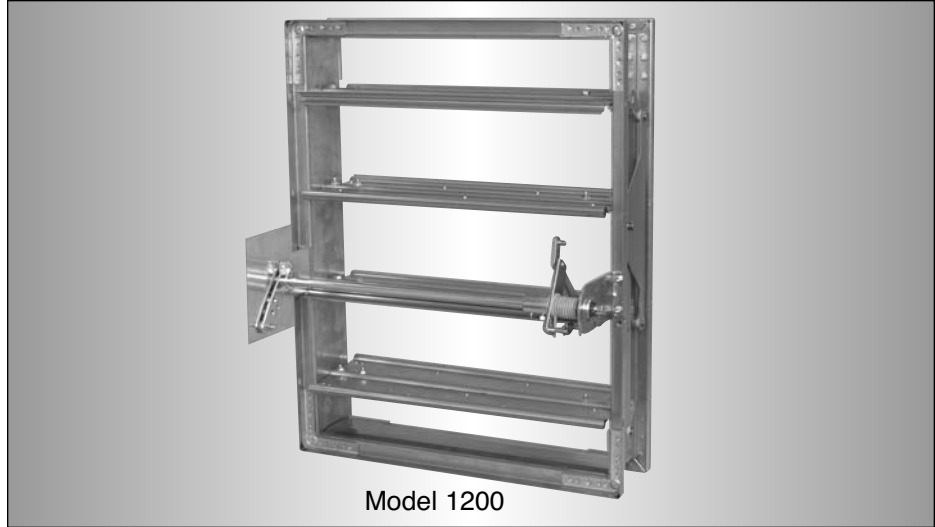


- PREMIUM PERFORMANCE
- AIRFOIL BLADE
- UL 555 CLASSIFIED DYNAMIC FIRE DAMPER

MODELS:

- 1200** 1 1/2 HR LABEL
1200-3 3 HOUR LABEL



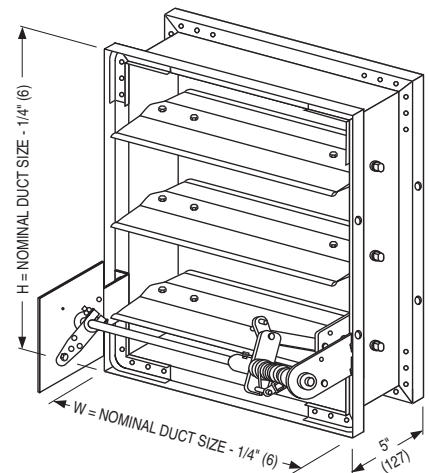
Nailor's 1200 Series multi-blade fire damper provides the ultimate in fire containment for both static and dynamic HVAC systems. The 1200 Series utilizes an innovative inter-locking double skin airfoil blade design that maintains a complete barrier throughout the fire test with absolutely no visible through-gaps. Amazingly, the 1200 Series fire damper gets tighter as it gets hotter! Ideal for use where building codes require a fire damper for the protection of ductwork penetrations in walls or floors, Model Series 1200 has a 1 1/2 hour UL label suitable for use in separations with fire resistance ratings of less than 3 hours. Model Series 1200-3 has a 3 hour UL label suitable for use in separations with a fire resistance rating of 3 hours or more. Features include a unique airfoil blade design and maintenance-free concealed blade linkage for extremely low pressure drop and minimal turbulence and noise. Rugged hat-channel frame is reinforced with die-formed corner gussets for superior rigidity. Industry proven high torque spring/fusible link with over-center knee lock design provides the security of assured closure under fire condition. Supplied as standard with an internal hand locking quadrant to hold blades in open position or balance the system, the 1200 Series is available with factory fitted sleeve ready for installation and choice of transition styles to suit duct size and type. Premium performance, versatility and assured closure make the 1200 Series an excellent choice for the majority of today's applications.

QUALIFICATIONS:

- UL 555 CLASSIFIED DYNAMIC FIRE DAMPER - 1 1/2 hr. or 3 hr. Label.
- Meets NFPA 90A, BOCA, SBCCI, UBC and IBC requirements.
- Maximum velocity 2000 fpm @ 4" w.g. (10 m/s @ 1 kPa).

CONSTRUCTION DETAILS:

- 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.
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.
 Internal locking quadrant is factory installed.
FUSIBLE LINK: 165°F (74°C) standard. 212°F (100°C) available.



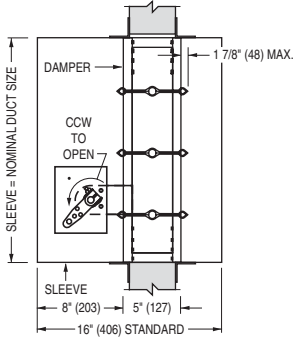
TYPE A: MODELS 1200/1200-3

	MODEL 1200 (1 1/2 HR. LABEL)	MODEL 1200-3 (3 HR. LABEL)
MIN. DUCT SIZE:	Vertical or Horizontal mount: 8" x 8" (203 x 203).	MIN. DUCT SIZE: Vertical or Horizontal mount: 8" x 8" (203 x 203).
MAX. DUCT SIZE:	Single Section Vertical mount: 36" x 48" (914 x 1219). Horizontal mount: 32" x 48" (813 x 1219). Multiple Section Assembly Vertical mount: 72" x 48" (1829 x 1219) or 36" x 96" (914 x 2438). Horizontal mount: 64" x 48" (1626 x 1219) or 32" x 96" (813 x 2438).	MAX. DUCT SIZE: Single Section Vertical mount: 36" x 48" (914 x 1219). Horizontal mount: 32" x 48" (813 x 1219). Multiple Section Assemblies are not permitted.

MULTI-BLADE FIRE DAMPERS

Model Series 1200 dampers with duct heights less than 8" (203) require a type 'B' sleeve enclosure (Models 1202/1202-3). Units less than 8" (203) in width only, or in both width and height, require a Type 'C' enclosure (Models 1203/1203-3).

WITH TYPE A SLEEVE: MODELS 1201/1201-3

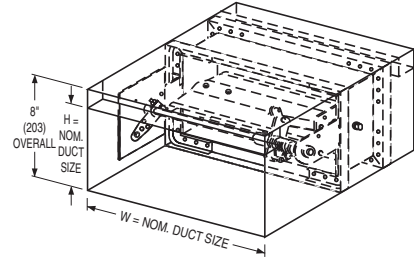
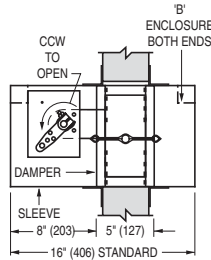


Wall Thickness	Minimum Sleeve Length
4 (102)	16 (406)
8 (203)	20 (508)
12 (305)	24 (610)
16 (406)	28 (711)

Standard factory sleeve (caulked to UL requirements) 16" long x 20 ga. (406 x 1.0).

Available up to 36" (914) dependent upon wall thickness and 10 through 20 ga. (3.5 - 1.0).

TYPE B SLEEVE ENCLOSURE: MODELS 1202/1202-3



Min. Duct Size: 8" x 4" (203 x 102)
(Overall damper height is 8" (203)).

Max. Duct Size: Single Section
Vertical mount: 36" x 7 1/2" (914 x 191).
Horizontal mount: 32" x 7 1/2" (813 x 191).

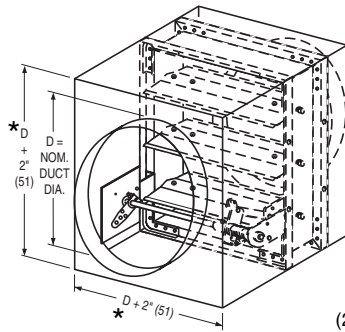
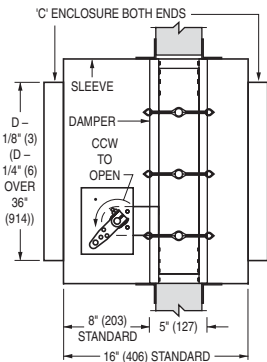
Multiple Section Assembly Model 1202

Vertical mount: 72" x 7 1/2" (1829 x 191).
Horizontal mount: 64" x 7 1/2" (1626 x 191).

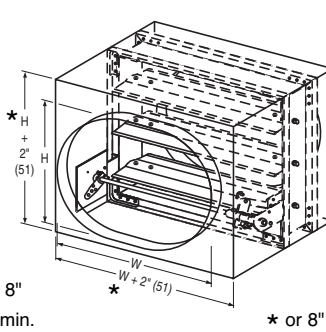
Multiple Section Assembly Model 1202-3

Multiple Section Assemblies are not permitted.

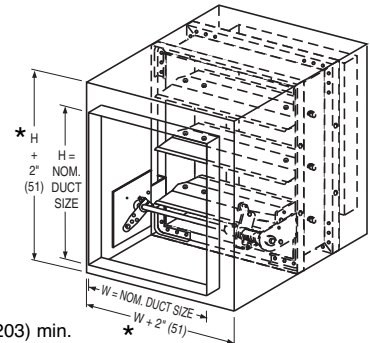
TYPE C SLEEVE ENCLOSURES: MODELS 1203/1203-3



STYLE CR : FOR ROUND DUCT



STYLE CO : FOR OVAL DUCT



STYLE CSR : FOR SQUARE OR RECTANGULAR DUCT

Min. Duct Size: Vertical or Horizontal mount:
4" (102) diameter.
(Overall damper size is 8" x 8" (203 x 203) min.).

Max. Duct Size: Single Section
Vertical mount: 34" (864) diameter.
Horizontal mount: 30" (762) diameter.

Multiple Section Assembly Model 1203

Vertical or
Horizontal mount: 46" (1168) diameter.

Multiple Section Assembly Model 1203-3

Multiple Section Assemblies are not permitted.

Min. Duct Size: Vertical or Horizontal mount:
4" x 4" (102 x 102).
(Overall damper size is 8" x 8" (203 x 203) min.).

Max. Duct Size: Single Section
Vertical mount: 34" x 46" (864 x 1168).
Horizontal mount: 30" x 46" (762 x 1168).

Multiple Section Assembly Model 1203

Vertical mount: 70" x 46" (1778 x 1168) or
34" x 94" (864 x 2388).

Horizontal mount: 62" x 46" (1575 x 1168) or
30" x 94" (762 x 2388).

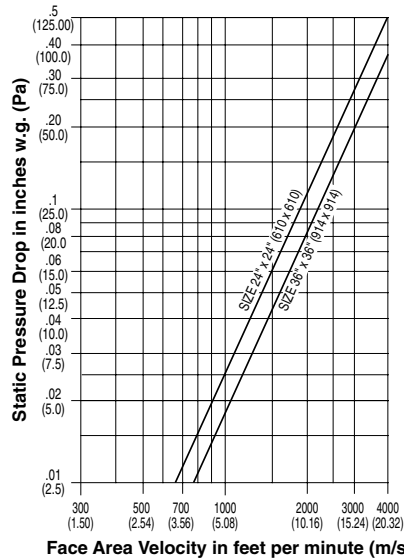
Multiple Section Assembly Model 1203-3

Multiple Section Assemblies are not permitted.

**MODELS: 1200/1201/1202/1203 (1 1/2 HOUR LABEL)
1200-3/1201-3/1202-3/1203-3 (3 HOUR LABEL)**

PERFORMANCE DATA:

PRESSURE DROP (damper fully open)



Imperial figures shown.
To convert to SI (metric) system:

Multiply:

CFM x .4719 = liters per second

inches w.g. x .2486 = kilopascals

fpm x .00508 = meters per second

cfm per sq. ft. x 5.08 = liters/second per sq. meter.

Tested per AMCA standard 500-D, Fig. 5.3.

VARIABLES / ACCESSORIES

VARIABLES:	CODE	DESCRIPTION
MOUNTING:	V H	Vertical Mount (wall) Horizontal Mount (floor)
CLOSURE DEVICE:	FL	Fusible Link
CLOSURE TEMP.:	165 212	165°F (74°C) 212°F (100°C)
SLEEVE LENGTH:	Specify Sleeve Length:	12" (305) to 36" (914)
SLEEVE GAUGE:	20 G 18 G 16 G 14 G 10 G	20 ga. (1.0 mm) 18 ga. (1.2 mm) 16 ga. (1.6 mm) 14 ga. (2.0 mm) 10 ga. (3.5 mm)
IF MODEL 1203 IS SELECTED, SPECIFY TYPE OF TRANSITION:	CR CO CSR	Round Type C Transitions Oval Type C Transitions Square/Rect. Type C Transitions
DAMPER LOCATION IN SLEEVE:	L8 L0	8" (204) from Sleeve End Specify Dimension from Sleeve End
OPTIONAL JAMB SEALS:	JSM	Flexible Metal Jamb Seals
ACCESSORIES:	CODE	DESCRIPTION
POSITION INDICATOR:	300	MLS-300 Switch Pack
SIDE MTG. PLATE:	SMP	Side Mounting Plate (required for mounting of MLS-300 without sleeve)
RETAINING ANGLES:	QS1 QS2	One "Quick Set" retaining angle Set of two "Quick Set" retaining angles
FLANGED SLEEVE: (MODELS 1201 AND 1201-3 ONLY)	TDF1 TDF2	TDF Flange on One End TDF Flange on Both Ends

E

MULTI-BLADE FIRE DAMPERS

HOW TO SPECIFY OR TO ORDER

MULTI-BLADE FIRE DAMPERS

MODELS: 1200/1201/1202/1203 (1 1/2 HOUR LABEL)
1200-3/1201-3/1202-3/1203-3 (3 HOUR LABEL)

HOW TO ORDER:

Select model number and size, then select from each variable as applicable. Choose accessories as desired. See previous page for description of variables and accessories.

MODEL	SIZE (W X H)	MOUNTING	CLOSURE DEVICE	CLOSURE TEMP.	SLEEVE LENGTH *	SLEEVE GAUGE *	TRANSITION TYPE (MODEL 1203 ONLY)	DAMPER LOCATION IN SLEEVE	JAMB SEALS (OPTIONAL)	ACCESSORIES
1200	ie: 36" x 24"	V	FL	165	SPECIFY LENGTH	20G	CR	L8	NONE	300
1201	or	H		212		18G	CO	L0	JSM	SMP
1202	18" dia.					16G	CSR			QS1
1203						14G				QS2
1200-3						10G				TDF1
1201-3										TDF2
1202-3										
1203-3										

Notes: 1. * Standard sleeve is 16" (406) long (suitable for 4" (102) thick wall) x 20 ga. (1.0).

SUGGESTED SPECIFICATION:

Provide and install, as shown on plans and/or schedules, multi-blade Dynamic Fire Dampers, as manufactured by Nailor Industries, meeting or exceeding the following criteria: Frame shall be constructed of 16 ga. (1.6) galvanized steel hat channel with mitered corners reinforced with die-formed corner gussets for strength. Blades shall be 14 ga. (2.0) equivalent galvanized steel formed double skin, airfoil design, on 5 1/2" (140) centers. Dampers shall be of opposed blade configuration with an interlocking blade design that provides complete flame and smoke seal under fire conditions at an elevated temperature of 2000°F (1093°C) when in closed position. Blade axles shall be plated steel, double bolted at each end of blade to provide positive locking connection. Hex or square friction-fit, or press-fit axles are not acceptable. Bearings shall be self-lubricating oilite bronze type. Blade linkage shall be zero-maintenance, concealed in frame, out of airstream.

Fire dampers shall meet the requirements of NFPA 90A and shall be manufactured, tested and labeled in accordance with UL 555 Safety Standard for Fire Dampers – Sixth Edition, June 1999, including Dynamic Closure Test. Dampers shall be classified for dynamic closure against an airflow velocity of 2000 fpm (10.16 m/s) at 4" w.g. (1 kPa) static pressure differential (across closed damper).

Each fire damper shall bear a UL 1 1/2 hour or 3 hour (**specifier select one**) fire resistance rating label, in addition to label verifying the airflow and closure pressure ratings as established by the Dynamic Closure Test. Each fire damper shall also be marked with the words "For use in dynamic systems". Dampers marked "For use in static systems only" are not acceptable.

Each fire damper shall be complete with a (**specifier select one**) 165°F (74°C) or 212°F (100°C) UL Listed fusible link that will cause the damper to close and lock in closed position by means of an over center/knee lock linkage for assured closure. Fire dampers shall each include a steel sleeve of appropriate length/gauge as field verified by contractor, and retaining angles, supplied by damper manufacturer to ensure proper installation in accordance with damper manufacturer's instructions. Each damper shall be supplied with an internal manual quadrant(s) for setting and locking of blades in desired position. Contractor shall provide and install an access door at each fire damper, of appropriate size to allow for inspection, testing and fusible link replacement. Information submitted for approval shall include independent pressure drop data and confirmation of UL qualifications in addition to manufacturer's installation instructions. Each shipment of fire dampers shall include same installation instructions. Dynamic rated fire dampers shall be Nailor Industries Model Series 1200 (1 1/2 hour label) or Model Series 1200-3 (3 hour label), as indicated on plans.

MULTI-BLADE FIRE DAMPERS