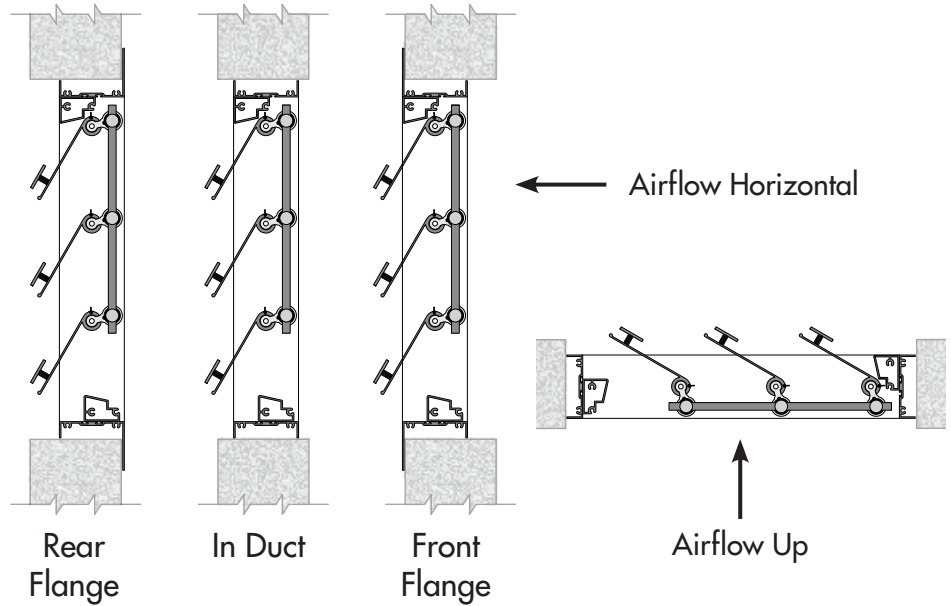
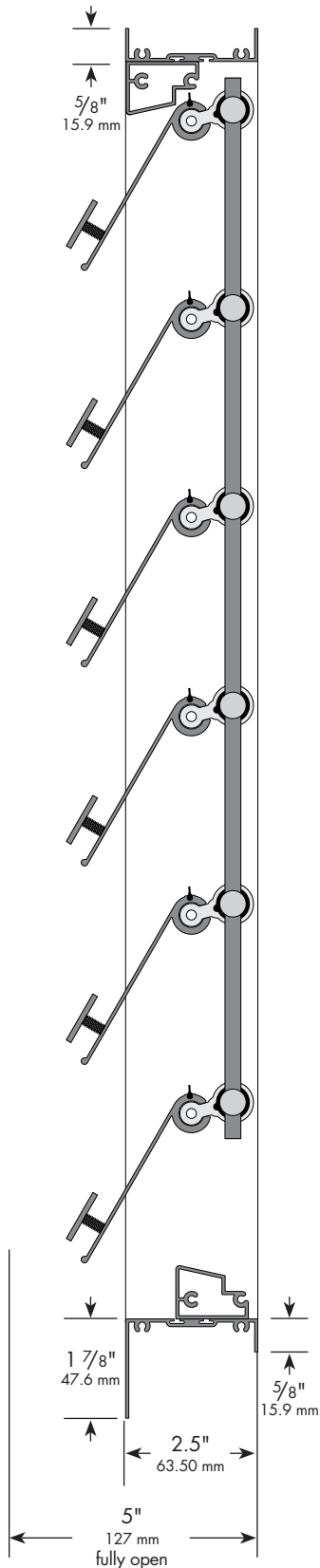


# SPECIFICATIONS

## S E R I E S 7 0 0 0 W T WEIGHTED BACK DRAFT DAMPER



- Extruded aluminum (6063-T5) weighted back draft damper frame is not less than .060" (1.52 mm) in thickness. Frame is 2.5" (63.5 mm) deep.
- Blades are extruded aluminum (6063-T5) profiles and not less than .060" (1.52 mm) in thickness.
- Each blade is manufactured with a mounting hole to receive a front-mounted mechanical weight. Weights are supplied, so that the required resistance to the opening of the blade against air flow can be increased.  
(To accelerate opening of blades, refer to the Series 7000 CW Specifications. The Series 7000 CW is an adjustable, counterweighted back draft damper designed to allow opening at lower pressures and air flow velocities.)
- Blade and side seals are extruded silicone. Seals are secured in integral slots within the aluminum extrusions. Blade and frame seals are mechanically fastened to eliminate shrinkage and movement over the life of the back draft damper.
- Bearing system is composed of 1/2" (12.7 mm) aluminum pivot points rotating on Celcon bearings.
- Linkage system consists of hard alloy aluminum (6005-T6) crank arms fastened to aluminum pivot rods and doubly secured within channel running along top of blade. Large diameter 1/32" (8.73 mm) hard alloy aluminum (6005-T6C) linkage rod connects the crank arms by means of a zinc-plated steel trunnion.
- Cup-point trunnion screw allows for a penetrating grip of the linkage rod.  
(Cup-point trunnion set screw creates a compression hard spot where it secures to the linkage rod.)
- Trunnions are zinc-plated to provide a hard, smooth and long-lasting rotating surface.
- Weighted back draft dampers are designed for operation in temperatures ranging between -40°F (-40°C) and 212°F (100°C).
- Air leakage through a 24" x 24" (610 mm x 610 mm) weighted back draft damper does not exceed 4.32 cfm/ft² (21.95 l/s/m²) against 1 in. w.g. (0.25 kPa) differential static pressure at standard air.
- Weighted back draft dampers are made to size required.  
Minimum section size: 6" wide x 6" high (153 mm x 153 mm)  
Maximum section size: 36" wide x 48.625" high (915 mm x 1235 mm)  
Weighted back draft dampers with dimensions greater than maximum section size will be manufactured in multiple sections. Multiple sections are not interlinked or connected. To install, each section must be individually fastened to a structural frame prepared on site.
- Available in three mounting types: Rear Flange, In Duct, or Front Flange.

### Note:

- Suitable for operation in breathable air environments within stated temperature range.
- For air flow down mounting, specify TAMCO Series 7000 CW Counterweighted Back Draft Damper.
- 1/4" (6.4 mm) is deducted from the opening dimensions to allow for clearance on mounting types Rear Flange, In Duct, Front Flange.
- 1/4" (6.4 mm) clearance deducted from Rear Flange and Front Flange mounting types affects effective flange.

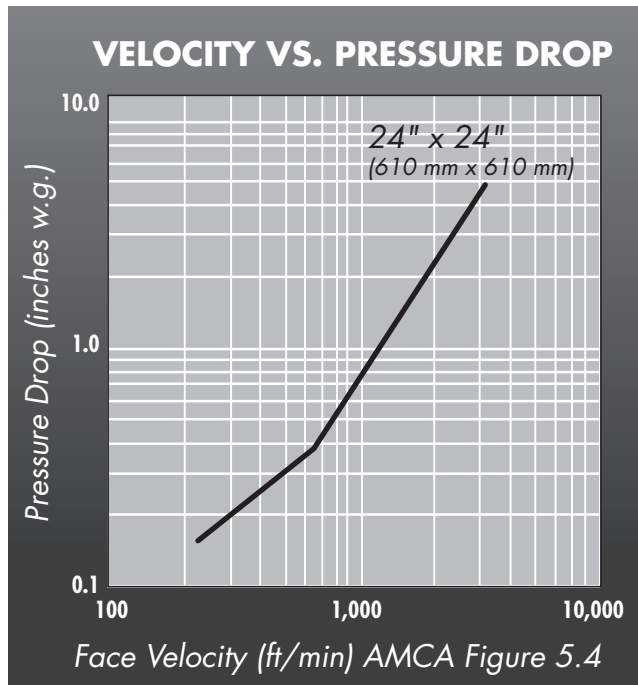
### For additional information, refer to:

- Series 7000 Specification Sheet
- Series 7000 CW Specification Sheet
- TAMCO Back Draft Damper Installation Guidelines

# PERFORMANCE DATA

## S E R I E S 7 0 0 0 W T WEIGHTED BACK DRAFT DAMPER

### PRESSURE DROP



Air Performance testing was conducted in accordance with ANSI/AMCA Standard 500-D, Figure 5.4. Data are based on a vertically mounted damper.

A 24" x 24" (610 mm x 610 mm) TAMCO Series 7000 WT Weighted Back Draft Damper was tested.

LEAKAGE RATE	
Static Pressure w.g. (kPa)	24" x 24" (610 mm x 610 mm) cfm/sq. ft (l/s/m <sup>2</sup> )
0.5" (0.124 kPa)	3.74 (19.00)
1.0" (0.249 kPa)	4.32 (21.95)
2.0" (0.498 kPa)	5.36 (27.23)
4" (1.00 kPa)	7.80 (39.62)

Leakage testing was conducted in accordance with ANSI/AMCA Standard 500-D, Figure 5.4. Data are based on a vertically mounted damper, with gravity used as the only closing torque. Air leakage is based on operation between 32°F (0°C) and 120°F (49°C) and converted to standard air density.

A 24" x 24" (610 mm x 610 mm) TAMCO Series 7000 WT Weighted Back Draft Damper was tested.

### OPERATIONAL DATA

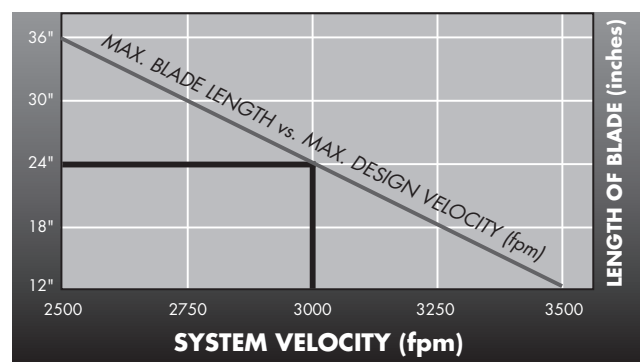
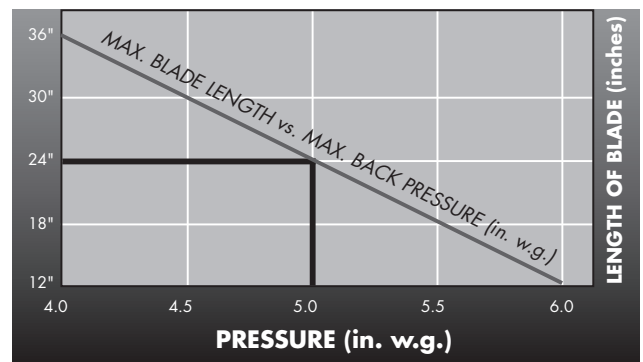
#### Blades begin to open

Velocity - fpm (m/s)	Δ P in. w.g. (kPa)
20 (0.10)	0.04 (0.01)

#### Static Pressure and Face Velocity to Open Damper

Weights are fully adjustable so that the required resistance to the opening of the blade against air flow can be achieved.

### BLADE LIMITATIONS



Series 7000 WT Weighted Back Draft Dampers that exceed the maximum design pressure or velocity due to blade length may be used by reducing the width of the back draft damper section(s) and increasing the number of sections per damper to maintain a blade length compatible with the stated system pressure or velocity.

Example: 1 section Series 7000 WT Weighted Back Draft Damper of 36" w x 36" h (915 mm x 915 mm) @ 3000 fpm would need to be built in 2 sections of 18" w x 36" h (458 mm x 915 mm).