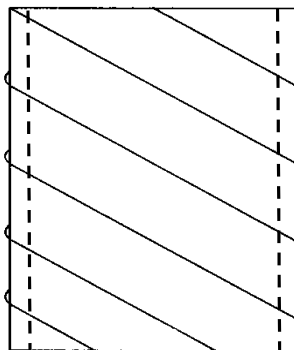




# Double Wall Round Pipe & Fittings

**ALUMINUM, GALVANIZED, GALVANNEAL, PVC AND STAINLESS STEEL**



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

## Double Wall Spiral Pipe & Fittings Specifications

2 - 10" Inch Positive Static Pressure

Double Wall Spiral Pipe Chart					Double Wall Round Fittings Chart			
Inner Liner Diameter ( Inches )	Outer Shell	Solid Inner	Perf Inner	Inner Liner - Solid and Perforated Construction	Inner Liner Diameter ( Inches )	Outer Shell Min. Gauge	Inner Liner Gauge	
	Min. Gauge	Liner Gauge	Liner Gauge				Solid	Perf
3 - 22"	26	26	24	Standard	3 - 12"	24	24	22
23 - 24"	24	26	24	Standard	13 - 22"	24	24	22
25 - 26"	24	24	24	Standard	23 - 24"	24	24	22
27 - 34"	24	24	24	Standard	25 - 26"	22	24	22
35 - 40"	24	24	24	Standard	27 - 34"	22	24	22
41 - 42"	22	24	24	Standard	35 - 42"	22	22	22
43 - 48"	22	22	22	Standard	43 - 48"	20	22	22
49 - 50"	22	22	22	Standard	50 - 51"	20	20	22
51 - 58"	22	22	22	Standard	52 - 58"	20	20	22
60"	22	22	22	Standard	60"	20	20	22

**Static Pressure:** System \_\_\_\_\_ Supply \_\_\_\_\_ Return \_\_\_\_\_

**General :** Provide static pressure, quantity, type, size and connection for fittings and ductwork. All double wall sizes are inside dimension.

**Construction :** Double 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 directions 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.

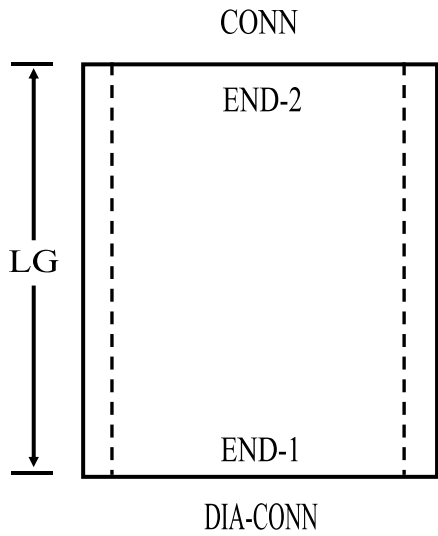
**Spiral pipe :** Spiral lockseam construction. Fabricated in 10'-0" lengths unless specified otherwise

**Connections :** Double 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.)

**Inner Liner :** *Spiral pipe:* Perforated 3/32" holes on 3/16" stager centers with 22% open area. *Fittings* Solid galvanized inner unless specified otherwise. Inner liner shall be the gauge as listed above.

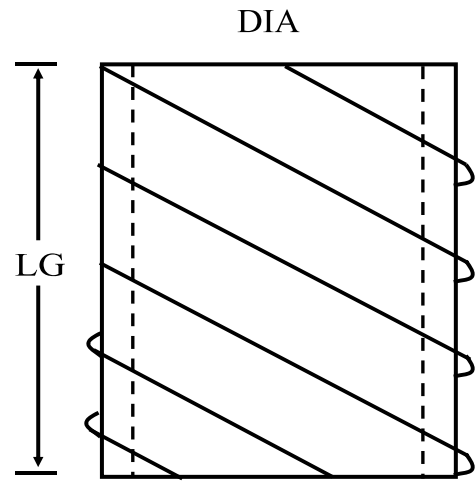
**Insulation :** RA-26 1" thick per specification on page 66 of this catalog. Unless specified otherwise.



**STRAIGHT ROUND PIPE - DW**

**SPECIFY**

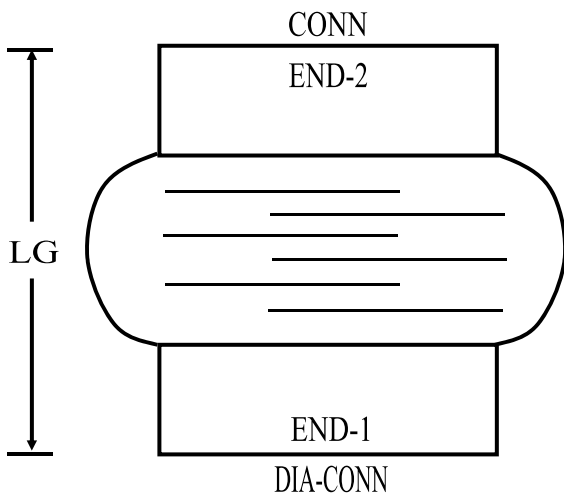
- Diameter ( I.D. )
- Length
- End 1 Connection
- End 2 Connection
- Material Type
- Gauge or Static Pressure



**SPIRAL DUCTWORK\* - DW**

**SPECIFY**

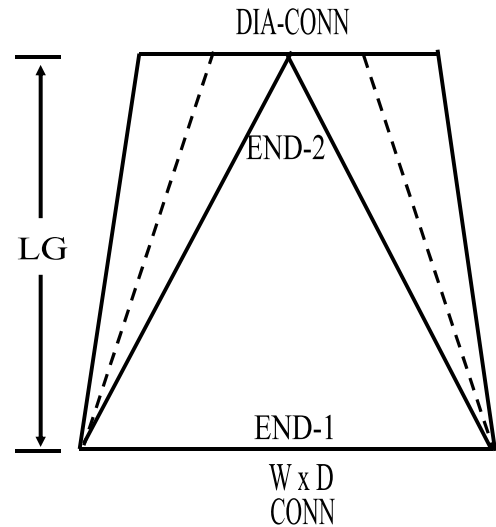
- Diameter ( I.D. )
- Length ( **Standard Length = 10'** )
- Material Type
- Gauge or Static Pressure



**ROUND FLEX\***

**SPECIFY**

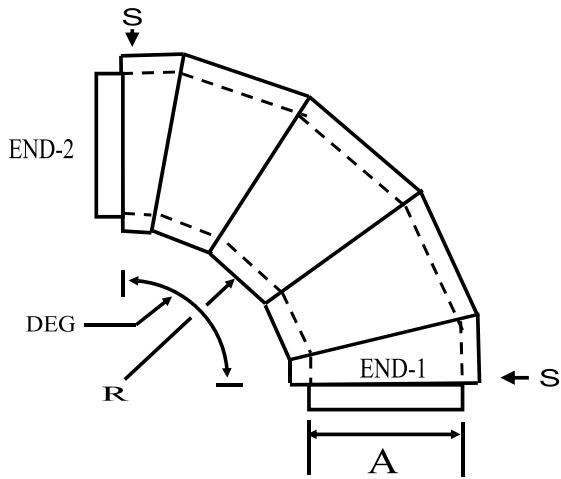
- Diameter ( I.D. )
- 9" or 12" ( Raw Length )
- End 1 Connection
- End 2 Connection
- Material Type



**CENTERLINE SQUARE TO ROUND\* - DW**

**SPECIFY**

- Diameter & Square Dimensions ( I.D. )
- Length
- End 1 Connection
- End 2 Connection
- Material Type

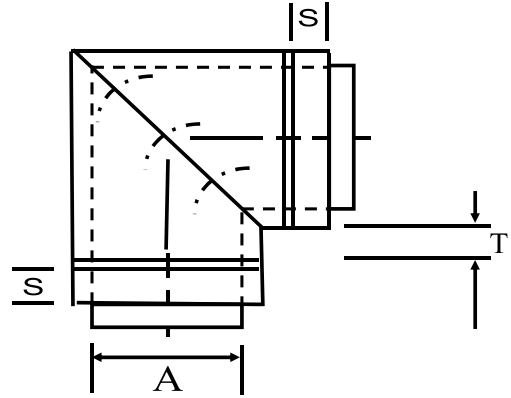


**SPECIFY:**

- Degree of Angle
- Diameter A ( I.D. )
- Connection Type
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**FABRICATED - DW**

- 2" Small Connection
- Any Angle
- $R = 1 \frac{1}{2} * \text{Dia.}$
- 0 -  $22\frac{1}{2}^\circ = 2$  Gore
- 23 -  $45^\circ = 3$  Gore
- 46 -  $60^\circ = 4$  Gore
- 61 -  $90^\circ = 5$  Gore

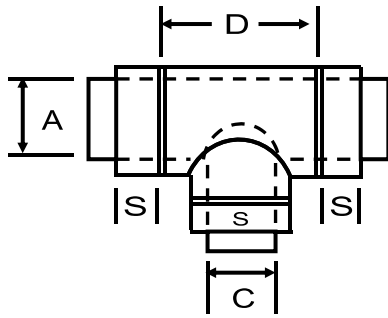


**SPECIFY:**

- Diameter A ( I.D. )
- Connection Type
- Liner Thickness
- Throat T
- Material Type
- Gauge or Static Pressure

**MITERED 90° - DW**

- 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

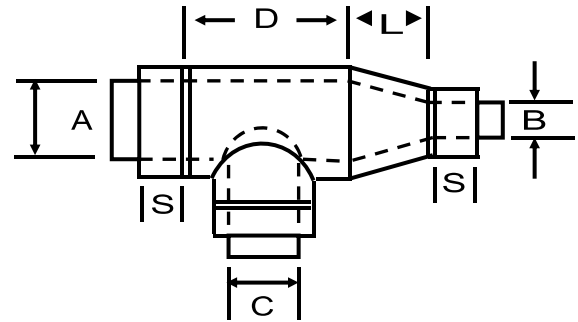


**SPECIFY**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**STRAIGHT TEE - DW**

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

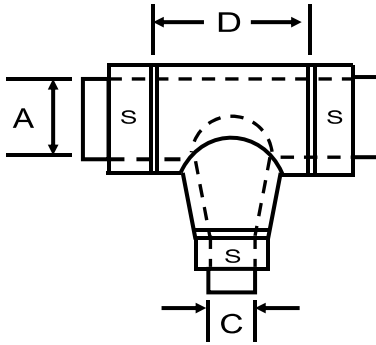


**SPECIFY**

- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**REDUCING TEE - DW**

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

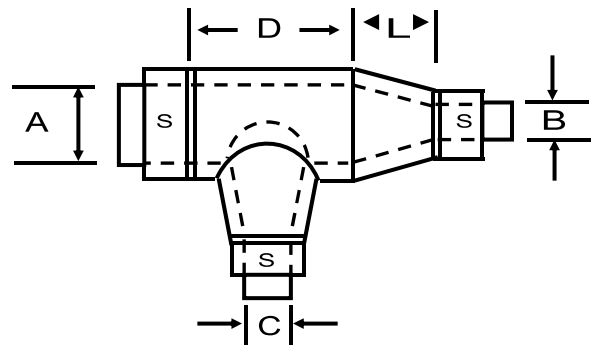


**SPECIFY**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CONICAL TEE - DW**

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

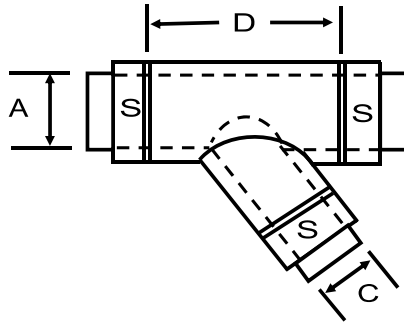


**SPECIFY**

- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CONICAL TEE REDUCING - DW**

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

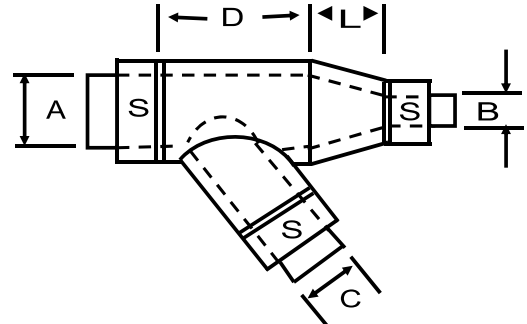


**SPECIFY:**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**LATERAL - DW**

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

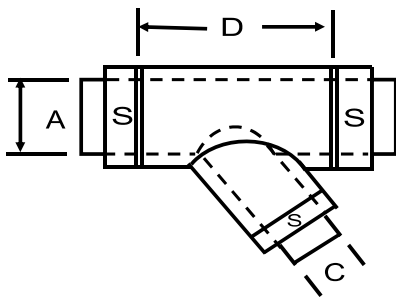


**SPECIFY:**

- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Diameter C ( I.D. )
- Material Type
- Gauge or Static Pressure

**REDUCING LATERAL - DW**

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

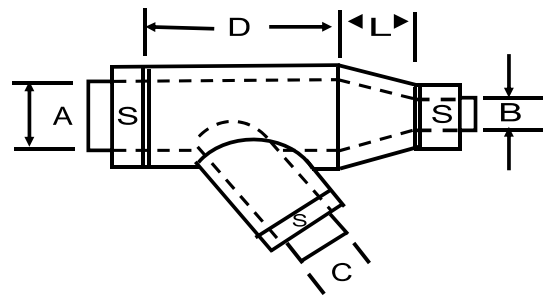


**SPECIFY:**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CONICAL LATERAL - DW**

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

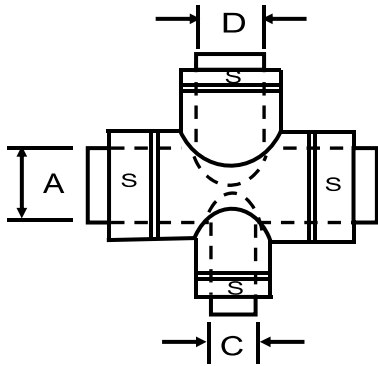


**SPECIFY:**

- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Diameter C ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CONICAL LATERAL**

- REDUCING - DW**
- 45° Tap
  - $D = C (1.41) + 4"$
  - $S = 2"$  Small End Connection
  - $L = \frac{A-B}{1.154}$

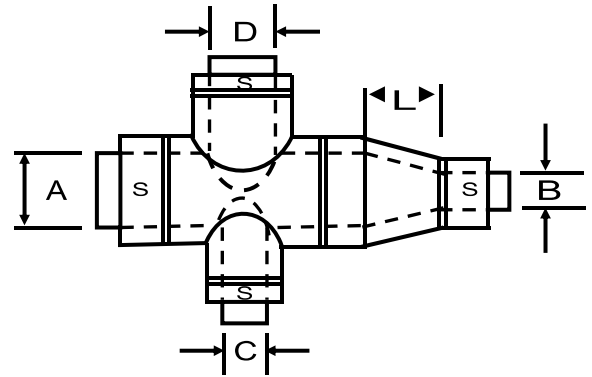


**SPECIFY:**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Diameter D ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CROSS - DW**

- 180°
- S = 2" Small End connection

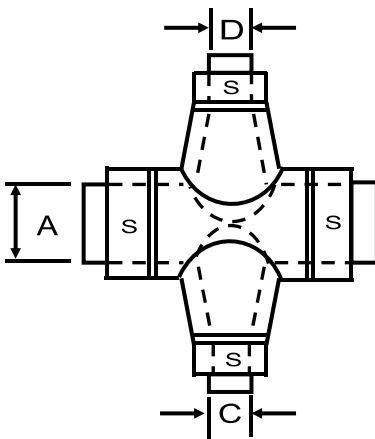


**SPECIFY**

- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Diameter C ( I.D. )
- Diameter D ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**REDUCING CROSS - DW**

- 180°
- S = 2" Small End Conn.
- $L = \frac{A-B}{1.154}$

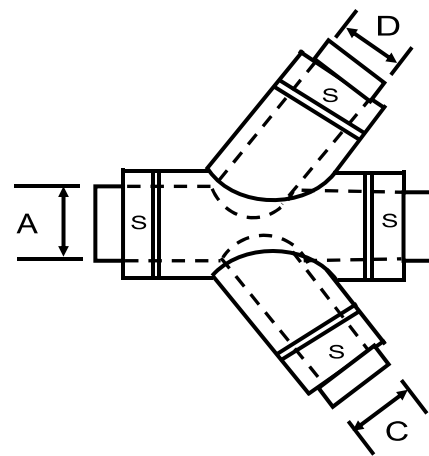


**SPECIFY**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Diameter D ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CONICAL CROSS-DW**

- 180°
- S = 2" Small End connection

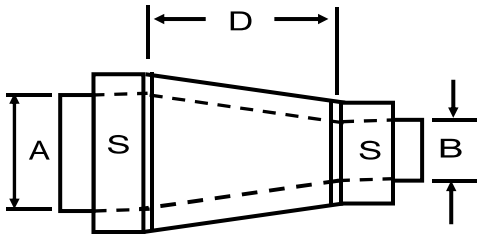


**SPECIFY**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Diameter D ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**LATERAL CROSS-DW**

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

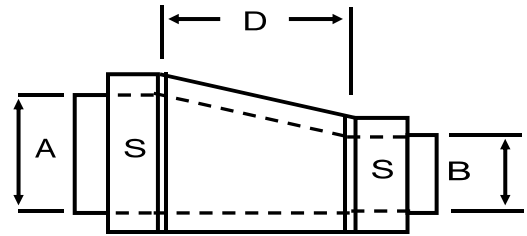


**SPECIFY:**

- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**CONCENTRIC REDUCER - DW**

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



**SPECIFY**

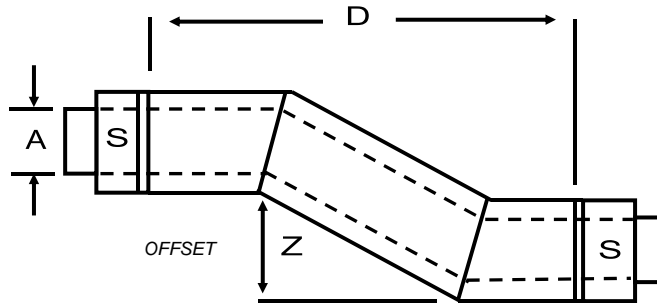
- Diameter A ( I.D. )
- Diameter B ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**ECCENTRIC REDUCER - DW**

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

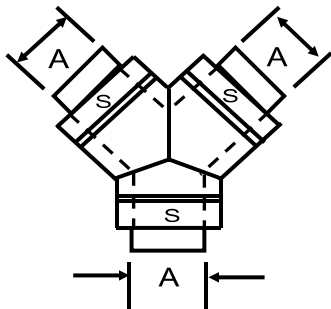
**SPECIFY**

- Diameter A ( I.D. )
- Offset Z
- Liner Thickness
- Length D
- Material Type
- Gauge or Static Pressure



**OFFSET - DW**

- S = 2" Small End connection

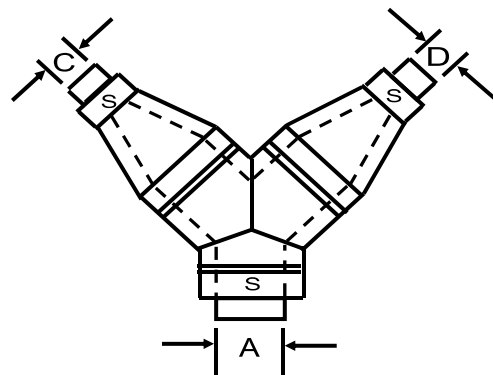


**SPECIFY**

- Diameter A ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**Y BRANCH - DW**

- 45°
- S = 2" Small End connection



**SPECIFY**

- Diameter A ( I.D. )
- Diameter C ( I.D. )
- Diameter D ( I.D. )
- Liner Thickness
- Material Type
- Gauge or Static Pressure

**Y BRANCH REDUCING - DW**

- 45°
- S = 2" Small End connection