



**OUT OF WALL COMBINATION FIRE/SMOKE DAMPER**  
**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 & CAN/ULC-S112.1 CLASSIFIED SMOKE DAMPER Class I at 250°F or 350°F elevated temperature (File # R9492).
- 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.

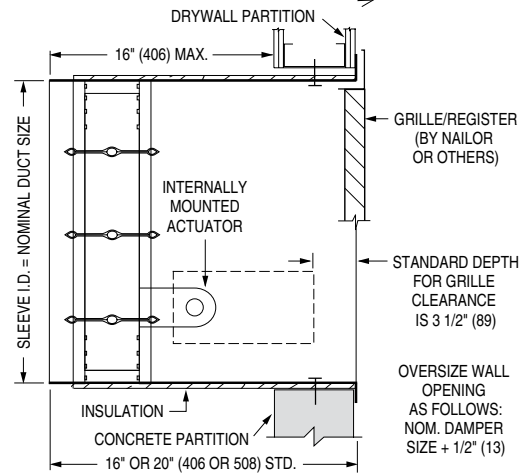
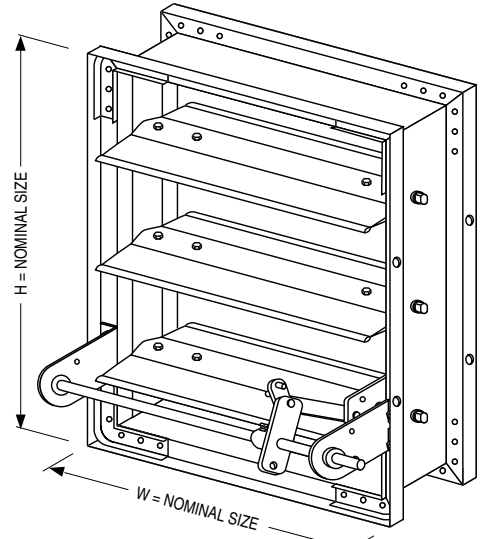
PRL (Pneumatic Replaceable Link) is standard on dampers with pneumatic actuators: 212°F (100°C) standard. 165°F (74°C) and 280°F (138°C) available.

**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. }
- 46 4000 fpm @ 6" w.g. }
- 48 4000 fpm @ 8" w.g. }

**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 - 16 - 24	1200	10 - 18 - 22	1221-OW