

POTTORFF®

PRODUCT COMPARISON GUIDE



POTTORFF®

THE PREFERRED SOLUTION FOR LIFE SAFETY AND AIR CONTROL



PROVIDING SOLUTIONS SINCE 1928

Founded in 1928, Pottorff is one of the most respected suppliers in the industry. We offer the preferred solution to our clients by delivering high-quality products on-time and at competitive prices. Our experience, versatility and superior customer service makes us the right choice for your project needs.

As members of AMCA's Board of Directors, AMCA's Code Action Review Committees and Underwriter's Laboratories, Pottorff participates in the development of building codes, design regulations and test standards. This ensures that Pottorff products comply or exceed the latest code requirements. We also have in-house testing laboratories which guarantee precision and allows us to respond quickly to our customer's product demands.

All products manufactured by Pottorff comply with the Buy American Act as described in the American Recovery and Reinvestment Act (ARRA). Fabrication of our products is performed in Fort Worth, Texas and Montebello, California.





TABLE OF CONTENTS

Drainable Louvers	.....	4
Louvers and Grilles	.....	6
Control and Backdraft Dampers	.....	8
Life Safety Fire Dampers	.....	10
Life Safety Fire/Smoke Dampers	.....	12

Drainable Louvers

Pottorff's drainable blade louvers are designed to prevent water penetration in non wind-driven rain applications by collecting water in frame and blade gutters and channeling it into downspouts and away from airflow paths. They are available in a wide array of anodized and painted finishes including custom color matching.

EFD-445



- Free Area: 50.4%
- Free Area Velocity: 1,026 fpm
- Pressure Loss: 0.16 in.wg.
- AMCA Certified for Water Penetration and Air Performance

EFD-635



- Free Area: 60.7%
- Free Area Velocity: 1,250 fpm
- Pressure Loss: 0.20 in.wg.
- AMCA Certified for Water Penetration and Air Performance

EFD-637



- Free Area: 57.5%
- Free Area Velocity: 1,113 fpm
- Pressure Loss: 0.15 in.wg.
- AMCA Certified for Water Penetration and Air Performance

EFJ-437-HP



Drainable head captures water that cascades down the face of a building and channels it into downspouts and away from airflow paths.

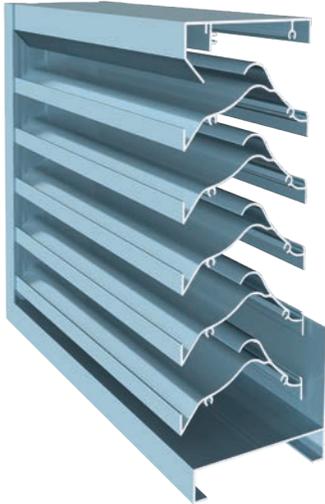
- Free Area: 56.3%
- Free Area Velocity: 912 fpm
- Pressure Loss: 0.14 in.wg.
- AMCA Certified for Water Penetration and Air Performance

MANUFACTURER	MODEL	FREE AREA %	Beginning Point Of Water Penetration	
			Free Area Velocity (fpm)	Pressure Loss (in. wg.)
Drainable Louvers				
POTTORFF	EFD-445	50.4	1,026	0.160
GREENHECK	ESD-403	50.0	1,007	0.175
RUSKIN	ELF445DX	52.1	1,075	0.233
POTTORFF	EFD-635	60.7	1,250	0.200
GREENHECK	ESD-635	58.8	1,250	0.232
RUSKIN	ELF6350DMP	62.2	1,250	0.206
POTTORFF	EFD-637	57.5	1,113	0.150
GREENHECK	ESD-635HP	61.5	910	0.126
RUSKIN	ELF6375DX	56.8	1,023	0.155
POTTORFF	EFJ-437-HP	56.3	912	0.140
GREENHECK	EDJ-401	52.0	963	0.152
RUSKIN	ELF375X	53.6	803	0.146

Louvers and Grilles

Pottorff features a full range of louvers including drainable, wind-driven rain and combination blade designs. Our FEMA grilles are designed in accordance with FEMA guidelines for storm shelters and safe rooms.

ECD-545 (Wind-Driven Rain)



The ECD-545 offers excellent protection against wind-driven rain under the most severe conditions and is ideally suited for high-wind areas.



- Free Area: 46.3%
- Free Area Velocity: 1,250 fpm
- Pressure Loss: 0.24 in. wg.
- AMCA Certified for Water Penetration, Air Performance and Wind Driven Rain

XAV-545 (FEMA Grille)



INDUSTRY LEADING FREE AREA

The XAV-545 is designed in accordance with ICC 500, FEMA P-361 and FEMA P-320 guidelines for storm shelters and safe rooms.



- Free Area: 51.2%
- Classified as a UL Windstorm Rated Assembly
- Design Pressure: 300 psf
- AMCA Certified for Water Penetration and Air Performance
- Available with a non-flanged frame and continuous angles for installation

EXA-645 (Combination Blade)



The EXA-645 design features stationary drainable louver blades to protect against water penetration and an integral airfoil blade control damper to allow positive shut-off of air intake and exhaust openings.



- Free Area: 50.4%
- Leakage Class: 1A
- Free Area Velocity: 1,085 fpm
- Pressure Loss: 0.11 in. wg.
- AMCA Certified for Water Penetration, Air Performance and Air Leakage

MANUFACTURER	MODEL	FREE AREA %	Beginning Point Of Water Penetration	
			Free Area Velocity (fpm)	Pressure Loss (in. wg.)
Combination Blade				
POTTORFF	EXA-645	50.4	1,085	0.110
GREENHECK	EACA-601	48.0	1,221	0.170
RUSKIN	ELC6375DAX	46.8	1,169	0.193

MANUFACTURER	MODEL	FREE AREA %	Beginning Point Of Water Penetration		Wind Driven Rain	
			Free Area Velocity (fpm)	Pressure Loss (in. wg.)	29 MPH Wind & 3 in./hr. Rain	
					Class	Core Area Velocity (fpm)
Wind-Driven Rain						
POTTORFF	ECD-545	46.3	1,250	0.240	A	862
GREENHECK	EHH-501	42.5	1,250	0.224	A	776
RUSKIN	EME520DD	47.4	1,250	0.244	A	673

MANUFACTURER	MODEL	FREE AREA %	Beginning Point Of Water Penetration		Max Section Size W x H (in.)	Wind Load (psf)
			Free Area Velocity (fpm)	Pressure Loss (in. wg.)		
FEMA Grille						
POTTORFF	XAV-545	51.2	680	0.170	48 x 96	300
GREENHECK	AFL-501	47.5	553	0.080	60 x 120	250
RUSKIN	XP500	49.8	615	0.122	48 x 78	300
					48 x 90	230
					48 x 96	200

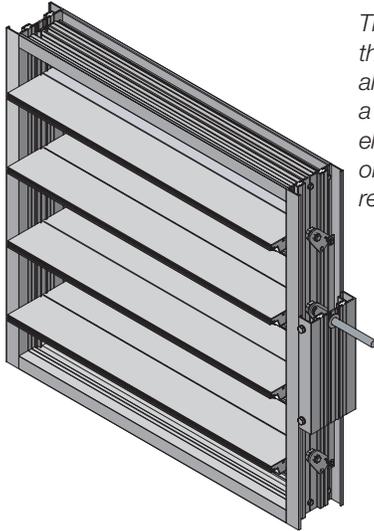
Control Dampers

Pottorff's Control Dampers are designed to regulate airflow through an HVAC system. They employ triple-V and airfoil blades and rugged channel frames to provide low leakage and air control in medium to high pressure applications.

TICD-51/52

- Parallel Action (TICD-51)
- Opposed Action (TICD-52)

The TICD 51/52 employs thermally insulated and broken aluminum airfoil blades and a rugged channel frame to eliminate the transfer of heat or cold penetration and reduce condensation.

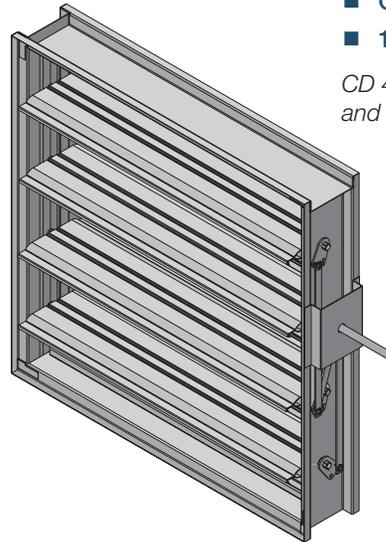


- Comply with IECC (International Energy Conservation Code)
- AMCA Certified for Air Leakage and Air Performance
- Leakage Class: 1A, 1

CD-45/46

- Parallel Action (CD-45)
- Opposed Action (CD-46)
- 1" Jackshaft

CD 45/46 employ airfoil blades and a rugged hat channel frame.



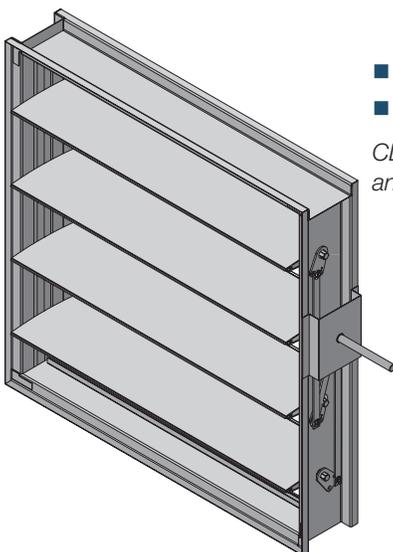
- AMCA Certified for Air Leakage and Air Performance
- Leakage Class: 1A, 1

CD-51/52

ECONOMICAL SOLUTION

- Parallel Action (CD-51)
- Opposed Action (CD-52)

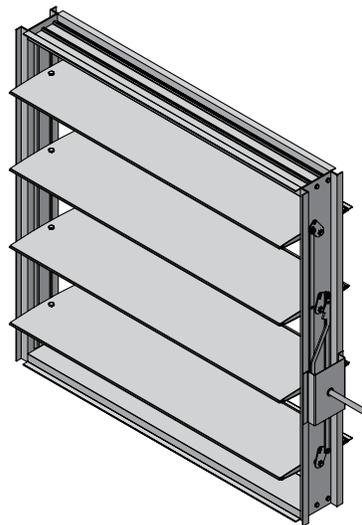
CD 51/52 employ airfoil blades and a rugged hat channel frame.



INDUSTRY LEADING AIR PERFORMANCE

- Parallel Action (CD-57)
- Opposed Action (CD-58)

CD 57/58 employ fully symmetrical aluminum airfoil blades and a rugged hat channel frame.



- AMCA Certified for Air Leakage and Air Performance
- Leakage Class: 1A, 1

MANUFACTURER	MODEL	Maximum System Velocity (fpm)	Maximum System Pressure (in.wg.)	AMCA Certified Air Leakage
Thermally Insulated Control Dampers				
POTTORFF	TICD-51/52	4,000	10	1A, 1
GREENHECK	ICD-44	4,000	8	1A, 1
RUSKIN	TED50	4,000	8	1A, 1

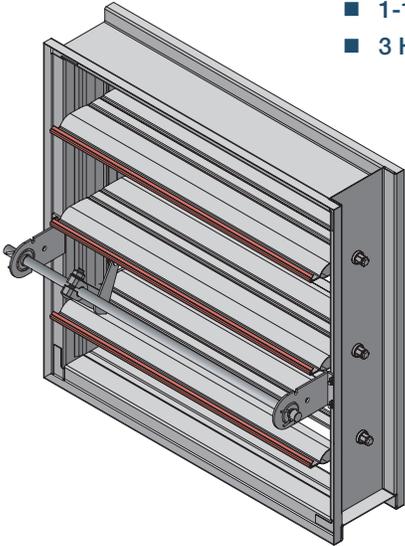
MANUFACTURER	MODEL	Maximum System Velocity (fpm) @ 24" Wide	Maximum System Pressure (in.wg.) @ 24" Wide	AMCA Certification Air Leakage Air Performance
Control Dampers				
POTTORFF	CD-45/46	4,000	8	✓
GREENHECK	VCD-33	4,000	8	✓
RUSKIN	CD60	5,000	10.8	✓
POTTORFF	CD-51/52	5,000	8.4	3.0 cfm/ft ² @ 1.0 in. wg. 5.0 cfm/ft ² @ 4.0 in. wg. 7.0 cfm/ft ² @ 10.0 in. wg.
GREENHECK	VCD-43	5,000	8	✓
RUSKIN	CD50	N/A	9.5	✓
POTTORFF	CD-57/58	5,000	8.4	✓
GREENHECK	VCD-43	5,000	8	✓
RUSKIN	N/A	N/A	N/A	N/A

Life Safety Fire Dampers

Fire Dampers employ airfoil blades for point-of-origin control of fire in static and dynamic HVAC systems. They are UL555 tested and designed to close upon detection of elevated heat.

FD-150/350

- 1-1/2 Hour Rating (FD-150)
- 3 Hour Rating (FD-350)

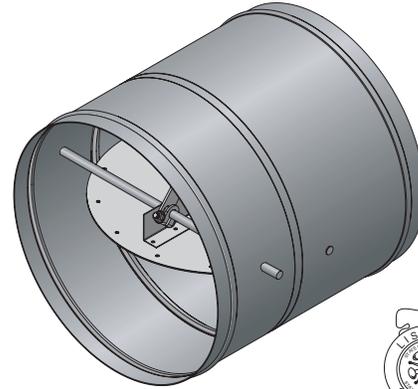


The FD150/350 may be installed in vertical walls or partitions, or horizontally in floors and assemblies with fire resistance ratings up to 2 hours (FD-150) and 4 hours (FD-350).

- **Maximum Dynamic Closure Velocity: 4,000 fpm**
- **Maximum Rated Pressure: 6 in. wg.**

FD-125R

- Single, Round Blade
- 304 Stainless Steel Option

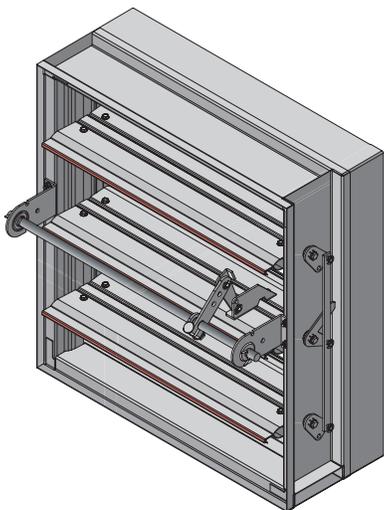


The FD-125R comes standard with mounting plates for interface to round or square openings in masonry, metal stud, or wood stud assemblies. Ideal for all round duct applications.

- **Maximum Dynamic Closure Velocity: 2,000 fpm**
- **Maximum Rated Pressure: 4 in. wg.**

FD-150-OP

- Out-of-Partition



The FD-150-OP is approved for installation with the closed plane of the blades up to 14-1/2" outside the fire-rated partition and allows for direct service access from the face of the damper through the HVAC grille.

- **Maximum Dynamic Closure Velocity: 4,000 fpm**
- **Maximum Rated Pressure: 6 in. wg.**

MANUFACTURER	MODEL	Maximum Dynamic Closure Velocity (fpm)	Maximum UL555S Rated Pressure (in.wg.)	Maximum Vertical Size (in.)
Fire Dampers				
POTTORFF	FD-150/350	4,000/2,000*	6/4**	128 × 96 or 144 × 48
GREENHECK	DFDAF-310	4,000/2,000	8/4	128 × 100
RUSKIN	DFD60	4,000/3,000/2,000	8/6/4	128 × 48 or 64 × 96
POTTORFF	FD-125R	2,000	4	24 Ø
GREENHECK	DFDR-510	2,000	4	24 Ø
RUSKIN	FDR25	2,000	4	24 Ø
POTTORFF	FD-150-0P	4,000/2,000*	6/4**	36 × 36
GREENHECK	–	–	–	–
RUSKIN	DFD60GA	2,000	6/4	32 × 36

*2,000 fpm Multiple Sections

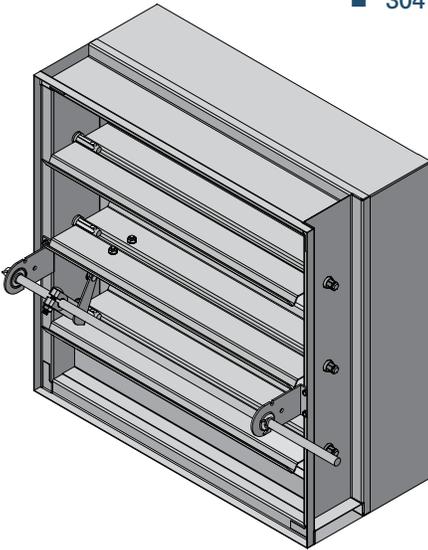
**Below 8" in Height, above 64" x 48" or above 32" x 96"

Life Safety Fire/Smoke Dampers

Combination fire/smoke dampers combine the fire barrier protection of a fire damper and smoke control of a smoke damper. Potterrf tests all of our combination fire/smoke dampers to UL's stringent requirements for fire resistance and leakage control.

FSD-142 (Triple-V Blade)

- UL Class 2 Leakage
- 304 Stainless Steel Option

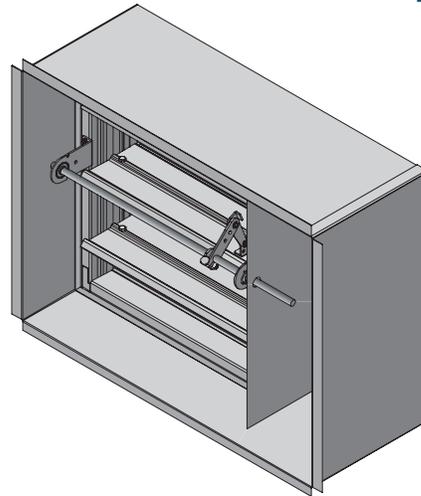


The FSD-142 Combination Fire/Smoke damper features point-of-origin control of fire and smoke in static and dynamic smoke management systems.

- Maximum Dynamic Closure Velocity: 2,000 fpm
- Maximum Rated Pressure: 4 in. wg.
- AMCA Certified for Air Performance

FSD-142-SP

- Side Panel

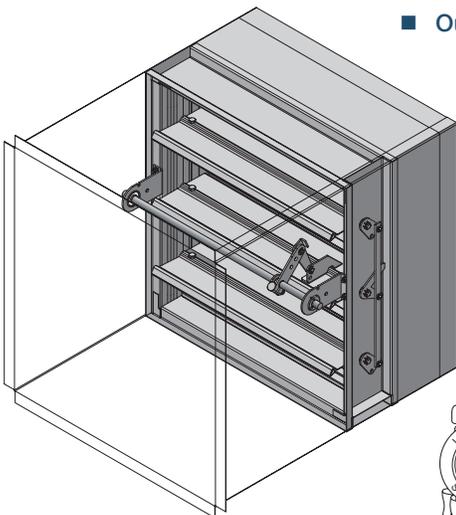


The FSD-142-SP are approved for installation with the closed plane of the blades up to 14-1/2" outside the fire-rated partition and come standard with the actuator externally mounted in a side panel allowing for direct service access from the face of the damper through the HVAC grille.

- Maximum Dynamic Closure Velocity: 2,000 fpm
- Maximum Rated Pressure: 4 in. wg.

FSD-142-OP

- Out-of-Partition



- Maximum Dynamic Closure Velocity: 2,000 fpm
- Maximum Rated Pressure: 4 in. wg.



The FSD-142-OP dampers are approved for installation with the closed plane of the blades up to 14-1/2" outside the fire rated partition and come standard with the actuator in the airstream allowing for direct service access from the face of the damper through the HVAC grille.

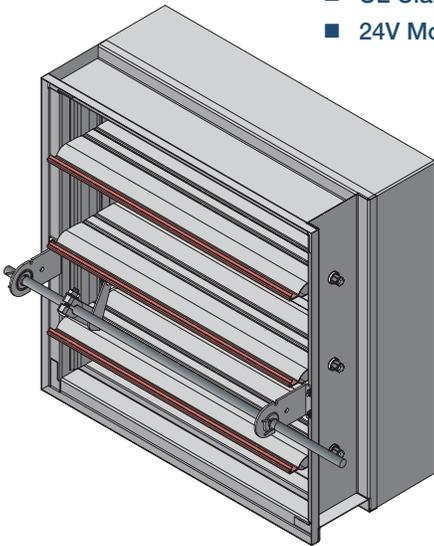
MANUFACTURER	MODEL	Maximum Dynamic Closure Velocity (fpm)	Maximum UL555S Rated Pressure (in.wg.)	Maximum Vertical Size (in.)
Combination Fire/Smoke Dampers				
POTTORFF	FSD-142	2,000	4	144 × 96
GREENHECK	FSD-212	2,000	6/4	128 × 100
RUSKIN	FSD36	2,000	4	126×96 or 72×122
POTTORFF	FSD-142-SP	2,000	4	44× 48
GREENHECK	–	–	–	–
RUSKIN	FSD36FA	2,000	4	36× 36
POTTORFF	FSD-142-OP	2,000	4	36× 48
GREENHECK	OFSD-212	2,000	6	36× 36
RUSKIN	FSD36GA	2,000	4	36× 36

Life Safety Fire/Smoke Dampers

Combination fire/smoke dampers combine the fire barrier protection of a fire damper and smoke control of a smoke damper. Pottorff tests all of our combination fire/smoke dampers to UL's stringent requirements for fire resistance and leakage control.

FSD-151 (Airfoil Blade)

- UL Class 1 Leakage
- 24V Modulating Actuator Option

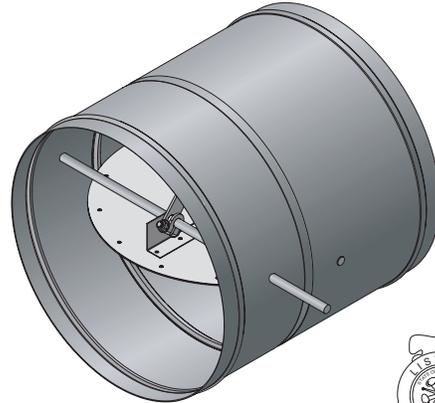


The FSD-151 Combination Fire/Smoke damper features point-of-origin control of fire and smoke in static and dynamic smoke management systems.

- Maximum Dynamic Closure Velocity: 4,000 fpm
- Maximum Rated Pressure: 8 in. wg.
- AMCA Certified for Air Performance

FSD-125R

- Single, Round Blade

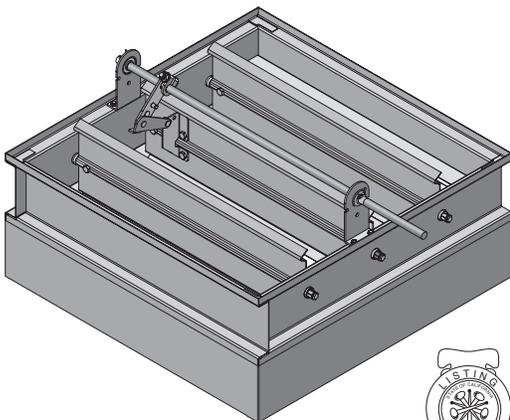


The FSD-125R comes standard with mounting plates for interface to round or square openings in masonry, metal stud, or wood stud assemblies. Ideal for all round duct applications.

- Maximum Dynamic Closure Velocity: 3,000 fpm
- Maximum Rated Pressure: 4 in. wg.

FSD-172 (Tunnel Type)

- UL Class 2 Leakage



The FSD-172 may be installed in horizontal openings of metal stud or wood stud tunnel-type corridor ceilings.

- Maximum Dynamic Closure Velocity: 2,000 fpm
- Maximum Rated Pressure: 4 in. wg.

MANUFACTURER	MODEL	Maximum Dynamic Closure Velocity (fpm)	Maximum UL555S Rated Pressure (in.wg.)	Maximum Vertical Size (in.)
Combination Fire/Smoke Dampers				
POTTORFF	FSD-151	4,000	8	128 × 96 or 144 × 48
GREENHECK	FSD-311	4,000	8	128 × 100
RUSKIN	FSD60	4,000	8	120 × 96
POTTORFF	FSD-125R	3,000	4	24 Ø
GREENHECK	FSDR-511	3,000	4	24 Ø
RUSKIN	FSDR25	3,000	4	24 Ø
POTTORFF	FSD-172	2,000	4	24 × 24
GREENHECK	–	–	–	–
RUSKIN	FSD36-C	2,000	4	24 × 24

POTTORFF[®]

THE PREFERRED SOLUTION FOR LIFE SAFETY AND AIR CONTROL

