# POTTORFF® LIFE SAFETY PRODUCTS

COMBINATION FIRE/SMOKE DAMPERS • SMOKE DAMPERS FIRE DAMPERS • CEILING RADIATION DAMPERS



# **SELECTION GUIDE**

COMBINATION FI	RE/SMOK	E DAMPERS				MAX	MAX	MAX	
MODEL	AMCA RATING	UL HOUR RATING	LEAKAGE CLASS	BLADE TYPE	MATERIAL	VELOCITY (fpm)	PRESSURE (in.wg)	ASSEMBLY TEMP (°F)	PG
STANDARD									
FSD-141	AIR	1½	1	TRIPLE-V	GALV	2000	4	350	3
FSD-142	AIR	1½	2	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-143	-	1½	3	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-151	AIR	1½	1	AIRFOIL	GALV	4000	8	350	4
FSD-152	-	1½	2	AIRFOIL	GALV	4000	8	350	4
FSD-151-SS	-	1½	1	STAINLESS AIRFOIL	STAINLESS	2000	4	350	4
FSD-152-SS	-	1½	2	STAINLESS AIRFOIL	STAINLESS	2000	4	350	4
FSD-151V	-	1½	1	VERT AIRFOIL	GALV	2000	4	250	4
FSD-152V	-	1½	2	VERT AIRFOIL	GALV	4000	4	250	4
FSD-341	-	3	1	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-342	-	3	2	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-343	-	3	3	TRIPLE-V	GALV/SS	2000	4	350	3
FSD-351	_	3	1	AIRFOIL	GALV	4000	8	350	4
FSD-352	-	3	2	AIRFOIL	GALV	4000	8	350	4
ACTUATOR IN THE A	AIRSTREAM	– OUT-OF-PAF	RTITION						
FSD-141-0P	-	1½	1	TRIPLE-V	GALV	2000	4	350	5
FSD-142-0P	-	1½	2	TRIPLE-V	GALV	2000	4	350	5
FSD-143-0P	_	1½	3	TRIPLE-V	GALV	2000	4	350	5
FSD-151-0P	_	1½	1	AIRFOIL	GALV	4000	8	350	5
FSD-152-0P	_	1½	2	AIRFOIL	GALV	4000	8	350	5
FSD-171-0P	-	1½	1	TRIPLE-V	GALV	2000	4	350	5
FSD-172-0P	-	1½	2	TRIPLE-V	GALV	2000	4	350	5
SIDE PANEL – FRON	T/ACCESS								
FSD-141-SP	-	1½	1	TRIPLE-V	GALV	2000	4	350	5
FSD-142-SP	_	1½	2	TRIPLE-V	GALV	2000	4	350	5
FSD-151-SP	-	1½	1	AIRFOIL	GALV	4000	8	350	5
FSD-152-SP	-	1½	2	AIRFOIL	GALV	4000	8	350	5
TRUE ROUND									
FSD-125R		1½	1	ROUND	GALV/SS	3000	4	350	6
TUNNEL TYPE CORF	RIDOR CE <u>ili</u>	NG							
FSD-171	-	1½*	1	TRIPLE-V	GALV	2000	4	350	6
FSD-172	-	1½*	2	TRIPLE-V	GALV	2000	4	350	6
FSD-171-0P	_	1½*	1	TRIPLE-V	GALV	2000	4	350	5
FSD-172-0P	-	1½*	2	TRIPLE-V	GALV	2000	4	350	5

SMOKE DAN	MPERS	UL555S	UL HOUR RATING			MAX DY CLOSURE VE		MAX	MAX	
MODEL	BLADE TYPE	LEAKAGE CLASS	CEILING	FIRE	MATERIAL	VERT WALLS	HORIZ FLOORS	PRESSURE (in.wg)	TEMP (°F)	PG
STANDARD										
SD-141	TRIPLE-V	1	-	-	GALV	2000	2000	4	350	9
SD-142	TRIPLE-V	2	-	-	GALV/SS	2000	2000	4	350	9
SD-143	TRIPLE-V	3	-	-	GALV/SS	2000	2000	4	350	9
SD-151	AIRF0IL	1	-	-	GALV	4000	4000	8	350	9
SD-152	AIRF0IL	2	-	-	GALV	4000	4000	8	350	9
SD-151-V	VERT AIRFOIL	1	-	-	GALV	2000	-	4	250	9
SD-152-V	VERT AIRFOIL	2	-	-	GALV	4000	-	4	250	9
TRUE ROUND										
SD-25R	ROUND	1	-	-	GALV/SS	3000	3000	4	350	9
CEILING RADI	ATION/SMOKE									
CFS-171	TRIPLE-V	1	3*	1½	GALV	-	2000	4	350	9
CFS-172	TRIPLE-V	2	3*	1½	GALV	-	2000	4	350	9

<sup>\*</sup> Tunnel Type Corridor ceiling installation has 1 hr rating

# **SELECTION GUIDE CONTINUED**

CEILING RADIATION	DAMPERS			
MODEL	UL HOUR RATING	BLADE TYPE	MATERIAL	PG
STANDARD				
CFD-15	3	BUTTERFLY	GALV	10
CFD-15-LP	3	LOW PROFILE BUTTERFLY	GALV	10
CFD-20	3	FOLDED CURTAIN	GALV	10
TRUE ROUND				
CFD-15R	3	ROUND BUTTERFLY	GALV	10
WOOD TRUSS SYSTEMS	S			
CFD-521	1	BUTTERFLY	GALV	10
CFD-521-90	1	BUTTERFLY – 90° PLENUM	GALV	10
CFD-521-BT	1	BUTTERFLY – R-6.3 OR 8.0 INSULATED OUTLET BOX	GALV	10
CFD-521-IP	1	BUTTERFLY – R-6.5 OR 8.7 INSULATED DUCT BOARD OUTLET BOX	GALV	10
CFD-521-NP	1	BUTTERFLY	GALV	10
CFD-521-NP90	1	BUTTERFLY – FIELD INSTALLED 90° PLENUM	GALV	10
COLD FORMED STEEL 1	RUSS SYSTI	EMS		
CFD-521-ST	1	BUTTERFLY – R-6.5 OR 8.7 INSULATED DUCT BOARD OUTLET BOX	GALV	10

FIRE DAMPERS						MAX D' CLOSURE VI	YNAMIC ELOCITY (fpm)	MAX	
MODEL	STATIC DYNAMIC	UL HOUR RATING	CLASS	BLADE TYPE	MATERIAL	VERT WALLS	HORIZ FLOORS	PRESSURE (in.wg)	PG
STANDARD									
FD-140	DYNAMIC	1½	-	TRIPLE-V	GALV/SS	4000*	4000*	6	11
FD-150	DYNAMIC	1½	-	AIRFOIL	GALV	4000*	4000*	6***	11
FD-340	DYNAMIC	3	-	TRIPLE-V	GALV/SS	4000*	-	6	11
FD-350	DYNAMIC	3	-	AIRFOIL	GALV	4000*	4000*	6**	11
<b>CURTAIN STYLE BLAI</b>	DES								
VFD-10-A	STATIC	1½	Α	CURTAIN	GALV/SS	-	-	-	12
VFD-10-B	STATIC	1½	В	CURTAIN	GALV/SS	-	-	-	12
VFD-10-C	STATIC	1½	С	CURTAIN	GALV/SS	-	-	-	12
VFD-10D-A	DYNAMIC	1½	Α	CURTAIN	GALV/SS	4000	4000	4	12
VFD-10D-B	DYNAMIC	1½	В	CURTAIN	GALV/SS	4000	4000	4	12
VFD-10D-C	DYNAMIC	1½	С	CURTAIN	GALV/SS	4000	4000	4	12
VFD-30-A	STATIC	3	Α	CURTAIN	GALV/SS	_	-	_	12
VFD-30-B	STATIC	3	В	CURTAIN	GALV/SS	_	-	_	12
VFD-30-C	STATIC	3	С	CURTAIN	GALV/SS	_	_	_	12
VFD-30D-A	DYNAMIC	3	A	CURTAIN	GALV/SS	4000	_	4	12
VFD-30D-B	DYNAMIC	3	В	CURTAIN	GALV/SS	4000	_	4	12
VFD-30D-C	DYNAMIC	3	С	CURTAIN	GALV/SS	4000	_	4	12
CURTAIN-INTEGRAL I	MOUNTING ANGLI								
VFD-10-IMA	STATIC	1½	Α	CURTAIN	GALV	_	_	_	12
VFD-10-IMB	STATIC	1½	В	CURTAIN	GALV	_	_	_	12
VFD-10D-IMA	DYNAMIC	1½	A	CURTAIN	GALV	4000	_	4	12
VFD-10D-IMB	DYNAMIC	1½	В	CURTAIN	GALV	4000	_	4	12
OUT-OF-PARTITION	2711711110	1/2		0011111111	0.7 1.23				
FD-140-0P	DYNAMIC	1½		TRIPLE-V	GALV/SS	4000	4000	6	11
FD-150-0P	DYNAMIC	1½	_	AIRFOIL	GALV	4000	4000	6**	11
VFD-10-0P	STATIC	1½	_	CURTAIN	GALV	_	_	_	12
VFD-10D-0P	DYNAMIC	1½	_	CURTAIN	GALV	4000	4000	4	12
TRUE ROUND	2711711110	1/2		0011111111	0.7 1.23				
FD-125R	DYNAMIC	1½	_	ROUND	GALV/SS	2000	2000	4	11
VFD-15R	STATIC	1½	_	ROUND	GALV	_	_	_	11
VFD-35R	STATIC	3	_	ROUND	GALV	_	_	_	11
THINLINE	0.71110				J				
VFD-10-TLA	STATIC	1½	Α	THINLINE CURTAIN	GALV	_	_	_	12
VFD-10-TLB	STATIC	1½	В	THINLINE CURTAIN	GALV	_	_	_	12
						4000*	_		12
									12
VFD-10D-TLA VFD-10D-TLB	DYNAMIC DYNAMIC	1½ 1½	A B	THINLINE CURTAIN THINLINE CURTAIN *2000 FPM on	GALV GALV multi-section   **4 in	4000* 4000* .wg. below 8" in heigh	– – ht   ***4 in.wg. when :	4 4 sizes exceed 64	ļ

### FSD-140 AND FSD-340 SERIES

# TRIPLE-V BLADE - COMBINATION FIRE/SMOKE DAMPER

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. The FSD-140 and FSD-340 series dampers are equipped with triple-V interlocking blades that perform to standards when velocities are 2000 fpm or less. These dampers are an economical solution to fire and smoke control in HVAC systems.

- 1½ to 3 Hour UL 555 Rating
- Class I, II, and III UL 555S Ratings
- Meets NFPA Standards
- Stainless steel option available on certain models
- CSFM Listing
- Maximum Temperature: 350°



**FSD-141 WITH SIDE PLATE** 



**FSD-142 WITH SLEEVE** 





**ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES** 



Certified Ratings:
Pottorff certifies that the models FSD-141 and FSD-142 shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings only.

	UL555 FIRE UL555S Model resistance Leakage		MIN	DAMPER MAXI	IMUM SIZE (in)		I DYNAMIC E RATING	LESS	AMCA
MODEL	RESISTANCE (hr)	CLASS	SIZE (in)	WALL	FL00R	VELOCITY (fpm)	PRESSURE (in.wg.)	STAINLESS	CERT
FSD-141	1½	1	6×6	144×96	108×48	2000	4	-	•
FSD-142	1½	2	6×6	144×96	108×48	2000	4	•*	•
FSD-143	1½	3	6×6	144×96	108×48	2000	4	•*	-
FSD-341	3	1	6×6	108×96	-	2000	4	-	-
FSD-342	3	2	6×6	108×96	-	2000	4	•*	-
FSD-343	3	3	6×6	108×96	-	2000	4	•*	_

<sup>\*</sup> Stainless Steel Max. Size: 36"× 48"

# FSD-150 AND FSD-350 SERIES

# AIRFOIL BLADE - COMBINATION FIRE/SMOKE DAMPER

Pottorff's FSD-150 and FSD-350 series are our high performance combination fire/smoke dampers. The low-profile airfoil blade allows for lower pressure drop, airflow velocities up to 4000 fpm and pressures up to 8 in.wg.

- 1½ to 3 Hour UL 555 Rating
- Class I and II UL 555S Ratings
- Horizontal and vertical blade models
- Meets NFPA Standards
- **CSFM** Listing
- Maximum Temperature: 350°
- Stainless Models Available

**FSD-151-V VERTICAL BLADE OPTION** 

**UL APPROVED FOR** CLASS 1 LEAKAGE AT 4000 FPM AND 8 IN.WG STATIC PRESSURE!

STAINLESS STEEL MODELS NOW AVAILABLE FOR CORROSIVE AND HIGH HUMIDITY ENVIRONMENTS!











### **LOW PROFILE AIRFOIL BLADES FOR HIGH PERFORMANCE**



### Certified Ratings:

Pottorff certifies that the model FSD-151 shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance

	UL555 FIRE	UL555S LEAKAGE	MIN	DAMPER MAX	(IMUM SIZE (in)		I DYNAMIC E RATING	AMCA
MODEL	RESISTANCE (hr)	CLASS	SIZE (in)	WALL	FL00R	VELOCITY (fpm)	PRESSURE (in.wg.)	CERT
FSD-151	1½	1	8×6	144×48 128×96	120×96	4000	8	•
FSD-152	1½	2	8×6	144×48 128×96	120×96	4000	8	-
FSD-151-SS STAINLESS STEEL BLADES	1½	1	8×6	96×72	-	2000	4	-
FSD-152-SS STAINLESS STEEL BLADES	1½	2	8×6	96×72	-	2000	4	-
FSD-151V VERTICAL BLADES	1½	1	8×8	96×32	-	2000	4	-
FSD-152V VERTICAL BLADES	1½	2	8×8	96×32	-	4000	4	-
FSD-351	3	1	8×6	120×96	64×96	4000	8	-
FSD-352	3	2	8×6	120×96	64×96	4000	8	-

# **OUT-OF-PARTITION AND SIDE PANEL**

Out-of-Partition dampers feature the actuator within the airstream. This allows direct service through the face of the HVAC grille.

- 1½ hour UL 555 Rating
- Class I, II and III UL 555S Ratings
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°









Side Panel dampers are specifically designed to have an out of the airstream actuator with direct access from the face of the damper through the HVAC grille.

- UL 555 1½ Hour Rating
- Class I, and II UL 555S Ratings
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°



**TRIPLE-V GROOVED BLADES** 





**LOW PROFILE AIRFOIL BLADES** FOR HIGH PERFORMANCE

	UL555 FIRE		BLADE	MIN	DAMPE	ER MAXIMUM :	SIZE (in)		DYNAMIC E RATING
MODEL	RESISTANCE (hr)	E LEAKAGE CLASS	TYPE	SIZE (in)	WALL	FL00R	CORRIDOR CEILING	VELOCITY (fpm)	PRESSURE (in.wg.)
OUT-OF-PART	ITION								
FSD-141-0P	1½	1	3V	10×6	36×48	36×48	-	2000	4
FSD-142-0P	1½	2	3V	10×6	36×48	36×48	-	2000	4
FSD-143-0P	1½	3	3V	10×6	36×48	36×48	-	2000	4
FSD-151-0P	1½	1	AIRFOIL	10×6	36×36	36×36	-	4000	8
FSD-152-0P	1½	2	AIRFOIL	10×6	36×36	36×36	-	4000	8
FSD-171-0P	1½*	1	3V	10×6	24×24	24×24	24×24	2000	4
FSD-172-0P	1½*	2	3V	10×6	24×24	24×24	24×24	2000	4
SIDE PANEL									
FSD-141-SP	1½	1	3V	14×8	44×48	44×48	-	2000	4
FSD-142-SP	1½	2	3V	14×8	44×48	44×48	-	2000	4
FSD-151-SP	1½	1	AIRFOIL	16×8	40×36	40×36	-	4000	8
FSD-152-SP	1½	2	AIRFOIL	16×8	40×36	40×36	-	4000	8

<sup>\*</sup> Tunnel Type Corridor ceiling installation has 1 hr rating

# **FSD-170 SERIES**

# **TUNNEL CORRIDOR DAMPERS**



Tunnel corridor dampers are efficient for installation in horizontal openings of metal stud or wood stud tunnel-type corridor ceilings. These combination fire/smoke dampers feature economical triple-V blades.

- 1½ Hour UL 555 Rating
- Class I, II and III UL 555S Classified
- Meets NFPA Standards
- Out-of-Partition models available
- CSFM Listing
- Maximum Temperature: 350°





FSD-125R TRUE ROUND

The FSD-125R is a combination fire/smoke damper that installs precisely within round ducted systems. It is UL 555 rated to  $1\frac{1}{2}$  hours and perform to 3000 fpm.

- Class I and II UL 555S Ratings
- Square Mounting Plates are standard
- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing







M0051	UL555 FIRE	UL555S LEAKAGE	MIN	DAMPE	R MAXIMUM S	SIZE (in)	MAXIMUM CLOSURI	DYNAMIC E RATING	VLESS
MODEL	RESISTANCE (hr)	CLASS	SIZE (in)	WALL	FL00R	CORRIDOR CEILING	VELOCITY (fpm)	PRESSURE (in.wg.)	STAINLES
TUNNEL CORRIDOR									
FSD-171	1½*	1	6×6	24×24	24×24	24×24	2000	4	-
FSD-172	1½*	2	6×6	24×24	24×24	24×24	2000	4	-
FSD-171-0P	1½*	1	10×6	24×24	24×24	24×24	2000	4	-
FSD-172-0P	1½*	2	10×6	24×24	24×24	24×24	2000	4	-
TRUE ROUND									
FSD-125R	1½	1	6Ø	24Ø	<b>24</b> Ø	-	3000	4	•

<sup>\*</sup> Tunnel Type Corridor ceiling installation has 1 hr rating

# **ELEVATED TEMPERATURE/AIRFLOW LABORATORY**

Pottorff's commitment to accurate and credible performance data is highlighted by our state-of-the-art elevated temperature test lab. Features include:

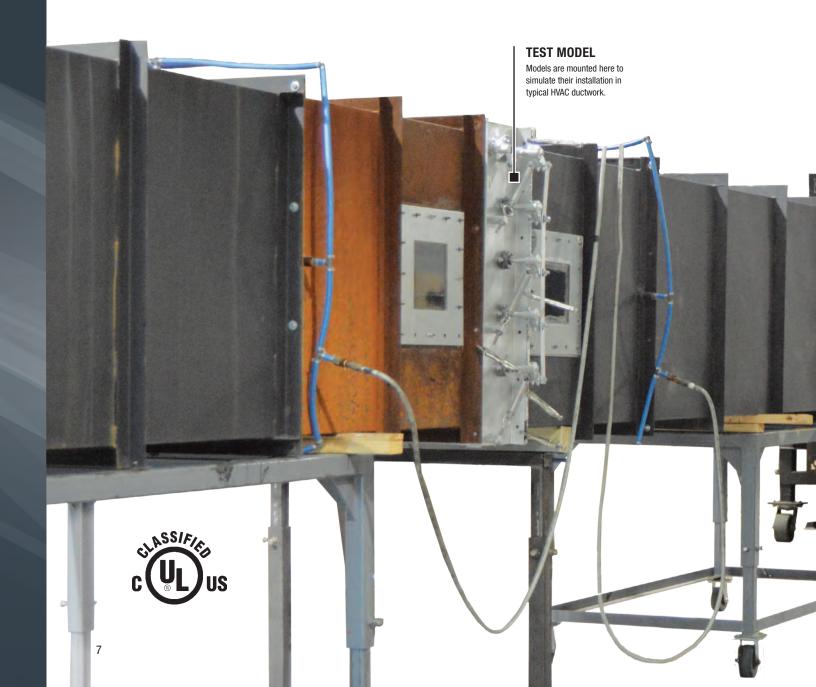
- 5000 fpm maximum velocity
- 500° F maximum temperature
- 20 in.wg. maximum static pressure
- UL-555 and UL-555S compliance testing
- AMCA 500D performance testing

The lab features a 4375 cu.ft. chamber with 25 nozzles, 8 settling screens and a 35 million BTU burner. The system has three fans capable of generating up to 97,000 CFM. All equipment has been designed per AMCA 500D and is currently in the process of getting UL and AMCA certification. This lab allows Pottorff to streamline product development efforts, as well as enhance current product offerings.



### **CONTROL CENTER**

Our staff can control testing parameters at this computer integrated control station.



# **4375 CUBIC FOOT CHAMBER**



# **35 MILLION BTU**

This burner can generate up to 35 million BTU, giving it the ability to perform elevated temperature testing and meet most requirements defined by life safety needs.



### **NOZZLES**

25 - 10 in. cast and machined aluminum nozzles that help control amount of airflow through the system.



### **SETTLING SCREENS**

Eight individual settling screens to produce the most laminar air possible.



### **THREE FANS**

Two Twin Loren Cook centrifugal paddle blade fans producing a total of 90,000 cfm and up to 10 in.wg. of static pressure, and a Loren Cook centrifugal paddle blade fan capable of 9,000 cfm and 30 in.wg. of static pressure.



AMCA 500D requirements in sizes from  $6"\times6"$  to  $72"\times48"$ . adjust to the ductwork and test products in many sizes up to 125"×125".

# **SMOKE DAMPERS**

# SD-140 SERIES, SD-150 SERIES AND TRUE ROUND SMOKE DAMPERS



A smoke damper provides a positive shutoff of HVAC ducts to help prevent the spread of smoke through an air control system. Pottorff smoke dampers pass UL's 555S stringent leakage testing requirements and are available in Class I, II, and III.

- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing
- Maximum Temperature: 350°







ECONOMICAL ROLL-FORMED TRIPLE-V GROOVED BLADES





The SD-25R round duct smoke damper installs precisely within round ducted systems.

SD-25R

# **CEILING RADIATION SMOKE DAMPERS**



A ceiling radiation smoke damper is utilized to protect penetrations in fire rated ceilings or floors in HVAC systems. Pottorff's CFS-170 series passes UL's stringent testing for fire resistance and leakage control.

- UL 555C 3 Hour Rating
- Class I and II UL 555S
- Meets NFPA Standards
- CSFM Listing
- Maximum Temperature: 350°
- Standard Sleeve Outlet Box
- Standard Top Duct Connection
- Optional Side Duct Connection

•	III 5550			DAMPER MA	XIMUM SIZE (in)	MAXIMUM CLOSURI	DYNAMIC E RATING	ESS
MODEL	UL555S LEAKAGE CLASS	BLADE TYPE	MIN SIZE (in)	WALL	FL00R	VELOCITY (fpm)	PRESSURE (in.wg.)	STAINLESS OPTION
SD-141	1	3V	6×6	144×96 288×48	144×96 288×48	2000	4	-
SD-142	2	3V	6×6	144×96 288×48	144×96 288×48	2000	4	•
SD-143	3	3V	6×6	144×96 288×48	144×96 288×48	2000	4	•
SD-151	1	AIRFOIL	8×6	144×96 288×48	144×96 288×48	4000	8	-
SD-152	2	AIRFOIL	8×6	144×96 288×48	144×96 288×48	4000	8	-
SD-151-V	1	VERT AIRFOIL	8×8	96×36	-	2000	4	-
SD-152-V	2	VERT AIRFOIL	8×8	96×36	-	4000	4	-
TRUE ROUND								
SD-25R	1	ROUND	6 Ø	24 Ø	24 Ø	3000	4	•
CEILING RADIA	TION/SMOKE							
CFS-171	3*	3V	6×6	12×12 24w or 12h ≤ 144in²	-	2000	4	_
CFS-172	3*	3V	6×6	12×12 24w or 12h ≤ 144in²	-	2000	4	-

<sup>\*</sup> Tunnel Type Corridor ceiling installation has 1 hr rating

# **CEILING RADIATION DAMPERS**

# **STANDARD AND TRUE ROUND**

Pottorff's ceiling radiation dampers create radiant heat barriers in HVAC systems. They are installed horizontally in the ceiling membrane of combustible floor-ceiling or roof-ceiling assemblies.

- UL 555C Rating up to 3 Hours
- Meets NFPA Standards
- Warnock Hersey Listing
- Galvanized Steel Construction
- CSFM Listing



CFD-15R BUTTERFLY BLADE

# **WOOD TRUSS SYSTEM**

Pottorff's ceiling radiation dampers are the proffered solution for wood truss systems, and ideal for multi-family projects.

- UL 555C Rating of 1 Hour
- Meets NFPA Standards
- Warnock Hersey Listing
- Galvanized Steel Construction
- CSFM Listing









CFD-521-IP



- Mounting with Boot Rails
- Expanded Duct Connections
- Extended Plenum Height



				MAX	IMUM SIZE (in)		DUCT COI	NNECTION	
	JL555 FIF ESISTAN( (hr)		MIN SIZE (in)	ROOF/FLOOR CEILING ASSEMBLIES	UL RATED WOOD-TRUSS ASSEMBLIES	SLEEVE OUTLET BOX	ТОР	SIDE	OUTLET BOX R VALUE
STANDARD									
CFD-15	3	BUTTERFLY	4×6	24×24	-	0	•	0	-
CFD-15-LP	3	LOW PROFILE BTRFLY	6×12	24×24	-	0	•	0	-
CFD-20	3	CURTAIN	4×4	24×24	-	0	•	0	_
TRUE ROUND									
CFD-15R	3	ROUND BUTTERFLY	4 Ø	24 Ø	-	0	•	-	-
WOOD TRUSS SY	STEMS								
CFD-521	1	BUTTERFLY	4×6	-	$18 \times 18$ 24w or 20h $\leq 324 \text{ in}^2$	•	O*	•*	-
CFD-521-90	1	BUTTERFLY	<b>4</b> × <b>4</b> (4∅)	-	$\begin{array}{c} 12\!\times\!12 (10 \varnothing) \\ 14w\!\times\!10h \text{ or } 10w\!\times\!14h \leq 144 \text{ in}^2 \end{array}$	•	-	-	-
CFD-521-BT	1	BUTTERFLY	4×6	$\begin{array}{c} 12 \times 12 \\ 24 w \text{ or } 24 \text{h} \leq 144 \text{ in}^2 \end{array}$	$12 \times 12 (10 \varnothing)$ 24w or 24h $\leq 144 \text{ in}^2$	•	•	-	R-6.3 or 8.0
CFD-521-IP	1	BUTTERFLY	4×6	-	$\begin{array}{c} 16 \times 16 \\ 24 \text{w or } 20 \text{h} \leq 256  \text{in}^2 \end{array}$	•	0*	●*	R-6.5 or 8.7
CFD-521-NP	1	BUTTERFLY	4×6	-	$\begin{array}{c} \textbf{16} \times \textbf{16} \\ \textbf{24} w \times \textbf{20h} \leq \textbf{256 in}^2 \end{array}$	•	<b>o</b> *	•*	-
CFD-521-NP90	1	BUTTERFLY	4×6(4∅)	-	$12 \times 12 (10 \varnothing)$ 14w or 10h $\leq 144 \text{ in}^2$	•	-	-	-
COLD FORMED S	TEEL TR	USS SYSTEMS							
CFD-521-ST	1	BUTTERFLY	4×6	16×14	-	•	-	•	R-6.5 or 8.7

# FIRE DAMPERS

# 1½ AND 3HR RATED FIRE DAMPERS



Fire dampers are fire protection products used in heating, ventilation, and air conditioning ducts to prevent the spread of fire inside the ductwork through fire-resistance rated walls and floors. Fire dampers are UL555 tested and designed to close upon the detection of elevated heat.

- 1½ and 3 Hour UL 555 Rating
- System pressures up to 6 in.wg.
- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing











LOW PROFILE AIRFOIL BLADES FOR HIGH PERFORMANCE

# **TRUE ROUND**

Our round fire dampers are designed for use in fire rated walls and floors and are the perfect, economical, choice for round ducted systems. They are UL555 tested and designed to close upon the detection of elevated heat.

- 1½ and 3 Hour Rating
- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing



MODEL	UL555 FIRE	21.122.202	MIN	DAMPER MAX	IMUM SIZE (in)		I DYNAMIC E RATING	LESS
MODEL	RESISTANCE (hr)	BLADE TYPE	SIZE (in)	WALL	FL00R	VELOCITY (fpm)	PRESSURE (in.wg.)	STAINLESS 0PTION
STANDARD								
FD-140	1½	3V	6×6	72×48 36×96	72×48	4000*	6	•
FD-150	1½	AIRFOIL	8×6	128×96	120×96	4000*	6***	-
FD-340	3	3V	6×6	72×48 36×96	-	4000*	6	•
FD-350	3	AIRFOIL	8×6	120×96	64×96	4000*	6**	-
OUT-OF-PARTIT	TION							
FD-140-0P	1½	3V	6×6	36×48	36×48	4000	6	-
FD-150-0P	1½	AIRFOIL	8×6	36×36	36×36	4000	6**	-
TRUE ROUND								
FD-125R	1½	ROUND	8Ø	24Ø	24Ø	2000	4	•
VFD-15R	1½	ROUND BUTTERFLY	<b>6</b> Ø	20Ø	<b>20</b> Ø	-	-	-
VFD-35R	3	ROUND BUTTERFLY	<b>6</b> Ø	20Ø	-	-	-	-

\*2000 FPM on multi-sections | \*\*4 in.wg. below 8" in height | \*\*\*4 in.wg. below 8" in height when sizes exceed 64"×48" or 32"×96"

See catalog online for stainless steel max sizes

# FIRE DAMPERS

# **CURTAIN BLADE FIRE DAMPERS**

# STATIC AND DYNAMIC



Fire dampers with curtain style blades are a cost savings solution to dynamic and static fire control. 11/2 and 3 Hour UL 555 Rating

- Meets NFPA Standards
- Stainless Steel Construction Available
- CSFM Listing





# OUR VFD-10D IS THE LARGEST SINGLE SECTION CURTAIN FIRE DAMPER IN THE INDUSTRY.

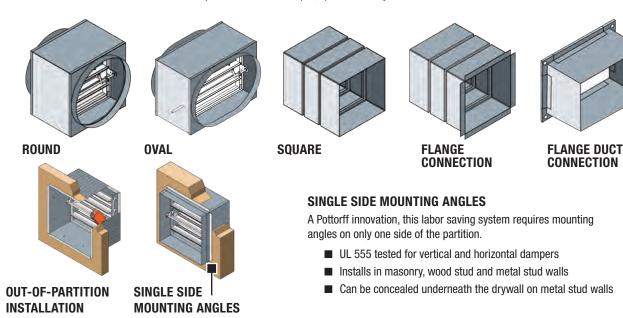
				IN E (in)	DAMPER MAX	IMUM SIZE (in)		I DYNAMIC E RATING	LESS
MODEL F	UL555 FIRE RESISTANCE (h	STATIC r) DYNAMIC	WALL	FLOOR	WALL	FL00R	VELOCITY (fpm)	PRESSURE (in.wg.)	STAINLESS OPTION
CURTAIN STYLE BL	ADES								
VFD-10-A	1½	STATIC	4×4	6×6	120×80 80×120	80×80	-	-	•
VFD-10-B	1½	STATIC	4×2	6×4	120×76 80×116	80×76	-	-	•
VFD-10-C	1½	STATIC	4×2	4×3	118×75 78×115	78×75	-	-	•
VFD-10D-A	1½	DYNAMIC	6×6	6×6	72×120 120×72	36×36 72×18	4000**	4	•
VFD-10D-B	1½	DYNAMIC	6×4	6×4	120×69 72×117	36×34 72×16	4000**	4	•
VFD-10D-C	1½	DYNAMIC	4×3	4×3	118×68 70×116	34×33 70×15	4000**	4	•
VFD-30-A	3	STATIC	4×4	6×10	108×24	76×96	-	-	•
VFD-30-B	3	STATIC	4×2	6×8	108×21	76×93	-	-	•
VFD-30-C	3	STATIC	4×2	4×7	106×20	74×91	-	-	•
VFD-30D-A	3	DYNAMIC	6×6	_	108×24	-	4000	4	•
VFD-30D-B	3	DYNAMIC	6×4	-	108×21	-	4000	4	•
VFD-30D-C	3	DYNAMIC	4×3	-	106×20	-	4000	4	•
CURTAIN INTEGRAL	MOUNTED A	NGLE							
VFD-10-IMA	1½	STATIC	4×4	-	48×48	-	_	-	-
VFD-10-IMB	1½	STATIC	4×2	-	48×44	-	-	-	-
VFD-10D-IMA	1½	DYNAMIC	6×6	-	36×48	-	4000	4	-
VFD-10D-IMB	1½	DYNAMIC	6×4	-	36×44	-	4000	4	-
OUT-OF-PARTITION									
VFD-10-0P	1½	STATIC	6×6	6×6	36×36	36×36	-	-	-
VFD-10D-0P	1½	DYNAMIC	6×6	6×6	36×36	36×36	4000	4	-
THINLINE									
VFD-10-TLA	1½	THINLINE STATIC	4×4	-	36×72 72×36	-	-	-	-
VFD-10-TLB	1½	THINLINE STATIC	4×2	-	36×65 72×29	-	-	-	-
VFD-10D-TLA	1½	THINLINE DYNAMIC	6×6	-	72×36 36×72	-	4000*	4	-
VFD-10D-TLB	1½	THINLINE DYNAMIC	6×4	-	72×29 36×65	-	4000*	4	-

# OPTIONS/INSTALLATION

# **CONNECTION FLEXIBILITY**

### TRANSITION DUCT CONNECTIONS

When duct connections are not the same shape or size as the damper, optional factory transitions include:



# WOOD TRUSS RATED CEILING RADIATION DAMPER INSTALLATION OPTIONS

### **INSTALLATION OPTIONS**

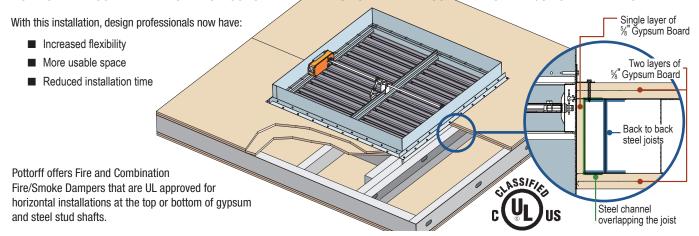
When the CFD-521, CFD-521-IP and CFD-521-NP dampers are configured to close within 1/8" of the gypsum board used in wood truss floor/ceiling and roof/ceiling assemblies, duct connections can now be made on the top of the damper, or on any combination of sides.

The plenum height can now be extended to allow duct connections in roof/ceiling assemblies with increased insulation to adhere to new, more stringent energy guidelines.

# Boot rails can be used to mount the damper to the rated assembly.

# **UL 1503 – INSTALLATION**

### HORIZONTAL MOUNT DAMPERS IN NON-CONCRETE BARRIERS FOR FIRE AND COMBINATION FIRE/SMOKE DAMPERS



# **ACCESSORIES**

# **ACTUATORS/SMOKE DETECTORS**

### **ACTUATORS**

Electric actuators and pneumatic actuators ensure top quality actuation for smoke and combination fire/smoke dampers.

- Compact
- Maintenance free
- 5 Year warranty

Standard model is 120 VAC, power-open, spring-close, external mount electric actuator. 24 VAC, 230 VAC, and modulating control options are also available.



PNEUMATIC ACTUATOR

# **MODULATING ACTUATOR OPTIONS**

Pottorff has expanded modulating actuator options for our out-of-partition and horizontally mounted steel airfoil combination fire/smoke dampers. The Belimo FSAFB24-SR(S) modulating actuator can be selected as an option on Pottorff's horizontally mounted FSD-151 and FSD-152 dampers in assemblies up to  $120" \times 48"$  and on FSD-151-OP and FSD-152-OP dampers up to  $36" \times 24"$ .



FSAFB24-SR ELECTRIC ACTUATOR

### FIRE CLOSURE AND POSITION INDICATIONS

Our fire dampers are held open using a UL listed fusible link which melts at a predetermined temperature to permit the damper to close for protection. We now offer the PI-10 switch package which can be used to signal an alarm or fire control system to indicate blade closure on VFD dampers. Our fire/smoke dampers typically utilize a thermostat sensor that interrupts the power to the damper actuator and closes the damper.

- The PI-10 can be used in static or dynamic systems
- The HS-10 features a single temperature fire closure with manual test/reset buttons
- The DRS-30 features a dual temperature fire closure with manual test/reset buttons and integral PI-50
- The PI-50 features positive open and closed blade position signal
- Maintenance free
- 5 Year warranty





DRS-30

HS-10

# **FACTORY MOUNTED SMOKE DETECTORS**

Smoke detector features fully integrated electrical wiring with a single point connection. A Pottorff innovation, this detector eliminates costly installation, wiring and interface coordination.

- UL and NFPA approved
- Standard external mount with duct velocity of 100-4000 fpm
- Optional internal mount system is ideal when detection is required under zero-flow conditions



D4120

PI-10 POSITION INDICATOR	

ACTUATOR ENCLOSURES	MANUFACTURER
ZS-100 – GALVANIZED	BELIM0
ZS-260 – EXPLOSION PROOF	BELIM0
ZS-300 – STAINLESS STEEL	BELIM0
DUCT SMOKE DETECTORS	
2151 - 0-3000 FPM	SYSTEM SENSOR
D4120 - 100-4000 FPM	SYSTEM SENSOR
FIRE RELEASING DEVICE	
DRS-30 – TWO TEMPERATURE	POTTORFF
HS-10 – ONE TEMPERATURE	POTTORFF

INDICATOR SWITCH PACKAGE	MANUFACTURER
PI-10	POTTORFF
PI-50 – DUAL POSITION INDICATOR	POTTORFF
REMOTE CONTROL PANELS	
RCP-1 – SINGLE POSITION	POTTORFF
RCP-1K – SINGLE STATION W/KEY	POTTORFF
RCP-1M – MOMENTARY TEST SWITCH	POTTORFF
RCP-1M-NL – MOMENTARY TEST SWITCH	POTTORFF
REMOTE LIGHT PANELS	
RLP-1 – 1-POSITION INDICATOR SWITCH	POTTORFF
RLP-2 – 2-POSITION INDICATOR SWITCH	POTTORFF

# WHY SPECIFY POTTORFF?

### **HOW WE ARE DIFFERENT FROM THE COMPETITION:**

Innovation, quality, performance and service are what differentiate Pottorff from the competition. Founded in 1928, we are the authority in Life Safety Damper technology. It is our experience, versatility, and ability to react quickly to our customer's needs which makes us the choice for architects and engineers.

- Ongoing commitment to personal and technical service
- Wide range of quality products
- Products delivered on time and on budget
- Innovative solutions for your design requirements
- Industry leading 5-year warranty







# **QUICK SHIP PROGRAM**

Whether your project requires delivery in 1 week or the next day, Pottorff's industry leading Quick Ship performance is guaranteed.







### THE COMPANY WE KEEP

Pottorff associates are active members of Underwriters Laboratories (UL) Committees and Advisory Council.

We are active members of AMCA's Board of Directors and Code Action Review Committee and participate in the development of building codes, design regulations and test standards.

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

POTTORFF®

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