

Tag: _____ Engineer: _____
 Project: _____ Contractor: _____
 Location: _____ Architect: _____
 Date: _____ Submitted by: _____



Manufacturing Excellence

Model FDD-OW

Out-of-Wall Dynamic Curtain Fire Damper
 1-1/2 Hour, UL555 Classified

Application:

The CVS-SAFE4 model FDD-OW fire damper utilizes a curtain style blade to prevent the spread of fire through a penetration in a fire rated barrier made by a HVAC duct or transfer. The FDD-OW is meant for when something prevents the fire damper from being within the plane of the wall/floor (such as a grille). The FDD-OW can be installed vertically or horizontally and is meant for dynamic (fans stay on in a fire) and static (fans turn off in a fire) HVAC systems.

MAXIMUM VELOCITY: 2000 fpm (10.2 m/s) on all sizes.

MAXIMUM PRESSURE: 4"wg (1kPa) on all sizes.

Standard Construction:

	Standard	Optional
Frame Material	22 Gauge Galvanized Roll-formed Steel	-----
Blade Material and Type	22 Gauge Galvanized Roll-formed Steel	-----
Sleeve Material	12" long 20 Gauge Galv. Steel Sleeve wrapped in Thermal Blanket	Various Gauges & Sleeve Lengths Available
Thermal Blanket	0.25" (6) thick thermal blanket 3 sides for vertical and 4 sides for horizontal applications	-----
Frame Depth	3-11/16" (94)	-----
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 Hour	-----

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

Optional Construction:

212° Fusible Link

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) 10 (3.5)

Location in Sleeve: Standard Offset: _____

Framed Retaining Angles - 16 ga. x 1 1/2 x 1 1/2 (1.5x38x38)

Single Side Dual Side

Transitions (see next pages)

Type B Type C

Other Options:

- Static models (see Model FD-OW)
- True Round models (see Model FDD-RD)

Special Notes:

- The damper assembly can be installed from one side of the wall or floor and does not require retaining angles
- The fire damper, insulation and sleeve MUST be ordered from the factory as an assembly

**Typical 3 sides for vertical mount (shown) and typical 4 sides for horizontal mount



LISTINGS:

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

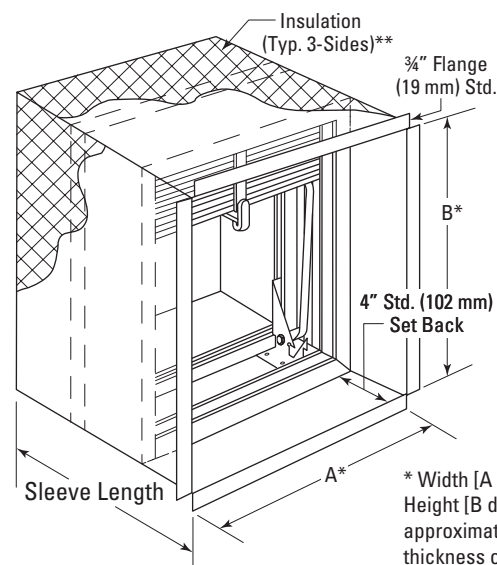


STANDARDS MET:

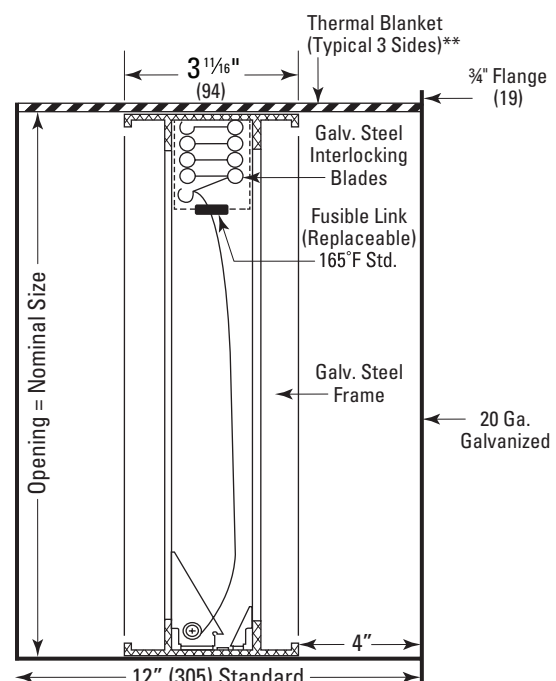
NFPA Standards: 80, 90A, 92A, 92B and 101

Building Code Standard:

ICC International Building Code



* Width [A dimension] and Height [B dimension] are approximately actual size, plus thickness of thermal blanket.



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 dynamic or static HVAC systems
- Frame and blade stack in air stream
- Approximately 75-85% Free Area
- Sleeve and insulation are factory installed
- 1-1/2 Hour Fire Rated

FDD-OW-A Minimum & Maximum Sizes:

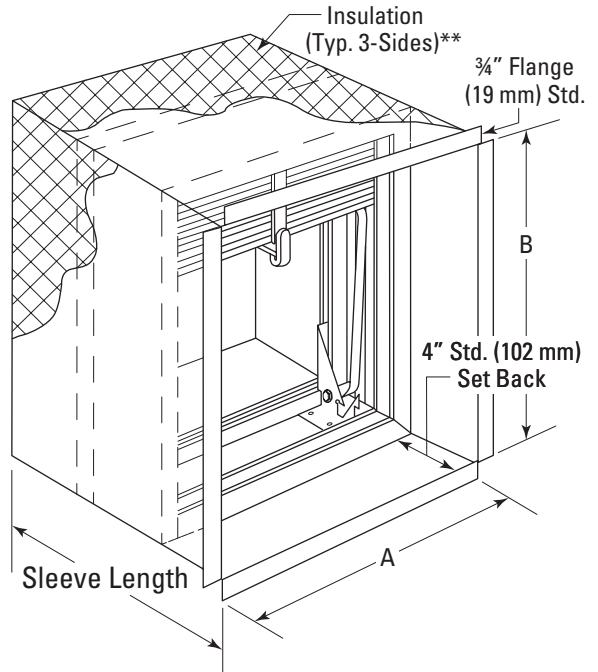
Type A Model	Minimum Size	Max. Single Section	Max. Multi-Section
	1.5 Hour	1.5 Hour	1.5 Hour
FDD-OW-A (Vertical)	6 x 6 (152 x 152)	24 x 24 (610 x 610)	36 x 36 (914 x 914)
FDD-OW-A (Horizontal)		24 x 24 (610 x 610)	36 x 36 (914 x 914)

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

A Dimension = Duct Width

B Dimension = Duct Height

**Insulation provided on 3 sides for vertical mount, and 4 sides for horizontal mount



Type B Dynamic Curtain Fire Damper

- For use in dynamic or static HVAC systems
- Blade stack out of airstream
- Approximately 80-90% Free Area
- Sleeve and insulation are factory installed
- 1-1/2 Hour Fire Rated

FDD-OW-B Minimum & Maximum Sizes:

Type B Model	Minimum Size	Max. Single Section
	1.5 Hour	1.5 Hour
FDD-OW-B (Vertical)	6 x 4 (152 x 102)	24 x 21 (610 x 533)
FDD-OW-B (Horizontal)		24 x 21 (610 x 533)

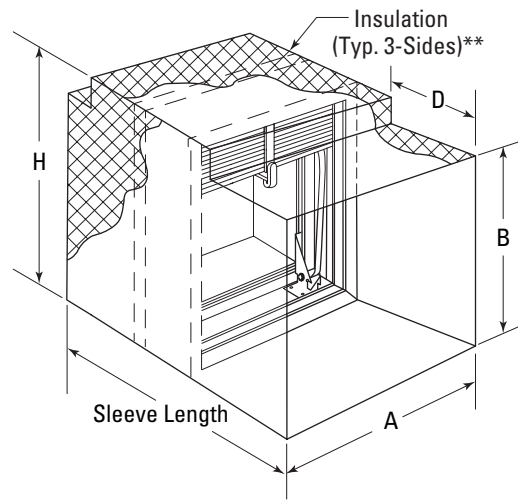
A Dimension = Duct Width

B Dimension = Duct Height

D Dimension = UL Wall Width

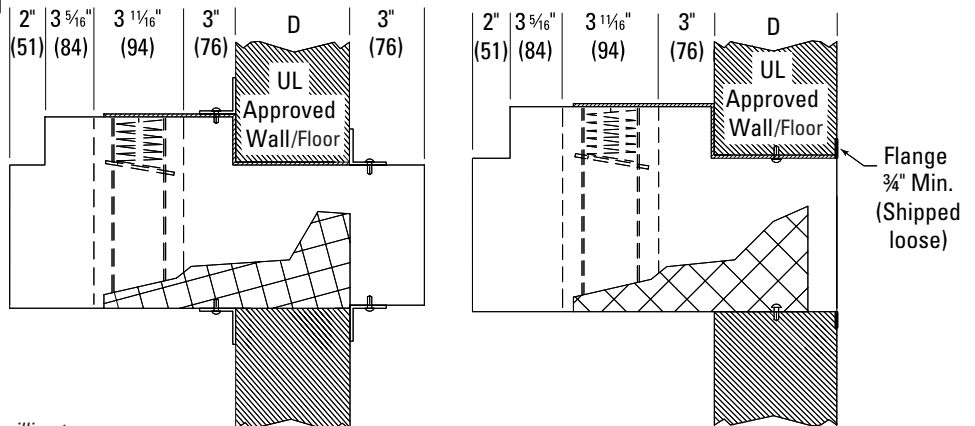
H Dimension = Overall Damper Height

**Insulation provided on 3 sides for vertical mount, and 4 sides for horizontal mount



Continuous Duct

Grille Mount



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

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Submittal

Type C Dynamic Curtain Fire Damper

- For use in dynamic or static HVAC systems
- Frame and blade stack out of airstream
- Approximately 95-100% Free Area
- Sleeve and insulation are factory installed
- 1-1/2 Hour Fire Rated

FDD-OW-C Minimum & Maximum Sizes:

Type C Model	Minimum Size	Max. Single Section
	1.5 Hour	1.5 Hour
FDD-OW-C (Vertical)	5 x 3 (127 x 76)	23 x 20 (584 x 508)
FDD-OW-C (Horizontal)		23 x 20 (584 x 508)

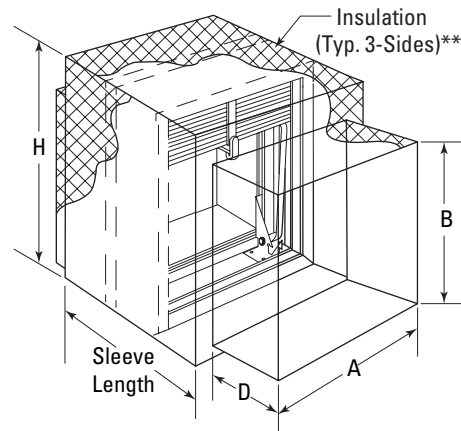
A Dimension = Duct Width

B Dimension = Duct Height

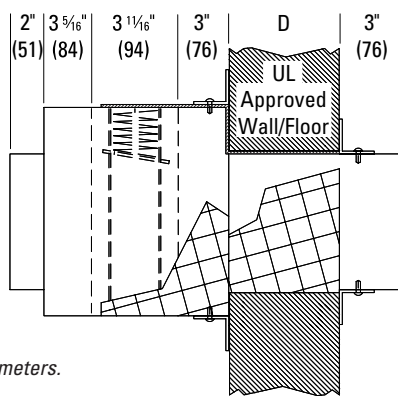
D Dimension = UL Wall/Floor Width

H Dimension = Overall Damper Height

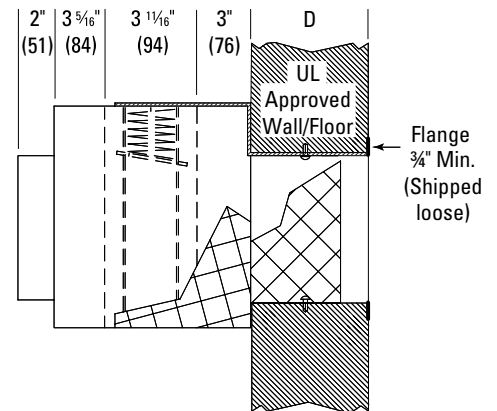
**Insulation provided on 3 sides for vertical mount, and 4 sides for horizontal mount



Continuous Duct



Grille Mount



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

Type OW-B & OW-C Size Charts

Duct Height (B)	Type OW-B Damper Height (H)	
	Inches	
	Vert.	Horiz.
4	6	6
5	7	7
6	8	8
7	9	9
8	10	10
9	11	11
10	12	12
11	13	13
12	14	14
13	15	15
14	16	16
15	17	17
16	18	18

17	19	19
18	20	20
19	21	21
20	22	22
21	24	24
22	25	26
23	26	27
24	27	28
25	28	29
26	29	30
27	30	31
28	31	32
29	32	33
30	33	34
31	34	35
32	35	36

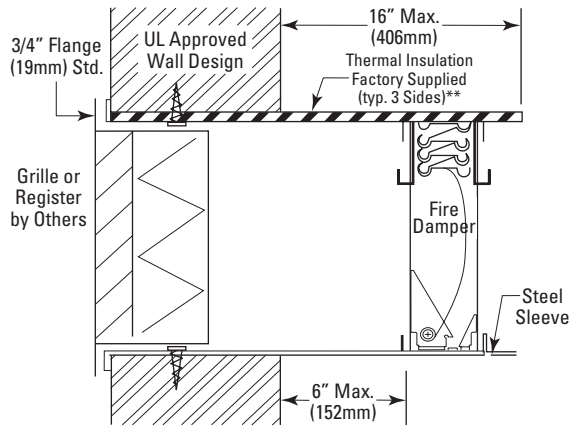
Duct Height (B)	Type OW-C Damper Height (H)
	Inches
3	6
4	7
5	8
6	9
7	10
8	11
9	12
10	13
11	14
12	15
13	16
14	17
15	18
16	19

17	20
18	21
19	22
20	23
21	25
22	26
23	27
24	28
25	29
26	30
27	31
28	32
29	33
30	34
31	35
32	36

Model FDD-OW Typical Application

Vertical Application (Out-of-Wall)

**Grille Mount
with "-OW" Damper**



Horizontal Application (Out-of-Floor)

**Grille Mount
with "-OW" Damper**

