



**Submittal for
Welded Duct
and Fittings**



HRANEC SHEET METAL, INC.

SUBMITTAL Welded Duct and Fittings

INDEX

- 1 NOTES
- 2 RECTANGULAR ELBOW
- 3 ROUND ELBOW
- 4 OFFSETS & TRANSITIONS
- 5 TAPS
- 6 SQUARE TO ROUND
- 7 STRAIGHT DUCT

SPECIAL NOTES:

1. OUR WELDED DUCT WORK HAS BEEN EXTENSIVELY AIR TESTED FOR LOW, MEDIUM & HIGH PRESSURES.
2. STANDARD MATERIAL BLACK IRON
ALTERNATE MATERIAL GALVANIZED
ALTERNATE MATERIAL STAINLESS STEEL 304,316
ALTERNATE MATERIAL ALUMINUM 3003
ALTERNATE MATERIAL PVC COATED
*(PVC IS NOT RECOMMENDED FOR EXPOSED DUCT THAT IS TO BE PAINTED DUE TO VARIATIONS IN COLORS)
3. METAL GAUGES ARE PRESSURE CLASS DRIVEN FROM LATEST SMACNA STANDARDS.
4. REINFORCEMENT APPLICATION PER SMACNA STANDARDS.
5. ALL SEAMS BUTT OR CORNER WELDED.
6. WELDED SEAMS AND JOINTS ARE MIG WELDED COMPLYING WITH AWS STANDARDS.
7. CLEAN OUT DOORS FABRICATED FLAT BLANK GASKETED BOLT AND NUT CONNECTION.

DESCRIPTION

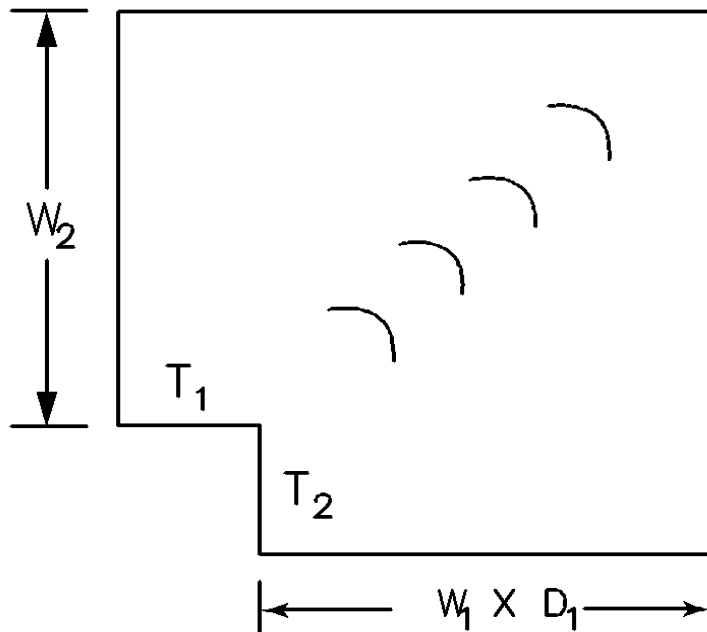
NOTES



HRANEC SHEET METAL INC
SPIRAL MANUFACTURERS

WELDED RECTANGULAR ELBOW

With or without vanes.



NOTES:

A. STANDARD ELBOW SHOWN. OTHER OPTIONS AVAILABLE AS FOLLOWS:

A.) RADIUS HEEL RADIUS THROAT

B.) RADIUS HEEL SQUARE THROAT

B. MITERED ELBOWS CONSTRUCTED PER SPECIFIED DEGREE.

C. CONNECTIONS AVAILABLE

1. RAW

2. FLANGE IN OR FLANGE OUT

3. DUCTMATE 35

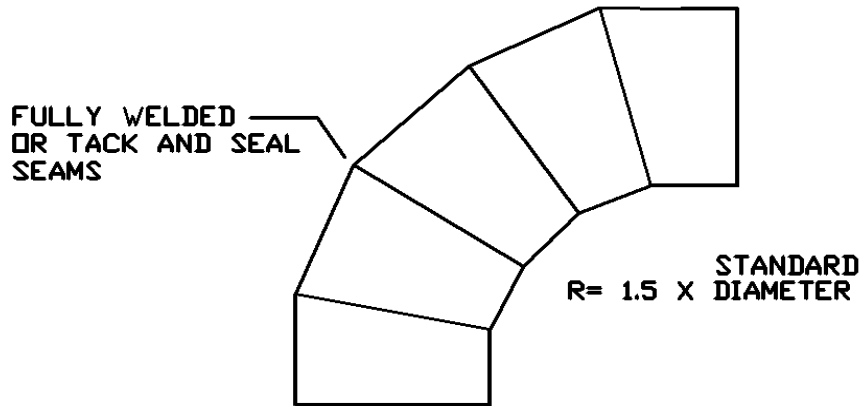
DESCRIPTION

RECTANGULAR ELBOW



HRANEC SHEET METAL INC
SPIRAL MANUFACTURERS

WELDED ROUND ELBOW



NOTES:

- A. AVAILABLE IN 5° THROUGH 90°
- B. FULLY WELDED OR TACK AND SEAL CONSTRUCTION.
- C. COUPLING CONNECTION SMALL END.
- D. FLANGED CONNECTIONS PIPE SIZE.
- E. 2 PIECE MITERED ELBOW WITH VANES AVAILABLE
- F. 16" AND BELOW=4 GORE CONSTRUCTION
- G. 18" AND ABOVE=5 GORE CONSTRUCTION
- H. CONNECTIONS
 1. RAW
 2. 1/2" FLANGE OUT
 3. WELDED ANGLE RING
 4. VANSTONE ANGLE RING

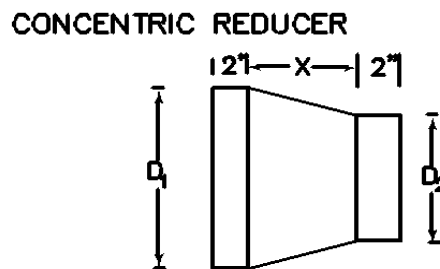
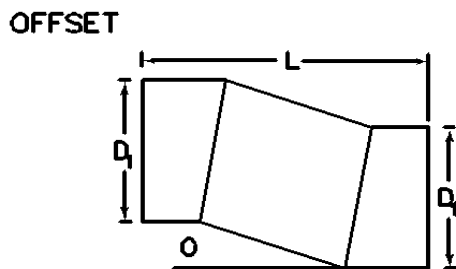
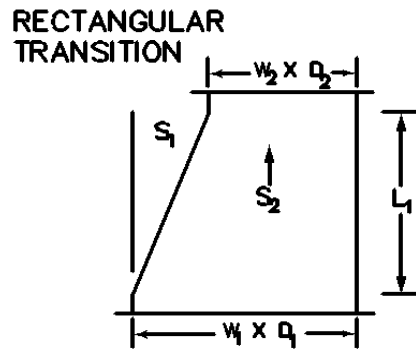
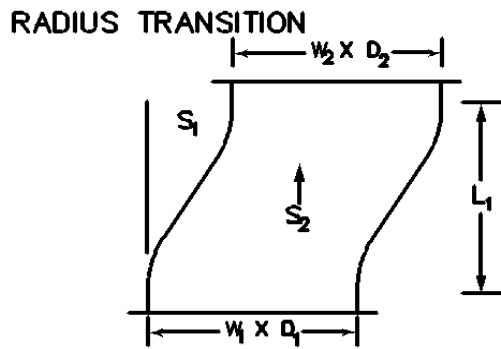
DESCRIPTION

ROUND ELBOW



HRANEC SHEET METAL INC
SPIRAL MANUFACTURERS

WELDED OFFSETS & TRANSITIONS



NOTES:

A. FABRICATED LENGTH IS 2 OR 3 TIMES THE GREATEST SET OF THE FITTING.

DESCRIPTION

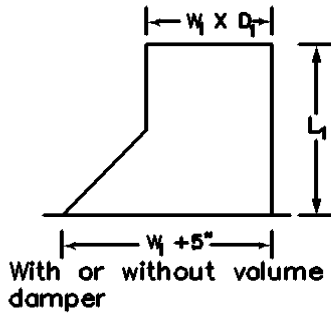
OFFSETS & TRANSITIONS



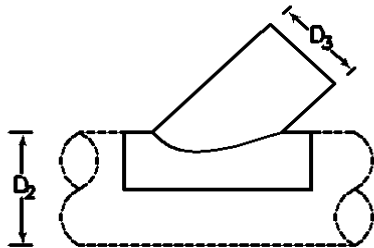
HRANEC SHEET METAL INC
SPIRAL MANUFACTURERS

WELDED TAPS

RECTANGULAR SHOE TAP
 $L_1 = 12"$ STANDARD

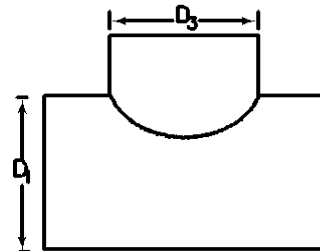


LATERAL SADDLE TAP



2" STANDARD
SADDLE

STRAIGHT SADDLE TAP



NOTES:

- A. ALTERNATE ANGLES AND DEGREES CAN BE FABRICATED.
- B. ALTERNATE BELLMOUTH TAKEOFF'S CAN BE FABRICATED.

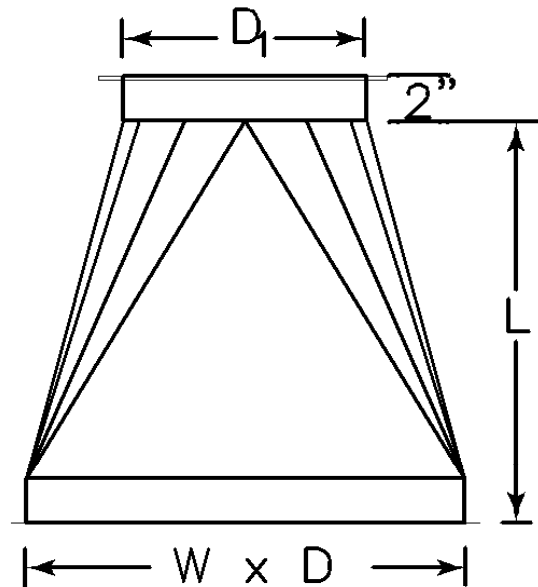
DESCRIPTION

TAPS



HRANEC SHEET METAL INC
 SPIRAL MANUFACTURERS

WELDED SQUARE to ROUND



NOTES:

A. RECTANGULAR CONNECTIONS

1. RAW
2. FLANGE IN OR FLANGE OUT
3. DUCTMATE 35

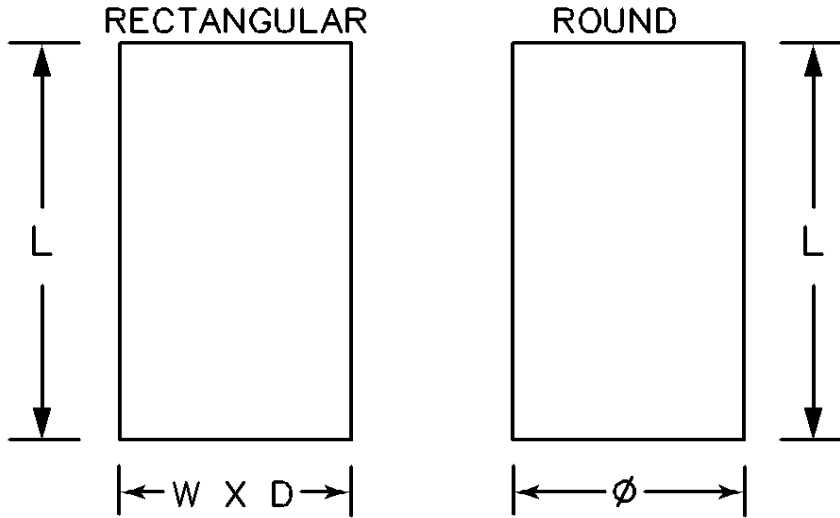
DESCRIPTION

SQUARE TO ROUND



HRANEC SHEET METAL INC
SPIRAL MANUFACTURERS

WELDED STRAIGHT DUCT



NOTES:(FOR 18 AND 16 GA. GALVANIZED AND BLACK IRON)

A. RECTANGULAR CONNECTIONS/LENGTHS

1. RAW-60"
2. 1/2" FLANGE OUT-59"
3. DUCTMATE 35-60"

B. ROUND CONNECTIONS

1. RAW-60"
2. 1/2" FLANGE OUT-59"
3. WELDED ANGLE RING-60"
4. VANSTONE ANGLE RING-59"

NOTES:(FOR ALL OTHER MATERIALS)

A. RECTANGULAR CONNECTIONS/LENGTHS

1. RAW-59"
2. 1/2" FLANGE OUT-58"
3. DUCTMATE 35-59"

B. ROUND CONNECTIONS

1. RAW-59"
2. 1/2" FLANGE OUT-58"
3. WELDED ANGLE RING-59"
4. VANSTONE ANGLE RING-58"

DESCRIPTION

STRAIGHT DUCT



HRANEC SHEET METAL INC
SPIRAL MANUFACTURERS