



# **GM-30 Series**

Backdraft Damper Vertical Mount/Horizontal Airflow

## **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**

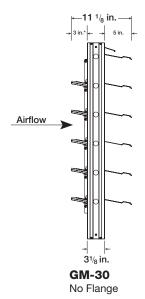
180°F (82°C)

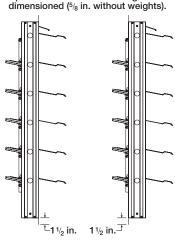
\*W & H dimensions furnished approximately 1/8 in. (3mm) under size.

#### Construction

	Standard	
Frame Material	Galvanized Steel	
Frame Thickness	18 ga. (1.3mm)	
Blade Material	6063T5 Extruded Aluminum	
Blade Thickness	.070 in. (1.8mm)	
Axle	½ in. (13mm) nylon	
Axle Linkage	⅓ in. (3mm) aluminum	
Bearings	Synthetic polycarbonate sleeve type	
Blade Seals	Vinyl	

WxH	Minimum Size With Weights	Maximum Single Section Size	Maximum Multi Section Size
Inches	11 x 11	48 x 74	96 x 74
mm	279 x 279	1219 x 1880	2438 x 1880





\* Optional counterbalance weights

**GM-31** Flange On Discharge

**GM-32** Flange On Intake

## **Options**

- 11/2 in. (38mm) flange on discharge: GM-31
- $\bullet$  1% in. (38mm) flange on intake: GM-32

Counterbalance weights may require field adjustment. Instructions are available at www.greenheck.com.

#### **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.

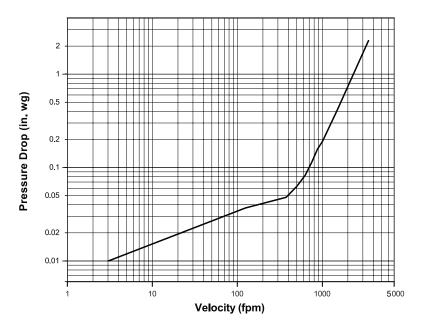
#### **Air Performance**

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>).

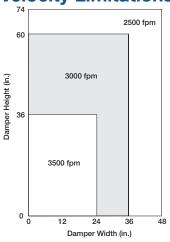
## **Pressure Drop**

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

#### **VELOCITY VS. PRESSURE DROP**



# **Velocity Limitations**



Operational Data (AMCA Figure 5.2)	ΔP in. wg (Pa)	
Operational Data (AMCA Figure 5.3)	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)		
Operational Data (AMCA Figure 5.5)	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** 



**CATALOG** 



**SELECTION GUIDE** 



**WARRANTY**