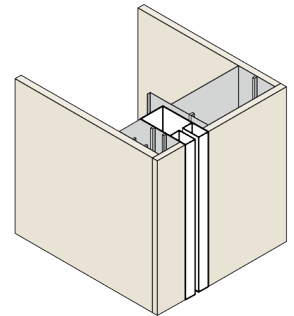
Exposed Flush (SGMEF\_01)



Butt to Wall Flush (SGMBWF\_02)

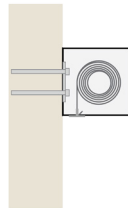


Inset in Drywall (SGMIDF\_03)



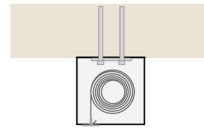
Inset in Wall Flush (SGMIWF\_3A)

### SINGLE ROLLER MOUNTING OPTIONS



Fixed Mount (SRMFM\_01)

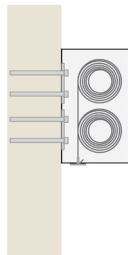
*Fixed directly to the lintel above an opening.*



Soffit Fixed Mount (SRMSFM\_01)

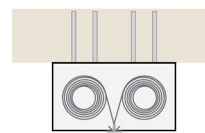
*Fixed directly to the underside of the soffit slab.*

### MULTIPLE ROLLER MOUNTING OPTIONS



Over/Under Arrangement (MRMOU\_01)

*Fixed directly to the lintel above an opening.*



Side by Side Arrangement (MRMSS\_01)

*Fixed directly to the underside of the soffit slab.*





## Comparison Chart

DSI-HS10B FABRIC FIRE CURTAIN vs. ROLLING STEEL FIRE DOORS

Features & Qualifications	DSI-HS10B HOSE STREAM RATED SMOKE AND FIRE CURTAIN	Overhead Coiling Steel Fire Doors
Fire Label	UL 10B with Hose Stream	UL 10B with Hose Stream
Fire Rating	20, 90, or 180 minutes	20, 90, or 180 minutes
Smoke Label	UL 1784 (Standard)	UL 1784 (Optional)*
Smoke Seals	Not Required	Required for "S" Label
Fail Safe Operation	Standard	Optional for an added cost
Minimum Head Room Requirement	9"	16"
Maximum Head Room Requirement	12"	30"
Side Clearance Required	4" on all sizes	Varies from 7 1/2" - 13 1/2"
Weight	3-5 lbs. per Sq. Ft.	13-15 lbs. per Sq. Ft.
Maximum Opening Size	984' Wide x 26' Tall*	24' Wide x 24' Tall*
Activation Function	Fire Alarm &(or) Fusible Link	Fire Alarm &(or) Fusible Link
Auto Reset Function	Standard	Optional for an added cost
Egress	Multiple options available	Not available
Battery Back-up	Standard	Optional for an added cost
Power Requirements	24V standard	120V Minimum
Finishes	Factory Primed finish	Factory Primed finish

\* Contact Factory for options or other sizes

# MODEL DSI-HHS10B

## Hose Stream Rated Horizontal Fire Curtain



The DSI Hose Stream Rated Horizontal Fire Curtain Model DSI-HHS10B allows architects to compartmentalize large floor openings and reduce or eliminate mechanical smoke evacuation systems. A solution to design challenges of preventing smoke and fire from spreading through the ceiling and atrium voids, stairwells, and skylights.

The DSI Hose Stream Rated Horizontal Fire Curtain consists of a light gauge compact steel headbox that houses the roller, fabric, and motor within the casing to create a small package that remains virtually invisible until deployed. The curtain consists of a light weight proprietary multi layered fire rated fiberglass/stainless steel fabric and slim steel side guides.

The DSI-HHS10B Horizontal Fire Curtain incorporates the cutting edge technology of our UL 10D curtain products but with the advantage of being tested and labeled to 2 hours UL 10B with Hose Stream.

### Compliant with...

Code	Description
UL 10B	With Hose Stream – 120 minutes
ASTM E84	Class A Surface Building Characteristics of Building Materials
UL 864	Control Units for Fire Protective Signaling Systems

### ADVANTAGES:

- UL 10B 120 minutes with Hose Stream
- Lightweight – 75% lighter than steel fire doors, requires little to no structural support.
- Compact design
- Creates open space for your building design.
- Saves money by reducing or eliminating smoke evacuation systems.
- Battery backup system standard
- Fail-safe deployment with automatic reset
- Multiple mounting options
- Widths to 32 feet wide
- Lengths to 32 feet long\*

\*For larger sizes consult the factory



### GUARANTEED QUALITY

Door Systems guarantee high quality products, tested to both UL and BS standards.

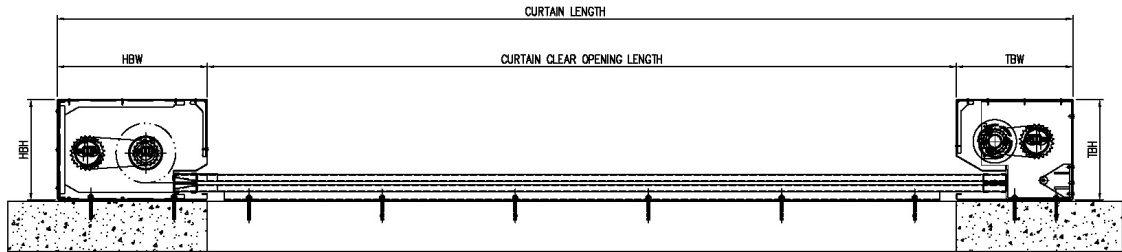
# MODEL DSI-HHS10B

Hose Stream Rated Horizontal Fire Curtain

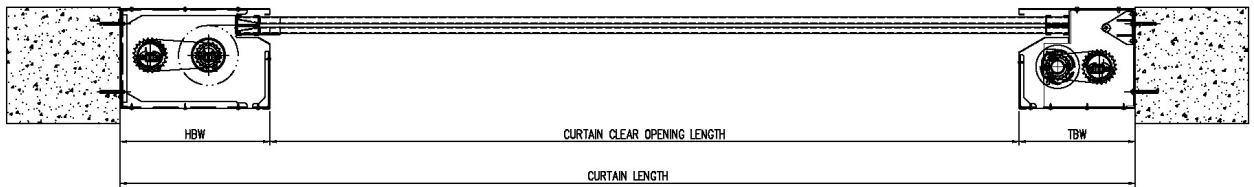
HEAD BOX DIMENSIONS BASED ON CURTAIN LENGTH				TAIL END BOX DIMENSIONS			
UP TO 10' IN LENGTH		UP TO 23' IN LENGTH		UP TO 32' IN LENGTH		TBW	
OPENING SIZE		HEADBOX		TAIL END BOX			
CURTAIN LENGTH	CURTAIN WIDTH	WIDTH (HBW)	HEIGHT (HBH)	WIDTH (TBW)	HEIGHT (TBH)		
3' 4" to 10' 0"	up to 32' 0"	15"	9"	13-3/4"	11-3/4"		
10' 0" to 23' 0"	up to 32' 0"	17-3/4"	11"	13-3/4"	11-3/4"		
23' 0" to 32' 0"	up to 26' 0"	18-1/4"	11-3/4"	13-3/4"	11-3/4"		
*For larger sizes consult the factory (Bi-Parting)							

## MOUNTING OPTIONS

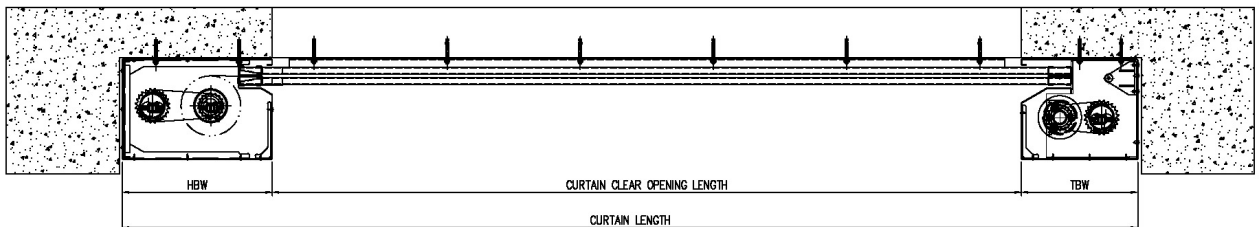
### FLOOR MOUNT



### JAMB MOUNT



### UNDER CEILING MOUNT







# MODEL DSI-FW119

## Deployable Fabric Fire Wall

The DSI Deployable Fabric Fire Wall Model DSI-FW119 allows architects to go beyond the maximum 25% fire barrier opening penetration restriction (IBC Section 707.6). Typical overhead or side acting opening protectives with a fire resistance rating fall into this limitation. However, with an ASTM E119/ UL263 rating, the DSI Deployable Fabric Fire Wall is considered a wall and therefore meets the exception (Exception 3) and is not limited to this rule.

The DSI Deployable Fabric Fire Wall consists of two of our DSI Hose Stream Rated Smoke and Fire Curtains mounted back-to-back to create a small light weight package above the ceiling that remains virtually invisible until deployed. The curtains consist of proprietary light weight multi layered fire rated fiberglass/stainless steel fabric and slim steel side guides that can be hidden in the walls.

The DSI Deployable Fire Wall incorporates the cutting-edge technology of our Hose Stream Rated Smoke and Fire Curtain but with the advantage of being tested as a 3-hour fire rated wall assembly. This in turn allows architects more cost-effective options to open space design while still meeting code requirements.

### ADVANTAGES:

- Creates open space for your building design.
- Allows designers to go beyond the 25% fire barrier penetration restriction.
- Saves money by reducing or eliminating smoke evacuation systems.
- Compact design
- Code compliant – Tested to ASTM E119/ UL 263
- Fire rated up to 3 hours
- 250-degree Temperature rise rating up to 2 hours
- Battery backup system standard
- Fail-safe deployment with automatic reset
- Widths to 948 feet wide.
- Heights to 39 feet tall
- Push button egress available

### Compliant with...

Standard	Description
ASTM E119/UL 236	250° Temperature Rise Rating up to 2-Hour
ASTM E226/UL 10B	Standard Practice for Application of Hose Stream
UL 864	Control Units for Fire Protective Signaling Systems



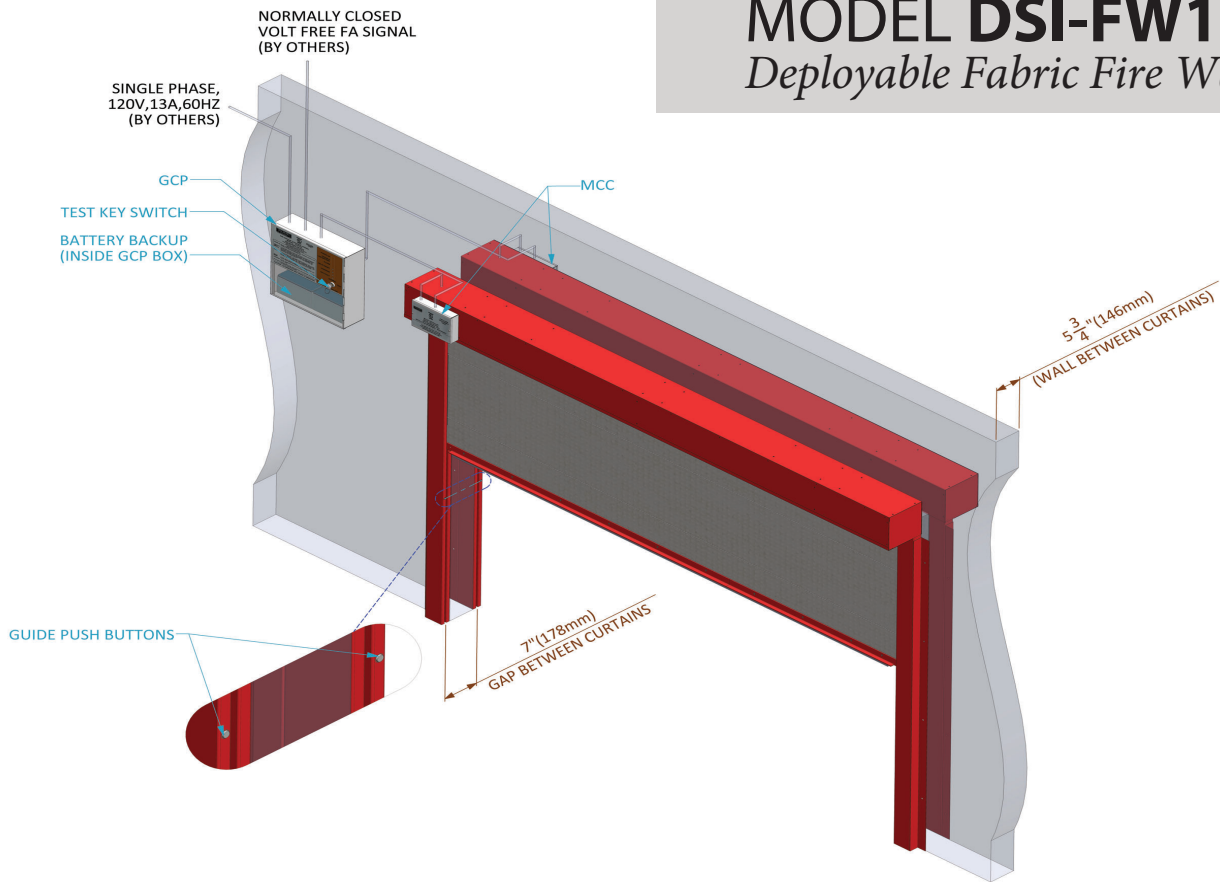
### GUARANTEED QUALITY

Door Systems guarantee high quality products, tested to both UL and BS standards.



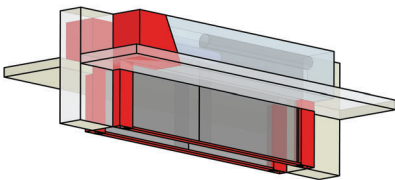
# MODEL DSI-FW119

## Deployable Fabric Fire Wall

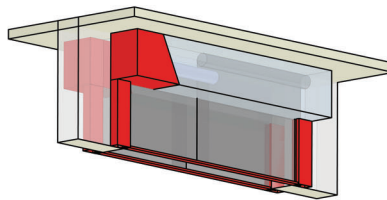


### Configurations

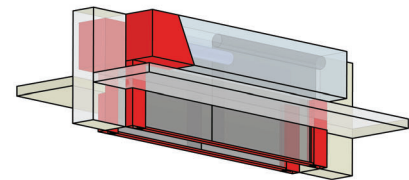
#### HEADBOX FINISHING OPTIONS



Flush to Ceiling(HBFC\_01)

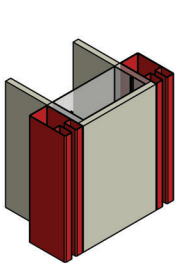


Exposed Mount(HBEM\_01)

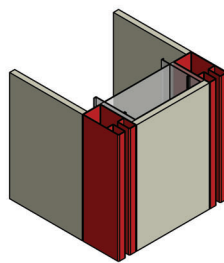


Shadow Gap(HBSG\_01)

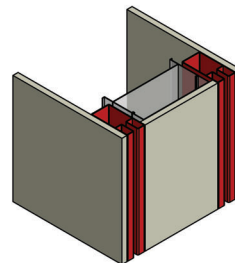
#### SIDE GUIDE MOUNTING OPTIONS



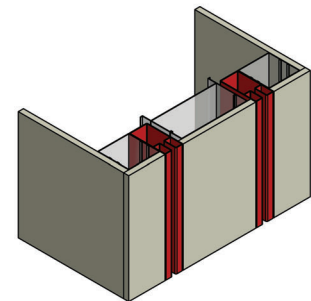
Exposed Flush(SGMEF\_01)



Butt to Wall Flush(SGMBWF\_02)



Insert in Drywall(SGMIDF\_03)



Insert in Wall Flush(SGMIWF\_3A)



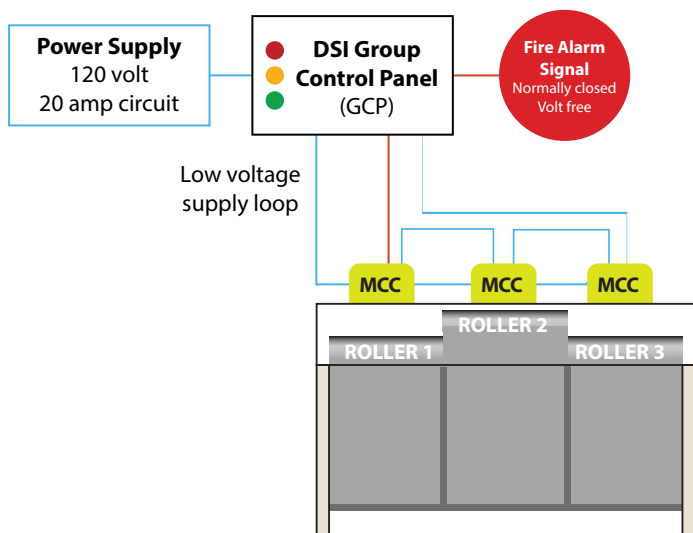


# DSI CONTROL OPTIONS

The Group Control Panel (GCP) provides power to the Motor Control Circuit (MCC) units when the fire alarm status is normal (closed). If the fire alarm is activated, the MCC units are powered down, allowing the curtains to deploy via gravity to their operational fire position. When the alarm is reinstated, the MCC's are powered up retracting the curtains. If there is a main power failure, the back-up batteries provide power to the MCC's for up to 3 hours (subject to load) and prevent deployment until discharged, unless overridden by an alarm signal. Delayed descent and delayed reset functions are fitted as standard.

## FEATURES

- **Integral Battery Back up:** Up to 3-hour power supplied by two 7Ah rechargeable, sealed, lead acid cells
- **Testing:** Key switch control on panel
- **Status Indication:** LED series on panel:  
Green=main power healthy, Red=fire status, Bottom Green=battery failure
- **Compatibility:** The GCP runs up to 3 MCC units (3 motors) from the 24v ring output. Two stage descent (with brake motors) is fitted as standard and is adjustable to suit project requirements
- **Options:** Optional modules for delayed descent, split drop, and BMS relays are available as an upgrade



### Motor Control Circuit Specifications

Type	Description
<b>Dimensions</b>	6-1/2" H x 9-1/2" W x 2" D
<b>Finish</b>	White powder coated mild steel



### Group Control Panel Specifications

Type	Description
<b>Dimensions</b>	15-1/2" H x 13-1/2" W x 4" D
<b>Finish</b>	White powder coated mild steel
<b>Power supply</b>	120-130v 60Hz AC
<b>Fire signal</b>	Open on fire, normally closed volt free contacts



# DSI EGRESS OPTIONS

*Smoke and Fire Curtain Electronics*



**EMERGENCY UP BUTTONS (EUB)**



**DELAYED 2-STAGED DESCENT**



**WALL MOUNTED PUSH TO EXIT BUTTON**

## EGRESS FUNCTIONS

EUB or wall mounted exit devices are powered by an internal battery back up system and act as the primary form of egress. The delayed 2-staged descent allows occupants extra time to egress and immediately starts protecting the space by acting as a draft stop.



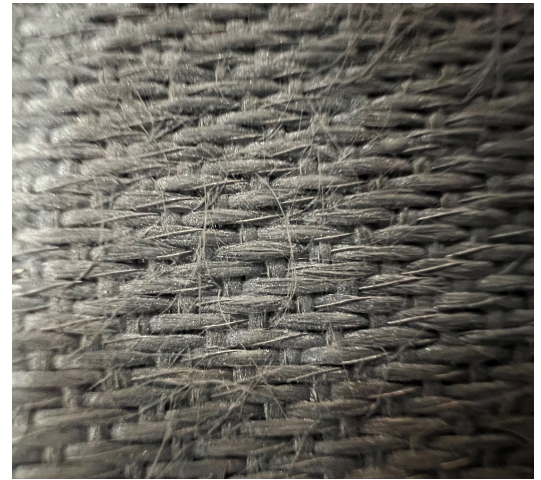
# DSI HS690-SS FABRIC- UL 10B

## Hose Stream Rated Smoke and Fire Curtain

HS690-SS is a stainless-steel wire reinforced glass fabric with a specially formulated aluminum pigmented, fire retardant silicone elastomer coating on both sides. That achieves a high temperature resistance of up to 2012 °F and maintains integrity thanks to its UL 10B label, with up to 180 minute rating that includes the Hose Stream Test.

The material does not generate toxic emissions, has a good resistance to hydrolysis and offers the convenience of being flexible and light weight.

The finished curtain fabric is carefully sewn with stainless steel thread to achieve factory produced hems at the top and the sides. Using a combination of woven fiberglass, stainless steel wire reinforcement and silicone coating, the HS690-SS fabric is the ideal choice for openings that need to be resistant to higher temperatures.



### Specifications

Specifications	Data	Tolerance	Test method
Thickness	.65mm	± 10 %	DIN ISO 4603/E
Base Fabric Weight	640g/m2	± 5 %	DIN EN 12127
Coated fabric weight	840g/m2	± 10 %	DIN EN 12127
Base Fabric Yarn (Warp)	EC9 68x2 + IV1 S/S Wire		DIN EN 12654
Base Fabric Yarn (Weft)	EC9 68x2 + IV1 S/S Wire		DIN EN 12654
Thread Count ( Wrap)	16 per 1cm	± 5 %	DIN EN 1049
Thread Count ( Weft)	15.3 per 1 cm	± 5 %	DIN EN 1049
Coated Fabric Tensile Strength (Wrap)	730 N/cm		DIN ISO 4606
Coated Fabric Tensile Strength (Weft)	700 N/cm		DIN ISO 4606
Weave	8 Shaft Satin		DIN ISO 9354

Specifications	Description
Coating	Fire retardant Silicone with added Aluminum pigment on both sides
Thread	Stainless Steel
Standard color	Grey
Stitching Thread - Tensile Strength	81N
EN 13501	Classified as A2,S1,D0



### GUARANTEED QUALITY

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