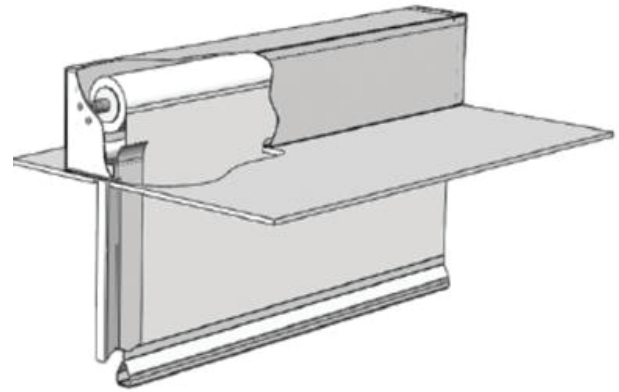




GENERAL DESCRIPTION:

The SD60GS Elevator Smoke Containment system is intended for installation at a fire-resistance-rated elevator hoistway door, allowing the elevator doors to open directly into a fire-resistance-rated or nonresistance-rated corridor, and eliminating the need for an enclosed elevator lobby in accordance with Item 3 of IBC Section 3006.3. In the absence of a corridor, fire resistance-rated elevator doors protected by a SD60GS Elevator Smoke Containment system may open directly into an open floor plan.

- A single roller assembly with a 0.05 in. thick galvanized steel head box with a minimum 6 in. x 6 in. with a maximum opening width of 6 feet and opening heights of 20 feet.
- A 24 V motor controller (MC) housed the steel enclosure and mounted onto the motor end of the head box. NFPA 70 compliant tubular DC low voltage motor interfaced with Control Panel (CP) and a suitably weighted steel bottom bar.
- The fabric zero-clearance door manufactured from 415g/m² woven glass fiber fabric coated on each side with 20g/m silver polyurethane.
- Removable fire rated cover plates incorporated to allow access to zero-clearance door rollers.
- Zero-clearance door passes through fire rated galvanized steel auxiliary rails (side guides) that can be powder coated or prime coated in finish.
- Hand liftable grab strap on elevator cab side for manual egress per section 3.1.1. of ICC AC77.
- Egress switches on both sides of zero-clearance door on side guide



STANDARDS & CERTIFICATIONS:

The SD60GS is certified for quality by ISO 9000, meets and exceeds the requirements of:

- UL 1784 Listed and Certified
- Tested without artificial bottom seal
- ASTM E84 Listed and Certified
- NFPA 105
- UL 864 Listed and Certified
- ICC AC 77 Code Compliance Research Report CCRR-0418

PERFORMANCE:

- When tested in accordance with UL 1784, the SD60GS systems have air leakage ratings not exceeding 3.0 cfm per square foot of opening at a pressure differential of .01 w.c. at both ambient and elevated temperatures and are therefore eligible to bear an "S" label in accordance with Section 710.5.2.2.1 of the IBC and NFPA 105.
- 5000 cycles at normal ambient temperatures in the range (32°F - 140°F)
- Bottom bar deploys ~6"/second. Heavier bottom bar deploys ~12"/second.



FABRIC:

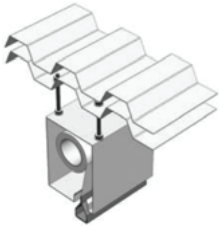
The SD60GS® fabric with Vison-tex™ is fabricated from woven glass fiber fabric coated on each side with silver polyurethane. The zero-clearance door fabric is manufactured from a unique “Panama” weave which offers an even surface and allows a tighter interlacing of the fabric edges. The tensile strength of Panama weave fabric is 10% greater than other fabrics due to constant thread tension.



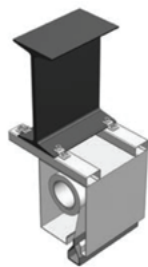
FABRIC		
Style: SD60GS		
Test Characteristics	Unit	Data
Weight of fab	g/m ²	455 ± 5%
Width	in.	39.4 ± 1%
Thickness	in.	0.017 ± 5%
Weave		Panama
Threads /warp	Per cm.	18.0 ± 3%
Fineness /warp	Tex	EC9 - 68x2 ± 5%
Tensile strength /weft	Lbf/ft	6167.0 ± 5%
Threads /warp	Per cm.	10.0 ± 3%
Fineness /weft	Tex	EC9 - 68x2 ± 5%
Tensile strength /weft	Lbf/ft	3426.1 ± 5%
Coating Quantity	G/m ²	35 ± 5%
One side/ Both sides	1/2	2
Application temp.	°F	932 (Glass)

HEADBOX INSTALLATION OPTIONS

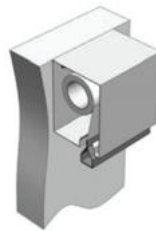
There are many installation options that suit all types of ceiling configurations and provide a broad array of flexibility.



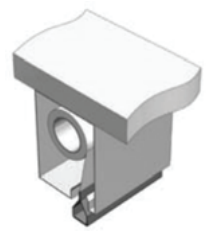
Unistrut Installation



I Beam

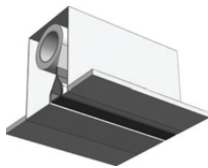


Back Mounted

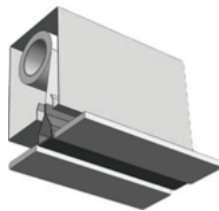


Top Mounted

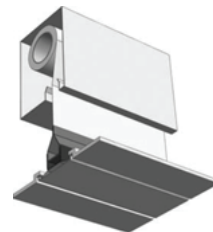
FINISHED CEILING OPTIONS



Flush



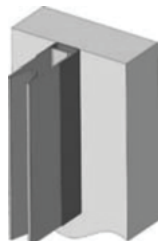
Shadow Gap



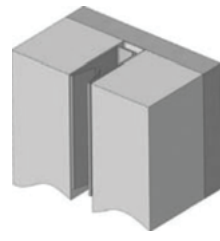
Downstand Neck

SIDE GUIDE CONFIGURATION

The side guide can either be exposed or recessed flush as shown below:



Exposed



Flush

CONTROL PANEL (CP):

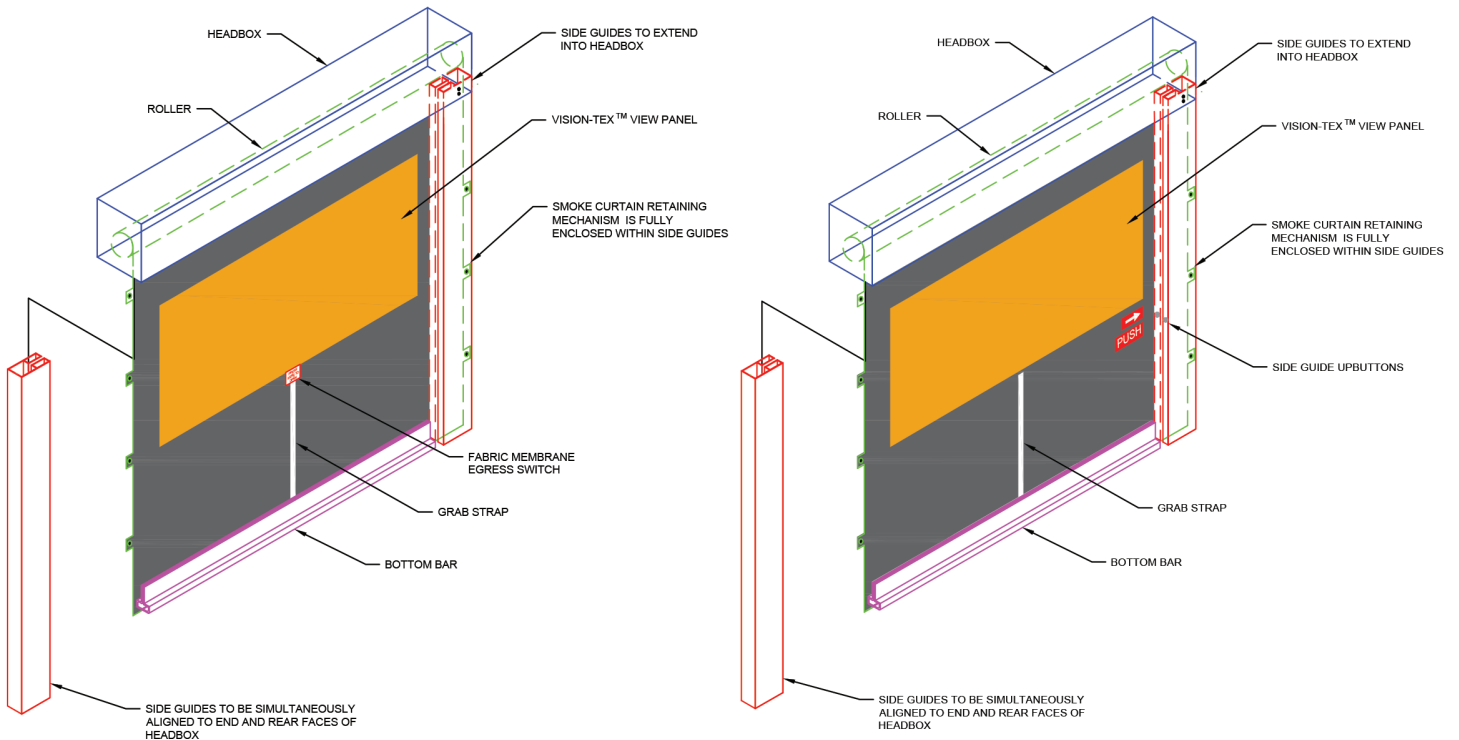
The SD60GS® Elevator Smoke Curtain deployment mechanism is directly synced and integrated in the fire alarm emergency systems.

When an alarm signal is detected, the CP will automatically trigger all the zero-clearance door systems to deploy in a controlled descent under gravity. Each CP controls a maximum of 6 Motor Controllers (MC). In normal operating conditions the CP provide a 24v AC supply the MC to keep the zero-clearance doors in retracted condition. Should smoke be detected, the fire alarm control system will signal the CP. The latter will open the circuit loop, remove the voltage and the zero-clearance doors will deploy under gravity at a controlled speed.

MOTOR CONTROL SPECIFICATION (MC):

- Nominal Voltage= 24 V
- Nominal speed = 3100 rpm
- Dimensions: 145 mm x 250 mm x 50 mm
- Continuous Torque : 1400 Ncm
- Efficiency : 0.70
- Ratio : 100.00
- Shaft Load Capacity – Axial : 150 N
- Shaft Load Capacity – Radial : 250 N
- A dynamic braking system housed in the motor control circuit

FIRE-PROTECTIVE ZERO-CLEARANCE DOOR DIAGRAM



U.S. SMOKE & FIRE®

12310 Pinecrest Road, Suite 300, Reston, VA 20191 • Phone: 888.917.8777 • Fax: 888.917.8777
 Washington, DC • Boston • New York • Miami • Dallas • San Francisco
www.usmokeandfire.com • aeteam@usmokeandfire.com



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