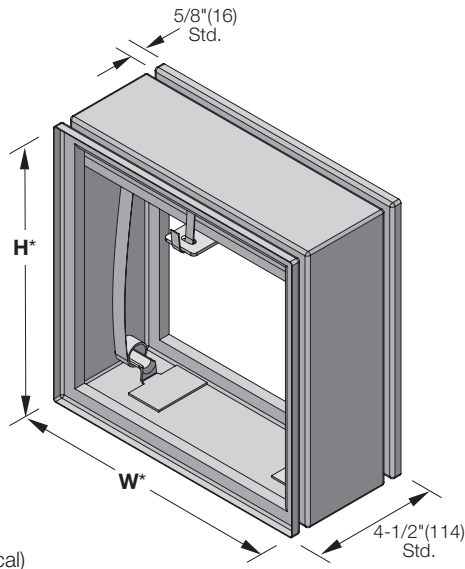




**FD-4D-A**  
(standard-vertical)

### Options

- **Installation:** ■ Vertical Mount ■ Horizontal Mount
- **Velocity Rating:** ■ 2,000 fpm ■ 4,000 fpm
- **Factory installed sleeve** ■ Integral
  - Gauge: ■ 20 (1.0) ■ 18 (1.3) ■ 16 (1.6) ■ 14(2.0) ■ 10 (3.5)
  - Length: ■ 12" (305) ■ 16" (406) ■ 24" (610) ■ Other\_\_\_\_\_
- **Low leakage taped joints** (Integral sleeve required)
- **Transitions** (sleeve required): ■ Flanged (sleeve required)
  - Round ■ Oval
  - Duct connections (sleeve required):
    - 1"(25) S-clip ■ DM-25
    - DM-35 ■ S & Drive ■ WARD
- **Retaining angle systems:**
  - Gauge: ■ 20 (1.0) ■ 16 (1.6)
  - Picture frame: ■ SSPF (single-side) ■ DSPF (2-sided)
  - Individual angle sets: ■ SS (single-side) ■ DS (2-sided)
- **Alternate fire closure temperature:**
  - 212°F (100°C)
- **Duct access door factory mounted in common sleeve**
- **Burglar Bars**
- **Generic mullion for oversized masonry or concrete openings**
- **Type-304 stainless steel construction**
- **PI-10** (Blade closure indication switch package):
  - External mount (sleeve required) ■ Internal mount ■ Loose

\* Damper dimensions furnished approximately 1/4" (6) undersize

† Damper dimensions furnished approximately 1/8" (3) undersize.

\*\*\*4000 fpm (20.3 m/s) limited to:

Single section: Vertical: 36" × 48" (914 × 1219)  
Horizontal: 36" × 18" (914 × 457)

Multiple section: Horizontal: 36" × 36" (914 × 914)  
72" × 18" (1829 × 457)

**NOTE:** Dimensions in parentheses ( ) are millimeters.  
Information is subject to change without notice or obligation.

The FD4DA fire damper employs curtain style blades for point-of-origin control of fire in static and dynamic HVAC systems. The FD4DA is qualified to 4,000 ft/min (20.3 m/s) and 4 in.wg. (1.0 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)

**UL HNLJ.V-5:** Ventilation Duct Assemblies

**\*\*\*Maximum Dynamic Closure Velocity:** 4,000 fpm (20.3 m/s)  
2,000 fpm (10.2 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 – curtain style

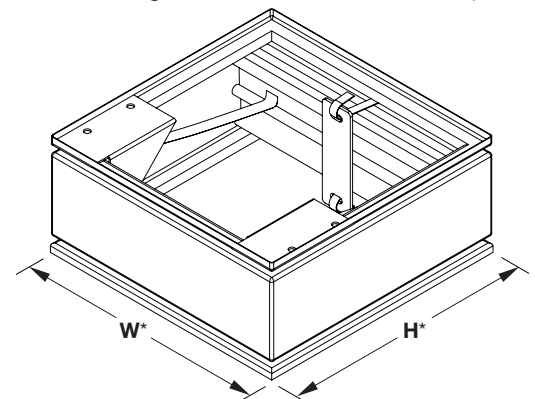
**Fire Closure Device:** Fusible link

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

**Minimum Size:** 6" × 6" (152 × 152)

**Maximum Size:** Single Section: Vertical: 36" × 48" (914 × 1219)  
Horizontal: 36" × 36" (914 × 914)  
Multiple Section: Vertical: 72" × 120" (1829 × 3048)  
120" × 72" (3048 × 1829)  
Horizontal: 36" × 36" (914 × 914)  
72" × 18" (1829 × 457)

**Stainless Steel:** Single Section: Vertical: 36" × 36" (914 × 914)



# Typical Damper Dimensional Data

## FD-4D-A

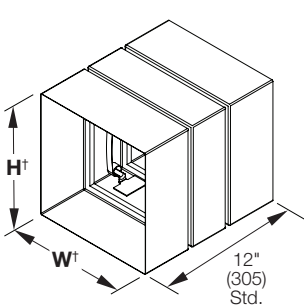
1-1/2-Hour Dynamic Rated – Fire Damper  
Curtain Style Blade

### Round Transitions

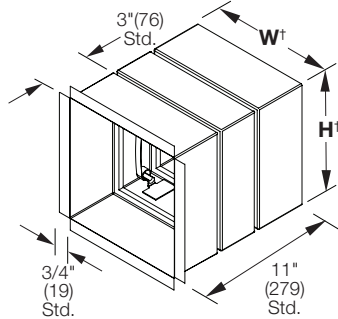
(Standard with  $D=W=H$ .  
Available with  $D<W$  and  $H$ )

### Oval Transitions

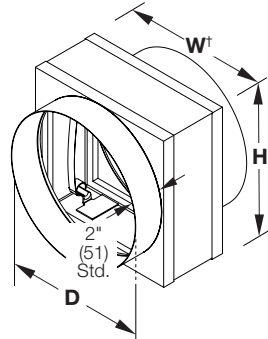
(Standard with  $W$  and  $H$  equal to  
damper width and height dimensions.  
Available with  $W$  and  $H$  smaller than  
damper width and height)



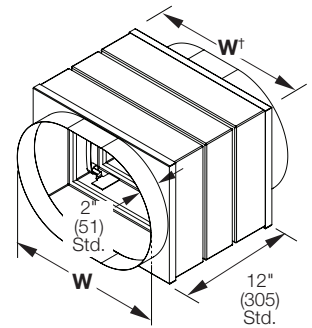
**Sleeve Style ISA** (Optional)



**Sleeve Style ISAF** (Optional)  
with standard flange  
(Typical for use with grille.)

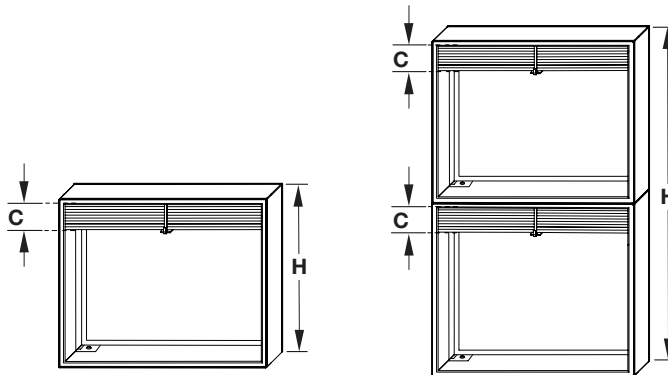


**Style AR** (Optional)



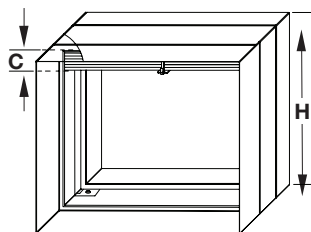
**Style ISAO** (Optional)

# Blade Stack Dimensional Layout

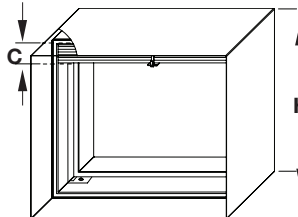


### Framed Unit — No Sleeve

(Multiple section units supplied as individual  
dampers for field assembly)

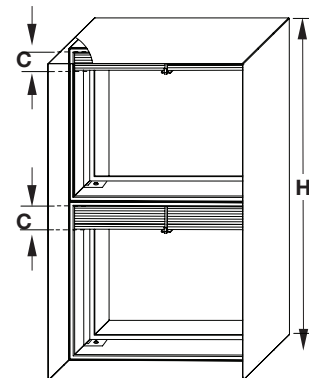


**Sleeve Style IS — Integral Sleeve**



### Sleeve Style S — Common Sleeve

(Multiple section units supplied as a single  
assembly)



Multiple section dampers shown as one wide by  
two high - two wide by one high similar

## Blade Stack Dimensional Data Sizing Chart

|                          | 6"(152) - 36"(914) | 37"(940) - 72"(1829) |
|--------------------------|--------------------|----------------------|
| Nominal Duct Height 'H'  | Damper Height 'T'  | Damper Height 'T'    |
| 6" (152)                 | 1-1/16" (27)       | 1-1/16" (27)         |
| 7" (178) - 9" (229)      | 1-3/16" (30)       | 1-3/16" (30)         |
| 10" (254) - 12" (305)    | 1-7/16" (37)       | 1-7/16" (37)         |
| 13" (330) - 14" (356)    | 1-9/16" (40)       | 1-9/16" (40)         |
| 15" (381) - 17" (432)    | 1-13/16" (46)      | 1-13/16" (46)        |
| 18" (457) - 19" (483)    | 1-15/16" (49)      | 1-15/16" (49)        |
| 20" (508) - 22" (559)    | 2-3/16" (56)       | 2-3/16" (56)         |
| 23" (584) - 24" (610)    | 2-5/16" (59)       | 2-5/16" (59)         |
| 25" (635) - 27" (686)    | 2-9/16" (65)       | 2-9/16" (65)         |
| 28" (711) - 29" (737)    | 2-11/16" (68)      | 2-11/16" (68)        |
| 30" (762) - 32" (813)    | 2-15/16" (75)      | 2-15/16" (75)        |
| 33" (838) - 34" (864)    | 3-1/16" (78)       | 3-1/16" (78)         |
| 35" (889) - 36" (914)    | 3-5/16" (84)       | 3-5/16" (84)         |
| 37" (940) - 39" (991)    | 3-5/16" (84)       | 3-5/16" (84)         |
| 40" (1016) - 42" (1067)  | 3-11/16" (94)      | 3-11/16" (94)        |
| 43" (1092) - 44" (1118)  | 3-13/16" (97)      | 3-13/16" (97)        |
| 45" (1143) - 47" (1194)  | 4-1/16" (103)      | 4-1/16" (103)        |
| 48" (1219)               | 4-3/16" (106)      | 4-3/16" (106)        |
| 49" (1245) - 54" (1372)  | 2-9/16" (65)       | 2-9/16" (65)         |
| 55" (1397) - 58" (1473)  | 2-11/16" (68)      | 2-11/16" (68)        |
| 59" (1499) - 64" (1626)  | 2-15/16" (75)      | 2-15/16" (75)        |
| 65" (1651) - 68" (1727)  | 3-1/16" (78)       | 3-1/16" (78)         |
| 69" (1753) - 72" (1829)  | 3-5/16" (84)       | 3-5/16" (84)         |
| 73" (1854) - 74" (1880)  | 3-5/16" (84)       | 2-5/16" (59)         |
| 75" (1905) - 78" (1981)  | 3-7/16" (87)       | 2-9/16" (65)         |
| 79" (2007) - 84" (2134)  | 3-11/16" (94)      | 2-9/16" (65)         |
| 85" (2159) - 88" (2235)  | 3-13/16" (97)      | 2-11/16" (68)        |
| 89" (2261) - 94" (2388)  | 4-1/16" (103)      | 2-11/16" (68)        |
| 95" (2413) - 96" (2438)  | 4-3/16" (106)      | 2-15/16" (75)        |
| 97" (2464) - 120" (3048) | 2-15/16" (75)      | 2-15/16" (75)        |

|                          | 49"(1245) - 72"(1829) | 37"(940) - 72"(1829) |
|--------------------------|-----------------------|----------------------|
| Nominal Duct Height 'H'  | Damper Height 'T'     | Damper Height 'T'    |
| 6" (152)                 | 1-1/16" (27)          | 1-1/16" (27)         |
| 7" (178) - 9" (229)      | 1-3/16" (30)          | 1-3/16" (30)         |
| 10" (254) - 12" (305)    | 1-7/16" (37)          | 1-7/16" (37)         |
| 13" (330) - 14" (356)    | 1-9/16" (40)          | 1-9/16" (40)         |
| 15" (381) - 17" (432)    | 1-13/16" (46)         | 1-13/16" (46)        |
| 18" (457) - 19" (483)    | 1-15/16" (49)         | 1-15/16" (49)        |
| 20" (508) - 22" (559)    | 2-3/16" (56)          | 2-3/16" (56)         |
| 23" (584) - 24" (610)    | 2-5/16" (59)          | 2-5/16" (59)         |
| 25" (635) - 27" (686)    | 2-9/16" (65)          | 2-9/16" (65)         |
| 28" (711) - 29" (737)    | 2-11/16" (68)         | 2-11/16" (68)        |
| 30" (762) - 32" (813)    | 2-15/16" (75)         | 2-15/16" (75)        |
| 33" (838) - 34" (864)    | 3-1/16" (78)          | 3-1/16" (78)         |
| 35" (889) - 36" (914)    | 3-5/16" (84)          | 3-5/16" (84)         |
| 37" (940) - 39" (991)    | 1-15/16" (49)         | 1-15/16" (49)        |
| 40" (1016) - 47" (1194)  | 2-3/16" (56)          | 2-3/16" (56)         |
| 46" (1168) - 49" (1245)  | 2-5/16" (59)          | 2-5/16" (59)         |
| 50" (1279) - 55" (1397)  | 2-9/16" (65)          | 2-9/16" (65)         |
| 56" (1422) - 59" (1499)  | 2-11/16" (68)         | 2-11/16" (68)        |
| 60" (1524) - 65" (1727)  | 2-15/16" (75)         | 2-15/16" (75)        |
| 66" (1676) - 72" (1829)  | 3-1/16" (78)          | 3-1/16" (78)         |
| 73" (1854) - 74" (1880)  | 2-5/16" (59)          |                      |
| 75" (1905) - 83" (2108)  | 2-9/16" (65)          |                      |
| 84" (2134) - 89" (2261)  | 2-11/16" (68)         |                      |
| 90" (2286) - 120" (3048) | 2-15/16" (75)         |                      |

### NOTE:

Dampers in the blue-shaded area are for Vertical Mount only.

Dampers inside the Bold Outline will be manufactured in individual sections not exceeding 36" x 48".

Vertical dampers exceeding 72" x 48" or 36" x 96" will be manufactured in individual sections not exceeding 36" x 36".