



# Sheet Metal Connectors, Inc.

[www.smduct.com](http://www.smduct.com)

SPECIFICATIONS FOR

## SPIRAL PIPE AND FITTINGS



### **MINNEAPOLIS, MN**

5850 Main Street N.E.

Minneapolis, MN 55432

LOCALLY CALL: 763-572-0000

TOLL FREE: 1-800-328-1966

FAX: 763-572-1100

### **ROCKFORD, IL**

5601 Sandy Hollow Road

Rockford, IL 61109

LOCALLY CALL: 815-874-4600

TOLL FREE: 1-866-504-4600

FAX: 815-874-9979



## Corporate Headquarters

# SHEET METAL CONNECTORS, INC.

5850 MAIN STREET N.E. • MINNEAPOLIS, MINNESOTA 55432

Toll Free: 800-328-1966 Local: 763-572-0000 Fax: 763-572-1100

[www.smcduct.com](http://www.smcduct.com)

## Manufacturing Facilities

5850 Main Street N.E.

Minneapolis, MN 55432

LOCAL: 763-572-0000

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5601 Sandy Hollow Road

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**Sheet Metal Connectors, Inc. is proud to be a member or affiliated  
with the following associations;**



YELLOW LABEL

Sheet Metal Workers' International Association  
Washington, DC



Sheet Metal Air Conditioning Contractors'  
National Association  
Chantilly, VA



SPIDA  
Spiral Duct Manufacturers Association  
Irmo, SC



SMACNA Testing & Research Institute  
Chantilly, VA

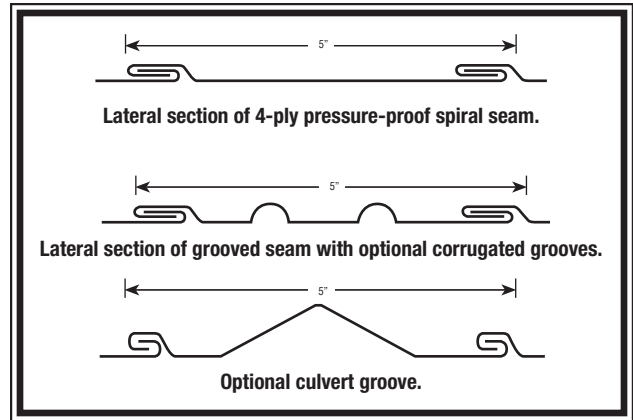


# Single-Wall Spiral Pipe & Fittings

Sheet Metal Connectors, Inc. (SMC) Single Wall Pipe and Fittings with Complete Seal, E-Z Flange and Barrel Clamp or Standard Slip Connection

## Single-Wall Spiral Pipe

Sheet Metal Connectors, Inc. spiral pipe is formed from a coil of metal into a rigid steel tube with a 4-ply spiral lockseam. It has a smooth interior for low friction loss with the grooved seam entirely on the outside. This pipe has a resistance to crushing approximately 2 1/2 times that of longitudinal lockseam or welded pipe. Optional corrugations are available which increase the rigidity of the pipe by approximately 300%. Pipe sections can be joined together by an Complete Seal Spiral Pipe Connector, E-Z Flange with Barrel Clamp, E-Z Flange Jr. with Barrel Clamp, Standard Spiral Pipe Connector, or Companion Angle Rings.



## Single-Wall Materials

DIAMETER	MATERIAL	THICKNESS	ASTM	TYPE	LENGTH
3" - 96"	Galvanized	26 - 14 gauge	A-653	G60-G90	1' - 20', 10' Standard
3" - 96"	Paint Grip	24 - 18 gauge	A-653	A60	1' - 20', 10' Standard
3" - 96"	PVS*	24 - 16 gauge	A-653	4 x 1, 4 x 4	1' - 20', 10' Standard
3" - 60"***	Aluminum	.032 - .063	B-316	3003 H-14	1' - 20', 10' Standard
3" - 60"***	Stainless Steel	24 - 18 gauge	A-240	304 or 316	1' - 20', 10' Standard

\*PVS specification book available

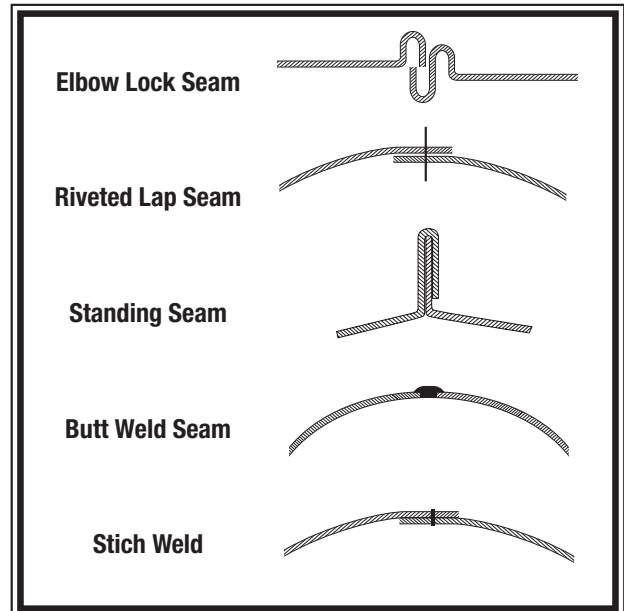
\*\* Call factory for sizes over 60" in diameter.

## Single-Wall Fittings

SMC spiral fittings are manufactured with an elbow lock seam, lap seam (i.e. stitch weld, riveted, tack weld or solid weld), standing seam or butt weld seam. These may be with or without duct sealant.

### All fittings can be manufactured with:

- Complete Seal Spiral Pipe System – 6" to 24" Diameter (even sizes)
- E-Z Flange Jr. with Barrel Clamp – 6" to 24" Diameter
- E-Z Flange with Barrel Clamp – 26" to 96" Diameter
- Standard Spiral Pipe End
- Companion Angle Ring



Note: SMACNA Testing and Research Institute verified that Sheet Metal Connectors, Inc. shop standards comply with the 2005-3rd edition of the SMACNA HVAC Duct Construction Standards.



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# Single-Wall Connectors

## Complete Seal Fittings - 6" to 24" Diameter

Complete Seal fittings are manufactured from galvanized steel meeting spec ASTM A-653 (Lockforming quality). They feature a double legged EPDM gasket which creates a virtually airtight connection when slipped into spiral pipe. The gasket is mechanically attached to the fitting with a 180 degree hemmed edge. This hem gives added rigidity to the fittings, ensures that the gasket will never slip out of place and makes a safe rounded edge for the installer.

\*Complete Seal is currently available on Galvanized Fittings only.



## E-Z Flange with Barrel Clamp - 26" to 96" Diameter

The E-Z flange with barrel clamp can be factory installed or shipped loose for field installation. A set consists of two E-Z flanges and one barrel clamp. For field installation the installer attaches the E-Z flange to the pipe and fittings. Next the installer applies the gasket to one flange, mates the two flanges together and attaches the barrel clamp. Sheet Metal Connectors can also install E-Z flanges. Flanges are spot welded and internally sealed on all ends of the spiral pipe and fittings.



## E-Z Flange Jr. with Barrel Clamp - 6" to 24" Diameter

The E-Z flange jr. is a 5/8" flange turned out 90° on each end of the spiral pipe and fittings. The installer applies a gasket on one flange, mates the two flanges together, and attaches the barrel clamp. For field cuts a 5/8" flanged sleeve is available. Trim the spiral pipe to the measured length and attach the sleeve.



## Standard Spiral Pipe Connector

Pipe to Pipe connections are made by using a fitting size exact coupling that slips inside the mating pipe sections. A stop bead runs around the middle of the coupling to center the coupling in the connection. Secure the connection by installing sheet metal screws through the outer shell of the duct, 1/2 inch from the stop bead.

## Companion Angle Rings - Pressed and Rolled

Companion angle rings are for end connections whenever a smooth interior surface or intermediate stiffening is required. Rings are manufactured from mild steel. Companion angle rings can be factory installed or shipped loose. Companion angle rings can be attached by solid weld, tack weld, or van stone connection. See companion angle ring size chart on page 20.



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## Weight and Gauge Chart

Diam.	26 Gauge lbs./ft.	24 Gauge lbs./ft.	22 Gauge lbs./ft.	20 Gauge lbs./ft.	18 Gauge lbs./ft.	16 Gauge lbs./ft.
3"	0.8	1.1	1.3	1.5		
4"	1.1	1.4	1.7	2.0		
5"	1.4	1.7	2.1	2.5	3.2	4.0
6"	1.6	2.0	2.5	3.0	3.9	4.5
7"	1.9	2.4	2.9	3.4	4.6	5.6
8"	2.1	2.8	3.3	3.9	5.2	6.3
9"	2.4	3.1	3.8	4.4	5.9	7.2
10"	2.6	3.4	4.2	4.9	6.5	7.9
11"	2.9	3.8	4.6	5.4	7.1	8.7
12"	3.2	4.1	5.0	5.9	7.8	9.5
13"		4.5	5.4	6.4	8.5	10.2
14"		4.8	5.8	6.9	9.1	11.1
15"		5.1	6.2	7.4	9.8	11.9
16"		5.5	6.6	7.8	10.4	12.7
17"		5.8	7.1	8.3	11.1	13.4
18"		6.1	7.5	8.8	11.7	14.2
20"		6.8	8.3	9.8	13.0	15.8
22"		7.5	9.1	10.8	14.3	17.4
24"		8.2	9.9	11.7	15.6	19.0
26"			10.8	12.7	16.9	20.6
28"			11.6	13.7	18.2	22.2
30"			12.4	14.6	19.5	23.8
32"			13.3	15.6	20.8	25.4
34"			14.1	16.6	22.0	26.9
36"			14.9	17.6	23.3	28.5
38"				18.5	24.6	30.1
40"				19.5	25.9	31.7
42"				20.5	27.2	33.3
44"				21.5	28.5	34.9
46"				22.5	29.8	36.4
48"				23.4	31.1	38.0
50"				24.5	32.4	39.6
52"					33.7	41.3
54"					34.8	42.9
56"					36.3	44.5
58"					37.4	46.0
60"					38.9	47.3

Standard gauges in boxed area, weights may vary slightly.

## CLOSE CELL NEOPRENE GASKET

Neoprene	1/4" x 1/2"	(50' rolls - 1500' per box)	E-Z Flange Jr.
Neoprene	1/4" x 3/4"	(50' rolls - 1500' per box)	E-Z Flange & TDC

These tables are given only as a courtesy. Sheet Metal Connectors is not responsible for any results listed on these charts.

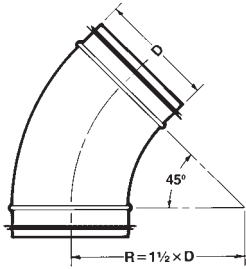
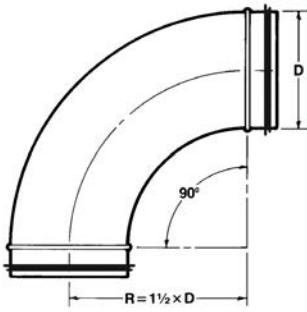


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## Two Piece Pressed Solid Welded Elbows



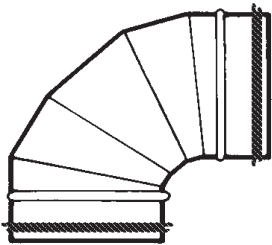
### Centerline Throat Radius Chart

Diam.	90°	45°
3"	4 1/2"	4 1/2"
4"	6"	6"
5"	7 1/2"	7 1/2"
6"	9"	9"
7"	10 1/2"	10 1/2"
8"	12"	12"
9"	13 1/2"	13 1/2"
10"	15"	15"
12"	18"	18"
14"	21"	21"

All Fittings are 1.75" from Bead to End of Fitting.

Pressed elbows and angles are resistance welded with copper on both the heel and throat. All pressed fittings are manufactured from extra deep drawing steel (EDDS) in accordance with ASTM-A653. Pressed fittings are precision drawn, tolerances must be within + or - .002 thickness to assure a quality product at all times. All pressed fittings are made of 24 Ga. or 22 Ga. Galvanized material with a G60 or better coating thickness and are chemically treated to retard white rust.

## Standing Seam Elbows & Angles



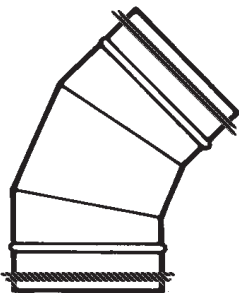
### Standing Seam Elbows and Angles

Standing Seam fittings work well for medium pressure applications and offer an alternative to welded elbows and angles. These are available from 8" through 60" diameters and fabricated as heavy as 16 gauge. Other diameters and throat radiuses are available.

\* 42" and larger diameter 90 degree elbows are fabricated using two 45 degree angles connected with an E-Z Flange and Barrel Clamp unless otherwise specified.

Standard Throats	
8" thru 18"	8" Throat
20" thru 40"	10" Throat
42" thru 60" *	20" Throat

All Fittings are 1.75" from Bead to End of Fitting.



### Full Sweep Standing Seam Elbows

8"-30" will be a 5 gore one piece standard throat construction. 32" and larger in diameter 90 degree full sweep (1.5 x CL) elbows are fabricated using two 45 degree angles connected with an E-Z flange and barrel clamp unless otherwise specified.

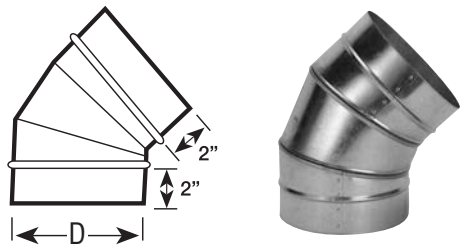
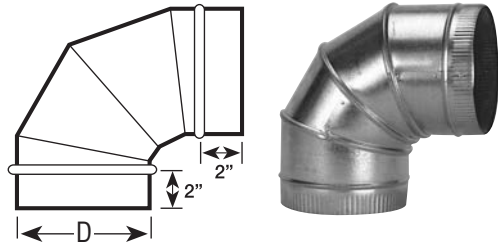


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# Adjustable Elbows & Angles



Full sweep elbows and angles are available up to 16" diameter.

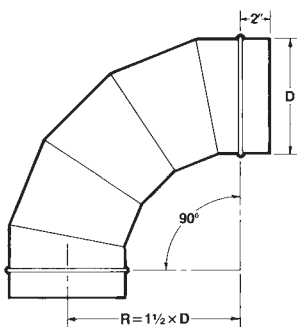
## 90° Throat and Gauge Chart

Diam.	26 Gauge	24 Gauge	22 Gauge	Diam.	26 Gauge	24 Gauge	22 Gauge
3"	1"	1"	N/A	13"	3"	3"	3"
4"	1 1/2"	1 1/2"	1 1/2"	14"	N/A	3"	3"
5"	1 1/2"	1 1/2"	1 1/2"	15"	N/A	3"	3"
6"	1 1/2"	1 1/2"	1 1/2"	16"	N/A	3"	3"
7"	1 1/2"	1 1/2"	1 1/2"	18"	N/A	3"	3"
8"	2"	2"	2"	20"	N/A	3"	3"
9"	2"	2"	2"	22"	N/A	N/A	5"
10"	2"	2"	2"	24"	N/A	N/A	5"
11"	3"	3"	3"	26"	N/A	N/A	5"
12"	2 1/2"	2 1/2"	2 1/2"	28"	N/A	N/A	5"

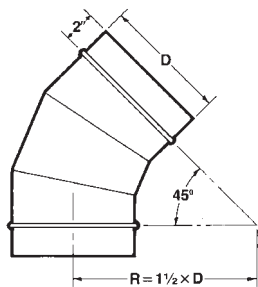
## 45° Throat and Gauge Chart

Diam.	26 Gauge	24 Gauge	22 Gauge	Diam.	26 Gauge	24 Gauge	22 Gauge
3"	3"	3"	N/A	13"	5"	5"	5"
4"	3"	3"	3"	14"	N/A	5"	5"
5"	4"	4"	4"	15"	N/A	5"	5"
6"	4"	4"	4"	16"	N/A	5"	5"
7"	5"	5"	5"	18"	N/A	5"	5"
8"	5"	5"	5"	20"	N/A	5"	5"
9"	5"	5"	5"	22"	N/A	N/A	5"
10"	5"	5"	5"	24"	N/A	N/A	5"
11"	5"	5"	5"	26"	N/A	N/A	5"
12"	5"	5"	5"	28"	N/A	N/A	5"

# Welded Gored Elbows & Angles



Standard Elbows and Angles are fabricated from 20 gauge galvanized material. Other diameters, throat radiuses and gauges are available, please consult factory.



52" and larger in diameter 90 degree full sweep (1.5 x CL) elbows are fabricated using two 45 degree angles connected with an E-Z flange and barrel clamp unless otherwise specified.



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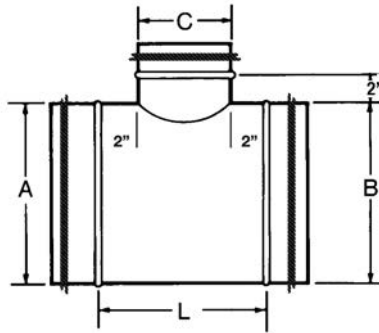
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## 90° Tee

Dimensions to be listed as follows: A, B, C  
 $L = "C" + 4"$

All Fittings are 1.75"  
 from Bead to End of Fitting.

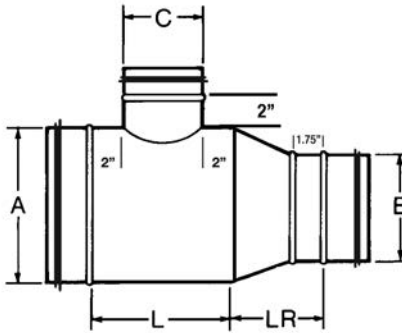


## Tee with Reducer

Dimensions to be listed as follows: A, B, C  
 $L = "C" + 4"$

L.R.: Refer to page 9

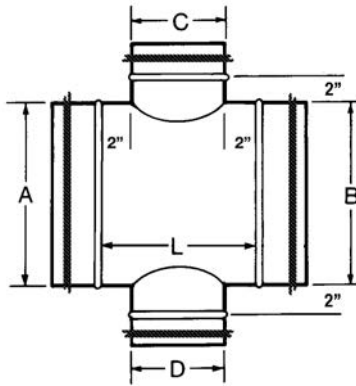
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Cross

Dimensions to be listed as follows: A, B, C, D  
 $L = \text{Largest of "C" or "D"} + 4"$

All Fittings are 1.75"  
 from Bead to End of Fitting.

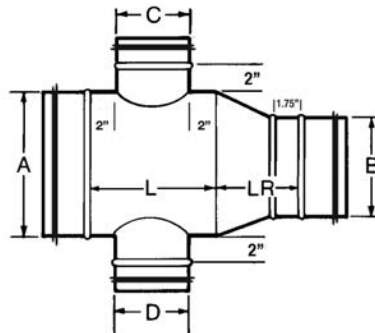


## Cross with Reducer

Dimensions to be listed as follows: A, B, C, D  
 $L = \text{Largest of "C" or "D"} + 4"$

L.R.: Refer to page 9

All Fittings are 1.75"  
 from Bead to End of Fitting.



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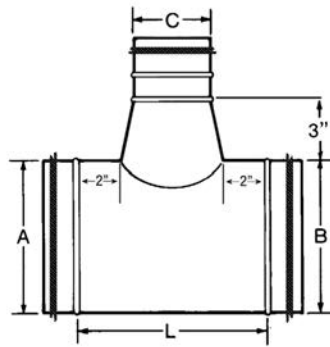
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## Conical Tee

Dimensions to be listed as follows: A, B, C  
 $L = C + 5"$

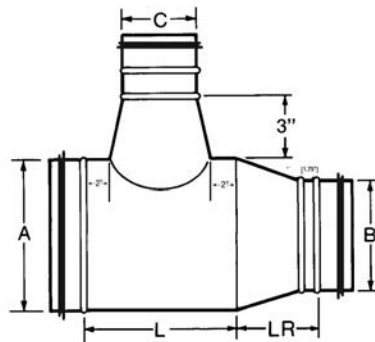
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Conical Tee with Reducer

Dimensions to be listed as follows: A, B, C  
 $L = C + 5"$   
 L.R.: Refer to page 9

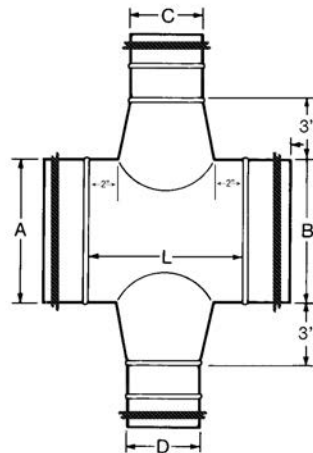
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Conical Cross

Dimensions to be listed as follows: A, B, C, D  
 $L = \text{Larger of "C" or "D"} + 5"$

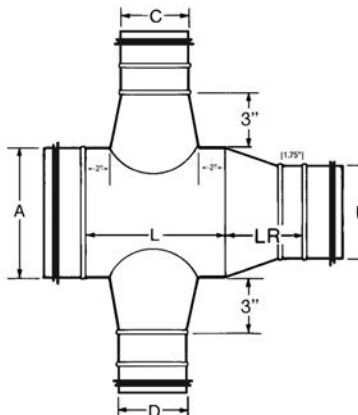
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Conical Cross with Reducer

Dimensions to be listed as follows: A, B, C, D  
 $L = \text{Larger of "C" or "D"} + 5"$   
 L.R.: Refer to page 9

All Fittings are 1.75"  
 from Bead to End of Fitting.



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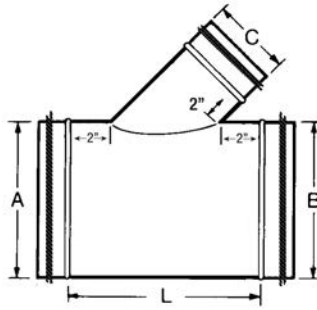
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## Lateral

Dimensions to be listed as follows: A, B, C  
 $L = (1.414 \times C) + 4"$

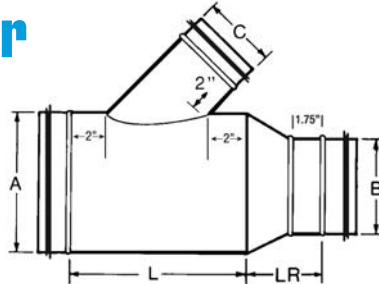
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Lateral with Reducer

Dimensions to be listed as follows: A, B, C  
 $L = (1.414 \times C) + 4"$   
 L.R.: Refer to page 9

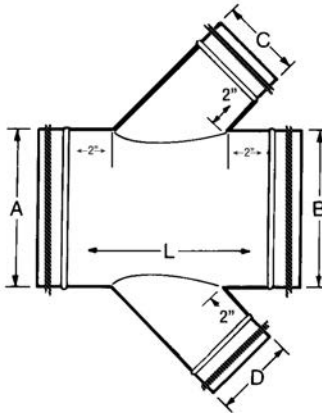
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Lateral Cross

Dimensions to be listed as follows: A, B, C, D  
 $L = 1.414 \times (\text{Larger of "C" or "D"}) + 4"$

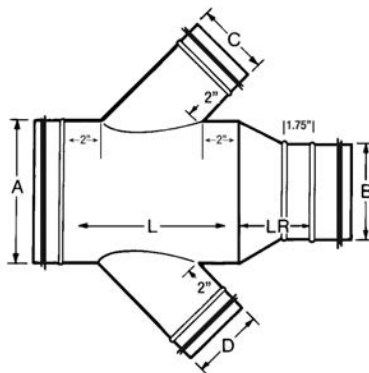
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Lateral Cross with Reducer

Dimensions to be listed as follows: A, B, C, D  
 $L = 1.414 \times (\text{Larger of "C" or "D"}) + 4"$   
 L.R.: Refer to page 9

All Fittings are 1.75"  
 from Bead to End of Fitting.



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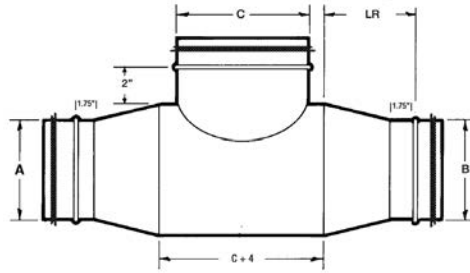
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## Bullnose Tee (Bullhead)

Dimensions to be listed as follows: A, B, C  
L.R.: Refer to page 9

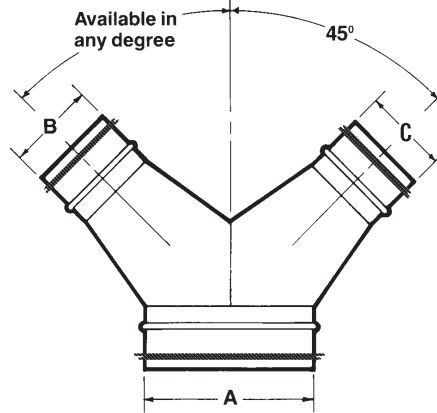
All Fittings are 1.75" from Bead to End of Fitting.



## Pair of Pants (Wye Branch)

Dimensions to be listed as follows: A, B, C

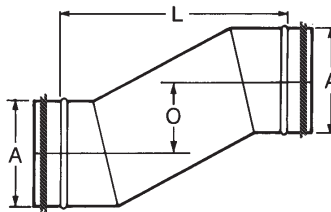
All Fittings are 1.75" from Bead to End of Fitting.



## Offset

Dimensions to be listed as follows: A, O, L

All Fittings are 1.75" from Bead to End of Fitting.



## LR Value for Tees and Crosses

Size Reduction	LR	Size Reduction	LR
1	4.75	12	20.25
2	5.75	13	21.25
3	5.75	14	22.25
4	7.75	15	25.25
5	8.75	16	25.25
6	9.75	17	28.25
7	13.25	18	28.25
8	14.25	19	29.25
9	16.25	20	31.25
10	17.25	21	32.25
11	18.25	22	33.25

\* Add 1.5" to LR Value for Diameters over 18"



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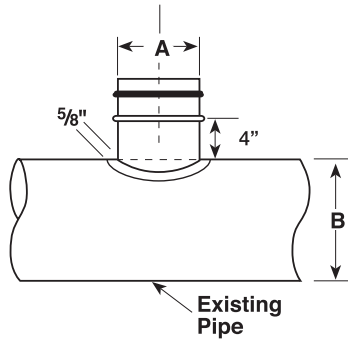
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## 90° Swedged Saddle

Dimensions to be listed as follows: A on B

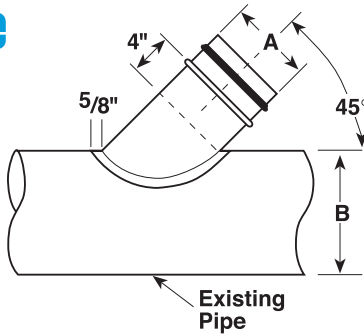
All Fittings are 1.75" from Bead to End of Fitting.



## 45° Swedged Saddle

Dimensions to be listed as follows: A on B

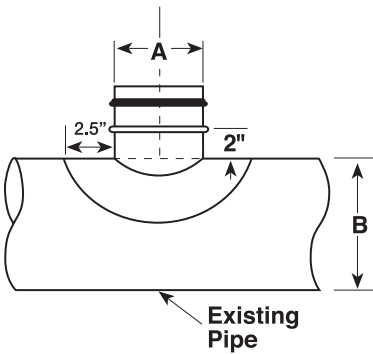
All Fittings are 1.75" from Bead to End of Fitting.



## 90° Full Saddle

Dimensions to be listed as follows: A on B

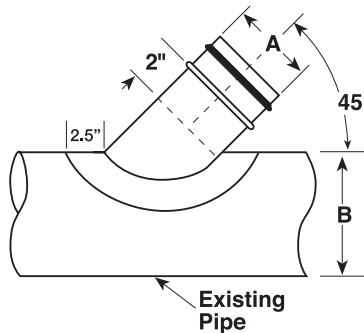
All Fittings are 1.75" from Bead to End of Fitting.



## 45° Full Saddle

Dimensions to be listed as follows: A on B

All Fittings are 1.75" from Bead to End of Fitting.



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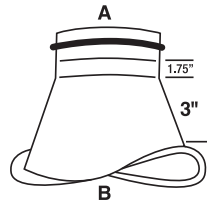
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## 90° Conical Swedge Saddle

Dimensions to be listed as follows: A on B  
 $B = A + 1"$

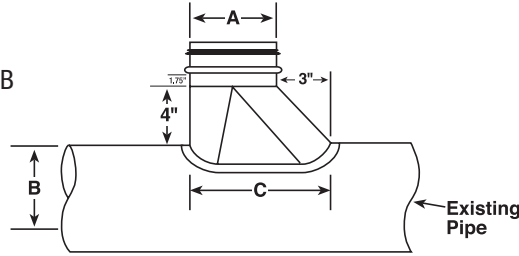
All Fittings are 1.75"  
 from Bead to End of Fitting.



## 90° Shoe Tap

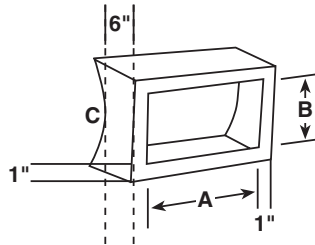
Dimensions to be listed as follows: A on B  
 $C = A + 3"$

All Fittings are 1.75"  
 from Bead to End of Fitting.



## Register Takeoffs

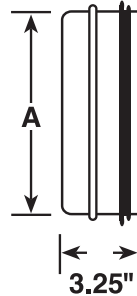
Dimensions to be listed as follows: A, B on C  
 (Order Takeoffs by Register Size Only)



## End Cap (Plug)

Dimensions to be listed as follows:  
 A, equal diameter

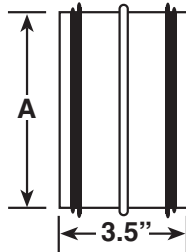
All Fittings are 1.75"  
 from Bead to End of Fitting.



## Connector (Coupling)

Dimensions to be listed as follows:  
 A, equals diameter

All Fittings are 1.75"  
 from Bead to End of Fitting.



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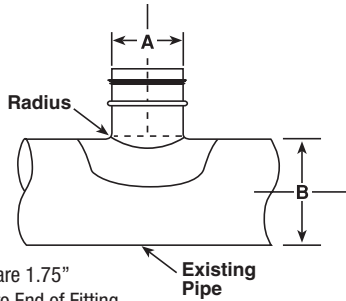
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# Pressed Fittings

All stamped fittings are manufactured from extra deep drawing steel (EDDS) in accordance with ASTM-A653. This type of steel is manufactured by domestic steel mills and has some unique qualities. Stamped fittings are precision drawn, tolerances must be within + or - .002 thickness to assure a quality product at all times. All pressed fittings are made of 24 Ga. or 22 Ga. Galvanized material with a G60 or better coating thickness and is chemically treated to retard white rust.

## 90° Saddle Tap

Dimensions to be listed as follows: A on B



All Fittings are 1.75" from Bead to End of Fitting.

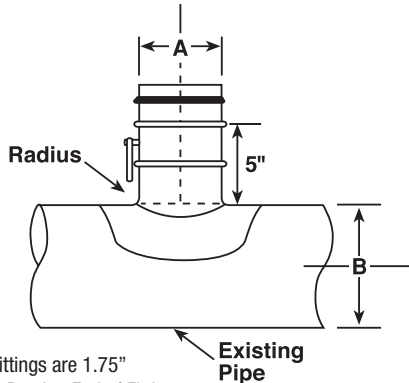


A	B	Radius	Height
6"	6"	7/8"	2 3/4"
6"	8"	7/8"	2 3/4"
6"	10"	7/8"	2 3/4"
6"	12"	7/8"	2 3/4"
6"	14"	7/8"	2 3/4"
8"	8"	1"	3 1/4"
8"	10"	1"	3 1/4"
8"	12"	1"	3 1/4"
8"	14"	1"	3 1/4"
8"	16"	1"	3 1/4"
8"	18"	1"	3 1/4"
10"	10"	1"	3 1/4"
10"	12"	1"	3 1/4"
10"	14"	1"	3 1/4"
10"	16"	1"	3 1/4"
10"	18"	1"	3 1/4"
12"	12"	1"	3 1/4"
12"	14"	1"	3 1/4"
12"	16"	1"	3 1/4"
12"	18"	1"	3 1/4"

## 90° Saddle Tap W/Damper

Dimensions to be listed as follows: A on B

Also available with 2" Insulation Extension



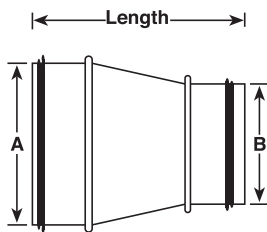
All Fittings are 1.75" from Bead to End of Fitting.



A	B	Radius	Height
6"	6"	7/8"	6.5"
6"	8"	7/8"	6.5"
6"	10"	7/8"	6.5"
6"	12"	7/8"	6.5"
6"	14"	7/8"	6.5"
8"	8"	1"	6.5"
8"	10"	1"	6.5"
8"	12"	1"	6.5"
8"	14"	1"	6.5"
8"	16"	1"	6.5"
8"	18"	1"	6.5"
10"	10"	1"	6.5"
10"	12"	1"	6.5"
10"	14"	1"	6.5"
10"	16"	1"	6.5"
10"	18"	1"	6.5"
12"	12"	1"	6.5"
12"	14"	1"	6.5"
12"	16"	1"	6.5"
12"	18"	1"	6.5"

## Concentric Reducer

Dimensions to be listed as follows: A, B



All Fittings are 1.75" from Bead to End of Fitting.



A	B	Overall Length
8"	6"	6 3/4"
10"	6"	8 1/2"
10"	8"	6 3/4"
12"	8"	8 1/2"
12"	10"	6 3/4"
14"	10"	8 1/2"
14"	12"	6 3/4"
16"	10"	10 1/2"
16"	12"	8 1/2"
16"	14"	6 3/4"
18"	12"	10 1/2"
18"	14"	8 1/2"
18"	16"	6 3/4"



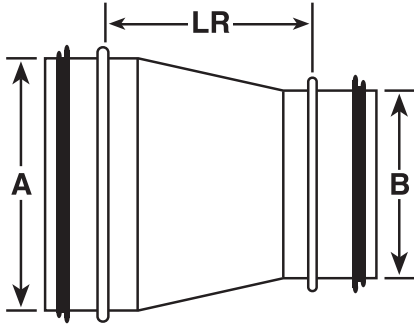
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## Concentric Reducer

Dimensions to be listed as follows: A, B  
LR = See Chart

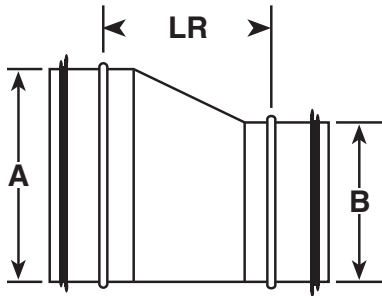


All Fittings are 1.75"  
from Bead to End of Fitting.

Size Reduction	LR
1	6.5
2 & 3	7.5
4	9.5
5	10.5
6	11.5
7	13.5
8	14.5
9	16.5
10	17.5
11	18.5
12	20.5
13	21.5
14	22.5
15 & 16	25.5
17 & 18	28.5
19	29.5
20	31.5
21	32.5
22	33.5

## Eccentric Reducer

Dimensions to be listed as follows: A,B  
LR = See Chart



All Fittings are 1.75"  
from Bead to End of Fitting.

Size Reduction	LR
1	6
2	8.5
3	11
4	13.5
5	16
6	18.5
7	21
8	23.5
9	26
10	28.5
11	31
12	33.5
14	38.5
16	43.5
18	48.5
20	53.5



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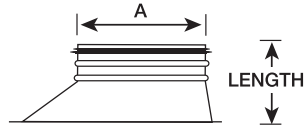
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# High Efficiency Die Stamped Takeoff (Super HETO)

## Super Heto

Order as follows: A = Diameter

★ Patent # US D571,908 S

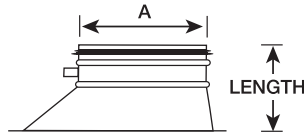


A	Overall Length
5"	10 1/2"
6"	6 1/2"
8"	7"
10"	7"
12"	7"
14"	7"

All Fittings are 1.75" from Bead to End of Fitting.

## Super Heto with Damper

Order as follows: A = Diameter

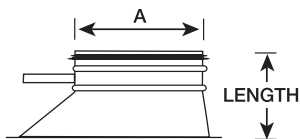


A	Overall Length
6"	6 1/2"
7"	10"
8"	7"
9"	10 3/4"
10"	7"
12"	7"
14"	7"

All Fittings are 1.75" from Bead to End of Fitting.

## Super Heto with 2" Extension

Order as follows: A = Diameter

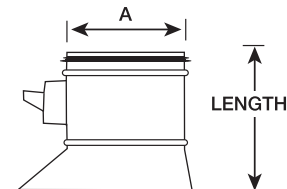


A	Overall Length
6"	6 1/2"
7"	10"
8"	7"
9"	10 3/4"
10"	7"
12"	7"
14"	7"

All Fittings are 1.75" from Bead to End of Fitting.

## Super Heto with 2" Standoff

Order as follows: A = Diameter



A	Overall Length
6"	8"
8"	9"
10"	9"
12"	9"
14"	9"

All Fittings are 1.75" from Bead to End of Fitting.



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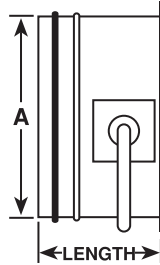
# Standoff Collars

## E-Z Tap Collars with 2" Standoff

Order as follows: A = Diameter

Also available with 2" Insulation Extension

All Fittings are 1.75"  
from Bead to End of Fitting.

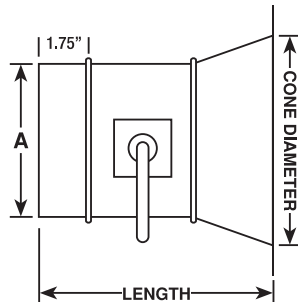


A	Overall Length
5"	5"
6"	5"
7"	5"
8"	5"
9"	5"
10"	5"
12"	7"
14"	7"
16"	7"
18"	10"
20"	10"
22"	10"
24"	10"

## Conical E-Z Tap with 2" Standoff

Order as follows: A = Diameter

Also available with 2" Insulation Extension



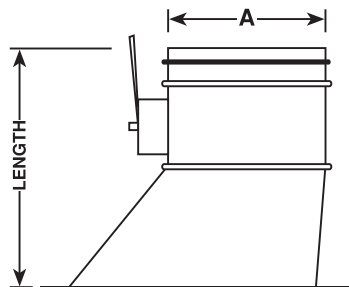
A	Overall Length
6"	9 1/4"
8"	9 1/4"
10"	9 1/4"
12"	9 1/4"

## High Efficiency with 2" Standoff

Order as follows: A = Diameter

Also available with 2" Insulation Extension

All Fittings are 1.75"  
from Bead to End of Fitting.



A	Overall Length
16"	14 1/4"
18"	15 1/2"
20"	15 1/2"



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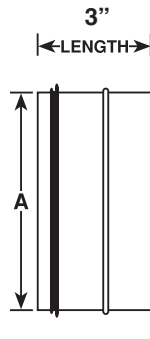
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# 16

## E-Z Tap Collar

Order as follows: A = Diameter

All Fittings are 1.75" from Bead to End of Fitting.

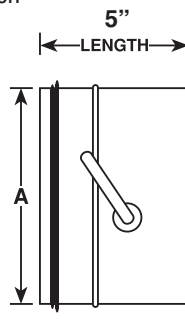


## E-Z Tap Collar with Damper

Order as follows: A = Diameter

Also Available with 2" Insulation Extension

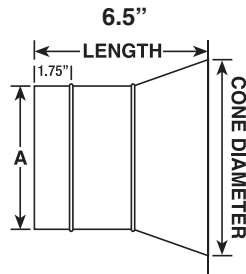
All Fittings are 1.75" from Bead to End of Fitting.



## E-Z Tap Conical Takeoff Collar

Order as follows: A = Diameter

Cone Diameter	
A	Diameter
4"	5"
5"	6"
6"	8"
7"	9"
8"	10"
9"	11"
10"	12"
12"	14"
14"	16"
16"	18"
18"	20"

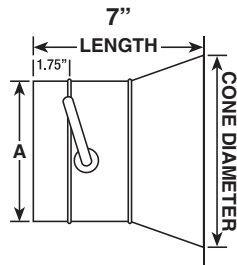


## E-Z Tap Conical Takeoff Collar with Damper

Order as follows: A = Diameter

Also Available with 2" Insulation Extension

Cone Diameter	
A	Diameter
4"	5"
5"	6"
6"	8"
7"	9"
8"	10"
9"	11"
10"	12"
12"	14"
14"	16"
16"	18"
18"	20"



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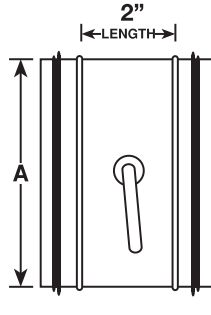
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# Damper Sleeves

## Complete Seal Damper Sleeve

Order as follows: A = Diameter  
Also available with 2" Insulation Extension

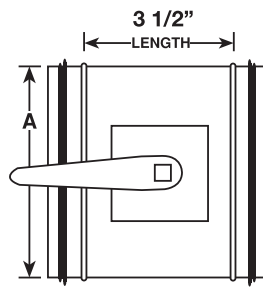
All Fittings are 1.75"  
from Bead to End of Fitting.



## Complete Seal Damper Sleeve with 2" Standoff

Order as follows: A = Diameter

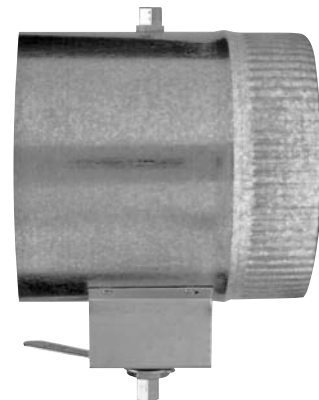
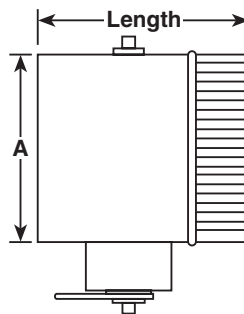
All Fittings are 1.75"  
from Bead to End of Fitting.



## Sleeve with 2" Standoff

Order as follows: A = Diameter  
Also available with 2" Insulation Extension

A	Length
6"	6 3/16"
7"	6 3/16"
8"	6 3/16"
9"	6 3/16"
10"	6 3/16"
12"	8"
14"	12"
16"	12"
18"	13"
20"	15"



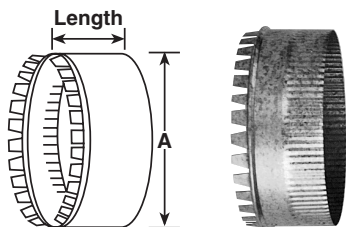
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## Notched Collars

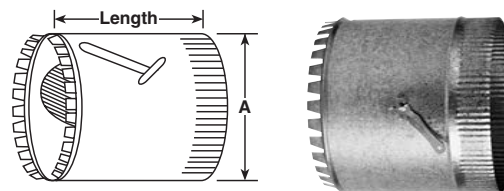
Order as follows: A = Diameter



A	Length
4" thru 20"	2 3/4"

## Notched Collars w/Damp

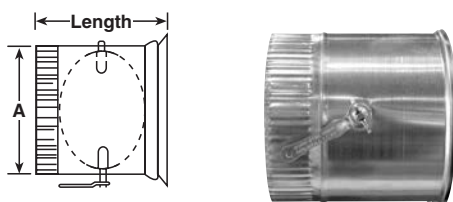
Order as follows: A = Diameter



A	Length
4" thru 7"	5 1/2"
8"	7 1/4"
9"	8 1/4"
10" thru 12"	9 1/4"
14" thru 16"	13 1/4"
18"	15 1/4"
20"	17 1/4"

## Spin-In Collar w/Dual Quad Damper

Order as follows: A = Diameter

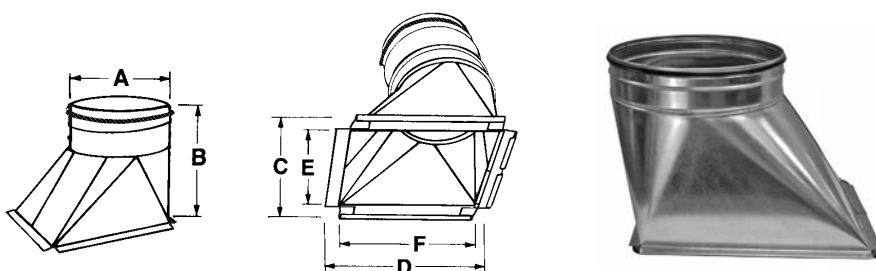


A	Length
4" thru 7"	5 3/4"
8" & 9"	7 1/2"
10" & 12"	9 1/2"
14" & 16"	13 5/8"
18" & 20"	17 5/8"

## High Efficiency Takeoffs

Order as follows: A = Diameter

Also available with 2" Insulation Extension



Hole Cut Size					
A	B	C	D	E	F
16"	13 1/2"	18"	22"	16"	20"
18"	13 1/2"	20"	24"	18"	22"
20"	13 1/2"	22 1/2"	26"	20"	24"
22"	17"	24"	28"	22"	26"
24"	17"	26"	30"	24"	28"

Our High-Efficiency Takeoff is designed with a rectangular opening and an approximate 45° slope on the body. A flange is turned out on all four sides. The flange also has pre-punched holes for easy installation. There is a closed cell neoprene gasket (3/4" X 1/4") applied to the flange to assure a tight seal.

High-Efficiency Takeoffs are fabricated from both 26 and 24 gauge galvanized steel. The fittings come with and without volume dampers. The adjustable dampers are assembled using a spring loaded retractable bearing and positive locking hardware.

Test data is available; call factory for more information. (Performed by ETL Testing Laboratories.)



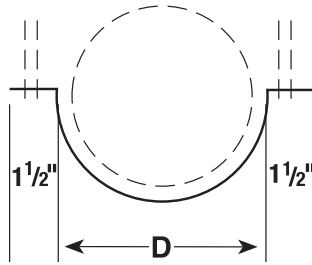
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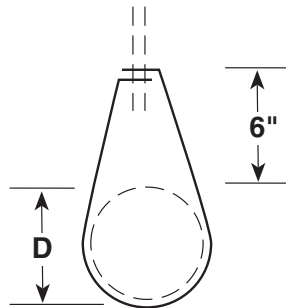
## Double Rod Hanger

18" - 60" Diameters, fabricated from 2 7/8" - 14 gauge galvanized  
 7/16" Standard Bolt Hole for 3/8" Rod.  
 9/16" Bolt Hole available on request.  
 (Rod and hardware not included)



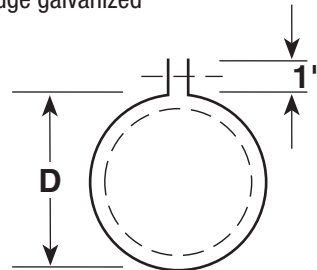
## Single Rod Hangers

3" - 16" Diameters, fabricated from 2 7/8" - 14 gauge galvanized  
 7/16" Standard Bolt Hole for 3/8" Rod.  
 9/16" Bolt Hole available on request.  
 (Rod and hardware not included)



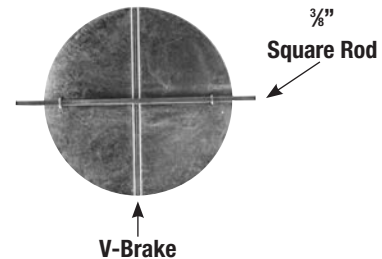
## Light Gauge Round Pipe Hangers

4" - 36" Diameters, fabricated from 1" - 16 gauge galvanized  
 5/16" Standard Bolt Hole for 1/4" Bolt.  
 (Bolt not included)



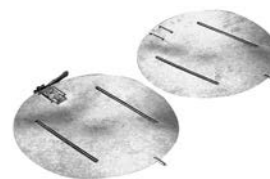
## Heavy Volume Dampers

14" - 24" 22 gauge, 3/8" square rod and H.D. Quadrants with stiffener brake  
 26" - 30" 20 gauge, 3/8" square rod and H.D. Quadrants with stiffener brake  
 Standoff Quadrants and End Bearings also available.



## Light Gauge Dampers

4" - 20" Diameters fabricated from 24 gauge galvanized material. 1/4" Rapit Bearing provided with Stiffening beads on 10" diameters and larger.



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# Wire Rope Hangers

## CL18

The CL18 Cable Lock is for use with 3/32" or 1/8" wire rope. These size wire ropes are available in 500 foot rolls. Depending upon the wire rope utilized, the CL18 has a working load limit of up to 225 lbs.

Wire Rope	3/32"	25 - 150 lbs
Wire Rope	1/8"	25-225 lbs



## CL23

The Maximum Load Range for each size wire rope incorporates a design safety factor of 5.1. The CL23 and wire rope combination should be sized for the job so that the projected load falls within the appropriate working load limit (WLL).

Wire Rope	1/8"	25-225 lbs
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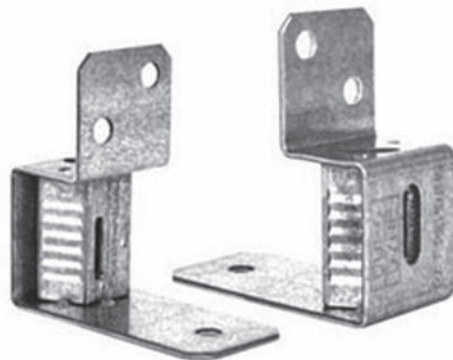


# KV12 Bracket Assembly

The KV12 bracket assembly enhances the suspension system by the addition of an integral bracket, which fastens the cable lock to the duck with sheet metal screws. The KV12 Bracket Assembly and CL12 have a working load limit of up to 150 lbs.

Bracket Assembly with CL12 100 per box  
For use with WC3 3/32" Wire Rope

Wire Rope	
1/8"	500' Roll
3/32"	500' Roll



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# Companion Angle Ring Size Chart

Order Size	Angle Mild Steel	I.D.	Bolt Holes	Hole Size	Bolt Circle
3"	Pressed	3 1/16	6	9/32	4 5/16
4"	10	4 1/16	6	9/32	5 5/16
5"	ga.	5 1/16	6	9/32	6 5/16
6"	1 1/4 X 1 1/4 X 1/8	6 1/8	6	3/8	7 5/16
7"	1 1/4 X 1 1/4 X 1/8	7 1/8	6	3/8	8 1/2
8"	1 1/4 X 1 1/4 X 1/8	8 1/8	6	3/8	9 9/16
9"	1 1/4 X 1 1/4 X 1/8	9 1/8	6	3/8	10 5/8
10"	1 1/4 X 1 1/4 X 1/8	10 1/8	6	3/8	11 13/16
11"	1 1/4 X 1 1/4 X 1/8	11 1/8	6	3/8	12 3/4
12"	1 1/2 X 1 1/2 X 1/8	12 3/16	8	7/16	14
13"	1 1/2 X 1 1/2 X 1/8	13 3/16	8	7/16	15
14"	1 1/2 X 1 1/2 X 1/8	14 3/16	8	7/16	16
15"	1 1/2 X 1 1/2 X 1/8	15 3/16	8	7/16	17
16"	1 1/2 X 1 1/2 X 3/16	16 3/16	8	7/16	18
17"	1 1/2 X 1 1/2 X 3/16	17 3/16	8	7/16	19
18"	1 1/2 X 1 1/2 X 3/16	18 3/16	8	7/16	20
20"	1 1/2 X 1 1/2 X 3/16	20 3/16	12	7/16	21 3/4
22"	1 1/2 X 1 1/2 X 3/16	22 3/16	12	7/16	23 3/4
24"	1 1/2 X 1 1/2 X 3/16	24 3/16	12	7/16	25 7/8

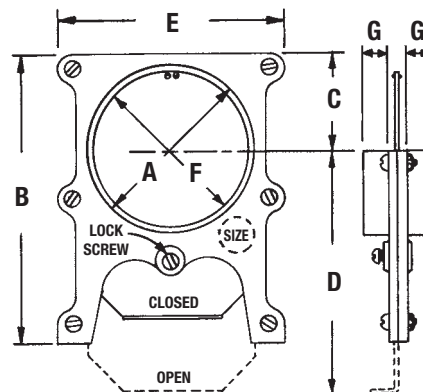
Order Size	Angle Mild Steel	I.D.	Bolt Holes	Hole Size	Bolt Circle
26"	2 x 2 x 3/16	26 3/16	16	7/16	28 3/8
28"	2 x 2 x 3/16	28 3/16	16	7/16	30 3/8
30"	2 x 2 x 3/16	30 3/16	16	7/16	32 3/8
32"	2 x 2 x 3/16	32 3/16	16	7/16	34 3/8
34"	2 x 2 x 3/16	34 3/16	16	7/16	36 3/8
36"	2 x 2 x 3/16	36 3/16	16	7/16	38 3/8
38"	2 x 2 x 3/16	38 1/4	24	7/16	40 3/8
40"	2 x 2 x 3/16	40 1/4	24	7/16	42 3/8
42"	2 x 2 x 3/16	42 1/4	24	7/16	44 3/8
44"	2 x 2 x 3/16	44 1/4	24	7/16	46 3/8
46"	2 x 2 x 3/16	46 1/4	24	7/16	48 3/8
48"	2 x 2 x 3/16	48 1/4	24	7/16	50 3/8
50"	2 x 2 x 3/16	50 1/4	24	7/16	52 3/8
52"	2 x 2 x 3/16	52 1/4	24	7/16	54 3/8
54"	2 x 2 x 3/16	54 1/4	24	7/16	56 3/8
56"	2 x 2 x 3/16	56 1/4	24	7/16	58 3/8
58"	2 x 2 x 3/16	58 1/4	24	7/16	60 3/8
60"	2 x 2 x 3/16	60 1/4	24	7/16	62 3/8

Other sizes and materials available, consult factory.

## Full Blast Gates

Size	A	B	C	D	E	F	G	wgt.
2"	2 5/16	4 7/16	1 11/16	6 1/2	3 15/16	1 7/8	3/4	3/4
3"	2 15/16	5 5/8	1 11/16	6 1/4	4	2 5/8	1 1/8	1 1/2
4"	3 7/8	6 7/8	2 3/8	7 1/2	5	3 1/2	1 1/4	1 3/4
5"	4 7/8	8	3	9 1/4	6	4 1/2	1 3/8	2 1/2
6"	5 7/8	10	3 1/4	12	7	5 1/2	1 3/8	3 1/4
7"	6 7/8	11	3 3/4	12	8	6 1/2	1 1/2	3 3/4
8"	7 7/8	12	4 1/2	14	9 1/4	7 1/2	1 3/4	5 1/2
9"	8 15/16	13 1/2	5 3/8	16	10 1/2	8 1/2	1 7/8	6 3/4
10"	9 3/4	14 3/8	5 3/4	18	11 1/4	9 7/16	1 7/8	7 1/2
11"	10 3/4	15 1/4	6 1/2	19 1/2	12 1/2	10 3/8	1 7/8	7
12"	11 3/4	16 1/4	6	21 1/4	13 1/4	11 1/2	2	9 1/4
14"	13 7/8	19	8	23 1/2	15 1/2	13 1/2	2 1/8	12 1/2
16"	15 15/16	21	9 1/2	27 1/2	18	15 1/2	2 1/4	16
18"	17 7/8	32 1/2	10	35 1/2	20	17 1/4	3 1/2	34
20"	19 3/4	34	11	39	22	19 1/8	3 5/8	44 1/2
22"	21 5/8	34	12	39	24 1/2	21 5/8	3	54 1/4
24"	23 5/8	34	13	40	26 1/2	23 5/8	3	58

Other sizes and materials available, consult factory.



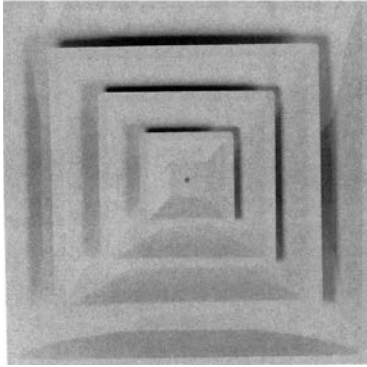
**SHEET METAL CONNECTORS, INC.**

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MINNEAPOLIS, MN 1-800-328-1966 • ROCKFORD, IL 1-866-504-4600

## Fixed Pattern Diffusers

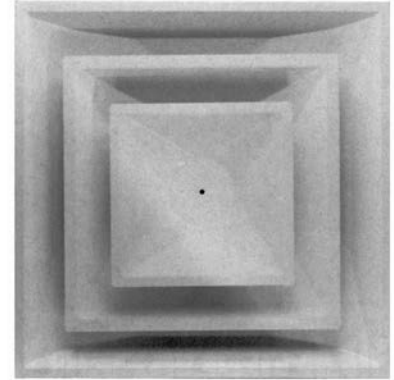
### 3 Cone



### 24' x 24" Lay-In Diffuser

- Provides high volume of air delivery
- 360° air diffusion
- Formed steel back panel
- Removable core
- Damper adjusted through diffuser face to allow proper air balancing
- Heavy gauge steel plenum
- Accepts butterfly damper (3800 Series) inserted in collar
- Prestige white finish
- Seismic tabs

### 2 Cone



Available in Sizes 6" - 24"

## Round Ceiling Diffuser with Butterfly Damper



- Steel Construction
- Step-down diffuser rings
- 360 degree air deflection
- For ceiling application



- Steel Construction
- Removable handle for adjustment

Available in Sizes 6" - 14"



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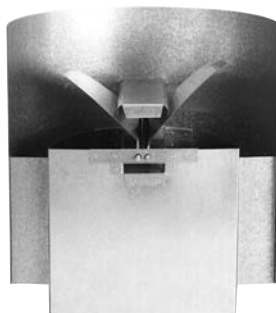
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## Skyblasts (In Lieu of Raincaps)

Size	ID Pipe Length	OD Pipe Length	Overall Length
12" - 17"*	18"	18"	26 1/2"
18" - 24"	18"	24"	32 1/2"
26" - 32"	20"	28"	36 1/2"
34" - 38"	20"	32"	40 1/2"
40" - 60"	20"	36"	44 1/2"

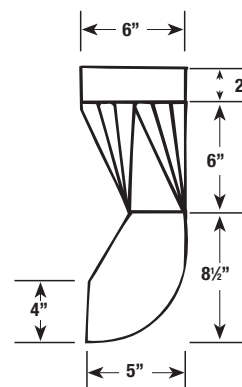
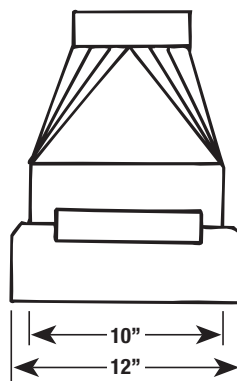


Semi-circular flaps (butterfly damper) cover the exhaust stack when fan is off. When the fan is on, flaps are forced out of the way to provide a clear path for air movement. A built-in gutter system is designed to prevent rain and snow from entering stack. Made from galvanized spiral pipe for strength and durability; available in most sizes. Preassembled for immediate installation.

\*Fabricated from Hammerlock pipe.

## Floor Sweeps

Floor sweeps are manufactured from 20 gauge galvanized steel for strength and rigidity. A continuous piano hinge connects the door to the fitting. Available in 6" standard. Other sizes can be fabricated.



## Access Doors

Access Doors available in...

- Galvanized
- Aluminum
- Stainless Steel (304 or 316)
- PVC Coated

The doors are also available in 16 ga. black iron when they are to be used for kitchen exhaust systems.

### Cellular Sponge Gasket

A cellular sponge gasket, fixed to the inner plate, keeps the doors free of leaks at pressures tested to 20" w.g.

### Access Doors for Round Ductwork

- 10" X 6" - 22 Gauge Doors available to fit on 6" - 16" diameters.
- 16" X 12" - 20 Gauge Doors available to fit on 18" - 36" diameters.

### Access Doors for Rectangular Ductwork

- 10" X 6" - 22 Gauge
- 16" X 12" - 20 Gauge



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# 24

## Tek Screws

10 x 1/2"  
10 x 3/4"  
10 x 1"

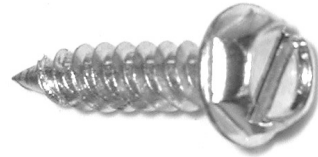
1000 or 5000 / Box



## Zip Screws

8 x 1/2"  
8 x 3/4"  
8 x 1"

1000 or 5000 / Box



## R4.2 Insulated Flexible Duct

4" - 20" Diameter

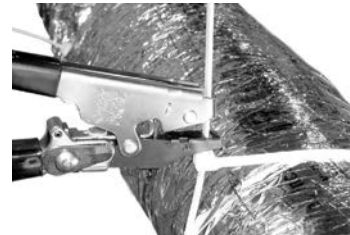
25' Per Box



## Heavy Duty Flexible Nylon Ties

36" Nylon Ties 25 / package

48" Nylon Ties 25 / package



## Tensioning Tool

Adjustable Auto Cut-off  
High Leverage



## Duct Cap

Fits Size Range:

6" - 10"	18" - 24"
10" - 14"	24" - 30"
14" - 18"	30" - 38"

25 Per Box



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