

CITY OF NEW YORK
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of Materials and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, A.I.A., Commissioner

MEA 366-03-M

Report of Material and Equipment Acceptance Division

Manufacturer – Nailor Industries Inc., 4714 Winfield Road, Houston, Texas.

Trade Name(s) – Nailor.

Product – Combination Fire/smoke damper.

Pertinent Code Section(s) – RS 13, Chapter III 3-3.7.1 and RS 13 Chapter IV 4-4.1.1.

Prescribed Test(s) - UL 555 and UL 555S..

Laboratory -Underwriters Laboratories, Inc.

Test Report(s) - UL File R9492, dated September 3, 1997, and March 20, 2000, June 2, 2000, August 29, 1997, September 2 & 3, 1997. UL9660 dated April 16, 1984, August 28, 1986, May 17, 1999, September 14, 2001 and January 8, 2002.

Description –

Model 0720 ceiling damper is designed to function as a fire and heat barrier in air handling openings penetrating fire resistive membrane ceilings, for use in lieu of hinged door type dampers in any UL floor/ceiling or roof/ceiling assembly with up to a 3 hour fire resistance rating where air handling openings are permitted. Frame is 22 gauge galvanized steel. Blade blanket, consisting of an inner layer of ceramic fiber insulation sandwiched between and stitched together with outer layers of fiberglass fabric, is riveted to a fixed blade attached to frame, and fan-folded to a lead blade to which constant force springs are attached to pull the blade blanket closed when fusible link melts.

Model series 0750 are ceiling dampers designed to function as heat barriers in air handling openings penetrating fire resistive membrane ceilings, and have been especially designed and tested to provide protection and simple installation in specific UL design wood truss ceiling assemblies listed on the UL marking on the product. Frames are 22 gauge galvanized steel. Hinged blade assemblies of sheet metal with a layer of ceramic fire blanket are held open by a fusible link and closed when fusible link melts by means of a spring attached to each blade around the central hinge. Model 0755 is a top-inlet grille mount, model 0755A is a top-inlet grille mount with adjustable blades. Model 0756 is a steel plenum side inlet, model 0756D is a steel plenum side inlet for ducted applications. Model 0757 is a fiberglass plenum side inlet, model 0757FP is a factory installed fiberglass plenum side inlet, model 0757D is a fiberglass plenum side inlet for ducted applications, and model 0757DFP is a factory installed fiberglass plenum side inlet for ducted applications.

Model series 1200 is a single and multi-blade fire damper rated 1 ½ and 3 hours. The damper frame is a hat shaped channel made of 16 gauge galvanized steel reinforced with die-formed corner gussets button-locked to the frame. Double-skin design airfoil blades are double bolted onto ½"(13) axles that rotate within oilite bronze bearings pressed through the frame. The out-of-airstream maintenance-free blade linkage is made of 12 gauge zinc plated cold rolled steel. Side (or jamb) seals located between ends of blade(s) and sides of damper frame are made of type 302 stainless steel. The unique inter-lock design of the double-skin airfoil blade provides a complete flame and smoke barrier at temperatures up to 2000°F (1093°C) with no combustible synthetic blade seal. One jackshaft assembly with a twist type closure spring is used on each damper. The fusible link is a U.L. listed soldered type rated at 165°F(74°C), 212°F(100°C), 250°F(121°C), or 350°F(177°C). Model 1200 has no sleeve; model 1201 has a sleeve; model 1202 has a sleeve and square/rectangular reducer collar; model 1203 has a sleeve and round/oval reducer collar. Three hour versions of these dampers have the above model numbers with a "-3" suffix.

Model series 1210 is a single and multi-blade Class I or II, 350°F, leakage rated damper. The damper frame is a hat shaped channel made of 16 gauge galvanized steel reinforced with die-formed corner gussets button-locked to the frame. Double-skin design airfoil blades are double bolted onto ½"(13) axles that rotate within oilite bronze bearings pressed through the frame. The out-of-airstream maintenance-free blade linkage is made of 12 gauge zinc plated cold rolled steel. Side (or jamb) seals located between ends of blade(s) and sides of damper frame are made of type 302 stainless steel. The unique inter-lock design of the double-skin airfoil blade provides a complete flame and smoke barrier at temperatures up to 2000°F (1093°C) with no combustible synthetic blade seal. The damper is direct drive when mounted outside the barrier. Alternately, the damper may be mounted within the barrier using one jackshaft assembly with no twist type closure spring on each damper. Model 1210 has no sleeve and may have an actuator mounting plate; model 1211 has a sleeve; model 1212 has a sleeve and square/rectangular reducer collar; model 1213 has a sleeve and round/oval reducer collar.

Model series 1220 is a single and multi-blade combination fire and leakage rated damper rated 1 ½ and 3 hours and leakage Class I. The damper frame is a hat shaped channel made of 16 gauge galvanized steel reinforced with die-formed corner gussets button-locked to the frame. Double-skin design airfoil blades are double bolted onto ½"(13) axles that rotate within oilite bronze bearings pressed through the frame. The out-of-airstream maintenance-free blade linkage is made of 12 gauge zinc plated cold rolled steel. Side (or jamb) seals located between ends of blade(s) and sides of damper frame are made of type 302 stainless steel. The unique inter-lock design of the double-skin airfoil blade provides a complete flame and smoke barrier at temperatures up to 2000°F (1093°C) with no combustible synthetic blade seal. One jackshaft assembly with a twist type closure spring is used on each damper. The fusible link is a U.L. listed soldered type rated at 165°F(74°C), 212°F(100°C), 250°F(121°C), or 350°F(177°C). Model 1220 has no sleeve and may have an actuator mounting plate; model 1221 has a sleeve; model 1222 has a sleeve and square/rectangular reducer collar; model 1223 has a sleeve and round/oval reducer collar; model 1221-OW is for mounting outside the wall with sleeve. Three hour versions of these dampers have the above model numbers with a "-3" suffix.

Model series 1280 is a single and multi-blade Class I or II, 250°F or 350°F, leakage rated damper. The damper frame is a hat shaped channel made of 16 gauge galvanized steel reinforced with die-formed corner gussets button-locked to the frame. Double-skin design extruded aluminum airfoil blades are double bolted onto ½”(13) axles that rotate within oilite bronze bearings pressed through the frame. The out-of-airstream maintenance-free blade linkage is made of 12 gauge zinc plated cold rolled steel. Side (or jamb) seals located between ends of blade(s) and sides of damper frame are made of type 302 stainless steel. The blade seal is inserted into, and retained by, slots on both edges of extruded aluminum blade. The damper is direct drive when mounted outside the barrier. Alternately, the damper may be mounted within the barrier using one jackshaft assembly with no twist type closure spring on each damper. Model 1280 has no sleeve and may have an actuator mounting plate; model 1281 has a sleeve; model 1282 has a sleeve and square/rectangular reducer collar; model 1283 has a sleeve and round/oval reducer collar.

Model series 1290F is a 1 ½ hour fire rated damper of the round single blade type for vertical and/or horizontal with a 20 gauge galvanized steel rolled frame. Blade consists of round silicone rubber sandwiched between two 20 gauge galvanized pieces riveted together and bolted to hinge pins which rotate within oilite bronze bushings in the damper frame. One jackshaft assembly with a twist type closure spring is used on each damper. One jackshaft assembly with a twist type closure spring is used on each damper. The fusible link is a U.L. listed soldered type rated at 165°F(74°C), 212°F(100°C), 250°F(121°C), 285°F(140°C), or 350°F(177°C).

Model series 1290S is a Class II, 350°F, leakage rated damper of the round single blade type for vertical and/or horizontal with a 20 gauge galvanized steel rolled frame. Blade consists of round silicone rubber sandwiched between two 20 gauge galvanized pieces riveted together and bolted to hinge pins which rotate within oilite bronze bushings in the damper frame. The unit is direct drive. The actuator is mounted to an elongated hinge pin which serves as the drive pin.

Model series 1290FS is a 1 ½ hour fire rated and Class II, 350°F, leakage rated damper of the round single blade type for vertical and/or horizontal with a 20 gauge galvanized steel rolled frame. Blade consists of round silicone rubber sandwiched between two 20 gauge galvanized pieces riveted together and bolted to hinge pins which rotate within oilite bronze bushings in the damper frame. One jackshaft assembly with a twist type closure spring is used on each damper. One jackshaft assembly with a twist type closure spring is used on each damper. The fusible link is a U.L. listed soldered type rated at 165°F(74°C), 212°F(100°C), 250°F(121°C), 285°F(140°C), or 350°F(177°C).

Fire Dampers for Use In Static Systems:

Model	Hr Class	Damper Mounting Position	Single Section Damper Size In.		Multiple Section Damper Size In.	
			W	H	W	H
01 Series, FD Series	1-1/2	V	60	60	120	120
		H	34	60	102	60
			60	60	—	—
02 Series	1-1/2	V	36	60	—	—
		H, V	41	36	—	—
03 Series	1-1/2	V	24	60	—	—
			60	48	—	—
		H	48	48	—	—
051, 052, 053, FD3 Series	3	H	36	36	72	36
		V	48	48	—	—
		V	36	36	108	72

054, 055, 056	3	V	24	60	—	—
		V	60	24	—	—
057, 058, 059	3	V	36	60	—	—
1200, 1201,	1-1/2	V	36	48	144	96
1202, 1203		H	32	48	144	96
1200-3, 1201-3,	3	V	36	48	—	—
1202-3, 1203-3		H	32	48	—	—
1250, 1251,	1-1/2	V	40	40	91	40
1252, 1253			—	—	40	91
			36	48	72	48
		H	30	40	91	40
Model	Hr Class	Damper Mounting Position	Round Damper Diameter, In.		Multiple Section Damper Size In.	
			Min	Max	W	H
1290F	1-1/2	H, V	6	18	—	—

Fire Dampers for Use in Dynamic Systems

Model	Hr Class	Damper Mounting Position	Single Section Damper Size In.		Multiple Section Damper Size In.	
			W	H	W	H
D0100	1-1/2	H, V	24	24	—	—
			18	24	36	48
D0500	3	H, V	24	24	—	—
			18	24	36	48
D1250, D1251,	1-1/2	H	30	40	91	40
D1252, D1253		V	36	48	91	48
D1200, D1201,	1-1/2	H	32	48	144	96
D1202, D1203		V	36	48	144	96
D1200-3, D1201-3,	3	H	32	48	—	—
D1202-3, D1203-3,		V	36	48	—	—

Smoke Dampers

Model	Leakage Class	Damper Mounting Position	Single Section Damper Size In.				Multiple Section Damper Size In.	
			W		H		W	H
			Min	Max	Min	Max		
1210, 1211,	I-350	H, V	8	36	8	48	144	96
1212, 1213			8	36	8	48	288	48
1260, 1261,	II-350	V	12	36	8	48	144	96
1262, 1263			12	36	8	48	36	91
			12	36	8	48	288	48
		H	12	36	8	48	—	—
			12	36	8	48	120	48
			12	36	8	48	36	91
			12	36	8	48	288	48
1280, 1281,	I-350	H, V	8	36	8	48	—	—
1282, 1283	I-250	H, V	8	36	8	48	144	96
			8	36	8	48	288	48
Model	Leakage Class	Damper Mounting Position	Round Damper Diameter, In.		Multiple Section Damper Size In.			
			Min	Max	W	H		
1290S	I-350	H, V	6	24	—	—		

Combination Fire and Smoke Dampers

Model	Hr Class	Leakage Class	Damper Mounting Position	Single Section Damper Size In.				Multiple Section Damper Size In.	
				W		H		W	H
				Min	Max	Min	Max		
1220, 1221,	1-1/2	I-350	H	8	32	8	48	144	96

1222, 1223			V	8	36	8	48	144	96
1221OW	1-1/2	I-350	H	8	32	8	48	—	—
			V	8	36	8	48	—	—
1220-3, 1221-3,	3	I-350	H	8	32	8	48	—	—
1222-3, 1222-3			V	8	36	8	48	—	—
1270, 1271,	1-1/2	II-350	H	12	30	8	40	72	48
1272, 1273				12	36	8	48	91	40
				12	36	8	48	30	91
			V	12	36	8	48	72	48
				12	36	8	48	91	40
				12	36	8	48	36	91
Model	Hr Class	Leakage Class	Damper Mounting Position	Round Damper Diameter, In.		Multiple Section Damper Size In.			
				Min	Max	W	H		
1290FS	1-1/2	I-350	H, V	6	18	—	—		

Corridor Dampers

Model	Hr Class	Leakage Class	Damper Mounting Position	Single Section Damper Size In.	
				W	H
				W	H
				W	H
1221	1	I-350	H	24	24
1271	1	II-350	H	24	24

Recommendation - That the above combination fire and smoke dampers be accepted in accordance with their Underwriters Laboratories Inc., rating of 3 hours on condition that all uses, locations and installations shall comply with the New York City Building Code and the manufacturer's installation instructions. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to those tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance Feb 127/04

Examined By S Derflinger