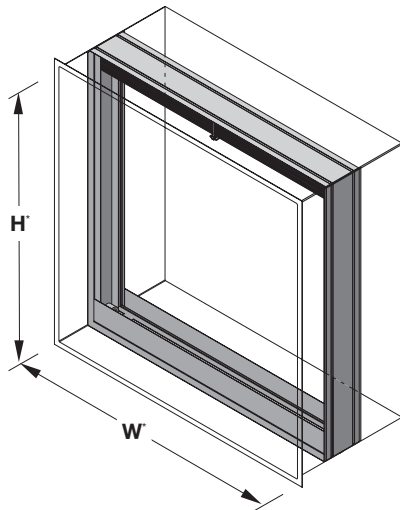




FD-4D-OP
(standard)

*Standard sleeve O.D. including thermal blanket wrap, is approximately 3/8" (9) over nominal duct size. Standard sleeve I.D. is approximately nominal duct size.

NOTE: The opening for the damper assembly in the fire wall must be sized appropriately. If not, serious damage to the thermal blanket wrap could occur and this will nullify the U.L. rating. Contact the factory if necessary for additional information.

Options

■ Installation:

- Vertical Mount ■ Horizontal Mount

■ Velocity Rating

- 2,000 fpm (10.2m/s) ■ 4,000 fpm (20.3 m/s)

■ Alternate factory-installed sleeve:

Gauge: ■ 16(1.6) ■ 14(2.0) ■ 10(3.5)

Length: ■ 16"(406) ■ 12"(305) ■ 10"(254)

■ Transitions:

- Round ■ Oval
- Duct connections (sleeve required):
 - 1"(25) S-clip ■ DM-25 ■ DM-35 ■ WARD

■ Retaining angle system:

Gauge: ■ 20 (1.0) ■ 16 (1.6)

Picture Frame: ■ SSPF (Single-side) ■ DSPF (2-sided)

Individual Angle Set: ■ SS (Single-side) ■ DS (2-sided)

■ Alternate fire closure temperature:

- 212°F (100°C)

■ PI-10 (Blade closure indication switch package):

- Internal mount ■ Loose

The FD-4D-OP fire damper employs curtain style blades for point-of-origin control of fire in dynamic HVAC systems. These specialty dampers are approved for installation with the closed plane of the curtain up to 2-1/2" (64) outside the fire rated partition and allow for direct service access from the face of the damper through the HVAC grille. The FD-4D-OP is qualified to 4,000 ft/min (20.3 m/s) and 4 in.wg. (1.5 kPa) and may be installed in vertical walls or partitions, or horizontally in floors or assemblies with fire resistance ratings up to 2 hours.

Ratings

UL 555 Fire Resistance Rating: 1-1/2 Hour (vertical and horizontal)

Maximum Dynamic Closure Velocity: 4,000 fpm (20.3 m/s)

Maximum UL555S Rated Pressure: 4 in.wg. (1.0 kPa)

Listings

UL 555 listing: R14981

CAN/ULC S112 listing: R14981

CSFM listing: 3225-1404:101

New York City MEA listing: 295-98-E

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

Meets Building Code Standards: IBC, NBC, NFPA, SBC and UBC



Standard Construction

Frame: 22 gauge (0.85) galvanized steel

Blades: 24 gauge (0.7) galvanized steel

Sleeve: 14" x 18 gauge (406 x 1.3) galvanized steel with 3/4" (19) flange and factory installed thermal insulation on four sides

Fire Closure Device: Fusible link

Fire Closure Temperature: 165°F (75°C)

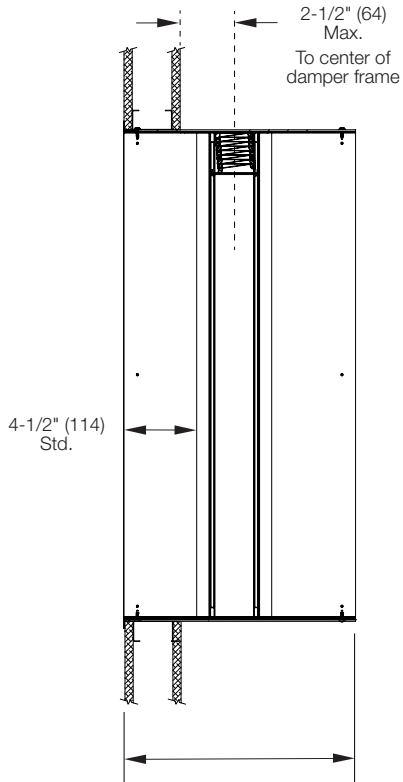
Minimum Size: 6" x 6" (152 x 152)

Maximum Size: 36" x 36" (914 x 914)

Blade Stack Dimensional Data

FD-4D-OP

1-1/2-Hour Rated – Dynamic Fire Damper
Out-Of-Partition



Maximum Sleeve Length 16" (406)
Standard Sleeve Length 14" (356)

Single Section Sizes Only	
Nominal Duct Height 'H'	Blade Stack Height
6" (152)	1-1/16" (27)
7" (178)	1-3/16" (30)
8" (203)	1-3/16" (30)
9" (229)	1-3/16" (30)
10" (254)	1-7/16" (37)
11" (279)	1-7/16" (37)
12" (305)	1-7/16" (37)
13" (330)	1-9/16" (40)
14" (356)	1-9/16" (40)
15" (381)	1-13/16" (46)
16" (406)	1-13/16" (46)
17" (432)	1-13/16" (46)
18" (457)	1-15/16" (49)
19" (483)	1-15/16" (49)
20" (508)	2-3/16" (56)
21" (533)	2-3/16" (56)
22" (559)	2-3/16" (56)
23" (584)	2-5/16" (59)
24" (610)	2-5/16" (59)
25" (635)	2-9/16" (65)
26" (660)	2-9/16" (65)
27" (686)	2-9/16" (65)
28" (711)	2-11/16" (68)
29" (737)	2-11/16" (68)
30" (762)	2-15/16" (75)
31" (787)	2-15/16" (75)
32" (813)	2-15/16" (75)
33" (838)	3-1/16" (78)
34" (864)	3-1/16" (78)
35" (889)	3-5/16" (84)
36" (914)	3-5/16" (84)