



OUT OF WALL COMBINATION FIRE/SMOKE DAMPER
GRILLE MOUNT WITH ACTUATOR ACCESS
1 1/2 HR. LABEL • ULTRA-LOW LEAKAGE
MODEL: 1221-OW



QUALIFICATIONS:

- **UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER** 1 1/2 hr. Label (File #'s R9492 & R19569).
- **UL 555S CLASSIFIED SMOKE DAMPER** (File # R9492) Class I at 250°F or 350°F elevated temperature.
- **Meets NFPA 80, 90A, 92A, 92B, 101 and 105** as well as IBC and NBC (Canada) Building Code requirements.
- **California State Fire Marshal Listing No. 03225-0935:106.**
- **City of New York. MEA# 366-03-M.**
- **Maximum velocity: Up to 4000 fpm @ 8" w.g.**
- **For use in vertical or horizontal concrete partitions and vertical steel stud partitions only.**

The Model 1221-OW is an "out of wall" high performance combination fire/smoke damper. It is specifically designed for supply or return ducts that terminate at a grille and provides through the grille access to the damper, actuator and other components. Standard sleeve length accommodates most commercial supply and return grilles/registers.

The 1221-OW is ideal for applications where building codes require both a fire damper for the protection of ductwork penetrations in walls or floors that have a fire resistance rating of up to 2 hours and also require a leakage rated damper for operational smoke control in static or dynamic smoke management systems.

The 1221-OW offers premium performance with the lowest leakage class available and a low pressure drop well suited to the majority of commercial applications. Unique, inter-locking double skin blade design eliminates combustible seals and provides flame and smoke seal under fire conditions at temperatures up to 2000°F.

STANDARD SPECIFICATION:

- Frame:** 5" x 7/8" x 16 ga. (127 x 22 x 1.6) galvanized steel hat channel.
Blades: 14 ga. (2.0) equivalent galvanized steel formed airfoil on 5 1/2" (140) centers. Opposed action.
Sleeve: **Damper 16" tall and under:** 20" x 20 ga. (508 x 1.0) galvanized steel with 3/4" (19) flange on one end.
Damper over 16" tall: 16" x 20 ga. (406 x 1.0) galvanized steel with 3/4" (19) flange on one end.
Insulation: Intumescent thermal insulation on four sides.
Linkage: Concealed in frame. 12 ga. (2.7) plated steel.
Bearings: 1/2" (13) dia. self-lubricating oilite bronze.
Axles: 1/2" (13) dia. plated steel double bolted to blades.
Jackshaft: 1/2" (13) dia. cadmium plated steel.
Jamb Seals: Stainless steel.

Heat Responsive Device (Controlled Closure):

ERL (Electric Resettable Link) is standard on dampers with electric actuators: 250°F (121°C) standard. 165°F (74°C), 212°F (100°C) and 350°F (176°C) available.

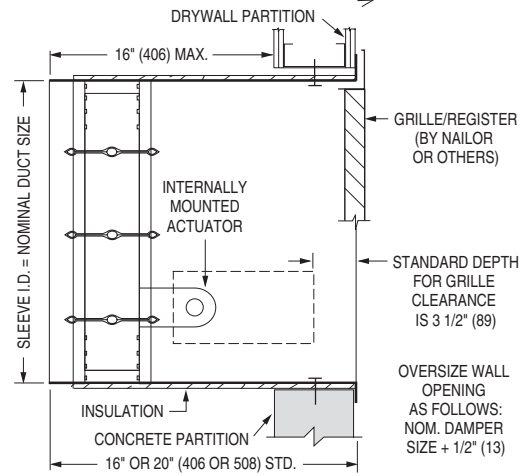
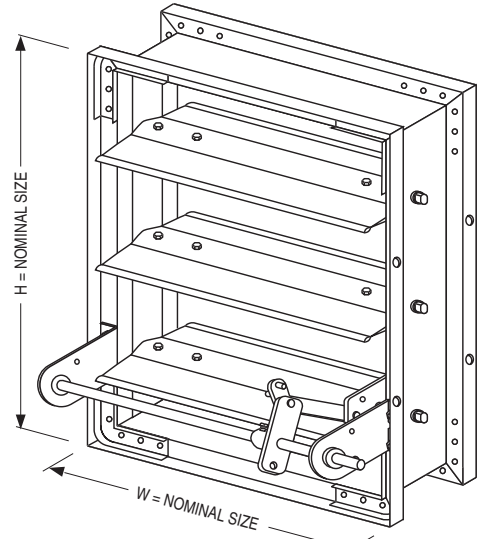
PRL (Pneumatic Replaceable Link) is standard on dampers with pneumatic actuators: 212°F (100°C) standard. 165°F (74°C) and 280°F (138°C) available.

Sizes (Damper W x H):

Velocity/ Pressure Rating	Elevated Temp. °F	Minimum		Maximum	
		Single Section		Single Section	
		Vertical/Horizontal	Vertical	Horizontal	Horizontal
24, 34, 36, 46	250/350	8" x 8" (203 x 203) with internal electric actuator.	36" x 48" (914 x 1219)	32" x 48" (813 x 1219)	
48	250	8" x 20" (203 x 508) with internal pneumatic actuator.	36" x 48" (914 x 1219)	32" x 48" (813 x 1219)	
48	350		36" x 24" (914 x 610)	32" x 24" (813 x 610)	

BASE MODEL SELECTION:

- 1221-OW** Standard length sleeve as described under "Sleeve:" under "Standard Specification:".
- 1221-OW** Non standard sleeve. Specify length _____. Shorter sleeve lengths are available (down to 14" [350]) dependant on height. Contact factory for limitations.



LEAKAGE CLASS/ELEVATED TEMPERATURE:

- I @ 250° (Standard)**
- I @ 350° (Optional)**

DYNAMIC VELOCITY/PRESSURE RATING:

- 24** 2000 fpm @ 4" w.g. (Standard)
- 34** 3000 fpm @ 4" w.g. (Optional)
- 36** 3000 fpm @ 6" w.g. (Optional)
- 46** 4000 fpm @ 6" w.g. (Optional)
- 48** 4000 fpm @ 8" w.g. (Optional)

ACTUATOR SELECTION:

- Electric**
- Pneumatic**

ACTUATOR FAIL POSITION: Closed.

OPTIONS:

- BS** Stainless steel bearings
- MLS-300** Position indicator switch pack
- MLS-400** Electric Fire Sensor (Re-openable control system). Includes dual heat sensors (165°F and 250°F or 350°F) and position indicator switch pack.
- QS1** Quick-set retaining angle (one side)

For installation instructions, see IOM-1221OWINST.
 Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE	B SERIES	SUPERSEDES	DRAWING NO.
10 - 18 - 22	1200	12 - 17 - 20	1221-OW