

FDD-B Dynamic Curtain Fire Damper
UL555 Classified 1 ½ and 3 Hour
For Use in Static or Dynamic Systems

APPLICATION

Model FDD-B Style B (Blades out of the airstream) 1 ½ or 3 hour UL classified dynamic (fans on) or static (fans off) curtain style fire damper for use in HVAC systems that remain in operation during a fire. Fire dampers are used for the protection of openings in walls, partitions, or masonry floors with fire resistance ratings of less than 3 hours for 1 ½ hour protective rating and 3 hour or more for 3 hour protective rating. The FDD-B can be installed vertically in walls or horizontally in masonry floors and is rated for airflow in either direction.

Standard Construction

Frame: Roll-formed galvanized steel in gauges required by UL listing R-25410.

Blades: Roll-formed galvanized steel in gauges required by UL listing R-25410.

Closure Springs: 301 stainless steel

Fuse Link: 165° F (74°C) is standard. 212° F (100°C) available option.

SIZE

Minimum: 6" (152) wide x 4" (102) high

Maximum:

Single Section

Vertical - 36" (914) wide x 32" (813) high.

Horizontal - 24" (610) wide x 21" (533) high

Multi-Section

Vertical - 72" (1829) wide x 32" (813) high or

36" (914) x 68" (1727)

Horizontal - 36" (914) wide x 34" (864) high

OPTIONS

Sleeves - of various lengths and gauges

One Side Mounting Angles - 1 ½ Hour Standard

Two Sides Mounting Angles - Option 1 ½ Hour and 3 Hour Standard

Ratings - EMME R25410

UL 555 Fire Resistance Rating

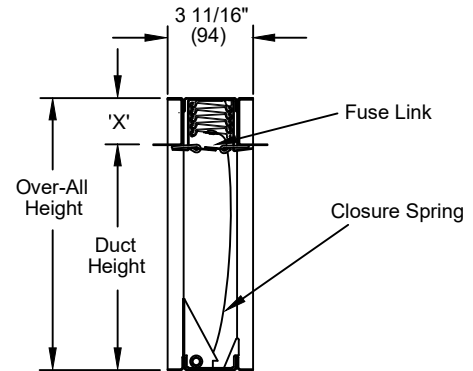
Fire Rating: 1 ½ Hour (Less than 3 hours wall rating)

3 Hour (3 hours and More rating)

Dynamic Ratings:

Velocity: 2000 FPM (10.2 m/s)

Static Pressure: 4" wg (1 kPa)



Over-All Height = Damper Height + 'X' Dim.
See Page 2



National Fire Protection Association

NFPA Standards 80, 90A, 92A, 101 and 5000

ICC International Building Codes

CSFM California State Fire Marshal

Listing 3225-1722:0100

Canada ULC-S112 Fire Damper

Notes:

1. Refer to the installation instructions for additional details.
2. Damper are furnished approx. ¼" (6) undersized, unless otherwise noted.
3. Dimensions shown in parentheses () indicate millimeters.



FDD-B Dynamic Fire Damper Style B

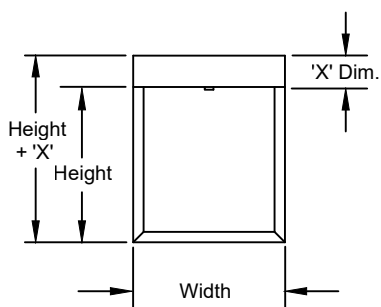
DRAWN BY: KSM	DATE: March, 2025	REV. DATE:	REV. NO.	DWG. NO.: PD-013
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S&P reserves the right to change specifications without notice.

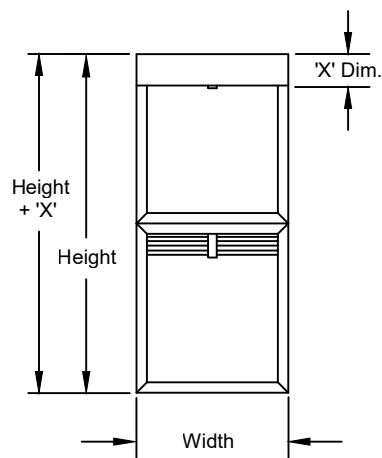
FDD-B Dimensional Data

Vertical Mount

Single Section Vertical 'B' Hood	
Damper Height	'X' Dim.
4" (102) Thru 20" (508)	2" (51)
21" (533) Thru 33" (838)	3" (76)

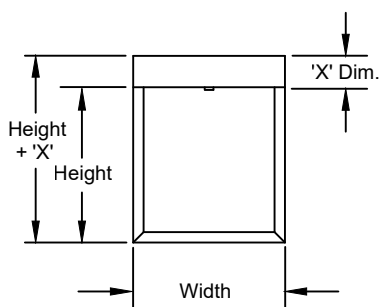


Two Section Height Vertical 'B' Hood	
Damper Height	'X' Dim.
34" (834) Thru 41" (1041)	2" (51)
42" (1067) Thru 68" (1727)	3" (76)

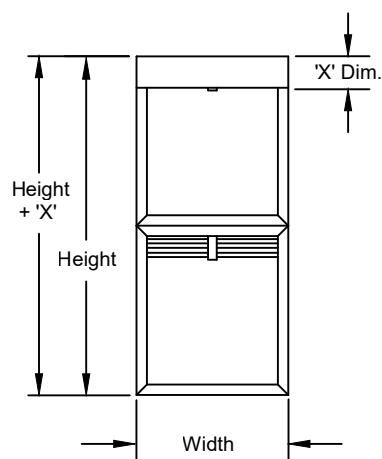


Horizontal Mount

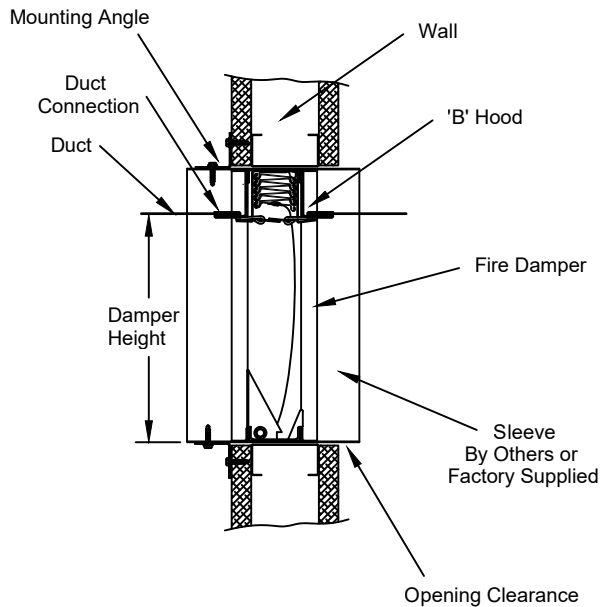
Single Section Vertical 'B' Hood	
Damper Height	'X' Dim.
4" (102) Thru 21" (533)	2" (51)



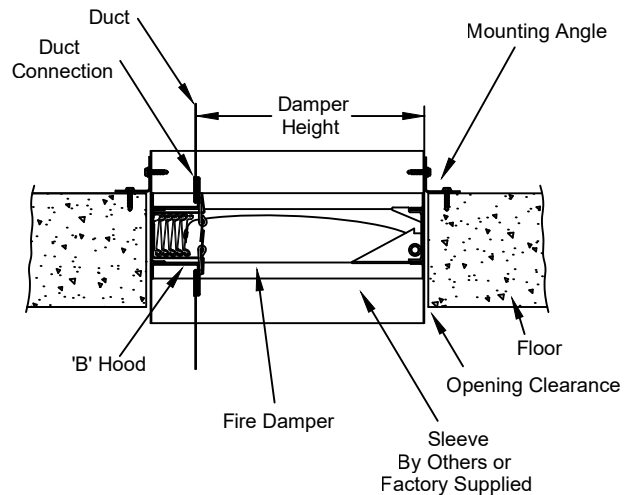
Two Section Height Vertical 'B' hood	
Damper Height	'X' Dim.
19" (482) Thru 33" (838)	2" (51)



Typical Fire Damper Installation



Vertical Mount



Horizontal Mount

See UL Listed Installation instructions for complete installation details

SUGGESTED SPECIFICATION

Furnish and install at locations shown on the plans, or as described in schedules for curtain type fire dampers suitable for vertical wall or horizontal masonry floor or ceiling. Dynamic fire dampers tested, constructed and labeled in accordance with the latest edition of UL Standard 555. Dampers shall have a fire rating of 1 1/2 hours or 3 hours and shall meet the requirements of the latest edition of NFPA90A.

Damper frame and blades shall be galvanized steel in gauges required by UL listing R-25410 installed in a factory mounted sleeve and shipped loose mounting angle. Damper blades shall be steel interlock to provide fire shield in gauges required by UL listing R-25410. Closure spring dampers shall be of 301 stainless steel and shall be constant force type.

Each dynamic fire damper shall include a steel sleeve and mounting angles furnished by the damper manufacturer to ensure appropriate installation. Submittal information shall include the fire protection rating, maximum velocity/pressure ratings and the manufacturer's UL installation instructions. The dampers shall be installed in accordance with the manufacturer's UL installation instructions. Dynamic fire dampers shall be in all respects equivalent to S&P FDD-B.

Each damper shall include a 165°F (74°C), or 212°F (100°C) fusible link and shall be labeled for use in dynamic systems. Dampers labeled for use in static systems only are not permitted. The damper shall be rated for dynamic closure at 2000 fpm (10.16 m/s) and 4 inches w.g. (1 kPa) static pressure and shall be rated to close with airflow in either direction.

Dynamic fire dampers shall be S&P model FDD-B.
(Consult S&P for detailed CSI MasterFormat Specifications).

