EHG
AIR DISTRIBUTION SOLUTIONS

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Diagram Abbreviations and Nomenclature

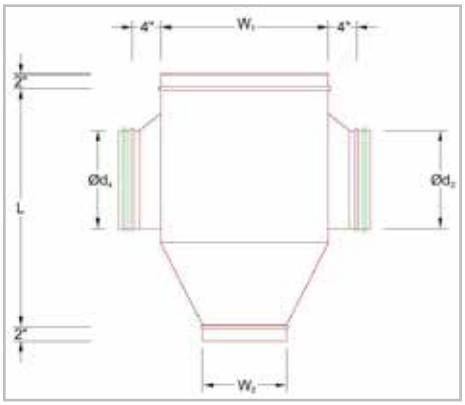
This catalog was designed to include both single wall and double wall nomenclature. It is important to note that the dimensions shown represents single wall or in the case of double wall, free open (inside dimensions only).

It is also important to note, that although some oval fittings are designed to have gasketed round taps, EHG Flat Oval product is inherently nongasketed.

Flat oval major ..... W_x
Flat oval minor ..... D_x

Nominal outside round tap diameter... $Ød_1$, $Ød_2$, $Ød_3$, $Ød_4$

Installed height ..... H
Center line radius ..... R_c
Center height I
Installed length L
Insertion length (slip dimension) ..... e
Material thickness (gauge) ..... t
Insulation thickness..... i



All measurements in inches (in or "). All angles in degrees (º).

Elbows
- B = elbow
- M = mitered
- E = easy bend
- H = hard bend
- A = 1.0 x radius

Reducers
- R = reducer
- C = round
- E = eccentric
- F = female

Transitions
- OR = rectangular to oval
- E = eccentric

Saddle Taps
- ST = saddle tap
- B = boot tap
- V = lateral tap

Offset
- O = offset
- E = easy bend
- H = hard bend

Tees/Crosses
- T = tee
- X = cross
- C = round
- R = reducing body
- ST = saddle tap
- M = tap on major axis
- BS = boot tap
- V = lateral tap
- PS = pressed tap
- BH = bullhead tee

Y-Branches
- Y = wye branches
- R = reducing
- C = round branch

End Caps
- E = end caps
- P = duct
- F = fittings

Couplings
- NP = duct coupling
- MF = fitting coupling

Specification

MATERIAL (*) not available in pressed construction

- Galvanized steel conforming to ASTM standards A653 and A924
- Stainless steel type 304 conforming to ASTM standard A240*
- Stainless steel type 316 conforming to ASTM standard A240*
- Aluminum T3003*
- Insulation specifications:
    1. Standard inner liner is perforated for pipe and solid for fittings.
    2. Perforated liner will consist of 1⁄8" perforations on 1⁄4" staggered centers corresponding to an overall open area of 23%.
    3. Standard 1" thick x 1.0 pound per cubic foot (pcf) density, glass fiber insulation has a maximum conductivity factor (k) of 0.26 BTU-in/hr x ft^2 x °F at 75°F mean ambient temperature (R = 3.8).
    4. Available in 1" and 2" insulation thickness. Please call for thicknesses over 2".
    5. Retaining fabric will be 0.008" thick, 15.6 lb/ft^3 density non-woven polyester fabric with an air permeability rate of 9.2 $ft^3/ft^2/s$.

SURFACE FINISH

- Galvanized steel (galvanized in accordance with SMACNA 2005 Duct Construction Standards).
- Stainless steel type 304 - Mill Finish
- Stainless steel type 316 - #2 Mill Finish
- ProCoat™ (outside only) or ProCoat™ Plus (inside and outside) on duct and/or fittings
    · Standard color = white (additional color options available)
    · Average coating thickness of 4 mils (0.004 inch)
    · Coating to meet or exceed 1,000 hour Salt Spray Test per ASTM B117-97
- Antimicrobial - EPA listed coating containing an antimicrobial compound complies with UL standard - not to exceed flame or smoke developed ratings of 25/50.

THICKNESS

EHG Oval components are constructed from galvanized steel of thickness conforming to latest SMACNA's HVAC Duct Construction Standards for +10" water gauge pressure.

CONNECTIONS

EHG Oval is available with two connection methods: Standard slip-fit or Flanged connections.

- Flanged connections can be factory installed or delivered loose.
- All fittings that are either spot-welded or button punched construction are internally sealed.
- All transitions and divided flow fittings which convert from flat-oval to round 60" diameter or less incorporate EHG's triple-lipped EPDM rubber gaskets as the duct sealing system.

Specification

CONSTRUCTION

Duct is of spiral lock seam construction with a mechanically formed seam locking indentation evenly spaced along the spiral seam. All spiral duct 8" diameter and larger incorporates multiple corrugations between spiral seams.

Double wall duct and fittings will consist of a perforated or solid inner liner; 1" thick x 1.0 lb/ft^3 (unless otherwise specified) layer of glass fiber insulation and a solid outer pressure shell. When a perforated inner liner is specified, the retaining fabric must be wrapped around the inside diameter, between the perforated inner and the glass fiber insulation. This is to prevent glass fiber tearing and maintains the desired acoustical properties.

Double wall has 1" thick insulation standard and 2" thick insulation available. The outer pressure shell dimensions shall be two times the insulation thickness larger than the inner liner. Inner and outer duct will be of spiral lock seam construction.

Fittings shall be manufactured using one or more of the following construction methods:

- Overlapped edges stitch welded along the entire length of the fitting
- Standing seam gore locked and internally sealed
- Button punched and internally sealed

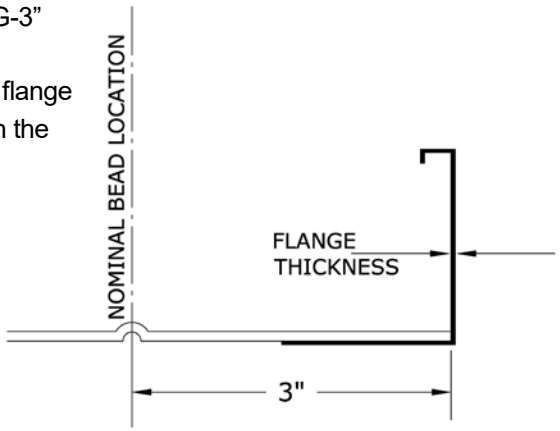
NOTE: For systems under negative pressure, please refer to the Industrial Catalog or a EHG representative.

JOINT SEALING

All joints must be sealed by the installer during the installation process. The type of sealant used as well as the method and level of application should be as directed by the specification and in accordance with the sealant manufacturer's published installation instructions.

Fitting Slip Dimension

Standard EHG products are designed with a male/female slip connections. Nongasketed connections have a 2" slip fit connection. For gasketed, or "G-3" connections, refer to the "e" dimension listed in the TOLERANCE chart on page 10 in the EHG Single Wall Catalog. If flanges are utilized, add 3" per flange and the flange thickness to the published length (L) dimension as shown in the product catalog as depicted in the diagram on the right.



Specification - Sizes

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
6	9	7.6	6	2.6
6	10	8.1	6	2.9
6	12	8.9	8	3.2
6	14	9.6	8	3.5
6	15	9.9	8	3.8
6	17	10.5	8	4.2
6	19	11.1	8	4.5
6	20	11.3	8	4.8
6	22	11.8	10	5.1
6	23	12.1	10	5.5
6	25	12.5	10	7.0
6	26	12.7	10	7.4
6	28	13.1	10	7.8
6	29	13.3	10	8.2
6	31	13.7	10	8.6
6	34	14.3	10	9.4
6	37	14.8	10	10.1
6	41	15.4	10	10.9
6	44	15.9	10	11.7
6	47	16.3	10	12.5
6	50	16.8	10	15.6
6	53	17.2	10	16.5
6	56	17.5	10	17.5
6	59	17.9	10	18.4
6	63	18.4	10	19.3
6	66	18.7	10	20.2
6	69	19.1	10	21.1
6	72	19.4	10	28.7
6	75	19.7	10	29.9
8	10	9.2	6	2.9
8	11	9.7	6	3.2
8	12	10.2	8	3.5
8	14	11.0	8	3.8
8	16	11.8	8	4.2
8	17	12.2	8	4.5
8	19	12.9	8	4.8
8	21	13.5	10	5.1
8	22	13.8	10	5.5
8	24	14.4	10	5.8
8	25	14.7	10	7.4
8	27	15.2	10	7.8
8	28	15.4	10	8.2
8	30	15.9	10	8.6
8	33	16.6	10	9.4
8	36	17.3	10	10.1
8	39	17.9	10	10.9
8	43	18.6	10	11.7
8	46	19.2	10	12.5
8	49	19.7	10	15.6
8	52	20.2	10	16.5

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
8	55	20.6	10	17.5
8	58	21.1	10	18.4
8	61	21.5	10	19.3
8	65	22.1	10	20.2
8	68	22.5	10	21.1
8	71	22.9	10	28.7
8	74	23.3	10	29.9
8	77	23.7	10	31.1
8	80	24.1	10	32.3
10	12	11.2	8	3.5
10	13	11.7	8	3.8
10	14	12.2	8	4.2
10	16	13.2	8	4.5
10	18	14.0	8	4.8
10	19	14.4	8	5.1
10	21	15.2	10	5.5
10	23	15.9	10	5.8
10	24	16.2	10	6.1
10	26	16.8	10	7.8
10	27	17.1	10	8.2
10	29	17.7	10	8.6
10	32	18.5	10	9.4
10	35	19.3	10	10.1
10	38	20.0	10	10.9
10	41	20.7	10	11.7
10	45	21.6	10	12.5
10	48	22.2	10	13.3
10	51	22.8	10	16.5
10	54	23.3	10	17.5
10	57	23.9	10	18.4
10	60	24.4	10	19.3
10	63	24.9	10	20.2
10	67	25.5	10	21.1
10	70	26.0	10	22.1
10	73	26.5	10	29.9
10	76	26.9	10	31.1
10	79	27.3	10	32.3
10	82*	27.7	10	33.5
12	14*	13.2	8	4.2
12	15	13.8	8	4.5
12	16	14.3	8	4.8
12	18	15.3	8	5.1
12	20	16.1	8	5.5
12	21	16.6	8	5.8
12	23	17.4	8	6.1
12	25	18.1	10	7.8
12	26	18.5	10	8.2
12	28	19.2	10	8.6
12	31	20.1	10	9.4
12	34	21.0	10	10.1
12	37	21.9	10	10.9

Specification - Sizes

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
12	40	22.7	10	11.7
12	43	23.4	10	12.5
12	47	24.4	10	13.3
12	50	25.0	10	16.5
12	53	25.7	10	17.5
12	56	26.3	10	18.4
12	59	26.9	10	19.3
12	62	27.5	10	20.2
12	65	28.0	10	21.1
12	69	28.7	10	22.1
12	72	29.3	10	29.9
12	75	29.8	10	31.1
12	78	30.3	10	32.3
12	81	30.7	10	33.5
12	84	31.2	10	34.7
14	17	15.8	8	5.1
14	18	16.3	8	5.5
14	20	17.3	8	5.8
14	22	18.3	10	6.1
14	23	18.7	10	6.4
14	25*	19.5	10	8.2
14	27	20.3	10	8.6
14	30	21.4	10	9.4
14	33	22.5	10	10.1
14	36	23.4	10	10.9
14	39	24.3	10	11.7
14	42	25.2	10	12.5
14	45	26.0	10	13.3
14	49	27.0	10	16.5
14	52	27.7	10	17.5
14	55	28.4	10	18.4
14	58	29.1	10	19.3
14	61	29.8	10	20.2
14	64	30.4	10	21.1
14	67	31.0	10	22.1
14	71	31.8	10	29.9
14	74	32.4	10	31.1
14	77	32.9	10	32.3
14	80	33.4	10	33.5
14	83*	34.0	10	34.7
16	18	17.2	6	5.5
16	19	17.8	6	5.8
16	20	18.3	6	6.1
16	22	19.4	6	6.4
16	24*	20.3	10	6.7
16	25	20.8	10	8.6
16	29	22.5	10	9.4
16	32	23.7	10	10.1
16	35	24.7	10	10.9
16	38	25.8	10	11.7
16	41	26.7	10	12.5

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
16	44	27.6	10	13.3
16	47	28.5	10	14.0
16	51	29.6	10	17.5
16	54	30.4	10	18.4
16	57	31.1	10	19.3
16	60	31.8	10	20.2
16	63	32.5	10	21.1
16	66	33.2	10	22.1
16	69	33.9	10	23.0
16	73	34.7	10	31.1
16	76	35.3	10	32.3
16	79	35.9	10	33.5
16	82*	36.5	10	34.7
18	20*	19.2	6	6.1
18	21*	19.8	6	6.4
18	22*	20.4	6	6.7
18	24	21.4	10	7.1
18	27	22.9	10	9.4
18	31	24.6	10	10.1
18	34	25.9	10	10.9
18	37	27.0	10	11.7
18	40	28.1	10	12.5
18	43	29.1	10	13.3
18	46	30.0	10	14.0
18	49	30.9	10	17.5
18	53	32.1	10	18.4
18	56	32.9	10	19.3
18	59	33.7	10	20.2
18	62	34.5	10	21.1
18	65	35.2	10	22.1
18	68	35.9	10	23.0
18	71	36.6	10	31.1
18	75	37.5	10	32.3
18	78	38.2	10	33.5
18	81	38.8	10	34.7
18	84	39.4	10	35.9
20	26	23.5	10	9.4
20	29	25.0	10	10.1
20	33	26.8	10	10.9
20	36	28.0	10	11.7
20	39	29.2	10	12.5
20	42	30.3	10	13.3
20	45	31.4	10	14.0
20	48	32.4	10	14.8
20	51	33.3	10	18.4
20	55	34.5	10	19.3
20	58	35.4	10	20.2
20	61	36.2	10	21.1
20	64	37.1	10	22.1
20	67	37.8	10	23.0
20	70	38.6	10	23.9

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
20	73	39.3	10	32.3
20	77	40.3	10	33.5
20	80	41.0	10	34.7
20	83*	41.6	10	35.9
22	28	25.5	10	10.1
22	31	27.0	10	10.9
22	35	28.9	10	11.7
22	38	30.2	10	12.5
22	41	31.4	10	13.3
22	44	32.5	10	14.0
22	47	33.6	10	14.8
22	50	34.7	10	18.4
22	53	35.7	10	19.3
22	57	36.9	10	20.2
22	60	37.8	10	21.1
22	63	38.7	10	22.1
22	66	39.6	10	23.0
22	69	40.4	10	23.9
22	72	41.2	10	32.3
22	75	42.0	10	33.5
22	79	42.9	10	34.7
22	82	43.7	10	35.9
24	30	27.5	10	10.9
24	33	29.1	10	11.7
24	37	31.0	10	12.5
24	40	32.3	10	13.3
24	43	33.5	10	14.0
24	46	34.7	10	14.8
24	49	35.9	10	18.4
24	52	36.9	10	19.3
24	55	38.0	10	20.2
24	59	39.3	10	21.1
24	62	40.2	10	22.1
24	65	41.2	10	23.0
24	68	42.0	10	23.9
24	71	42.9	10	32.3
24	74	43.7	10	33.5
24	77	44.5	10	34.7
24	81*	45.6	10	35.9
24	84*	46.3	10	37.1
26	29	27.9	8	10.9
26	32	29.5	8	11.7
26	35	31.1	8	12.5
26	39	33.0	8	13.3
26	42	34.4	8	14.0
26	45	35.7	8	14.8
26	48	36.9	8	15.6
26	51	38.1	8	19.3
26	54	39.2	8	20.2
26	57	40.3	8	21.1
26	61	41.6	8	22.1

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
26	64	42.6	8	23.0
26	67	43.5	8	23.9
26	70	44.5	8	24.8
26	73	45.3	8	33.5
26	76	46.2	8	34.7
26	79	47.0	8	35.9
26	83*	48.1	8	37.1
28	31	29.9	8	11.7
28	34	31.6	8	12.5
28	37	33.2	8	13.3
28	41	35.1	8	14.0
28	44	36.5	8	14.8
28	47	37.8	8	15.6
28	50	39.1	8	19.3
28	53	40.3	8	20.2
28	56	41.4	8	21.1
28	59	42.5	8	22.1
28	63	43.9	8	23.0
28	66	44.9	8	23.9
28	69	45.9	8	24.8
28	72	46.8	8	33.5
28	75	47.8	8	34.7
28	78	48.7	8	35.9
28	81*	49.5	8	37.1
30	33*	31.9	8	12.5
30	36	33.6	8	13.3
30	39	35.2	8	14.0
30	43	37.2	8	14.8
30	46	38.6	8	15.6
30	49	39.9	8	19.3
30	52	41.2	8	20.2
30	55	42.4	8	21.1
30	58	43.6	8	22.1
30	61	44.7	8	23.0
30	65	46.2	8	23.9
30	68	47.2	8	24.8
30	71	48.2	8	33.5
30	74	49.2	8	34.7
30	77	50.1	8	35.9
30	80	51.1	8	37.1
30	83	52.0	8	38.3
32	38	35.6	6	14.0
32	41	37.2	6	14.8
32	45	39.2	6	15.6
32	48	40.7	6	16.4
32	51	42.0	6	20.2
32	54	43.3	6	21.1
32	57	44.6	6	22.1
32	60	45.8	6	23.0
32	63	46.9	6	23.9
32	67	48.4	6	24.8

Specification - Sizes

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
32	70	49.5	6	25.7
32	73	50.5	6	34.7
32	76	51.5	6	35.9
32	79	52.5	6	37.1
32	82*	53.4	6	38.3
34	40	37.6	6	14.8
34	43	39.3	6	15.6
34	47	41.3	6	16.4
34	50	42.7	6	20.2
34	53	44.1	6	21.1
34	56	45.5	6	22.1
34	59	46.7	6	23.0
34	65	49.1	6	24.8
34	69	50.6	6	25.7
34	72	51.7	6	34.7
34	75	52.8	6	35.9

Minor Nom, in	Major Nom, in	Equiv Round, in	Max Duct Length, ft	Weight Per Linear Ft, lbs
34	81	54.8	6	38.3
34	84*	55.8	6	39.5
36	42*	39.6	6	15.6
36	45*	41.3	6	16.4
36	49*	43.3	6	20.2
36	52*	44.8	6	21.1
36	55*	46.2	6	22.1
36	58*	47.6	6	23.0
36	61*	48.9	6	23.9
36	64*	50.1	6	24.8
36	67*	51.3	6	25.7
36	71*	52.9	6	34.7
36	74*	54.0	6	35.9
36	77*	55.1	6	37.1
36	80*	56.1	6	38.3
36	83*	57.1	6	39.5

PLEASE NOTE

- The sizes outlined here are available in single and 1" double wall spiral unless noted with an asterisk (*). An asterisk indicates the size is available in single wall only. 2" and 3" double wall is available but not represented in the dimensional chart.
- Pipe can be constructed in any minor/major combination using long seam construction.
- Fittings can be constructed in any minor/major combination under 83” major.
- Pipe and fitting gauge to meet or exceed SMACNA guidelines.

Major Dim (in)	Longitudinal Seam	Spiral Seam	Fitting
To 24	20	24	20
30	20	22	20
36	20	22	20
42	18	22	18
48	18	22	18
54	18	20	18
60	18	20	18
66	16	20	16
71 and up	16	18	16
Credit: SMACNA HVAC Duct Construction Standards Metal and Flexible (2005), Table 3-15 Flat Oval Duct Gauge, Positive Pressure to 10 iwg.			

Flat Oval to Round $D_e = 1.55 \times \frac{(A)^{0.625}}{(P)^{0.250}}$

Rectangular to Round $D_e = 1.3 \times \frac{(a \times b)^{0.625}}{(a + b)^{0.250}}$

D_e = Equivalent round diameter (equal pressure loss), in
A = Cross sectional area, in^2
P = Flat oval perimeter, in
a = Rectangular dimension, in
b = Rectangular dimension, in

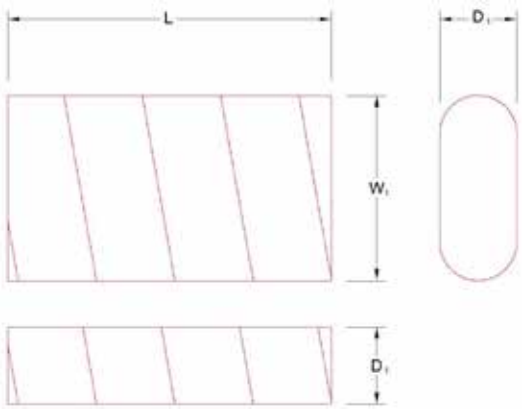
Standard 1" thick double wall spiral duct with perforated inner

Round Equivalent Diameter (in)	Insulation Thickness (in)	Velocity (fpm)	Octave Band / Frequency (Hz)							
			1	2	3	4	5	6	7	8
			63	125	250	500	1000	2000	4000	8000
6	1	0	0.3	0.5	1.2	2.1	2.5	2.3	2.3	2.1
6	1	1000	0.2	0.5	1.2	2.1	2.3	2.3	2.3	2.2
6	1	2000	0.2	0.5	1.2	2.1	2.5	2.4	2.3	2.3
6	1	3000	0.1	0.5	1.2	2.1	2.2	2	2.3	2.3
12	1	0	0.1	0.3	0.7	1.7	2.5	2.5	1.9	1.6
12	1	1000	0.1	0.3	0.7	1.6	2.5	2.5	2	1.7
12	1	2000	0.1	0.3	0.7	1.6	2.4	2.5	2.1	1.8
12	1	3000	0.1	0.3	0.7	1.5	2	2.1	2.1	1.9
18	1	0	0.3	0.3	0.6	1.5	2.5	2.3	1.6	1.4
18	1	1000	0.3	0.3	0.6	1.4	2.6	2.4	1.6	1.4
18	1	2000	0.2	0.2	0.6	1.4	2.5	2.3	1.6	1.4
18	1	3000	0.2	0.1	0.6	1.3	2.3	2.3	1.5	1.4
24	1	0	0.2	0.2	0.5	1.2	2.7	1.7	1.3	1.4
24	1	1000	0.2	0.2	0.5	1.2	2.7	1.6	1.3	1.2
24	1	2000	0.2	0.2	0.5	1.2	2.7	1.6	1.2	1.2
24	1	3000	0.3	0.2	0.4	1.1	2.6	1.7	1.2	1.3
30	1	0	0.1	0.2	0.4	1.3	2.1	1.3	1.2	1.2
30	1	1000	0.1	0.2	0.4	1.3	2.1	1.2	1.1	1.1
30	1	2000	0.1	0.2	0.4	1.3	2.1	1.2	1.1	1.1
30	1	3000	0.1	0.2	0.4	1.3	2	1.2	1	1.1
36	1	0	0.1	0.2	0.3	1.1	1.6	1.2	1	0.9
36	1	1000	0.1	0.2	0.3	1.1	1.6	1.1	0.9	0.9
36	1	2000	0.1	0.2	0.3	1.1	1.6	1	0.9	0.9
36	1	3000	0.1	0.2	0.3	1	1.5	1	0.9	0.9
42	1	0	0.1	0.1	0.3	1.1	1.2	1	0.8	0.8
42	1	1000	0.1	0.2	0.3	1.1	1.1	1	0.7	0.6
42	1	2000	0.1	0.2	0.3	1.1	1	0.9	0.7	0.6
42	1	3000	0.1	0.2	0.3	1	1	0.9	0.7	0.6

1. The chart represents tests performed by an independent testing laboratory in accordance with ASTM standard E477-96, entitled “Standard Method of Testing Duct Liner Materials and Prefabricated Silencers for Acoustical and Airflow Performance”. Data for test specimens with inside diameters of 6", 12", 18", 24", 30", 36" and 42" were recorded for 20' lengths of duct and then divided to obtain the dB/foot ratings.
2. Insertion loss gains of approximately 0.25 to 0.50 dB/ft in the 4th, 5th, and 6th octave bands were recorded for 24" diameter duct with 2" thick insulation. Gains were negligible in the 1st, 2nd, 3rd, 7th and 8th octave bands.
3. Data recorded for a 30' section of 24" diameter duct indicates an average gain of 1 dB in the 2nd octave band, 3 dB in the 3rd octave band, 9 dB in the 4th octave band, 1 dB in the 5th octave band, 4 dB in the 6th octave band, 4 dB in the 7th octave band and 3 dB in the 8th octave band. These gains were the average for insertion loss data collected at 0, 1000, 2000 and 3000 fpm with 0.000, 0.006, 0.031, and 0.070 inch water gauge respectively.
4. Data was not collected for duct lengths greater than 30'. However, the results for the 30' test indicate the insertion loss gains diminish with longer duct lengths. For this reason, the data in the above table should be considered valid only for sections of duct 20' or less in length. In addition, data was not collected for larger diameter duct. As the test data indicates, insertion loss decreases with increasing duct diameters.
5. The self-generated noise for double wall duct is too low to be measured by ASTM E477-96. The measurements obtained for these ducts are equal to the corresponding single wall duct reference condition or are within +/- 10 dB per ASTM E477-96 section 9.1.2.
6. Reduced breakout noise in double wall pipe with outer diameter 14" and larger is attributed to double corrugation which increases rigidity and minimizes the area of the outer shell that allows sound waves to break out of the system.

Flat Oval Spiral Duct

FOSR



Description

Flat oval spiral duct. Note: All flat oval spiral duct is constructed with multiple corrugations between the seams.

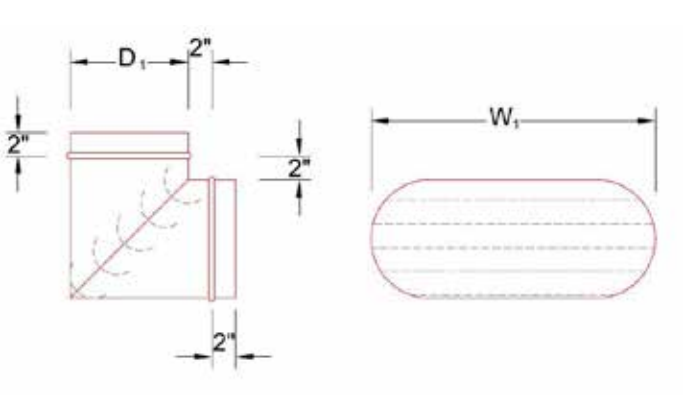
Dimensions

Order Example

Single Wall	FOSR - W_1/D_1 - L
Double Wall	FOSRI - W_1/D_1 - L - i

Elbows

FOBME/FOBMH

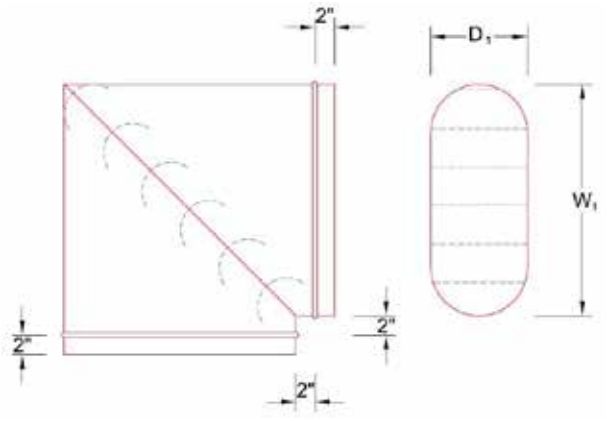


Description

Mitered 90° easy bend elbow with turning vanes. Available without turning vanes upon request.

Order Example

Single Wall	FOBME - W_1/D_1
Double Wall	FOBMEI - W_1/D_1 - i



Description

Mitered 90° hard bend elbow with turning vanes. Available without turning vanes upon request.

Order Example

Single Wall	FOBMH - W_1/D_1
Double Wall	FOBMHI - W_1/D_1 - i

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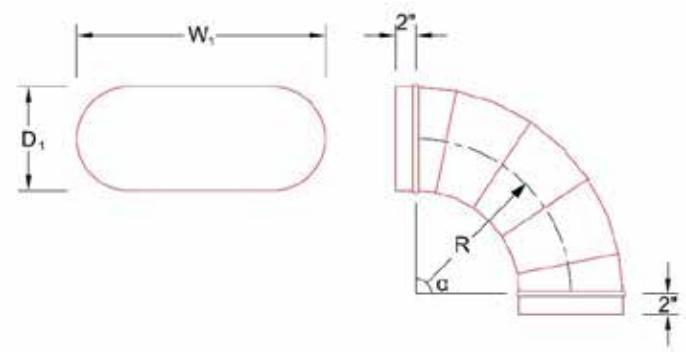
Elbows

FOBE/FOBEA



Description

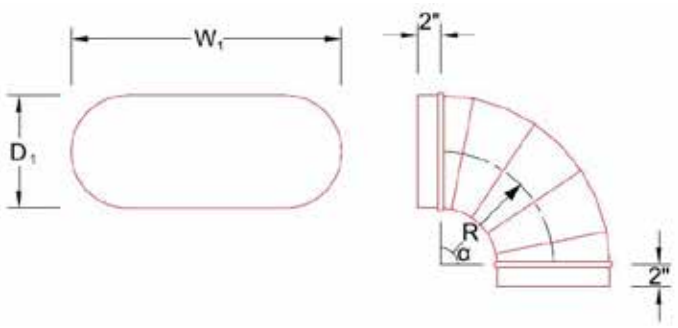
Easy bend elbow with R = 1.5 x D_1

Dimensions

α = elbow angle

Order Example

Single Wall	FOBEα - W_1/D_1
Double Wall	FOBEIα - W_1/D_1 - i



Description

Easy bend elbow with R = 1.0 x D_1

Dimensions

α = elbow angle

Order Example

Single Wall	FOBEAα - W_1/D_1
Double Wall	FOBEAIα - W_1/D_1 - i

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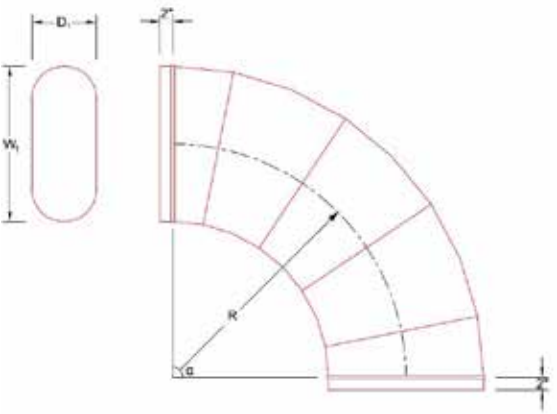
Elbows

FOBH/FOBHA



Description

Hard bend elbow with R = 1.5 x W_1.
For majors ≥ 46", FOBH/I 90° will be constructed of two FOBH/I 45°s.

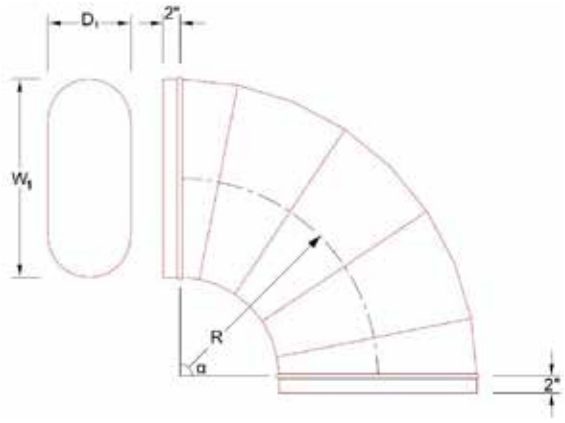
Dimensions

α = elbow angle

NOTE:
FOBH majors ≥ 48”, construction is limited to 60º.
FOBHI majors ≥ 40”, construction is limited to 60º.

Order Example

Single Wall	FOBHα - W_1/D_1
Double Wall	FOBHIα - W_1/D_1 - i



Description

Hard bend elbow with R = 1.0 x W_1.
For majors ≥ 46", FOBHA/I 90° will be constructed of two FOBHA/I 45°s.

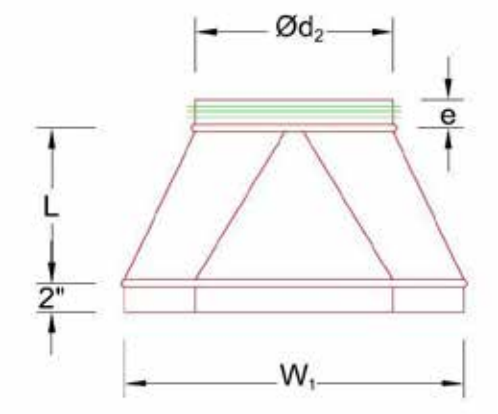
Dimensions

α = elbow angle

Order Example

Single Wall	FOBHAα - W_1/D_1
Double Wall	FOBHAIα - W_1/D_1 - i

Reducers



Description

Oval to round concentric reducer.

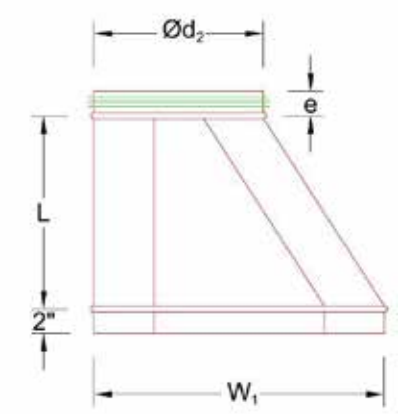
Dimensions

$L = [(W_1 - Ød_2) \times 0.5] + 6$

Order Example

Single Wall	FORC - W_1/D_1 - $Ød_2$
Double Wall	FORCI - W_1/D_1 - $Ød_2$ - i

FORC/FORCE



Description

Oval to round eccentric reducer

Dimensions

$L = (W_1 - Ød_2) + 6$

Configurations (when looking down from W_1 to $Ød_2$):

FOT = flat on top
FOB = flat on bottom
FOL = flat on left
FOR = flat on right
FOTR = flat on top right
FOTL = flat on top left
FOBR = flat on bottom right
FOBL = flat on bottom left

Order Example

Single Wall	FORCE - W_1/D_1 - $Ød_2$- Config
Double Wall	FORCEI - W_1/D_1 - $Ød_2$ - Config - i

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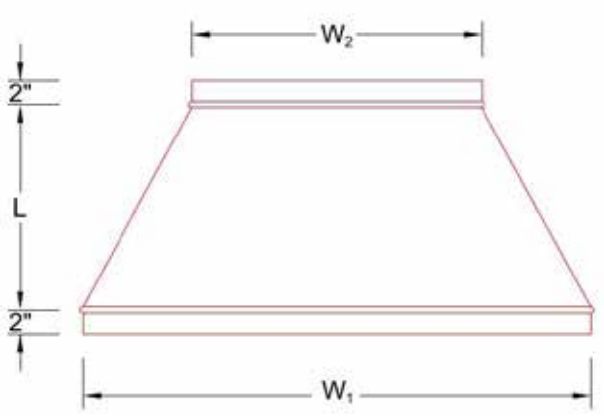
Reducers

FOR/FORE



Description

Oval to oval concentric reducer.

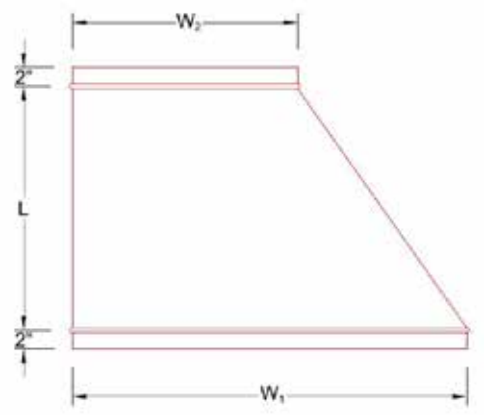
Dimensions

$L = [(W_1 - W_2) \times 0.5] + 8$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FOR - W_1/D_1 - W_2/D_2
Double Wall	FORI - W_1/D_1 - W_2/D_2 - i



Description

Oval to oval eccentric reducer.

Dimensions

$L = (W_1 - W_2) + 8$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Configurations (when looking down from W_1 to W_2):

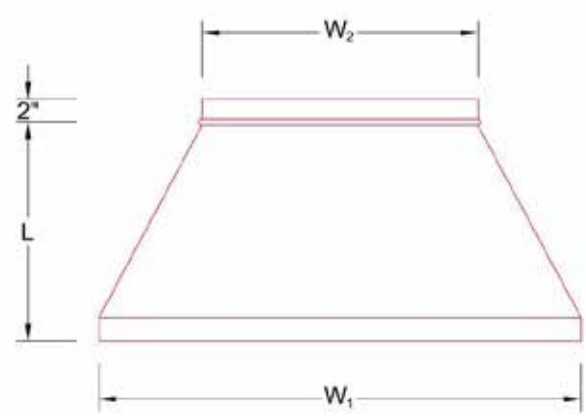
FOT = flat on top
FOB = flat on bottom
FOL = flat on left
FOR = flat on right
FOTR = flat on top right
FOTL = flat on top left
FOBR = flat on bottom right
FOBL = flat on bottom left

Order Example

Single Wall	FORE - W_1/D_1 - W_2/D_2 - Config
Double Wall	FOREI - W_1/D_1 - W_2/D_2 - Config - i

Reducers

FORF/FOREF



Description

Oval to oval concentric reducer.
Large end: duct size.

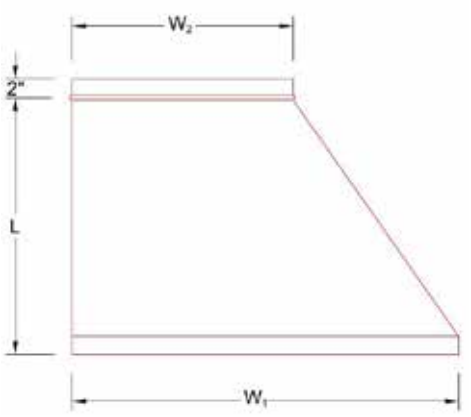
Dimensions

$L = [(W_1 - W_2) \times 0.5] + 10$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORF - W_1/D_1 - W_2/D_2
Double Wall	FORFI - W_1/D_1 - W_2/D_2 - i



Description

Oval to oval eccentric reducer.
Large end: duct size.

Dimensions

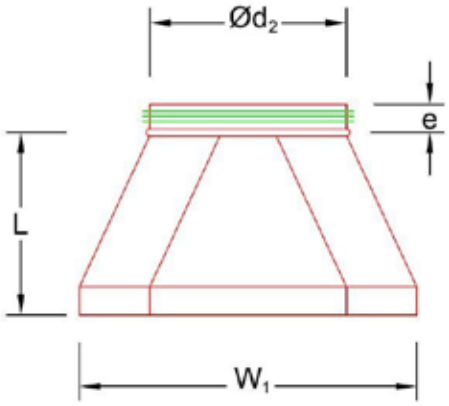
Configurations (when looking down from W_1 to Ød_2):

FOT = flat on top
FOB = flat on bottom
FOL = flat on left
FOR = flat on right
FOTR = flat on top right
FOTL = flat on top left
FOBR = flat on bottom right
FOBL = flat on bottom left

Order Example

Single Wall	FOREF - W_1/D_1 - W_2/D_2 - Config
Double Wall	FOREFI - W_1/D_1 - W_2/D_2 - Config - i

Reducers



Description

Oval to round concentric reducer.
Large end: duct size.

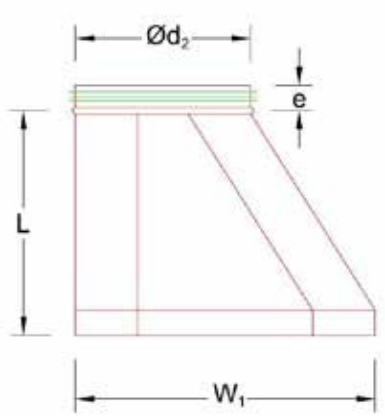
Dimensions

$L = [(W_1 - Ød_2) \times 0.5] + 8$

Order Example

Single Wall	FORCF - W_1/D_1 - $Ød_2$
Double Wall	FORCFI - W_1/D_1 - $Ød_2$ - i

FORCF/FORCEF



Description

Oval to round eccentric reducer.
Large end: duct size.

Dimensions

$L = (W_1 - Ød_2) + 8$

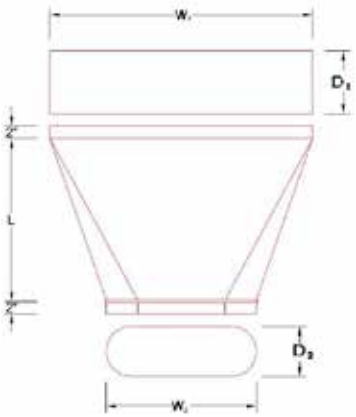
Configurations (when looking down from W_1 to $Ød_2$):

FOT = flat on top
FOB = flat on bottom
FOL = flat on left
FOR = flat on right
FOTR = flat on top right
FOTL = flat on top left
FOBR = flat on bottom right
FOBL = flat on bottom left

Order Example

Single Wall	FORCEF - W_1/D_1 - $Ød_2$ - Config
Double Wall	FORCEFI - W_1/D_1 - $Ød_2$ - Config - i

Transistions



Description

Rectangular to oval concentric transition.
Extended raw ends.

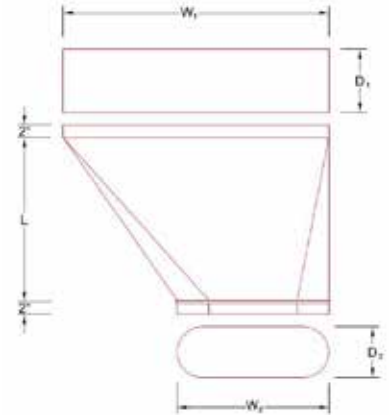
Dimensions

L can be any length as long as taper angle is less than or equal to 45°.

Order Example

Single Wall	FOROR - W_1/D_1 - W_2/D_2 - L
Double Wall	FORORI - W_1/D_1 - W_2/D_2 - L - i

FOROR/FORORE



Description

Rectangular to oval eccentric transition.

Dimensions

L can be any length as long as taper angle is less than or equal to 45°.

Configurations (when looking down from W_1 to Ød_2):

FOT = flat on top
FOB = flat on bottom
FOL = flat on left
FOR = flat on right
FOTR = flat on top right
FOTL = flat on top left
FOBR = flat on bottom right
FOBL = flat on bottom left

Order Example

Single Wall	FORORE - W_1/D_1 - W_2/D_2 - L - Config
Double Wall	FORORE I - W_1/D_1 - W_2/D_2 - L - Config - i

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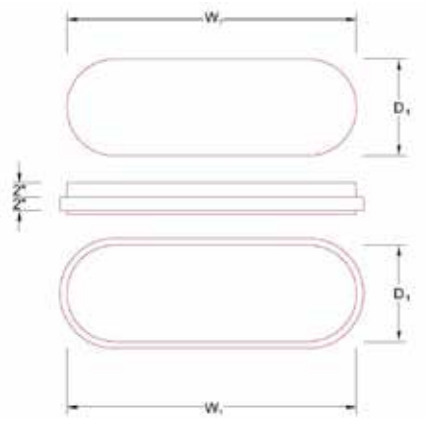
Transitions



Description

Double wall to single wall transition. W_1 x D_1 is the inner diameter of the double wall.

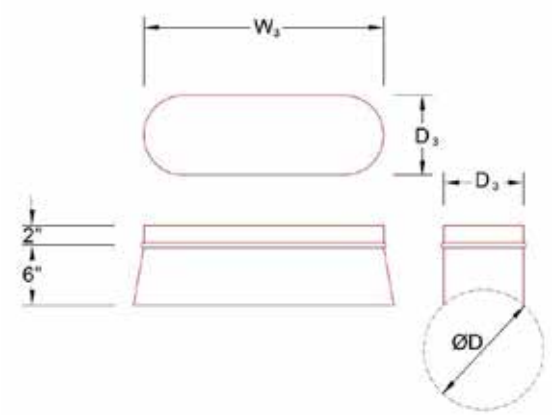
Configurations:

FORCKMM: both male ends
FORCKMF: small end male, large end female
FORCKFM: small end female, large end male
FORCKFF: both ends female

Order Example

Double Wall FORCK - W_1/D_1 - Config - i

FOST/FOSBT

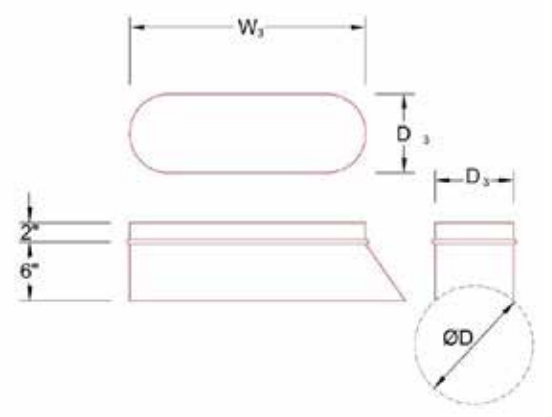


Description

Oval expanded base saddle tap for field installation on the minor axis of flat oval or on round duct.

Order Example

Single Wall FOST - W_3/D_3 - ØD



Description

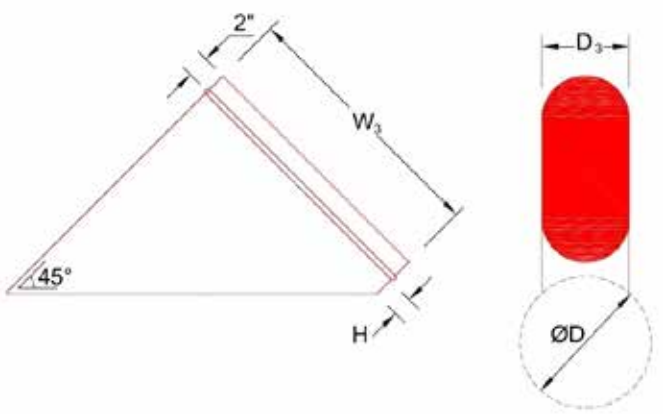
Oval boot saddle tap for field installation on the minor axis of flat oval or on round duct.

Order Example

Single Wall FOSBT - W_3/D_3 - ØD

Saddle Taps

FOSVT 45



Description

Oval 45° lateral saddle tap for field installation on the minor axis of flat oval or on round duct.

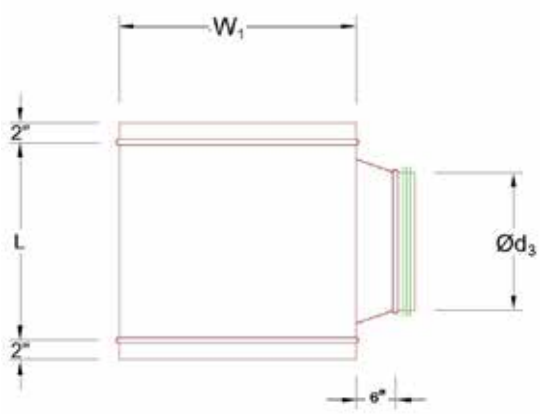
Dimensions

H = 2.5"(constant)(throat length)

Order Example

Single Wall FOSVT 45 - W_3/D_3 - ØD

Tees/Crossing Tees



Description

Oval tee with round conical concentric taps on minor axis. Taps are centered on fitting body.

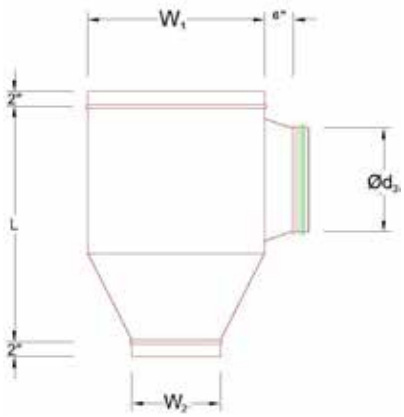
Dimensions

$L = Ød_3 + 6$

Order Example

Single Wall	FOTCT - W_1/D_1 - $Ød_3$
Double Wall	FOTCTI - W_1/D_1 - $Ød_3$ - i

FOTCT/FORTCT



Description

Oval reducing tee with round conical concentric taps on minor axis.

Dimensions

$L = (Ød_3 + 6) + [(W_1 - W_2) \times 0.5] + 6$

Order Example

Single Wall	FORTCT - W_1/D_1 - W_2/D_2- $Ød_3$
Double Wall	FORTCTI - W_1/D_1 - W_2/D_2- $Ød_3$ - i

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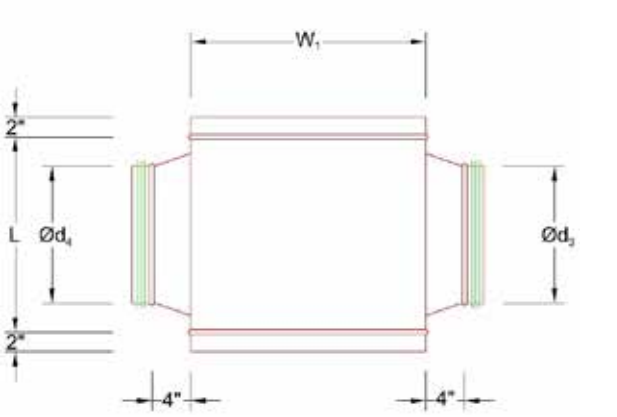
Tees/Crossing Tees



Description

Oval crossing tee with round conical concentric taps on minor axis. Tap is centered on fitting body.

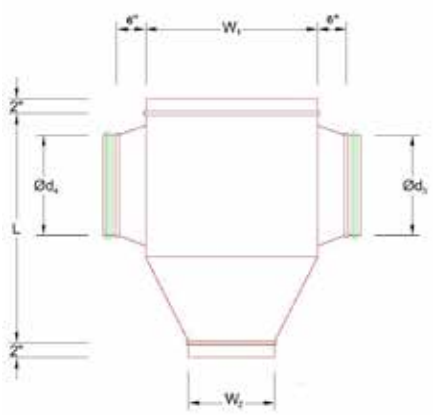
Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = Ød_3 + 6$

Order Example

Single Wall	FOXCT - W_1/D_1 - $Ød_3$ - $Ød_4$
Double Wall	FOXCTI - W_1/D_1 - $Ød_3$ - $Ød_4$ - i

FOXCT/FORXCT



Description

Oval reducing crossing tee with round conical concentric taps on minor axis.

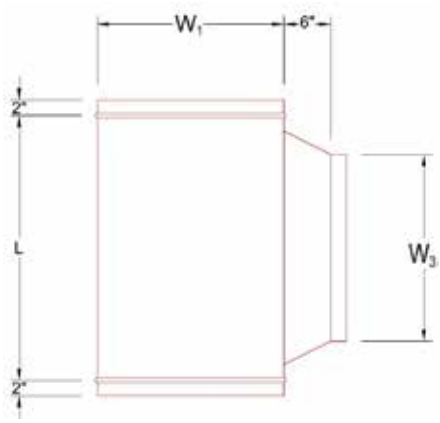
Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = (Ød_3 + 6) + [(W_1 - W_2) \times 0.5] + 6$

Order Example

Single Wall	FORXCT - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$
Double Wall	FORXCTI - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$ - i

Tees/Crossing Tees



Description

Oval tee with oval expanded base concentric tap on minor axis. Tap is centered on fitting body.

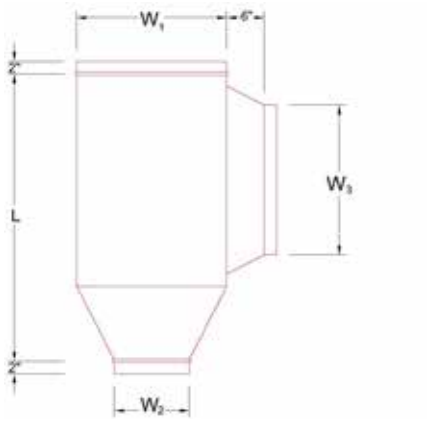
Dimensions

$L = W_3 + 10$

Order Example

Single Wall	FOTST - W_1/D_1 - W_3/D_3
Double Wall	FOTSTI - W_1/D_1 - W_3/D_3 - i

FOTST/FORTST



Description

Oval reducing tee with oval expanded base concentric tap on minor axis.

Dimensions

$L = (W_3 + 10) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

i

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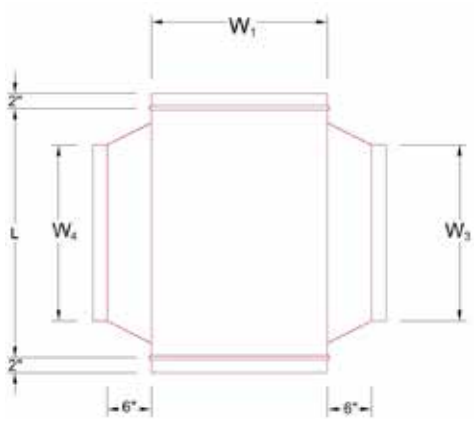
Tees/Crossing Tees



Description

Oval crossing tee with oval expanded base concentric taps on minor axis. Taps are centered on fitting body.

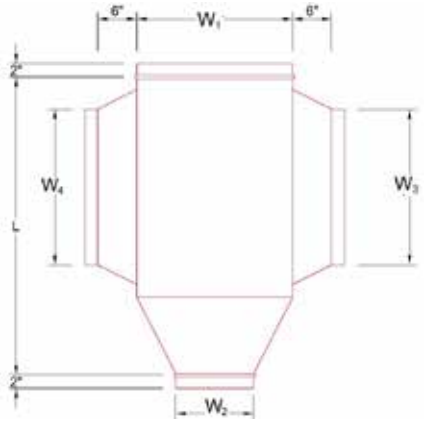
Dimensions

W_3 is always greater than or equal to W_4.
$L = W_3 + 10$

Order Example

Single Wall	FOXST - W_1/D_1 - W_3/D_3 - W_4/D_4
Double Wall	FOXSTI - W_1/D_1 - W_3/D_3 - W_4/D_4 - i

FOXST/FORXST



Description

Oval reducing tee with oval expanded base concentric taps on minor axis.

Dimensions

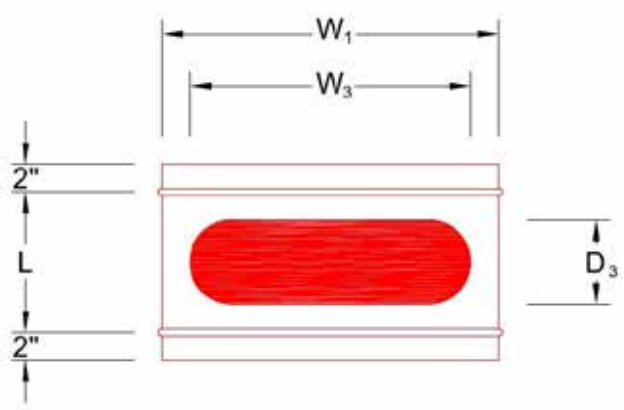
W_3 is always greater than or equal to W_4.
$L = (W_3 + 10) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXST - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4
Double Wall	FORXSTI - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4 - i

Tees/Crossing Tees



Description

Oval tee with oval straight tap on major axis. Tap is centered on fitting body.

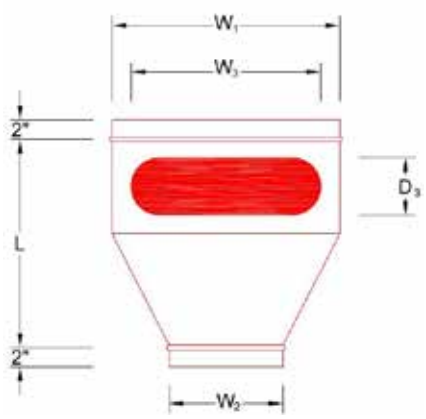
Dimensions

"

Order Example

Single Wall	FOTM - W_1/D_1 - W_3/D_3
Double Wall	FOTMI - W_1/D_1 - W_3/D_3 - i

FOTM/FORTM



Description

Oval reducing tee with oval straight tap on major axis.

Dimensions

$L = (D_3 + 4) + [(W_1 - W_2) \times 0.5] + 6$
Height from fitting body to tap bead = 2".

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTM - W_1/D_1 - W_2/D_2 - W_3/D_3
Double Wall	FORTMI - W_1/D_1 - W_2/D_2 - W_3/D_3 - i

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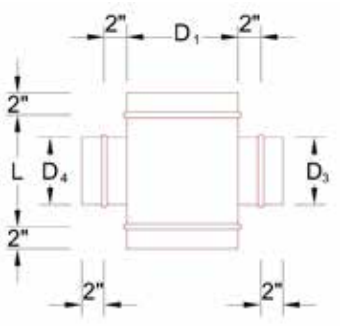
Tees/Crossing Tees



Description

Oval crossing tee with oval straight taps on major axis. Taps are centered on fitting body.

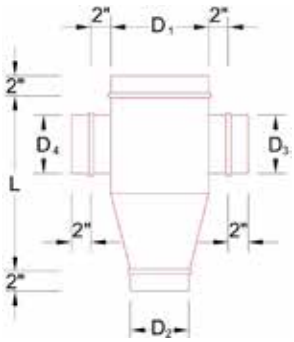
Dimensions

D_3 is always greater than or equal to D_4.
$L = D_3 + 4$

Order Example

Single Wall	FOXM - W_1/D_1 - W_3/D_3 - W_4/D_4
Double Wall	FOXMI - W_1/D_1 - W_3/D_3 - W_4/D_4 - L - i

FOXM/FORXM



Description

Dimensions

D_3 is always greater than or equal to D_4.
$L = (D_3 + 4) + [(D_1 - D_2) \times 0.5] + 6$

Substitute:
$W_{1,2}$ for $D_{1,2}$ if $(W_1 - W_2) > (D_1 - D_2)$

Order Example

Single Wall	FORXM - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4
Double Wall	FORXMI - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4 - i

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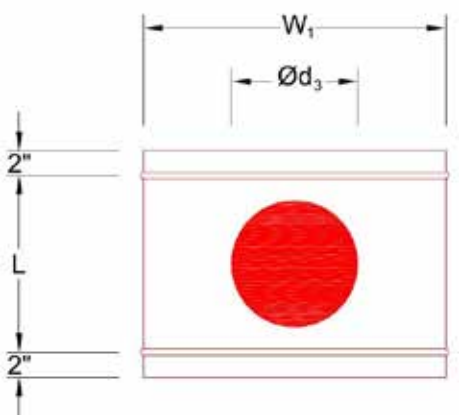
Tees/Crossing Tees



Description

Oval tee with round straight tap on major axis. Tap is centered on fitting body.

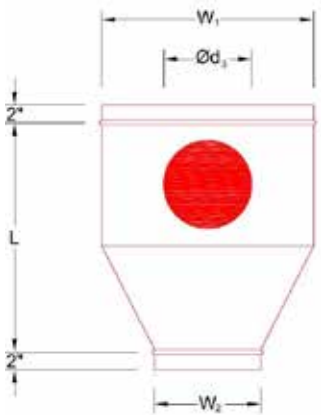
Dimensions

$L = Ød_3 + 4$
Height from fitting body to tap bead = 2".

Order Example

Single Wall	FOTMC - W_1/D_1 - $Ød_3$
Double Wall	FOTMCI - W_1/D_1 - $Ød_3$ - i

FOTMC/FORTMC



Description

Oval reducing tee with round straight tap on major axis. Tap is centered on fitting body.

Dimensions

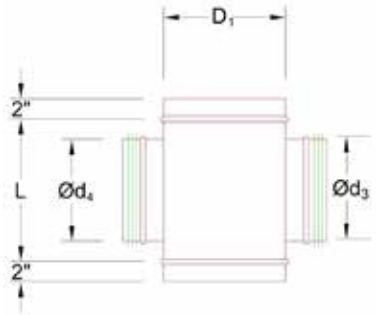
$L = (Ød_3 + 4) + [(W1 - W_2) \times 0.5] + 6$
Height from fitting body to tap bead = 2".

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTMC - W_1/D_1 - W_2/D_2 - $Ød_3$
Double Wall	FORTMCI - W_1/D_1 - W_2/D_2 - $Ød_3$ - i

Tees/Crossing Tees



Description

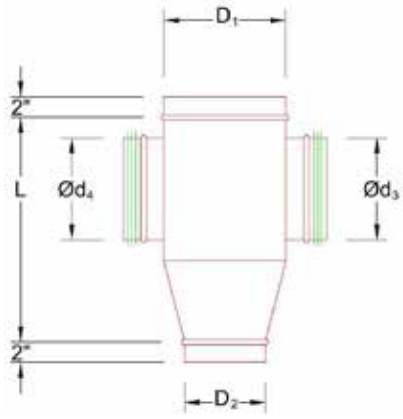
Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = Ød_3 + 4$

Order Example

Single Wall	FOXMC - W_1/D_1 - $Ød_3$ - $Ød_4$
Double Wall	FOXMCI - W_1/D_1 - $Ød_3$ - $Ød_4$ - i

FOXMC/FORXMC



Description

Oval reducing crossing tee with oval straight taps on major axis.

Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = (Ød_3 + 4) + [(D_1 - D_2) \times 0.5] + 6$

Substitute:
$W_{1,2}$ for $D_{1,2}$ if $(W_1 - W_2) > (D_1 - D_2)$

Order Example

Single Wall	FORXMC - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$
Double Wall	FORXMCI - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$ - i

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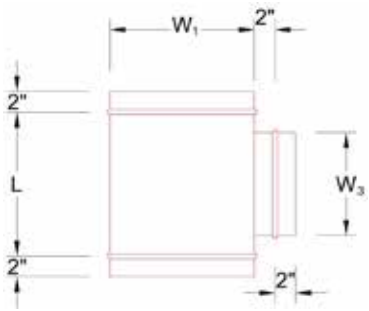
Tees/Crossing Tees



Description

Oval tee with oval straight tap on minor axis. Tap is centered on fitting body.

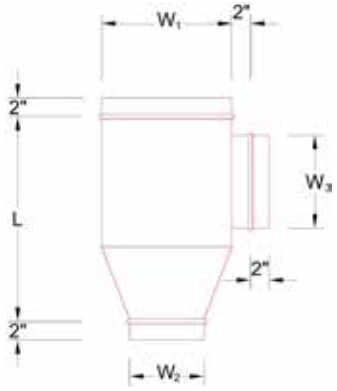
Dimensions

$L = W_3 + 4$

Order Example

Single Wall	FOT - W_1/D_1 - W_3/D_3
Double Wall	FOTI - W_1/D_1 - W_3/D_3 - i

FOT/FORT



Description

Oval reducing tee with oval straight tap on minor axis.

Dimensions

$L = (W_3 + 4) + [(W_1 - W_2) \times 0.5] + 6$

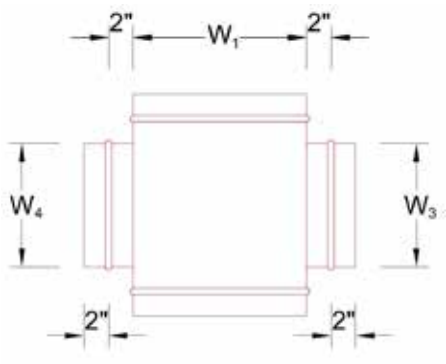
Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORT - W_1/D_1 - W_2/D_2 - W_3/D_3
Double Wall	FORTI - W_1/D_1 - W_2/D_2 - W_3/D_3 - i

Tees/Crossing Tees

FOX/FORX



Description

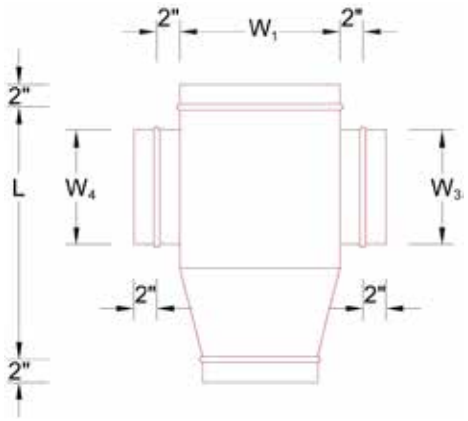
Oval tee with oval straight taps on minor axis. Taps are centered on fitting body.

Dimensions

W_3 is always greater than or equal to W_4.
$L = W_3 + 4$

Order Example

Single Wall	FOX - W_1/D_1 - W_3/D_3 - W_4/D_4
Double Wall	FOXI - W_1/D_1 - W_3/D_3 - W_4/D_4 - i



Description

Oval reducing crossing tee with oval straight taps on minor axis.

Dimensions

W_3 is always greater than or equal to W_4.
$L = (W_3 + 4) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORX - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4
Double Wall	FORXI - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4 - i

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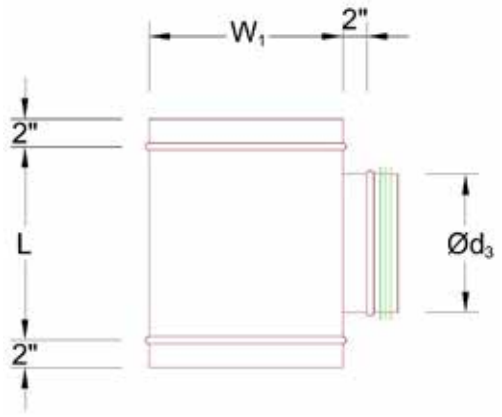
Tees/Crossing Tees

FOTC/FORTC



Description

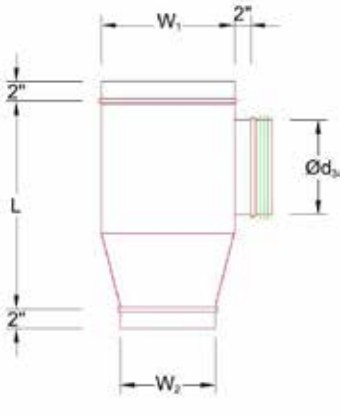
Oval tee with round straight tap on minor axis. Tap is centered on fitting body.

Dimensions

$L = Ød_3 + 4$

Order Example

Single Wall	FOTC - W_1/D_1 - $Ød_3$
Double Wall	FOTCI - W_1/D_1 - $Ød_3$ - i



Description

Oval reducing tee with round straight tap on minor axis.

Dimensions

$L = (Ød_3 + 4) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTC - W_1/D_1 - W_2/D_2 - $Ød_3$
Double Wall	FORTCI - W_1/D_1 - W_2/D_2 - $Ød_3$ - i

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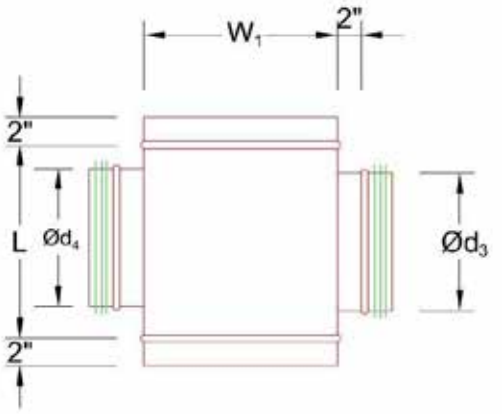
Tees/Crossing Tees

FOXC/FORXC



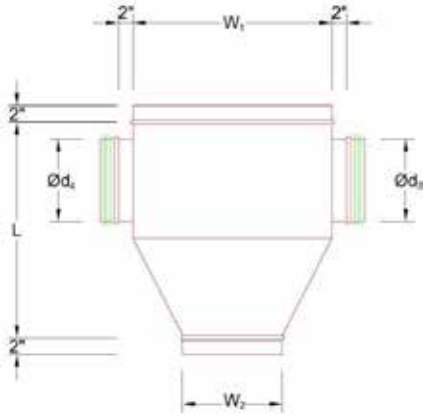
Description

Oval crossing tee with round straight taps on minor axis. Taps are centered on fitting body.

Dimensions

Order Example

Single Wall	FOXC - W_1/D_1 - $Ød_3$ - $Ød_4$
Double Wall	FOXCI - W_1/D_1 - $Ød_3$ - $Ød_4$ - i



Description

Oval reducing crossing tee with round straight taps on minor axis.

Dimensions

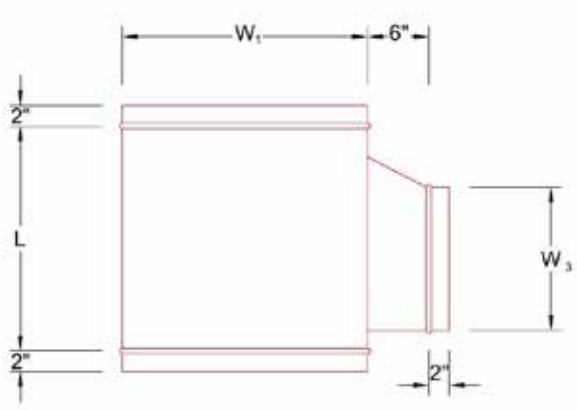
$Ød_3$ is always greater than or equal to $Ød_4$.
$L = (Ød_3 + 4) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXC - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$
Double Wall	FORXCI - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$ - i

Tees/Crossing Tees



Description

Oval tee with oval boot tap on minor axis.

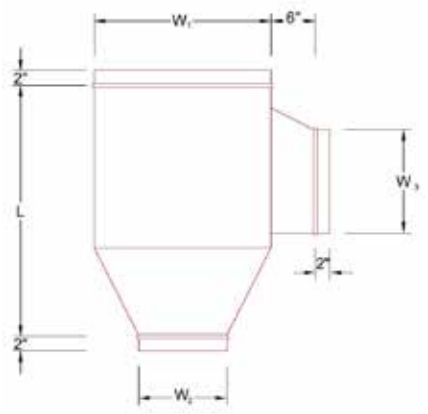
Dimensions

$L = W_3 + 10$

Order Example

Single Wall	FOTBS - W_1/D_1 - W_3/D_3
Double Wall	FOTBSI - W_1/D_1 - W_3/D_3 - i

FOTBS/FORTBS



Description

Oval reducing tee with oval boot tap on minor axis.

Dimensions

$L = (W_3 + 10) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTBS - W_1/D_1 - W_2/D_2 - W_3/D_3
Double Wall	FORTBSI - W_1/D_1 - W_2/D_2 - W_3/D_3 - i

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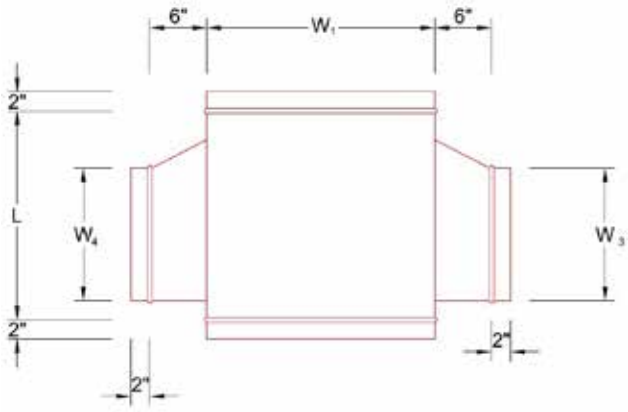
Tees/Crossing Tees



Description

Oval crossing tee with oval boot taps on minor axis.

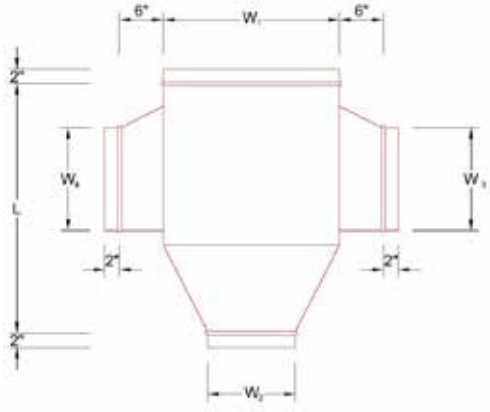
Dimensions

W_3 is always greater than or equal to W_4.
$L = W_3 + 10$

Order Example

Single Wall	FOXBS - W_1/D_1 - W_3/D_3 - W_4/D_4
Double Wall	FOXBSI - W_1/D_1 - W_3/D_3 - W_4/D_4 - i

FOXBS/FORXBS



Description

Oval crossing reducing tee with oval boot taps on minor axis.

Dimensions

W_3 is always greater than or equal to W_4.
$L = (W_3 + 10) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXBS - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4
Double Wall	FORXBSI - W_1/D_1 - W_2/D_2 - W_3/D_3 - W_4/D_4 - i

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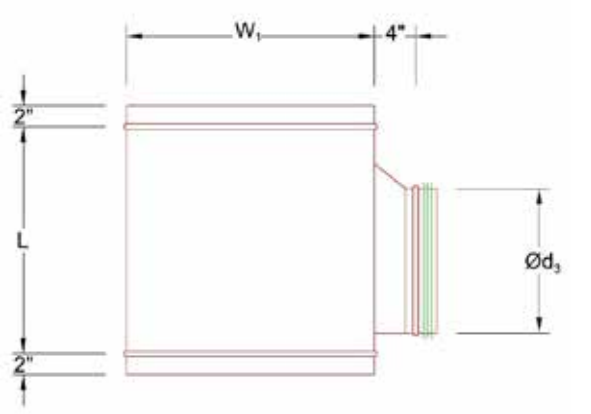
Tees/Crossing Tees FOTBSC/FORTBSC



Description

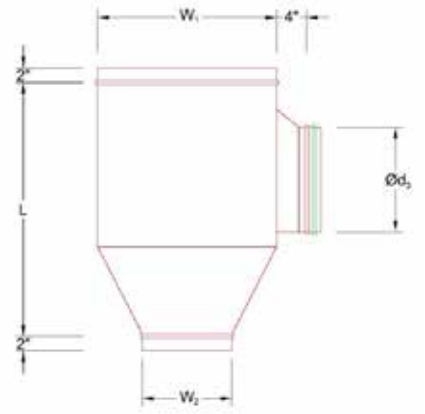
Oval tee with round boot tap on minor axis.

Dimensions

$L = Ød_3 + 8$

Order Example

Single Wall	FOTBSC - W_1/D_1 - $Ød_3$
Double Wall	FOTBSCI - W_1/D_1 - $Ød_3$ - i



Description

Oval reducing tee with round boot tap on minor axis.

Dimensions

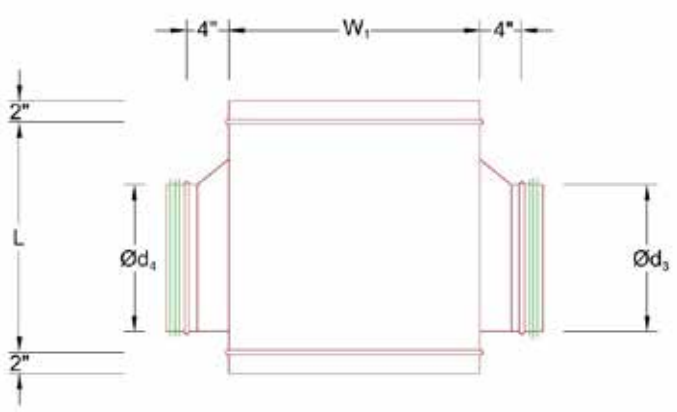
$L = (Ød_3 + 8) + [(W_1 - W_2) \times 0.5] + 6$

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTBSC - W_1/D_1 - W_2/D_2 - $Ød_3$
Double Wall	FORTBSCI - W_1/D_1 - W_2/D_2 - $Ød_3$ - i

Tees/Crossing Tees



Description

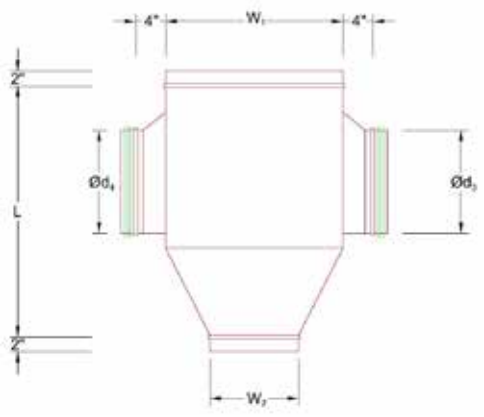
Oval crossing tee with round boot taps on minor axis.

Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = Ød_3 + 8$

Order Example

Single Wall	FOXBSC - W_1/D_1 - $Ød_3$ - $Ød_4$
Double Wall	FOXBSCI - W_1/D_1 - $Ød_3$ - $Ød_4$ - i



Description

Oval reducing crossing tee with round boot taps on minor axis.

Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = (Ød_3 + 8) + [(W_1 - W_2) \times 0.5] + 6$

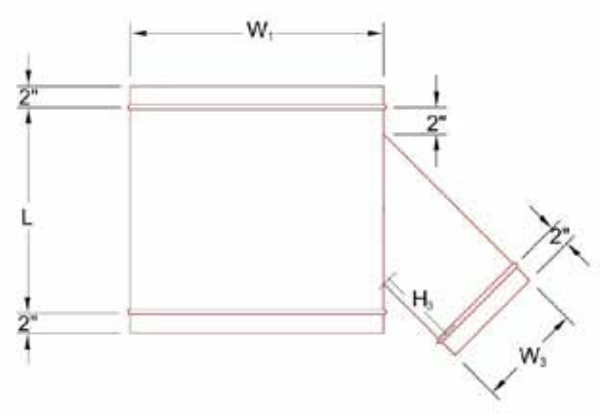
Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXBSC - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$
Double Wall	FORXBSCI - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$ - i

Tees/Crossing Tees

FOTV/FORTV



Description

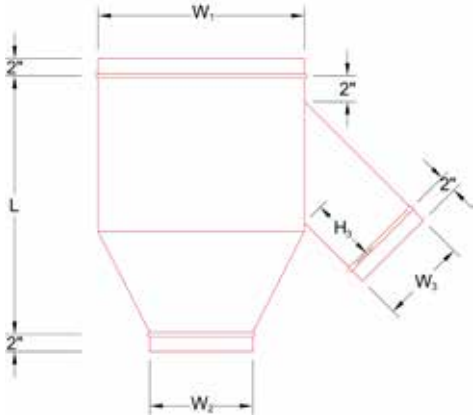
Oval tee with lateral oval tap on minor axis. Tap is centered on fitting body.

Dimensions

Available with α = 15°, 30°, 45°, 60° taps.
$L = [W_3 \times (1/\sin\alpha)] + 4$
H_3 = 2.5"(constant)(throat length)

Order Example

Single Wall	FOTVα - W_1/D_1 - W_3/D_3
Double Wall	FOTVIα - W_1/D_1 - W_3/D_3 - i



Description

Oval reducing tee with lateral oval tap on minor axis.

Dimensions

Available with α = 15°, 30°, 45°, 60° taps.
$L = [W_3 \times (1/\sin\alpha)] + 4 + [(W_1 - W_2) \times 0.5] + 6$
H_3 = 2.5"(constant)(throat length)

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTVα - W_1/D_1 - W_2/D_2 - W_3/D_3
Double Wall	FORTVIα - W_1/D_1 - W_2/D_2 - W_3/D_3 - i

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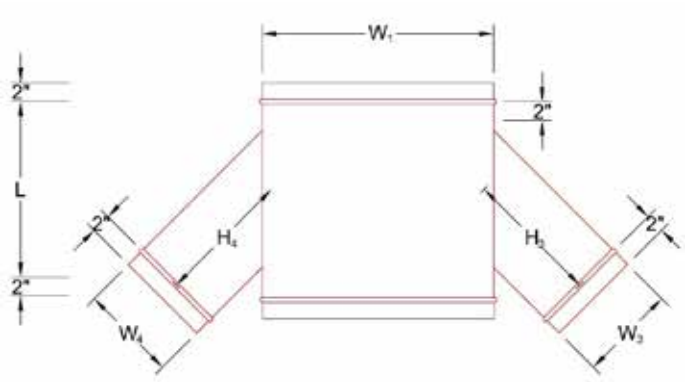
Tees/Crossing Tees

FOXV/FORXV



Description

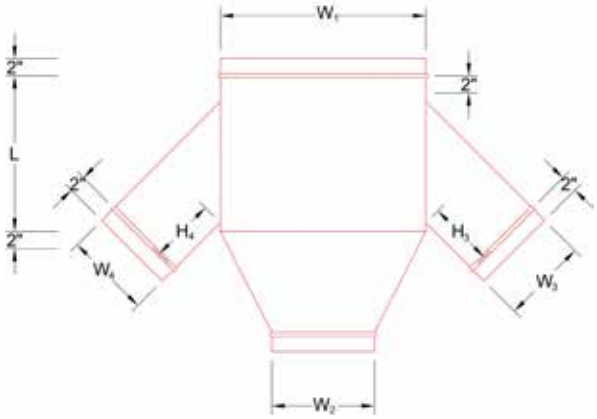
Oval crossing tee with lateral oval taps on minor axis. Taps are centered on fitting body.

Dimensions

Available with α = 15°, 30°, 45°, 60° taps.
W_3 is always greater than or equal to W_4.
$L = [W_3 \times (1/\sin\alpha)] + 4$
H_3 = 2.5"(constant)(throat length)

Order Example

Single Wall	FOXVα - W_1/D_1 - W_3/D_3- W_4/D_4
Double Wall	FOXVIα - W_1/D_1 - W_3/D_3- W_4/D_4 - i



Description

Oval reducing crossing tee with lateral oval taps on minor axis.

Dimensions

Available with α = 15°, 30°, 45°, 60° taps.
W_3 is always greater than or equal to W_4.
$L = [W_3 \times (1/\sin\alpha)] + 4 + [(W_1 - W_2) \times 0.5] + 6$
H_3 = 2.5"(constant)(throat length)

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXVα - W_1/D_1 - W_2/D_2 - W_3/D_3- W_4/D_4
Double Wall	FORXVIα - W_1/D_1 - W_2/D_2 - W_3/D_3- W_4/D_4 - i

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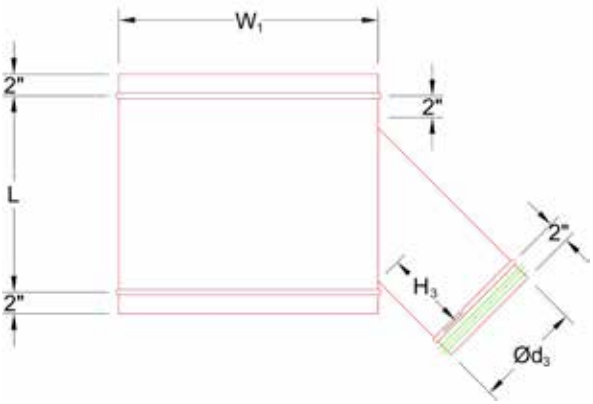
Tees/Crossing Tees



Description

Oval tee with lateral round tap on minor axis. Tap is centered on fitting body.

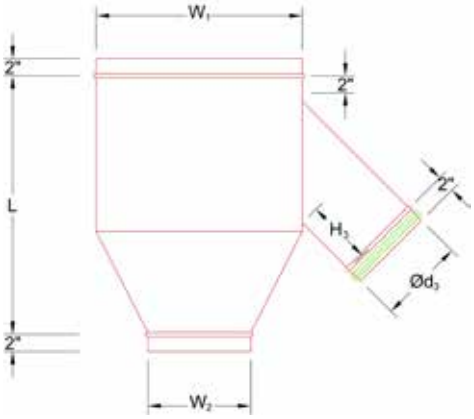
Dimensions

Available with α = 15°, 30°, 45°, 60° taps.
$L = [Ød_3 \times (1/\sin\alpha)] + 4$
H_3 = 2.5"(constant)(throat length)

Order Example

Single Wall	FOTVCα - W_1/D_1 - $Ød_3$
Double Wall	FOTVCIα - W_1/D_1 - $Ød_3$ - i

FOTVC/FORTVC



Description

Oval reducing tee with lateral round tap on minor axis. Tap is centered on fitting body.

Dimensions

Available with α = 15°, 30°, 45°, 60° taps.
$L = [Ød_3 \times (1/\sin\alpha)] + 4 + [(W_1 - W_2) \times 0.5] + 6$
H_3 = 2.5"(constant)(throat length)

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

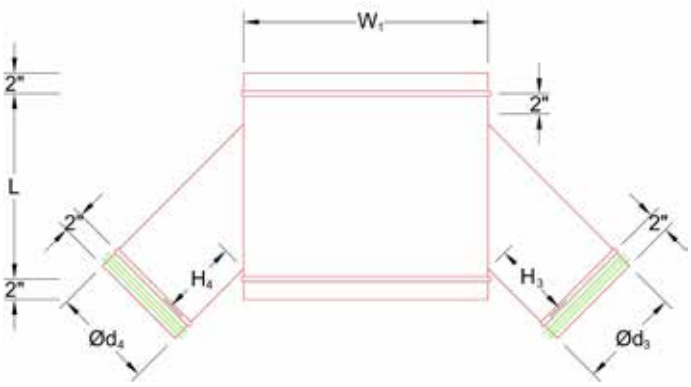
Order Example

Single Wall	FORTVCα - W_1/D_1 - W_2/D_2 - $Ød_3$
Double Wall	FORTVCIα - W_1/D_1 - W_2/D_2 - $Ød_3$ - i

All double wall dimensions refer to free open (inside) dimensions. For flanged systems, be sure to reference Flange Dimensional detail located on page 6. We reserve the right to make changes without prior notice. Therefore, all designs, specifications, and product features are subject to change without notice. The company and its products are protected by patents and registered trademarks.

Tees/Crossing Tees

FOXVC/FORXVC



Description

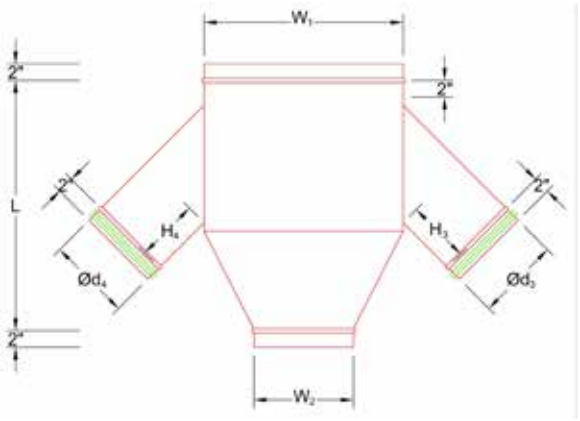
Oval crossing tee with lateral round taps on minor axis. Taps are centered on fitting body.

Dimensions

αα"

Order Example

ααί



Description

Oval reducing crossing tee with lateral round taps on minor axis.

Dimensions

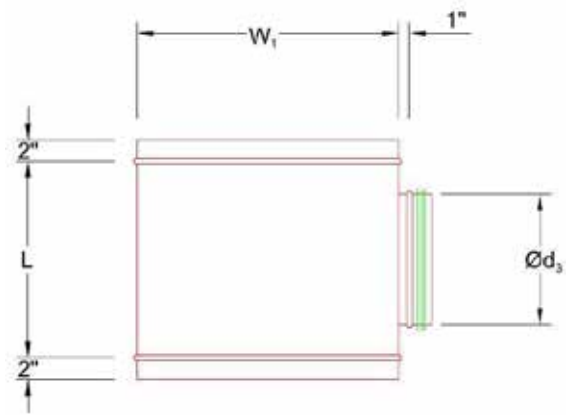
Available with α = 15°, 30°, 45°, 60° taps.
$Ød_3$ is always greater than or equal to $Ød_4$.
$L = [W_3 \times (1/\sin\alpha)] + 4 + [(W_1 - W_2) \times 0.5] + 6$
H_3 = 2.5"(constant)(throat length)

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXVCα - W_1/D_1 - $Ød_3$ - $Ød_4$
Double Wall	FORXVCIα - W_1/D_1 - $Ød_3$ - $Ød_4$ - ί

Tees/Crossing Tees



Description

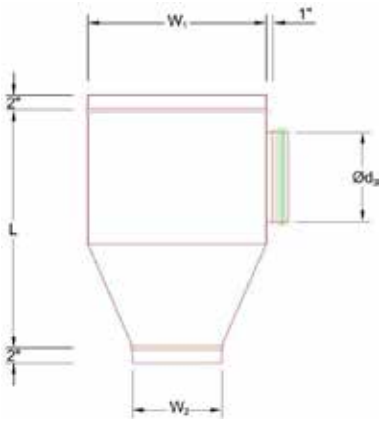
Dimensions

$L = Ød_3 + 6$
Maximum size for $Ød_3$ is 12".
Maximum size for D_1 is 24".

Order Example

Single Wall	FOTPSCα - W_1/D_1 - $Ød_3$
Double Wall	FOTPSCIα - W_1/D_1 - $Ød_3$ - i

FOTPSC/FORTPSC



Description

Oval reducing tee with round radiussed pressed tap on minor axis.

Dimensions

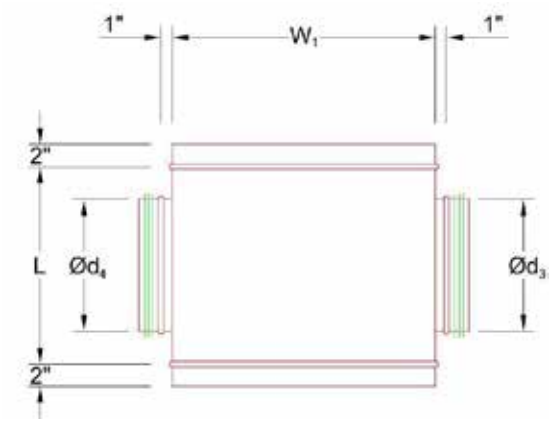
$L = (Ød_3 + 6) + [(W_1 - W_2) \times 0.5] + 6$
Maximum size for $Ød_3$ is 12".
Maximum size for D_1 is 24".

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORTPSCα - W_1/D_1 - W_2/D_2 - $Ød_3$
Double Wall	FORTPSCIα - W_1/D_1 - W_2/D_2 - $Ød_3$ - i

Tees/Crossing Tees FOXPSC/FORXPSC



Description

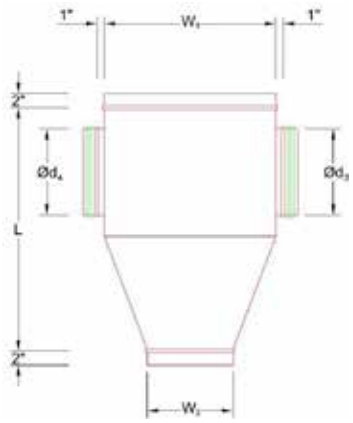
Oval crossing tee with round radiussed pressed taps on minor axis. Taps are centered on fitting body.

Dimensions

$Ød_3$ is always greater than or equal to $Ød_4$.
$L = Ød_3 + 6$
Maximum size for $Ød_3$ is 12".
Maximum size for D_1 is 24".

Order Example

Single Wall	FOXPSCα - W_1/D_1 - $Ød_3$ - $Ød_4$
Double Wall	FOXPSCIα - W_1/D_1 - $Ød_3$ - $Ød_4$- i



Description

Oval reducing crossing tee with round radiussed pressed taps on minor axis.

Dimensions

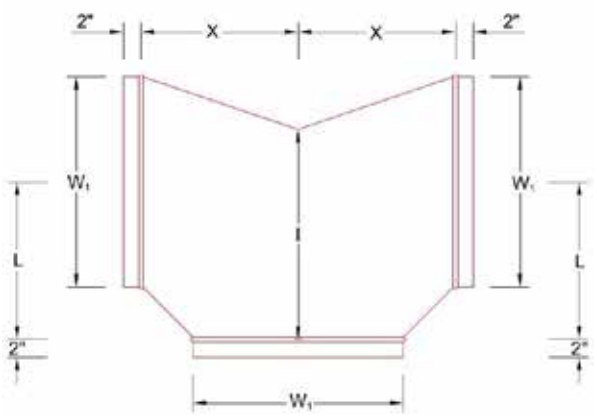
$Ød_3$ is always greater than or equal to $Ød_4$.
$L = (Ød_3 + 6) \times [(W_1 - W_2) \times 0.5] + 10$
Maximum size for $Ød_3$ is 12".
Maximum size for D_1 is 24".

Substitute:
$D_{1,2}$ for $W_{1,2}$ if $(D_1 - D_2) > (W_1 - W_2)$

Order Example

Single Wall	FORXPSCα - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$
Double Wall	FORXPSCIα - W_1/D_1 - W_2/D_2 - $Ød_3$ - $Ød_4$- i

Tees/Crossing Tees



Description

Diverted flow oval bullhead tee.

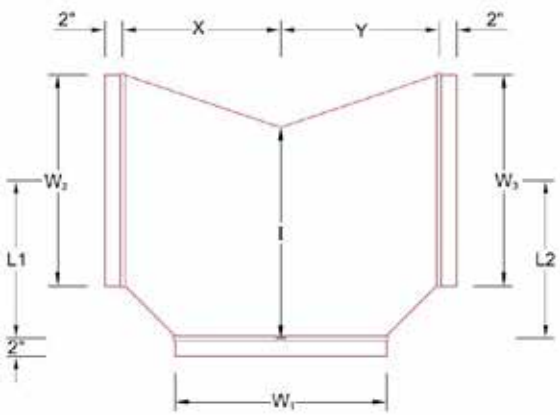
Dimensions

$L = (0.5)W_1 + 6$
$X = (0.5)W_1 + 6$
$I = W_1$

Order Example

Single Wall	FOBHT - W_1/D_1
Double Wall	FOBHTI - W_1/D_1 - i

FOBHT/FORBHT



Description

Dimensions

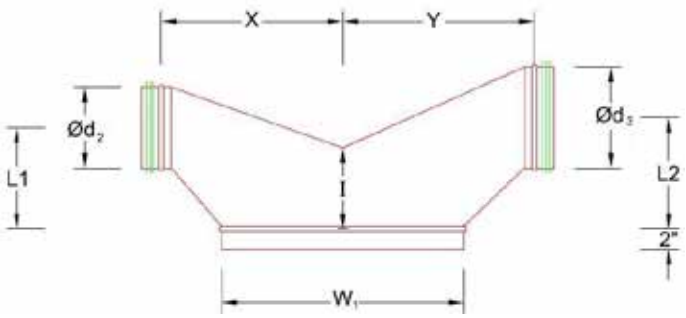
W_2 is always greater than or equal to W_3.
$L_1 = 0.5(W_2) + 6$
$L_2 = L_1 + [0.5(W_2 - W_3)]$
$X = 0.5(W_1) + 6$
$Y = X + [0.5(W_2 - W_3)]$
$I = W_2$

Order Example

i

Tees/Crossing Tees

FORBHTC



Description

Diverted flow oval to round bullhead tee.

Dimensions

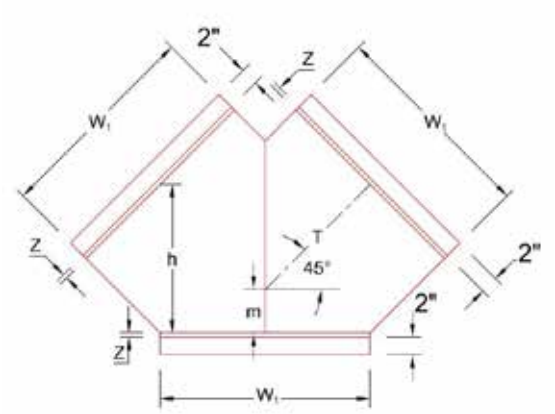
$Ød_2$ is always greater than or equal to $Ød_3$.
$L_1 = (0.5)Ød_2 + 6$
$L_2 = L_1 + [0.5(Ød_2 - Ød_3)]$
$X = 0.5(W_1) + 6$
$Y = X + [0.5(Ød_2 - Ød_3)]$
$I = Ød_2$

Order Example

Single Wall	FORBHTC - W_1/D_1 - $Ød_2$ - $Ød_3$
Double Wall	FORBHTCI - W_1/D_1 - $Ød_2$ - $Ød_3$ - i

Y-branches

FOY/FORY



Description

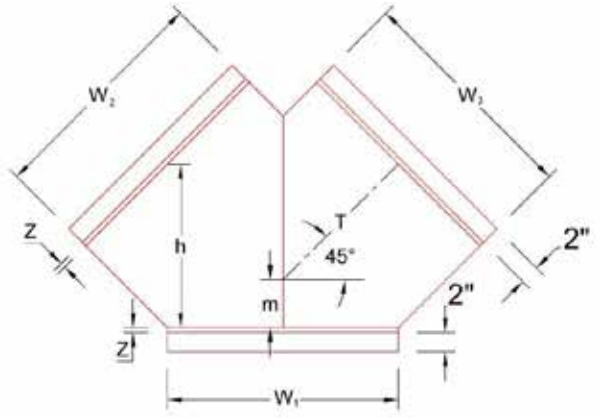
45° hard oval wye branch. NOTE: these measurements are valid only for 45° “Y” branch fittings. Call for special angles.

Dimensions

Z = constant = 0.5"
m = (0.207)(W_1)
O = 2.828 + 0.354 * W_1
h = O + m

Order Example

Single Wall	FOY - W_1/D_1
Double Wall	FOYI - W_1/D_1 - i



Description

45° hard reducing oval wye branch. NOTE: these measurements are valid only for 45° “Y” branch fittings. Call for special angles.

Dimensions

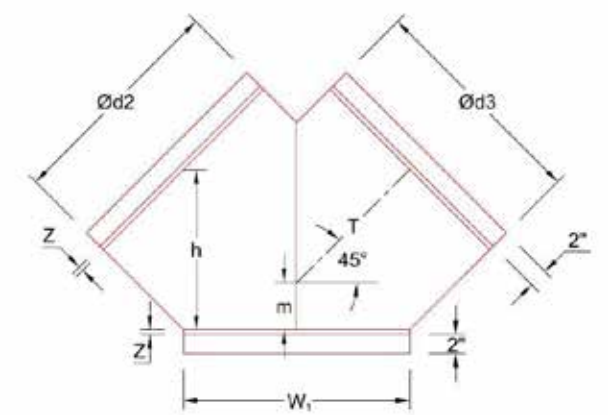
Ød$_2$ must be ≥ Ød$_3$
Z = constant = 0.5"
m = (0.207)(W_1)
O = 2.828 + 0.354 * W_1
h = O + m

Order Example

Single Wall	FORY - W_1/D_1 - W_2/D_2 - W_3/D_3
Double Wall	FORYI - W_1/D_1 - W_2/D_2 - W_3/D_3 - i

Y-branches

FORYC



Description

45° oval to round wye branch. NOTE: these measurements are valid only for 45° “Y” branch fittings. Call for special angles.

Dimensions

$Ød_2$ must be ≥ $Ød_3$
Z = constant = 0.5”
$m = (0.207)(W_1)$
$O = 2.828 + 0.354 * W_1$
$h = O + m$

Order Example

Single Wall	FORYC - W_1/D_1 - $Ød_2$ - $Ød_3$
Double Wall	FORYCI - W_1/D_1 - $Ød_2$ - $Ød_3$ - i

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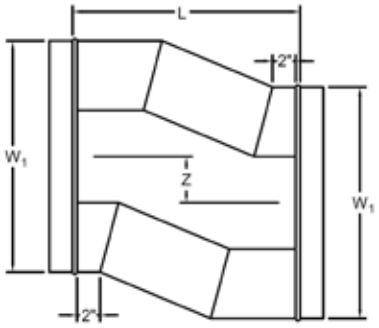
Offsets

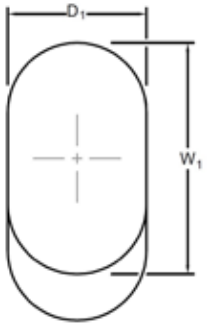


Description

Flat oval hard bend offset.

Dimensions

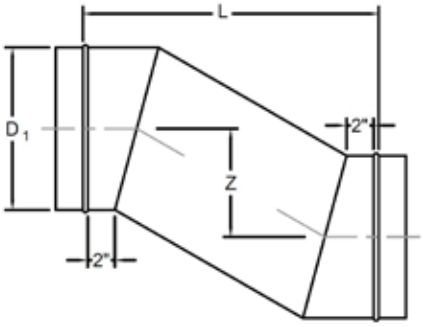
Do not exceed 45°. Offsets resulting in severe angles may result in airflow restriction and may not be possible.



Order Example

Single Wall	FOOH - W_1/D_1 - Z - L
Double Wall	FOOHI - W_1/D_1 - Z - L - i

FOOH/FOOE

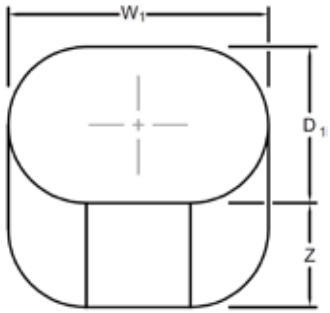


Description

Flat oval easy bend offset.

Dimensions

Do not exceed 45°. Offsets resulting in severe angles may result in airflow restriction and may not be possible.

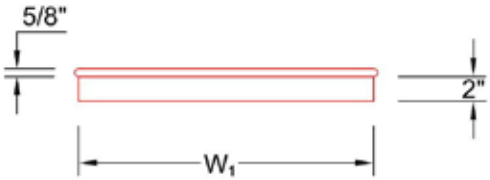


Order Example

Single Wall	FOOE - W_1/D_1 - Z - L
Double Wall	FOOEI - W_1/D_1 - Z - L - i

End Caps

FOEP/FOEF

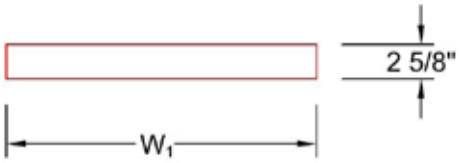


Description

Flat oval end cap for duct.

Order Example

Single Wall	FOEP - W_1/D_1
Double Wall	FOEPI - W_1/D_1 - L - i



Description

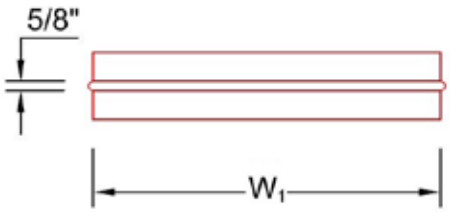
Flat oval end cap for fittings.

Order Example

i

Couplings

FONP/FOMF

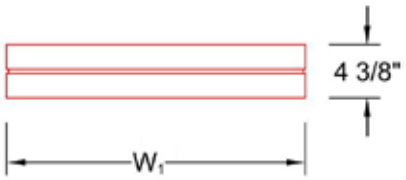


Description

Flat oval duct coupling.

Order Example

Single Wall	FONP - W_1/D_1
Double Wall	FONPI - W_1/D_1 - *i*



Description

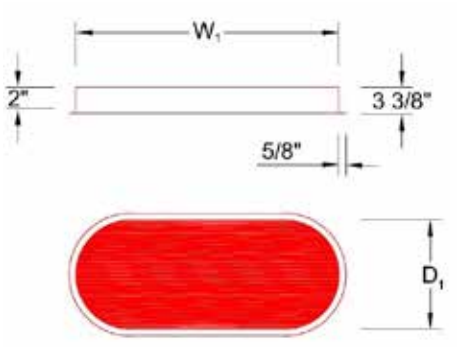
Flat oval fitting coupling.

Order Example

Single Wall	FOMF - W_1/D_1
Double Wall	FOMFI - W_1/D_1 - *i*

Take-offs

FOIL/FOILR

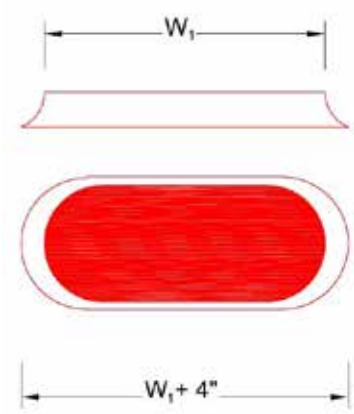


Description

Take-off / starting collar.

Order Example

Single Wall	FOIL - W_1/D_1
Double Wall	FOILI - W_1/D_1 - *i*



Description

Bellmouth take-off. For 1" insulation, max I.D. for minor axis is 30".

Order Example

Single Wall	FOILR - W_1/D_1
Double Wall	FOILRI - W_1/D_1 - *i*

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