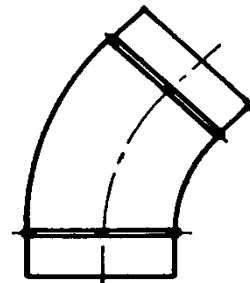
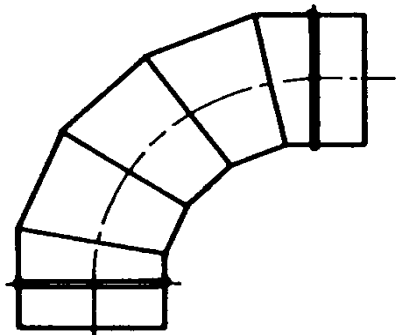
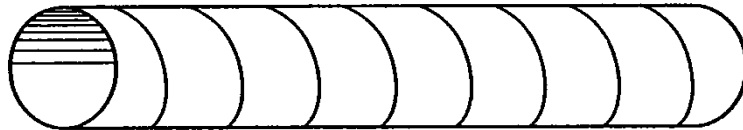




Spiral / Round Pipe & Fittings

ALUMINUM, GALVANIZED, GALVANNEAL, PVC AND STAINLESS STEEL



9865 WAYNE AVENUE • CINCINNATI, OHIO 45215
PHONE (513) 733-5955 FAX (513) 733-8050

Single Wall Spiral Pipe & Fittings Specifications

2 - 10" Inch Positive Static Pressure

Max. Dia.	+2" W.G		+4" W.G.		+10" W.G.	
	Spiral Seam	Fittings & Longitudinal Seam Pipe	Spiral Seam	Fittings & Longitudinal Seam Pipe	Spiral Seam	Fittings & Longitudinal Seam Pipe
3-24"	26	24	26	24	26	24
26-42"	24	22	24	22	24	22
44-60"	22	20	22	20	22	20

Static Pressure: System _____ Supply _____ Return _____

General : Provide static pressure, quantity, type, size and connection for fittings and ductwork.

Construction : Single wall spiral pipe and fittings to be fabricated in accordance with 2005 SMACNA "HVAC Duct Construction Standards, Metal and Flexible". Ductwork and Fittings shall be the gauge for the pressure classification listed above.

Metal : Galvanized Steel of ASTM Standard A527 and 2005 SMACNA Standards.

Fittings : Radius type elbows with 1½ x centerline radius, elbows through 14" diameter are die stamped. Elbows 16" and larger are fabricated of multiple sections with maximum 22 1/2 degree change of direction per section with segmented standing seam or segmented seam spot welded construction. Concentric reducers 30 degree diverging, 90 degree straight and 45 degree type fittings for branch connections will be spot welded or mechanically attached to spiral and sealed per SMACNA class A specifications. All 90 and 45 degree type fittings are field installed unless specified otherwise.

Spiral pipe : Spiral lockseam construction. Fabricated in 10'-0" lengths unless specified otherwise.

Connections : Single wall fittings are small end slip connections, pipe to pipe is a coupler. Fasten screws at 15" intervals along the circumference (three screws minimum on 14" diameter or less). Flange joints are available by request and are recommended for sizes 36" and larger. When flange joints are used AccuFlange connections will be supplied on pipe and fittings. (see diagram on page 13)

Sealant : Non- hardening, non- migrating mastic or liquid elastic sealant specifically for sealing fittings or longitudinal seams in ductwork. (Seal class A or B, N/A for seal class C and 2" W.G.)

Single Wall Spiral Pipe & Fittings Specifications

2 - 10" Inch Negative Static Pressure

Max. Dia.	-2" W.G.		-4" W.G.		-10" W.G.	
	Spiral Seam	Fittings & Longitudinal Seam Pipe	Spiral Seam	Fittings & Longitudinal Seam Pipe	Spiral Seam	Fittings & Longitudinal Seam Pipe
3-14"	26 A-10	24 A-20	26 A-10	24 A-20	26 A-10	24 A-12
15"	26 A-10	24 A-20	26 A-10	24 A-20	26 A-10	22 A-12
16"	26 A-10	24 A-20	26 A-10	24 A-20	26 A-10	22 A-12
17"	26 A-10	24 A-20	26 A-10	24 A-20	24 A-10	22 A-12
18"	26 A-10	24 A-20	26 A-10	24 A-20	24 A-10	22 A-12
19"	26 A-10	24 A-20	26 A-10	22 A-20	24 A-10	22 A-12
20"	26 A-10	24 A-20	26 A-10	22 A-20	24 A-10	22 A-12
21"	26 A-10	24 A-20	26 A-10	22 A-20	24 A-10	20 A-12
22"	26 A-10	24 A-20	26 A-10	22 A-20	24 A-10	20 A-12
23"	26 A-10	24 A-20	26 A-10	22 A-20	24 A-10	20 A-12
24"	26 A-10	24 A-20	26 A-10	22 A-20	24 A-10	20 A-12
25-26"	26 A-10	22 A-20	26 A-10	20 A-20	22 A-10	18 A-12
27-29"	26 A-10	22 A-20	26 A-10	20 A-20	22 A-10	18 A-12
30"	26 A-10	22 A-20	26 A-10	20 A-20	22 A-10	18 A-12
31-33"	26 A-10	22 A-20	24 A-10	20 B-20	22 B-10	18 B-12
34"	26 A-10	22 A-20	24 A-10	20 B-20	22 B-10	18 B-12
35-36"	26 A-10	22 A-20	24 A-10	20 B-20	22 B-10	18 B-12
37-42"	26 A-10	22 A-20	24 A-10	18 B-20	20 B-10	18 B-12
43-48"	26 A-10	20 B-20	22 B-10	18 B-20	20 C-10	16 C-12
49-54"	24 A-10	20 B-20	22 B-10	18 C-20	18 C-10	16 D-12
56-60"	24 B-10	20 B-20	22 B-10	18 D-20	18 E-10	16 E-12

An alphabet letter in the table means that reinforcement angles or their equivalent must be used at the foot interval following the letter
A= 1" X 1" X 1/8" ; **B**= 1-1/4" X 1-1/4" X 3/16" ; **C**= 1-1/2" X 1-1/2" X 3/16" ; **D**= 1-1/2" X 1-1/2" X 1/4" ; **E**= 2" X 2" X 3/16" ; **F**= 2" X 2" X 1/4"

Static Pressure: System _____ Supply _____ Return _____

General : Provide static pressure, quantity, type, size and connection for fittings and ductwork.

Construction : Single wall spiral pipe and fittings to be fabricated in accordance with 2005 SMACNA "HVAC Duct Construction Standards, Metal and Flexible". Ductwork and Fittings shall be the gauge for the pressure classification listed above. External reinforcement is to be field installed and coordinated with duct hanger.

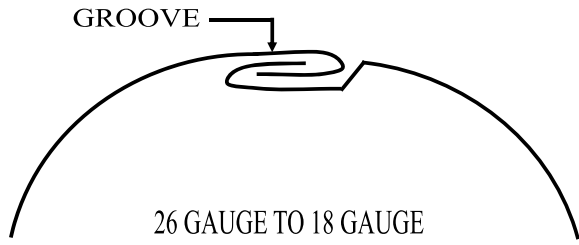
Metal : Galvanized Steel of ASTM Standard A527 and 2005 SMACNA Standards.

Fittings : Radius type elbows with 1½ x centerline radius, elbows through 14" diameter are die stamped, elbows 16" and larger are fabricated of multiple sections with maximum 22 1/2 degree change of direction per section with segmented standing seam or segmented seam spot welded construction. Concentric reducers 30 degree diverging , 90 degree straight and 45 degree type fittings for branch connections will be spot welded or mechanically attached to spiral and sealed per SMACNA class A specifications. All 90 and 45 degree type fittings are field installed unless specified otherwise.

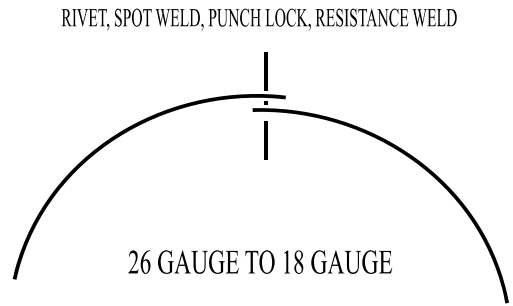
Spiral pipe : Spiral lockseam construction. Fabricated in 10'-0" lengths unless specified otherwise

Connections : Single wall fittings are small end slip connections, pipe to pipe is a coupler. Fasten screws at 15" intervals along the circumference (three screws minimum on 14" diameter or less). Flange joints are available by request and are recommended for sizes 36" and larger. When flange joints are used AccuFlange connections will be supplied on pipe and fittings.

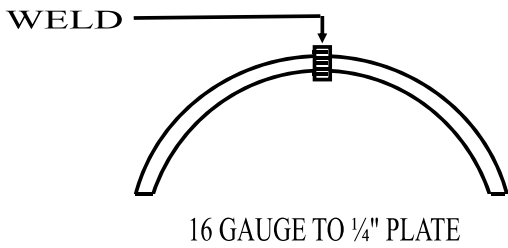
Sealant : Non- hardening, non- migrating mastic or liquid elastic sealant specifically for sealing fittings or longitudinal seams in ductwork. (Seal class A or B, N/A for seal class C and 2" W.G.)



GROOVE SEAM CONSTRUCTION

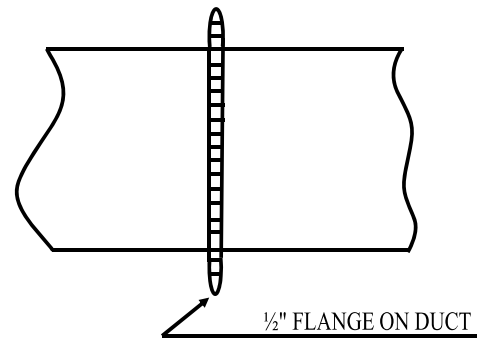


LAP SEAM CONSTRUCTION

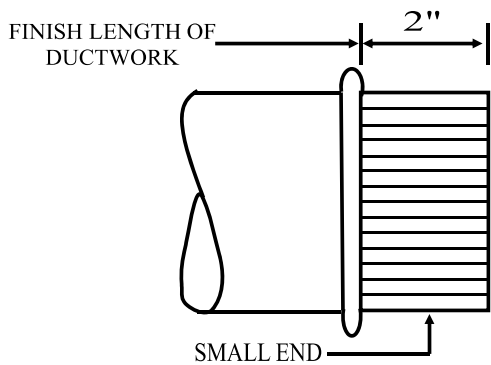


- MIG
- TIG

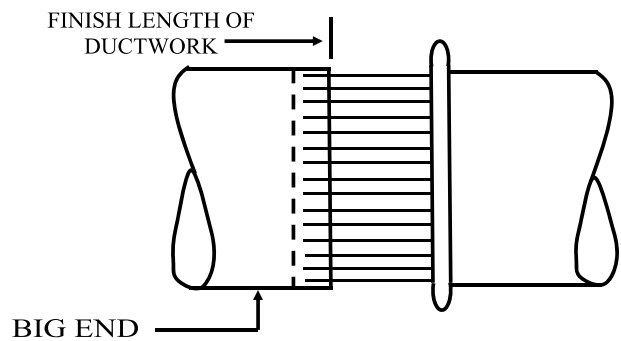
WELD SEAM CONSTRUCTION



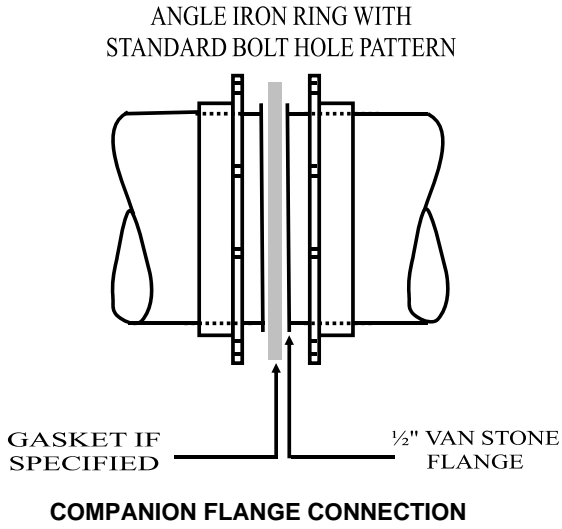
WELDED JOINT CONNECTION



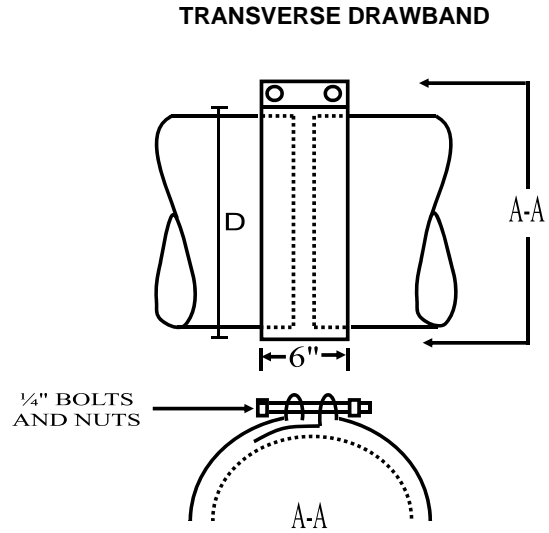
SMALL END CONNECTION



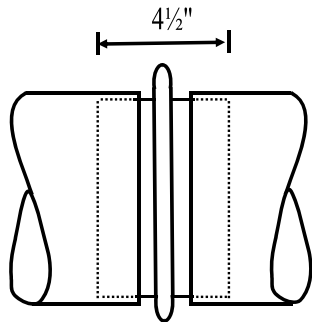
BIG END CONNECTION



- SPECIFY
- Diameter
 - Material Type
 - Gauge

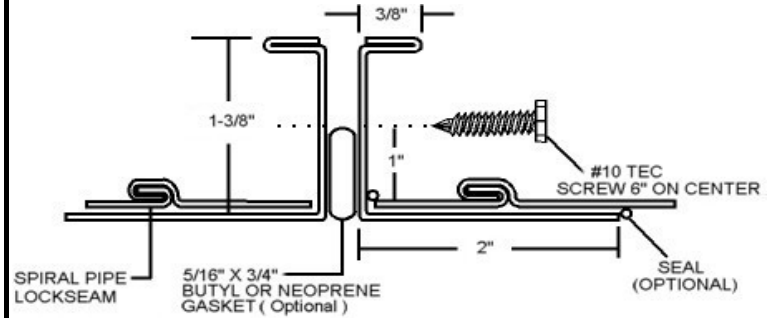


- SPECIFY
- Diameter
 - Material Type
 - Gauge



SMALL END BEADED COUPLING

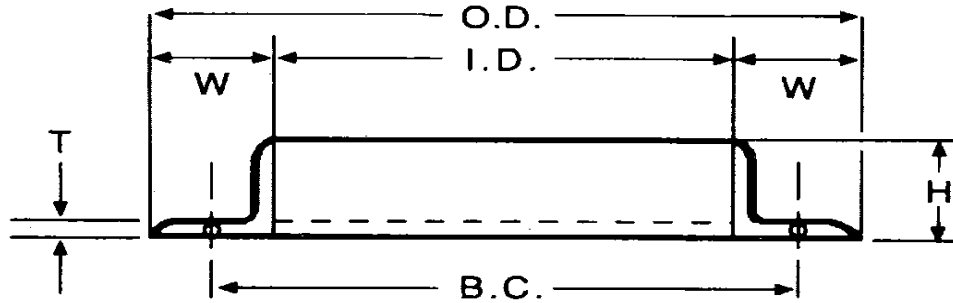
- SPECIFY
- Diameter
 - Material Type
 - Gauge



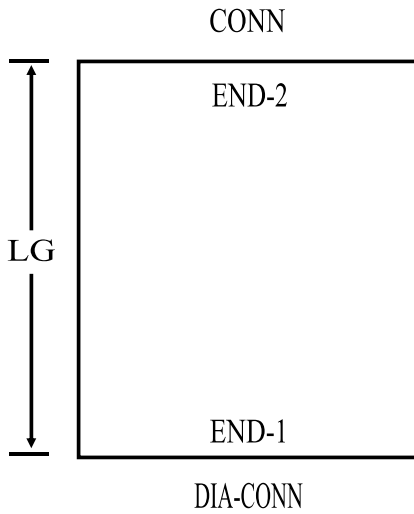
AccuFlange Connection - Round Duct & Fittings

- SPECIFY
- Sealer
 - Gasket (Butyl or Neoprene)

ANGLE RINGS



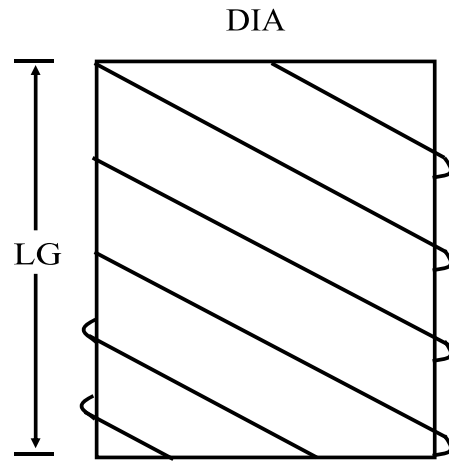
ORDER SIZE	INSIDE DIAMETER I.D.	OUTSIDE DIAMETER O.D.	WIDTH W	HEIGHT H	THICKNESS T	BOLT HOLES CENTER B.C.	HOLE SIZE	NUMBER OF HOLES	WEIGHT LBS.
3"	3 1/16"	5 1/16"	1"	7/8"	1/8"	4 5/16"	9/32"	6	.75
4"	4 1/16"	6 1/16"	1"	15/16"	1/8"	5 5/16"	9/32"	6	1.00
5"	5 1/16"	7 1/16"	1"	1"	1/8"	6 5/16"	9/32"	6	1.25
6"	6 3/32"	8 1/8"	1"	1"	1/8"	7 5/16"	9/32"	6	1.50
7"	7 1/8"	9 1/8"	1 1/8"	1"	1/8"	8 7/16"	3/8"	6	1.75
8"	8 1/8"	10 5/8"	1 1/8"	1"	1/8"	9 7/16"	3/8"	6	2.00
9"	9 1/8"	11 5/8"	1 1/4"	1 1/8"	1/8"	10 5/8"	7/16"	6	2.50
10"	10 1/8"	12 9/16"	1 3/8"	1 1/4"	1/8"	11 13/16"	7/16"	6	3.00
11"	11 1/8"	13 9/16"	1 3/8"	1 1/4"	1/8"	12 3/4"	7/16"	6	3.25
12"	12 1/8"	15 1/16"	1 1/2"	1 1/2"	1/8"	14"	7/16"	8	4.00
13"	13 1/8"	16 1/16"	1 1/2"	1 1/2"	1/8"	15"	7/16"	8	4.25
14"	14 1/8"	17 1/16"	1 1/2"	1 1/2"	1/8"	16"	7/16"	8	4.75
15"	15 1/8"	18 1/16"	1 1/2"	1 1/2"	3/16"	17"	7/16"	8	7.25
16"	16 1/8"	19 3/16"	1 1/2"	1 1/2"	3/16"	18"	7/16"	8	8.00
17"	17 1/8"	20 3/16"	1 1/2"	1 1/2"	3/16"	19"	7/16"	8	8.25
18"	18 1/8"	21 3/16"	1 1/2"	1 1/2"	3/16"	20"	7/16"	8	8.50
19"	19 1/8"	22 3/16"	1 1/2"	1 1/2"	3/16"	20 3/4"	7/16"	12	8.75
20"	20 1/8"	23 3/16"	1 1/2"	1 1/2"	3/16"	21 3/4"	7/16"	12	9.50
21"	21 1/8"	24 3/16"	1 1/2"	1 1/2"	3/16"	22 3/4"	7/16"	12	10.25
22"	22 1/8"	25 3/16"	1 1/2"	1 1/2"	3/16"	23 3/4"	7/16"	12	10.75
23"	23 1/8"	26 3/16"	1 1/2"	1 1/2"	3/16"	24 7/8"	7/16"	12	11.25
24"	24 1/8"	27 3/16"	1 1/2"	1 1/2"	3/16"	25 7/8"	7/16"	12	11.50
25"	25 1/8"	28 3/16"	1 1/2"	1 1/2"	3/16"	26 7/8"	7/16"	16	12.00
26"	26 1/8"	30 1/8"	2"	2"	3/16"	28 3/8"	7/16"	16	16.75
27"	27 1/8"	31 1/8"	2"	2"	3/16"	29 3/8"	7/16"	16	17.50
28"	28 1/8"	32 1/8"	2"	2"	3/16"	30 3/8"	7/16"	16	18.00
29"	29 1/8"	33 1/8"	2"	2"	3/16"	31 3/8"	7/16"	16	18.75
30"	30 1/8"	34 1/8"	2"	2"	3/16"	32 3/8"	7/16"	16	19.50
31"	31 1/8"	35 1/8"	2"	2"	3/16"	33 3/8"	7/16"	16	20.50
32"	32 1/8"	36 1/8"	2"	2"	3/16"	34 3/8"	7/16"	16	20.75
33"	33 1/8"	37 1/8"	2"	2"	3/16"	35 3/8"	7/16"	16	21.25
34"	34 1/8"	38 1/8"	2"	2"	3/16"	36 3/8"	7/16"	16	22.00
35"	35 1/8"	39 1/8"	2"	2"	3/16"	37 3/8"	7/16"	16	22.50
36"	36 1/8"	40 1/8"	2"	2"	3/16"	38 3/8"	7/16"	16	23.00
37"	37 1/8"	41 1/8"	2"	2"	3/16"	39 3/8"	7/16"	24	23.75
38"	38 1/8"	42 1/8"	2"	2"	3/16"	40 3/8"	7/16"	24	24.50
39"	39 1/8"	43 1/8"	2"	2"	3/16"	41 3/8"	7/16"	24	25.00
40"	40 1/8"	44 1/8"	2"	2"	3/16"	42 3/8"	7/16"	24	25.75
41"	41 1/8"	45 1/8"	2"	2"	3/16"	43 3/8"	7/16"	24	26.25
42"	42 1/8"	46 1/8"	2"	2"	3/16"	44 3/8"	7/16"	24	26.50
43"	43 1/8"	47 1/8"	2"	2"	3/16"	45 3/8"	7/16"	24	27.50
44"	44 1/8"	48 1/8"	2"	2"	3/16"	46 3/8"	7/16"	24	28.00
45"	45 1/8"	49 1/8"	2"	2"	3/16"	47 3/8"	7/16"	24	28.75
46"	46 1/8"	50 1/8"	2"	2"	3/16"	48 3/8"	7/16"	24	29.00
47"	47 1/8"	51 1/8"	2"	2"	3/16"	49 3/8"	7/16"	24	30.00
48"	48 1/8"	52 1/8"	2"	2"	3/16"	50 3/8"	7/16"	24	30.75
49"	49 1/8"	53 1/8"	2"	2"	3/16"	51 3/8"	7/16"	24	31.50
50"	50 1/8"	54 1/8"	2"	2"	3/16"	52 3/8"	7/16"	24	32.00



STRAIGHT ROUND PIPE

SPECIFY

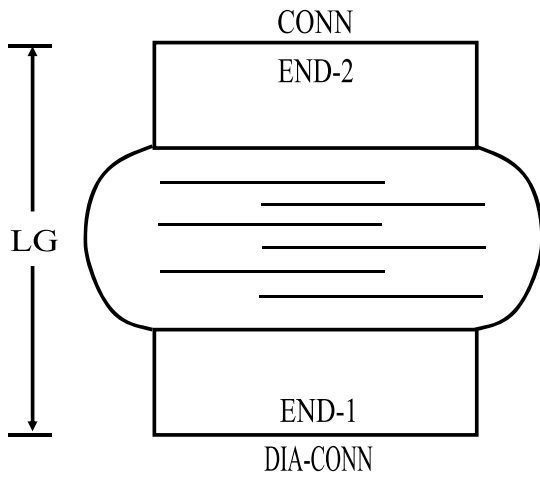
- Diameter
- Length
- End 1 Connection
- End 2 Connection
- Material Type
- Gauge or Static Pressure



SINGLE WALL SPIRAL DUCTWORK

SPECIFY

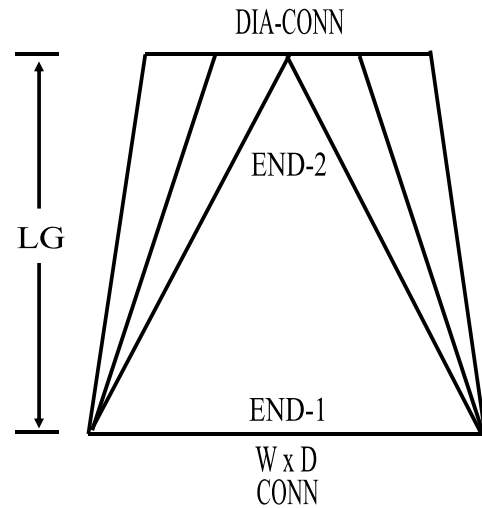
- Diameter
- Length (*Standard Length = 10'*)
- Material Type
- Gauge or Static Pressure



ROUND FLEX

SPECIFY

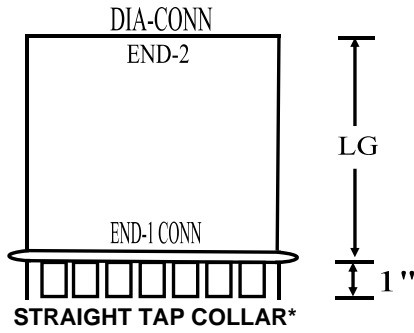
- Diameter
- 9" or 12" (Raw Length)
- End 1 Connection
- End 2 Connection
- Material Type



CENTERLINE SQUARE TO ROUND*

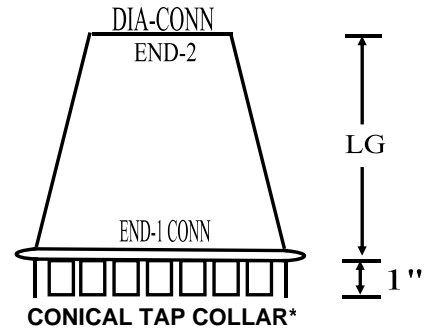
SPECIFY

- Diameter & Square Dimensions
- Length
- End 1 Connection
- End 2 Connection
- Material Type



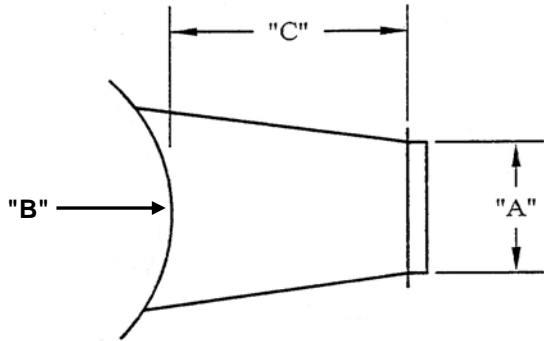
SPECIFY

- Diameter (18" and Larger)
- Material Type
- Gauge or Static Pressure
- * *LG = 6" WITH VOLUME DAMPER*
- * *LG = 2" NO VOLUME DAMPER*
- * **(End 2) = 2" Small End Connection**



SPECIFY

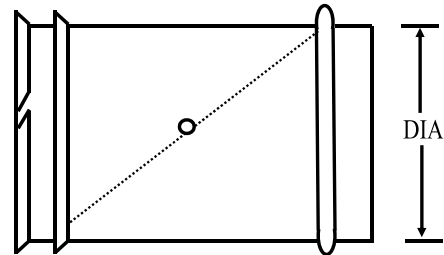
- Diameter
- Material Type
- Gauge or Static Pressure
- * *LG = 6" NO VOLUME DAMPER*
- * **(End 2) = 2" Small End Connection**



CONICAL ROUND PIPE SADDLE TAP

SPECIFY

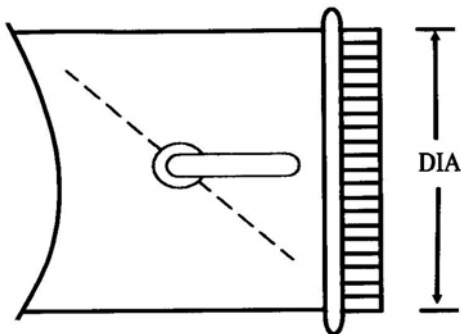
- Diameter A and B
- Material Type
- Gauge or Static Pressure
- Length C
- Damper
- 2" Small End Connection



SPIN - IN WITH DAMPER

SPECIFY

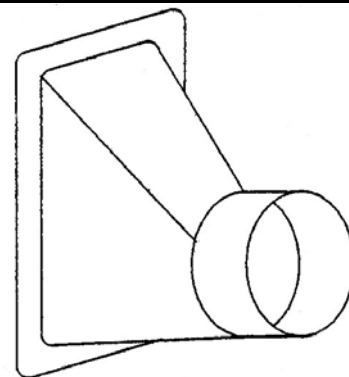
- Diameter
- * Galvanized Only



STRAIGHT SADDLE TAP

SPECIFY

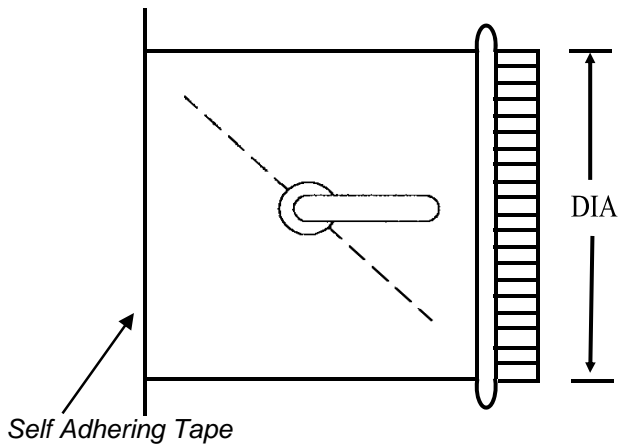
- Diameter (18" Dia. and Larger)
- Damper
- Material Type
- Gauge or Static Pressure
- 2" Small end Connection
- Length = 6" with Volume Damper*
- Length = 2" No Volume Damper*



RECTANGULAR TO ROUND TAP

SPECIFY

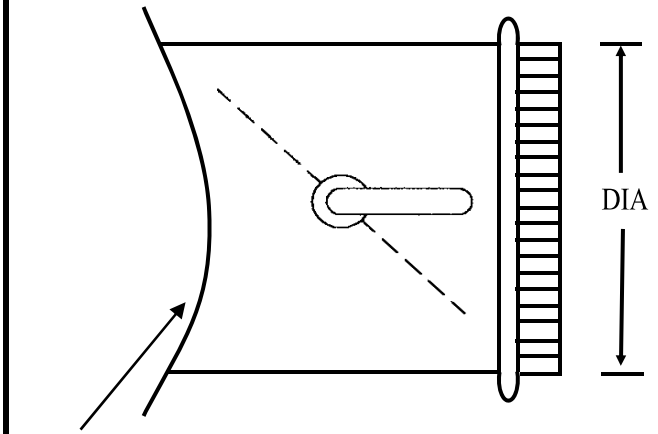
- Diameter
- Damper
- Material Type
- Gauge or Static Pressure
- 2" Small end Connection



AIR TITE WITH DAMPER

SPECIFY

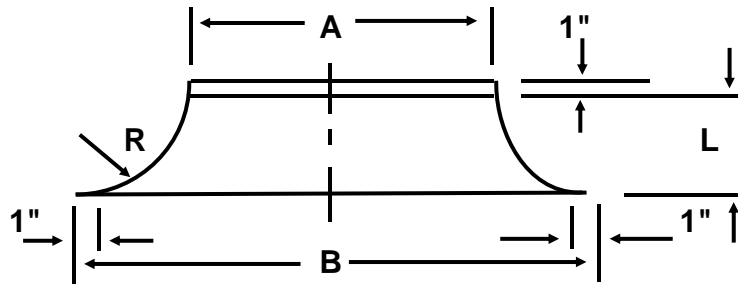
- Diameter - up to 16"
- * Galvanized Only



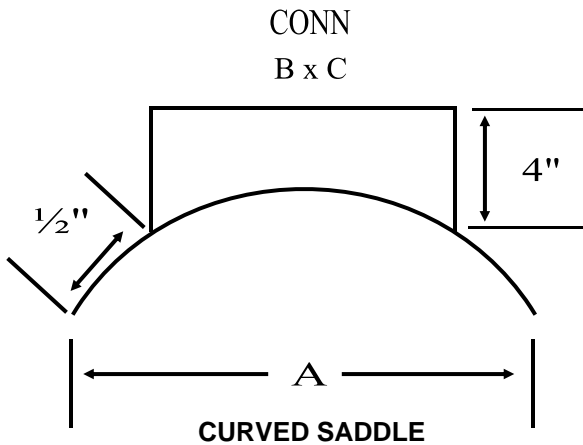
AIR TITE ROUND PIPE TAKEOFF

SPECIFY

- Diameter - up to 16"
- * Galvanized Only



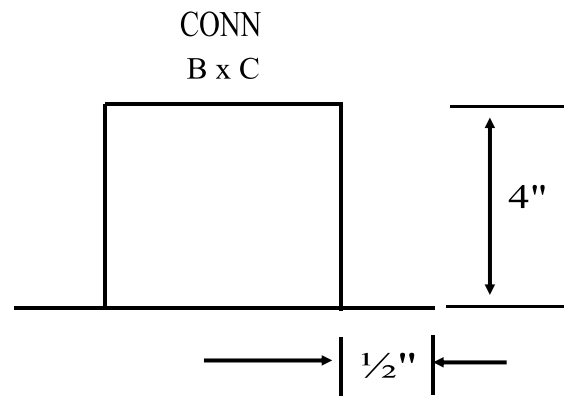
BELLMOUTH



CURVED SADDLE

SPECIFY

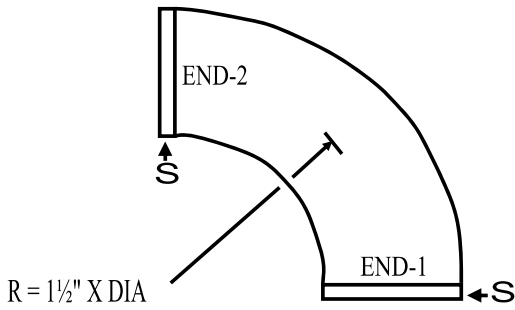
- Diameter A
- Dimensions B & C
- Connection Type
- Material Type
- Gauge



FLAT SADDLE

SPECIFY

- Dimensions B & C
- Connection Type
- Material Type
- Gauge

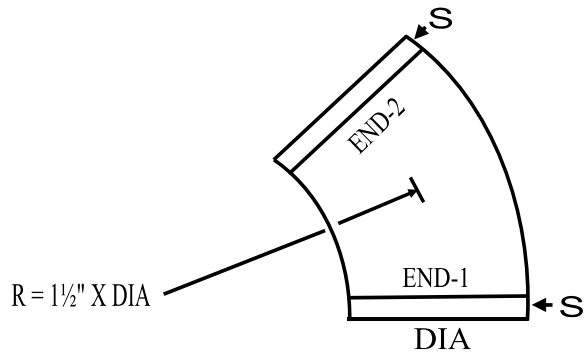


SPECIFY:

- Diameter End 1
- Material Type
- Gauge or Static Pressure

DIE STAMPED 90°

- 90°
- 3" - 7" Dia. - 24 Gauge
- 8" - 12" Dia. - 22 Gauge
- 14" Dia. - 20 Gauge
- S = 2" Small end connection

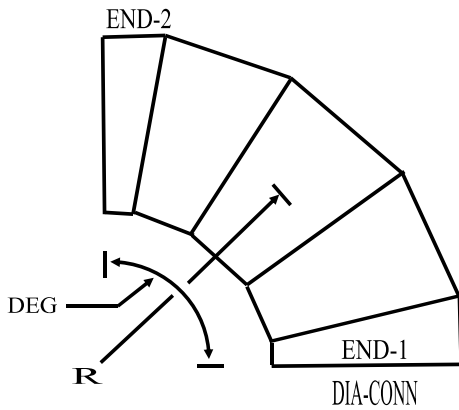


SPECIFY:

- Diameter End 1
- Material Type
- Gauge or Static Pressure

DIE STAMPED 45°

- 45°
- 3" - 7" Dia. - 24 Gauge
- 8" - 12" Dia. - 22 Gauge
- 14" Dia. - 20 Gauge
- S = 2" Small end connection

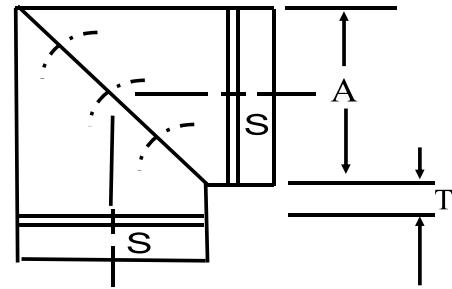


SPECIFY:

- Degree of Angle
- Diameter End 1
- Material Type
- Gauge or Static Pressure

FABRICATED

- 16" Diameter & Larger
- 2" Small Connection
- R = 1 1/2 * Dia.
- 0 - 22 1/2° = 2 Gore
- 23 - 45° = 3 Gore
- 46 - 60° = 4 Gore
- 61 - 90° = 5 Gore

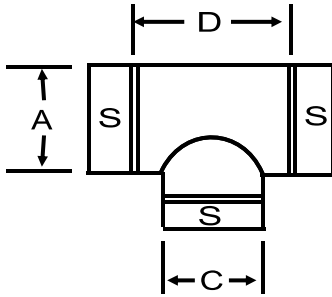


SPECIFY:

- Diameter A
- Throat T
- Material Type
- Gauge or Static Pressure
- Vanes

MITERED 90°

- 90°
- 3" - 9" Dia. - 2 Vanes
- 10" - 14" Dia. - 3 Vanes
- 15" - 19" Dia. - 4 Vanes
- 20" - 60" Dia. - 5 Vanes
- OVER 60" - 12" Spacing
- S = 2" Small end connection

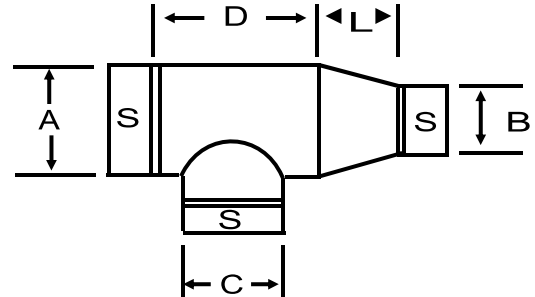


SPECIFY

- Diameter A
- Diameter C
- Material Type
- Gauge or Static Pressure

STRAIGHT TEE

- 90° Tap
- $D = C + 4''$
- $S = 2''$ Small end connection

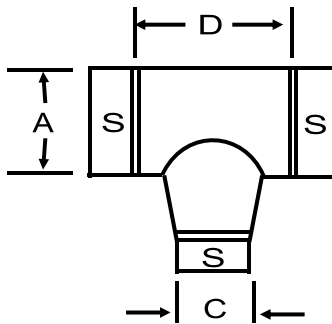


SPECIFY

- Diameter A
- Diameter B
- Diameter C
- Length L
- Material Type
- Gauge or Static Pressure

REDUCING TEE

- 90° Tap
- $D = C + 4''$
- $S = 2''$ Small end connection
- $L = \frac{A-B}{1.154}$

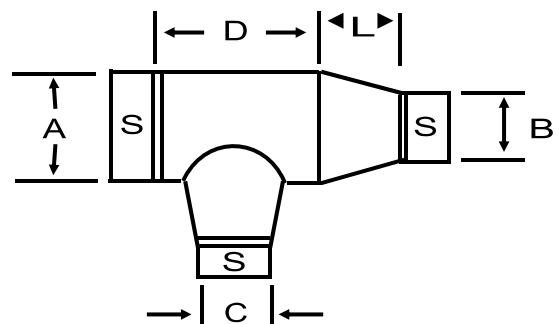


SPECIFY

- Diameter A
- Diameter C
- Material Type
- Gauge or Static Pressure

CONICAL TEE

- 90° Tap
- $D = C + 6''$
- $S = 2''$ Small end connection

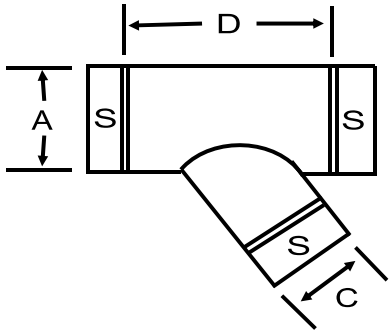


SPECIFY

- Diameter A
- Diameter B
- Diameter C
- Material Type
- Gauge or Static Pressure

CONICAL TEE REDUCING

- 90° Tap
- $D = C + 6''$
- $S = 2''$ Small end connection
- $L = \frac{A-B}{1.154}$

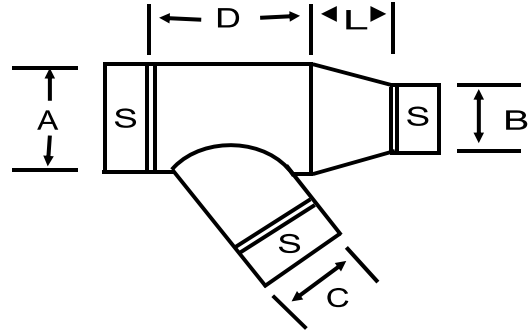


SPECIFY:

- Diameter A
- Diameter C
- Material Type
- Gauge or Static Pressure

LATERAL

- 45° Tap
- $D = C (1.41) + 4"$
- $S = 2"$ Small end connection

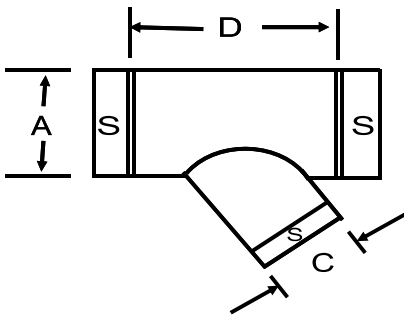


SPECIFY:

- Diameter A
- Diameter B
- Diameter C
- Material Type
- Gauge or Static Pressure

REDUCING LATERAL

- 45° Tap
- $D = C (1.41) + 4"$
- $S = 2"$ Small end connection
- $L = \frac{A-B}{1.154}$

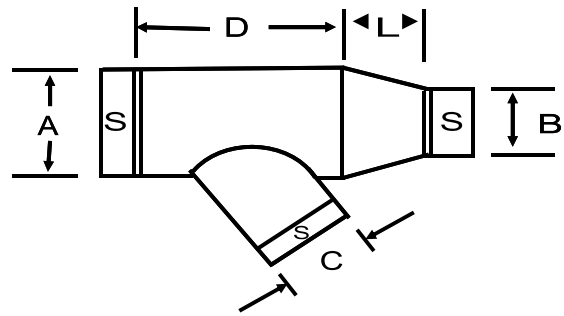


SPECIFY:

- Diameter A
- Diameter C
- Material Type
- Gauge or Static Pressure

CONICAL LATERAL

- 45° Tap
- $D = C (1.41) + 4"$
- $S = 2"$ Small end connection

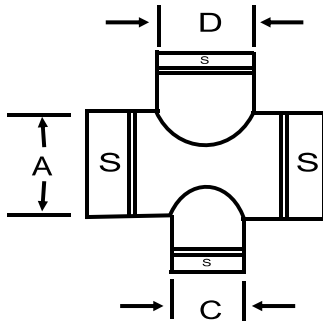


SPECIFY:

- Diameter A
- Diameter B
- Diameter C
- Material Type
- Gauge or Static Pressure

CONICAL LATERAL REDUCING

- 45° Tap
- $D = C (1.41) + 4"$
- $S = 2"$ Small end connection
- $L = \frac{A-B}{1.154}$

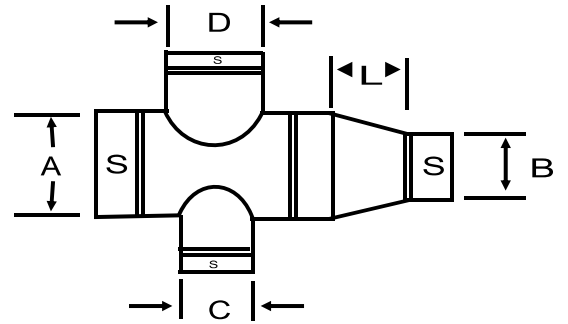


SPECIFY:

- Diameter A
- Diameter C
- Diameter D
- Material Type
- Gauge or Static Pressure

CROSS

- 180°
- S = 2" Small end connection

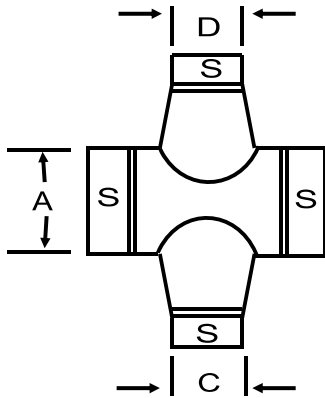


SPECIFY

- Diameter A
- Diameter B
- Diameter C
- Diameter D
- Material Type
- Gauge or Static Pressure

REDUCING CROSS

- 180°
- S = 2" Small end connection
- $L = \frac{A-B}{1.154}$

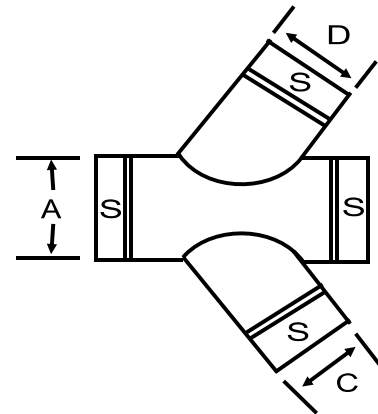


SPECIFY

- Diameter A
- Diameter C
- Diameter D
- Material Type
- Gauge or Static Pressure

CONICAL CROSS

- 180°
- S = 2" Small end connection

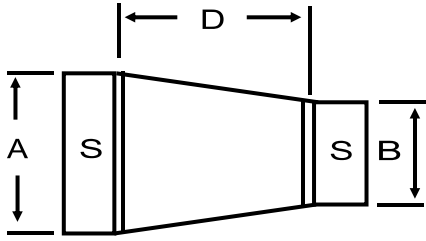


SPECIFY

- Diameter A
- Diameter C
- Diameter D
- Material Type
- Gauge or Static Pressure

LATERAL CROSS

- 180°
- Lateral Angle 45°
- S = 2" Small end connection

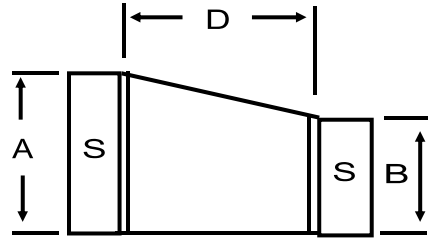


SPECIFY:

- Diameter A
- Diameter B
- Material Type
- Gauge or Static Pressure

CONCENTRIC REDUCER

- D = 4" Min.
- D = 12" Max.
- $D = \frac{A-B}{1.154}$
- 2" Small End connection



SPECIFY

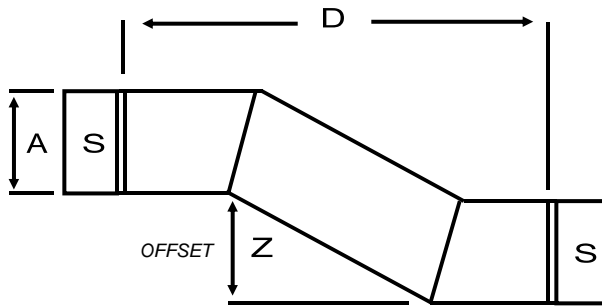
- Diameter A
- Diameter B
- Material Type
- Gauge or Static Pressure

ECCENTRIC REDUCER

- S = 2" Small End Conn.
- D = 4" Min.
- D = 12" Max.
- $D = \frac{A-B}{0.577}$

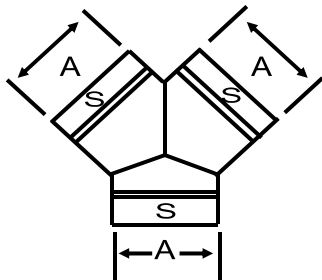
SPECIFY

- Diameter A
- Offset Z
- Length D
- Material Type
- Gauge or Static Pressure



OFFSET

- S = 2" Small End Conn.

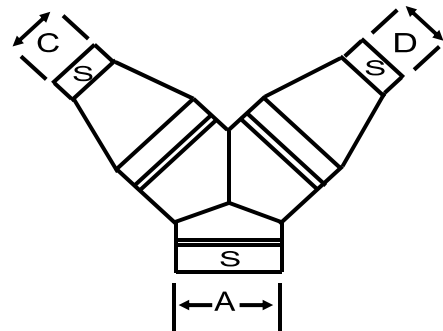


SPECIFY

- Diameter A
- Material Type
- Gauge or Static Pressure

Y BRANCH

- 45°
- S = 2" Small End connection

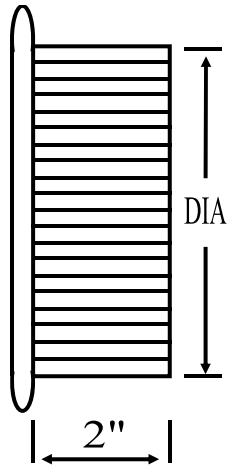


SPECIFY

- Diameter A
- Diameter C
- Diameter D
- Material Type
- Gauge or Static Pressure

Y BRANCH REDUCING

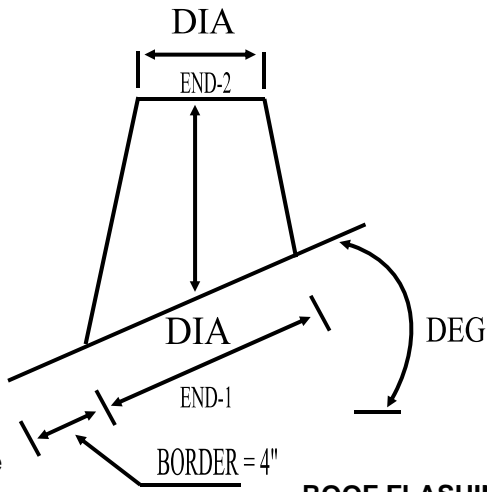
- 45°
- S = 2" Small End connection



SPECIFY

- Diameter
- Material Type
- Gauge or Static Pressure

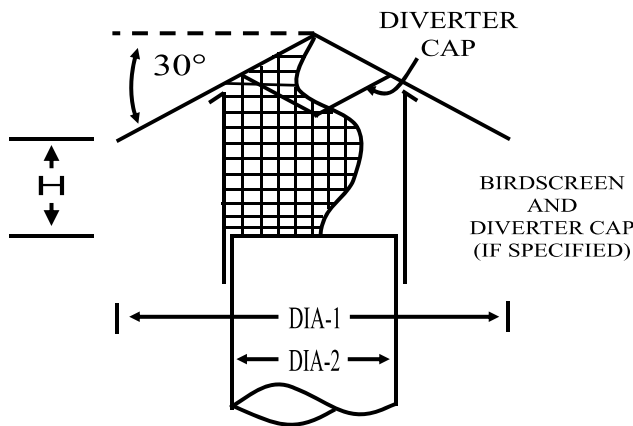
END CAP



SPECIFY

- Material Type
- Gauge
- End 1
- End 2

ROOF FLASHING

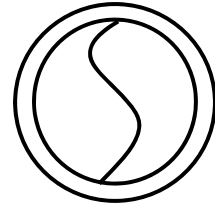


SPECIFY

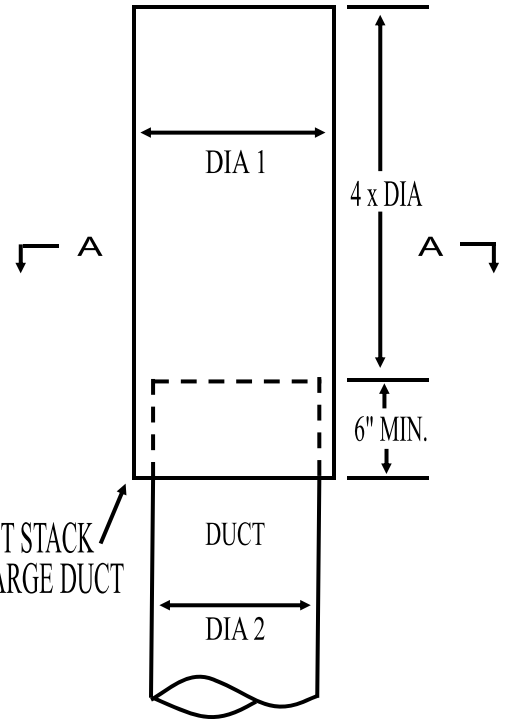
- Material Type
- Gauge
- Dia. 2

WEATHER CAP

- Dia.1 = (Dia. 2 * 2)
- H = $\frac{\text{Dia. 2}}{2}$



A-A



NO LOSS STACK

SPECIFY

- Material Type
- Gauge
- Dia. 2