Reference:	Client:
Project:	Contractor:
Location:	Contractor:
Date:	Submitted by:



Model FD-SL

Slimline Static Curtain Fire Damper 1-1/2 or 3 Hour, UL555 Classified

Application:

The CVS-SAFE4 model FD-SL fire damper utilizes a Slimline frame as well as curtain style blades to prevent the spread of fire through a penetration in a fire rated barrier made by an HVAC duct or transfer. The FD-SL can be installed vertically or horizontally and is meant for static HVAC systems (fans turn off in a fire) only.

Standard Construction:

	Standard	Optional	
Frame Material	22 Gauge Galvanized Roll-formed Steel		
Blade Material and Type	22 Gauge Galvanized Roll-formed Steel		
Frame Depth	2-3/8" (55)	3-11/16" (94) [see Model FD] 1-½" (38) [see Model FD-USL]	
Dimensions	Actual - 1/4" (6)	Actual	
Closure Spring	Stainless Steel (Horizontal)	Stainless Steel (Vertical)	
Fusible Link	165° (74°C)	212° (100°C)	
Mounting	Vertical	Horizontal	
UL Hour Rating	1-1/2 Hours	3 Hours	

Option in Stainless steel construction available.

All dimensions shown in inches, parentheses () indicate millimeters.

Optional Construction:

Factory Installed External Sleeve:

Length: 12 (305) 16 (406) 24 (610) Other: Gauge: 20 (1.0) 18 (1.2) 16 (1.5) 14 (2.0) Other:_ **Location in Sleeve:** Standard Offset:

Flanged Sleeve (requires factory installed external sleeve):

3/4" (19) 1" (25)

Framed Retaining Angles - 16 ga. x 1½ x 1½ (1.5x38x38)

Sinale Side **Dual Side**

Other Options:

- Dynamic models (see Model FDD-SL)
- Multi-Blade models (FD-MB)
- Regular Frame and Ultra Slimline models (see Models FD and FD-USL)
- Out-of-wall models (see Model FD-OW)
- True Round models (see Model FD-RD)



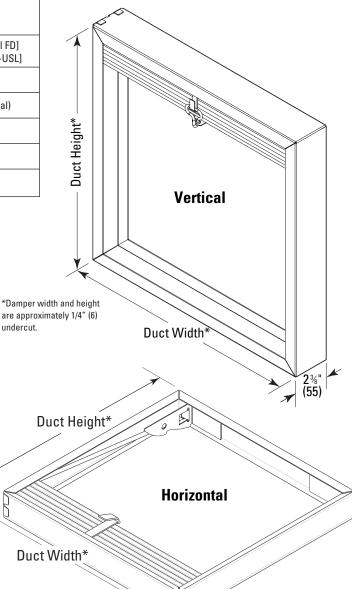
SEE COMPLETE MARKING

LISTINGS:

UL 555 Listing: R27700(UAE), R41135(KSA), R40068(Qatar), R41122(Egypt)

STANDARDS MET:

NFPA Standards: 80, 90A, 92A, 92B and 101 **Building Code Standard:** ICC International Building Code



As part of our continuous improvement program, we reserve the right to make further improvements without notice.



DAMPER STYLES & SIZES - Model FD-SL Slimline Static Curtain Fire Damper

Type A Static Curtain Fire Damper

- For use in static HVAC systems (fans off)
- Frame and blade stack in air stream
- Approximately 75-85% Free Area
- Sleeve optional (Factory installed)
- 1-1/2 or 3 Hour Fire Rated

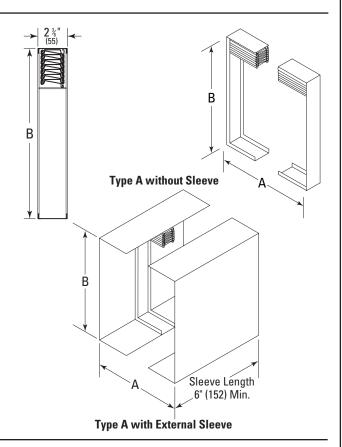
FD-SL-A Minimum & Maximum Sizes:

Type A Model	Minimum Size		Max. Single Section		Max. Multi-Section	
	1.5 Hour	3 Hour	1.5 Hour	3 Hour	1.5 Hour	3 Hour
FD-SL-A (Vertical)	4x4 (102x102)		60x60 (1524x1524)	48x48 (1219x1219)	120x120 (3048x3048)	80x40 (2032x1016)
FD-SL-A (Horizontal)			40x40 (1016x1016) or 48x48 (1219x1219)	40x40 (1016x1016)	120x40 (3048x1016) or 96x48 (2438x1219)	80x40 (2032x1016)

All dimensions shown in inches, parentheses () indicate millimeters.

A Dimension = Duct Width

B Dimension = Duct Height



Type B Static Curtain Fire Damper

- For use in static HVAC systems (fans off)
- Blade stack out of airstream
- Approximately 80-90% Free Area
- Sleeve optional (Factory installed)
- 1-1/2 or 3 Hour Fire Rated

FD-SL-B Minimum & Maximum Sizes:

Type B	Minimum Size		Max. Single Section		Max. Multi-Section ²	
Model	1.5 Hour	3 Hour	1.5 Hour	3 Hour	1.5 Hour	3 Hour
FD-SL-B (Vertical)	4x3 (102x76)		60x55 (1524x1397)	48x43 (1219x1092)	120x115 (3048x2921)	80x36 (2032x914)
FD-SL-B (Horizontal)			48x43 (1219x1092)	40x36 (1016x914)	120x36 (3048x914) or 96x43 (2438x1092)	80x36 (2032x914)

All dimensions shown in inches, parentheses () indicate millimeters.

A Dimension = Duct Width

B Dimension = Duct Height

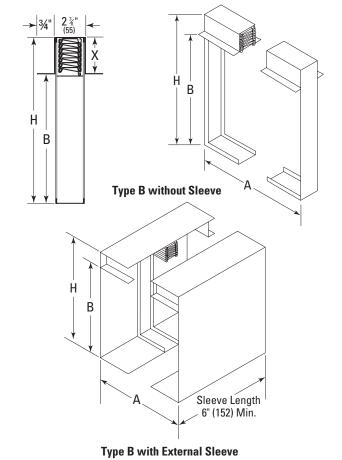
X Dimension = Height of Blade Stack

H Dimension = Overall Damper Height (B+X)

Notes:

 Multi-section damper will have frame in the airstream, and blades for vertical models more than one damper in height.

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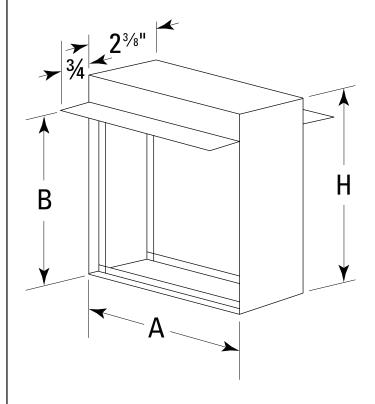


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DIMENSIONAL INFORMATION - Model FD-SL Slimline Static Curtain Fire Damper (for Type B)

Type B Fire Damper



Duct Height (B)	Type B Damper Height (H)		
Inches	Inches		
3	5		
4	6		
5	7		
6	8		
7	9		
8	10		
9	11		
10	12		
11	13		
12	14		
13	15		
14	16		
15	17		
16	18		
17	19		
18	20		
19	21		
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32	35		
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34	38		
35	39		
36	40		
37	41		
38	42		
39	43		

40	44	78	82
41	45	79	83
42	46	80	84
43	48	81	85
44	49	82	86
45	50	83	87
46	51	84	88
47	52	85	89
48	53	86	91
49	54	87	92
50	55	88	93
51	56	89	94
52	57	90	95
53	58	91	96
54	59	92	97
55	60	93	98
56	59	94	99
57	60	95	100
58	61	96	101
59	62	97	102
60	63	98	103
61	64	99	104
62	65	100	105
63	66	101	106
64	67	102	107
65	69	103	108
66	70	104	109
67	71	105	110
68	72	106	111
69	73	107	112
70	74	108	113
71	75	109	114
72	76	110	115
73	77	111	116
74	78	112	117
75	79	113	118
76	80	114	119
77	81	115	120

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SLEEVE DIMENSIONAL DATA - Model FD-SL Slimline Static Curtain Fire Damper

Below are diagrams showing the location of the Type A and B fire dampers in a factory installed external sleeve.

Sleeve Diagram Key:

H = Overall height

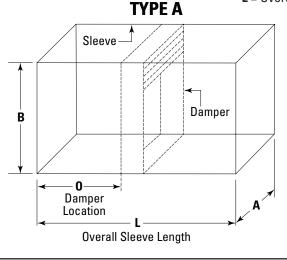
W = Overall width (always the length of the blades)

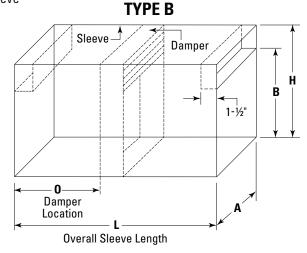
A = Duct Width

B = Duct Height

0 = The offset from one end of the sleeve to the beginning of the damper frame (can be altered as a construction option)

L = Overall length of sleeve



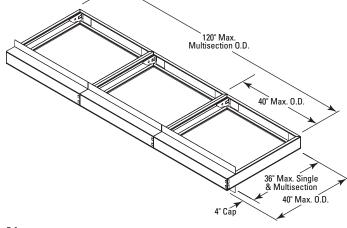


MULTIPLE SECTION INFORMATION - Model FD-SL Slimline Static Curtain Fire Damper

Multiple section damper assemblies are shipped in individual sections from the factory unless a factory supplied and installed sleeve is required. When a multiple section damper is ordered with a sleeve, it is usually shipped as a complete assembly. The following drawings are of different maximum size multiple section FDD-SL models and are for reference purposes (not all options are shown).

Type A Multi-Section Assembly FD-SL-A Model Shown (max size): 1-1/2 Hour Vertical 120" Max. 0.D. Single Section 120" Max. 0.D.

Type B Multi-Section Assembly FD-SL-B Model Shown (max size): 1-1/2 Hour Horizontal



Notes:

- 1. These diagrams are for reference purposes
- 2. Not all FD-SL Model options are shown

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