



Model MBD-15

Manual Balancing Damper

Multi-Blade

Application

Model MBD-15 is a manual balancing damper designed to regulate the flow of air in a HVAC system. They are not intended to be used in applications as a positive shut off or for automatic control. The design incorporates heavy gauge galvanized steel construction for durability and longevity. MBD-15 meets SMACNA's recommended construction requirements for manual balancing dampers.

Ratings

Pressure: Up to 4 in. wg (1 kPa) - pressure differential

Velocity: 2,000 fpm (10.2 m/s)

Temperature: 180°F (82°C)



*W & H dimension furnished approximately 1/4 in. (6mm) undersize.

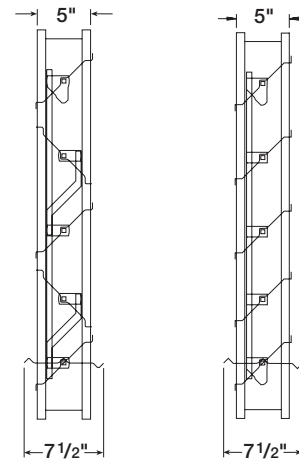
Construction	Standard	Optional
Frame Material	Galvanized Steel	-
Frame Thickness	16 ga. (1.5mm)	-
Frame Type	5 in. x 1 in. (127mm x 25mm) Channel	-
Blade Material	Galvanized steel	-
Blade Thickness	16 ga. (1.5mm)	-
Blade Type	3V	-
Blade Operation	Opposed	Parallel
Axle Bearings	Synthetic (acetal) sleeve	-
Linkage Material	Plated Steel	-
Operator	1/2 in. (13mm) Locking manual quadrant with 1 1/2 in. (38mm) standoff bracket for external insulation	-
Extension Pin	1/2 in. (13mm) Diagonal glass reinforced polymer extends 3 1/2 in. (89mm) beyond frame	1/2 in. (38mm) Steel extension pin

Features

- Linkage concealed in jamb

Options

- 2 in. (51mm) stand off bracket
- Galvanized steel sleeves
- Flanges



Opposed Blade

Parallel Blade

Size Limitations

W x H	Minimum Size*	Maximum Size	
		Single Section	Multiple Section
Inches	6 x 6	48 x 60	96 x 96
mm	152 x 152	1219 x 1524	2438 x 2438

* Note: If the height is less than 9 in. (228mm) or less, the damper will have one blade.

Performance Data

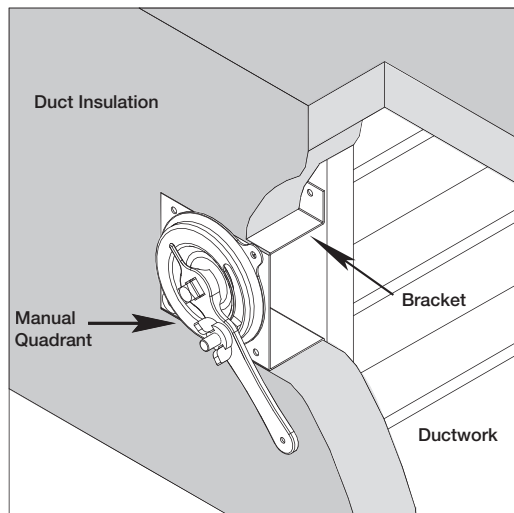
Maximum recommended system pressure and velocity ratings are conservative to prevent misapplication. Dampers are structurally capable of withstanding higher limits, however it is recommended that Greenheck be contacted for an engineering evaluation before exceeding these limits.

Temperature: Applications above 180°F (82°C) may require special considerations.

Damper Width in. (mm)	Maximum System Pressure in. wg (kPa)	Maximum System Velocity fpm (m/s)
48 (1219)	2 (.5)	2000 (10.2)
36 (914)	2.5 (.63)	
24 (610)	3 (.75)	
12 (305)	4 (1)	

Stand off Bracket

1½ in. (38mm) standoff bracket is standard. It is used to extend the manual quadrant away from the ductwork to accommodate external insulation.



Specifications

Manual balancing dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules.

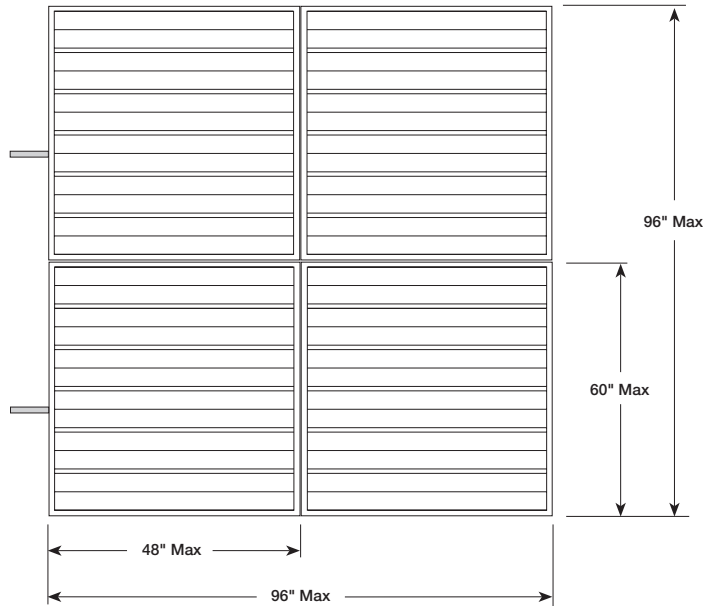
Dampers shall consist of: 16 ga. (1.5mm) galvanized steel hat channel frame with 5 in. (127mm) depth; triple V type blades fabricated from 16 ga. (1.5mm) galvanized steel; 1/2 in. (12mm) dia. plated steel axles; external (out of the airstream) blade-to-blade linkage.

Damper manufacturer's printed application and performance data including pressure, velocity, and

Maximum Size

Dampers over 48 in. (1219mm) wide and/or 60 in. (1524mm) high are shipped as 2 equal sections (requiring field assembly).

For dampers larger than 96 in. W x 96 in. H (2438mm x 2438mm), use Greenheck model VCD-20 series.



temperature limitations shall be submitted for approval showing damper suitable for pressures up to 4 in. wg (1 kPa), velocities up to 2,000 fpm (10.2 m/s) and temperatures up to 180°F (82°C). Temperature and ratings to be in accordance with AMCA Standard 500-D.

Basis of design is model MBD-15.