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Introduction

Since 1991, Ward Industries has been a trusted leader in the manufacturing and supply of sheet metal products for commercial and industrial HVAC applications. In 2002, Hart & Cooley, Inc. acquired Ward to add to their comprehensive offering of HVAC products and to expand Ward’s business across the United States.

Ward Industries’ main product line centers on high quality duct connectors for rectangular and round/oval sheet metal ductwork, and includes high quality accessory products like fire dampers, ceiling radiation dampers, various styles of access doors and much more. In addition to the J and H flange connector systems, Ward Industries offers spiral and oval duct connectors, slips & drive, and vane & rail. Corner systems are available to match almost any flange style.

To complement the popular QuickFlange™, we’ve added the QuicKorner™, a new corner engineered to work in insertion machines for easy connection of TDF or TDC roll-formed flanges.

Today, Ward Industries continues to lead the industry with an intense customer focus. By understanding needs and creating value added products, Ward Industries can help increase profitability and create winning results.
Flange

- Available in specialty metals
- Provides a large butyl-filled integrated sealant pocket to ensure proper sealing
- Offers a metal shoulder to protect gasket
- Available in 10' and 20' lengths
- Recommended for 14-gauge through 26-gauge ductwork

Model FLG J
- J-rated Flange
- 20-gauge galvanized steel
- Meets SMACNA rigidity Class J for transverse joints (steel)
- Meets SMACNA rigidity Class H for transverse joints (aluminum)

Model FLG H
- H-rated Flange
- 22-gauge galvanized steel
- Meets SMACNA rigidity Class H for transverse joints (steel)

Model Q FLG J QUICK FLANGE™
- J-rated Flange
- 20-gauge galvanized steel
- Meets SMACNA rigidity Class J for transverse joints (steel)
- Meets SMACNA rigidity Class H for transverse joints (aluminum)

Model Q FLG H QUICK FLANGE™
- H-rated Flange
- 22-gauge galvanized steel
- Meets SMACNA rigidity Class H for transverse joints (steel)
**Corner**

- Formed galvanized steel
- Available in specialty metals to match flange material

- Model CNR J
  - J Flange Corner
  - Nuts and bolts included (galvanized)

- Model CNR H
  - H Flange Corner
  - Nuts and bolts included (galvanized)

- Model CNR QF
  - TDF Flange Corner
  - Use with TDF

- Model CNR TF
  - TDF Flange Corner
  - Use with TDF-formed flange

- Model CNR TC
  - TDC Flange Corner
  - Use with TDC-formed flange

- Model CNR QC
  - TDC Flange Corner
  - Use with TDC

**Cleat**

- Formed galvanized steel
- Available in specialty metals to match flange material
- Available in 10' or 6" lengths
- Available in .070" thick extruded PVC for breakaway connections (6" only)

- Model CLT W
  - W Cleat
  - Use with Ward J and H flange, as well as TDC-formed flange

- Model CLT F
  - F Cleat
  - Use with TDF-formed flange
Butyl Gasket

- Provides a nondrying, permanently flexible gasket
- Adheres to a variety of clean, dry surfaces
- Contains high percentage of virgin butyl rubber to enhance its sealing and aging characteristics
- Formulated to retain handling properties through a wide temperature range
- Will not crack or separate while being applied at low temperatures

Model GSK-BT Butyl Tape Gasket
- Product is 3/16" x 5/8" and is available in 25' and 30' rolls

Model GSK-BP Butyl Patch Gasket
- Product is 3/16" thick, and is available in 1" x 2" and 2" x 3" patch sizes

Neoprene Tape Gasket

- Closed-cell foam comprised of neoprene, PVC, and nitrile
- Has good chemical resistance and is flame-rated
- Product is 5/16" x 3/4" and is available in 50' rolls

Model GSK-NT
Slip
• Roll-formed galvanized steel
• Available in specialty metals
• Available in 5’ and 10’ lengths

Model SLS
• Standing slip
• Available in 1/2” in 24-gauge and 26-gauge
• Available in 1” in 20-gauge through 26-gauge

Drive
• Roll-formed galvanized steel
• Available in specialty metals
• Available in 5’ and 10’ lengths

Model SLF
• Flat slip
• Available in 22-gauge through 26-gauge

Model DRS
• Standing drive
• Available in 24-gauge and 26-gauge
• Available in 1” height

Model DRF
• Flat drive
• Available in 22-gauge through 26-gauge
**Trapeze Hanger**
- Roll-formed galvanized steel
- Slotted holes 2-1/4" on center
- Available in both 16-gauge and 18-gauge
- Available in 10’ and 20’ lengths
- Inexpensive, yet strong alternative to standard strut systems
- Compatible with multiple clamp and component items
- Use Trapeze Washer (TZW) and Threaded Rod for a complete system (sold separately)

**Threaded Rod**
- Zinc-plated threaded rod
- Available in standard thread diameters ranging from 1/4" to 7/8"
- Available in 6’, 10’ or 12’ lengths
- Use with Trapeze Hanger and Washer for a complete hanging system (sold separately)

**Hanger Strap**
- Galvanized steel
- Available in 16-gauge through 24-gauge
- Available in 200’ rolls or 10’ flat blanks
- Great multipurpose product for hanging ductwork
- Use with Strap Buckle for quick and easy installation

**Strap Buckle**
- Ideal for hanging round duct
- Hanger strap is bent into the strap buckle and suspended with threaded rod
Angle Iron
- Roll-formed galvanized steel
- Slotted and punched holes 4" on center
- Available in 14-, 16- and 18-gauge
- Available in 12' lengths
- Great multipurpose product
Vane and Rail

- Roll-formed galvanized steel
- Available in 10’ lengths
- Custom lengths available
- Double-wall turning vane and turning rail designs in accordance to SMACNA guidelines

Model VNN/VNA
- Roll-formed 24-gauge galvanized steel (4”)
- Roll-formed 26-gauge galvanized steel (2”)
- Acoustical vane utilizes a perforated inner vane wall and insulation for sound absorption

Model RAL
- Roll-formed 22-gauge galvanized steel (2” and 4”)
- Provides extra wide margin for easy fastening
- Rail stacks to minimize storage and shipping requirements
- Self-aligning tabs for easy vane installation

Quick Rail™

Model FRI RAL Quick Rail™
- Roll-formed 22-gauge galvanized steel (2” Rail Only)
- Eliminates the tedious process of bending each vane to secure it to the rail
- Two tabs instead of one
- Eliminates loose connections that can cause annoying rattle over time
- Self-aligning tabs for easy vane installation
- Self-centers vanes onto rails
- Holds the vanes tangent to the airstream eliminating trailing edges

Quick Rail™ eliminates extra assembly steps
Flexible Connector

- Roll-formed galvanized steel and fabric
- Available in specialty metals
- Available in both commercial and residential grades
- Available with two different styles of seam wraps
- Available in 100' rolls
- All fabrics rated to 10" S.P.
- Absorbs sound and vibration to prevent from transmitting throughout system

<table>
<thead>
<tr>
<th>Grade</th>
<th>Composition</th>
<th>Gauge</th>
<th>Metal</th>
<th>Fabric*</th>
<th>Wrap</th>
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<tr>
<td>TDC/TDF</td>
<td>4&quot; Metal</td>
<td>24</td>
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<td>All Types</td>
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<td></td>
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<tr>
<td>Commercial</td>
<td>3&quot; Metal</td>
<td>24</td>
<td>Galvanized Aluminum</td>
<td>All Types</td>
<td>Double</td>
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<tr>
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<tr>
<td>Economy</td>
<td>2.75&quot; Metal</td>
<td>28</td>
<td>Galvanized</td>
<td>Neoprene Vinyl</td>
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<td></td>
<td>4&quot; Fabric</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.75&quot; Metal</td>
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<tr>
<td>Residential</td>
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<td>Neoprene Vinyl</td>
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<td>3&quot; Fabric</td>
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</tr>
<tr>
<td></td>
<td>1.75&quot; Metal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The proper fabric can be easily selected by using our Flexible Connector Fabric Chart (see pg. 26) after careful consideration of the installation requirements, such as, pressure of the system, temperature range, indoor and outdoor installation, proximity to chemicals or fumes and approvals required.

Keating Koupling™

- Formed 20-gauge galvanized steel
- Available in specialty metals
- Provides a large, butyl-filled, integrated sealant pocket to ensure proper sealing
- Available for both round and flat oval duct
- Available in sizes ranging from 10" to 72"
- Provides a connection that is virtually airtight up to 16" S.P.
- Provides a smooth, clean appearance for exposed installation

Model KKC - round

Model KKC - oval

Installed
Compression Duct Door

- Formed galvanized steel
- Available in specialty metals
- Available in sizes 8" x 4", 10" x 6" and 16" x 12"
- Available for both flat and round duct
- Self-adhesive template included for proper installation

Model DSA
for Single-Wall Duct
- Formed 20-gauge galvanized steel
- Utilizes closed-cell neoprene gasket to ensure proper sealing requirements
- Pressure tested to over 20" WG

Model DSA DW
for Double-Wall Duct
- Formed 20-gauge galvanized steel
- Utilizes closed-cell neoprene gasket to ensure proper sealing requirements
- Increased bolt length allows door to encompass double wall or insulated duct
- Pressure tested to over 20" WG

Model DSA HT
for High-Temperature Duct
- Formed 16-gauge black iron
- Utilizes ceramic rope gasket
- For applications up to 2000°F

Spin-In Access Doors

- Formed 22-gauge galvanized steel frame
- Formed 24-gauge galvanized steel door
- Fiberglass encapsulated in 1" thick door, providing an estimated R-value of 3
- Utilizes closed-cell neoprene gasket
- Available in sizes from 8" to 24" diameter
- Tested to 20" S.P. with minimal leakage

Model DSP
Square Access Doors

- Formed 22-gauge galvanized steel frame
- Formed 24-gauge galvanized steel door
- Fiberglass encapsulated 1" thick door
- Preformed dovetail tabs allow for easy and quick installation
- Available in sizes from 6" x 6" to 24" x 24"
- Available in both styles for high pressure applications

Model DCM
Square Cammed Door
- Provides an estimated R-value of 3
- Utilizes open-cell polyester foam gasket
- Dual-cam design offers complete removal of door for accessing duct
- Tested to 4.5" S.P. with minimal leakage

Model DCM-HP
Square Cammed Door
- Provides an estimated R-value of 3
- Utilizes closed-cell neoprene foam gasket
- Multi-cam design offers complete removal of door for accessing duct
- Tested to 10" S.P. with minimal leaking

Model DHG
Square Hinged Door
- Provides an estimated R-value of 3
- Utilizes open-cell polyester foam gasket
- Full-length hinge allows door to pivot out of the way for easy access to the duct
- Tested to 4.5" S.P. with minimal leakage

Model DHG-HP
Square Hinged Door
- Provides an estimated R-value of 3
- Utilizes closed-cell neoprene foam gasket
- Full-length hinge allows door to pivot out of the way for easy access to the duct
- Tested to 10" S.P. with minimal leaking
Rod Lock
• Zinc-plated grade 5 bolt
• Zinc-plated washer with neoprene gasket
• Zinc-plated nut with spring steel seat plates
• Available in both 1/2" and 3/4" sizes
• Use with standard conduit to provide quick and easy installation of tie rods
• Use for both joint and center tie rods
• Pull-tested to over 1,900 lbs.
• Use rod lock tool for easy installation (sold separately)

Weld Pins
• Available in 1/2", 3/4", 1", 1-1/2" and 2" sizes
• Available in both cupped and flat head
• Compatible with most weld machines used to apply pins up to 2" in length

Stik-Pins
• No tools needed for the application of hangers to sheet metal.
• Insulation may be installed immediately because of positive adhesion of hanger to metal.
• Application of hanger is clean, fast and simple with no toxic fumes.
• Available in copper plated, 12 gauge (.106 dia.) material
**Crimper**
- Installs Ward TDC corners in TDC-formed flange
- Installs Ward TDF corners in TDF-formed flange
- Forms hem, presses to crimp, and secures the corner in the flange

**Rod Lock Install Tool**
- Installs Rod Lock nuts quickly and accurately in conduit

**Cleat Install Tool**
- Installs finishing cleat quickly and easily
Reference Guide

75 Series
• 1.5-hour fire rating
• Used in barriers rated at 2 hours or less
• Has a 4-1/4" side profile
• 165°F fusible link standard
  (212°F and 286°F also available)
• Available in both horizontal (H) and vertical (V) damper orientations
• Available in A, B, and C type configurations
• Available in S4 stainless steel

85 Series (Thinline)
• 1.5-hour fire rating
• Used in barriers rated at 2 hours or less
• Has a 2" side profile
• 165°F fusible link standard
  (212°F and 286°F also available)
• Available in both horizontal (H) and vertical (V) damper orientations
• Available in A, B and C type configurations

95 Series (Thinline)
• 3.0-hour fire rating
• Used in barriers rated at 4 hours or less
• Has a 2" side profile
• 165°F fusible link standard
  (212°F and 286°F also available)
• Available in vertical (V) damper orientation only
• Available in A, B, and C type configurations

105 Series
• 3.0-hour fire rating
• Used in barriers rated at 4 hours or less
• Has a 4-1/4" side profile
• 165°F fusible link standard
  (212°F and 286°F also available)
• Available in vertical (V) damper orientation only
• Available in A, B, and C type configurations

Damper Orientation Guide
H – Horizontal (spring loaded)
V – Vertical (gravity)

Configuration Reference Guide
A – Damper blades and damper frame are in the air stream.
B – Damper blades are out of the air stream, but the damper frame is in the air stream.
C – Damper blades and damper frame are both removed from the air stream. The “C” configuration requires the damper to be fitted with a collar that will correspond to the type of duct being used.

C – Designates an oval collar for use with oval ductwork.
CR – Designates a rectangular collar for use with flat ductwork.
C – Designates a round collar for use with round ductwork.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Hour Rating</th>
<th>Side Profile</th>
<th>Damper Orientation</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 Series</td>
<td>1.5-hour</td>
<td>Wide (4-1/4&quot;)</td>
<td>H and V</td>
<td>A, B, C</td>
</tr>
<tr>
<td>85 Series</td>
<td>1.5-hour</td>
<td>Thinline (2&quot;)</td>
<td>H and V</td>
<td>A, B, C</td>
</tr>
<tr>
<td>95 Series</td>
<td>3-hour</td>
<td>Thinline (2&quot;)</td>
<td>V</td>
<td>A, B, C</td>
</tr>
<tr>
<td>105 Series</td>
<td>3-hour</td>
<td>Wide (4-1/4&quot;)</td>
<td>V</td>
<td>A, B, C</td>
</tr>
</tbody>
</table>
Important Facts

Ward Industries fire dampers are undersized 1/4” at the factory (size minus 1/4”).

Fire Damper Sleeves

A fire damper sleeve is a rectangular piece of sheet metal (usually the same gauge as the ductwork or heavier) that is wrapped around the damper in order to meet the UL 555 installation instructions. The damper sleeve serves two functions. In many cases it provides a fastening site for the ductwork on either side of the damper and acts as a platform to attach the retaining angle.

Fire damper sleeves are available in 8” to 20” lengths (4” increments) and gauges 14 through 22.

Retaining Angles

Retaining angles attach to the fire damper sleeve on either side of the barrier (wall or floor) for the purpose of securing the damper in place. The retaining angles frame the damper on each side to secure it in position in the barrier and to cover the gap between the damper and the opening in the barrier.

Fusible Links

165°F link is standard. To order 212°F or 286°F link, specify at the time of order.

Listed to Underwriters Laboratories Standard 555

This product is listed by UNDERWRITERS LABORATORIES, INC. and bears the mark:
75 Series
1.5-Hour Fire Damper

- Roll-formed 22-gauge galvanized frame
- Roll-formed 22-gauge galvanized blades
- Available in stainless steel
- Stainless steel closure spring (horizontal models only)
- Available in vertical (V) or horizontal (H) models
- Available in both single and multiple unit sizes
- Minimum width 6”
- Maximum single unit size (damper)
  - Vertical: 60” x 60”
  - Horizontal: 60” x 60”
- Maximum multiple unit size (damper)
  - Vertical: 120” x 120”
  - Horizontal: 102” x 60”
- UL-listed, curtain-style fire damper for static systems
- Tested to UL 555, File R16475
- Meets NFPA 90A requirements
- Listed with California State Fire Marshall, Listing 3225-1577:100
85 Series
1.5-Hour Fire Damper

- Roll-formed 22-gauge galvanized frame
- Roll-formed 22-gauge galvanized blades
- Stainless steel closure spring (horizontal models only)
- Available in vertical (V) or horizontal (H) models
- Available as single units only
- Minimum width 6"
- Maximum single unit size (damper)
  - Vertical: 41" x 36" or 36" x 60"
  - Horizontal: 41" x 36"
- Thinline frame for applications with space constraints
- UL-listed, curtain-style fire damper for static systems
- Tested to UL 555, File R16475
- Meets NFPA 90A requirements
- Listed with California State Fire Marshall, Listing 3225-1577:100

85VA and 85HA
85VB and 85HB
85VC and 85HC
95 Series
3-Hour Fire Damper

- Roll-formed 22-gauge galvanized frame
- Roll-formed 22-gauge galvanized blades
- Available in vertical (V) models only
- Available as single units only
- Minimum width 6"
- Maximum single unit size (damper)
  - Vertical: 48" x 49"
- Thinline frame for applications with space constraints
- UL-listed, curtain-style fire damper for static systems
- Tested to UL 555: File R16475
- Meets NFPA 90A requirements
- Listed with California State Fire Marshall: Listing 3225-1577:100
105 Series
3-Hour Fire Damper

- Roll-formed 22-gauge galvanized frame
- Roll-formed 22-gauge galvanized blades
- Available in vertical (V) models only
- Available as single units only
- Minimum width 6"
- Maximum single unit size (damper)
  Vertical: 60" x 48"
- UL-listed, curtain-style fire damper for static systems
- Tested to UL 555: File R16475
- Meets NFPA 90A requirements
- Listed with California State Fire Marshall: Listing 3225-1577:100
Sleeves

- UL-listed fire damper factory mounted in a galvanized sleeve
- Available in the following lengths:
  - 8"
  - 12"
  - 16"
  - 20"
- Available in the following gauges:
  - 14
  - 16
  - 18
  - 20
  - 22
- Available in stainless steel (with model 75 only)
- Damper can be ordered offset from center for sidewall applications
- Provides a fastening site for ductwork leading to the damper
- Provides a platform to which retaining angle can be mounted

Retaining Angle

- Used to retain fire damper and sleeve assembly in fire-rated partition
- Sandwiches the partition to prevent stress on the damper caused from partition expanding and contracting
- Required on all fire damper and sleeve installations
50 Series - Square and Rectangular

WCRD-50-4X
- Single-blade damper
- Great for smaller sized dampers where maximizing airflow is essential
- Rectangular
- Available in 8” x 4”, 10” x 4”, and 12” x 4” only
- 165°F fusible link standard (212°F also available)

WCRD-50
- Dual-blade damper, arranged in a butterfly configuration
- Square or rectangular
- Minimum size - 4” x 4”
- Maximum size - 24” x 24”
- 165°F fusible link standard (212°F also available)
- Available with easy access hook and catch

55 Series - Round

WCRD-55
- Dual-blade damper, arranged in a butterfly configuration
- Round
- Sizes range from 4” to 24” diameter
- 165°F fusible link standard (212°F also available)
- Available with easy access hook and catch

Suffix
*EA - Easy Access
*LP - Link Plate
AD - Adjustable
ADE - Adjustable Extended

*The easy access feature allows for “easy access” to reset the damper.

Order width x height with the width being the direction of the damper hinge.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Side Profile</th>
<th>Blade Orientation</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCRD-50-4X</td>
<td>Square/Rectangular</td>
<td>Single Blade</td>
<td>Easy access only</td>
</tr>
<tr>
<td>WCRD-50</td>
<td>Square/Rectangular</td>
<td>Double Blade</td>
<td>Easy access or link plate</td>
</tr>
<tr>
<td>WCRD-50-B</td>
<td>Square/Rectangular w/ boot</td>
<td>Double Blade</td>
<td>Easy access or link plate</td>
</tr>
<tr>
<td>WCRD-50-4XB</td>
<td>Square/Rectangular w/ boot</td>
<td>Single Blade</td>
<td>Easy access only</td>
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<tr>
<td>WCRD-55</td>
<td>Round</td>
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<td>Easy access or link plate</td>
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<td>WCRD-55-AD</td>
<td>Round</td>
<td>Double Blade</td>
<td>Adjustable</td>
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<tr>
<td>WCRD-55-ADE</td>
<td>Round</td>
<td>Double Blade</td>
<td>Adjustable &amp; Extended</td>
</tr>
</tbody>
</table>
Ceiling Radiation Damper

- Roll-formed 22-gauge galvanized frame
- Formed 22-gauge galvanized blades
- Roll-formed 22-gauge galvanized hinge (Model 50-4X has stainless steel spring hinge)
- Available in both easy access (EA) and link plate (LP) versions for mounting the fusible link (Model 50-4X available in EA only)
- Double-blade butterfly configuration (single-blade on Model 50-4X)
- Available in adjustable (AD) volume control (55 series only)
- Insulation and scrim are required on dampers over 80 in\(^2\) in area
- Insulation and scrim are optional on dampers less than 80 in\(^2\) in area
- Tested to UL 555C: File R16579
- Meets NFPA 90A requirements
- Listed with California State Fire Marshall: Listing 3225-1577:101

50 Series - easy access
- Minimum unit size: 4” x 4”
- Maximum unit size: 24” x 24”
- Dimensions are determined by blade width (hinge dimension) then by blade height (W x H)
- Galvanized hinge
- Double blade

50 Series - with link plate
- Minimum unit size: 4” x 4”
- Maximum unit size: 24” x 24”
- Dimensions are determined by blade width (hinge dimension) then by blade height (W x H)
- Galvanized hinge
- Double blade

50-4X - easy access
- Available sizes: 8” x 4”, 10” x 4” and 12” x 4”
- Dimensions are determined by blade length (hinge dimension) then by blade width
- Stainless steel spring hinge
- Single blade

55 Series - easy access
- Minimum unit size: 4” diameter
- Maximum unit size: 24” diameter
- Double blade

55 Series - with link plate
- Minimum unit size: 4” diameter
- Maximum unit size: 24” diameter
- Double blade

55 Series - adjustable damper
- Minimum unit size: 4” diameter
- Maximum unit size: 24” diameter
- Double blade
- Also available in extended
Ceiling Radiation Damper with Boot

- UL-listed ceiling radiation damper factory-mounted in a galvanized boot
- Available in the following styles:
  - 90° boot
  - End boot
  - Straight boot
- Available with collars ranging from 4” to 10”
- Available with throat depths of 4”, 6”, and 8”
- Available with or without a flange
- Factory-assembled to ensure proper fit and placement
- Eliminates the need for labor to install in the field
- Single-blade damper not available in end boots with a 4” throat

Thermal Blanket and Scrim

- Model CTB 24 (24” x 24” thermal blanket)
- Model CTB SCM 24 (24” x 24” scrim for attaching thermal blanket to damper)
### Fabric Selection Chart

<table>
<thead>
<tr>
<th>Industry Standard High Velocity</th>
<th>General Purpose Low/Med Velocity</th>
<th>Ideal Outdoor High Velocity</th>
<th>All Weather High Velocity</th>
<th>Superior Weathering High Temperatures</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEOPRENE (Neoprene/Fiberglass)</td>
<td>VINYL (PVC/Nylon/Polyester)</td>
<td>HYPALON (Polyester/Foamglas)</td>
<td>EPDM (Polyester)</td>
<td>SILICONE (Silicone/Fiberglass)</td>
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<tr>
<td><strong>Description</strong></td>
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<tr>
<td>A heavy glass fabric, coated on both sides with neoprene. The glass fabric is non-combustible, and the coating is fire retardant, and has no glow time or char length. It is waterproof, airtight, and resistant to oils and greases.</td>
<td>A nylon polyester fabric with a heavy vinyl coating on both sides. It is an extremely tough connector material. Dark gray in color, the coating is flame retardant, and is airtight, weather resistant and chemical resistant.</td>
<td>A heavy glass fabric, coated on both sides with white Hypalon (CPSE) a synthetic rubber. Fabric is non-combustible and the coating is flameproof. It has excellent weathering quality and is waterproof. Resistant to ozone, acids, alkalies, gasoline and grease.</td>
<td>A polyester fabric with a heavy coating on both sides of EPDM. Airtight and watertight fabric has outstanding resistance to weathering, UV radiation, ozone and is not affected by mildew.</td>
<td>A very heavy glass fabric, coated on both sides with silicone. Silver in color, flameproof, and has excellent resistance to many chemicals and weathering. Designed for high temperature applications.</td>
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<tr>
<td><strong>Approvals</strong></td>
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<tr>
<td>ASTM D 751-73 475 lbs warp x 375 lbs fill</td>
<td>ASTM D 751-73 225 lbs warp x 250 lbs fill</td>
<td>ASTM D 751-73 475 lbs warp x 375 lbs fill</td>
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<tr>
<td>ASTM D 2136 and D 573 -40 F to 200 F continuous</td>
<td>ASTM D 2136 and D 573 -40 F to 200 F continuous</td>
<td>ASTM D 2136 and D 573 -45 F to 200 F continuous</td>
<td>ASTM D 2136 and D 573 -67F to 500 F continuous</td>
<td>ASTM D 2136 and D 573 -76F to 500 F continuous</td>
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<td><strong>Waterproof Qualities</strong></td>
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<tr>
<td>ASTM D 751-73 .025&quot;</td>
<td>ASTM D 751-73 .023&quot;</td>
<td>ASTM D 751-73 .036&quot;</td>
<td>ASTM D 751-73 .030&quot;</td>
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<tr>
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<td>All grades rated to 10° SP</td>
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<tr>
<td>ASTM D 1149 Resistant to acids, alkalies, and gases</td>
<td>ASTM D 1149 Resistant to oil, grease, weathering and many other chemicals</td>
<td>ASTM D 1149 Resistant to ozone, acids, alkalies, gasoline and grease.</td>
<td>ASTM D 1149 Outstanding resistance to weathering, ultraviolet radiation, ozone and is not affected by mildew.</td>
<td>ASTM D 1149 Excellent resistance to acids and alkalies. Adversely affected by gasoline, toluene, acetone and grease.</td>
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<tr>
<td><strong>Applications</strong></td>
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<tr>
<td>Can be used in practically every type of HVAC system. Because of its chemical resistance, it can be used in kitchen and fume hoods. It is absolutely waterproof and airtight, and is ideal for high pressure systems and outdoor applications.</td>
<td>Can be used in practically every type of installation within its temperature range. Low in cost and easy to work with. It has extremely high abrasion, tear and cut resistance, is rot, fungus and UV resistant. Dielectric and thermally weldable.</td>
<td>Can be used in practically every type of installation. White coating reflects heat and is clean and easy to work with. It is ideal for outdoor applications. And because of its chemical resistance, it can be used in kitchen and fume hoods. It is absolutely airtight and is ideal for high pressure systems.</td>
<td>Can be used in practically every type of installation. It is especially recommended for heavy weather applications. It is not affected by ultraviolet radiation, ozone or mildew. Insulated EPDM has a R rating of 2 and will reduce heat loss/gain.</td>
<td>Can be used in practically every type of installation, especially in high temperature applications, and where an airtight connector is required.</td>
</tr>
</tbody>
</table>