

### Application and Design

Model MBD-M15 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. Design incorporates heavy gauge galvanized steel construction for durability and longevity. MBD-M15 meets SMACNA's recommended construction requirements for manual balancing dampers.

### Ratings

**Pressure:** .5 kPa - 1 kPa pressure differential.

**Velocity:** 10.16 m/s

**Temperature:** 82°C

### Standard Construction

**Frame:** 127 mm x 25mm 1.5mm galvanized steel hat channel with reinforced corners.

**Blades:** 1.5mm galvanized steel reinforced with three longitudinal structurally designed vee's.

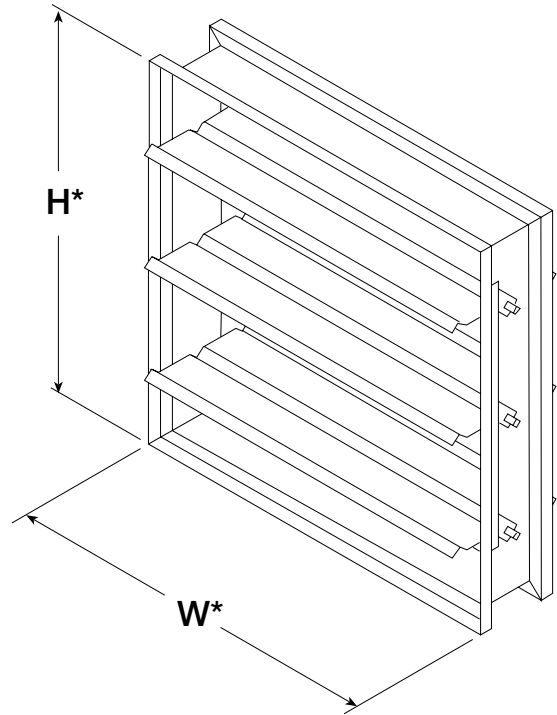
**Linkage:** Concealed in jamb.

**Axles:** 13mm dia. plated steel.

**Bearings:** Synthetic (acetal) sleeve type.

**Control Shaft:** 13mm dia. plated steel extends 152mm beyond frame. Comes with 38mm standoff bracket for external insulation (see back page).

**Operator:** 13mm dia. locking manual quadrant.



\*W&H dimension furnished approximately 6mm undersize.

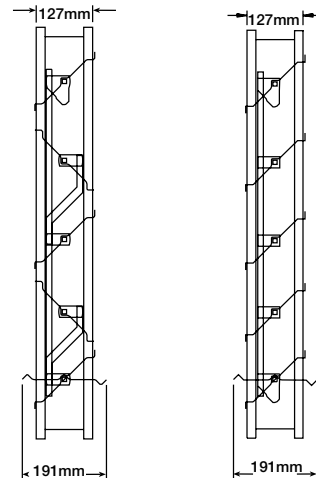
### Size Limitations

**Minimum Size:** One blade 203mm W x 152mm H  
Two blades 203mm W x 254mm H

**Maximum Size:** Single section 1219mm W x 1524mm H  
Multiple section 2438mm W x 2438mm H

### Options (at additional cost)

- Oil impregnated bronze bearings.



Opposed Blade

Parallel Blade

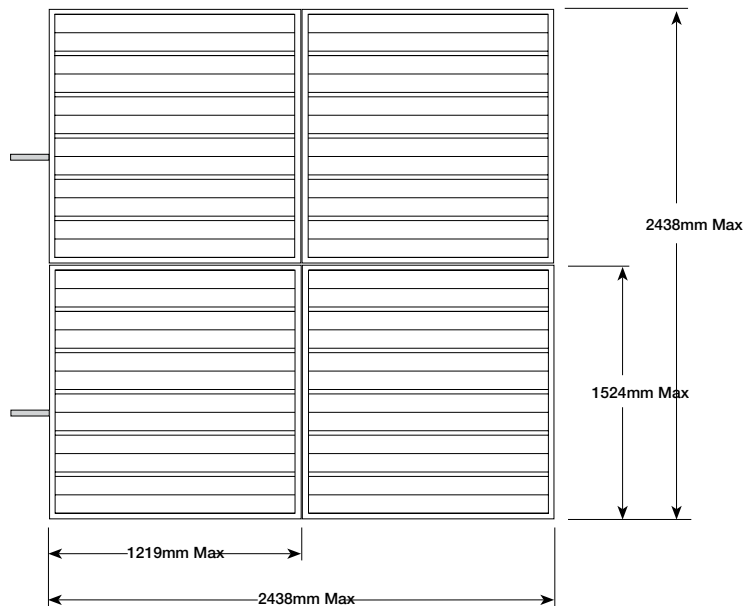
## Performance Data

Damper Width	Maximum System Pressure	Maximum System Velocity
1219mm	498 Pa	10.16m/s
914mm	623 Pa	10.16m/s
610mm	747 Pa	10.16m/s
305mm	996 Pa	10.16m/s

NOTE: 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.

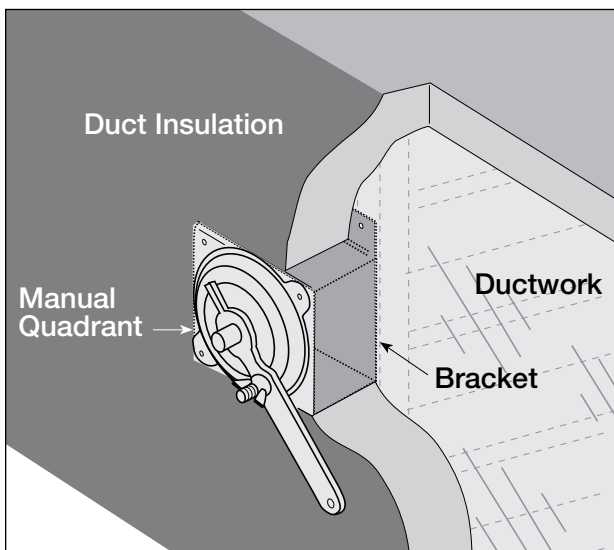
Temperature: Applications above 82°C may require special considerations.

## Maximum Size and Installation Information



Maximum size for a MBD-M15 is 2438mm W x 2438mm H. Dampers over 1219mm wide and/or 1524mm high are shipped as 2 equal sections (requiring field assembly). For dampers larger than 2438mm x 2438mm, use Greenheck model VCD-M20 series.

## Standoff Bracket



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: a 1.006mm galvanized steel hat channel frame with 127mm depth; triple V type blades fabricated from 1.5mm galvanized steel; 13mm 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 temperature limitations shall be submitted for approval showing damper suitable for pressures to 996 Pa, velocities to 10.16 m/s and temperatures to 82°C. Testing and ratings to be in accordance with AMCA Standard 500. Basis of design is Greenheck model MBD-M15.

NOTE: Temperatures in excess of 82°C require special consideration.