Severe Environment Dampers
• Corrosion-Resistant
• 316 Stainless Steel
Severe Environment Dampers

Greenheck was the first manufacturer to have a complete line of dampers made from all 316 stainless steel material as a standard product offering. We have over 20 models, including dynamic fire dampers, smoke dampers, combination fire smoke dampers, commercial control dampers, barometric relief dampers, industrial control dampers, and industrial backdraft dampers. This new line of severe environment dampers offers an excellent corrosion-resistant option for a variety of applications.

- Paper mills
- Wastewater treatment plants
- Natatoriums
- Laboratories
- Coastal locations
- Maritime
- Computer clean rooms

Materials with Excellent Corrosion Resistance

When tested against 140 different corrosive mediums, 316 stainless steel received an excellent rating for over 115 of those mediums.
Combination Fire Smoke and Smoke Dampers

Features:
- 316 stainless steel construction is standard (heat responsive device is UL compliant, not 316 stainless steel)
- UL 555 (fire) Classified
- UL 555S (smoke) Classified
- SEFSD-211 & SESMD-201
  - Minimum size: 8 x 6 in. (203 x 152 mm)
  - Maximum multisection size: 88 x 72 in. (2235 x 1829 mm)
  - Pressure up to 6 in. wg (1.5 kPa)
  - Velocity up to 2000 fpm (10.2 m/s)
  - Licensed to bear the AMCA Air Performance Seal
- SEFSDR-511 & SESMDR-501
  - Minimum diameter: 6 in. (152 mm)
  - Maximum diameter: 24 in. (610 mm)
  - Pressure up to 4 in. wg (1 kPa)
  - Velocity up to 3000 fpm (15.2 m/s)

Available upon request:
- NEMA 7 housing for actuators
  - Explosion-proof enclosure
  - Aluminum housing

Quick Reference Combination Fire Smoke and Smoke Dampers

<table>
<thead>
<tr>
<th>Blade Profile</th>
<th>SEFSD-211</th>
<th>SEFSDR-511</th>
<th>SESMD-201</th>
<th>SESMDR-501</th>
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<tbody>
<tr>
<td>3V</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Round</td>
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<table>
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<tr>
<th>Closure Temperature</th>
<th>SEFSD-211</th>
<th>SEFSDR-511</th>
<th>SESMD-201</th>
<th>SESMDR-501</th>
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<td>165°F (74°C)</td>
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<td>212°F (100°C)</td>
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<td>250°F (121°C)</td>
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<td>286°F (141°C)</td>
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<td>350°F (176°C)</td>
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<tr>
<th>Closure Device</th>
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<th>SEFSDR-511</th>
<th>SESMD-201</th>
<th>SESMDR-501</th>
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<td>PRV</td>
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<tr>
<th>Accessories</th>
<th>SEFSD-211</th>
<th>SEFSDR-511</th>
<th>SESMD-201</th>
<th>SESMDR-501</th>
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<tbody>
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<td>Retaining Angles</td>
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<td>Retaining Plate</td>
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<tr>
<td>Smoke Detector</td>
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<td>Momentary Switch</td>
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<td>Transformer</td>
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<td>GTS-1, 2, 3, 4</td>
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X = Standard  O = Optional
Fire Dampers

Features:
- 316 stainless steel construction is standard (heat responsive device is UL compliant, not 316 stainless steel)
- Dynamic closure for use in HVAC systems that are operational in the event of a fire
- UL 555 Classified
- Pressure up to 4 in. wg (1 kPa)
- Velocity up to 2000 fpm (10.2 m/s)
- UL rated retaining angles or plates
- SEDFD-210
  - Minimum size: 8 x 6 in. (203 x 152 mm)
  - Maximum multisection size: 48 x 30 in. (1219 x 762 mm)
  - Licensed to bear the AMCA Air Performance Seal

Barometric Dampers

Features:
- 316 stainless steel construction is standard
- Back pressure up to 2 in. wg (.5 kPa)
- Selectable start to open pressure from .05 to .13 in. wg (.01 to .03 kPa)
- Velocity up to 2000 fpm (10.2 m/s)
- SEBR series
  - Minimum size: 8 x 6 in. (203 x 152 mm)
  - Maximum size: 48 x 74 in. (1219 x 1880 mm)

<table>
<thead>
<tr>
<th>Airflow Direction</th>
<th>Insert Type</th>
<th>Flange on Discharge</th>
<th>Flange on Intake</th>
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<tr>
<td>Vertical Up</td>
<td>SEBR-10</td>
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<td>SEBR-12</td>
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<td>Horizontal</td>
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<td>Vertical Down</td>
<td>SEBR-40</td>
<td>SEBR-41</td>
<td>SEBR-42</td>
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</table>
Commercial Control Dampers

Features:

- 316 stainless steel construction is standard
- Blade styles
  - 3V (SEVCD-23): The 3V blades are fabricated from a single thickness of 316 stainless steel incorporating three structural V grooves running the length of the blade.
  - Airfoil (SEVCD-33): The airfoil blades are constructed of double skin 316 stainless steel. This blade design presents a lower resistance to airflow.
- SEVCD-23
  - Minimum size: 6 x 6 in. (152 x 152 mm)
  - Maximum multisection size: Unlimited
  - Licensed to bear the AMCA Air Performance Seal
  - Pressure up to 5 in. wg (1.2 kPa)
  - Velocity up to 3000 fpm (1.52 m/s)
- SEVCD-33
  - Minimum size: 6 x 6 in. (152 x 152 mm)
  - Maximum multisection size: Unlimited
  - Pressure rating up to 10 in. wg (2 kPa)
  - Velocity up to 4000 fpm (20.3 m/s)

Available upon request:

- NEMA 4X housing for actuators
  - Watertight, corrosion-resistant, and dust tight indoor or outdoor enclosure
  - Plastic housing
- NEMA 7 housing for actuators
  - Explosion-proof enclosure
  - Cast aluminum housing

Greenheck Fan Corporation certifies that the model SEVCD-23 and SEVCD-33 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Programs. The AMCA Certified Ratings Seal applies to Air Leakage and Air Performance ratings.
Industrial Backdraft Dampers

Features:

- Model HB-110, 120, 230, 240, 330 and HBR-050
- 316 stainless steel option
- Pressure up to 20 in. wg (5 kPa)
- Velocity up to 6400 fpm (32 m/s)
- Temperature -40° to 250°F (-40° to 121°C)
Industrial Control Dampers

Features:
- 316 stainless steel
  - Optional on:
    HBTR-151, 451
    HCD-120, 130, 140, 220, 230, 330, 430, 530
    HCDR-050, 150, 250, 350, and 351
- Pressure rating up to 45 in. wg (11.2 kPa)
- Velocity up to 6500 fpm (33 m/s)
UL 555
The UL 555 standard governs fire dampers which are intended for use where air ducts penetrate or terminate at openings in walls or partitions, in air transfer openings in partitions, and where air ducts extend through floors as specified in the Standard for Installation of Air-Conditioning and Ventilating Systems, NFPA 90A. In a fire emergency the fire damper is designed to close and prevent the spread of fire from one side of the wall or partition to the other. Testing includes cycling, salt spray, dynamic closure, fire endurance, and hose stream.

UL 555S
The UL 555S standard governs smoke dampers which are intended to prevent the spread of smoke when HVAC systems shutdown during a fire emergency and those which control the movement of smoke within a building when the HVAC system functions in a smoke control mode. Leakage rated dampers are intended for installation in accordance with NFPA 90A. Testing includes salt spray, cycling, temperature degradation, operation while under heated airflow, and elevated temperature leakage.

AMCA
The AMCA Certified Ratings Program seal assures you that a product line has been tested to the appropriate AMCA standards in accordance with a legal license agreement and that the manufacturer’s catalogued certified ratings have been submitted to the AMCA staff for approval prior to publication.

Enjoy Greenheck’s extraordinary service, before, during and after the sale.

Greenheck offers added value to our wide selection of top performing, energy-efficient products by providing several unique Greenheck service programs.

- **Our Quick Delivery** Program ensures shipment of our in-stock products within 24 hours of placing your order. Our **Quick Build** made-to-order products can be produced in 1-3-5-10-15 or 25-day production cycles, depending upon their complexity.

- Greenheck’s free **Computer Aided Product Selection** program (CAPS), rated by many as the best in the industry, helps you conveniently and efficiently select the right products for the challenge at hand.

- Greenheck has been **Green** for a long time! Our energy-saving products and ongoing corporate commitment to sustainability can help you qualify for LEED credits.

- **Our 3D service** allows you to download at no charge lightweight, easy-to-use AutoDesk™ Revit™ 3D drawings for many of our ventilation products.

Find out more about these special Greenheck services at **greenheck.com**

Our Commitment

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

Specific Greenheck product warranties are located on greenheck.com within the product area tabs and in the Library under Warranties.