



Dampers Submittals

Job Name: NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK

Job Location: NORTH YORK

Customer: CONSULT MECHANICAL

Date Printed: 10/30/2024

Spec Section: 15 - HVAC

Contact: 571 Chrislea Rd., Unit 3
Woodbridge, ON L4L 8A2



All-In-One
Detailed Submittal Schedule
Dampers

#	Qty	Model	Tag	Width, Height	Design	Mtg Pos	Fire Rating	Temp	Sleeve Length
31	4	FDD	FD	14.00, 6.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
32	6	FDD	FD	12.00, 4.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
33	7	FDD	FD	10.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
34	2	FDD	FD	12.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
35	12	FDD	FD	12.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
36	1	FDD	FD	20.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
37	1	FDD	FD	34.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
38	4	FDD	FD	10.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
39	2	FDD	FD	14.00, 7.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
40	1	FDD	FD	14.00, 14.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
41	1	FDD	FD	10.00, 4.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
42	2	FDD	FD	18.00, 10.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
43	1	FDD	FD	14.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
44	1	FDD	FD	46.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
45	1	FDD	FD	36.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
46	1	FDD	FD	18.00, 8.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
47	1	FDD	FD	26.00, 12.00	B	V	1.5HR	165	0.00
B - Blades Outside Airstream V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
48	2	FDD	FD	10.00, 0.00	RC	V	1.5HR	165	0.00
RC - Round Inlet V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
49	1	FDD	FD	7.00, 0.00	RC	V	1.5HR	165	0.00
RC - Round Inlet V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
50	1	FDD	FD	6.00, 0.00	RC	V	1.5HR	165	0.00
RC - Round Inlet V - Vertical 1.5HR - 1.5 Hour 165 - 165 Degrees									
51	1	FDD	FD	36.00, 12.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream H - Horizontal 1.5HR - 1.5 Hour 165 - 165 Degrees									
52	1	FDD	FD	36.00, 6.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream H - Horizontal 1.5HR - 1.5 Hour 165 - 165 Degrees									
53	2	FDD	FD	14.00, 14.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream H - Horizontal 1.5HR - 1.5 Hour 165 - 165 Degrees									
54	1	FDD	FD	10.00, 6.00	B	H	1.5HR	165	0.00
B - Blades Outside Airstream H - Horizontal 1.5HR - 1.5 Hour 165 - 165 Degrees									
55	1	FDD	FD	8.00, 0.00	RC	H	1.5HR	165	0.00
RC - Round Inlet H - Horizontal 1.5HR - 1.5 Hour 165 - 165 Degrees									

The list provided above is for reference purpose only. Contractor to provide a full release list confirming quantity, tag, size, style, orientation of all fire dampers prior to release.

Dynamic Fire Damper, Horizontal and Vertical

Model

Dynamic Fire Damper **FDD-B**

Standard Construction:

Frame: Roll Formed Galvanized Steel with Safety Edge.

Blades: Roll Formed Galvanized Steel, Curtain-Type

Springs: Stainless Steel.

Fusible Link: U.L. Listed 165°F.

1½ & 3 Hr. Vertical:

Min. Size: 6"w X 4"h (152mm x 102mm)

Max. Single Section: 36"w X 32"h (914mm x 813mm)

Max. Size: 72"w X 32"h (1829mm x 813mm)

1½ & 3 Hr. Horizontal:

Min. Size: 6"w X 4"h (152mm x 102mm)

Max. Single Sect.: 24"w X 21"h (610mm x 533mm)

Max. Size: 36"w X 32"h (914mm x 813mm)

Optional Construction:

- ☐ For factory supplied sleeve see submittal for FDD-B c/w sleeve
- ☐ 3 Hour Rating
- ☐ 212°F fusible link (vertical only, 24"x21" (610mm x 533mm) max size)

Notes: Dampers are furnished approximately ¼" (6mm) smaller than given duct dimensions.

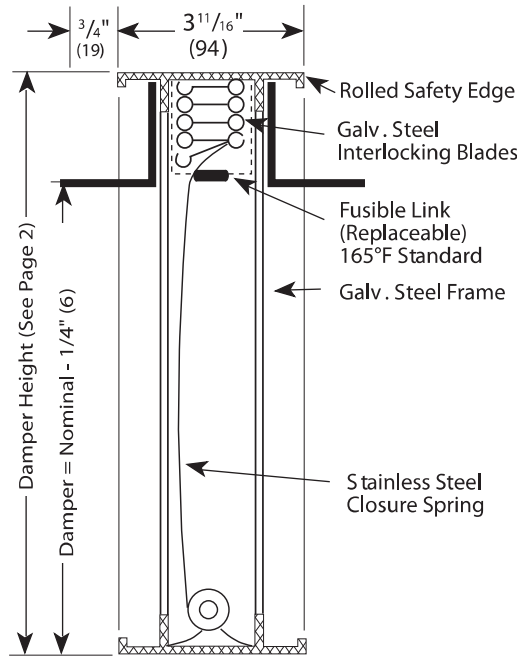
UL/ULC Approved for Use in Static and Dynamic Systems.

Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

FDD-VB

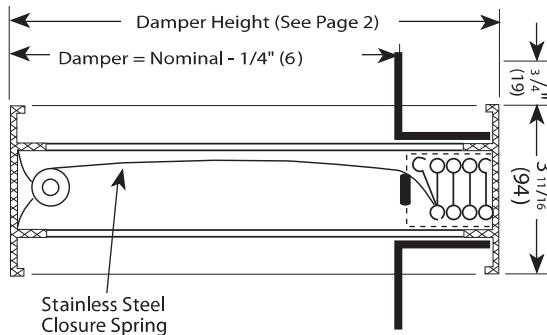


DESIGNED AND TESTED IN ACCORDANCE WITH UL-555 AND ULC-S112. MEETS ALL NFPA-90A REQUIREMENTS FOR FIRE DAMPERS.

**LISTED
AND
LABELLED BY:**



FDD-HB



PROJECT: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

ENGINEER:

CUSTOMER: CONSULT MECHANICAL

SUBMITTAL DATE: 10/30/2024

SPEC. SYMBOL: FD

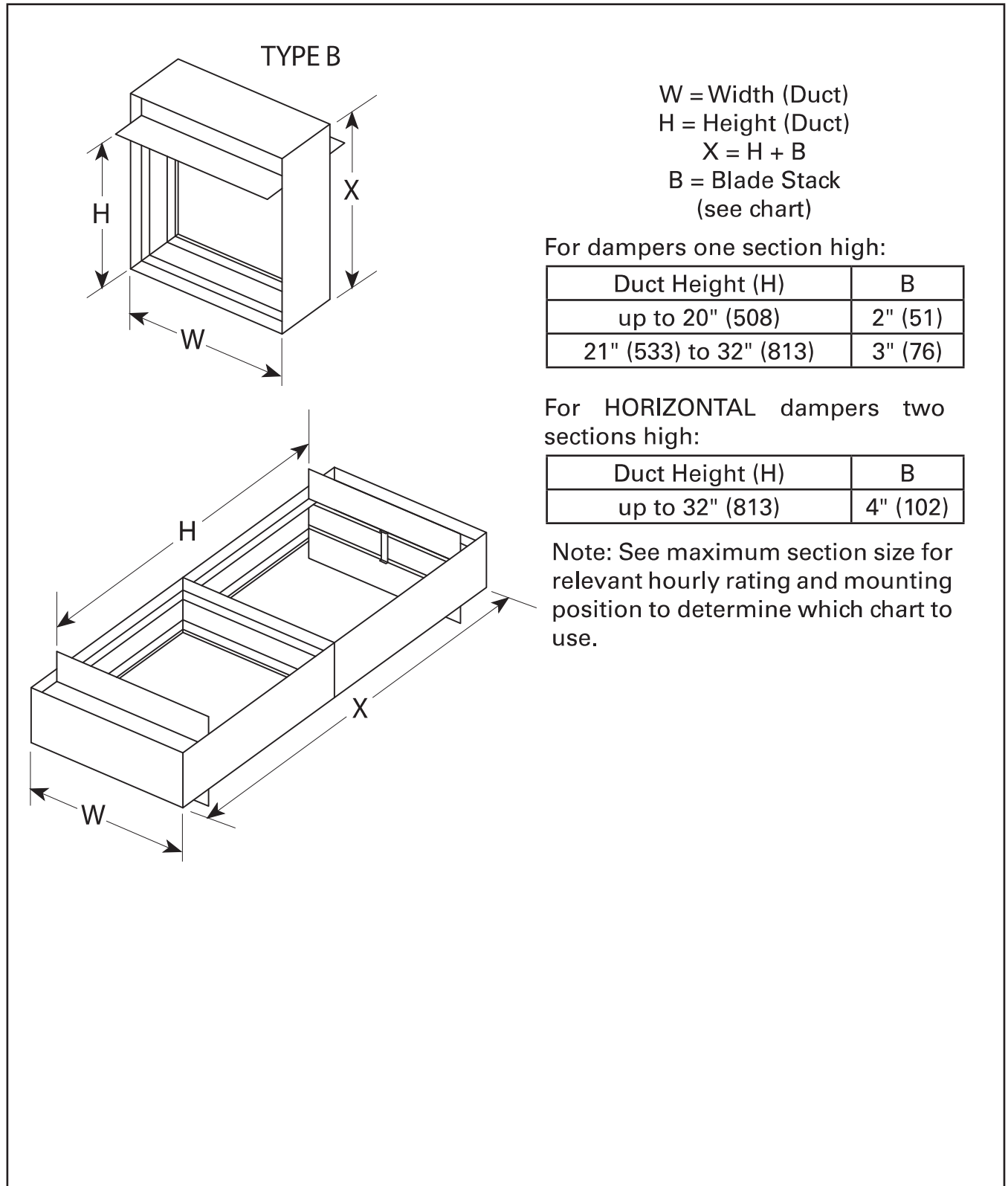
PRICE[®]

May / 08

245015

■ **Model FDD-B**
 1½, 3 Hour Rated
 "B" Style

Dynamic Fire Damper, Horizontal and Vertical



Dynamic Fire Damper, Horizontal and Vertical

Model

Dynamic Fire Damper **FDD-C**

Standard Construction:

Frame: Roll Formed Galvanized Steel with Safety Edge.

Blades: Roll Formed Galvanized Steel, Curtain-Type

Springs: Stainless Steel.

Fusible Link: U.L. Listed 165°F.

1½ & 3 Hr. Vertical:

Min. Size: 5"w x 3"h (127mm x 76mm) or 5" (127) round

Max. Single Section: 35"w x 32"h (889mm x 813mm)

Max. Size:

71"w X 32"h (1803mm x 813mm)

1½ & 3 Hr. Horizontal:

Min. Size: 5"w x 3"h (152mm x 102mm) or 5" (127) round

Max. Single Sect.: 23"w x 20"h (584mm x 508mm)

Max. Size: 35"w X 32"h (889mm x 813mm)

Optional Construction:

- ☐ For factory supplied sleeve see submittal for FDD-C c/w sleeve.
- ☐ 3 Hour Rating
- ☐ 212°F fusible link (vertical only, 23"x20" (584mm x 508mm) max size)

Notes: Dampers are furnished approximately ¼" (6mm) smaller than given duct dimensions.

UL/ULC Approved For Use in Static and Dynamic Systems.

Models:

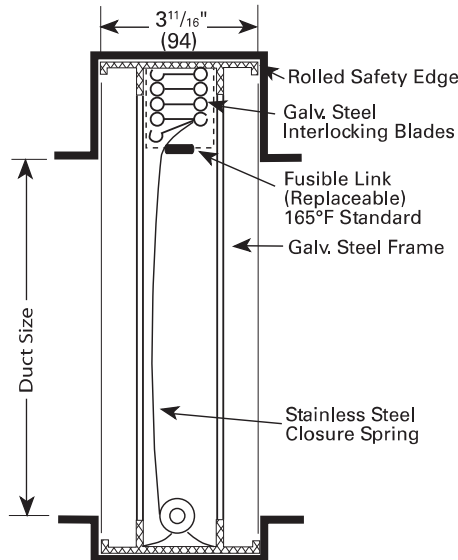
- ☐ FDD-RC - round inlet
- ☐ FDD-SRC - square/rectangular inlet
- ☐ FDD-OVC - oval inlet

Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

FDD-C-V

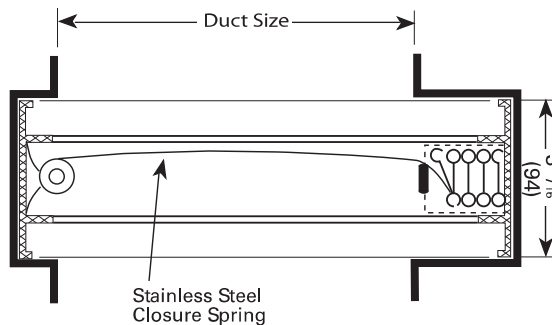


DESIGNED AND TESTED IN ACCORDANCE WITH UL-555 AND ULC-S112. MEETS ALL NFPA-90A REQUIREMENTS FOR FIRE DAMPERS.

LISTED AND LABELLED BY :



FDD-C-H



PROJECT: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

PRICE[®]

ENGINEER:

CUSTOMER: CONSULT MECHANICAL

Feb / 14

SUBMITTAL DATE: 10/30/2024

SPEC. SYMBOL: FD

245018

■ **Model FDD-C**
1½, 3 Hour Rated
"C" Style

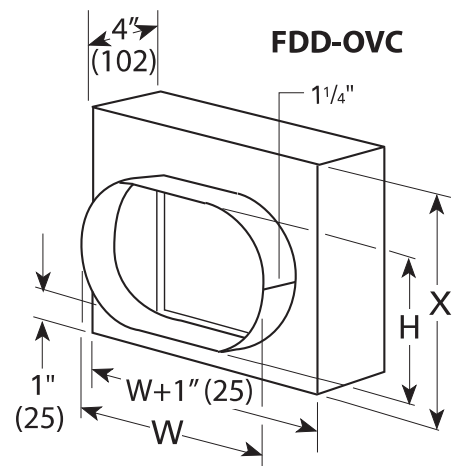
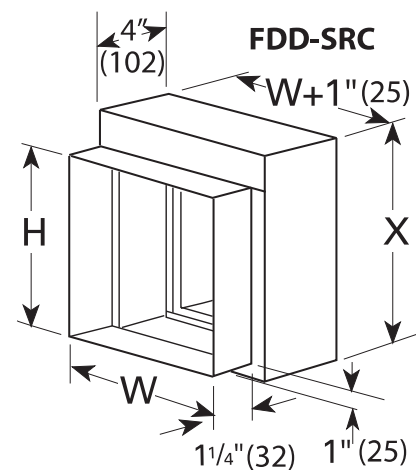
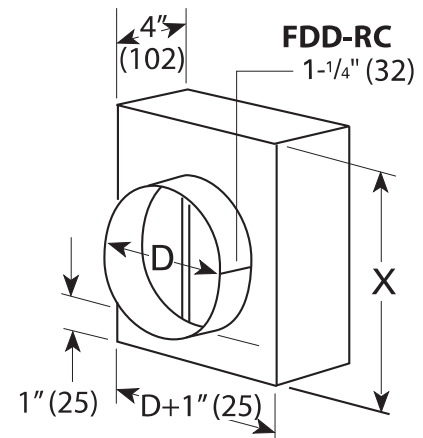
price®

Dynamic Fire Damper, Horizontal and Vertical

SIZE CHART

Duct Height	Type C Damper Height
Inches	Inches
3	6
4	7
5	8
6	9
7	10
8	11
9	12
10	13
11	14
12	15
13	16
14	17
15	18
16	19
17	20
18	21
19	22
20	23
21	25
22	26
23	27
24	28
25	29
26	30
27	31
28	32
29	33
30	34
31	35
32	36

X = DAMPER HEIGHT



W = Width (Duct)
H = Height (Duct)
X = Variable (See Size Chart)



Dampers Submittals

Job Name: NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK

Job Location: NORTH YORK

Customer: CONSULT MECHANICAL

Date Printed: 10/30/2024

Spec Section: 15 - HVAC

Contact: 571 Chrislea Rd., Unit 3
Woodbridge, ON L4L 8A2



All-In-One
Detailed Submittal Schedule
Dampers

#	Qty	Model	Tag	Width, Height	Design	Temp	Sleeve Length	Sleeve Gauge	Mtg Angles	Option 1	Option 2	Option 3	Option 4
56	4	SSD	SD	14.00, 6.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type 250 - 250F 20GA - 20 Gauge(Default) FRA2 - 2 Side PO - Power Open/Spring Return Closed 120VAC - 120VAC Electric EX-RH - External Right Hand MS4104 - Honeywell MS4104 -120V													
57	8	SSD	SD	12.00, 8.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type 250 - 250F 20GA - 20 Gauge(Default) FRA2 - 2 Side PO - Power Open/Spring Return Closed 120VAC - 120VAC Electric EX-RH - External Right Hand MS4104 - Honeywell MS4104 -120V													
58	6	SSD	SD	12.00, 6.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type 250 - 250F 20GA - 20 Gauge(Default) FRA2 - 2 Side PO - Power Open/Spring Return Closed 120VAC - 120VAC Electric EX-RH - External Right Hand MS4104 - Honeywell MS4104 -120V													
59	6	SSD	SD	10.00, 10.00	3V	250	16.00	20GA	FRA2	PO	120VAC	EX-RH	MS4104
3V - Triple-Vee Blade Type 250 - 250F 20GA - 20 Gauge(Default) FRA2 - 2 Side PO - Power Open/Spring Return Closed 120VAC - 120VAC Electric EX-RH - External Right Hand MS4104 - Honeywell MS4104 -120V													

The list provided above is for reference purpose only. Contractor to provide a full release list confirming quantity, tag, size, style, orientation of all Smoke Dampers prior to release.

Low Leakage Smoke Damper

Model

Low Leakage Smoke Damper **SSD-3V-201**

Features

- The SSD-3V-201 series Smoke Dampers have been designed and tested to exceed all U.L., U.L.C. and N.F.P.A. requirements for smoke dampers. These U.L. leakage rated dampers are intended for use in engineered smoke control systems to provide extremely tight shut off.
- U.L. 555S and U.L.C. S112.1 listed and labelled as Leakage Class I rated Smoke Damper with airflow in both directions. Class I provides for a maximum leakage of 8 cfm per sq. ft. at 4 inch static pressure. As we are constantly expanding our U.L./U.L.C. listings, we suggest you contact the factory for further information.
- The SSD-3V-201 damper's rigid frame and integrally braced corners provide true damper alignment that generally resists being installed out of square or out of flat. This insures onsite performance equal to test results.
- The SSD-3V-201 exceeds N.F.P.A. 90A & 92 smoke damper requirements and is recommended for applications that call for tight sealing requirements. The SSD-3V-201 provides excellent control of smoke movement or containment as the smoke management system demands.
- The SSD-3V-201 may be equipped with factory installed electric or pneumatic operators.

Standard Construction:

Frame: Roll-formed galvanized steel hat-section with staked corners with integral bracing.

Blades: 16 ga. Roll-formed galvanized steel.

Minimum width: 4 $\frac{1}{4}$ " (108mm)

Maximum width: 7 $\frac{1}{4}$ " (184mm)

Bearings: Bronze Oilite, press-fit into frame.

Axles: Square, plated steel.

Seals: Pressure sensitive 450°F silicone blade edge seals and flexible metal jamb seals.

Linkage: Concealed in frame. Linkage bars are 12ga. galvanized steel.

Finish: Mill galvanized.

Sizes:

Minimum Size: 8"w x 6"h.
(203 mm x 152 mm)

Maximum UL Listed Size:
Single Section: 36"w x 48"h
(914 mm x 1219 mm)

Multiple Assembly:

144"w x 96"h (3658mm x 2438mm)

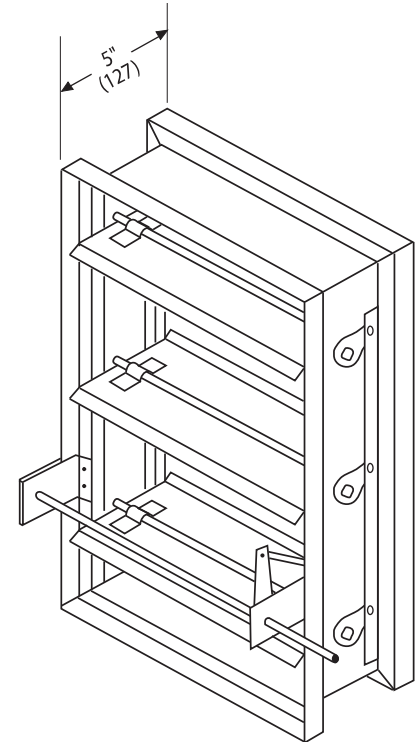
Notes: Dampers are furnished approximately $\frac{1}{4}$ " (6mm) smaller than given duct dimensions.

- Not recommended with blades running vertically.

Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.


Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.



LISTED AND LABELLED BY:



**U.L. 555S CLASSIFIED
AT 250°F OR 350°F
DEPENDENT UPON
MOTOR/OPERATOR
*SEE MOTOR/OPERATOR SCHEDULE**

PROJECT: NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK			
ENGINEER:			
CUSTOMER: CONSULT MECHANICAL		Jul / 06	
SUBMITTAL DATE: 10/30/2024	SPEC. SYMBOL: SD	245040	

Model SSD-3V-201

U.L. 555S Classified

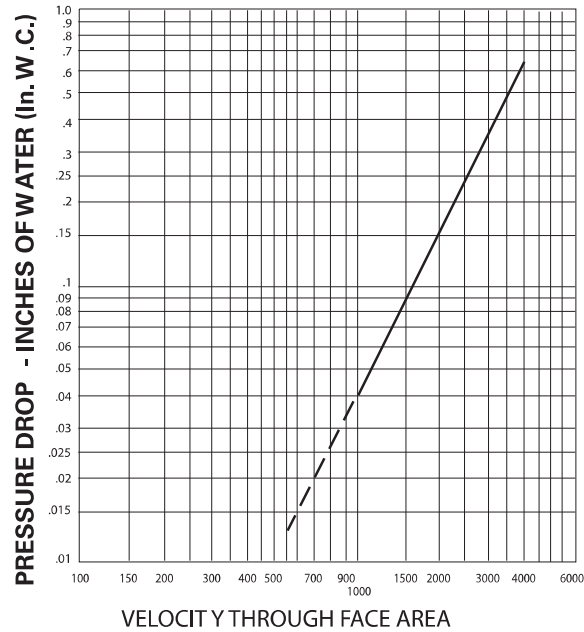
Class 1

price[®]

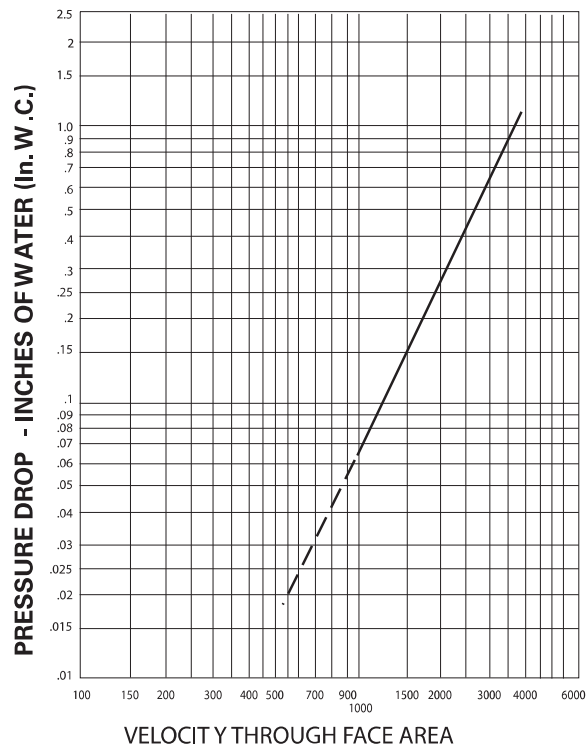
Low Leakage Smoke Damper

Pressure drop testing was done by an independent laboratory to AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream.

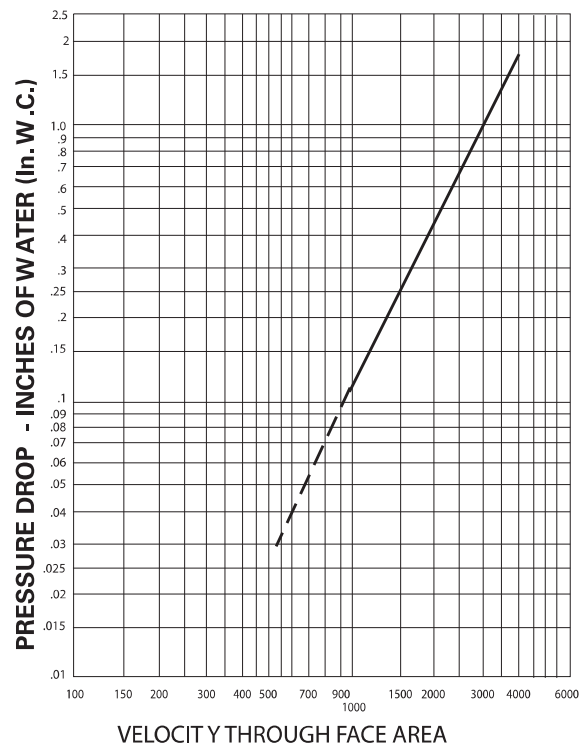
DAMPER SIZE 36 x 36



DAMPER SIZE 24 x 24



DAMPER SIZE 12 X 12





Dampers Submittals

Job Name: NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK

Job Location: NORTH YORK

Customer: CONSULT MECHANICAL

Date Printed: 10/30/2024

Spec Section: 15 - HVAC

Contact: 571 Chrislea Rd., Unit 3
Woodbridge, ON L4L 8A2



All-In-One
Detailed Submittal Schedule
Dampers

#	Qty	Model	Tag	Width, Height	Design	Mtg Pos	Sections
60	1	BDD	BDD	24.00, 10.00	2X	V	1, 1
2X - Extruded Aluminum V - Vertical							
61	1	BDD	BDD	20.00, 12.00	2X	V	1, 1
2X - Extruded Aluminum V - Vertical							
62	2	BDD	BDD	12.00, 8.00	2X	V	1, 1
2X - Extruded Aluminum V - Vertical							
63	2	BDD	BDD	10.00, 8.00	2X	V	1, 1
2X - Extruded Aluminum V - Vertical							

The list provided above is for reference purpose only. Contractor to provide a full release list confirming quantity, tag, size, style, orientation of all Backdraft dampers prior to release.

Extruded Aluminum Backdraft Damper

Standard Construction:

Frame: Extruded aluminum.

Blades: Extruded aluminum.

Axles: $\frac{3}{16}$ " (4.8 mm) dia. aluminum.

Seals: Vinyl blade seals.

Linkage: Heavy gauge aluminum brackets with aluminum linkage bar.

Finish: Mill aluminum.

Sizes:

Minimum Damper Size:

Single Blade - 6"w x 6"h (152 mm x 152 mm)

Maximum Damper Size: Single Section - 40"w x 52"h (1016 mm x 1321 mm)

Maximum Velocity: 2500 fpm

Options:

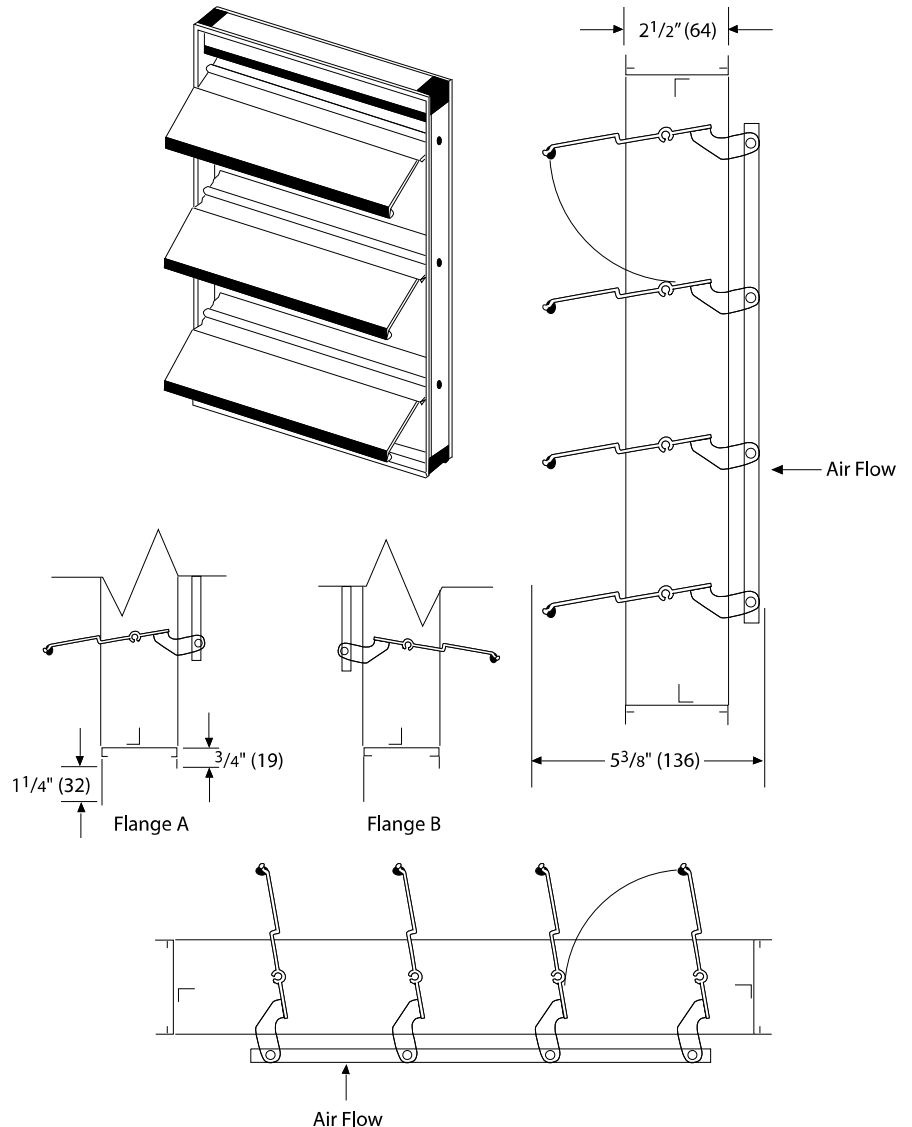
Counterweight: Assist or Retard


Flange: $1\frac{1}{4}$ " (32 mm) Flange frame (front or rear)

Mounting: Horizontal mount (up blast only)

Notes:

- All dampers are fabricated $\frac{1}{4}$ " (6mm) under listed size unless specified "actual or exact".
- Dampers must be installed square and free from racking.



PROJECT: NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK			
ENGINEER:			
CUSTOMER: CONSULT MECHANICAL		Feb / 11	
SUBMITTAL DATE: 10/30/2024	SPEC. SYMBOL: BDD	245089	

Model BDD-2X

Extruded Aluminum Backdraft Damper

price®

Performance Data

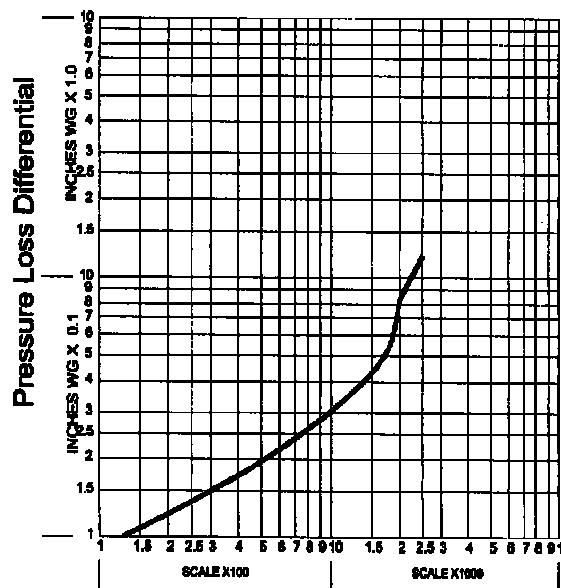
The following performance data and tables are developed from testing a 24" x 24" (610mm x 610mm) BDD-2X Backdraft Damper in accordance with AMCA Standard 500 using figure 5.5 (vertical mount, no ductwork upstream or downstream). The data represented has been corrected to represent standard air density, .075 lb/ft³. Testing to AMCA standard 500 is preformed under laboratory conditions. Actual field and environmental conditions may exist that will not allow the dampers to perform and operate in this manner. Horizontal mounted dampers may require high flows and create larger pressure drops. The BDD-2X is an extruded aluminum frame and blade damper and it is recommended for velocities up to 2500 fpm.

Position Data

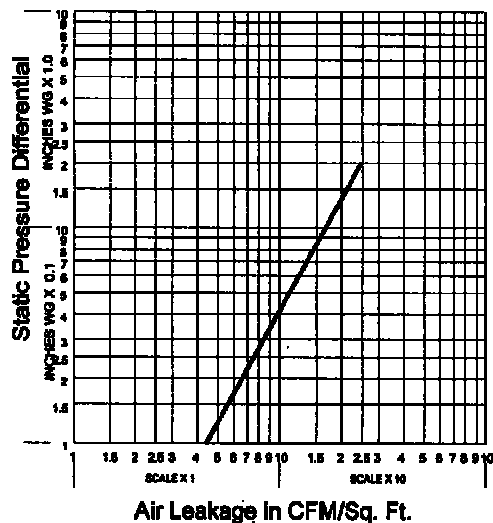
Blade Position	DP (in. wg)	Velocity (fpm)
5% Open	0.07	45
25% Open	0.15	325
50% Open	0.25	800
75% Open	0.40	1400
100% Open	0.45	1625

PRESSURE DROP (Exhaust)

BDD-2X



Leakage



Width - Inches

	6	12	16	20	24	28	32	36	40
6	0.07	0.19	0.26	0.34	0.41	0.49	0.56	0.63	0.71
12	0.20	0.51	0.72	0.92	1.13	1.33	1.53	1.74	1.94
16	0.31	0.77	1.07	1.38	1.69	2.00	2.30	2.61	2.92
20	0.41	1.02	1.43	1.84	2.25	2.66	3.07	3.48	3.89
24	0.51	1.28	1.79	2.30	2.82	3.33	3.84	4.35	4.86
28	0.61	1.54	2.15	2.76	3.38	3.99	4.61	5.22	5.84
32	0.72	1.79	2.51	3.23	3.94	4.66	5.38	6.09	6.81
36	0.82	2.05	2.87	3.69	4.51	5.32	6.14	6.96	7.78
40	0.92	2.30	3.23	4.15	5.07	5.99	6.91	7.83	8.76
44	1.02	2.56	3.58	4.61	5.63	6.66	7.68	8.70	9.73
48	1.13	2.82	3.94	5.07	6.20	7.32	8.45	9.58	10.70
52	1.23	3.07	4.30	5.53	6.76	7.99	9.22	10.45	11.68



E. H. Price
571 Chrislea Road, Unit 3,
Woodbridge, ON, L4L 8A2

REFERENCE
R20205601

QUOTE DATE: 07/09/2024
REVISION DATE: 10/30/2024

SUBMITTAL

Project: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

Engineer:

Submitted by: E. H. PRICE (WOODBIDGE)
571 CHRISLEA ROAD UNIT 3
571 CHRISLEA ROAD, UNIT 3
WOODBIDGE, ON, CAN
L4L 8A2

Contact:

Project: NESHAMA HOSPICE, 3 CADILLAC AVE, NORTH YORK

Engineer:

Structural supports for multiple-section damper assemblies are to be supplied and installed by the installing contractor.



E. H. Price
571 Chrislea Road, Unit 3,
Woodbridge, ON, L4L 8A2

REFERENCE R20205601

QUOTE DATE: 07/09/2024
REVISION DATE: 10/30/2024

Item	Qty	Opening Dimension Width(A) x Height(B)			Series	Option	Profile	Blade Type	Install Type	Cfg
1	1	900	x	150	9000		SP	OPPOSED	FLANGED TO	1LFS
DRIVE LEFT DRIVE BOTH SIDES										
MD-1										
2	1	350	x	175	9000		SP	OPPOSED	FLANGED TO	1LFS
DRIVE LEFT DRIVE BOTH SIDES										
MD-2										
3	1	350	x	175	9000		SP	OPPOSED	FLANGED TO	1LFS
DRIVE LEFT DRIVE BOTH SIDES										
MD-3										

The list provided below is for reference purpose only. Contractor to confirm quantity, tag, size, blade style / mounting style of all dampers prior to release.

****NOT INCLUDING ACTUATORS****

Structural supports for multiple-section damper assemblies are to be supplied and installed by the installing contractor.



E. H. Price
571 Chrislea Road, Unit 3,
Woodbridge, ON, L4L 8A2

REFERENCE

R20205601

QUOTE DATE: 07/09/2024
REVISION DATE: 10/30/2024

Contact:

Project: NESHAMA HOSPICE,3 CADILLAC AVE, NORTH YORK

Engineer:



A
DRIVE LEFT DRIVE BOTH SIDES

Item	1
Qty:	1
Opening Dimensions:	
Width (A) x Height (B)	900 x 150
Finished Outside Dimensions:	
Width (A) x Height (B)	949 x 200
Series:	9000
Option:	
Profile:	STANDARD
Blade Type:	OPPOSED
Install Type:	FLANGED TO
ConfigNo:	1LFS
MD-1	



A
DRIVE LEFT DRIVE BOTH SIDES

Item	2
Qty:	1
Opening Dimensions:	
Width (A) x Height (B)	350 x 175
Finished Outside Dimensions:	
Width (A) x Height (B)	400 x 225
Series:	9000
Option:	
Profile:	STANDARD
Blade Type:	OPPOSED
Install Type:	FLANGED TO
ConfigNo:	1LFS
MD-2	



A
DRIVE LEFT DRIVE BOTH SIDES

Item	3
Qty:	1
Opening Dimensions:	
Width (A) x Height (B)	350 x 175
Finished Outside Dimensions:	
Width (A) x Height (B)	400 x 225
Series:	9000
Option:	
Profile:	STANDARD
Blade Type:	OPPOSED
Install Type:	FLANGED TO
ConfigNo:	1LFS
MD-3	

Structural supports for multiple-section damper assemblies are to be supplied and installed by the installing contractor.

Questions? Contact ABHI SHAH
905-669-8988

SUBMITTAL DATA | Series 9000

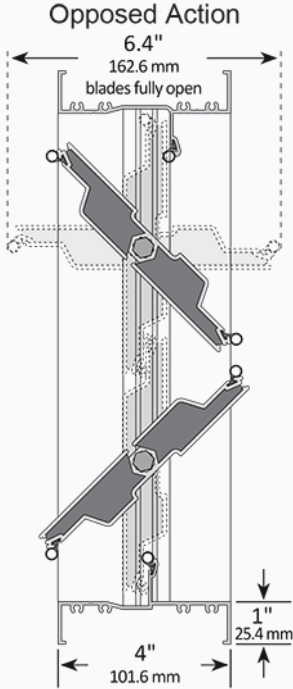
THERMALLY INSULATED CONTROL DAMPER

REFERENCE

R20205601

Item 1

STANDARD PROFILE



- Extruded aluminum (6063-T5) damper frame is not less than 0.080" (2.03 mm) in thickness. Damper frame is 4" (101.6 mm) deep x 1" (25.4 mm), with mounting flanges on both sides of frame.
- Blades are maximum 6" (152.4 mm) deep extruded aluminum (6063-T5) air-foil profiles, internally insulated with expanded polyurethane foam and thermally broken. Complete blade has an insulating factor of R-2.29 and a temperature index of 55 (tested to AAMA 1502.7 Test Method). All blades are symmetrically pivoted.
- Blade seals are extruded EPDM. Frame seals are extruded silicone. Seals are secured in an integral slot within the aluminum extrusions. Blade and frame seals are mechanically fastened to prevent shrinkage and movement over the life of the damper.
- Bearings are composed of a Celcon inner bearing - fixed around a 7/16" (11.11 mm) aluminum hexagon blade pivot pin - rotating within a polycarbonate outer bearing inserted in the frame. This eliminates action between metal-to-metal or metal-to-plastic riding surfaces.
- Adjustable 7/16" (11.11 mm) hexagonal drive rod, U-bolt fastener, and hexagonal retaining nuts are zinc-plated steel. These provide a positive connection to blades and linkage.
- Aluminum and corrosion-resistant zinc-plated steel linkage hardware is installed in the frame side, complete with cup-point trunnion screws for a slip-proof grip.
- Dampers are designed for operation in temperatures ranging from -40°F (-40°C) to 212°F (100°C).
- Leakage Class 1A at 1 in w.g. (0.25 kPa) static pressure differential. Standard air leakage data is certified under the AMCA Certified Ratings Program.
- Dampers are custom made to required size, without blanking off free area. The blade stop is set at a fixed height and is a continuous and integral part of the top and bottom frames.
- Dampers selected with blade action as shown to the left.
- Dampers selected with install type as shown below.
- Installation of dampers must be in accordance with TAMCO's current on-line installation guidelines. (Printed installation guidelines are provided with each damper shipment, however all technical information available on TAMCO's web site at www.tamcodampers.com supersedes information contained within printed versions.)
- Intermediate structural support is required to resist applied pressure loads for dampers that consist of two or more sections in both height and width. (See TAMCO Aluminum Damper Installation Guidelines.)

FLANGED TO DUCT TYPE ▼

- > For SP and NP Profiles, finished damper O.D. is 2" (50.8 mm) greater than opening width and height dimensions.
- > For WP Profile, finished damper O.D. is 3.25" (82.6 mm) greater than opening width and height dimensions.

MINIMUM SECTION SIZE:

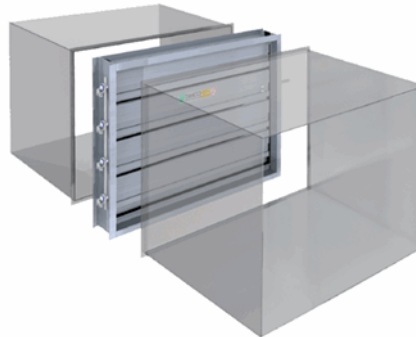
4½"w x 4¼"h (115 mm x 108 mm)

MAXIMUM SECTION SIZE:

25 ft² (2.3 m²)

60"w x 60"h or (1524 mm x 1524 mm) or

48"w x 75"h (1220 mm x 1905 mm)



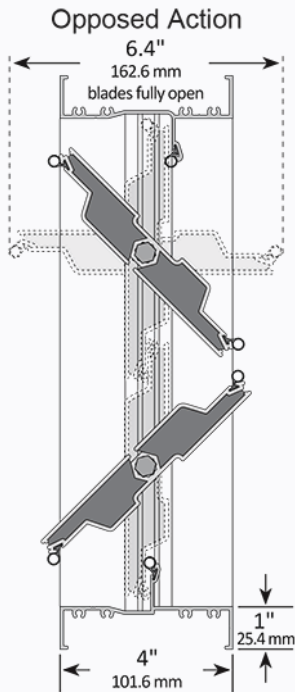
SUBMITTAL DATA | Series 9000

THERMALLY INSULATED CONTROL DAMPER

REFERENCE**R20205601**

Item 2

STANDARD PROFILE



- Extruded aluminum (6063-T5) damper frame is not less than 0.080" (2.03 mm) in thickness. Damper frame is 4" (101.6 mm) deep x 1" (25.4 mm), with mounting flanges on both sides of frame.
- Blades are maximum 6" (152.4 mm) deep extruded aluminum (6063-T5) air-foil profiles, internally insulated with expanded polyurethane foam and thermally broken. Complete blade has an insulating factor of R-2.29 and a temperature index of 55 (tested to AAMA 1502.7 Test Method). All blades are symmetrically pivoted.
- Blade seals are extruded EPDM. Frame seals are extruded silicone. Seals are secured in an integral slot within the aluminum extrusions. Blade and frame seals are mechanically fastened to prevent shrinkage and movement over the life of the damper.
- Bearings are composed of a Celcon inner bearing - fixed around a 7/16" (11.11 mm) aluminum hexagon blade pivot pin - rotating within a polycarbonate outer bearing inserted in the frame. This eliminates action between metal-to-metal or metal-to-plastic riding surfaces.
- Adjustable 7/16" (11.11 mm) hexagonal drive rod, U-bolt fastener, and hexagonal retaining nuts are zinc-plated steel. These provide a positive connection to blades and linkage.
- Aluminum and corrosion-resistant zinc-plated steel linkage hardware is installed in the frame side, complete with cup-point trunnion screws for a slip-proof grip.
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MINIMUM SECTION SIZE:

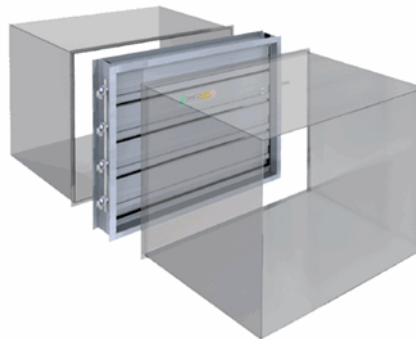
4½"w x 4¼"h (115 mm x 108 mm)

MAXIMUM SECTION SIZE:

25 ft² (2.3 m²)

60"w x 60"h or (1524 mm x 1524 mm) or

48"w x 75"h (1220 mm x 1905 mm)



SUBMITTAL DATA | Series 9000

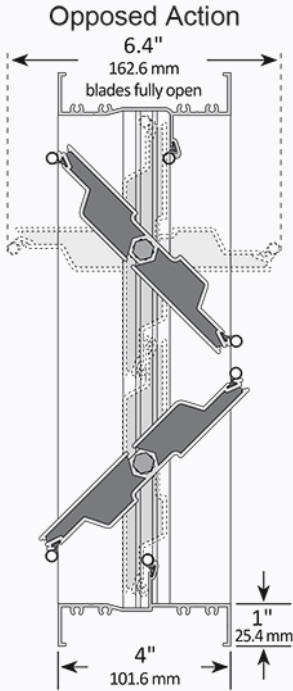
THERMALLY INSULATED CONTROL DAMPER

REFERENCE

R20205601

Item 3

STANDARD PROFILE



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