



Submittal For Single Wall Spiral With Non-Gasketed Fittings

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HRANEC CORP.



SUBMITTAL
Single Wall Spiral

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SPECIAL NOTES:

- **SUBMITAL** = INCLUDES ALL AVAILABLE MATERIALS, CONNECTIONS AND PRESSURE CLASSES REFERANCE OUR FABRICATION FORM FOR PROJECT SPECIFIC DUCTWORK INFORMATION. LISTED AS PAGE 1
- **FABRICATION** = ALL DUCTWORK IS FABRICATED PER SMACNA STANDARDS AND / PROJECT SPECIFICATIONS
- **MATERIALS FOR PAINTING** = RECOMMENDED MATERIAL FOR PAINTED SPIRAL DUCT = PAINT GRIP, HOWEVER GALVANIZED G90 CAN EASILY BE PAINTED WITH EXTRA PREP WORK.
- **PREP BEFORE PAINTING** = WE RECOMMENDED WIPING DOWN MINIMAL EXCESS LUBRICANT TWICE BEFORE PAINTING WITH DRY RAGS. IN ADDITION, WIPE DOWN WITH NO RINSE PREPAINT CLEANER #13158 (SHERWIN WILLIAMS) BEFORE APPLYING TWO COATS METAL PRIMER.
- **PAINT AND PRIMER** = ALL PRIMER AND PAINT SHOULD BE LABELED TO ADHERE TO METAL PAINTING APPLICATIONS. FOLLOW PAINT MANUFACTURERS APPLICATION PROCEDURES, TEMERATURE, HUMIDITY, SURFACE PREP WORK, ETC.
- **CAUTION** = IF A STEEL CABLE HANGING SYSTEM IS USED TO SUSPEND DUCT WORK, DO NOT APPLY PAINT, LUBRICANTS, OR OTHER COATINGS TO THE HANGING SYSTEM. FOLLOW HANING SYSTEM MANUFACTURERS INSTRUCTIONS
- **TESTING** = OUR SPIRAL DUCTWORK HAS BEEN EXTENSIVELY AIR TESTED FOR LOW, MEDIUM, & HIGH PRESSURES.
- **SEAMS** = LONGITUDINAL SEAMS ARE ALL STITCH WELDED ON FITTINGS.
- **GAUGES** = METAL GAUGES ARE PRESSURE CLASS DRIVEN FROM LATEST SMACNA STANDARDS
- **SEALANT** = PROPER SEALING OF ALL COMPONENTS ESSPECIALLY CONNECTIONS. IS REQUIRED TO AVOID DARK AIR STREAKS AFTER INSTALLATION.
- **MATERIAL** = GALVANIZED, PAINT GRIP, SS304, SS316, PVC 4X4, ALUMINUM
- **WATER PROOF** = SPIRAL SEAM DUCT WORK IS NOT CONSTRUCTED TO BE WATER PROFF



PRESSURE CLASSES

POSITIVE PRESSURE

2005 SMACNA +10WG -6WG

Diameter	Fittings	Spiral
3-9	28	28
9-14	28	28
15-18	26	26
19-24	24	26
25-42	22	24
43-60	20	22
61-66	18	22
67-96	18	20

ALUMINUM

2005 SMACNA +4WG -6WG

Dia.	Fittings	Spiral
3-8	0.032	0.025
9-14	0.032	0.025
15-26	0.040	0.032
27-36	0.050	0.040
37-50	0.063	0.050
51-60	0.071	0.063

GALV, PG, SS, PVC ("Steel")

HRANEC PIPE		HRANEC FITTINGS	
Size	Gauge	Size	Gauge
4"-18"	26	5"-20"	24
20-28	24	22-36	22
30-38	22	38-50	20
40-48	20	52-60	18
50-58	18	62-70	16
60-70	16		

ALUM

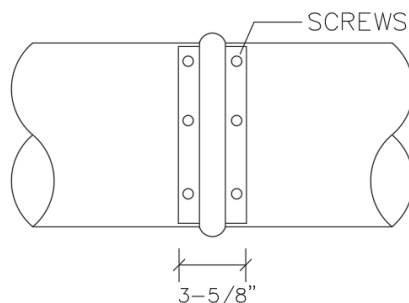
HRANEC PIPE		HRANEC FITTINGS	
SIZE	GAUGE	SIZE	GAUGE
4" - 40"	.040	4" - 40"	.040
42" - 70"	.050	42" - 70"	.050

- ALL GAUGE AND DIAMETER PIPE WILL BE SPIRAL SEAM
- ALL STEEL FITTINGS 24 GAUGE TO 20 GAUGE TO HAVE GORELOCK TRANSVERSE SEAM
- ALL STEEL FITTINGS 24 GAUGE TO 20 GAUGE TO HAVE STITCH WELD LONGITUDINAL SEAM
- ALL STEEL FITTINGS 18 GAUGE TO 16 GAUGE TO HAVE TACK WELDED AND SEALED TRANSVERSE SEAM
- ALL STEEL FITTINGS 18 GAUGE TO 16 GAUGE TO HAVE TACK WELDED AND SEALED LONGITUDINAL SEAM
- ALL ALUMINUM FITTINGS 50" AND SMALLER TO HAVE GORELOCK TRANSVERSE SEAM
- ALL ALUMINUM FITTINGS 50" AND SMALLER TO HAVE BUTTON LOCK LONGITUDINAL SEAM
- ALL ALUMINUM FITTINGS 52" AND LARGER TO HAVE BUTTON LOCK TRANSVERSE SEAM
- ALL ALUMINUM FITTINGS 50" AND SMALLER TO HAVE TACK WELDED AND SEALED LONGITUDINAL SEAM

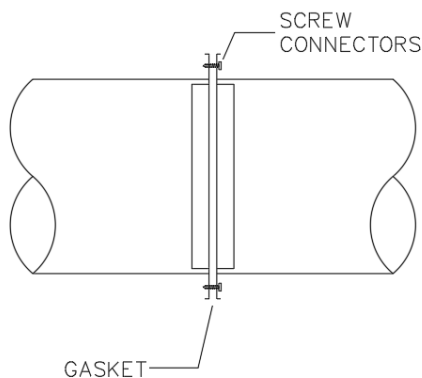


CONNECTIONS AVAILABLE FOR ROUND DUCT AND FITTINGS

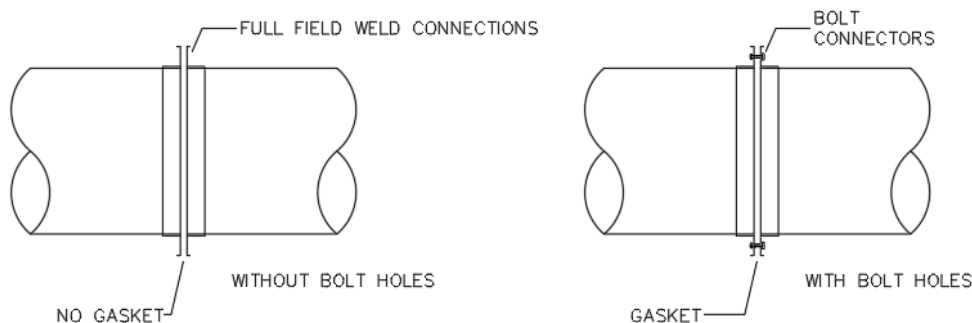
1. **SLIP FIT** = RECOMMENDED INSTALLATION = COUPLING CONNECTIONS TO BE CAULKED AND SCREWED EVERY 10" AROUND THE DIAMETER



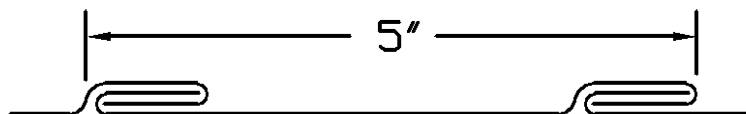
2. **SINGLE - WALL FLANGE** = RECOMMENDED INSTALLATION = FLANGED CONNECTION TO BE GASKETED OR CAULKED AND SCREWED EVERY 10" AROUND THE DIAMETER



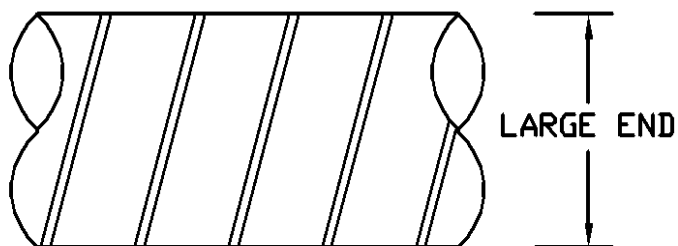
3. **ANGLE RING WITH OR WITHOUT BOLT HOLES** = RECOMMENDED INSTALLATION = ANGLE RINGS WITHOUT BOLT HOLES TO HAVE FIELD FULLY WELDED CONNECTIONS WITH NO GASKET, ANGLE RINGS WITH BOLT HOLES TO BE GASKETED THEN NUT AND BOLTED USING THE BOLT HOLE PATTERN WITHOUT SKIPPING ANY HOLES. REFERENCE SMACNA FOR FULL INSTALLATION GUIDLINES



SPIRAL DUCT



LATERAL SECTION OF 4-PLY PRESSURE PROOF SPIRAL SEAM

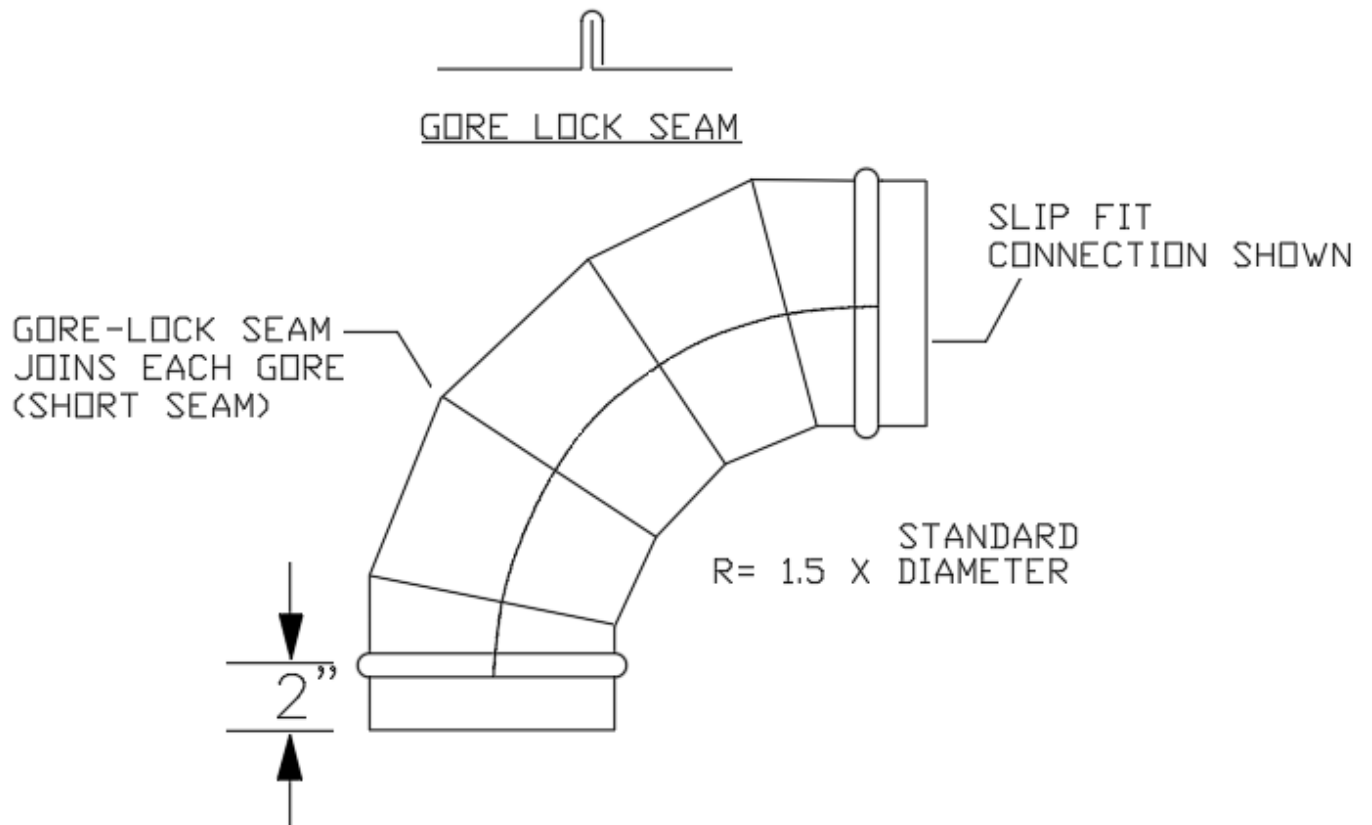


NOTES:

- A. AVAILABLE IN EVEN SIZES 4"Ø THROUGH 70" Ø
- B. AVAILABLE IN ODD SIZES 5"Ø, 7", & 9"Ø
- C. LENGTHS - 6" THROUGH 240" (STANDARD 120")



GORE-LOCK ELBOW



- AVAILABLE IN 5° THROUGH 120°
- SHORT RADIUS ELBOWS ARE CONSIDERED 1 X DIAMETER AND IS CENTERLINE
- OTHER RADIUS ELBOWS ARE AVAILABLE

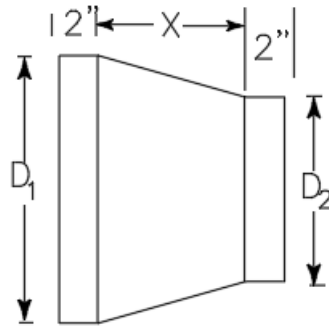


REDUCERS

CONCENTRIC REDUCER

$$X = \frac{D_1 - D_2}{2} \times 3$$

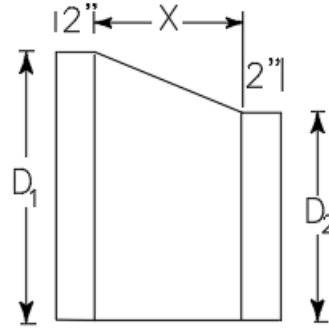
4" Minimum



ECCENTRIC REDUCER

$$X = \frac{D_1 - D_2}{2} \times 3$$

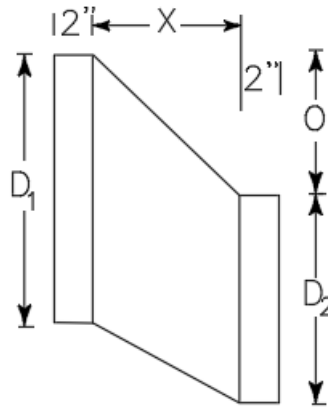
4" Minimum



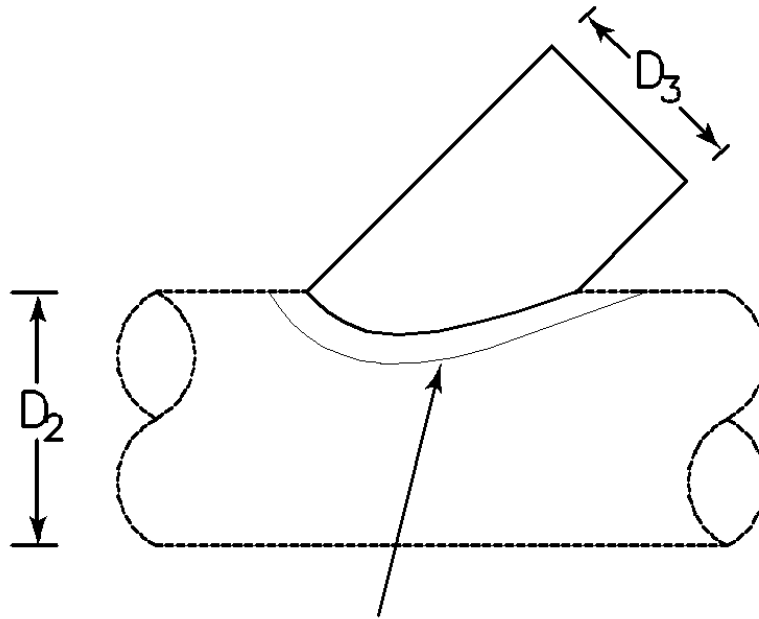
OFFSETTING REDUCER

$$X = O \times 3$$

4" Minimum

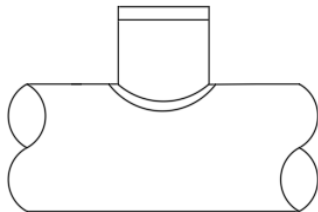


ROUND END SADDLE TAPS

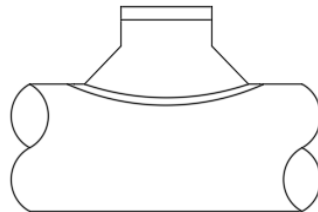


4"-16"= 1/2" FLANGE OUT
 18" AND ABOVE= 2" PLATE WITH 1/2" HEM IN

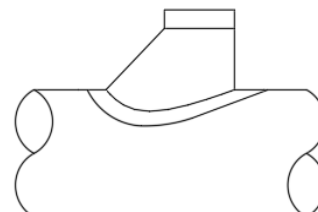
- STANDARD 45 DEGREE&90 DEGREE ANGLES. ALTERNATE ANGLES AVAILABLE.
- 90 DEGREE CONICAL AVAILABLE.
- HIGH EFFICIENCY SHOE STYLE AVAILABLE



90 DEGREE SADDLE



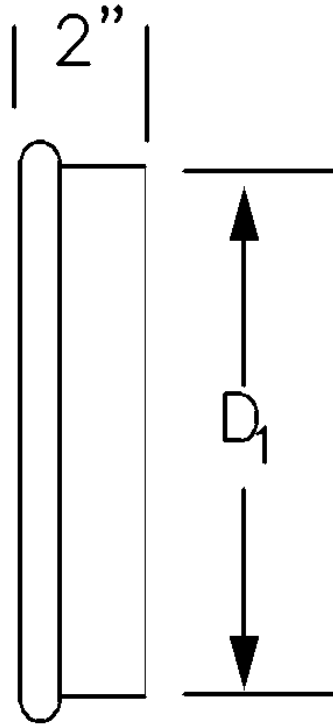
CONICAL SADDLE



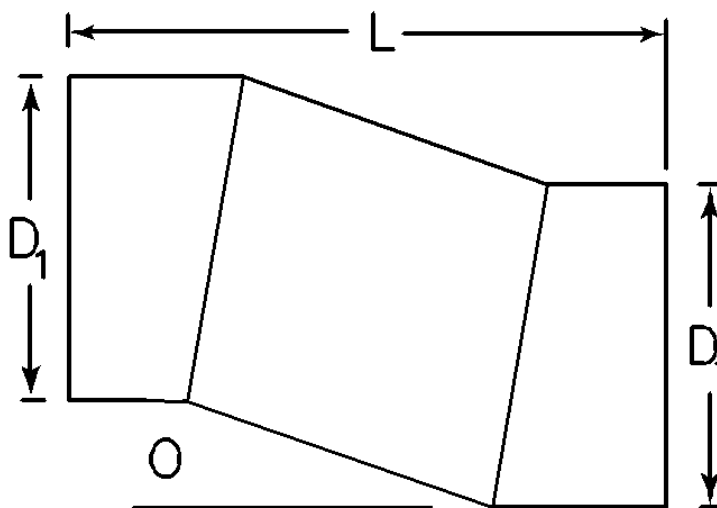
SHOE STYLE SADDLE



END CAPS



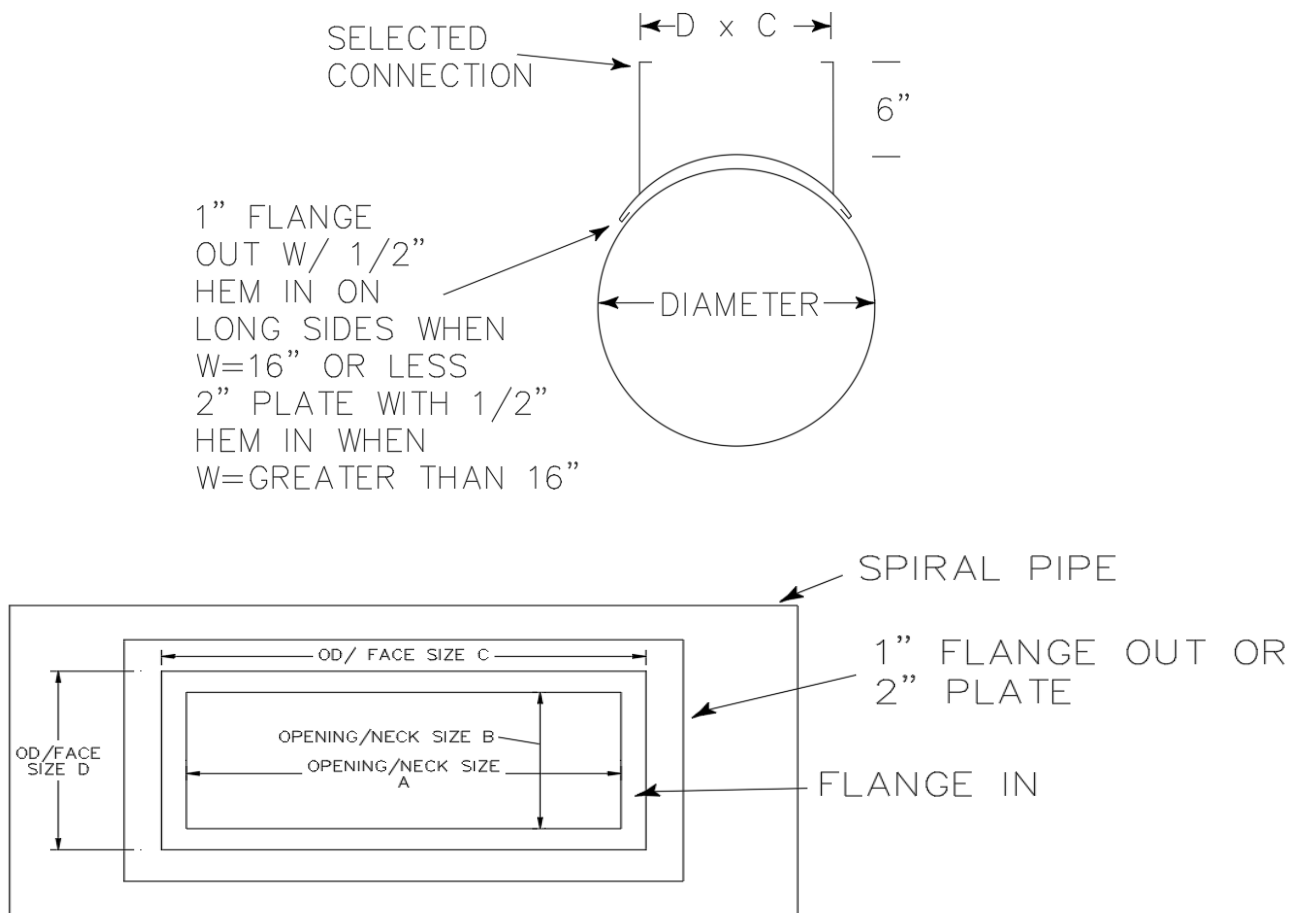
OFFSETS



- LENGTH TWO OR THREE TIMES THE OFFSET



RECTANGULAR END SADDLE TAPS

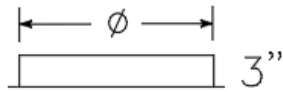


REGISTER BOX SQUARE END SADDLE

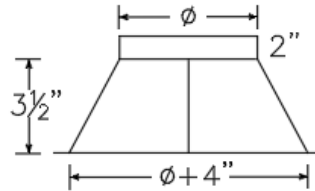
- **SPOT WELDED SEAMS USED ON BOXES**
- **STANDARD RECTANGULAR CONNECTION IS FLANGE IN**
- **ALTERNATE CONNECTIONS AVAILABLE: SLIP AND DRIVE, TDC, OR PREMANUFACTURED FLANGE FOR RECTANGULAR END**



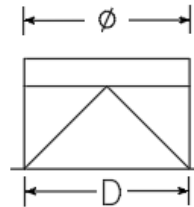
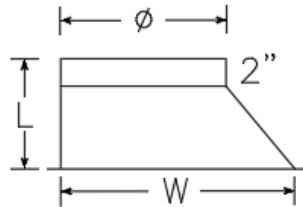
ROUND TAPS OFF FLAT SURFACES



STRAIGHT STICK-ON



CONICAL STICK-ON

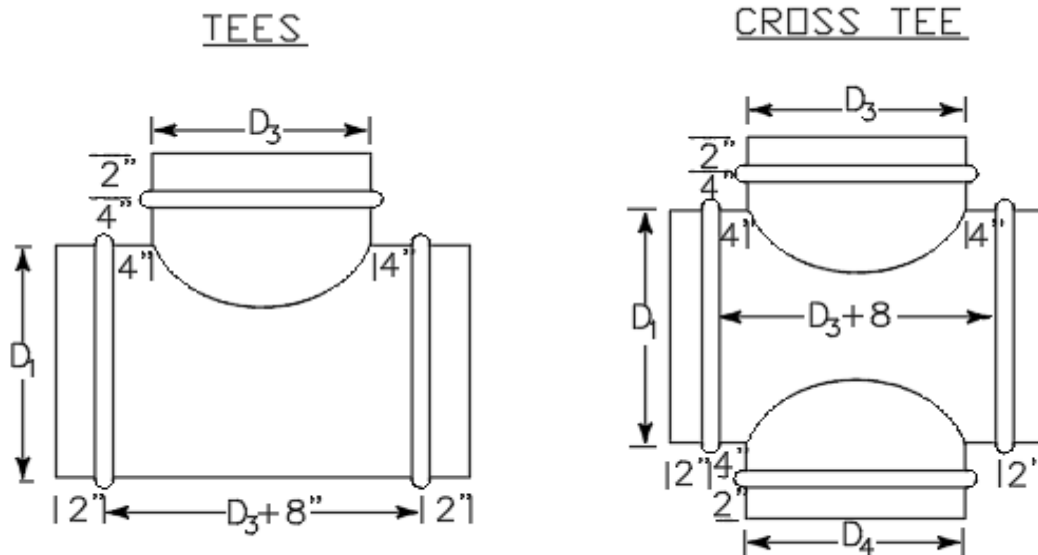


HIGH EFFICIENCY SIDE TAKE OFF

- **ALL TAPS HAVE 3/4" FLANGE OUT WITH 1/8" THICK GASKET.**
- **45 DEGREE LATERAL TAPS AVAILABLE**
- **INSTALLED DAMPERS AVAILABLE (SEE DAMPER SHEET FOR DETAILS)**



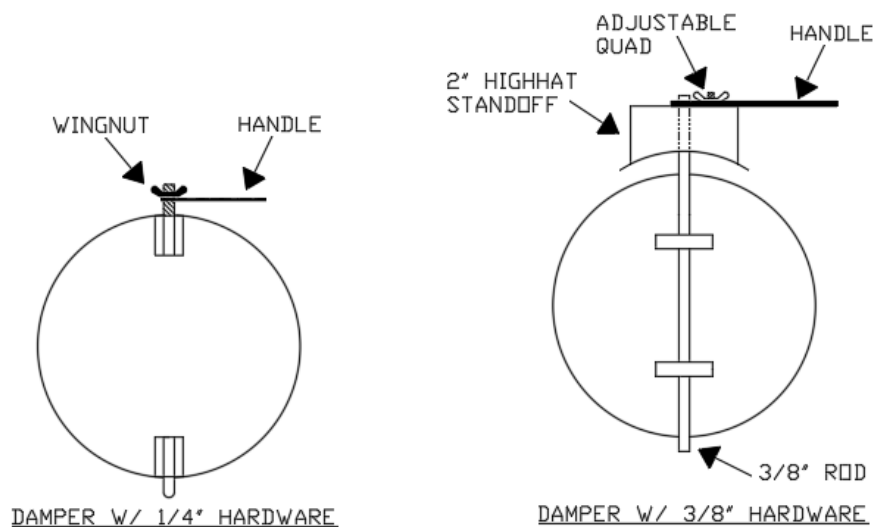
TEES AND CROSSES



- **SEALED, TACK WELDED SEAMS, STITCH WELDED LONGITUDINAL SEAMS**
- **CONICAL, SHOE STYLE, 45 DEGREE LATERAL TEES AND CROSSES AVAILABLE**
- **REDUCING TEES AND LATERALS ALSO AVAILABLE**



ROUND DAMPERS



- **DAMPER AVAILABLE IN SLEEVES, LOOSE, OR INSTALLED IN SPIRAL PIPE AND FITTINGS**
- **DAMPERS UP TO 16" ROUND WILL BE 1/4" HARDWARE**
- **DAMPER 18" AND ABOVE WILL BE 3/8" ROD HARWARE**
- **RAPID STANDOFFS AVAILABLE FOR 1/4" HARDWARE**

