

- BACKDRAFT DAMPER
- EXTRUDED ALUMINUM
- HIGH PERFORMANCE
- HEAVY DUTY

MODEL: 1380



Model 1380

**B**

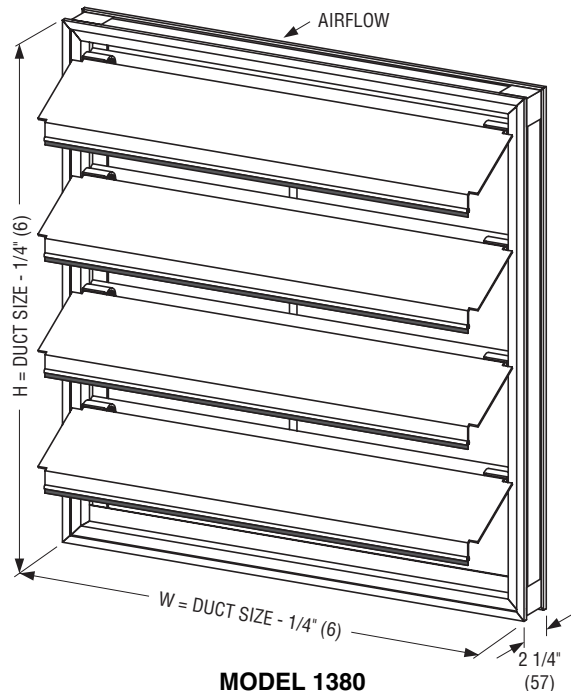
**BACKDRAFT DAMPERS**

Model 1380 is a high performance gravity operated backdraft damper for use in medium to heavy duty commercial and light industrial HVAC applications. Backdraft dampers are used in systems to pass airflow in one direction and to prevent airflow in the opposite direction.

Corrosion resistant extruded aluminum construction highlights the model's features which include a reinforced mitered corner frame that resists racking, and aerodynamic blades that overlap the jambs for maximum weather protection. Extruded PVC blade seals provide quiet closure as well as extra weather protection. Blade linkage is mounted out of view on the rear of the blades and provides smooth operation at system velocities of up to 2500 fpm.

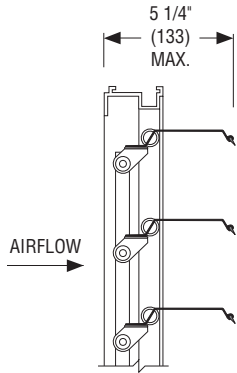
**STANDARD CONSTRUCTION:**

- FRAME:** 2 1/4" (57) duct mount type, .125" (3.2) nominal wall thickness type 6063-T5 extruded aluminum. Corners are mitered.
- BLADES:** .070" (1.8) nominal wall thickness type 6063-T5 extruded aluminum on 5 1/2" (140) centers.
- LINKAGE:** Center mounted on rear of blades.
- BEARINGS:** Synthetic type.
- BLADE SEALS:** Extruded PVC.
- FINISH:** Mill.
- MINIMUM SIZE:** 6" x 6" (152 x 152).
- MAXIMUM SIZE:** Single section 48" x 52" (1219 x 1321) single. Multiple section – unlimited.
- MAXIMUM TEMPERATURE:** 200°F (93°C).
- MAXIMUM BACK PRESSURE:** 4 to 16 in. w.g. (see page B67).
- MAX. SYSTEM VELOCITY:** 2500 fpm (3500 fpm maximum spot velocity).

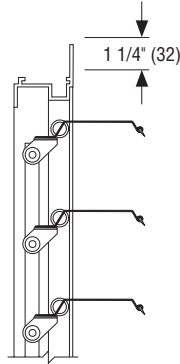


**MODEL 1380**  
(VM Vertical Mount standard)

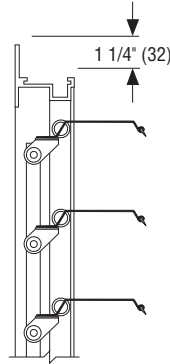
## FRAME OPTIONS:



**Channel Frame  
(Duct Mount)  
(Standard CF)**

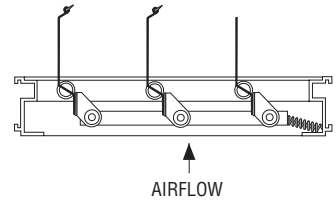


**Front Flange  
(on discharge side)  
(Option FF)**



**Rear Flange  
(on intake side)  
(Option FR)**

## MOUNTING OPTION:



**Horizontal Mount – Airflow up  
(Option HMU)**

## MODEL: 1380

### PERFORMANCE LIMITATIONS AND LEAKAGE DATA:

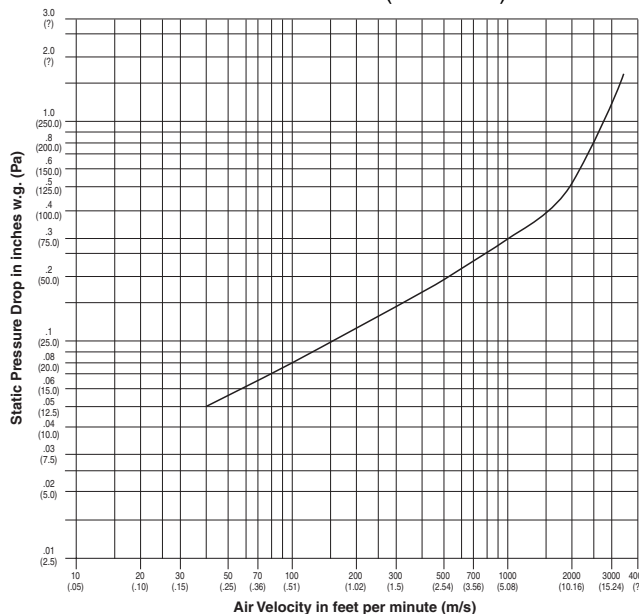
Damper Width	Maximum Back Pressure	Maximum System Velocity	Operational Data		Leakage*	
			Blades Begin Opening	Blades Fully Open	% of Maximum Flow	CFM per Sq. Ft.
48" (1219)	4.0" w.g.	2500 fpm	.12" w.g. (29.8 Pa)	.20" w.g. (49.7 Pa)	0.60	15
36" (914)	8.0" w.g.	2500 fpm			0.60	15
24" (610)	12.0" w.g.	2500 fpm			0.72	18
12" (305)	16.0" w.g.	2500 fpm			1.00	25

Pressure and velocity limitations shown are guidelines for design purposes. Although ratings are on the conservative side, contact Nailor for requirements beyond limitations shown.

\*Leakage data is based upon a pressure differential of 1 in. w.g., tested in accordance with AMCA Standard 500-D.

## PRESSURE DROP:

SIZE: 36" x 36" (914 x 914)



Tested per AMCA Standard 500-D using test set-up figure 5.5, plenum mounted.

## MODEL SERIES: 1370, 1380, 1370CB AND 1380CB

### AVAILABLE OPTIONS/ACCESSORIES:

The following construction options and accessories are available on Models 1370, 1380, 1370CB & 1380CB.

	CODE	DESCRIPTION
<b>MOUNTING:</b>	VM	Vertical Mount (standard)
	HMU	Horizontal Mount – Airflow Up
	HMD (1370CB and 1380CB only)	Horizontal Mount – Airflow Down
<b>FRAME TYPE:</b>	CF	Channel Frame (standard)
	FF/FFB	Front Flange/Front Flange with Bolt Holes
	FR/FRB	Rear Flange/Rear Flange with Bolt Holes
<b>FINISH:</b>	MI	Mill Finish
<b>SCREEN:</b> (1370 and 1380 only)	AIS	Aluminum Insect Screen
	GBS	Galvanized Bird Screen

## HOW TO ORDER OR TO SPECIFY

### HOW TO ORDER:

Standard construction is shown in highlighted box. Option codes are listed below. See above for description of options.

MODEL	SIZE (W X H)	MOUNTING*	FRAME TYPE	FINISH	SCREEN**
1370	i.e. 24 x 20	VM	CF	MI	—
1380		HMU	FF		AIS
1370CB		HMD	FFB		GBS
1380CB			FR		
			FRB		

- Notes: 1. \* Mounting type HMD is not available on Models 1370 and 1380.  
2. \*\* Screen options are not available on Models 1370CB and 1380CB.

#### MODEL 1370:

##### SUGGESTED SPECIFICATION:

Provide and install, as shown on plans and/or schedules, backdraft dampers meeting or exceeding the following criteria: Frame shall be constructed of .090" (2.3) type 6063-T5 extruded aluminum with welded mitered corners and concealed reinforcing brackets. Blades shall be .050" (1.3) type 6063-T5 extruded aluminum with extruded PVC blade seals mechanically fastened to blade edge. Adhesive type seals are not acceptable. Bearings shall be long life synthetic type. Blade linkage shall be concealed in frame for low pressure drop.

Standard of acceptance: Nailor Industries Model 1370.

#### MODEL 1380:

##### SUGGESTED SPECIFICATION:

Provide and install, as shown on plans and/or schedules, backdraft dampers meeting or exceeding the following criteria: Frame shall be constructed of .125" (3.2) type 6063-T5 extruded aluminum with welded mitered corners and concealed reinforcing brackets. Blades shall be .070" (1.8) type 6063-T5 extruded aluminum with extruded PVC blade seals mechanically fastened to blade edge. Adhesive type seals are not acceptable. Bearings shall be long life synthetic type. Blade linkage shall be plated steel tie bar with stainless steel pivot pins.

Standard of acceptance: Nailor Industries Model 1380.

**MODEL 1370CB:****SUGGESTED SPECIFICATION:**

Provide and install, as shown on plans and/or schedules, counterbalanced backdraft dampers meeting or exceeding the following criteria: Frame shall be constructed of .090" (2.3) type 6063-T5 extruded aluminum with welded mitered corners and concealed reinforcing brackets. Blades shall be .050" (1.3) type 6063-T5 extruded aluminum with extruded PVC blade seals mechanically fastened to blade edge. Adhesive type seals are not acceptable. Bearings shall be long life synthetic type. Blade linkage shall be concealed in frame. Counterbalances shall be of plated steel, mounted on rear of blades (in the airstream) and shall be field adjustable.

Standard of acceptance: Nailor Industries Model 1370CB.

**MODEL 1380CB:****SUGGESTED SPECIFICATION:**

Provide and install, as shown on plans and/or schedules, counterbalanced backdraft dampers meeting or exceeding the following criteria: Frame shall be constructed of .125" (3.2) type 6063-T5 extruded aluminum with welded mitered corners and concealed reinforcing brackets. Blades shall be .070" (1.8) type 6063-T5 extruded aluminum with extruded PVC blade seals mechanically fastened to blade edge. Adhesive type seals are not acceptable. Bearings shall be long life synthetic type. Blade linkage shall be plated steel tie bar with stainless steel pivot pins. Counterbalances shall be of plated steel, mounted on rear of blades (in the airstream) and shall be field adjustable.

Standard of acceptance: Nailor Industries Model 1380CB.