



# Single Wall Round Duct & Fittings



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# SINGLE WALL ROUND SUBMITTAL

Project Name:

Section Number:

Engineer:

Systems:

Contractor:

Additional Comments:

**Pressure Class:**

- 2005 Up to 10" wg
- 1995 2" wg pos
- 1995 4" wg pos
- 1995 10" wg pos
- 2005 neg WG: \_\_\_\_\_
- 1995 neg WG: \_\_\_\_\_
- Underground
- Special Gauge per Spec

**Material Type:**

- G60
- G90
- Paint Grip
- Aluminum
- 304L SS
- 316L SS
- 4 x 1 Coated
- 4 x 4 Coated

**Connections:** (specify size)

- Couplings
- Gasket 36" max
- Sheet Metal Flange 10" min
- Spiralmate/Ovalmate
- Vanstone Flg Angle Ring
- Welded Flg Angle Ring
- Weld Flange
- Raw for butt weld

**Pipe Construction:**

- Spiral
- Long Seam Welded
- Pipelock

**Single**

- Single Wall

**Misc:**

- Access doors at FD
- Reducers at VAV boxes
- Single low pressure dampers

**Grille Boxes:**

- 4" std GBST
- 4" std GBST w/1" liner
- 4" std GBST Double Wall
- 45° entry GBST
- 45° entry GBST w/1" liner
- 45° entry GBST Double Wall

**Construction:**

- Gore Lock / Spot & Seal
- Continuously welded

**Tee/ Saddle:**

- Full body fittings
- Loose saddle taps
- Manifold saddle taps

**Tap Type:**

- Straight taps
- Conical taps
- Increased area taps
- Combination taps
- Lateral
- Conical lateral

**Installation:**

- Installed
- Loose
- Slot Only

Date Submitted: \_\_\_\_\_

Date Approved: \_\_\_\_\_ Comments: \_\_\_\_\_

## PRODUCT CODE LEGEND

E	.....	Elbow	N	.....	End Cap
SE	.....	Stamped Elbow	CON	.....	Conical
L	.....	Lateral	C	.....	Cross
FS	.....	Flat Saddle	R	.....	Reducer
Y	.....	Wye Fitting	SET	.....	Offset
PET	.....	Saddle Tap	RTR	.....	Square to Round
B	.....	Bellmouth	S1	.....	Male Coupling
T	.....	Tee	S2	.....	Female Coupling

## MATERIAL

- Galvanized Steel
- Stainless Steel
- Aluminum
- Power Coated
- Paint Grip
- Anti-Microbial

## DIMENSIONS

When ordering please specify the following dimensions:

Elbows:	A	Tees:	A,B,(C,D,E,F)
Laterals:	A,B,(C,D,E,F)	Crosses:	A,B,C,D,(E,F,G,H)
Reducers:	A,B,(L,Z)	Offsets:	A,B,L,Z

### LEGEND

S	.....	Slip
H	.....	Height
Z	.....	Dimension of offset
A	.....	Diameter of main inlet
C,D,E,F	.....	Diameter of take-off taps
V	.....	Body length
L	.....	Reducer length
R	.....	Radius
B	.....	Diameter of main outlet

# INSTALLATION INSTRUCTIONS

## Single Wall Slip Fit Connection:

Precision Duct Systems fittings are sized to slip into, and should be used along with spiral pipe manufactured by Precision Duct Systems. A tight fit is necessary to minimize friction loss, noise and leakage. Unless a flanged duct system or a gasketed self sealing system is purchased, the following sealant steps are recommended:

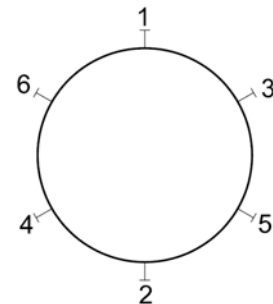
- a) Insert the bottom of the fitting collar into the spiral pipe at a slight angle. Once achieved, begin to work the rest of the collar into the duct up to where 1" remains exposed. Note, use the heel of your hand if necessary, but avoid use of screwdrivers or knives.
- b) Apply sealant to the inch that is exposed. After applied, push the collar into the spiral pipe up to the stop bead or gore lock connection.
- c) Fasten the fitting into the spiral duct with screws ½" from the stop bead. Screws should be placed minimum 6" on center.

## Sheet Metal Flange Connection:

Precision Duct Systems fitting lengths grow 3" on each end that receive a sheet metal flange. This should be taken into consideration when lengths are being detailed. Flanges come factory installed on both fittings and spiral pipe. Flanges are sealed on both inside and outside prior to leaving our factory, however customer should inspect to insure that the sealer is intact and not damaged during shipment. If crack or lack of sealer are present, repair sealer as required. For joint connections:

- a) Place closed cell neoprene gasket provided by Precision Duct Systems on the face of one of the mating flanges. The gasket should be completely around the circumference of the flange. No voids in the gasket should exist.
- b) Push the flanges together while keeping the edges of the flange aligned.
- c) Clamp the flanges together utilizing a locking C Clamp to help hold the connection in place, while compressing the gasket.
- d) Screw the flanges together with self tapping screws. The screws should be evenly spaced around the perimeter of the connection no more than 6" on center. Placement of the screws should be opposite of each other as demonstrated in the diagram.

Spiral Duct Dia (in)	Screw Dia (in)	Quantity
3 - 5	1/8	2
6 - 10	1/8	3
12 - 24	1/8	4
28 - 50	1/8	6
52 - 60	1/8	8



# CONVERSION CHART: RECTANGULAR TO EQUIVALENT ROUND

b/a	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3	3.8	4.6	5.2	5.7	6.2	6.6	7.0	7.3	7.7	8.0	8.3	8.5	8.8	9.0	9.3	9.5	9.7	9.9	10.1
4	4.4	5.3	6.1	6.7	7.3	7.8	8.3	8.7	9.1	9.5	9.8	10.1	10.4	10.7	11.0	11.3	11.5	11.8	12.0
5	4.9	6.0	6.9	7.6	8.3	8.9	9.4	9.9	10.3	10.8	11.2	11.5	11.9	12.2	12.6	12.9	13.2	13.5	13.8
6	5.3	6.6	7.6	8.4	9.1	9.8	10.4	11.0	11.5	12.0	12.4	12.8	13.2	13.6	14.0	14.4	14.7	15.0	15.3
7	5.7	7.1	8.2	9.1	9.9	10.7	11.3	11.9	12.5	13.0	13.5	14.0	14.5	14.9	15.3	15.7	16.1	16.5	16.8
8	6.1	7.6	8.7	9.8	10.7	11.5	12.2	12.9	13.5	14.1	14.6	15.1	15.6	16.1	16.5	17.0	17.4	17.8	18.2
9	6.4	8.0	9.3	10.4	11.3	12.2	13.0	13.7	14.4	15.0	15.6	16.2	16.7	17.2	17.7	18.2	18.6	19.0	19.5
10	6.7	8.4	9.8	10.9	12.0	12.9	13.7	14.5	15.2	15.9	16.5	17.1	17.7	18.3	18.8	19.3	19.8	20.2	20.7
11	7.0	8.8	10.2	11.5	12.6	13.5	14.4	15.3	16.0	16.8	17.4	18.1	18.7	19.3	19.8	20.4	20.9	21.4	21.8
12	7.3	9.1	10.7	12.0	13.1	14.2	15.1	16.0	16.8	17.6	18.3	19.0	19.6	20.2	20.8	21.4	21.9	22.4	22.9
13	7.6	9.5	11.1	12.4	13.7	14.7	15.7	16.7	17.5	18.3	19.1	19.8	20.5	21.1	21.8	22.4	22.9	23.5	24.0
14	7.8	9.8	11.5	12.9	14.2	15.3	16.4	17.3	18.2	19.1	19.9	20.6	21.3	22.0	22.7	23.3	23.9	24.5	25.0
15	8.0	10.1	11.8	13.3	14.6	15.8	16.9	17.9	18.9	19.8	20.6	21.4	22.1	22.9	23.5	24.2	24.8	25.4	26.0
16	8.3	10.4	12.2	13.7	15.1	16.4	17.5	18.5	19.5	20.4	21.3	22.1	22.9	23.7	24.4	25.1	25.7	26.4	27.0
17	8.5	10.7	12.5	14.1	15.6	16.8	18.0	19.1	20.1	21.1	22.0	22.9	23.7	24.4	25.2	25.9	26.6	27.2	27.9
18	8.7	11.0	12.9	14.5	16.0	17.3	18.5	19.7	20.7	21.7	22.7	23.5	24.4	25.2	26.0	26.7	27.4	28.1	28.8
19	8.9	11.2	13.2	14.9	16.4	17.8	19.0	20.2	21.3	22.3	23.3	24.2	25.1	25.9	26.7	27.5	28.2	28.9	29.6
20	9.1	11.5	13.5	15.2	16.8	18.2	19.5	20.7	21.9	22.9	23.9	24.9	25.8	26.6	27.5	28.3	29.0	29.8	30.5
22	9.5	12.0	14.1	15.9	17.6	19.1	20.4	21.7	22.9	24.0	25.1	26.1	27.1	28.0	28.9	29.7	30.5	31.3	32.1
24	9.8	12.4	14.6	16.5	18.3	19.9	21.3	22.7	23.9	25.1	26.2	27.3	28.3	29.3	30.2	31.1	32.0	32.8	33.6
26	10.1	12.8	15.1	17.1	19.0	20.6	22.1	23.5	24.9	26.1	27.3	28.4	29.5	30.5	31.5	32.4	33.3	34.2	35.1
28	10.4	13.2	15.6	17.7	19.6	21.3	22.9	24.4	25.8	27.1	28.3	29.5	30.6	31.7	32.7	33.7	34.6	35.6	36.4
30	10.7	13.6	16.1	18.3	20.2	22.0	23.7	25.2	26.6	28.0	29.3	30.5	31.7	32.8	33.9	34.9	35.9	36.8	37.8
32	11.0	14.0	16.5	18.8	20.8	22.7	24.4	26.0	27.5	28.9	30.2	31.5	32.7	33.9	35.0	36.1	37.1	38.1	39.0
34	11.3	14.4	17.0	19.3	21.4	23.3	25.1	26.7	28.3	29.7	31.1	32.4	33.7	34.9	36.1	37.2	38.2	39.3	40.3
36	11.5	14.7	17.4	19.8	21.9	23.9	25.7	27.4	29.0	30.5	32.0	33.3	34.6	35.9	37.1	38.2	39.4	40.4	41.5
38	11.8	15.0	17.8	20.2	22.4	24.5	26.4	28.1	29.8	31.3	32.8	34.2	35.6	36.8	38.1	39.3	40.4	41.5	42.6
40	12.0	15.3	18.2	20.7	22.9	25.0	27.0	28.8	30.5	32.1	33.6	35.1	36.4	37.8	39.0	40.3	41.5	42.6	43.7
42	12.3	15.6	18.5	21.1	23.4	25.6	27.6	29.4	31.2	32.8	34.4	35.9	37.3	38.7	40.0	41.3	42.5	43.7	44.8
44	12.5	15.9	18.9	21.5	23.9	26.1	28.1	30.0	31.8	33.5	35.1	36.7	38.1	39.5	40.9	42.2	43.5	44.7	45.8
46	12.7	16.2	19.3	21.9	24.4	26.6	28.7	30.6	32.5	34.2	35.9	37.4	38.9	40.4	41.8	43.1	44.4	45.7	46.9

$$De = 1.30 [(ab)^{0.625}/(a+b)^{0.250}]$$

Example : convert rectangular duct 22x12 to equivalent round.

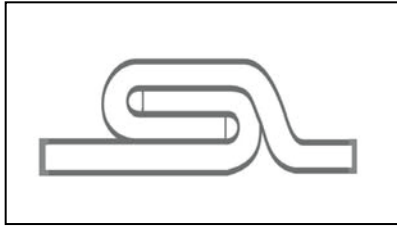
a = length of one side of rectangular duct (inch)  
 b = length of adjacent side of rectangular duct (inch)  
 De = circular equivalent of rectangular duct for equal friction and capacity (inch)

a = 22, b = 12; from above table  
 De = 17.6, use 18 diameter

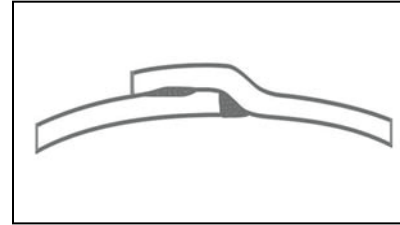
Source: 2001 ASHRAE Fundamentals, p. 32.10

6 State Route 202 • Troy, Ohio 45373  
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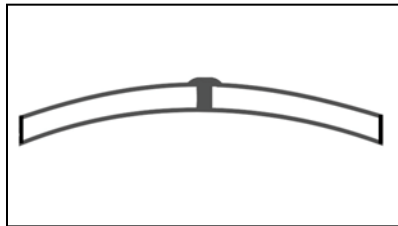
## SEAM SPECIFICATIONS



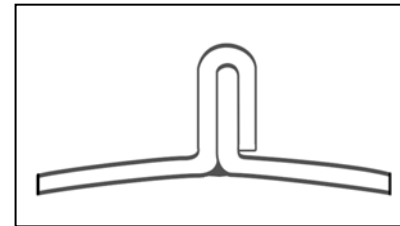
Lock seam RL-1



Stitch Weld Seam RL-2

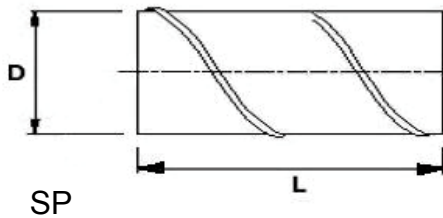


Butt Weld Seam RL-4



Gore Locked Seam

## SPIRAL SPECIFICATIONS



Description: RL-1 Spiral Lock Seam Duct

- Minimum length 5"
- Maximum length 240"
- Stock length 120"
- See next page for galvanized diameter and gauge chart

Required Ordering Information:

- Designation: SP
- Diameter: 3" - 22" even and odd, 24" - 74" even
- Length: inches as outlined by min and max above

Spiral Duct Lock Seam (RL-1):

Galvanized	Gauges: 28 - 14
Stainless Steel	Gauges: 26 - 18
Aluminum	Gauges: 22 - 14
Paint Grip	Gauges: 26 - 16
Powder Coated	Gauges: 26 - 18
Perforated	Gauges: 22
Antimicrobial	Gauges: 28 - 14

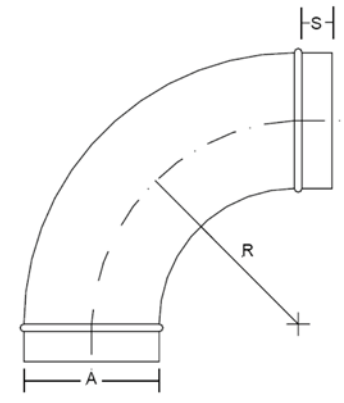
# SPIRAL DUCT

Dia	Gauge							
	28	26	24	22	20	18	16	14
3	.68	.79	1.01	1.23	1.44	1.92	2.32	n/a
4	.91	1.06	1.35	1.64	1.93	2.56	3.10	n/a
5	1.14	1.32	1.69	2.05	2.42	3.21	3.88	n/a
6	1.37	1.59	2.03	2.47	2.91	3.86	4.66	n/a
7	1.60	1.86	2.37	2.88	3.39	4.50	5.44	n/a
8	1.83	2.12	2.71	3.30	3.88	5.15	6.23	7.69
9	2.06	2.39	3.05	3.71	4.37	5.80	7.01	8.66
10	2.29	2.66	3.39	4.12	4.85	6.45	7.79	9.62
11	2.52	2.92	3.73	4.54	5.34	7.09	8.57	10.59
12	2.75	3.19	4.07	4.95	5.83	7.74	9.35	11.56
13	2.98	3.46	4.41	5.37	6.32	8.39	10.14	12.52
14	3.21	3.72	4.75	5.78	6.80	9.03	10.92	13.49
15	3.44	3.99	5.07	6.19	7.29	9.68	11.70	14.45
16	3.67	4.25	5.43	6.61	7.78	10.33	12.48	15.42
18	4.13	4.79	6.11	7.43	8.75	11.62	14.05	17.35
20	4.59	5.32	6.79	8.26	9.73	12.92	15.61	19.28
22	5.05	5.85	7.47	9.09	10.70	14.21	17.17	21.22
24	5.51	6.39	8.15	9.92	11.68	15.51	18.74	23.15
26	5.97	6.92	8.82	10.75	12.65	16.80	20.30	25.08
28	6.43	7.45	9.50	11.57	13.63	18.09	21.87	27.01
30	6.89	7.99	10.18	12.40	14.60	19.39	23.43	28.94
32	7.35	8.52	10.86	13.23	15.57	20.68	24.99	30.88
34	7.81	9.05	11.54	14.06	16.55	21.98	26.56	32.81
36	8.27	9.59	12.22	14.89	17.52	23.27	28.12	38.74
38	8.73	10.12	12.90	15.71	18.50	24.56	29.69	36.67
40	9.19	10.65	13.58	16.54	19.47	25.86	31.25	38.61
42	9.65	11.19	14.26	17.37	20.45	27.15	32.81	40.54
44	10.11	11.72	14.94	18.20	21.42	28.45	34.38	42.47
46	10.57	12.25	15.62	19.02	22.40	29.74	35.94	44.40
48	11.03	12.78	16.30	19.85	23.37	31.04	37.51	46.33
50	11.49	13.32	16.98	20.68	24.35	32.33	39.07	48.27
52	11.95	13.85	17.66	21.51	25.32	33.62	40.63	50.20
54	12.41	14.38	18.34	22.34	26.29	34.92	42.20	52.13
56	12.86	14.92	19.02	23.16	27.27	36.21	43.76	54.06
58	13.32	15.45	19.70	23.99	28.24	37.51	45.33	55.99
60	13.78	15.98	20.38	24.82	29.22	38.80	46.89	57.93

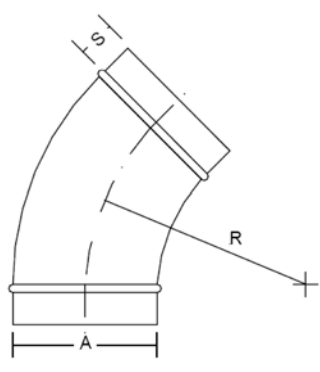
- Gray shading indicates 2005 SMACNA +10" WG Standard. Other gauges available as required by specification.



# STAMPED ELBOWS



SE90



SE45

Description: Stamped Elbows

- 3" diameter through 12" diameter
- Continuously stitch welded
- All ends have rolled edges to maintain concentricity of round
- 15°, 30° and 60° elbows are available

FOR STANDARD RADIUS (R)

1.5 x A equals centerline radius

Required Ordering Information:

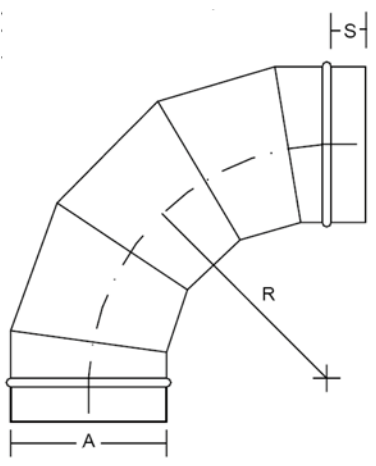
- Designation: SE90 or SE45
- Diameter: A

FOR 1.0 x A equals centerline radius

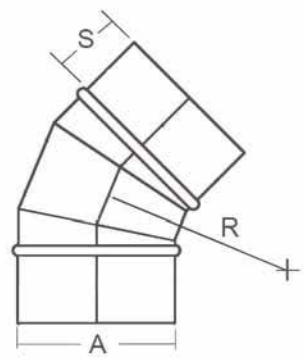
Required Ordering Information:

- Designation: SESR90 or SESR45
- Diameter: A

# GORED ELBOWS



E90



E45

Description: Gored Elbows

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standard utilizing 5 gores for 90° elbows and 3 gores for 45° elbows
- 15°, 30° and 60° elbows are available

Degree of elbow	# Gores
0 - 35°	2
36° - 71°	3
72° - 90°	5

FOR STANDARD RADIUS (R)

1.5 x A equals centerline radius

Required Ordering Information:

- Designation: E90 or E45
- Diameter: A

FOR 1.0 x A equals centerline radius

Required Ordering Information:

- Designation: ESR90 or ESR45
- Diameter: A

## Description: Mitered Elbows

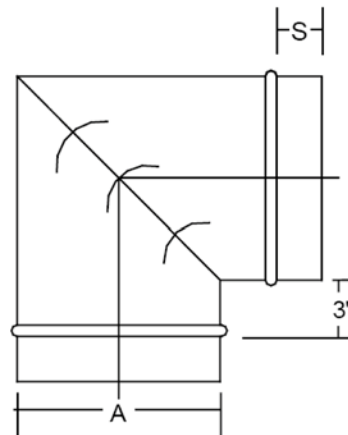
- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Number of vanes varies by diameter

"A" Dimension	# Vanes
3" - 9"	2
10" - 14"	3
15" - 19"	4
20" - 60"	5
Over 60"	12" Spacing

### Required Ordering Information:

- Designation: EV90
- Diameter: 3" - 74"

## MITERED ELBOW



EV90

## Description: Bullhead Tee

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Number of vanes varies by diameter

"A" Dimension	# Vanes
3" - 9"	2
10" - 14"	3
15" - 19"	4
20" - 60"	5
Over 60"	12" Spacing

### Required Ordering Information:

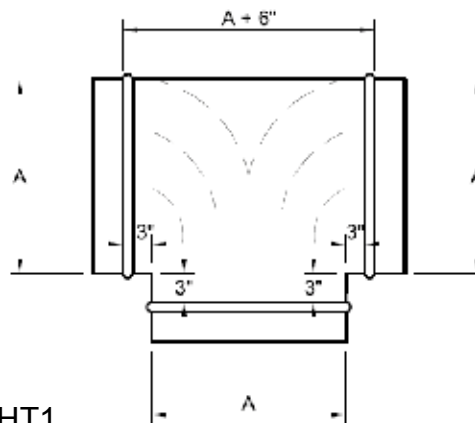
- Designation: BHT1
- Diameter: A
- L1 = A - C (min 4", max 12")
- L2 = A - D (min 4", max 12")

### FOR REDUCING:

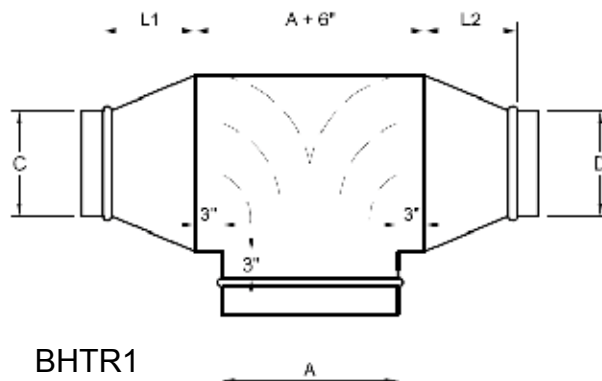
### Required Ordering Information:

- Designation: BHTR1
- Diameter: A x C x D

## BULLHEAD TEES

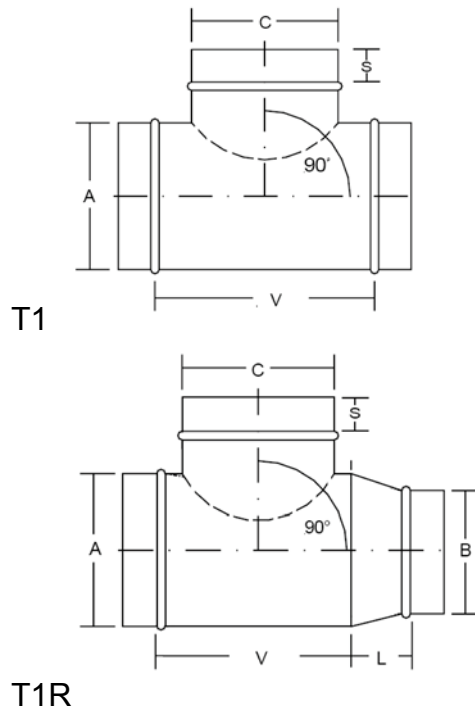


BHT1



BHTR1

# TEES



## Description: Tees

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Assembled tee with stamped increased area tap or fabricated straight tap
- $V = C + 6\frac{1}{2}"$
- $L = A - B$  (min 4", max 12")

### Required Ordering Information:

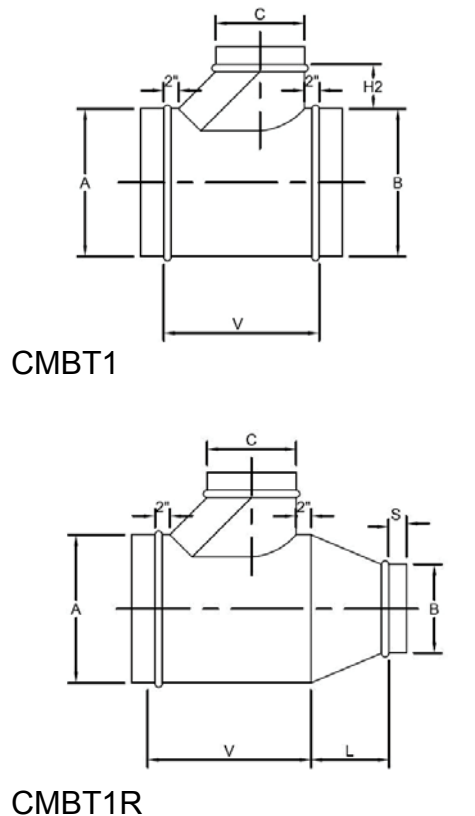
- Designation: T1
- Diameter: A x C

### FOR REDUCING:

#### Required Ordering Information:

- Designation: T1R
- Diameter: A x B x C

# COMBINATION TEE



## Description: Combination Tees

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- 45° combination boot tee
- $V = C + H2 + 4"$
- $L = A - B$  (min 4", max 12")

Diameter	H2
3" - 8"	4"
9" - 14"	7"
15" - 26"	10"
27" - 46"	13"

### Required Ordering Information:

- Designation: CMBT1
- Diameter: A x C

### FOR REDUCING:

#### Required Ordering Information:

- Designation: CMBT1R
- Diameter: A x B x C

Description: Conical Tees

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- $V = C + 6"$
- $L = A - B$  (4" min, 12" max)

Required Ordering Information:

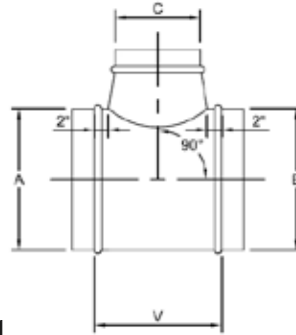
- Designation: CONT1
- Diameter: A x C

FOR REDUCING:

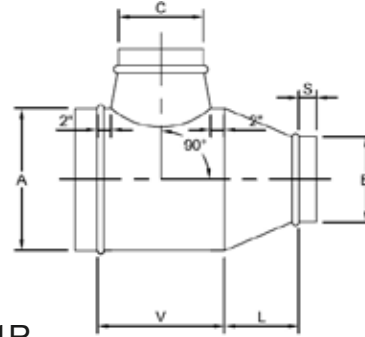
Required Ordering Information:

- Designation: CONT1R
- Diameter: A x B x C

# CONICAL TEES



CONT1



CONT1R

Description: 45° Laterals Tees

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- 15°, 30°, and 60° available
- $V = (C \times 1.414) + 5$
- $L = A - B$  (4" min, 12" max)

Required Ordering Information:

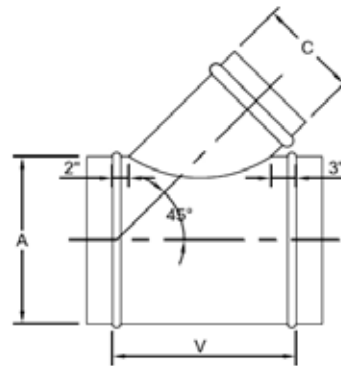
- Designation: L1
- Diameter: A x C

FOR REDUCING:

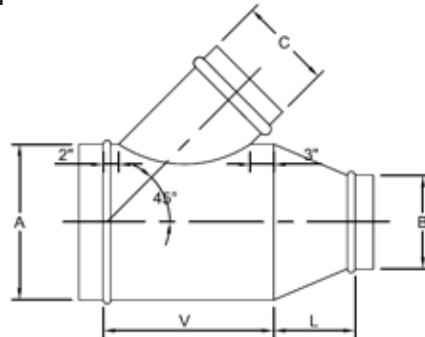
Required Ordering Information:

- Designation: L1R
- Diameter: A x B x C

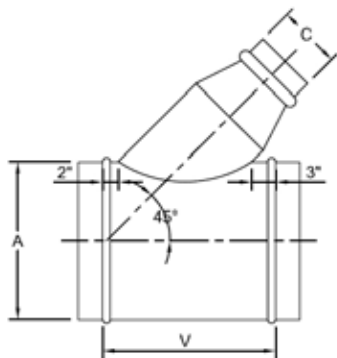
# LATERALS TEES



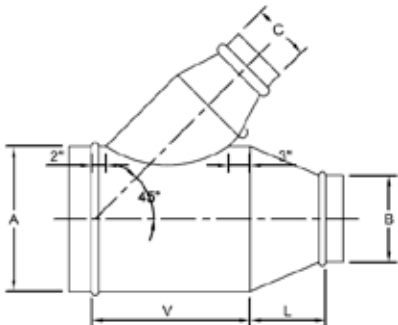
L1



L1R



CONL1



CONL1R

**Description: Conical Lateral Tees**

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards

**Required Ordering Information:**

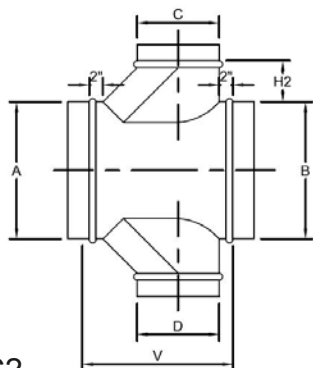
- Designation: CONL1
- Diameter: A x C

**FOR REDUCING:**

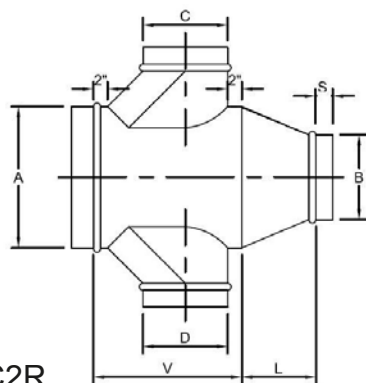
**Required Ordering Information:**

- Designation: CONL1R
- Diameter: A x B x C

## CROSSES



CMBC2



CMBC2R

**Description: Combination Crosses**

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- 45° boot style crossing tee
- Assembled using the CBST
- V = the longer of C or D + H2 + 4
- L = A - B (min 4", max 12")

**Required Ordering Information:**

- Designation: CMBC2
- Diameter: A x C x D

**FOR REDUCING:**

**Required Ordering Information:**

- Designation: CMBC2R
- Diameter: A x B x C x D

Diameter	H2
3" - 8"	4"
9" - 14"	7"
15" - 26"	10"
27" - 46"	13"

Description: Crosses

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- assembled crossing tee with stamped or increased area tap or fabricated straight tap
- $V = \text{Greater of } C \text{ or } D + 6 \frac{1}{2}"$
- $L = A - B$  (4" min, 12" max)

Required Ordering Information:

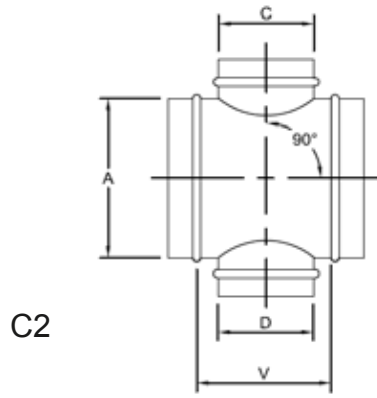
- Designation: C2
- Diameter: A x C x D

FOR REDUCING:

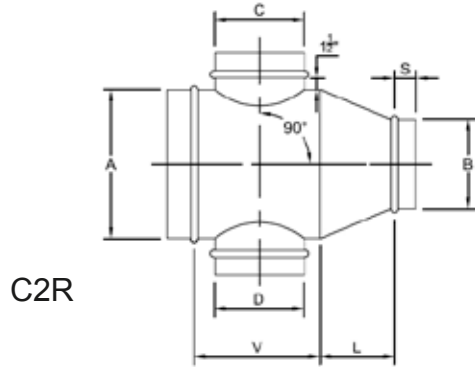
Required Ordering Information:

- Designation: C2R
- Diameter: A x B x C x D

# CROSSES



C2



C2R

Description: Conical Lateral Crosses

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards

Required Ordering Information:

- Designation: CONLC2
- Diameter: A x C x D

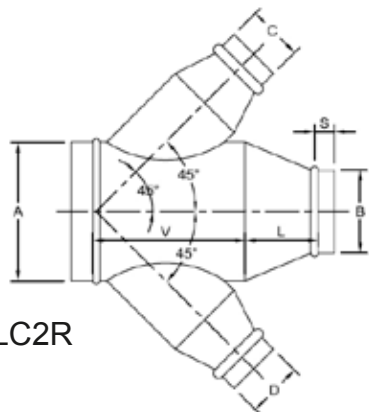
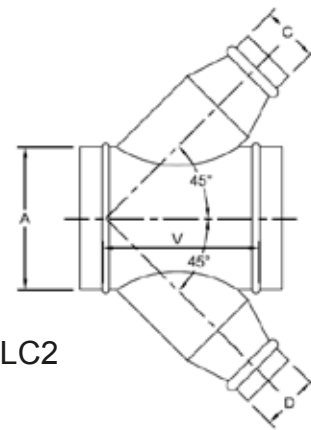
CONLC2

FOR REDUCING:

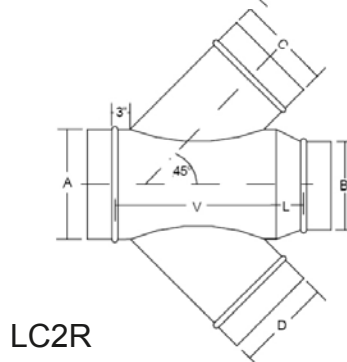
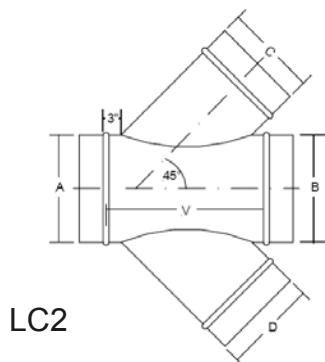
Required Ordering Information:

- Designation: CONLC2F
- Diameter: A x B x C x D

CONLC2R



## LATERAL CROSSES



Description: Lateral Crosses

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- 15°, 30° and 60° available
- $V = (\text{Greater of } C \text{ or } D) + 5"$
- $L = A - B$  (min 4", max 12")

Required Ordering Information:

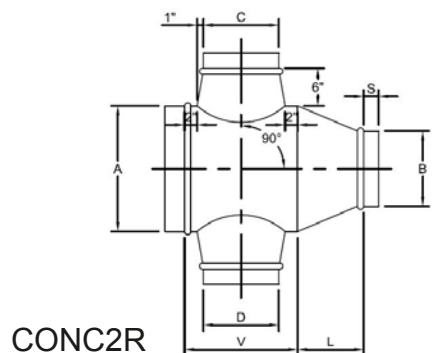
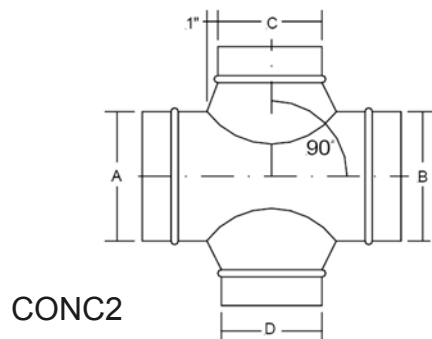
- Designation: LC2
- Diameter: A x C x D

FOR REDUCING:

Required Ordering Information:

- Designation: LC2R
- Diameter: A x B x C x D

## CONICAL CROSSES



Description: Conical Crosses

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- $V = \text{Greater of } C \text{ or } D + 6"$
- $L = A - B$  (4" min, 12" max)

Required Ordering Information:

- Designation: CONC2
- Diameter: A x C x D

Required Ordering Information:

- Designation: CONC2R
- Diameter: A x B x C x D

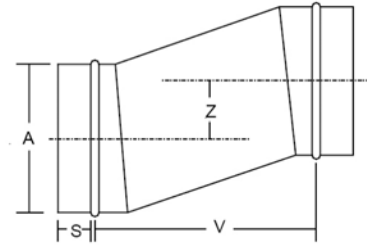
Description: One Piece Offset

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- 60° max angle of convergence
- $V = \text{minimum of } 1/2 A + Z$

Required Ordering Information:

- Designation: SET
- Diameter: A, Z, V

# OFFSET



SET

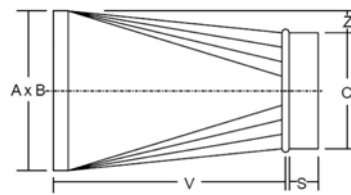
Description: Rectangle to Round

- Square to round transition
- 2-inch raw edge rectangular end
- Minimum length of 12-inch
- Special order: offset styles available
- Fabricated to SMACNA standards
- Special connectors available on rectangular end

Required Ordering Information:

- Designation: RTR
- Diameter: A x B x C

# RECTANGLE TO ROUND



RTR

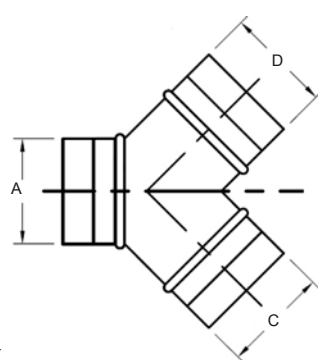
Description: Wyes

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- 15°, 30° and 60° available

Required Ordering Information:

- Designation: Y
- Diameter: A x C x D

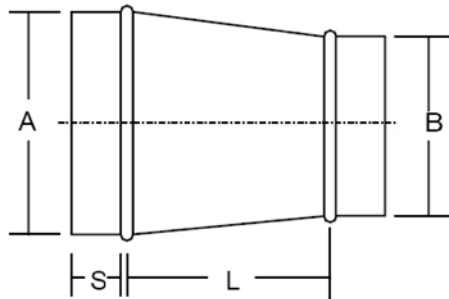
# WYES



Y



## REDUCERS



R  
RF

Description: Fabricated Concentric Reducers

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Formula:  $A - B = L$
- Minimum 4", Maximum 12"

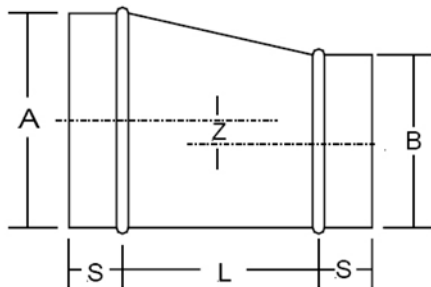
Required Ordering Information:

- Designation: R
- Diameter: A x B

FOR FEMALE "A" DIMENSION:

Required Ordering Information:

- Designation: RF
- Formula:  $A - B + 2" = L$
- Diameter: A x B



ER  
ERF

Description: Fabricated Eccentric Reducers

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Formula:  $A - B = L$
- Minimum 4", Maximum 12"

Required Ordering Information:

- Designation: ER
- Diameter: A x B

FOR FEMALE "A" DIMENSION:

Required Ordering Information:

- Designation: ERF
- Diameter: A x B

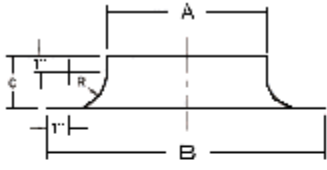
Description: Standard Bellmouth Taps

# TAPS

- Available 3" diameter through 48" diameter
- Fabricated to SMACNA standards

Required Ordering Information:

- Designation: B1
- Diameter: A



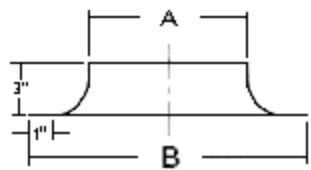
B1

Description: Short Radius Bellmouth

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards

Required Ordering Information:

- Designation: SB1
- Diameter: A



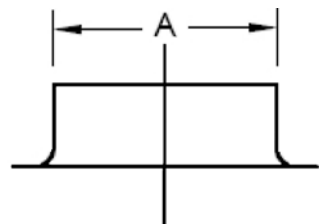
SB1

Description: Mini-Bellmouth

- Available 3" diameter through 16" diameter
- Fabricated to SMACNA standards

Required Ordering Information:

- Designation: MB1
- Diameter: A



MB1

"A"	B1				SB1
	"B"	"C"	"R"	Opening	"B"
3					
4	9	2.5	1.5	7	
5	10	2.5	1.5	8	
6	12	3	2	10	10
7	13	3	2	11	11
8	14	3	2	12	12
9	15	3	2	13	13
10	16	3	2	14	14
11	19	4	3	17	15
12	20	4	3	18	16
13	21	4	3	19	17
14	22	4	3	20	18
15	23	4	3	21	19
16	26	5	4	24	20
17	27	5	4	25	21
18	28	5	4	26	22
19	29	5	4	27	23
20	30	5	4	28	24
21	31	5	4	29	25
22	34	6	5	32	26
23	35	6	5	33	27
24	36	6	5	34	28
26	40	7	6	38	30
28	42	7	6	40	32
30	44	7	6	42	34
32	48	8	7	46	36
34	50	8	7	48	38
36	52	8	7	50	40
38	54	8	7	52	42
40	58	9	8	56	44
42	60	9	8	58	46
44	62	9	8	60	48
46	64	9	8	62	50
48	66	9	8	64	52
50	-	-	-	-	56
52	-	-	-	-	58

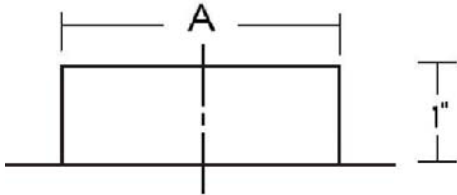
# TAPS

Description: Take-off Staring Collar

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Manufactured to be installed on the flat

Required Ordering Information:

- Designation: FT
- Diameter: A



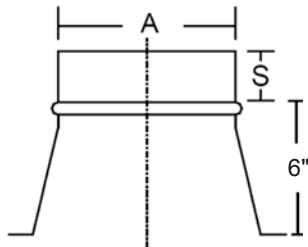
FT

Description: Conical Tap

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Manufactured to be installed on the flat

Required Ordering Information:

- Designation: CFT
- Diameter: A



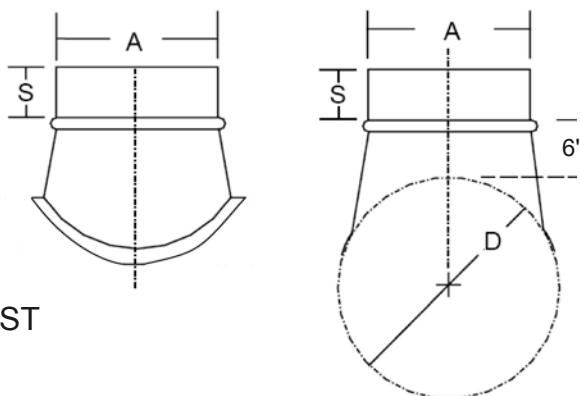
CFT

Description: Conical Saddle Tap

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Manufactured to be installed on a round surface

Required Ordering Information:

- Designation: CST
- Diameter: A on D



CST

Description: 45° Combination Boot Tap

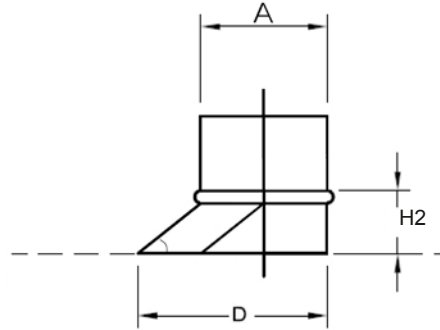
# TAPS

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards

MANUFACTURED TO BE INSTALLED ON FLAT:

Required Ordering Information:

- Designation: CBFT
- Diameter: A

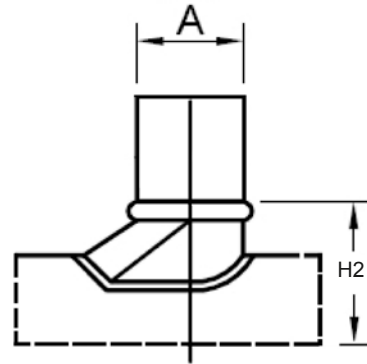


CBFT

CONTOURED FLANGED TEE TAP:

Required Ordering Information:

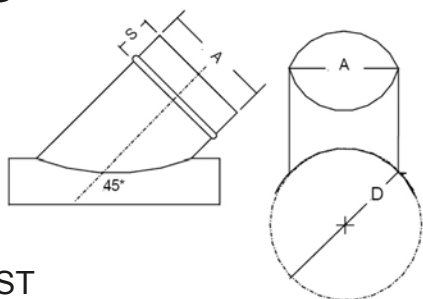
- Designation: CBST
- Diameter: A on D



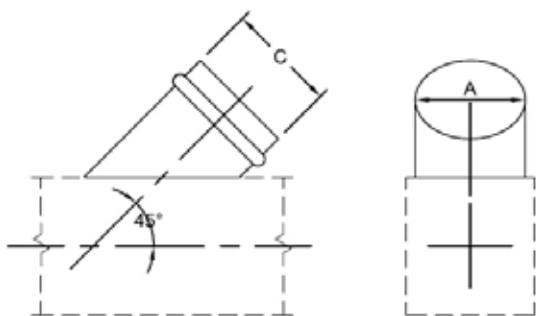
CBST

Diameter	H2
3" - 8"	4"
9" - 14"	7"
15" - 26"	10"
27" - 46"	13"

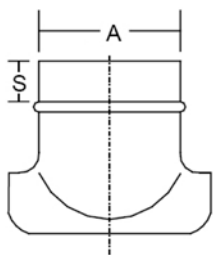
## TAPS



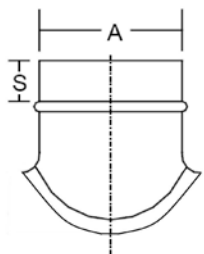
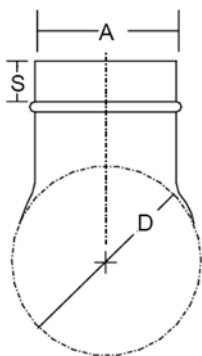
LST



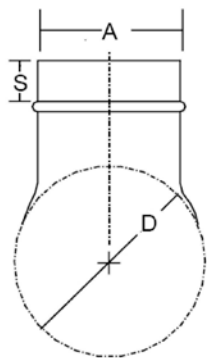
LSTFT



PET



TST



### Description: Contoured Lateral Taps

- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards
- Fabricated 45° standard
- 15°, 30° and 60° available

Manufactured to be installed on round duct  
Required Ordering Information:

- Designation: LST
- Diameter: A on D

Manufactured to be installed on the flat  
Required Ordering Information:

- Designation: LSTFT
- Diameter: A

### Description: Saddle Taps

- Die stamped with radiused entry
- Available 3" diameter through 12" diameter, to fit 22" duct
- Fabricated to SMACNA standards

Required Ordering Information:

- Designation: PET
- Diameter: A on D

FOR FABRICATED:

Required Ordering Information:

- Designation: TST
- Diameter: A on D

Description: Grille Box Taps

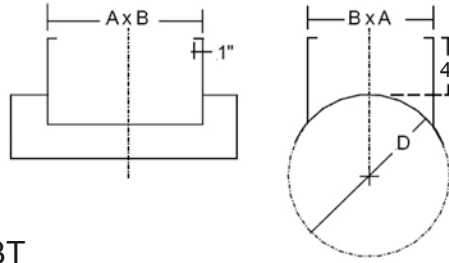
- Grille box taps are oversized 2" with 1" flange turned in all the way around
- Fabricated to SMACNA standards

Manufactured to fit on round duct

Required Ordering Information:

- Designation: GBT
- Diameter: A x B on D

# RECTANGULAR TAPS

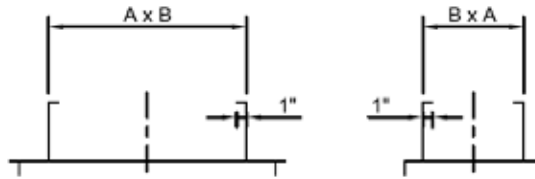


GBT

Manufactured to fit on flat duct

Required Ordering Information:

- Designation: GBTFT
- Diameter: A x B on flat

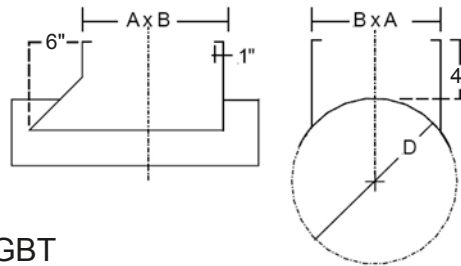


GBTFT

Manufactured to fit on round duct

Required Ordering Information:

- Designation: TEGBT
- Diameter: A x B on D



TEGBT

## END CAPS

EP  
EC



### Description: End Caps

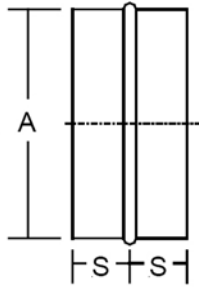
- End plug for duct (designation- EP)
- End cap for fittings (designation- EC)
- End cap for fittings with handle (designation- ECH)
- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards

### Required Ordering Information:

- Designation: EP or EC or ECH
- Diameter: A

## COUPLING

S1



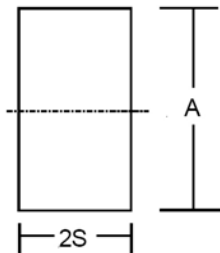
### Description: Coupling

- Coupling for duct (designation- S1)
- Coupling for fittings (designation- S2)
- Available 3" diameter through 74" diameter
- Fabricated to SMACNA standards

### Required Ordering Information:

- Designation: S1 or S2
- Diameter: A

S2





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

