

# The **EDGE**®

Self-Sealing Round Duct System



The EDGE<sup>®</sup> System will eliminate the sealing of all connections in your spiral pipe system. This system will not only provide a labor savings for the installer, it is a high efficient duct system and also great for exposed systems.

#### FEATURES

- $^1$  All fittings will have a factory installed EPDM gasket, which has an operating temperature rating of -20°F to 212°F.
- The smoke and flame spread rating is 0/0.
- <sup>1</sup> The gasket construction is of a black EPDM base with a wiper for machine application and a green EPDM hollow seal that will act as the sealing section.
- <sup>1</sup> The gasket is attached to the fitting with a 180° hemmed edge that will hold the gasket in place, as shown in the diagrams to the right.
- <sup>1</sup> The connections are secured with self-tapping sheet metal screws per SMACNA standards.
- The EDGE® System allows for substantial space for insertion of the screws, because the gasket is located on the leading EDGE of the fitting. (NOTE: The use of sheet metal screws with a rubber gasket would insure that all screw holes are sealed as well.
- <sup>1</sup> The EDGE<sup>®</sup> System has been tested in accordance to SMACNA's Air Duct Leakage Test Manual and meets SMACNA Class 3 leakage standards.

#### BENEFITS

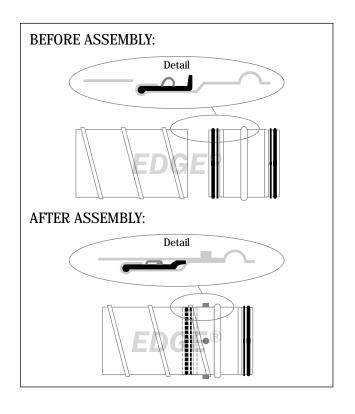
- <sup>1</sup> Stronger fitting
- Eliminates sharp edge
- 1 Consistent diameter
- <sup>1</sup> Factory installed resulting in a cost savings

## The EDGE® – Fittings & Materials

Fittings: 4"-10" (all sizes), 12"-60" (even sizes only)

Materials: Galvanized, Galvaneal, Stainless Steel Type 304 & 316, Aluminum. All fittings will be fabricated, except for Galvanized Stamped Fittings<sup>®</sup> listed below:

| Elbows             | 4"-12" = Stamped/Stitch Welded  |    |
|--------------------|---|----|
| Reducers           | 4"- 18" = Spun  |    |
| Bellmouths         | 4"- 12" = Stamped<br>14"- 36" = Spun  |    |
| 90° Tee            | 4"- 12" = Fabricated body with Stamped Saddle Tap   |    |
| 90° Tap            | 4"- 12" = Stamped   |    |
| All Other Fittings | Any fitting can be fabricated with gasket attached.<br>All products will be fabricated per SMACNA standards and gauges.<br>All fabricated fittings conform to SPIDA dimensional data. | ٨٢ |





## The EDGE® – Construction

#### CONSTRUCTION (GAUGE):

- <sup>1</sup> All duct and fittings are made per SMACNA's Duct Construction Standards (+10" W.G.).
- <sup>1</sup> Stamped Fittings are all 22 or 24 gauge. Spun Fittings are all 20 gauge.
- <sup>1</sup> The following table shows diameter and gauges:

| Diameter | Spiral Duct | Fabricated<br>Fittings |
|----------|-------------|------------------------|
| 4"- 24"  | 26 ga.      | 24 ga.                 |
| 26"- 36" | 24 ga.      | 22 ga.                 |
| 38"- 60" | 22 ga.      | Please Specify         |

| Stamped Fittings® | 4"     | 5"     | 6"     | 7"     | 8"     | 9"     | 10"    | 12"    | 14" - 36" |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| GDSE              | 24 ga. | 22 ga. | N/A       |
| GDSE1             | 24 ga. | 22 ga. | N/A       |
| GDST              | 24 ga. | N/A       |
| GBTO - stamped    | 24 ga. | N/A       |
| GBTO - spun       | N/A    | 20 ga.    |
| GSPR - spun       | 20 ga.    |

#### CONSTRUCTION (PIPE):

- 1 Spiral pipe
- <sup>1</sup> Calibration of spiral is required by The EDGE<sup>®</sup> System manufacturer, Stamped Fittings Inc.

#### CONSTRUCTION (FITTINGS):

All EDGE<sup> $\otimes$ </sup> fittings, 4"– 60", will have a factory installed gasket that is attached to the fitting with a 180° hemmed edge for strength, rigidity and maintaining proper tolerances.

#### CONSTRUCTION (GASKET):

- $\ ^{1}$  The EDGE  $^{\otimes}$  gasket consists of a two-part EPDM rubber sealing material.
- <sup>1</sup> The base EPDM (black material) is classified according to ASTM D2000-86 M3BA 810 B13 C12 F17.
- <sup>1</sup> The sealing EPDM (green material) is classified according to ASTM D2000-86 M8BA 507 B13 C12.
- <sup>1</sup> The operating temperature is -20°F to 212°F.
- <sup>1</sup> The smoke and flame spread is in accordance to ASTM E-84-91A.

#### PRESSURE CLASS:

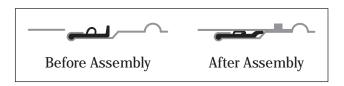
<sup>1</sup> The EDGE<sup>®</sup> System has been tested and meets the requirements of SMACNA's Leakage Class 3.

#### JOINT CONNECTIONS:

All fittings are manufactured to slip fit into spiral duct.
Any fitting to fitting connection can use a fitting coupling.



The EDGE<sup>®</sup> System fittings are made to fit tight, assuring a proper seal. Care should be taken when handling these fittings as damage could result in an improper fit and a difficult installation process.

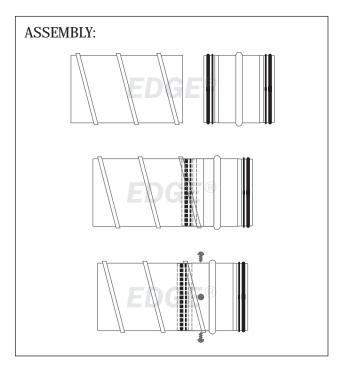


#### WHEN INSTALLING:

- 1. Place the hemmed EDGE of the fitting in the spiral pipe then apply pressure and the fitting will slip into place, stopping at the bead/pipe stop.
- 2. Placement of the fastening screws should be opposite from one another, evenly spaced around the circumference (see diagram). Screws should be placed approximately <sup>1</sup>/2" from the bead in order to avoid damaging The EDGE<sup>®</sup> gasket. In the event of incorrect installation, holes caused by the screws must be sealed before reassembly.
- 3. Quantities and sizes to be used are listed in the table below.

| 1                   | Spiral Duct<br>Diameter | Screw<br>Diameter | Quantity |
|---------------------|-------------------------|-------------------|----------|
| $6 \xrightarrow{3}$ | 3"- 5"                  | 1/8"              | 2        |
|                     | 6"- 10"                 | 1/8"              | 3        |
| 4                   | 12"- 24"                | 1/8"              | 4        |
| 2                   | 26"- 36"                | 1/8"              | 6        |

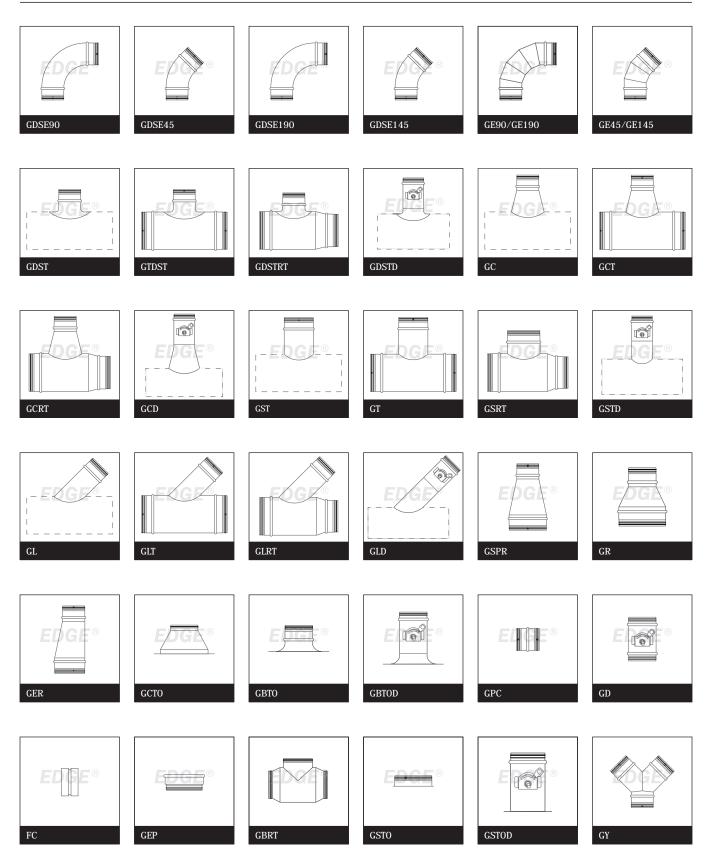
4. Always start the first fastener at the largest radial gap between fitting and duct. Be sure to achieve even distribution around the circumference.



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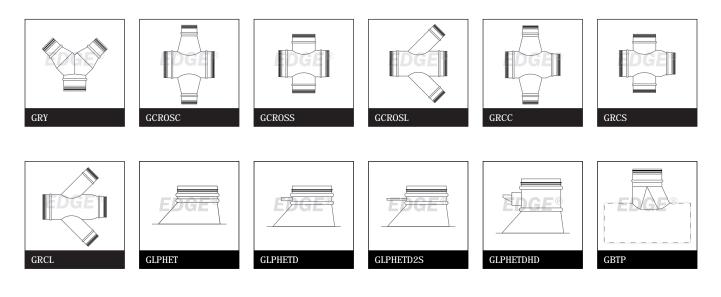


## The EDGE $^{\circ}$ – Products

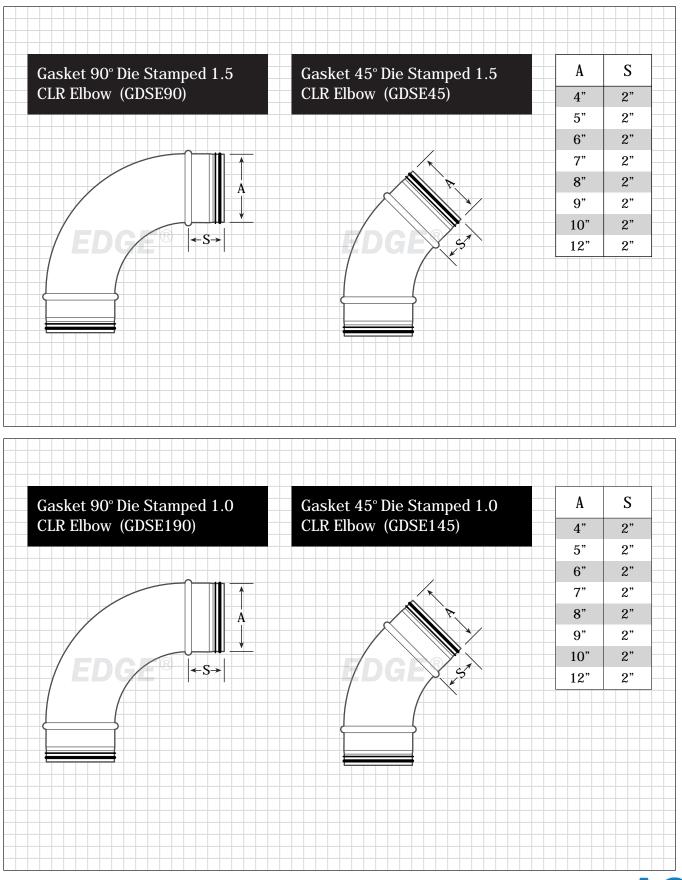




## The EDGE $^{\circ}$ – Products

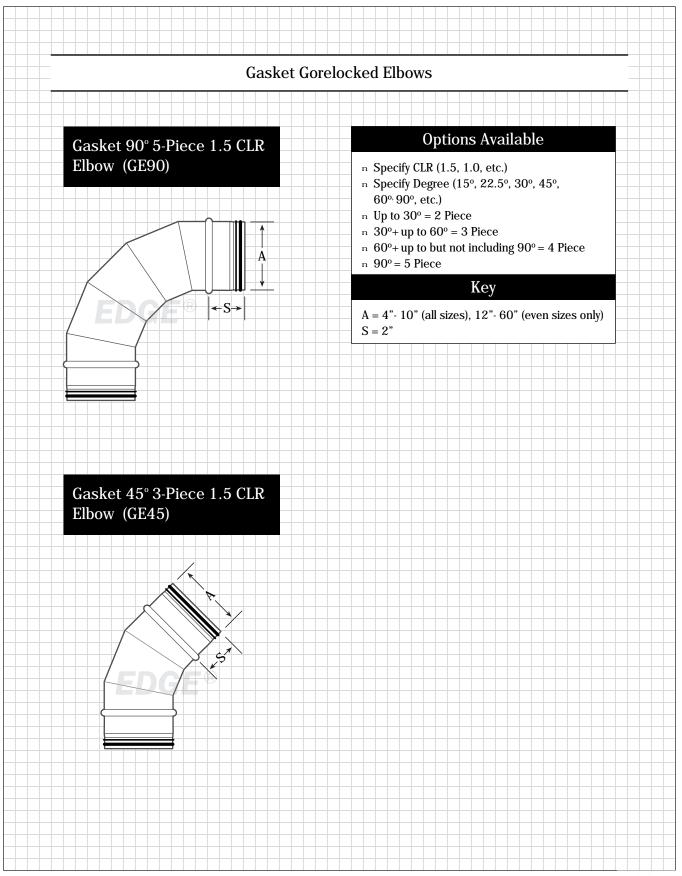




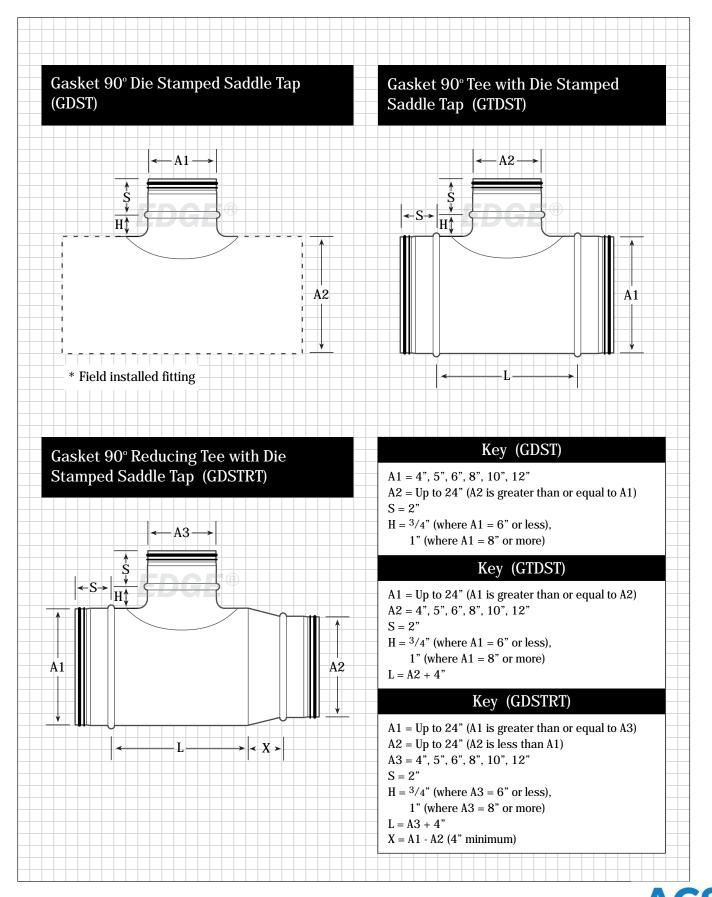




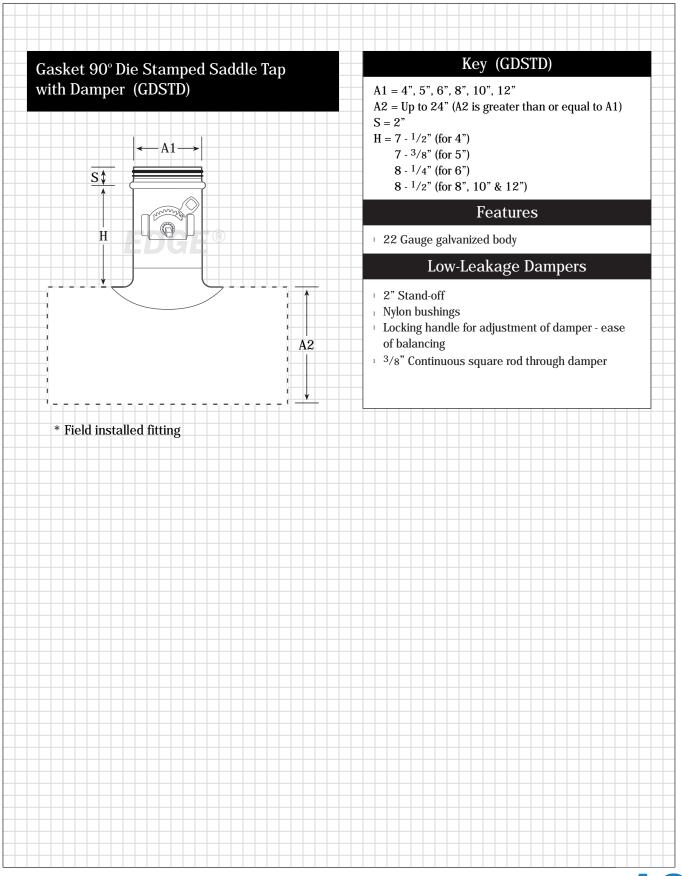
## The EDGE® – Product Specifications



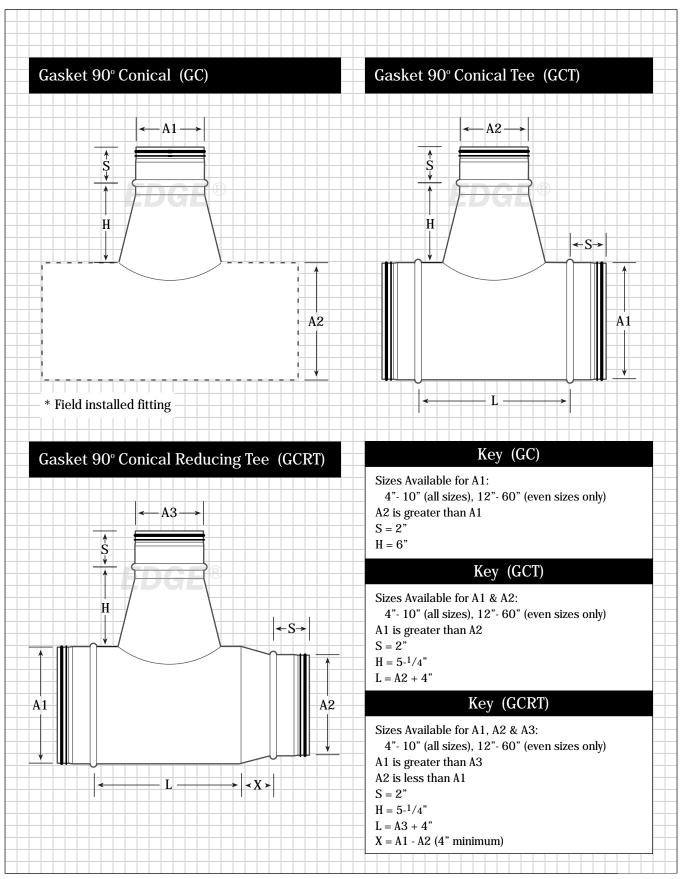




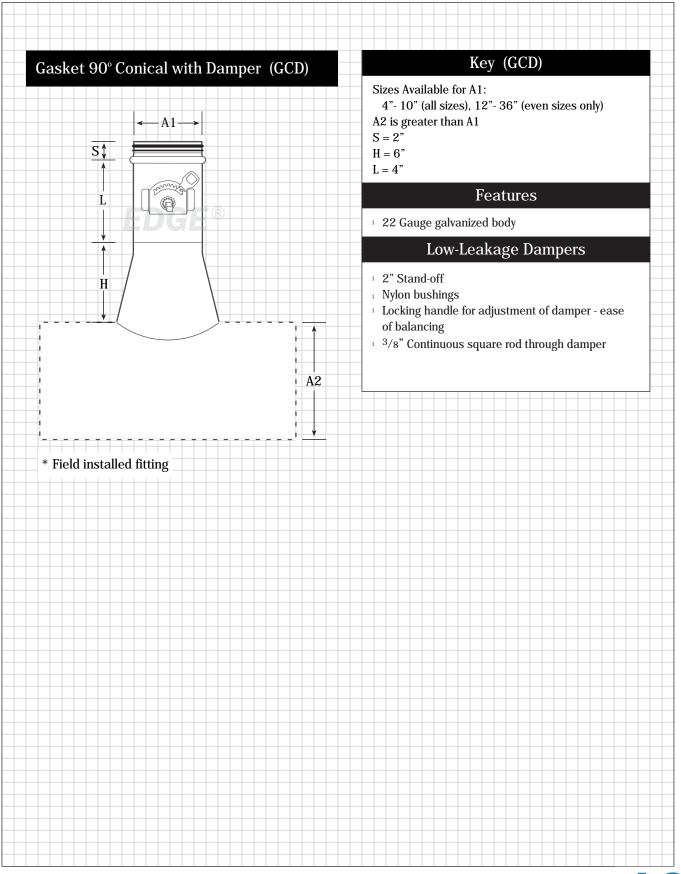




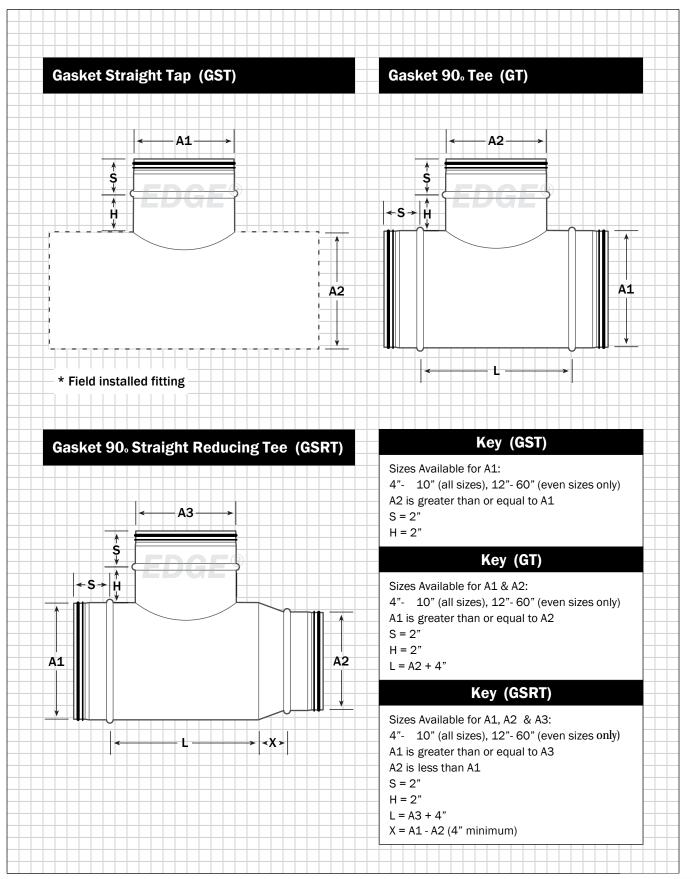




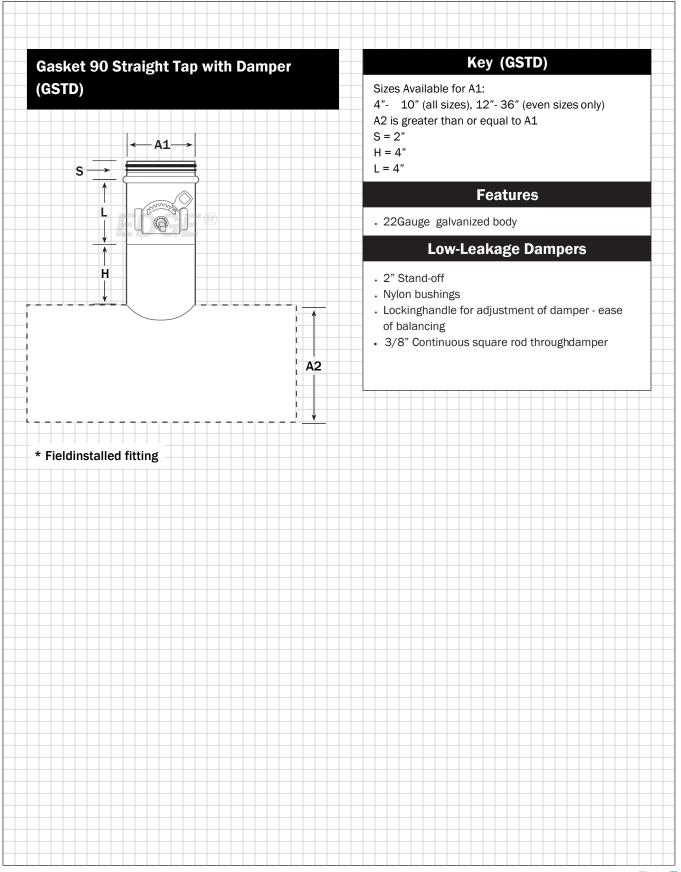




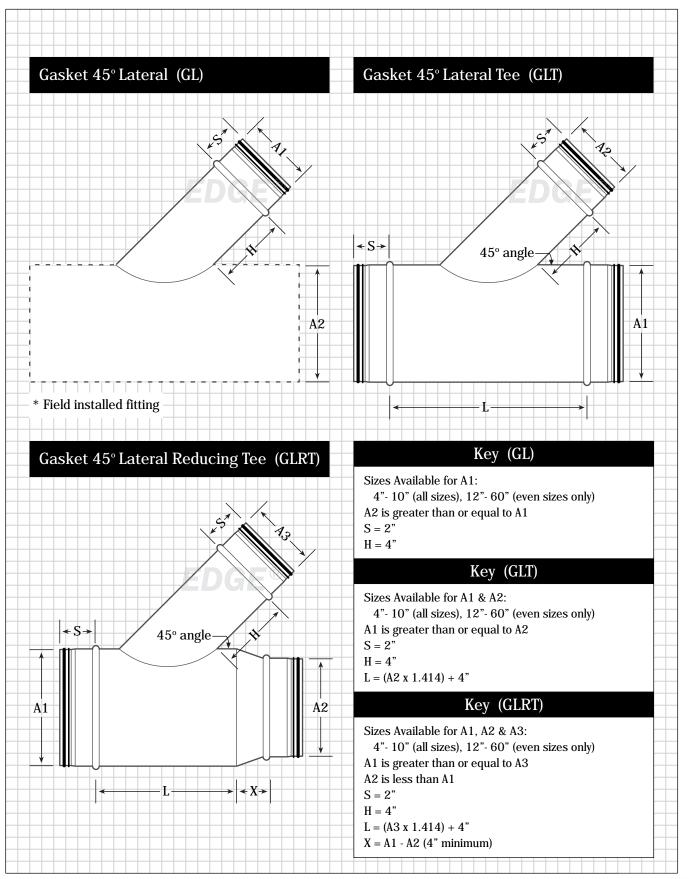






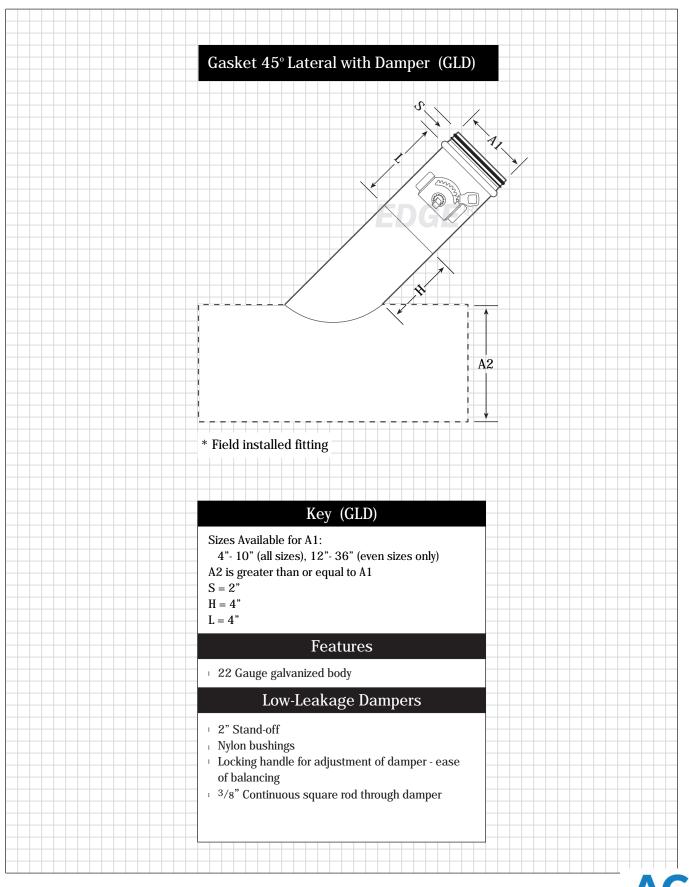








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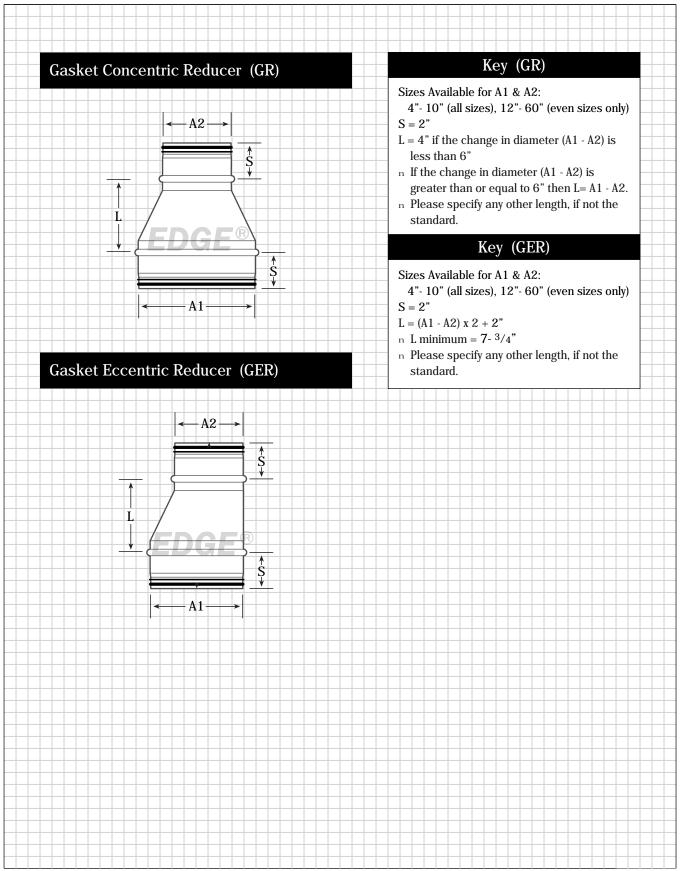


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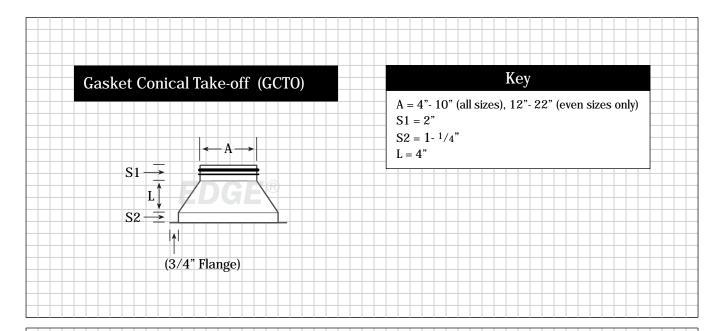
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| Gasket Spun Reducer-0 | Concentric (GSPR)                              | A1             | A2             | A1         | A2         |
|-----------------------|--|----------------|----------------|------------|------------|
| dasket opun keudeer   |  | 4"             | 3"             | 10"        | 5"         |
|                       |  | 5"             | 3"             | 10"        | 6"         |
|                       |  | 5"             | 4"             | 10"        | 7"         |
| ← A2→                 | If the difference                              | 6"             | 3"             | 10"        | 8"         |
|                       | between A1 and A2                              | 6"             | 4"             | 10"        | 9"         |
|                       | is equal to or greater<br>than 6" and/or A1 is | 6"             | 5"             | 12"        | 7"         |
|                       | greater than 24",                              | 7"             | 3"             | 12"        | 8"         |
|                       | please specify as                              | 7"             | 4"             | 12"        | 9"         |
|                       | Gasket Concentric<br>Reducer (GR). This        | 7"             | 5"             | 12"        | 10"        |
|                       | item will be                                   | 7"             | 6"             | 14"        | 9"         |
| S                     | fabricated and not                             | 8"             | 4"             | 14"        | 10"        |
| → A1→→                | spun.  | 8"             | 5"             | 14"        | 12"        |
|                       |  | 8"             | 6"             | 16"        | 12"        |
|                       |  | 8"             | 7"             | 16"        | 14"        |
|                       |  |                |                |            |            |
| ΙΖ                    |  | 9"             | 5"             | 18"        | 14"        |
| Key                   |  |                | 5"<br>6"       | 18"<br>18" | 14"<br>16" |
| S = 2"                |  | 9"<br>9"<br>9" | 5"<br>6"<br>7" | 18"<br>18" | 14"<br>16" |
|                       |  | 9"             | 6"             |            |            |
| S = 2"                |  | 9"<br>9"<br>9" | 6"<br>7"<br>8" |            | 16"        |
| S = 2"                |  | 9"<br>9"<br>9" | 6"<br>7"<br>8" | 18"        | 16"        |
| S = 2"                |  | 9"<br>9"<br>9" | 6"<br>7"<br>8" | 18"        | 16"        |
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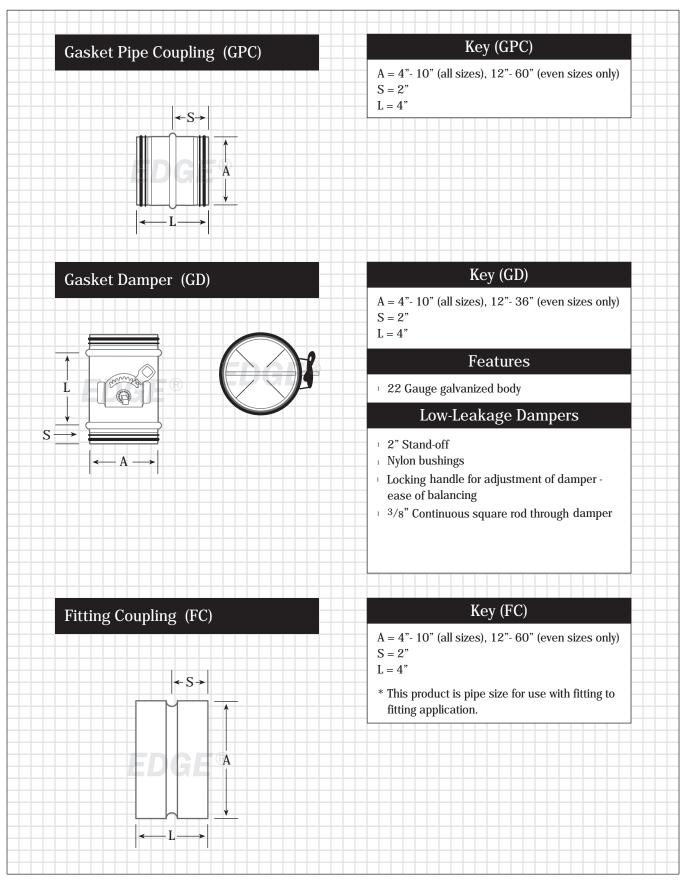


| Gasket Bellmouth Take-off |     | Dimensions |       |      |        |       |
|---------------------------|-----|------------|-------|------|--------|-------|
| (GBTO)                    | (A) | (S)        | (R)   | (F)  | (H)    | (B)   |
|                           | 4"  | 2"         | .394" | 1"   | 4.5"   | 6.5"  |
|                           | 5"  | 2"         | .472" | 1"   | 4.875" | 8.25" |
| A →                       | 6"  | 2"         | .787" | 1"   | 4"     | 8.5"  |
|                           | 7"  | 2"         | 1.0"  | 1"   | 3.25"  | 10.5" |
| Н → с===> ,               | 8"  | 2"         | 1.0"  | 1"   | 4"     | 11"   |
|                           | 9"  | 2"         | 1.0"  | 1"   | 3.25"  | 13"   |
|                           | 10" | 2"         | 1.0"  | 1"   | 4.5"   | 13.5" |
| F                         | 12" | 2"         | 1.0"  | 1"   | 5"     | 14.5" |
|                           | 14" | 2"         | 2.0"  | 1"   | 6"     | 17"   |
|                           | 16" | 2"         | 2.0"  | 1.5" | 8"     | 20"   |
|                           | 18" | 2"         | 2.0"  | 1.5" | 8"     | 22"   |
|                           | 20" | 2"         | 2.0"  | 1.5" | 8"     | 24"   |
|                           | 22" | 2"         | 2.0"  | 1.5" | 8"     | 26"   |
|                           | 24" | 2"         | 2.0"  | 1.5" | 8"     | 28"   |
|                           | 26" | 2"         | 2.0"  | 1.5" | 8"     | 30"   |
|                           | 28" | 2"         | 2.0"  | 1.5" | 8"     | 32"   |
|                           | 30" | 2"         | 2.0"  | 1.5" | 8"     | 34"   |
|                           | 32" | 2"         | 2.0"  | 1.5" | 8"     | 36"   |
|                           | 34" | 2"         | 2.0"  | 1.5" | 8"     | 38"   |
|                           | 36" | 2"         | 2.0"  | 1.5" | 8"     | 40"   |

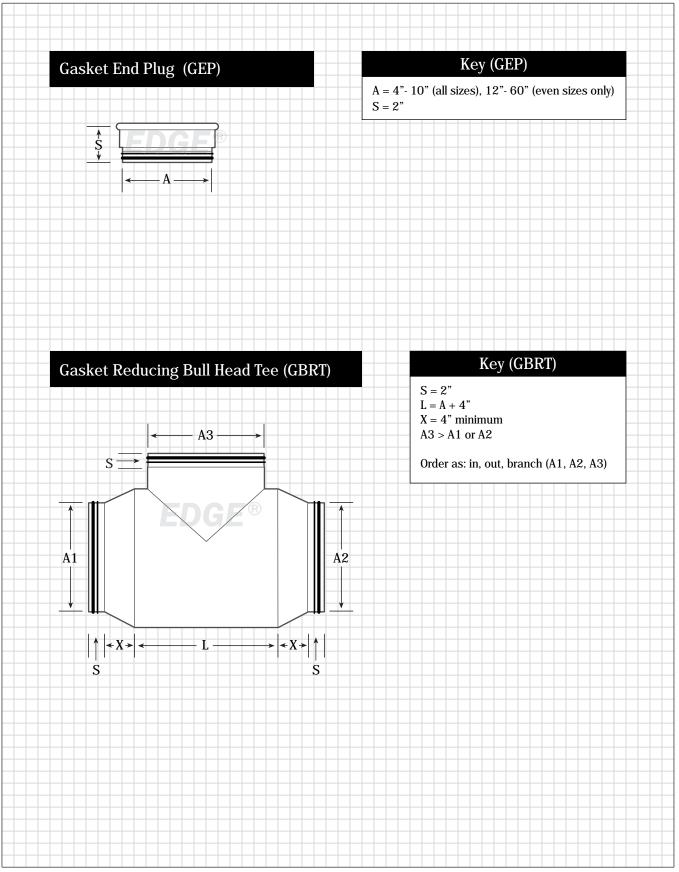


| Gasket Bellmouth Take-off   |     |     | Dime  | nsions |        |       |
|---|-----|-----|-------|--------|--------|-------|
| with Damper (GBTOD)   | (A) | (S) | (R)   | (F)    | (H)    | (B)   |
|   | 4"  | 2"  | .394" | 1"     | 7.625" | 6.5"  |
|   | 5"  | 2"  | .472" | 1"     | 7.75"  | 8.25" |
|   | 6"  | 2"  | .787" | 1"     | 9.25"  | 8.5"  |
|   | 7"  | 2"  | 1.0"  | 1"     | 8.5"   | 10.5" |
|   | 8"  | 2"  | 1.0"  | 1"     | 9.25"  | 11"   |
|   | 9"  | 2"  | 1.0"  | 1"     | 8.5"   | 13"   |
| H L C   | 10" | 2"  | 1.0"  | 1"     | 10"    | 13.5" |
|   | 12" | 2"  | 1.0"  | 1"     | 10.5"  | 14.5" |
| R   | 14" | 2"  | 2.0"  | 1"     | 11.25" | 17"   |
|   | 16" | 2"  | 2.0"  | 1.5"   | 13.5"  | 20"   |
|   | 18" | 2"  | 2.0"  | 1.5"   | 13.5"  | 22"   |
| $  \longleftrightarrow B \longrightarrow  $                           | 20" | 2"  | 2.0"  | 1.5"   | 13.5"  | 24"   |
|   | 22" | 2"  | 2.0"  | 1.5"   | 13.5"  | 26"   |
|   | 24" | 2"  | 2.0"  | 1.5"   | 13.5"  | 28"   |
| Features  | 26" | 2"  | 2.0"  | 1.5"   | 13.5"  | 30"   |
| 22 Gauge galvanized body  | 28" | 2"  | 2.0"  | 1.5"   | 13.5"  | 32"   |
|   | 30" | 2"  | 2.0"  | 1.5"   | 13.5"  | 34"   |
| Low-Leakage Dampers   | 32" | 2"  | 2.0"  | 1.5"   | 13.5"  | 36"   |
| <sup>2</sup> 2" Stand-off   | 34" | 2"  | 2.0"  | 1.5"   | 13.5"  | 38"   |
| 1 Nylon bushings  | 36" | 2"  | 2.0"  | 1.5"   | 13.5"  | 40"   |
| Locking handle for adjustment of                                      |     |     |       |        |        |       |
| damper - ease of balancing  |     |     |       |        |        |       |
| <sup>1</sup> <sup>3</sup> /8" Continuous square rod through<br>damper |     |     |       |        |        |       |
|   |     |     |       |        |        |       |
| _   |     |     |       |        |        |       |
|   |     |     |       |        |        |       |
|   |     |     |       |        |        |       |
|   |     |     |       |        |        |       |
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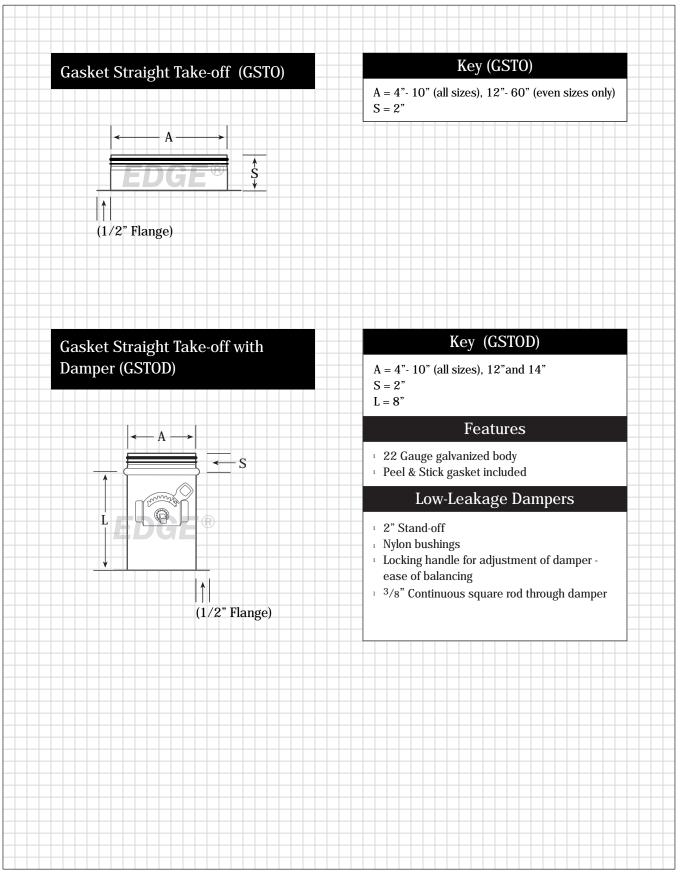




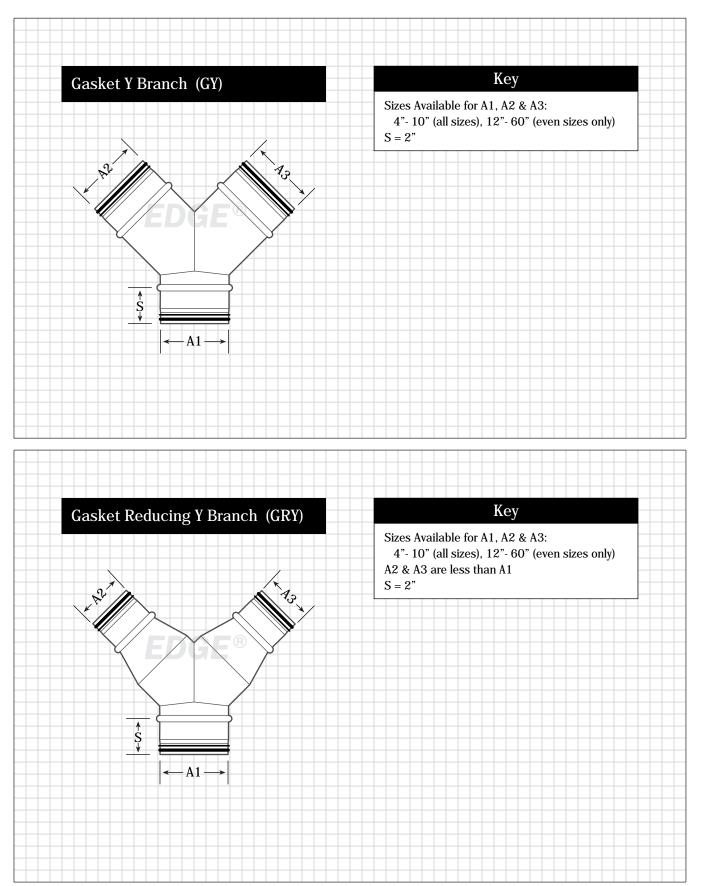




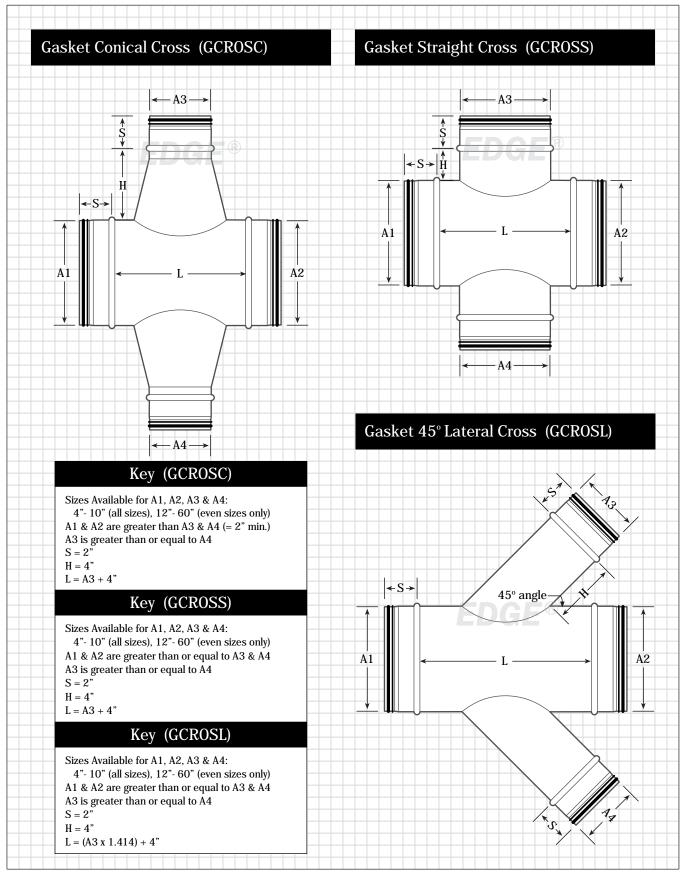




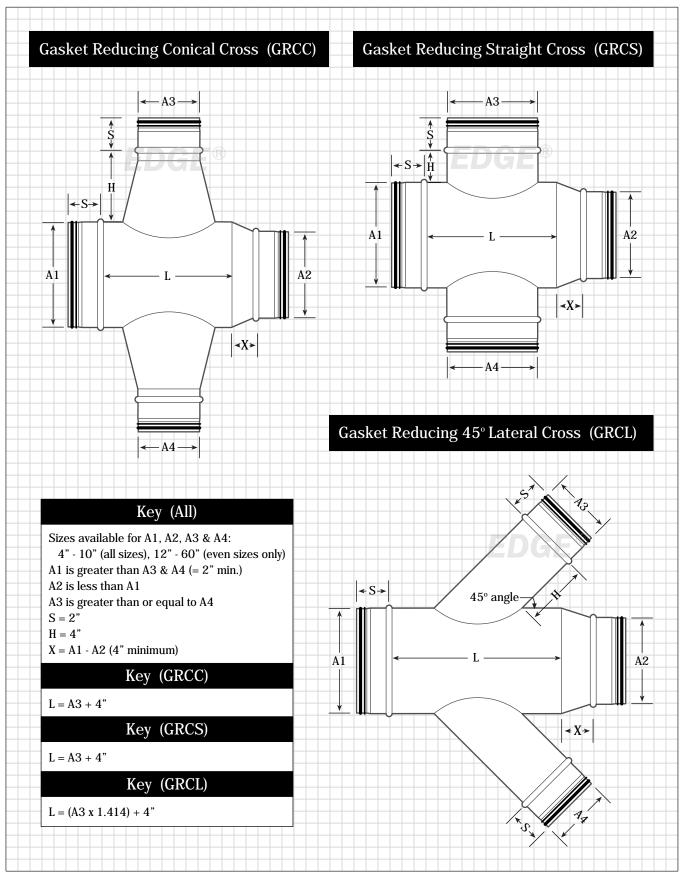














### The EDGE<sup>®</sup> – Product Specifications

