

Reference:

Client:

Project:

Contractor:

Location:

Contractor:

Date:

Submitted by:



Manufacturing Excellence

Model FD-USL

Ultra-Slimline Static Curtain Fire Damper

1-1/2 or 3 Hour, UL555 Classified

Application:

The CVS-SAFE4 model FD-USL fire damper utilizes a Ultra-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-USL can be installed vertically or horizontally and is meant for static HVAC systems (fans turn off in a fire) only.



LISTINGS:

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

Standard Construction:

	Standard	Optional
Frame Material	22-gauge Galvanized Roll-formed Steel	-----
Blade Material and Type	22-gauge Galvanized Roll-formed Steel	-----
Frame Depth	1-1/2" (38 mm)	3-11/16" (94) [see Model FD] 2-3/8" (55 mm) [see Model FD-SL]
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 1 1/2 x 1 1/2 (1.5x38x38)

Single Side Dual Side

Other Options:

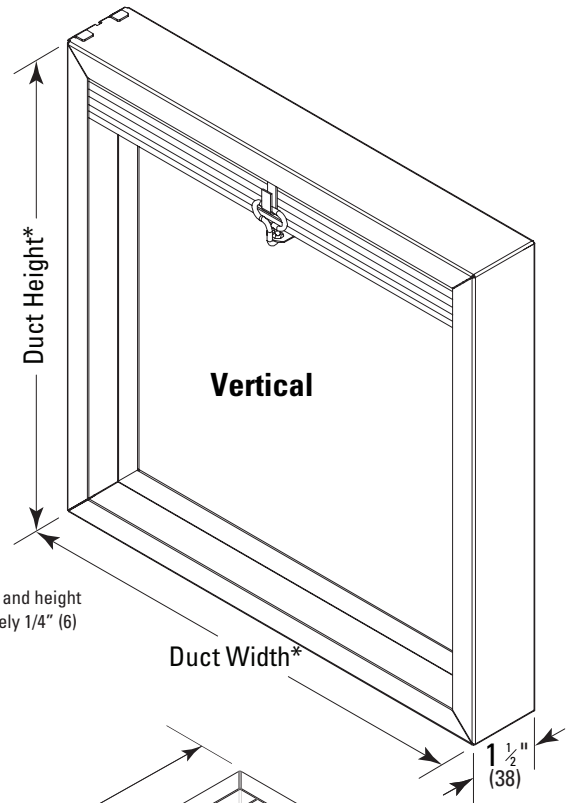
- Dynamic models (see Model FDD-SL)
- Multi-Blade models (FD-MB)
- Regular Frame and Slimline models (see Models FD and FD-USL)
- Out-of-wall models (see Model FD-OW)
- True Round models (see Model FD-RD)

STANDARDS MET:

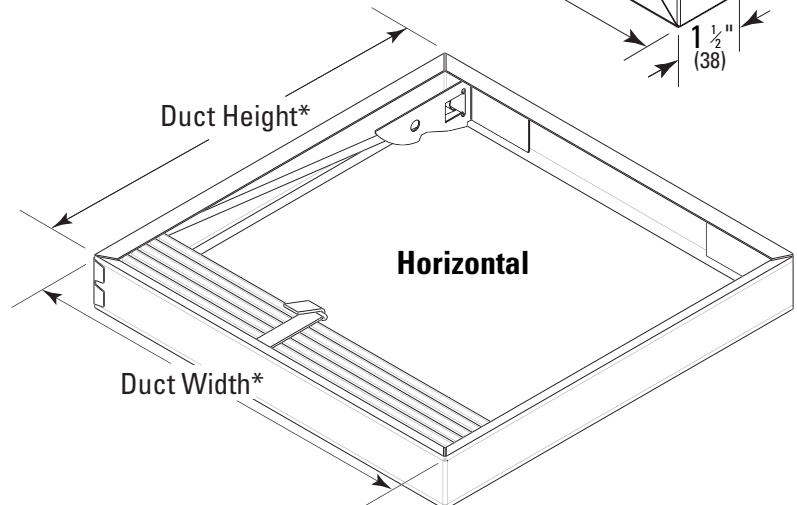
NFPA Standards: 80, 90A, 92A, 92B and 101

Building Code Standard:

ICC International Building Code



*Damper width and height are approximately 1/4" (6) undercut.



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

Submittal

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

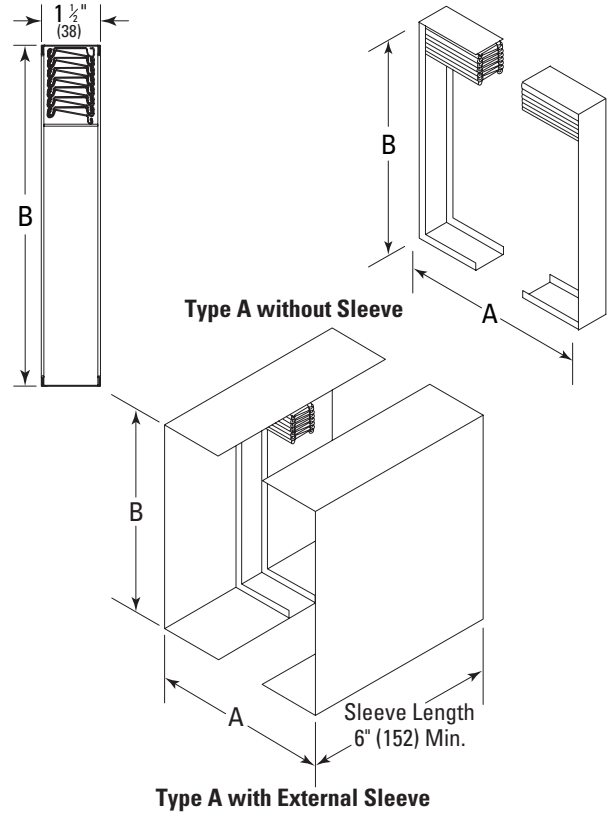
FD-USL-A Minimum & Maximum Sizes:

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-USL-A (Vertical)	4x4 (102x102)		48x48 (1219x1219)	48x48 (1219x1219)	80x40 (2032x1016)	80x40 (2032x1016)
FD-USL-A (Horizontal)			40x40 (1016x1016)	40x40 (1016x1016)	80x40 (2032x1016)	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-USL-B Minimum & Maximum Sizes:

Type B Model	Minimum Size		Max. Single Section		Max. Multi-Section ¹	
	1.5 Hour	3 Hour	1.5 Hour	3 Hour	1.5 Hour	3 Hour
FD-USL-B (Vertical)	----	----	----	----	----	----
FD-USL-B (Horizontal)	4x3 (102x76)		40x40 (1016x1016)	40x40 (1016x1016)	80x40 (2032x1016)	80x40 (2032x1016)

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

A Dimension = Duct Width

B Dimension = Duct Height

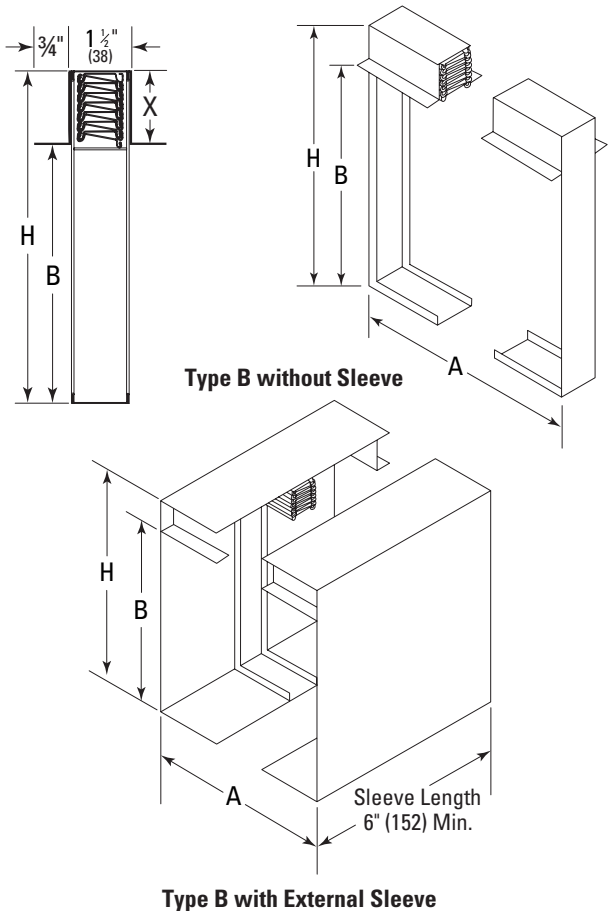
X Dimension = Height of Blade Stack

H Dimension = Overall Damper Height (B+X)

Notes:

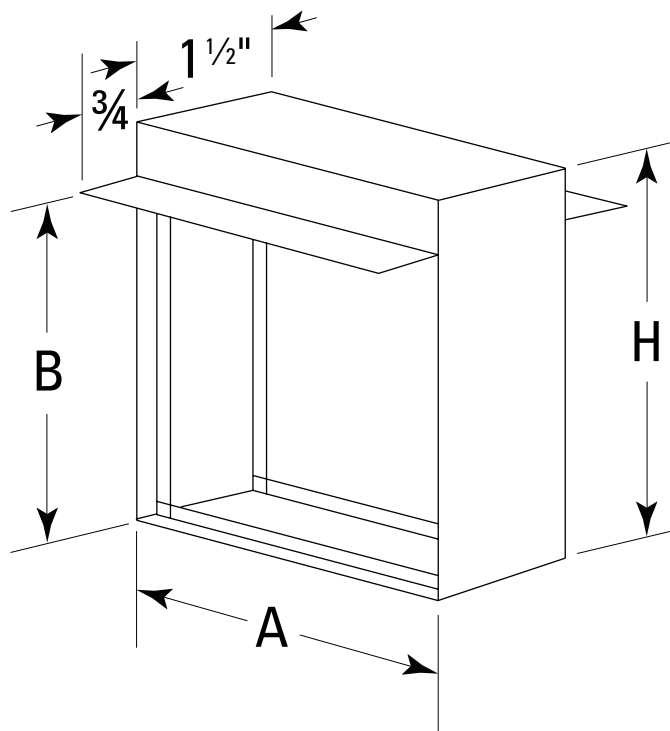
1. Multi-section damper will have frame in the airstream, and blades for vertical models more than one damper in height.

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Type B Fire Damper

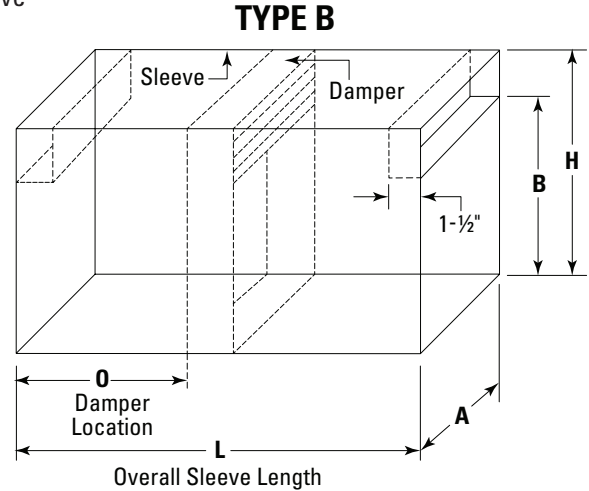
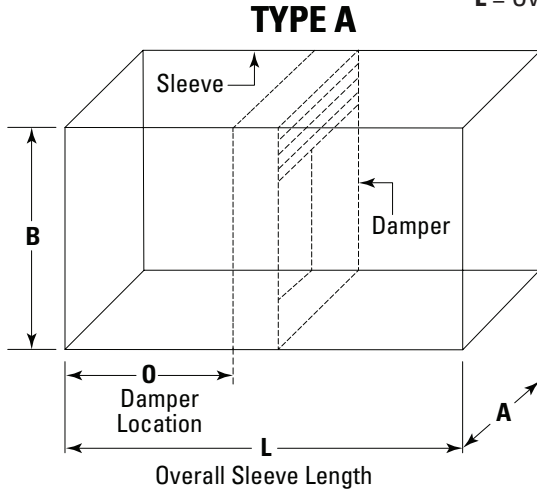


Duct Height (B)	Type B Damper Height (H)				
Inches	Inches				
3	5	40	44	78	82
4	6	41	45	79	83
5	7	42	46	80	84
6	8	43	48	81	85
7	9	44	49	82	86
8	10	45	50	83	87
9	11	46	51	84	88
10	12	47	52	85	89
11	13	48	53	86	91
12	14	49	54	87	92
13	15	50	55	88	93
14	16	51	56	89	94
15	17	52	57	90	95
16	18	53	58	91	96
17	19	54	59	92	97
18	20	55	60	93	98
19	21	56	59	94	99
20	22	57	60	95	100
21	23	58	61	96	101
22	25	59	62	97	102
23	26	60	63	98	103
24	27	61	64	99	104
25	28	62	65	100	105
26	29	63	66	101	106
27	30	64	67	102	107
28	31	65	69	103	108
29	32	66	70	104	109
30	33	67	71	105	110
31	34	68	72	106	111
32	35	69	73	107	112
33	37	70	74	108	113
34	38	71	75	109	114
35	39	72	76	110	115
36	40	73	77	111	116
37	41	74	78	112	117
38	42	75	79	113	118
39	43	76	80	114	119
		77	81	115	120

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

Sleeve Diagram Key:

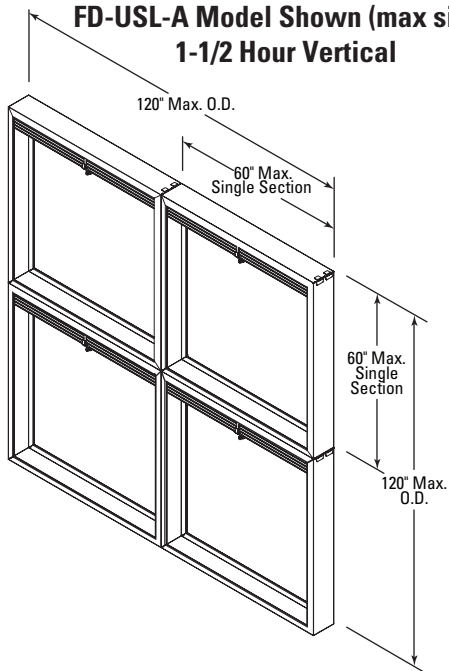
- H** = Overall height
- W** = Overall width (always the length of the blades)
- A** = Duct Width
- B** = Duct Height
- O** = The offset from one end of the sleeve to the beginning of the damper frame (can be altered as a construction option)
- L** = Overall length of sleeve



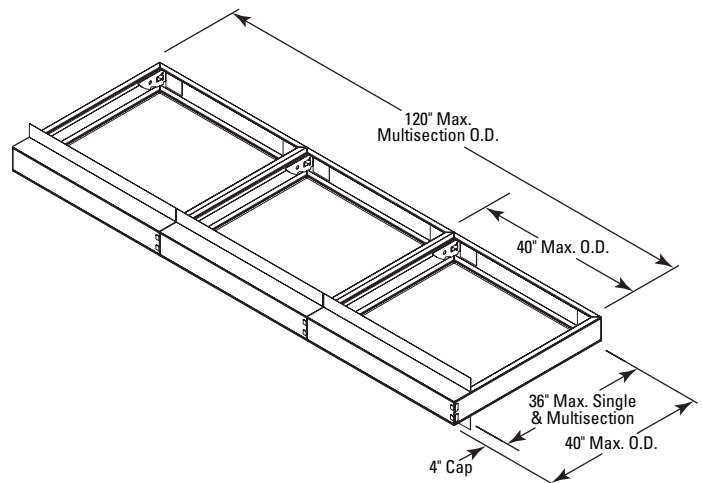
MULTIPLE SECTION INFORMATION - Model FD-USL
Ultra-Slimline Static Curtain Fire Damper

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-USL-A Model Shown (max size):
1-1/2 Hour Vertical



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



Notes:

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

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