

## APPLICATION

Model FDD-B is a integral sleeve Style SB (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-SB can be installed vertically in walls or horizontally in masonry floors and is rated for airflow in either direction.

## Standard Construction

**Frame:** 12" (305) Long Roll-formed galvanized steel in gauges required by UL listing R-25410. 14" (356) and 16" (406) long sleeve optional.

**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

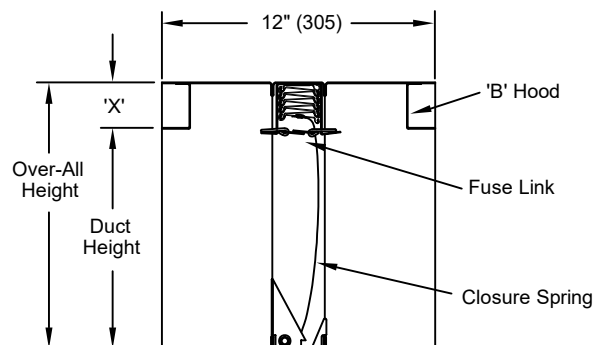
**UL 555 Fire Resistance Rating**

**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.

**UnitedEnertech**

3005 South Hickory Street  
 Chattanooga, Tennessee 37407  
 Tel: (423) 689-7715  
 www.unitedenertech.com

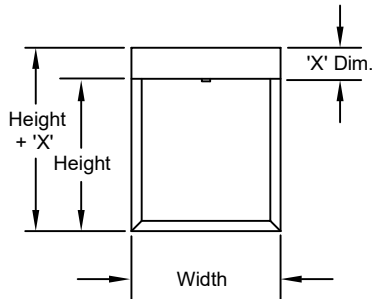
**FDD-SB Dynamic Fire Damper Style B with Integral Sleeve/Frame**

DRAWN BY: KSM	DATE: March, 2025	REV. DATE:	REV. NO.	DWG. NO. <b>PD-014</b>
------------------	----------------------	------------	----------	---------------------------

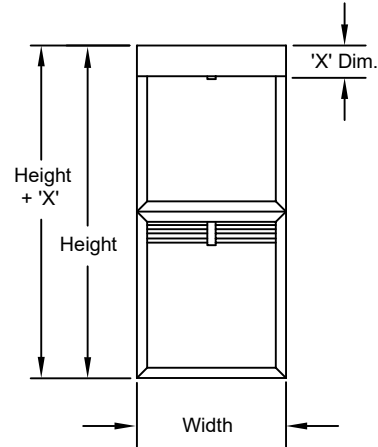
## FDD-SB Dimensional Data

### 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)

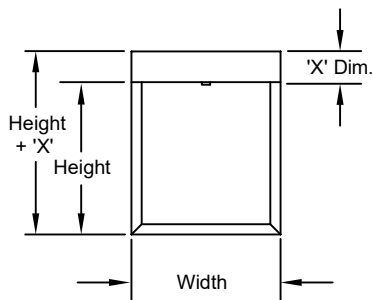


Two Section Height Vertical 'B' Hood	
Damper Height	'X' Dim.
34" (834) Thru 41" (1041)	2" (51)
42" (1067) Thru 68" (1727)	3" (76)

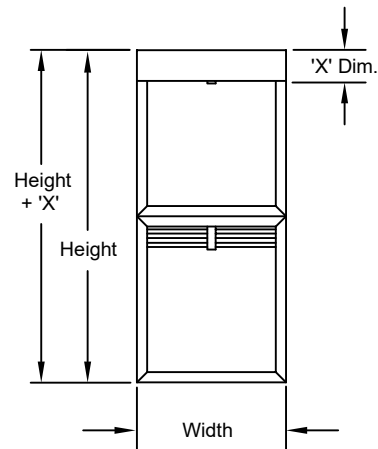


### Horizontal Mount

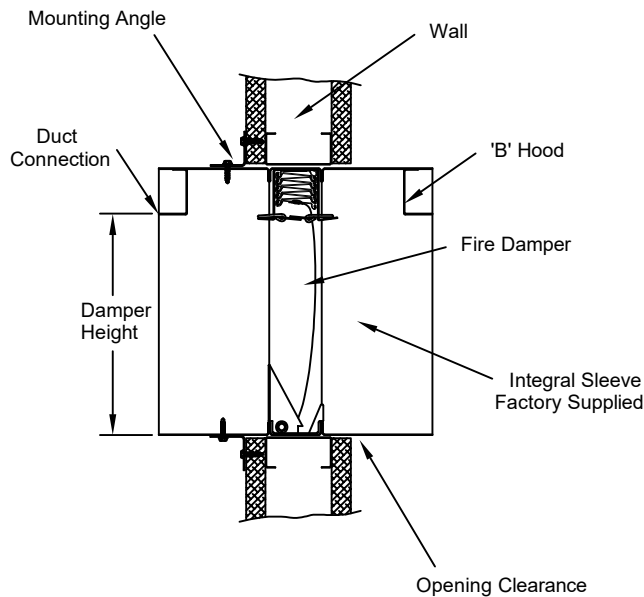
Single Section Vertical 'B' hood	
Damper Height	'X' Dim.
4" (102) Thru 21" (533)	2" (51)



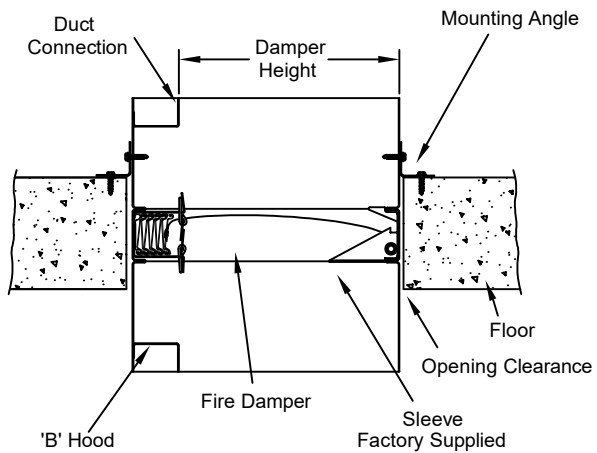
Two Section Height Vertical 'B' Hood	
Damper Height	'X' Dim.
19" (482) Thru 33" (838)	2" (51)



## 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 United Enertech FDD-SB.

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 United Enertech model FDD-SB.  
(Consult United Enertech for detailed CSI MasterFormat Specifications).



3005 South Hickory Street  
Chattanooga, Tennessee 37407  
www.unitedenertech.com