

## Application

The GM-30 series is a vertical mounted backdraft damper that is designed to allow horizontal airflow and prevent reverse airflow. The damper is opened by air pressure differential with assistance from fully adjustable counterbalance weights to minimize pressure loss. The damper is closed by gravity.

## Ratings

### Pressure

Up to 10 in. wg (2.5 kPa) differential pressure

### Velocity

3,500 fpm (18 m/s)

### Temperature

180°F (82°C)

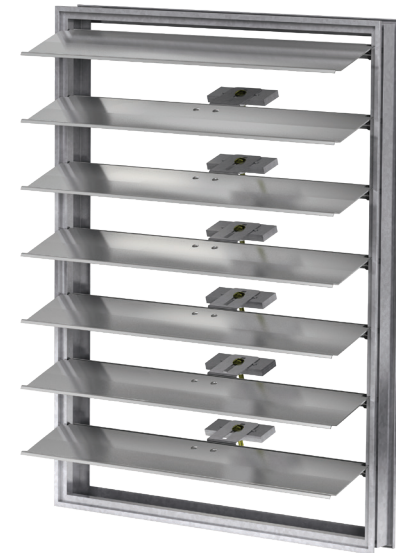
## Construction

	Standard
<b>Frame Material</b>	Galvanized Steel
<b>Frame Thickness</b>	18 ga. (1.3mm)
<b>Blade Material</b>	6063T5 Extruded Aluminum
<b>Blade Thickness</b>	.070 in. (1.8mm)
<b>Axle</b>	½ in. (13mm) nylon
<b>Axle Linkage</b>	⅛ in. (3mm) aluminum
<b>Bearings</b>	Synthetic polycarbonate sleeve type
<b>Blade Seals</b>	Vinyl

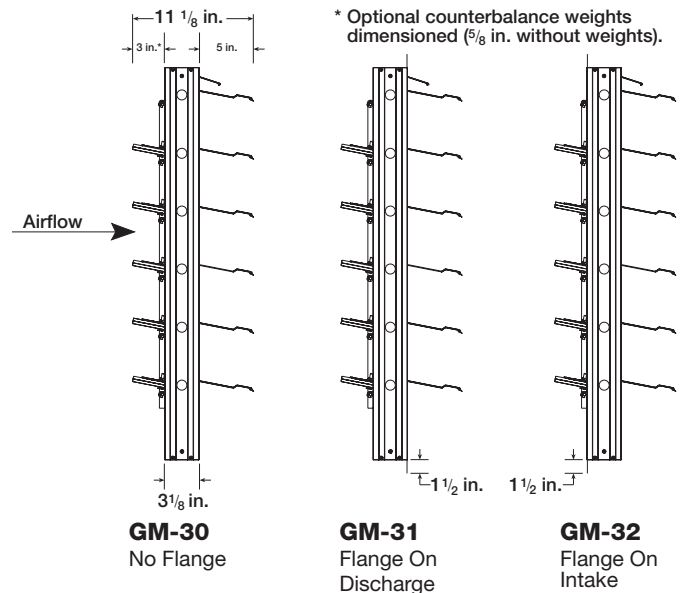
W x H	Minimum Size	Maximum Single	Maximum Multi
	With Weights	Section Size	Section Size
<b>Inches</b>	11 x 11	48 x 74	96 x 74
<b>mm</b>	279 x 279	1219 x 1880	2438 x 1880

## Options

- 1½ in. (38mm) flange on discharge: GM-31
- 1½ in. (38mm) flange on intake: GM-32



\*W & H dimensions furnished approximately ⅛ in. (3mm) under size.



Counterbalance weights may require field adjustment. Instructions are available at [www.greenheck.com](http://www.greenheck.com).

## Performance Data

### Test Information

- Air leakage is based on operation between 32°F and 120°F (0°C and 48°C)
- Tests for air leakage were conducted in accordance with ANSI/AMCA Standard 500-D Figure 5.5, in the intake direction
- Air performance testing conducted in accordance with ANSI/AMCA Standard 500-D, Figure 5.5

### Air Leakage

Model GM-30 series dampers with a width and height 24 in. (610mm) or greater leak a maximum of:

- 8.9 cfm/ft<sup>2</sup> or less at 1.0 inches w.g.

Model GM-30 series dampers with a width or height less than 24 in. (610mm) leak a maximum of:

- 35 cfm/ft<sup>2</sup> or less at 1.0 inches w.g.

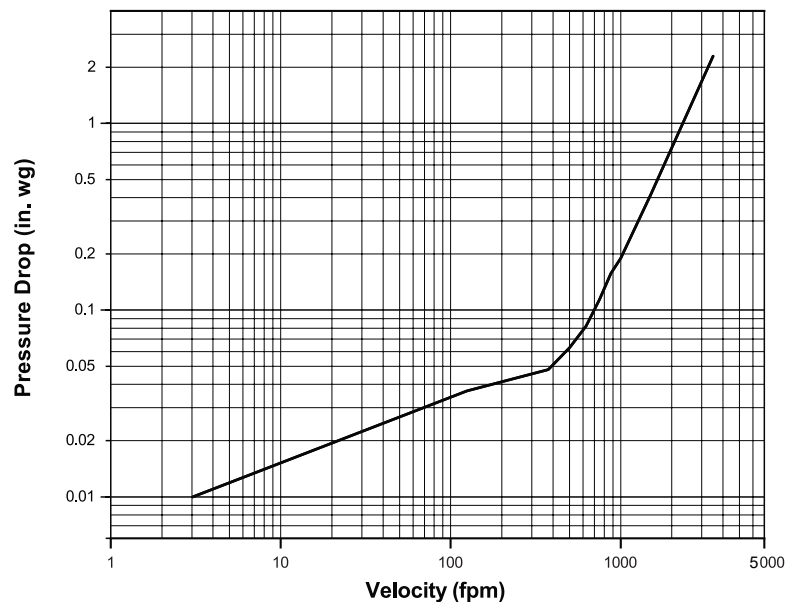
### Air Performance

Performance data results from testing a 24 in. x 24 in. damper in accordance with AMCA Standard 500-D using Figure 5.5. All data has been corrected to represent standard air at 0.075 lb/ft<sup>3</sup> (1.201 kg/m<sup>3</sup>).

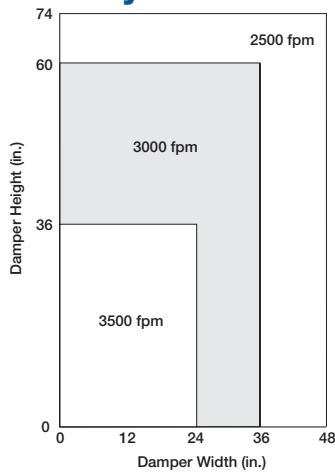
#### Pressure Drop

24 in. x 24 in. Damper  
(610mm x 610mm)

VELOCITY VS. PRESSURE DROP



### Velocity Limitations

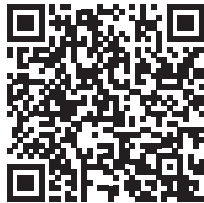


Operational Data (AMCA Figure 5.3)	ΔP in. wg (Pa)	
	Without Weights	With Weights
Blades Start to Open	0.03 (7.5)	0.01 (2.5)
Blades Fully Open	0.25 (62)	0.055 (13.7)

Operational Data (AMCA Figure 5.5)	ΔP in. wg (Pa)	
	Without Weights	With Weights
Blades Start to Open	0.025 (6.2)	0.01 (3)
Blades Fully Open	0.32 (8)	0.08 (20)

### Document Links

[Installation Instructions](#)



[Backdraft Catalog](#)



[Damper Product Selection Guide](#)



[Damper Warranty](#)

