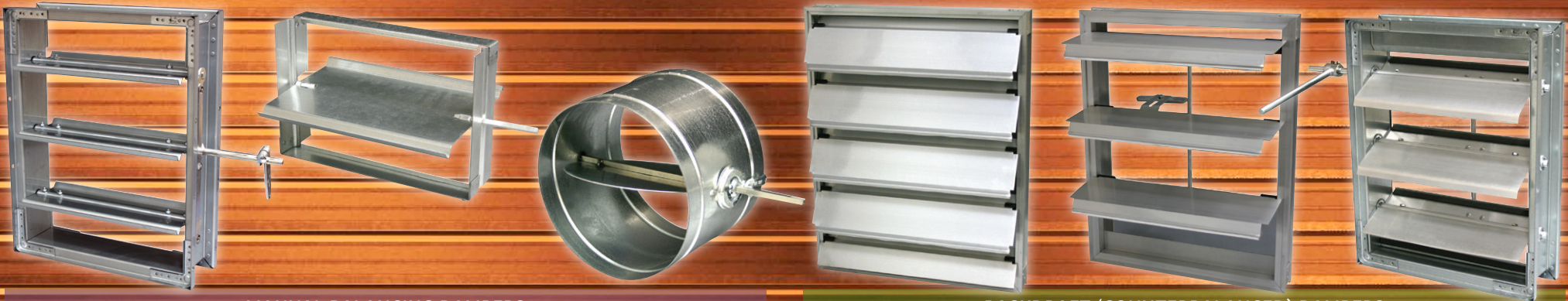


# BALANCING & BACKDRAFT DAMPERS



## MANUAL BALANCING DAMPERS

## BACKDRAFT (COUNTERBALANCED) DAMPERS

MODELS:  
**1810, 1820**

MODEL:  
**1870**

MODEL:  
**1890**

MODEL:  
**1370(CB)**

MODEL:  
**1380(CB)**

MODEL:  
**1390CB**

### Steel Vee Blade

Min. Single Section	Single Blade (Parallel): 6" x 4" (152 x 102), Two Blades (Parallel or Opposed): 8" x 10" (203 x 254)
Max. Single Section	48" x 72" (1219 x 1829)
Max. Multiple Section	96" x 144" (2438 x 3658)

- Temperature Range:**  
-50°F – +250°F (-45°C – +121°C)
- Reliable economical design for manual balancing applications
  - Exceeds SMACNA design standards
  - Suitable for many low to medium velocity and pressure commercial HVAC systems
  - Maximum face velocity of 2000 fpm (10 m/s) and maximum system pressure of 2.5 in. w.g. (625 Pa)
  - Optional S. S. construction, round/oval duct transitions, and hand-locking quadrants available

### Single Blade

Min. Single Section	4" x 4" (102 x 102)
Max. Single Section	36" x 12" (914 x 305)

- Temperature Range:**  
-50°F – +180°F (-45°C – +82°C)
- Sturdy and economically designed for manual balancing applications within rectangular ductwork
  - Exceeds SMACNA design standards
  - Easily installed saving time and installation costs
  - Maximum face velocity of 1500 fpm (7.6 m/s) and maximum system pressure of 2 in. w.g. (500 Pa)
  - Optional hand-locking quadrant available

### True Round

Min. Single Section	4" (102) Dia.
Max. Single Section	20" (508) Dia.

- Available in 1" (25) increments**  
**Temperature Range:**  
-50°F – +250°F (-45°C – +121°C)
- Easily installed economical steel butterfly damper
  - Suitable for low velocity and pressure commercial HVAC systems
  - Corrosion resistant ideal for spiral ductwork
  - Maximum face velocity of 2000 fpm (10 m/s) and maximum system pressure of 2 in. w.g. (500 Pa)
  - A variety of options available to meet your requirements and applications

### Medium Duty

Min. Single Section	6" x 6" (152 x 152)
Max. Single Section	40" x 48" (1016 x 1219)
Max. Multiple Section	Unlimited

- Maximum Temperature: +200°F (+93°C)**
- Designed for light to medium duty commercial HVAC applications
  - Suitable for fan discharge and relief air functions where weather protection is needed
  - Construction provides resistance to racking, maximum weather protection, quiet operation, and resistance to corrosion
  - Maximum system velocity and back pressure of 1500 fpm (7.6 m/s) @6 in. w.g. (1.5 kPa)
  - Optional front/rear flange frame, mounting orientations, aluminum insect screen, bird screen, and other options available
  - Use Model 1370CB for counterbalance

### Heavy Duty

Min. Single Section <sup>1</sup>	6" x 6" (152 x 152)
Max. Single Section	48" x 52" (1219 x 1321)
Max. Multiple Section	Unlimited

- Maximum Temperature: +200°F (+93°C)**
- Designed for use in medium to heavy duty commercial or light duty industrial air intake applications
  - Suitable for fan discharge and relief air functions where weather protection is needed
  - Construction provides resistance to racking, maximum weather protection, quiet operation, and resistant to corrosion
  - Maximum system velocity and back pressure of 2500 fpm (12.7 m/s) @16 in. w.g. (4 kPa)
  - Optional front/rear flange frame, mounting orientations, aluminum insect screen, bird screen, and other options available
  - Use Model 1380CB for counterbalance

### Heavy Duty

Min. Single Section	6" x 10" (152 x 254)
Max. Single Section	48" x 60" (1219 x 1524)
Max. Multiple Section	W: 96" (2413) H: Unlimited

- Maximum Temperature: +200°F (+93°C)**
- Designed for use in medium to heavy duty commercial or light duty industrial HVAC or process air systems
  - Engineered for pressure relief, automatically assisting to maintain/limit desired pressures
  - Construction provides resistance to racking, ultra-smooth quiet operation, and extra weather protection
  - Maximum system velocity and back pressure of 2500 fpm (12.7 m/s) @16 in. w.g. (4 kPa)
  - Optional extruded aluminum frame construction, mounting orientations, front/rear flange frame, internal counterbalance, and other options available

NOTE: Max size and performance varies across models. Check submittal data sheets and RAPP for the most up to date information.

Nailor offers a complete line of Manual Balancing, Backdraft and Counterbalance Backdraft Dampers for commercial and light industrial HVAC systems as economical alternative to "shop built" dampers.

For the most up to date information, go to  
**nailor.com**