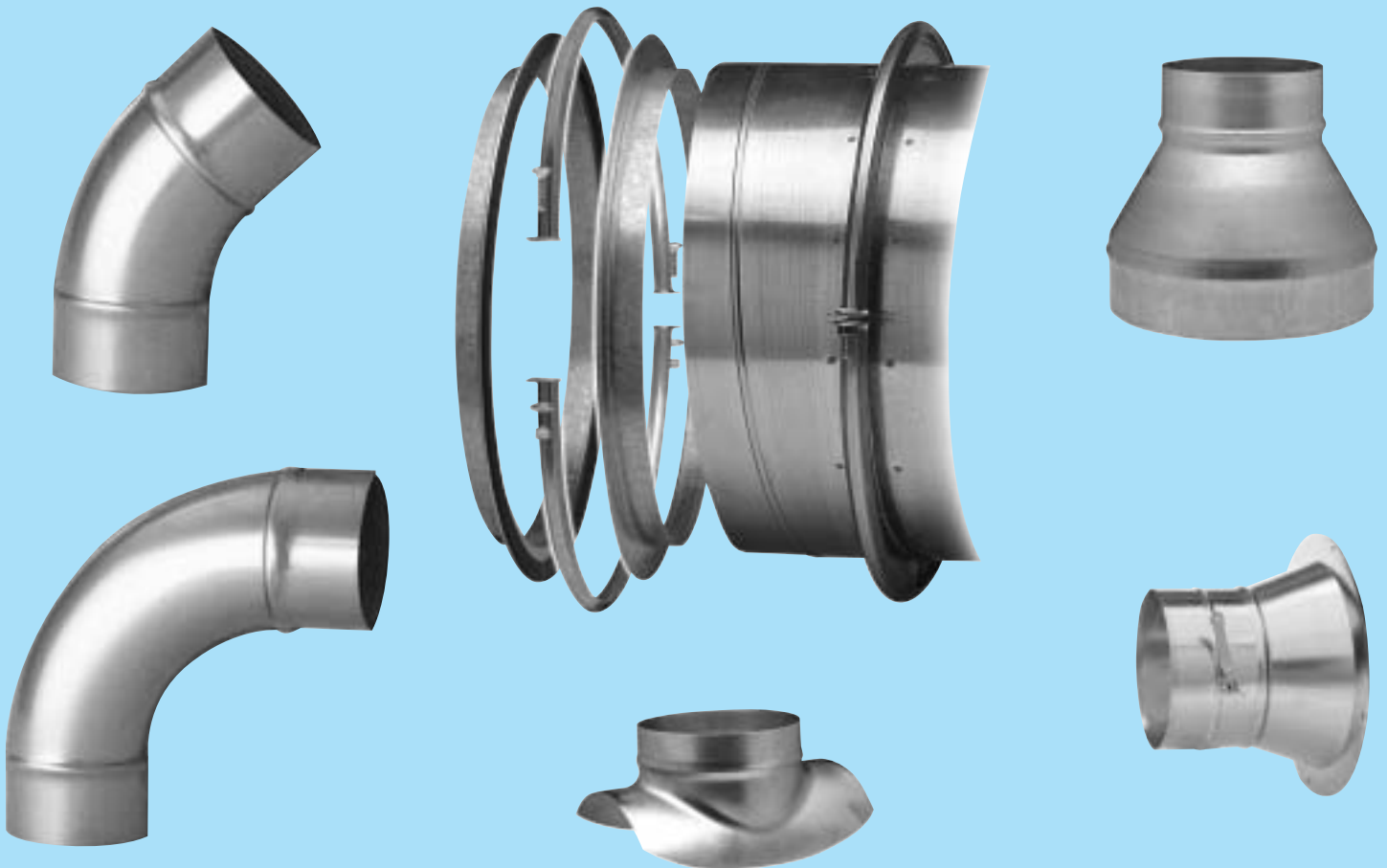




Sheet Metal Connectors, Inc.

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

Manufacturing Facilities

5850 Main Street N.E.
Minneapolis, MN 55432

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FAX: 763-572-1100

5601 Sandy Hollow Road
Rockford, IL 61109

LOCAL: 815-874-4600

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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



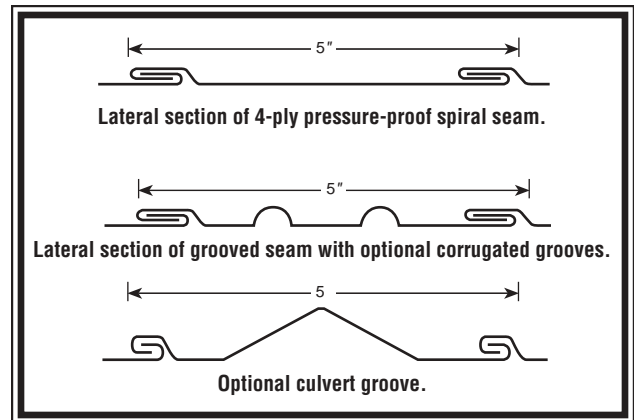
SMACNA Testing & Research Institute
Chantilly, VA

Single-Wall Spiral Pipe & Fittings

Sheet Metal Connectors, Inc. (SMC) Single Wall Pipe and Fittings with 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 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 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

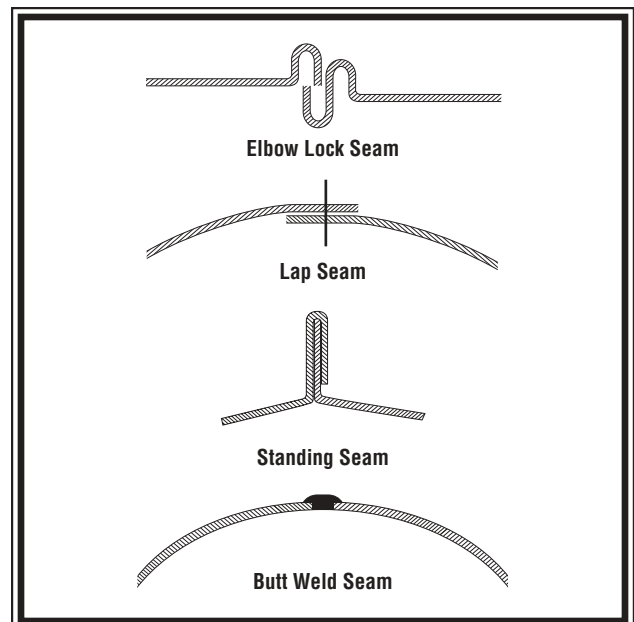
** Call factory for sizes over 60" in diameter.

Single-Wall Fittings

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

All fittings can be manufactured with:

- 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 1995-2nd edition of the SMACNA HVAC Duct Construction Standards.

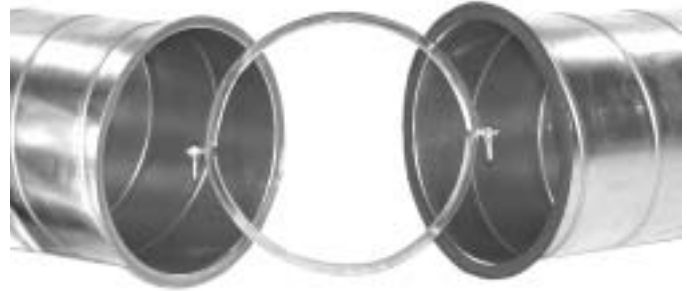


SHEET METAL CONNECTORS, INC.

Single-Wall Connectors

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.



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.



Standard Spiral Pipe Connector

Pipe to Pipe connections are made by using a fitting size coupling that slips inside the mating pipe sections, as shown. 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 stiffing 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.



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.

Positive Pressure

Bursting Pressure various gauges of spiral tubing

Diam.	26 Gauge	24 Gauge	22 Gauge	20 Gauge	18 Gauge
3"	420	535	650	765	995
4"	308	392	475	560	728
5"	238	303	369	435	566
6"	199	252	308	363	473
7"	169	216	262	309	403
8"	145	186	224	264	344
9"	127	161	196	230	299
10"	113	144	177	208	271
12"	93	118	145	171	223
14"	76	100	120	142	185
16"	68	86	103	122	162
18"		75	91	104	136
20"		66	81	96	125
22"		60	72	85	111
24"			66	78	101
26"			61	72	94
28"			55	65	85
30"			51	60	78
32"			47	56	73
34"				52	68
36"				48	65
38"				45	59
40"				42	55
42"				39	51
44"					47
46"					44
48"					41
50"					39

All tube diameters in inches. All pressure in PSI.

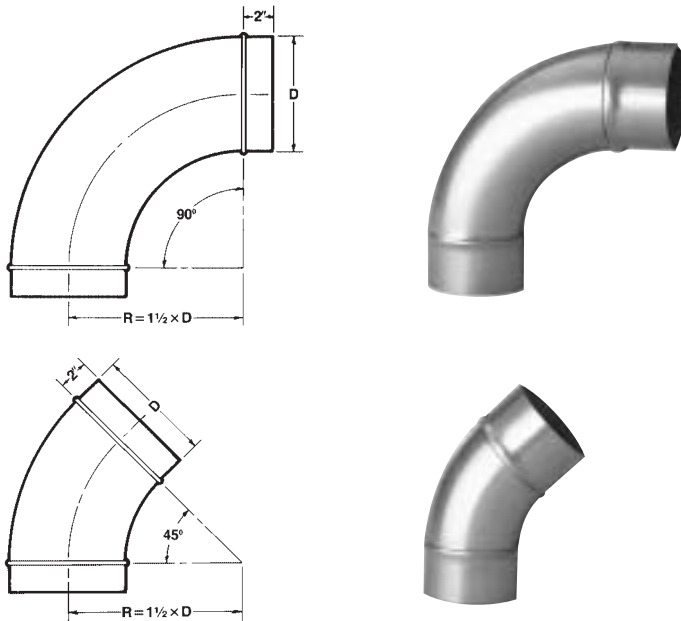
Internal Pressure

Collapsing Pressure various gauges of spiral tubing

Diam.	26 Gauge	24 Gauge	22 Gauge	20 Gauge	18 Gauge	16 Gauge
6"	220.4					
8"	69.2	121.2				
10"	34.6	110.6	691.7			
12"	22.0	55.1	249.2	1107.0		
14"	15.3	38.5	110.6	456.6	2767.7	
16"	11.0	27.5	105.1	236.2	1383.8	5258.6
18"	9.0	20.8	53.9	149.6	664.1	2214.1
20"	7.8	16.5	38.5	99.6	332.2	1245.6
22"	7.2	14.1	30.3	72.0	221.2	692.1
24"	5.5	11.8	24.8	55.5	155.1	387.4
26"	5.1	9.8	20.8	44.0	110.6	290.5
28"	4.7	8.6	18.1	35.8	88.5	243.7
30"	4.3	8.2	15.3	30.3	69.2	166.1
32"		6.6	13.7	26.3	58.2	128.7
34"				22.0	48.4	103.9
36"		5.5	11.0	20.4	42.9	85.8
38"				17.7	37.4	72.0
40"		4.3	9.8	16.5	33.0	62.2
42"			9.0	15.3	29.1	53.9
44"				13.7	26.3	47.2
46"				12.5	23.6	41.3
48"				11.8	22.0	37.4
50"				11.0	19.2	34.6
60"					14.9	24.8

Internal negative pressure in inches of water.

Two Piece Pressed Solid Welded Elbows

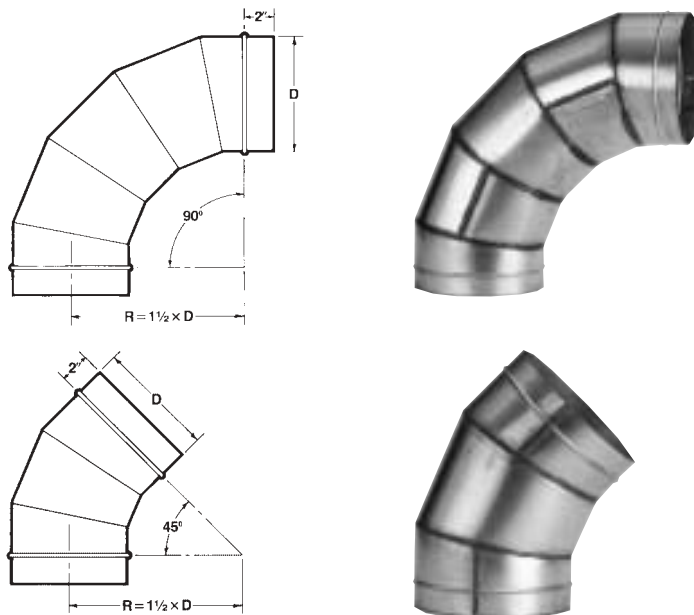


Centerline Throat Radius Chart

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"

Pressed elbows and angles are continuously welded with silicon bronze 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 material is specified to be 22 gauge galvanized with a G90 coating thickness and are chemically treated to retard white rust.

Welded Gored Elbows & Angles

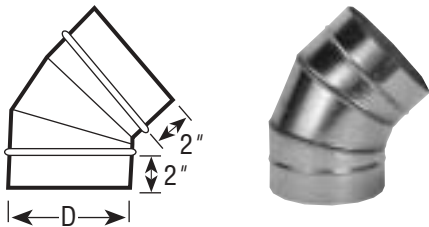
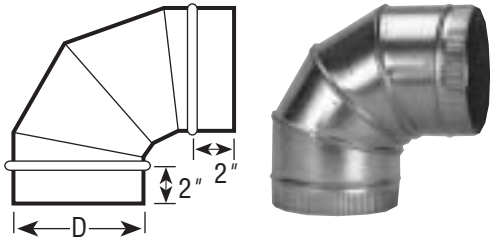


52" and larger in diameter 90 degree full sweep (1.5 x CL) elbows are fabricated using two 45 degree angles connected with an E-Z flange and barrel clamp unless otherwise specified.

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



Adjustable Elbows & Angles



Adjustable elbows and angles are versatile and are most commonly used in a standard spiral duct system.

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

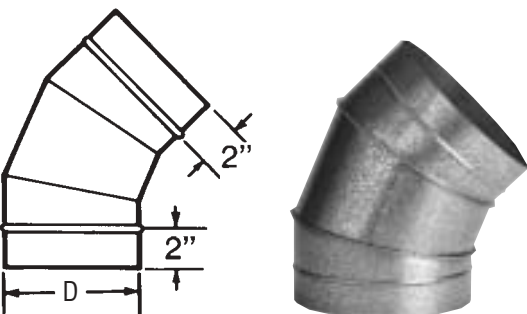
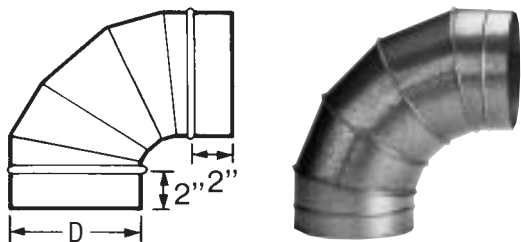
90° Throat and Gauge Chart

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"

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.

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

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.

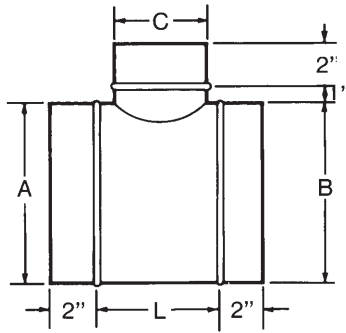


SHEET METAL CONNECTORS, INC.

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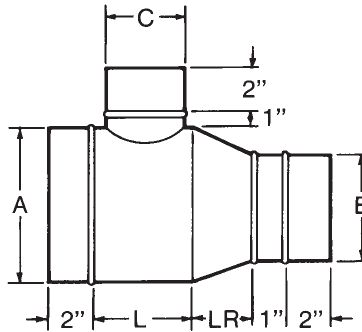
90° Tee

Dimensions to be listed as follows: A, B, C
 $L = "C" + 8"$



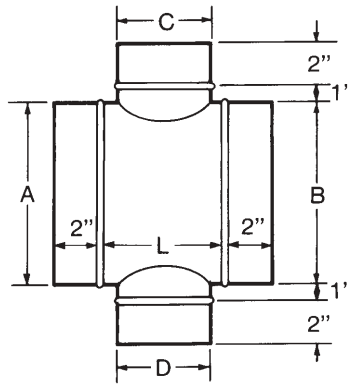
Tee with Reducer

Dimensions to be listed as follows: A, B, C
 $L = "C" + 8"$
L.R.: Refer to page 13



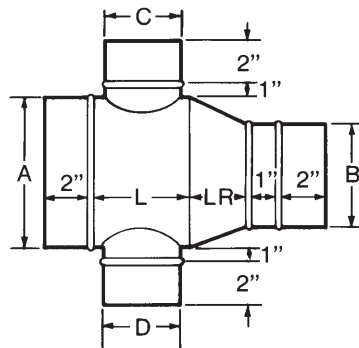
Cross

Dimensions to be listed as follows: A, B, C, D
 $L = \text{Largest of "C" or "D"} + 8"$



Cross with Reducer

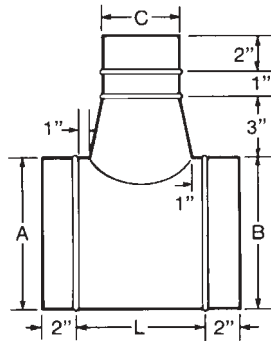
Dimensions to be listed as follows: A, B, C, D
 $L = \text{Largest of "C" or "D"} + 8"$
L.R.: Refer to page 13



SHEET METAL CONNECTORS, INC.

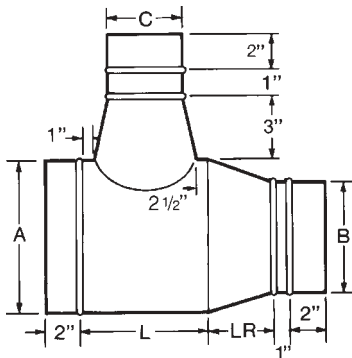
Conical Tee

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



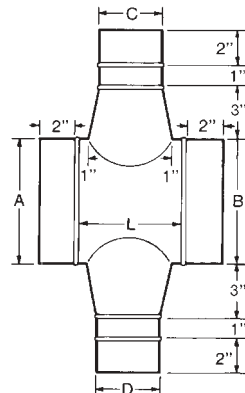
Conical Tee with Reducer

Dimensions to be listed as follows: A, B, C
 $L = C + 5 \frac{1}{2}"$
 L.R.: Refer to page 13



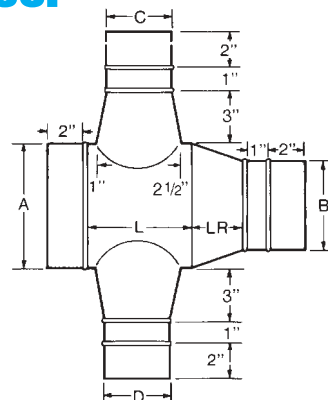
Conical Cross

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



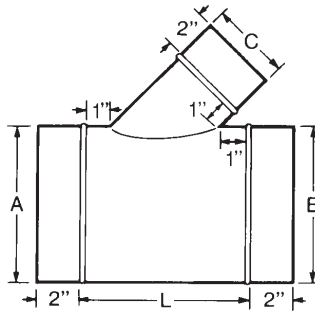
Conical Cross with Reducer

Dimensions to be listed as follows: A, B, C, D
 $L = \text{Larger of "C" or "D"} + 5 \frac{1}{2}"$
 L.R.: Refer to page 13



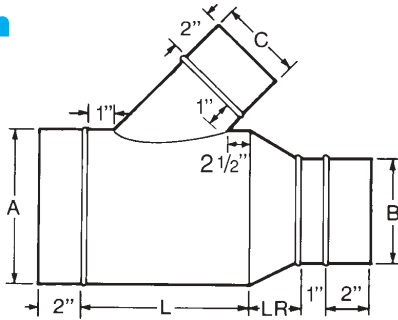
Lateral

Dimensions to be listed as follows: A, B, C
 $L = (1.414 \times C) + 2''$



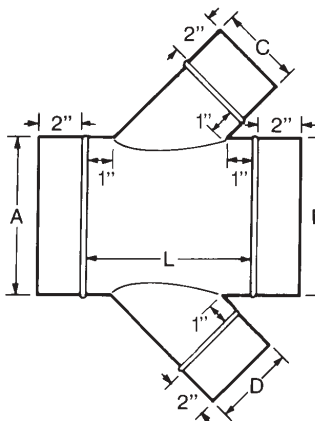
Lateral with Reducer

Dimensions to be listed as follows: A, B, C
 $L = (1.414 \times C) + 3 \frac{1}{2}''$
 L.R.: Refer to page 13



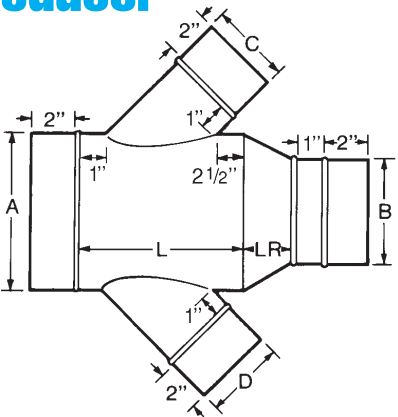
Lateral Cross

Dimensions to be listed as follows: A, B, C, D
 $L = 1.414 \times (\text{Larger of "C" or "D"}) + 2''$



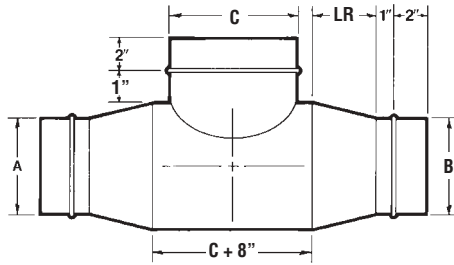
Lateral Cross with Reducer

Dimensions to be listed as follows: A, B, C, D
 $L = 1.414 \times (\text{Larger of "C" or "D"}) + 3 \frac{1}{2}''$
 L.R.: Refer to page 13



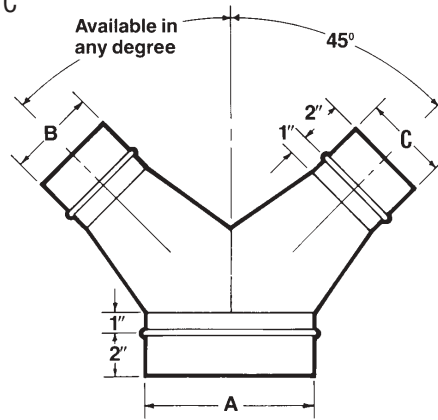
Bullnose Tee (Bullhead)

Dimensions to be listed as follows: A, B, C
L.R.: Refer to page 13



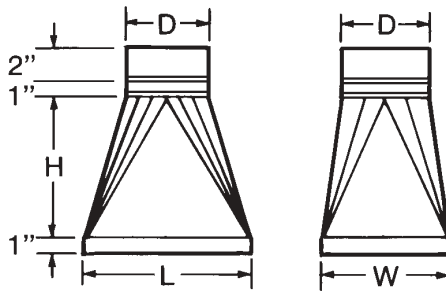
Pair of Pants (Wye Branch)

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



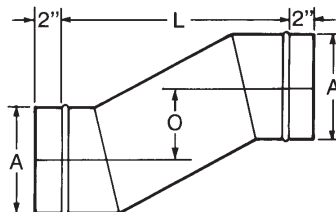
Square to Round

Dimensions to be listed as follows: L, W, D
Offset Square to Rounds available (drawing required)



Offset

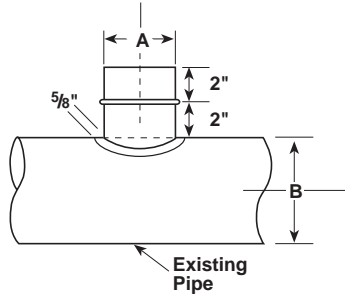
Dimensions to be listed as follows: A, O, L



10

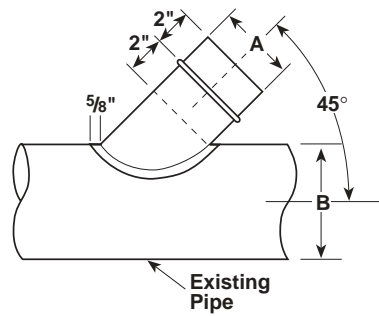
90° Swedged Saddle

Dimensions to be listed as follows: A on B



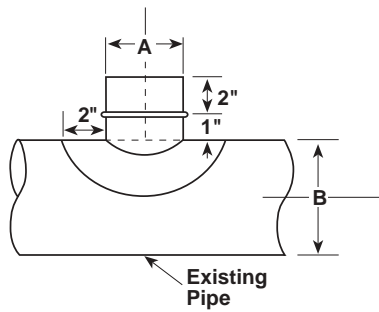
45° Swedged Saddle

Dimensions to be listed as follows: A on B



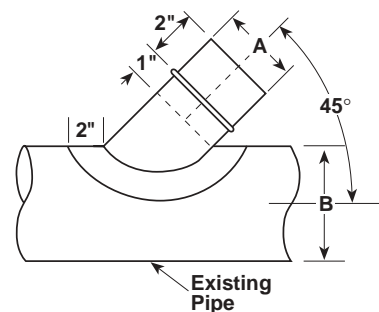
90° Full Saddle

Dimensions to be listed as follows: A on B



45° Full Saddle

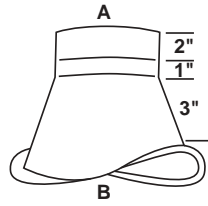
Dimensions to be listed as follows: A on B



SHEET METAL CONNECTORS, INC.

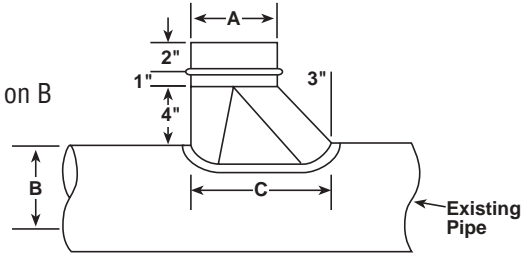
90° Conical Swedge Saddle

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



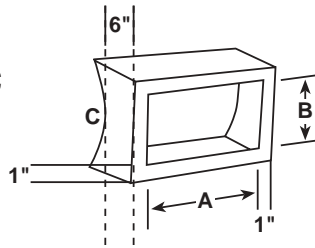
90° Shoe Tap

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



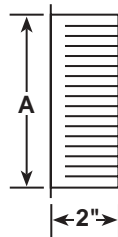
Register Takeoffs

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



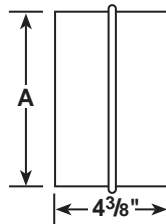
End Cap (Plug)

Dimensions to be listed as follows:
 A, equal diameter



Connector (Coupling)

Dimensions to be listed as follows:
 A, equals diameter

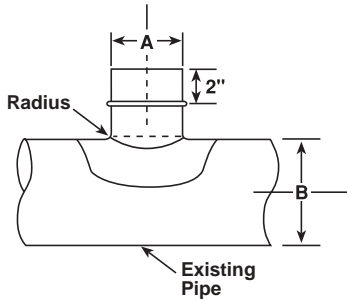


Pressed Fittings

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 material is 22 ga. galvanized with a G90 coating thickness and is chemically treated to retard white rust.

90° Saddle Tap

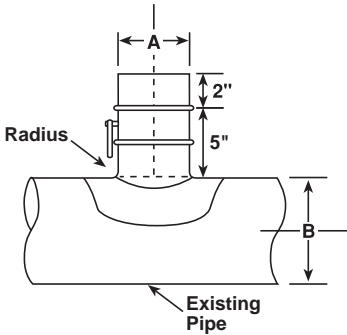
Dimensions to be listed as follows: A on B



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

90° Saddle Tap W/Damper

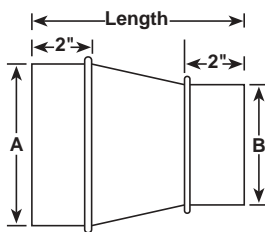
Dimensions to be listed as follows: A on B



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

Concentric Reducer

Dimensions to be listed as follows: A, B

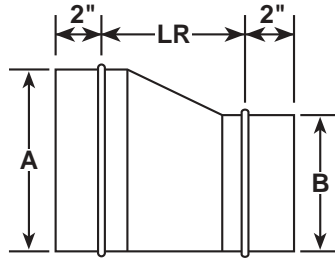


A	B	Overall Length
8"	6"	7 1/4"
10"	6"	9"
10"	8"	7 1/4"
12"	8"	9"
12"	10"	7 1/4"
14"	10"	9"
14"	12"	7 1/4"
16"	10"	11"
16"	12"	9"
16"	14"	7 1/4"
18"	12"	11"
18"	14"	9"
18"	16"	7 1/4"



Eccentric Reducer

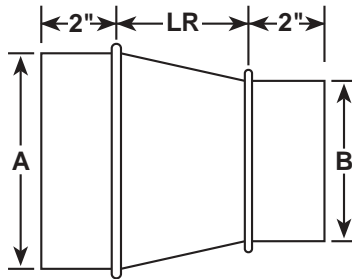
Dimensions to be listed as follows:
 $LR = 2 \frac{1}{2}'' + 2''$ for each inch of reduction



Size Reduction	LR
1" reduction	4 1/2"
2" reduction	7"
3" reduction	9 1/2"
4" reduction	12"
5" reduction	14 1/2"
6" reduction	17"
7" reduction	19 1/2"
8" reduction	22"
9" reduction	24 1/2"
10" reduction	27"
11" reduction	29 1/2"
12" reduction	32"
14" reduction	37"
16" reduction	42"
18" reduction	47"
20" reduction	52"

Concentric Reducer

Dimensions to be listed as follows: A, B
 $LR =$ (See Chart Below)



Standard Lengths for Concentric Reducers (LR)

For pressed concentric reducer lengths see chart on bottom of page 12.

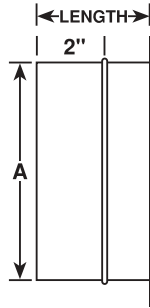
30																	17	14	12	8	5
28																	17	14	11	9	5
26													17	14	11	8	5				
24							25	22	22	20	18	17	14	12	9	5					
22						24	22	20	18	17	16	14	11	8	5						
20					20	19	17	16	14	13	12	8	5								
18				18	17	16	14	13	11	10	8	5									
16			18	16	14	13	11	10	8	7	6										
14		16	14	13	12	10	8	7	6	5											
13	18	16	15	13	11	10	9	7	6	5											
12	17	14	13	12	10	9	7	6	5												
11	15	13	11	10	8	7	6	5													
10	13	11	10	9	7	6	5														
9	12	10	8	7	6	5															
8	10	9	7	6	5																
7	9	7	6	5																	
6	7	6	5																		
5	6	5																			
4	5																				
3																					
	3	4	5	6	7	8	9	10	11	12	13	14	16	18	20	22	24	26	28		



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E-Z Tap Collar

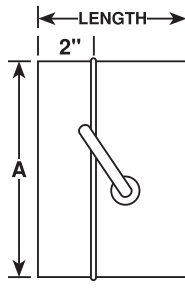
Order as follows: A equals diameter



A	Overall Length
5"	3 1/2"
6"	3"
7"	3"
8"	3"
9"	3"
10"	3"
12"	3"
14"	3"
16"	3 1/2"
18"	3 1/2"
20"	3 1/2"

E-Z Tap Collar with Damper

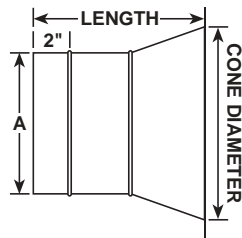
Order as follows: A equals diameter



A	Overall Length
5"	5 1/2"
6"	5 1/2"
7"	5 1/2"
8"	5 1/2"
9"	5 1/2"
10"	5 1/2"
12"	7"
14"	11"
16"	13 1/2"
18"	18"
20"	18"

E-Z Tap Conical Takeoff Collar

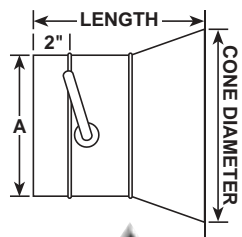
Order as follows: A equals diameter



A	Cone Diameter	Overall Length
4"	5"	6 1/2"
5"	6"	6 1/2"
6"	8"	6 1/2"
7"	9"	6 1/2"
8"	10"	6 1/2"
9"	11"	6 1/2"
10"	12"	6 1/2"
12"	14"	6 1/2"
14"	16"	6 1/2"
16"	18"	6 1/2"
18"	20"	6 1/2"

E-Z Tap Conical Takeoff Collar with Damper

Order as follows: A equals diameter



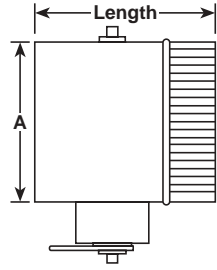
A	Cone Diameter	Overall Length
4"	5"	6 1/2"
5"	6"	6 1/2"
6"	8"	6 1/2"
7"	9"	6 1/2"
8"	10"	6 1/2"
9"	11"	6 1/2"
10"	12"	6 1/2"
12"	14"	7 1/2"
14"	16"	7 1/2"
16"	18"	9"
18"	20"	9"



Standoff Collars

1.5" Standoff Collars with Dampers

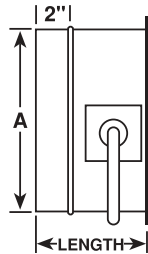
Order as follows: A equals diameter



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"

E-Z Tap Collars with 1.5" Standoff

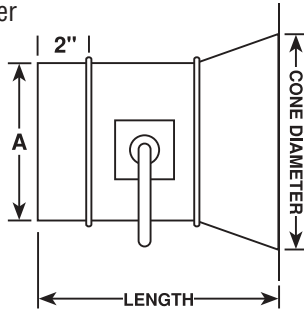
Order as follows: A equals diameter



A	Overall Length
4"	
5"	5 1/2"
6"	5 1/2"
7"	5 1/2"
8"	5 1/2"
9"	5 1/2"
10"	5 1/2"
12"	7"
14"	11"
16"	13 1/2"
18"	18"
20"	18"

Conical E-Z Tap with 1.5" Standoff

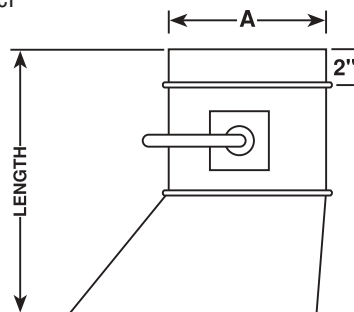
Order as follows: A equals diameter



A	Overall Length
4"	9 1/4"
5"	9 1/4"
6"	9 1/4"
7"	9 1/4"
8"	9 1/4"
9"	9 1/4"
10"	9 1/4"
12"	9 1/2"
14"	9 1/2"
16"	9 1/2"
18"	9 1/2"
20"	9 1/2"

Hi-Efficiency with 1.5" Standoff

Order as follows: A equals diameter

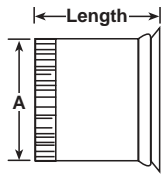


A	Overall Length
4"	11 1/2"
5"	11 1/2"
6"	11 1/2"
7"	11 1/2"
8"	11 1/2"
9"	13 1/4"
10"	13 1/4"
12"	14 1/4"
14"	14 1/4"
16"	14 1/4"
18"	15 1/2"
20"	15 1/2"



Spin-In Collar

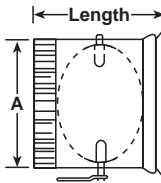
Order as follows: A equals diameter



A	Length	Cut Hole
4"	5 3/4	3 7/8
5"	5 3/4	4 7/8
6"	5 3/4	5 7/8
7"	5 3/4	6 7/8
8"	5 3/4	7 7/8
9"	5 3/4	8 7/8
10"	5 3/4	9 7/8
12"	5 3/4	11 7/8
14"	5 3/4	13 7/8
16"	5 3/4	15 7/8
18"	5 3/4	17 7/8
20"	5 3/4	19 7/8

Spin-In Collar w/Damper

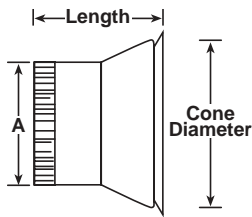
Order as follows: A equals diameter



A	Length	Cut Hole
4"	5 3/4	3 7/8
5"	5 3/4	4 7/8
6"	5 3/4	5 7/8
7"	5 3/4	6 7/8
8"	7 1/2	7 7/8
9"	7 1/2	8 7/8
10"	9 1/2	9 7/8
12"	9 1/2	11 7/8
14"	13 5/8	13 7/8
16"	13 5/8	15 7/8
18"	17 5/8	17 7/8
20"	17 5/8	19 7/8

Conical Bellmouth Spin-In

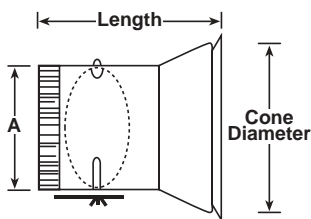
Order as follows: A equals diameter



A	Cone Diameter	Length	Cut Hole
4"	5	6 5/8	4 7/8
5"	6	6 1/2	5 7/8
6"	8	6 1/4	7 7/8
8"	10	6 1/8	9 7/8
10"	12	6 1/8	11 7/8
12"	14	6 1/8	13 7/8
14"	16	5 3/4	15 7/8
16"	18	6 1/4	17 7/8
18"	20	6 1/4	19 7/8
20"	22	6 1/4	21 7/8

Conical Bellmouth Spin-In w/Damper

Order as follows: A equals diameter

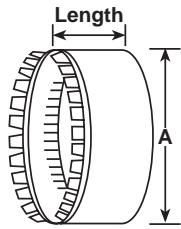


A	Cone Diameter	Length	Cut Hole
4"	5	6 1/4	4 7/8
5"	6	6 1/4	5 7/8
6"	8	6 1/4	7 7/8
8"	10	6 1/4	9 7/8
10"	12	6 1/4	11 7/8
12"	14	6 1/4	13 7/8
14"	16	6 1/4	15 7/8
16"	18	8 3/4	17 7/8
18"	20	8 3/4	19 7/8
20"	22	8 3/4	21 7/8



Notched Collars

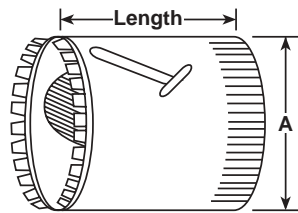
Order as follows: A equals diameter



A	Length	Cut Hole
4"	2 3/4	3 7/8
5"	2 3/4	4 7/8
6"	2 3/4	5 7/8
7"	2 3/4	6 7/8
8"	2 3/4	7 7/8
9"	2 3/4	8 7/8
10"	2 3/4	9 7/8
12"	2 3/4	11 7/8
14"	2 3/4	13 7/8
16"	2 3/4	15 7/8
18"	2 3/4	17 7/8
20"	2 3/4	19 7/8

Notched Collars w/Damp

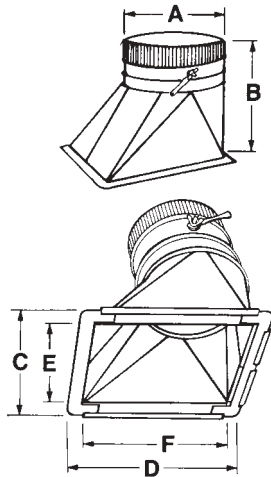
Order as follows: A equals diameter



A	Length	Cut Hole
4"	5 1/2	3 7/8
5"	5 1/2	4 7/8
6"	5 1/2	5 7/8
7"	5 1/2	6 7/8
8"	7 1/4	7 7/8
9"	8 1/4	8 7/8
10"	9 1/4	9 7/8
12"	9 1/4	11 7/8
14"	13 1/4	13 7/8
16"	13 1/4	15 7/8
18"	15 1/4	17 7/8
20"	17 1/4	19 7/8

H.E.T. High Efficiency Takeoffs

Order as follows: A equals diameter



A	B	C	Cut Hole Size		
			D	E	F
6"	10	8 1/4	11	6	9
7"	10	9 1/4	12	7	10
8"	10	10 1/4	13	8	11
9"	11 1/2	11 1/4	14	9	12
10"	11 1/2	12 1/4	14	10	12
12"	11 1/2	14 1/4	16	12	14
14"	12 1/2	16 1/4	18	14	16

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 with each corner being filled. 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.

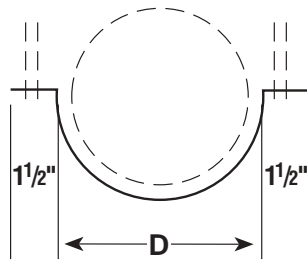
Test data is available; call factory for more information. (Performed by ETL Testing Laboratories.)



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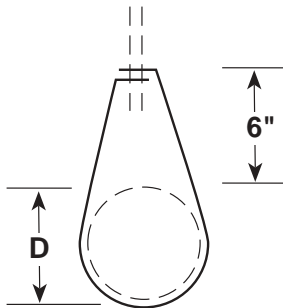
Double Rod Hanger

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)



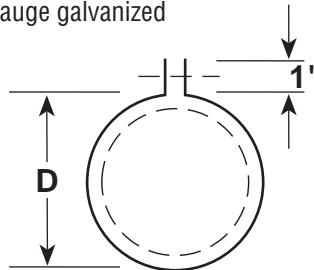
Single Rod Hangers

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)



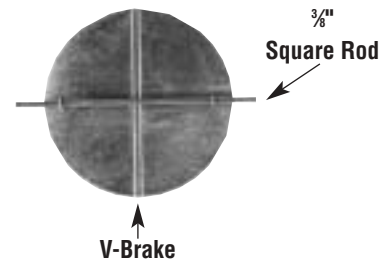
Light Gauge Round Pipe Hangers

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.



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"

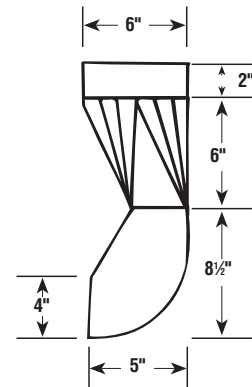
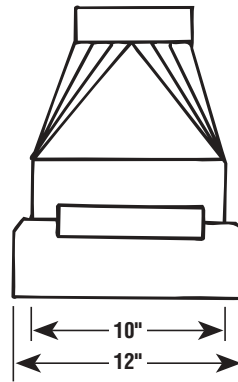


Semi-circular flaps (butterfly damper) cover the exhaust stack when fan is off. When the fan is on, flaps are forced out of the way to provide a clear path for air movement. A built-in gutter system is designed to prevent rain and snow from entering stack. Made from galvanized spiral pipe for strength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

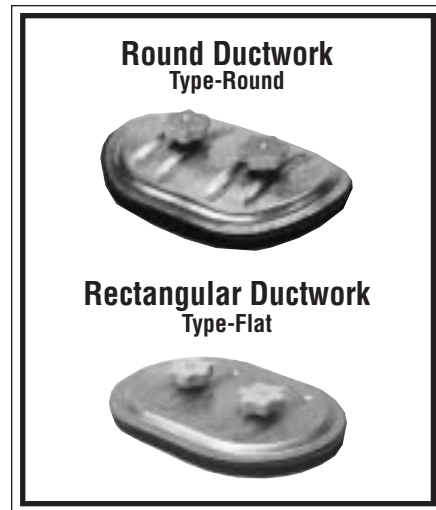
A cellular sponge gasket, fixed to the inner plate, keeps the doors free of leaks at pressures tested to 20" w.g.

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



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 ga.	4 1/16	6	9/32	5 5/16
5"		5 1/16	6	9/32	6 5/16
6"	1 1/4 X 1 1/4 X 1 1/8	6 1/8	6	3/8	7 5/16
7"	1 1/4 X 1 1/4 X 1 1/8	7 1/8	6	3/8	8 1/2
8"	1 1/4 X 1 1/4 X 1 1/8	8 1/8	6	3/8	9 9/16
9"	1 1/4 X 1 1/4 X 1 1/8	9 1/8	6	3/8	10 5/8
10"	1 1/4 X 1 1/4 X 1 1/8	10 1/8	6	3/8	11 13/16
11"	1 1/4 X 1 1/4 X 1 1/8	11 1/8	6	3/8	12 3/4
12"	1 1/2 X 1 1/2 X 1 1/8	12 3/16	8	7/16	14
13"	1 1/2 X 1 1/2 X 1 1/8	13 3/16	8	7/16	15
14"	1 1/2 X 1 1/2 X 1 1/8	14 3/16	8	7/16	16
15"	1 1/2 X 1 1/2 X 1 1/8	15 3/16	8	7/16	17
16"	1 1/2 X 1 1/2 X 1 3/16	16 3/16	8	7/16	18
17"	1 1/2 X 1 1/2 X 1 3/16	17 3/16	8	7/16	19
18"	1 1/2 X 1 1/2 X 1 3/16	18 3/16	8	7/16	20
20"	1 1/2 X 1 1/2 X 1 3/16	20 3/16	12	7/16	21 3/4
22"	1 1/2 X 1 1/2 X 1 3/16	22 3/16	12	7/16	23 3/4
24"	1 1/2 X 1 1/2 X 1 3/16	24 3/16	12	7/16	25 7/8

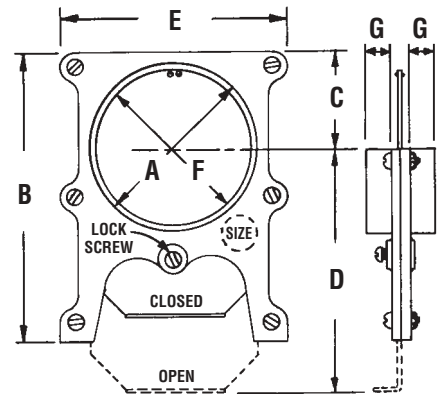
Order Size	Angle Mild Steel	I.D.	Bolt Holes	Hole Size	Bolt Circle
26"	2 x 2 x 3/16	26 3/16	12	7/16	28 3/8
28"	2 x 2 x 3/16	28 3/16	12	7/16	30 3/8
30"	2 x 2 x 3/16	30 3/16	12	7/16	32 3/8
32"	2 x 2 x 3/16	32 3/16	16	7/16	34 3/8
34"	2 x 2 x 3/16	34 3/16	16	7/16	36 3/8
36"	2 x 2 x 3/16	36 3/16	16	7/16	38 3/8
38"	2 x 2 x 3/16	38 3/16	16	7/16	40 3/8
40"	2 x 2 x 3/16	40 3/16	16	7/16	42 3/8
42"	2 x 2 x 3/16	42 3/16	16	7/16	44 3/8
44"	2 x 2 x 3/16	44 3/16	16	7/16	46 3/8
46"	2 x 2 x 3/16	46 3/16	16	7/16	48 3/8
48"	2 x 2 x 3/16	48 3/16	16	7/16	50 3/8
50"	2 x 2 x 3/16	50 3/16	16	7/16	52 3/8
52"	2 x 2 x 3/16	52 3/16	16	7/16	54 3/8
54"	2 x 2 x 3/16	54 3/16	16	7/16	56 3/8
56"	2 x 2 x 3/16	56 3/16	24	7/16	58 3/8
58"	2 x 2 x 3/16	58 3/16	24	7/16	60 3/8
60"	2 x 2 x 3/16	60 3/16	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.

DP1010 WATER BASED DUCT SEALANT - Gray

A smooth, water based, premium quality, U.L. 181 Classified, high velocity duct sealant for commercial and residential use.

Available in 1/12 gallon tubes, 1 gallon pail, or 5 gallon pail.

Recommended Uses:

- Sealing metal joints on air duct where a smooth finish is desired
- Sealing connections on flexible duct or fiberglass ductboard
- Intended for use on duct systems which do not exceed 15 inches water column pressure



DP1090 SOLVENT BASED DUCT SEALANT

A premium quality UL Classified high velocity duct sealant, for commercial use.

Recommended Uses:

- DP1090 is formulated for sealing low, medium and high-pressure metal duct systems in commercial and industrial applications
- DP1090 is intended for use on duct systems which do not exceed 15 inches water column pressure
- DP1090 is ideal for sealing rectangular, round, oval and metal flexible ducts.



DP2501 WATER BASED DUCT LINER ADHESIVE - Clear

A water based, premium quality U.L. Classified duct liner adhesive.

DP 2501 is specifically formulated for roller and low pressure spray applications.

Available in 5 gallon pails, 54 gallon drum

Recommended Uses:

- Bonding fibrous duct liner installation to galvanized ductwork
- Sealing cut edges of fiberglass insulation
- Bonding kraft backed foil coverings to fiberglass and urethane flat stock or pipe insulation
- Bonding multiple layers of fibrous insulation board



DP2502 WATER BASED DUCT LINER ADHESIVE - Clear

A water based, premium quality U.L. Classified duct liner adhesive. DP 2502 is a higher viscosity version of DP 2501. DP 2502 is specifically formulated for spray, brush, and roller applications.

Available in 5 gallon pails, 54 gallon drum

Recommended Uses:

- Bonding fibrous duct liner installation to galvanized ductwork
- Sealing cut edges of fiberglass insulation
- Bonding kraft backed foil coverings to fiberglass and urethane flat stock or pipe insulation
- Bonding multiple layers of fibrous insulation board



DP 2590 SOLVENT BASED SPRAY ADHESIVE

A premium quality, solvent based, fast drying, non-flammable, pressure sensitive insulation adhesive. DP 2590 is supplied in a convenient spray system which is both portable and cost effective.

Available in 12# canister or 40# canister. Pro spray gun and 12' hose sold separately.

Recommended Uses:

- Bonding fiberglass duct liner to galvanized steel, stainless steel and aluminum HVAC duct
- Bonding fiberglass insulation to the exterior of galvanized steel, stainless steel and aluminum HVAC duct
- Sealing and bonding laps in HVAC duct insulation
- Adhering kraft backed foil and foil jacketing to urethane foam



DP 77 INDUSTRIAL SPRAY ADHESIVE

Solvent based industrial strength aerosol duct liner spray adhesive.

Available in 12 oz. spray cans.

Recommended Uses:

- Bonding galvanized metal, wood, fiberglass, foam rubber, cardboard, textiles, cloth and plastics



DP 2" CHIP BRUSH



DUCT TAPE

Product Number	Description Application	Colors	Adhesive	Total Thickness mils (mm)	Tensile Strength lbs/in (kg/cm)	Adhesion To Steel ozs/in (g/cm)
557 Printed	Premium performance duct tape specifically engineered for flex duct systems. Meets UL 181B-FX & UL 723	Grey	Natural Rubber	14.0 (0.36)	45 (8.01)	50 (560)
229	Heavy duty contractor grade duct tape with extra thick adhesive for conformability Meets UL 723	Grey	Natural Rubber	12.0 (0.30)	25 (4.45)	70 (784)
339 Printed	Dead-soft aluminum foil backed duct tape for fiberglass duct systems. UL 181 A-P approved	Silver	Acrylic	4.4 (0.11)	25 (4.45)	72 (806)
330	All-weather duct tape, working temperature range of -35°F to 260°F, plain dead soft aluminum foil, extremely conformable.	Silver	Acrylic	3.5 (0.08)	20 (3.56)	45 (504)





Sheet Metal Connectors, Inc.
5850 Main Street N.E.
Minneapolis, Minnesota 55432-5439