



DFD-150X series

Dynamic Rated FIRE DAMPERS with Sleeve

1½ Hour Fire Resistance Rating

APPLICATION

Model DFD-150X is approved for use in walls, floors and partitions with fire resistance ratings less than 3 hours. This model carries a 1½ 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) up to 24 in. x 24 in.
(610mm x 610mm) 2000 fpm (10.2 m/s) above
24 in. x 24 in. (610mm x 610mm)

Maximum Pressure: 4 in. wg (1 kPa)

Model DFD-150X meets the requirements for fire dampers established by:

National Fire Protection Association
(NFPA Standards 80, 90A & 101)

BOCA National 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 Marshall

(Listing #3225-981:102 for use in walls)

"UL CLASSIFIED (see complete marking on product)"

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

Standard 555 (Listing #R13317)

CONSTRUCTION

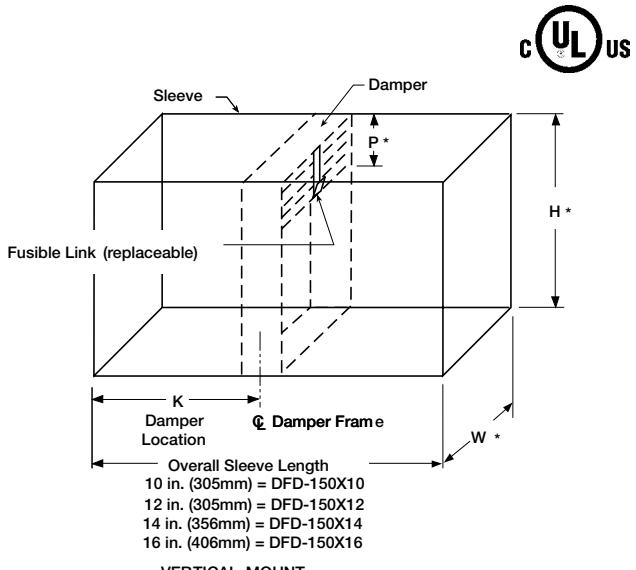
Damper is galvanized steel (in gauges required by UL listing R-13317) sleeve is 20 ga. galvanized steel.

STANDARD FEATURES

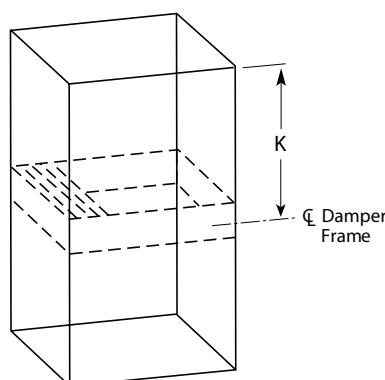
- Stainless steel closure springs
- Fusible links (165°F (74°C) standard, 212°F (100°C) and 286°F (141°C) available.
- Horizontal or vertical mount available

OPTIONAL FEATURES

- Security bars
- One piece retaining angles (POC)
- Transitions (B, C, CO, CR, & R)
- Steel stud connection
- Sealed transitions and sleeves



*These dimensions are furnished approximately 1/4 in. (6mm) undersize.



HORIZONTAL MOUNT

DFD-150X Type A

Dampers larger than maximum single section size are supplied in 2 or more sections of equal size.

The following chart and illustrations show minimum and maximum damper section size and assembly configurations for multi-section dampers.

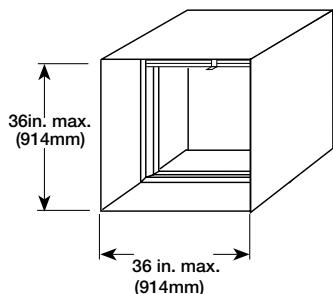
SIZE LIMITATIONS

Inches (mm)	Type A		Type B	
	minimum	maximum	minimum	maximum
Single Section Vertical	6 x 4 (152 x 102)	36 x 36 (914 x 914)	6 x 6 (152 x 152)	36 x 32 (914 x 813)
Multi Section** Vertical	NA	72 x 48 (1829 x 1219) or 60 x 60 (1824 x 1524)	NA	72 x 45 (1829 x 1143) or 60 x 56 (1524 x 1422)
Single Section Horizontal	6 x 4 (152 x 102)	30 x 30 (762 x 762)	6 x 6 (152 x 152)	30 x 26 (762 x 660)
Multi Section** Horizontal	NA	48 x 36 (1219 x 914)	NA	48 x 32 (1219 x 813)

Installation of sizes larger than the maximums shown requires approval of the authority having jurisdiction.

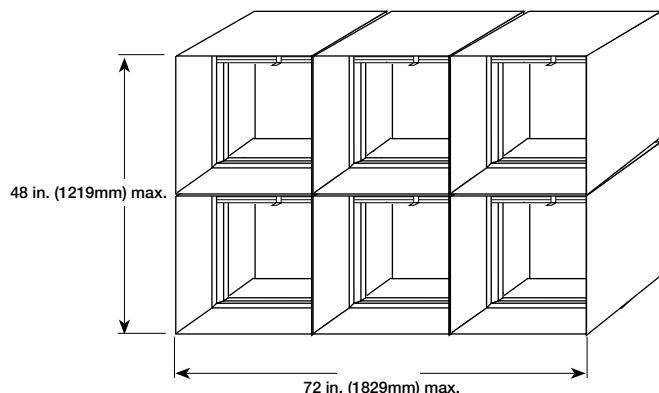
** Consult factory for number of sections.

① MAXIMUM SINGLE SECTION DIMENSIONS

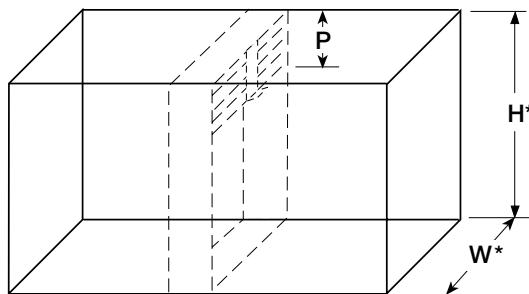


② MULTI-SECTION LIMITATIONS

Maximum height is 48 in. (1219mm) when width is 72 in. (1829mm) or less.



Blade Stack Dimensional Data



H*		P	
in.	mm	in.	mm
8	203	1.2	30
9	229	1.3	33
10	254	1.3	33
11	279	1.4	36
12	305	1.6	41
13	330	1.7	43
14	356	1.8	46
15	381	1.8	46
16	406	2.0	51
17	432	2.1	53
18	457	2.2	56
19/37/38	483/940/965	2.3	58
20/39/40	508/991/1016	2.4	61
21/41/42	533/1041/1067	2.6	66
22/43/44	559/1092/1118	2.6	66
23/45/46	584/1143/1168	2.7	69
24/47/48	610/1194/1219	2.9	74
25/49/50	635/1245/1270	3.1	79
26/51/52	660/1295/1321	3.2	81
27/53/54	686/1346/1372	3.2	81
28/55/56	711/1397/1422	3.3	84
29/57/58	737/1448/1473	3.4	86
30/59/60	762/1499/1524	3.6	91
31/32	787/813	3.7	94
33/34	838/864	3.9	99
35	889	4.1	104
36	914	4.2	107

* These dimensions are furnished approximately 1/4 in. (6mm) undersize.

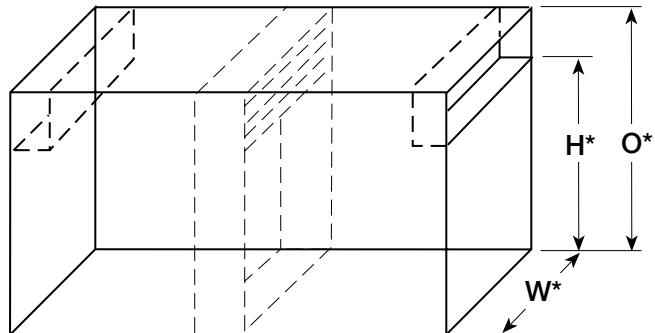
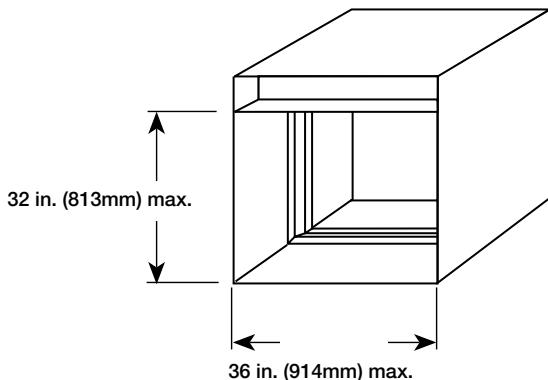
DFD-150X Type B

Dampers larger than maximum single section size are supplied in 2 or more sections of equal size.

The following chart and illustrations show minimum and maximum damper section size and assembly configurations for multi-section dampers.

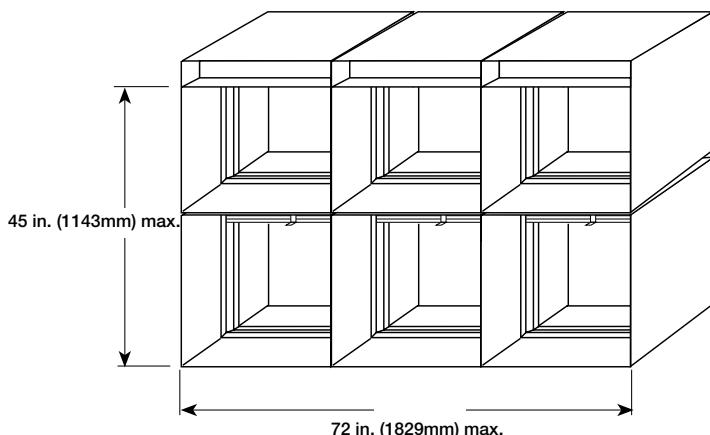
Type B Overall Damper Dimensions

① Maximum Single Section Dimensions



② MULTI-SECTION LIMITATIONS

Maximum height is 45 in. (1143mm) when width is 72 in. (1829mm) or less.



H^*	O^*
6 (152)	8 (203)
7 (178)	9 (229)
8 (203)	10 (254)
9 (229)	11 (279)
10 (254)	12 (305)
11 (279)	13 (330)
12 (305)	14 (356)
13 (330)	15 (381)
14 (356)	16 (406)
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)	26 (660)
23 (584)	27 (686)
24 (610)	28 (711)
25 (635)	29 (737)
26 (660)	30 (762)
27 (686)	31 (787)
28 (711)	32 (813)
29 (737)	33 (838)
30 (762)	34 (864)
31(787)	35 (889)

H^*	O^*
32(813)	36 (914)
33 (838)	36 (914)
34 (864)	37 (940)
35 (889)	38 (965)
36 (914)	39 (991)
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)	50 (1270)
47 (1194)	51 (1295)
48 (1219)	52 (1321)
49 (1245)	53 (1346)
50 (1270)	54 (1372)
51 (1295)	55 (1397)
52 (1321)	56 (1422)
53 (1346)	57 (1448)
54 (1372)	58 (1473)
55 (1397)	59 (1397)
56 (1422)	60 (1524)

* 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. The top section is a Type B and the bottom sections are Type A).

DFD-150X Types CR, CO & C

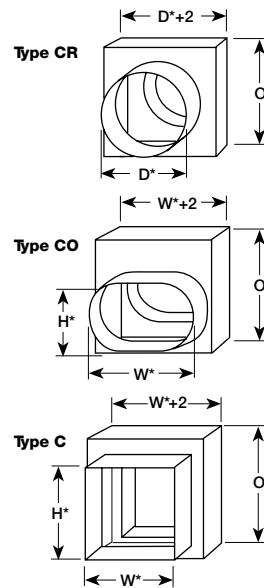
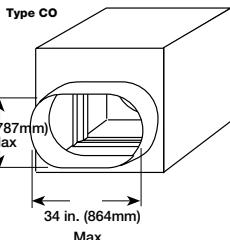
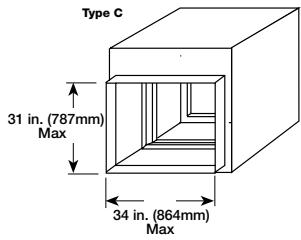
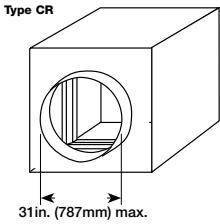
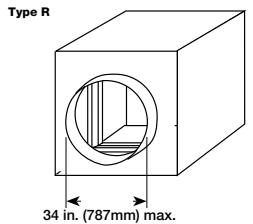
DFD-150X dampers with C, CO, CR, and R transitions are available only as single section dampers.

The following chart show minimum and maximum damper size. Dimensions are in inches (mm in parentheses).

inches (mm)	Type CR		Type CO & C		Type R*1	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Single Section Vertical	6 (152)	31 (787)	6 x 5 (152 x 127)	34 x 31 (864 x 787)	6 (152)	34 (864)
Single Section Horizontal	6 (152)	31 (787)	6 x 5 (152 x 127)	34 X 31 (864 X 787)	6 (152)	34 (864)

*1 With 2 in. (50mm) offset. Sizes adjust with 1 in.(25mm) offset.

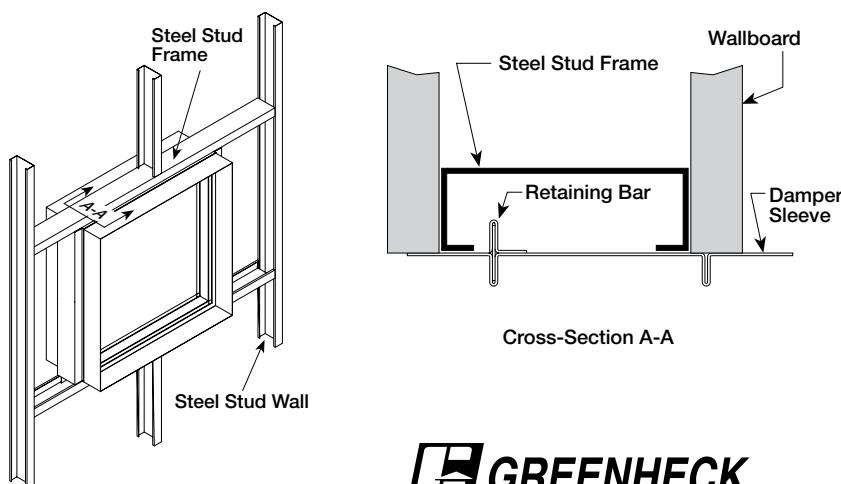
C, CO, CR transitions are positioned 1 in. (25mm) from bottom of sleeve.



H or D*	O*
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)	19 (483)
16 (406)	20 (508)
17 (432)	21 (533)
18 (457)	22 (559)
19 (483)	23 (584)
20 (508)	24 (610)
21 (533)	25 (635)
22 (559)	27 (686)
23 (584)	28 (711)
24 (610)	29 (737)
25 (635)	30 (762)
26 (660)	31 (787)
27 (686)	32 (813)
28 (711)	33 (838)
29 (737)	34 (894)
30 (762)	35 (889)
31 (787)	36 (914)

Steel Stud Connection (SSC) Option

The Steel Stud Connection (SSC) Option allows fastening of the damper sleeve (up to 36 in. W x 36 in. H [914mm x 914m]) directly to the wall's steel stud framing. This option replaces the angles that were previously required for wall installations.



* Dimension are in inches (mm). These dimensions are furnished approximately 1/4 in. (6mm) undersize.



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