

Application

The VFD-10-C fire damper employs out of airstream frame and curtain style blades for point-of-origin control of fire in static HVAC systems. The VFD-10-C may be installed in vertical walls or partitions, or horizontally in floors or assemblies with fire resistance ratings up to 2 hours.

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: Vertical mount: 4" x 2" (102 x 51)
Horizontal mount: 4" x 3" (102 x 76)

Maximum Size: Single section: Vertical: 46" x 43" (1168 x 1092)
Horizontal: 38" x 35" (965 x 889)
Multiple Section: Vertical: 118" x 75" (2997 x 1905) or
78" x 115" (1981 x 2921)
Horizontal: 78" x 75" (1981 x 1905)

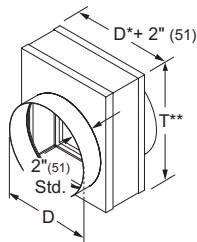
Stainless Steel: Single section: 38" x 35" (965 x 889)
Vertical/Horizontal mount: 78" x 35" (1981 x 889) or
38" x 75" (965 x 1905)

Options

- Factory installed sleeve:
 - Integral (Includes high pressure/low leakage taped joints).
 - Gauge: 20 (1.0) 18 (1.3) 16 (1.6) 14 (2.0) 10 (3.5)
 - Length: 12" (305) 16" (406) 24" (610) Other _____
- Transitions:
 - Round Oval
 - Duct connections (sleeve required):
 - 1" (25) S-clip DM-25 DM-35 WARD
- Retaining angle systems:
 - Gauge: 20 (1.0) 16 (1.6)
 - Picture frame: SSPF (single-side) DSPF (2-side)
 - Individual angle sets: SS (single-side) DS (2-side)
- Alternate fire closure temperature.
 - 212°F (100°C)
- Duct access door factory mounted in common sleeve.
- Generic mullion for oversized masonry or concrete openings.
- Type-304 stainless steel construction (not available with integral sleeve option).

Round Transitions

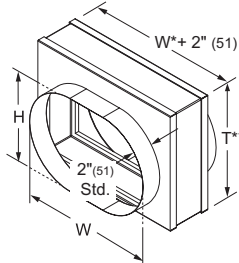
(Standard with D=W=H. Available with D<W and H)



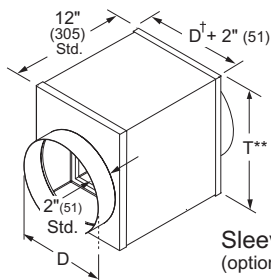
Style CR (optional)

Oval Transitions

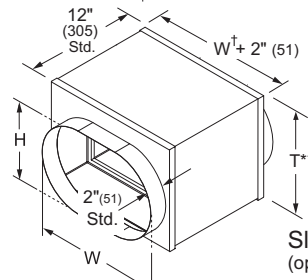
(Standard with W and H equal to damper width and height dimensions. Available with W and H smaller than damper width and height)



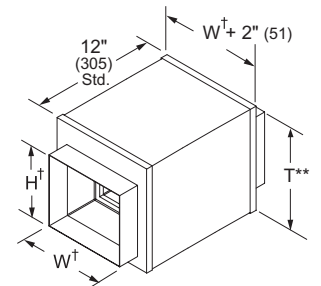
Style CO (optional)



Sleeve Style CR (optional)



Sleeve Style CO (optional)



Sleeve Style C (optional)

Ratings

UL 555 Fire Resistance Rating: 1½ hour (vertical and horizontal)

UL HNLJ.V-5: Ventilation Duct Assemblies

Listings

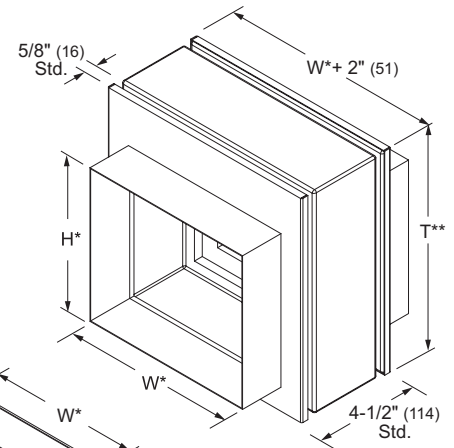
UL 555 listing: R11767

CSFM listing: 3225-0368:101

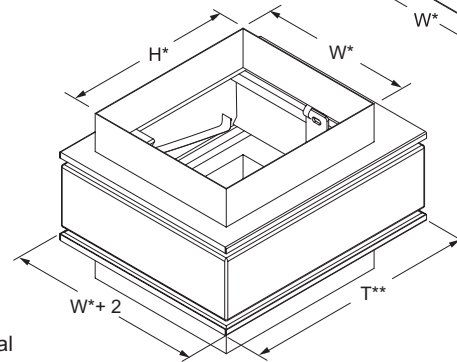
New York City MEA listing: 295-98-E

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

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



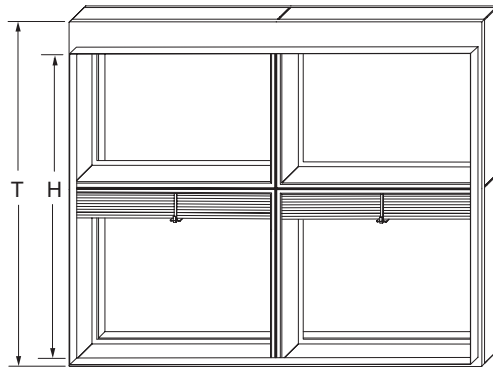
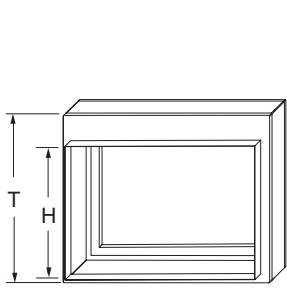
Model **VFD-10-C**
(standard-vertical)



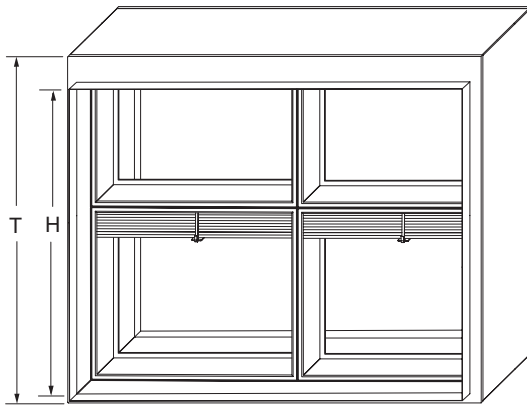
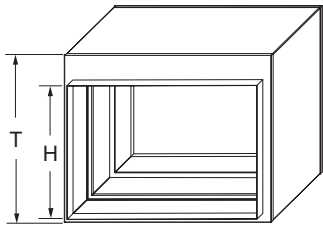
Model **VFD-10-C**
(standard-horizontal)

* Damper dimensions furnished approximately 1/4" (6) undersize.
† Damper dimensions furnished approximately 1/8" (3) undersize.

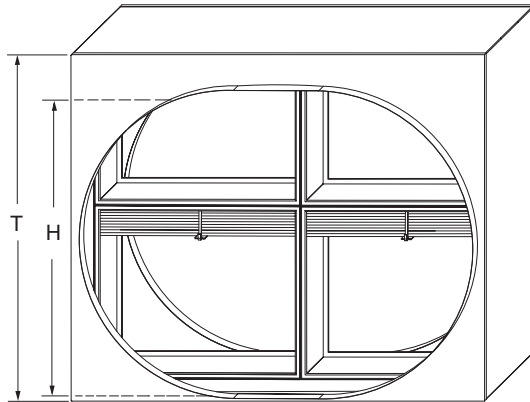
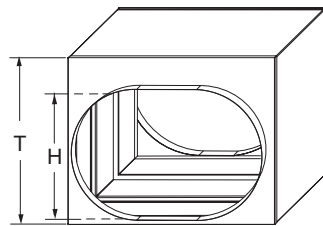
Blade Stack Dimensional Data



Framed Unit — No Sleeve
(Multiple section units supplied as a single assembly)



Sleeve Style S — Common Sleeve
(Multiple section units supplied as a single assembly)



Sleeve Style IS — Integral Sleeve
(Multiple section units supplied as individual dampers for field assembly)

Single Section

| Nominal Duct Height 'H' | Damper Height 'T' |
|-------------------------|-------------------|
| 2" (51) | 5" (127) |
| 3" (76) | 6" (152) |
| 4" (102) | 7" (178) |
| 5" (127) | 8" (203) |
| 6" (152) | 9" (229) |
| 7" (178) | 10" (254) |
| 8" (203) | 11" (279) |
| 9" (229) | 12" (305) |
| 10" (254) | 13" (330) |
| 11" (279) | 14" (356) |
| 12" (305) | 15" (381) |
| 13" (330) | 16" (406) |
| 14" (356) | 17" (432) |
| 15" (381) | 18" (457) |
| 16" (406) | 19" (483) |
| 17" (432) | 20" (508) |
| 18" (457) | 21" (533) |
| 19" (483) | 22" (559) |
| 20" (508) | 23" (584) |
| 21" (533) | 24" (610) |
| 22" (559) | 25" (635) |
| 23" (584) | 26" (660) |
| 24" (610) | 28" (686) |
| 25" (635) | 29" (711) |
| 26" (660) | 30" (737) |
| 27" (686) | 31" (762) |
| 28" (711) | 32" (787) |
| 29" (737) | 33" (813) |
| 30" (762) | 34" (838) |
| 31" (787) | 35" (864) |
| 32" (813) | 36" (889) |
| 33" (838) | 37" (914) |
| 34" (864) | 38" (940) |
| 35" (889) | 39" (965) |
| 36" (914) | 41" (991) |
| 37" (940) | 42" (1016) |
| 38" (965) | 43" (1041) |
| 39" (991) | 44" (1067) |
| 40" (1016) | 45" (1092) |
| 41" (1041) | 46" (1118) |
| 42" (1067) | 47" (1144) |
| 43" (1092) | 48" (1194) |

Multiple Section

| Nominal Duct Height 'H' | Damper Height 'T' |
|-------------------------|-------------------|
| 37" (940) | 40" (1016) |
| 38" (965) | 41" (1041) |
| 39" (991) | 42" (1067) |
| 40" (1016) | 43" (1092) |
| 41" (1041) | 44" (1118) |
| 42" (1067) | 45" (1143) |
| 43" (1092) | 46" (1168) |
| 44" (1118) | 47" (1194) |
| 45" (1143) | 48" (1219) |
| 46" (1168) | 49" (1245) |
| 47" (1194) | 50" (1270) |
| 48" (1219) | 51" (1295) |
| 49" (1245) | 52" (1321) |
| 50" (1270) | 54" (1372) |
| 51" (1295) | 55" (1397) |
| 52" (1321) | 56" (1422) |
| 53" (1346) | 57" (1448) |
| 54" (1372) | 58" (1473) |
| 55" (1397) | 59" (1499) |
| 56" (1422) | 60" (1524) |
| 57" (1448) | 61" (1549) |
| 58" (1473) | 62" (1575) |
| 59" (1499) | 63" (1600) |
| 60" (1524) | 64" (1626) |
| 61" (1549) | 65" (1651) |
| 62" (1575) | 66" (1676) |
| 63" (1600) | 67" (1702) |
| 64" (1626) | 68" (1727) |
| 65" (1651) | 69" (1753) |
| 66" (1676) | 70" (1778) |
| 67" (1702) | 71" (1803) |
| 68" (1727) | 72" (1829) |
| 69" (1753) | 73" (1854) |
| 70" (1778) | 74" (1880) |
| 71" (1803) | 75" (1905) |
| 72" (1829) | 76" (1930) |
| 73" (1854) | 77" (1956) |
| 74" (1880) | 78" (1981) |
| 75" (1905) | 80" (2032) |
| 76" (1930) | 80" (2032) |
| 77" (1956) | 81" (2057) |
| 78" (1981) | 82" (2083) |
| 79" (2007) | 83" (2108) |
| 80" (2032) | 84" (2134) |
| 81" (2057) | 85" (2159) |
| 82" (2083) | 86" (2184) |
| 83" (2108) | 87" (2210) |
| 84" (2134) | 88" (2235) |
| 85" (2159) | 89" (2261) |
| 86" (2184) | 90" (2286) |
| 87" (2210) | 91" (2311) |
| 88" (2235) | 92" (2337) |
| 89" (2261) | 93" (2362) |
| 90" (2286) | 94" (2388) |
| 91" (2311) | 95" (2413) |
| 92" (2337) | 96" (2438) |
| 93" (2362) | 97" (2464) |
| 94" (2388) | 98" (2489) |
| 95" (2413) | 99" (2515) |
| 96" (2438) | 100" (2540) |
| 97" (2464) | 101" (2565) |
| 98" (2489) | 102" (2591) |
| 99" (2515) | 103" (2616) |
| 100" (2540) | 104" (2642) |
| 101" (2565) | 105" (2667) |
| 102" (2591) | 106" (2692) |
| 103" (2616) | 107" (2718) |
| 104" (2642) | 108" (2743) |
| 105" (2667) | 109" (2769) |
| 106" (2692) | 110" (2794) |
| 107" (2718) | 111" (2819) |
| 108" (2743) | 112" (2845) |
| 109" (2769) | 113" (2870) |
| 110" (2794) | 114" (2896) |
| 111" (2819) | 115" (2921) |
| 112" (2845) | 116" (2946) |
| 113" (2870) | 118" (2997) |
| 114" (2896) | 119" (3023) |
| 115" (2921) | 120" (3048) |

Vertical Dampers Only

Vertical Dampers Only

Note: When vertical dampers exceed 48" in either width or height they will be manufactured in multiple sections not exceeding individual sections of 40" wide by 40" high.

Dampers shown as vertical mount. Horizontal mount supplied in the same orientation.