

Dynamic Rated FIRE DAMPERS

100% Free Area - Sealed for High Pressure Systems
1 1/2 Hour Fire Resistance Rating

Application

Model DFD-155 is approved for use in walls, floors and partitions with fire resistance ratings less than 3 hours. This model carries a 1 1/2 hour UL fire damper label. UL 555 classifies dynamic rated fire dampers for use in HVAC systems that are operational in the event of fire.

Ratings

UL555 Fire Resistance Rating

Fire Rating: 1 1/2 hours

Dynamic closure rating

Maximum Velocity: 4000 fpm (20.3 m/s) vertical mount only,
up to 24 in. x 24 in. (610mm x 610mm)
2000 fpm (10.2 m/s) vertical or horizontal
mount, on all sizes.

Maximum Pressure: 4 in wg (1 kPa)

Construction

Galvanized steel (in gauges required by UL listing R-13317)

Installation

All fire damper installations require the use of sleeves, angles and methods described in Greenheck Fire Damper Installation Instructions #452763, included with every damper shipment. Sleeves can be field fabricated or factory furnished as a complete damper/sleeve assembly. See Factory Sleeve Option below for details.

Features

- Stainless steel closure springs
- Fusible links - 165°F (74°C) standard, 212°F (100°C) and 286°F (141°C) available
- Horizontal or vertical mount available
- Sealed for use in high pressure systems

Optional Features

- Security bars
- One piece retaining angle (POC)
- Transitions (C, CO, CR, & R)

Model DFD-155 meets the requirements for fire dampers established by:

National Fire Protection Association

(NFPA Standards 80, 90A & 101)

BOCA National Building Codes

IBC International Building Codes

ICBO Uniform Building Codes (UBC Standard 43-7)

SBCCI Standard Building Codes

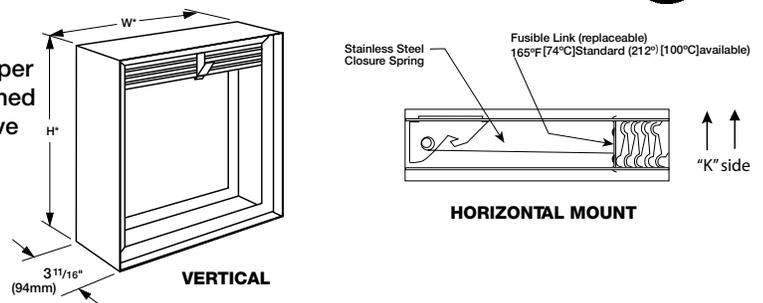
New York City (MEA listing #260-91-M)

California State Fire Marshal (Listing #3225-981:102)

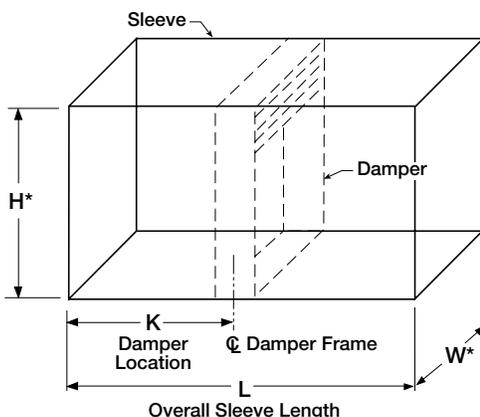
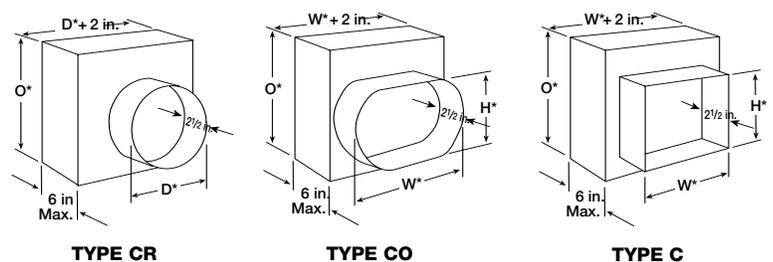
"UL CLASSIFIED (see complete marking on product)"

"UL CLASSIFIED to Canadian safety standards (see complete marking on product)"

Standard 555 (Listing #R13317)



* These dimensions are furnished approximately 1/4 in. (6mm) undersize, except round and oval dimensions which are 1/8 in. (3mm) undersize. (Add sleeve thickness for overall sleeved damper dimension)



Factory Sleeve Option

DFD-155 Fire Dampers are available in factory furnished sleeves. Sleeves are galvanized steel and are available in 10 thru 20 ga. (1mm - 3.5mm) thicknesses and lengths up to 36 in. (914mm).

"K" dimension specifies location of damper within the sleeve. Minimum is 4 in. (102mm), maximum is "L" less 4 in. (102mm), which allows for mounting angle installation and duct connection at each end of sleeve. If "K" dimension is not specified, it will be provided as one half of "L" dimension (damper centered in sleeve).

Horizontally mounted dampers must be installed with the "K" dimension on the bottom side.

Note: If using access doors, the doors should be installed on the "K" side of the damper.

SIZING DATA

DFD-155 TYPE CR, CO, C, & R

Dampers larger than maximum single section size are supplied as a factory assembly of two or more sections of equal size. These multi-section damper assemblies may have slightly less than 100% free area because of the mullions where damper sections join.

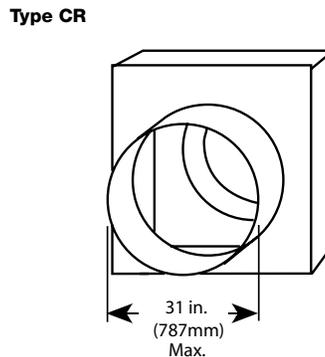
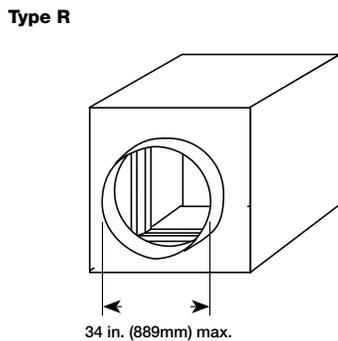
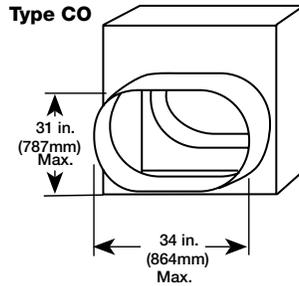
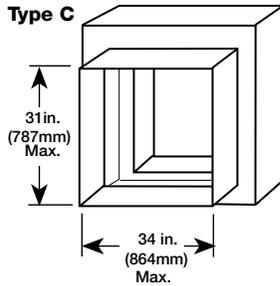
The following charts shows minimum and maximum damper section sizes . Dimensions are in inches (mm in parentheses).

C, CO, & CR transitions are positioned 1 in.(25mm) from bottom of sleeve.

Inches (mm)	Type CR		Type CO & C		Type R ^{*1}	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Single Section Vertical	3 (76)	31 (787)	3 x 3 (76 x 76)	34 x 31 (864 x 787)	3 (76)	34 (864)
Multi Section Vertical**	NA	55 (1397)	NA	70 x 44 (1778 x 1118) or 58 x 55 (1473 x 1397)	NA	58 (1473)
Single Section Horizontal	3 (76)	25 (635)	3 x 3 (76 x 76)	28 x 25 (711 x 635)	3 (76)	28 (711)
Multi Section Horizontal**	NA	31 (787)	NA	46 x 31 (1163 x 787)	NA	34 (864)

^{*1} With 2 in. (50mm) offset. Sizes adjust with 0 offset & 1 in. (25mm) offset.
^{**} Consult factory for number of sections.

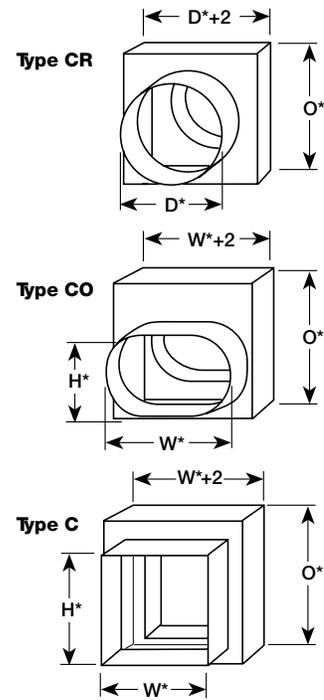
Maximum Single Section Dimensions



Type R transition is centered on damper frame. Dimensions are with 2 in. (50mm) offset.

* All multiple section dampers, with transitions, will include a factory installed 8 in. (203mm) sleeve.

Overall Damper Dimensions



H or D*	O*	H or D*	O*
3 (76)	6 (152)	27 (686)	32 (813)
4 (102)	7 (178)	28 (711)	33 (838)
5 (127)	8 (203)	29 (737)	34 (864)
6 (152)	9 (229)	30 (762)	35 (889)
7 (178)	10 (254)	31 (787)	36 (914)
8 (203)	11 (279)	32 (813)	36 (914)
9 (229)	12 (305)	33 (838)	37 (940)
10 (254)	13 (330)	34 (864)	38 (965)
11 (279)	14 (356)	35 (889)	39 (991)
12 (305)	15 (381)	36 (914)	40 (1016)
13 (330)	16 (406)	37 (940)	41 (1041)
14 (356)	17 (432)	38 (965)	42 (1067)
15 (381)	19 (483)	39 (991)	43 (1092)
16 (406)	20 (508)	40 (1016)	44 (1118)
17 (432)	21 (533)	41 (1041)	45 (1143)
18 (457)	22 (559)	42 (1067)	46 (1168)
19 (483)	23 (584)	43 (1092)	47 (1194)
20 (508)	24 (610)	44 (1118)	48 (1219)
21 (533)	25 (635)	45 (1143)	50 (1270)
22 (559)	27 (686)	46 (1168)	51 (1295)
23 (584)	28 (711)	47 (1194)	52 (1321)
24 (610)	29 (737)	48 (1219)	53 (1346)
25 (635)	30 (762)	49 (1245)	54 (1372)
26 (660)	31 (787)	50 (1270)	55 (1397)

* Dimensions are in inches (mm in parentheses). These dimensions are furnished approximately 1/4 in. (6mm) undersize. (All 'H' dimensions larger than single section height are two sections high. Refer to chart.) Dimension are in inches (mm).

