



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



QUALIFICATIONS:

- **UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER** 1 hr. Label (File # R9492).
- **UL 555S CLASSIFIED SMOKE DAMPER** (File # R9492) Leakage Class I at 250°F elevated temperature.
- **Meets NFPA 80, 90A, 92, 101 and 105 as well as IBC and NBC (Canada) Building Code requirements.**
- **Maximum velocity: 2000 fpm @ 4" w.g. (10 m/s @ 1 kPa).**
- **For use in vertical or horizontal concrete partitions and vertical steel stud partitions only.**

Model 1221-OWM is a modulating "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-OWM 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-OWM 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 (1093°C).

STANDARD CONSTRUCTION:

- 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:** 16" x 20 ga. (406 x 1.0) galvanized steel with 3/4" (19) flange on one end standard for all dampers over 16" (406) high. Dampers 16" (406) high and under have a 20" (508) long sleeve.
- 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):

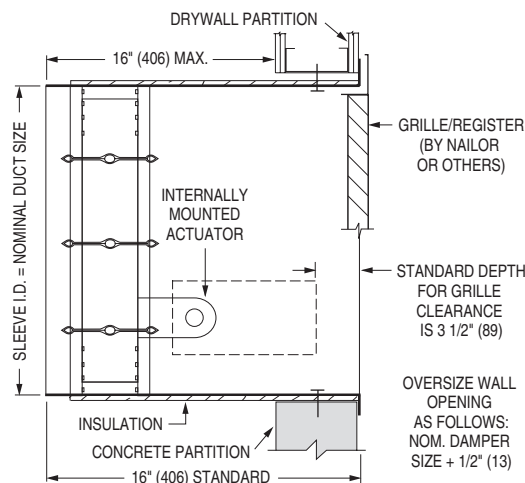
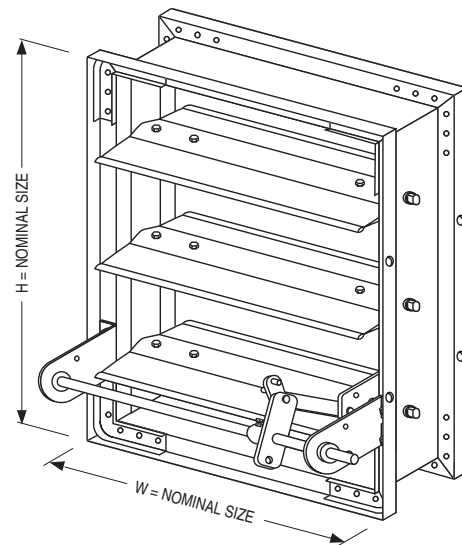
ERL (Electric Resettable Link) is standard on dampers with electric actuators: 250°F (121°C) standard. 165°F (74°C) and 212°F (100°C) available.

Sizes (Duct W x H):

Velocity/ Pressure Rating	Elevated Temp. °F	Minimum Single Section		Maximum Single Section	
		Vertical/Horizontal		Vertical	Horizontal
		24	250	8" x 20" (203 x 508)	36" x 48" (914 x 1219)

BASE MODEL SELECTION:

- 1221-OWM** Standard 16" (406) long x 20 ga. (1.0) insulated sleeve with 3/4" (19) flange on grille side.
- 1221-OWM** 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°

DYNAMIC VELOCITY/PRESSURE RATING:

24 2000 fpm @ 4" w.g.

ACTUATOR SELECTION:

Electric

ACTUATOR FAIL POSITION:

CL 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 or 250°F) and position indicator switch pack.
- QS1** Quick-set retaining angle (one side)

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

SCHEDULE TYPE:				
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	11 - 24 - 20	1200	8 - 24 - 15	1221-OWM