

Reference:

Client:

Project:

Consultant:

Location:

Contractor:

Date:

Submitted by: BM



BADR and ASFOUR
Engineering & Metal Industries

Model FD-OW

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

Application:

The BAS/ CVS model FD-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 FD-OW is meant for when something prevents the fire damper from being within the plane of the wall/floor (such as a grille). The FD-OW 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	-----
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

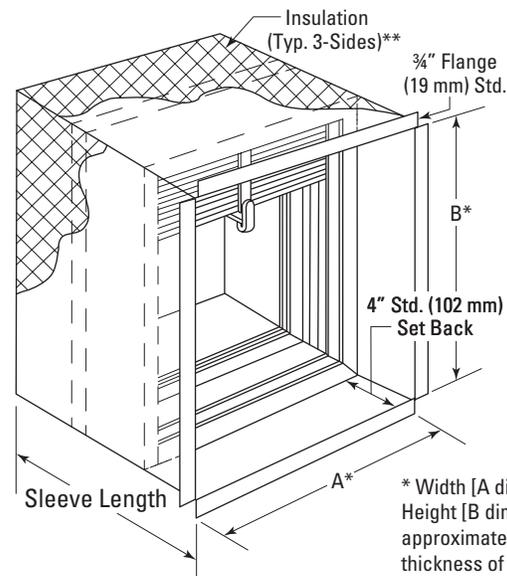
Other Options:

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

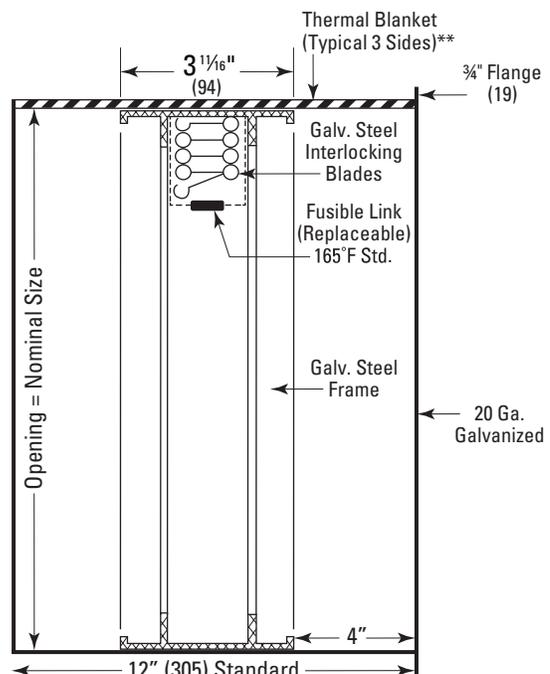
Special Notes:

- 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



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

FD-A-OW Minimum & Maximum Sizes:

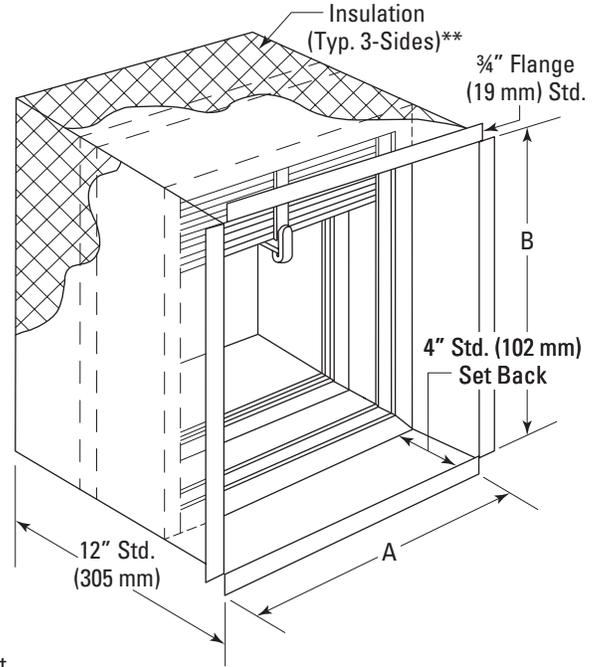
Type A Model	Minimum Size	Max. Single Section
	1.5 Hour	1.5 Hour
FD-OW-A (Vertical)	4 x 4 (102 x 102)	36 x 48 (914 x 1219)
FD-OW-A (Horizontal)		

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 Static Curtain Fire Damper

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

FD-B-OW Minimum & Maximum Sizes:

Type B Model	Minimum Size	Max. Single Section
	1.5 Hour	1.5 Hour
FD-OW-B (Vertical)	4 x 3 (102 x 76)	36 x 43 (914 x 1092)
FD-OW-B (Horizontal)		

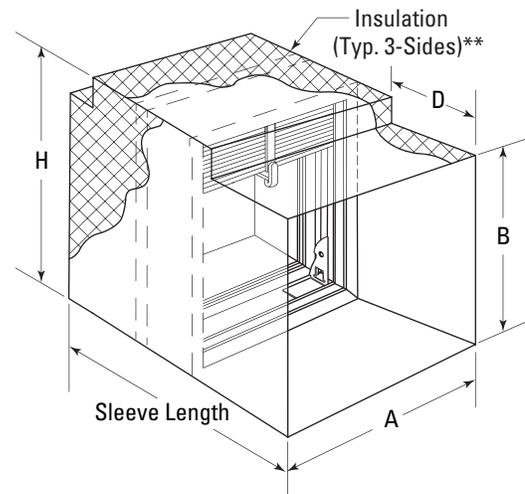
A Dimension = Duct Width

B Dimension = Duct Height

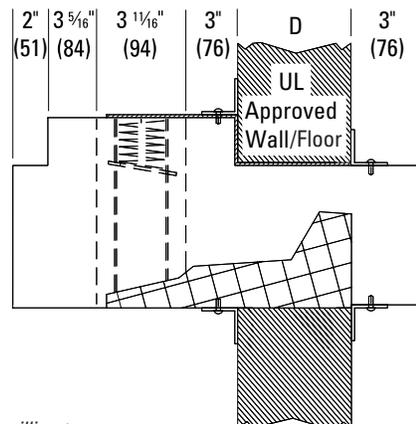
D Dimension = UL Wall Width

H Dimension = Overall Damper Height

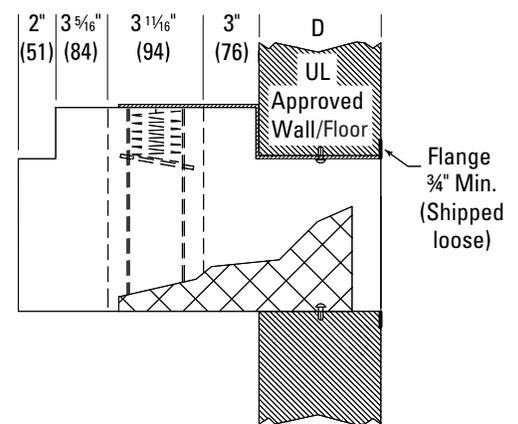
**Insulation provided on 3 sides for vertical mount, and 4 sides for horizontal mount



Continuous Duct



Grille Mount



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

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Submittal

Type C Static Curtain Fire Damper

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

FD-C-OW Minimum & Maximum Sizes:

Type C Model	Minimum Size	Max. Single Section
	1.5 Hour	1.5 Hour
FD-OW-C (Vertical)	3 x 3 (76 x 76)	36 x 42 (914 x 1067)
FD-OW-C (Horizontal)		

A Dimension = Duct Width

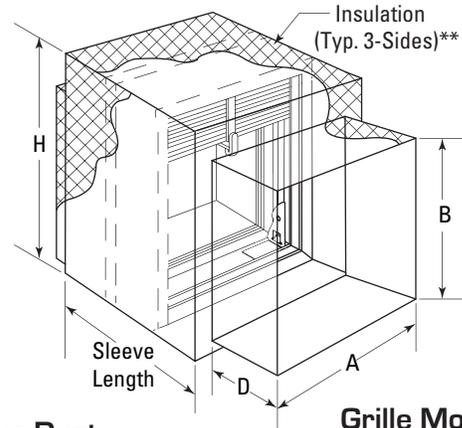
B Dimension = Duct Height

D Dimension = UL Wall/Floor Width

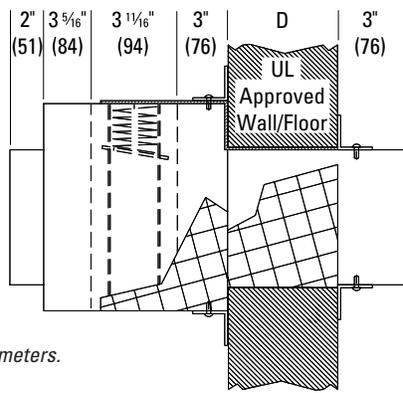
H Dimension = Overall Damper Height

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

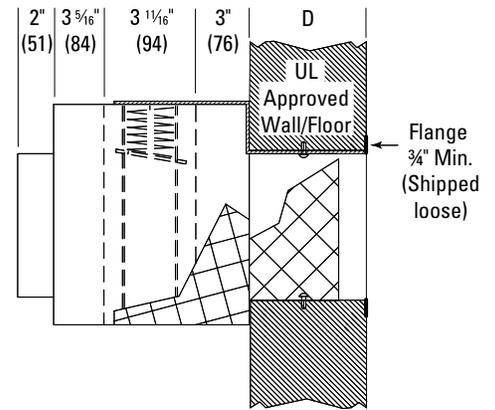
All dimensions shown in inches, parentheses () indicate millimeters.



Continuous Duct



Grille Mount



Type B-OW & C-OW Size Charts

Duct Height (B)	Type B-OW 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
20	22
21	24

22	25
23	26
24	27
25	28
26	29
27	30
28	31
29	32
30	33
31	34
32	35
33	37
34	38
35	39
36	40
37	41
38	42
39	43
40	44
41	45
42	46
43	48

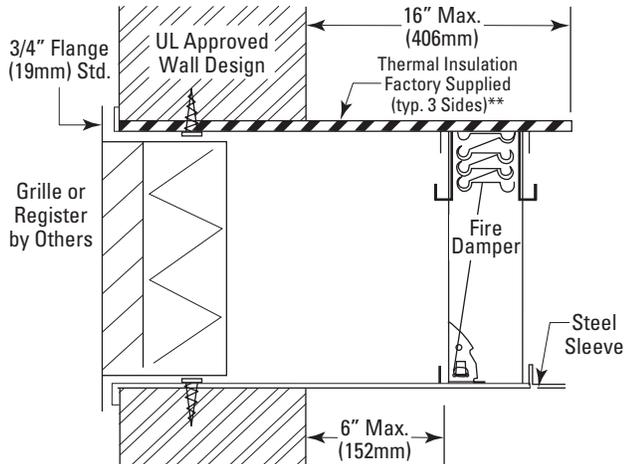
Duct Height (B)	Type C-OW Damper Height (H)
Inches	Inches
3	6
4	7
5	8
6	9
7	10
8	11
9	12
10	13
11	14
12	15
13	16
14	17
15	18
16	19
17	20
18	21
19	22
20	23
21	25

22	26
23	27
24	28
25	29
26	30
27	31
28	32
29	33
30	34
31	35
32	37
33	38
34	39
35	40
36	41
37	42
38	43
39	44
40	45
41	46
42	47

Model FD-OW Typical Application

Vertical Application (Out-of-Wall)

Grille Mount with "-OW" Damper



Horizontal Application (Out-of-Floor)

Grille Mount with "-OW" Damper

