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AL MUTHATHAWERAH A/C SYSTEMS ACCESSORIES IND. CENTER L.L.C.

RECTANGULAR & ROUND DUCT

(GI, MS, SS, PI, AL)

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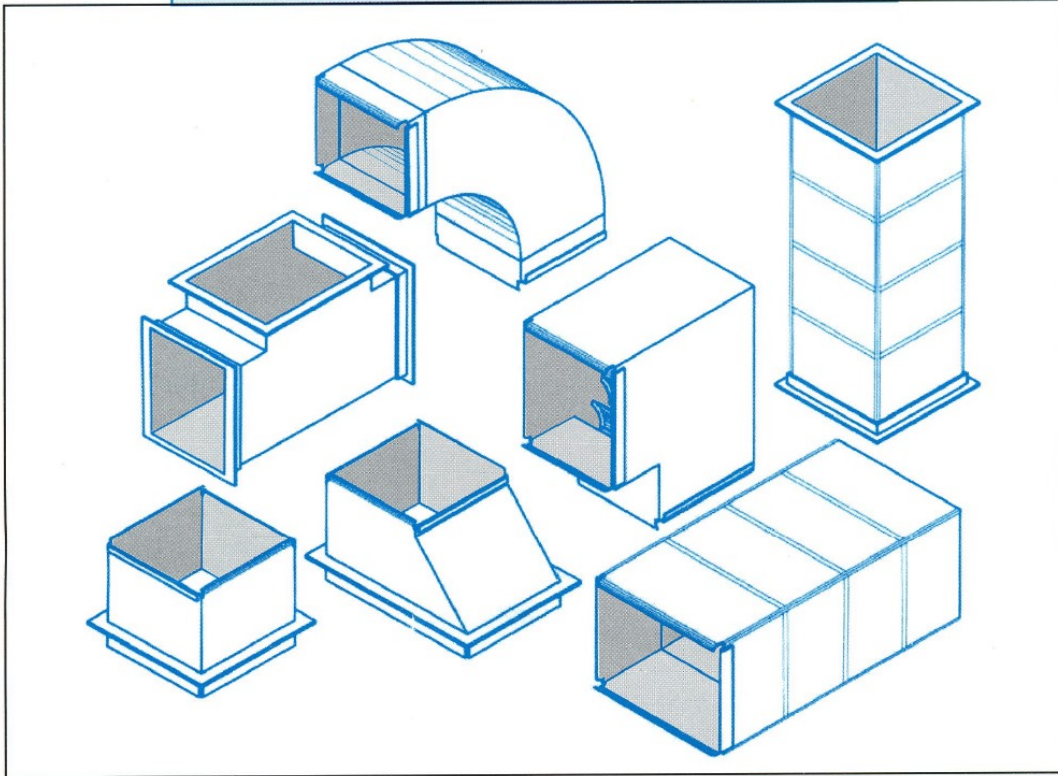
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RECTANGULAR DUCT AND FITTINGS



DESCRIPTION:

• DUCT WORK MANUFACTURED TO THE FOLLOWING SPECIFICATIONS:

- SMACNA.
- DW142/144

• GALVANIZED STEEL TO ASTM A527/653 ZINC COATING LOCK
• FORMING QUALITY GRADE OF G90/Z 27.

• OPTIONS :

- PLAIN END OR FLANGE.
- BLACK MILD STEEL.
- ALUMINUM
- STAINLESS STEEL

• THICKNESS

- 0.4mm thik. UP TO 3mm thick
- STANDARD STRAIGHT LENGTH 1200MM

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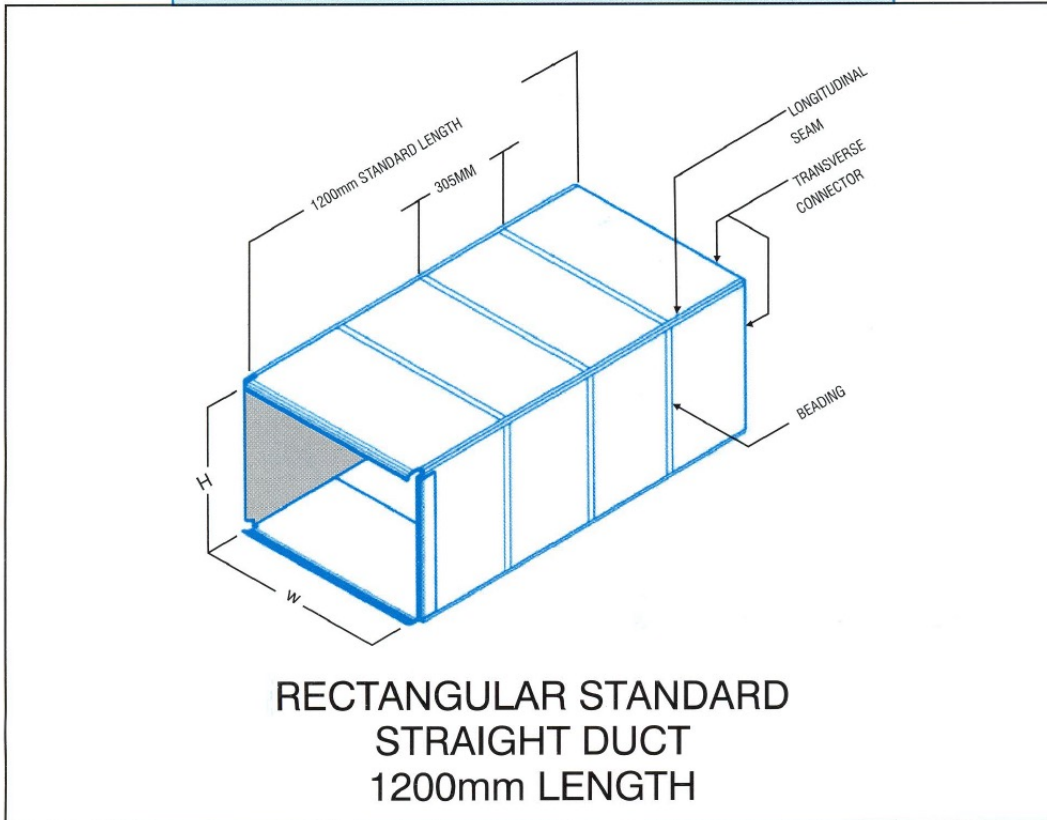
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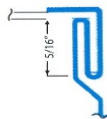
RECTANGULAR STRAIGHT



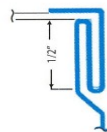
(A) SEAM

PITTSBURGH SEAMS

- SMALL PITTSBURGH FOR 26 TO 22Ga.



- LARGEST PITTSBURGH FOR 20 TO 18Ga.



(B) BEADING

- BEADING STANDARD DISTANCE IS AT EVERY 305 mm INTERVAL UP TO 18ga. STEEL THICKNESS ONLY.
- BEADING IS ONLY FOR STANDARD STRAIGHT LENGTH OF 1200mm.

(C) CONNECTOR

- FOR CONNECTOR DETAILS REFER TO STANDARD DUCT CONSTRUCTION SCHEDULE.

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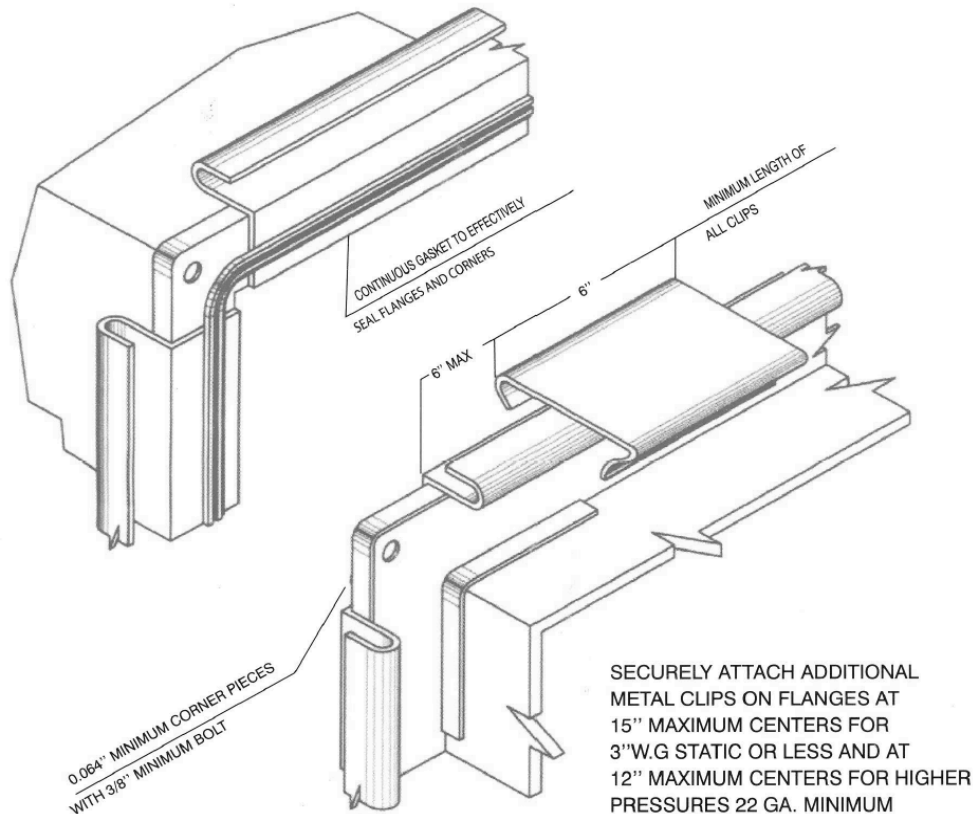
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FORMED FLANGE / TDC



JOINT T-24, FORMED FLANGE : MATING FLANGES ARE FORMED ON THE ENDS OF THE DUCT IN DOUBLE FLANGE STYLE TO CREATE A TEE SHAPE WHEN ASSEMBLED. 0.064" MINIMUM THICKNESS STEEL CORNER PIECES WITH 3/8" MINIMUM DIAMETER BOLTS SHALL BE USED TO CLOSE CORNERS. 1/4" BY 1/2" MINIMUM SIZE GASKETS OF SUITABLE DENSITY AND RESILIENCY SHALL BE CONTINUOUS AROUND THE JOINT AND SHALL BE LOCATED TO FORM AN EFFECTIVE SEAL. MATING FLANGES SHALL BE LOCKED TOGETHER BY 6" LONG CLIPS LOCATED WITHIN 6" OF EACH CORNER AND ALSO SPACED AT CENTERS NOT EXCEEDING 15" OF 3"W.G. OR LEES STATIC PRESSURE, NOR EXCEEDING 12" FOR 4",6" AND 10"W.G.

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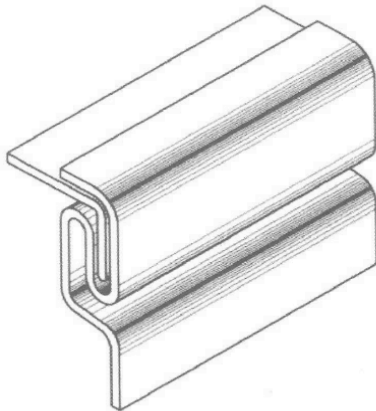
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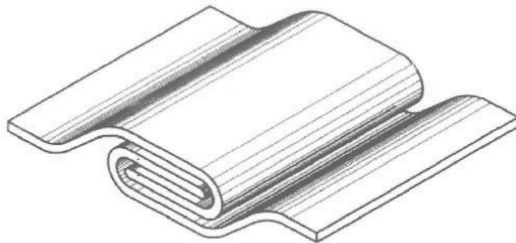
LONGITUDINAL SEAMS



ALSO SEAL THIS POCKET AT ENDS WHEN SEALING SEAMS.

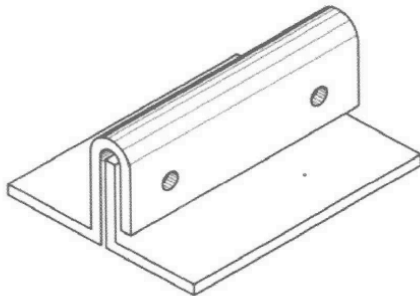
PITTSBURGH LOCK

PITTSBURGH SEAM : POCKET DEPTH VARIES FROM 1/4" TO 5/8" DEPENDING ON GAUGE OF METAL AND ROLL FROM EQUIPMENT. THE MOST COMMON SIZES ARE 5/6" AND 3/8" USED ON STRAIGHT DUCT AND FITTING.



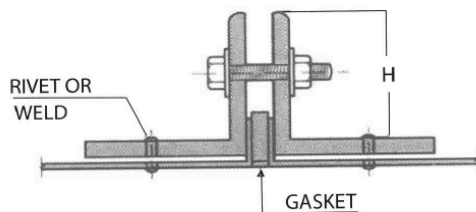
GROOVED SEAM

ALSO CALLED FLAT LOCK AND PIPE LOCK. GROOVED SEAM: TYPE ILLUSTRATED IS KNOWN AS PIPE LOCK, FLAT LOCK OR GROOVED SEAM.



STANDING SEAM

STANDING SEAM: UNLESS OTHERWISE REQUIRED BY THE APPLICATION, A 1" SEAM IS NORMALLY USED UP TO 42" DUCT WIDTH WITH 1 1/2" SEAMS FOR LARGER DUCTS, MAY BE USED ON INTERIOR OF THE DUCT WITH DUE CONSIDERATION FOR VELOCITY LEVEL, FASTEN TOGETHER AT ENDS AND 8" INTERVALS.



COMPANION ANGLES (CAULK OR GASKET)



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LONGITUDINAL SEAMS



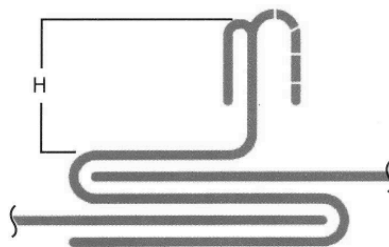
DRIVE SLIP



PLAIN "S" SLIP



HEMMED "S" SLIP



STANDING S

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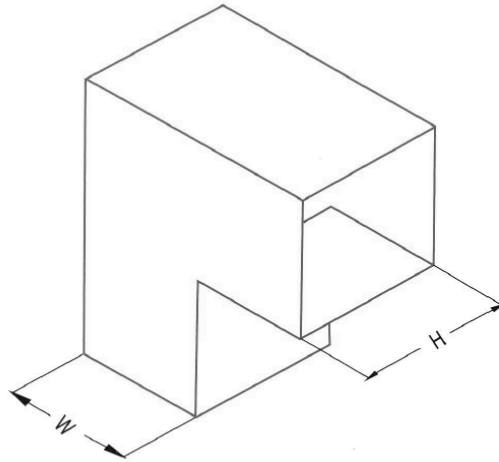
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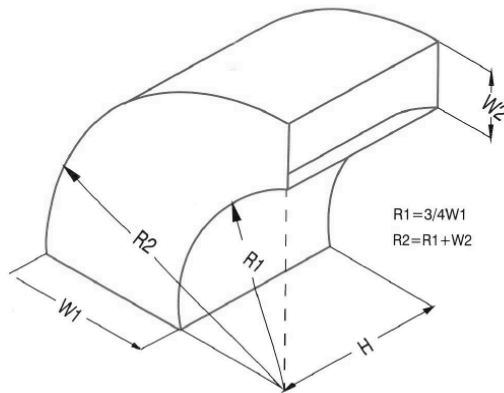
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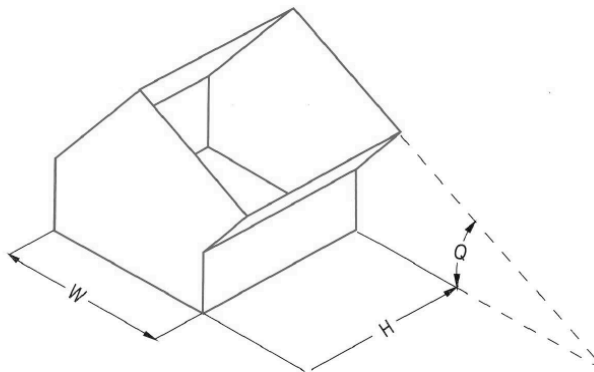
RECTANGULAR FITTINGS



SQUARE THROAT ELBOW
WITHOUT VANES



DUAL RADIUS ELBOW



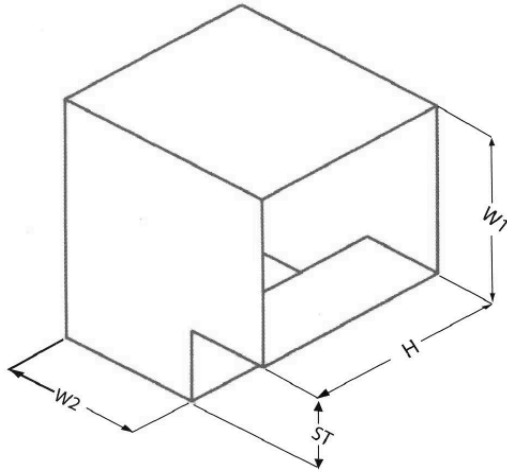
MITERED ELBOW



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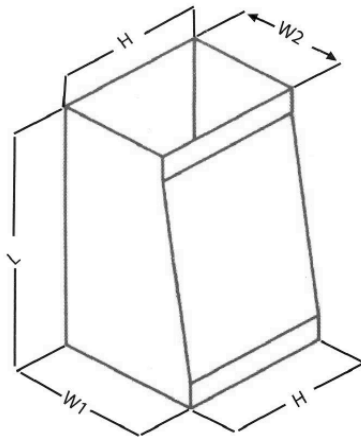
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RECTANGULAR FITTINGS



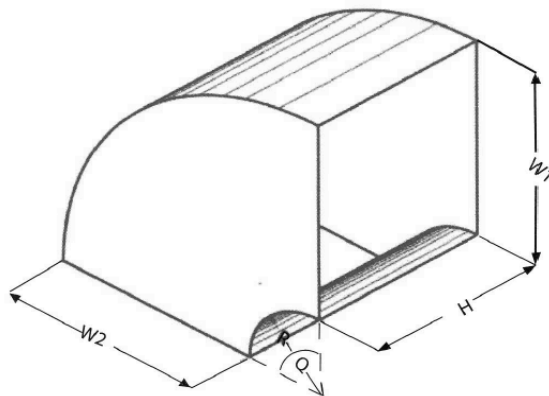
SQUARE THROAT ELBOW

W1: WIDTH ON END 1
W2: WIDTH ON END 2
H : DUCT HEIGHT
ST: SQUARE THROAT LENGTH.



STRAIGHT SIDE TRANSITION

W1: WIDTH ON END 1
W2: WIDTH ON END 2
H : DUCT HEIGHT
L : LENGTH
• IF (H) ON BOTH ENDS ARE NOT THE SAME, INDICATE ELEVATION.



RADIUS ELBOW VANES DEPENDING ON ELBOW WDTN.

W1: WIDTH ON END-1
W2: WIDH ON END-2
H: DUCT HEIGHT
R: RADIUS CENTERLINE ROAD
== $\frac{3W}{2}$ STD ROD.

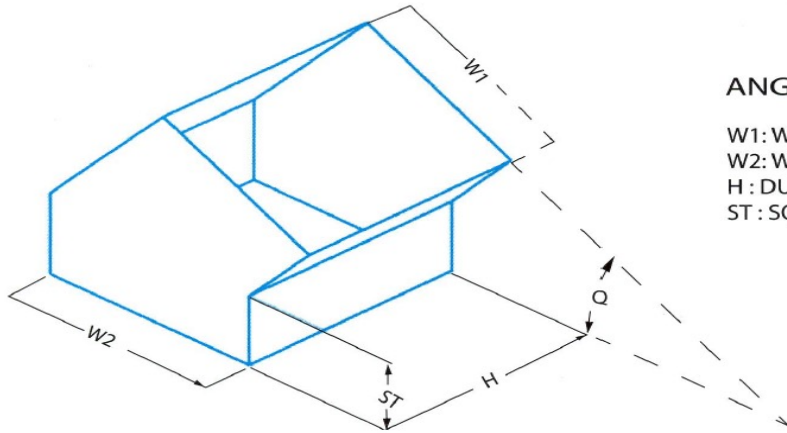
Q : DEGREE
• IF (H) ON BOTH ENDS ARE NOT THE SAME, INDICATE ELEVATION.



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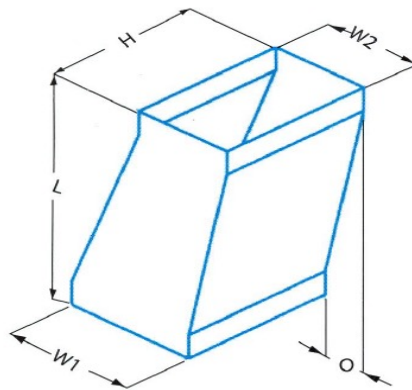
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RECTANGULAR FITTINGS



ANGLED ELBOW

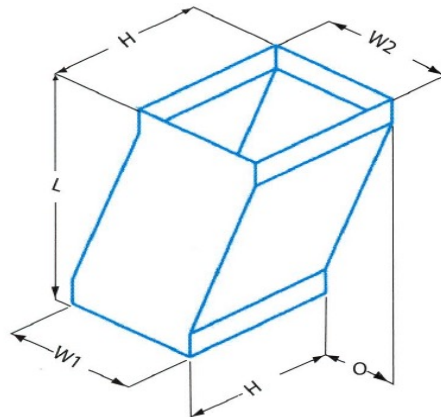
W1: WIDTH ON END 1
W2: WIDTH ON END 2
H: DUCT HEIGHT
ST: SQUARE THROAT LENGTH



DOGLEG OFFSET UNEQUAL ENDS

W1: WIDTH ON END 1
W2: WIDTH ON END 2
H: DUCT HEIGHT
L: LENGTH
O: OFFSET

- IF (H) ON BOTH ENDS ARE NOT THE SAME, INDICATE ELEVATION



DOGLEG OFFSET EQUAL ENDS

W1: WIDTH ON END 1
W2: WIDTH ON END 2
H: DUCT HEIGHT
L: LENGTH
O: OFFSET

- IF (H) ON BOTH ENDS ARE NOT THE SAME, INDICATE ELEVATION

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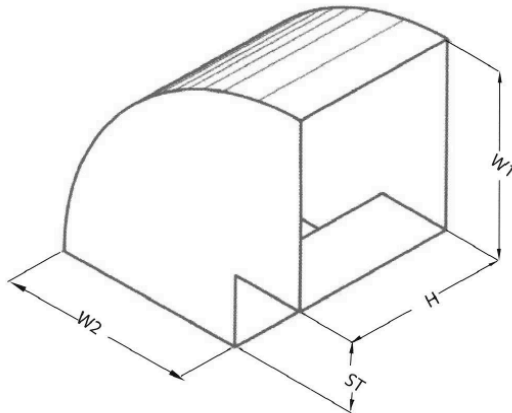
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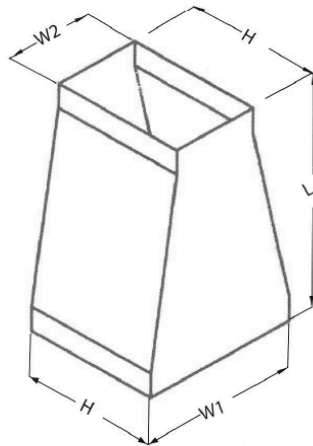
RECTANGULAR FITTINGS



SQUARE THROAT RADIUSED HEEL ELBOW

W1: WIDTH ON END 1
W2: WIDTH ON END 2
H: DUCT HEIGHT

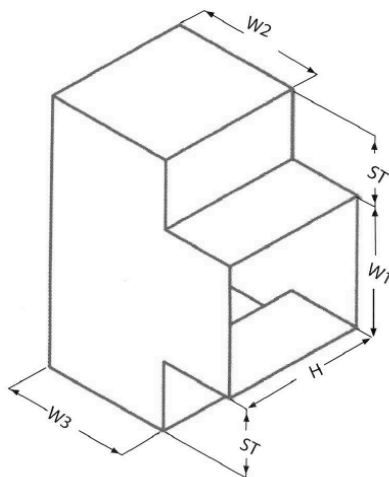
ST: SQUARE THROAT LENGTH



EQUAL SIDE TRANSITION

W1 : WIDTH ON END - 1
W2 : WIDTH ON END - 2
H : DUCT HEIGHT
L: LENGTH

* IF (H) ON BOTH ENDS
ARE NOT THE SAME,
INDICATE ELEVATION



TEE

W1 : WIDTH ON END 1
W2 : WIDTH ON END 2
W3 : WIDTH ON END 3
H : DUCT HEIGHT

ST : SQUARE THROAT LENGTH

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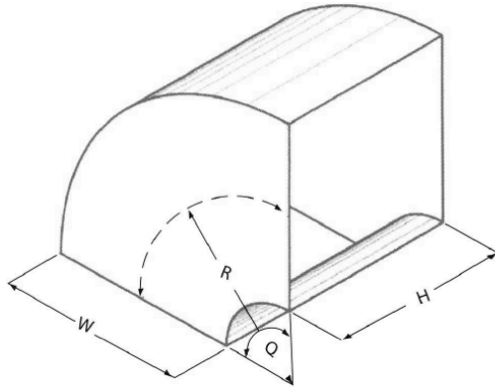
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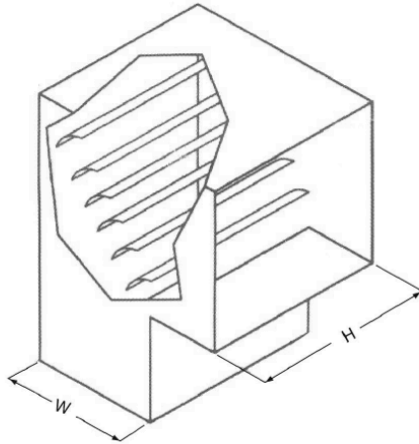
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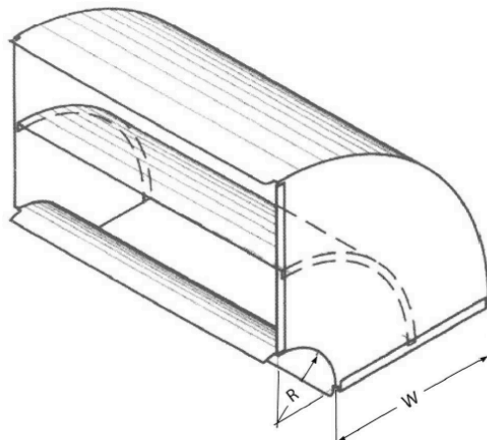
RECTAGULAR ELBOWS



RADIUS ELBOW
(CENTERLINE $R = \frac{3W}{2} = \text{STD RADIUS}$)



SQUARE THROAT ELBOW
WITH VANES.



SHORT BENDS

W=UP TO 300mm NO SPLITTER.
W=OVER 300mm UP TO 500mm,
1'NO. SPLITTER. ($\frac{W}{3}$).

W=OVER 500mm UP TO 1000mm,
2'NO. SPLITTER. ($\frac{W}{6}, \frac{W}{2}$).

W=OVER 1000 mm 3'NO
SPLITTER. ($\frac{W}{12}, \frac{W}{4}, \frac{W}{2}$).

- LONG BENDS - ($R=W$), NO SPLITTER REQUIRED.

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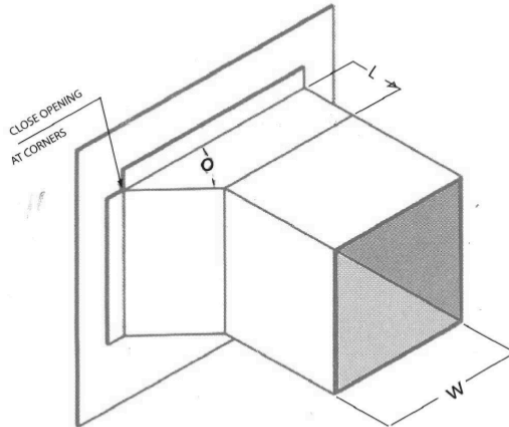
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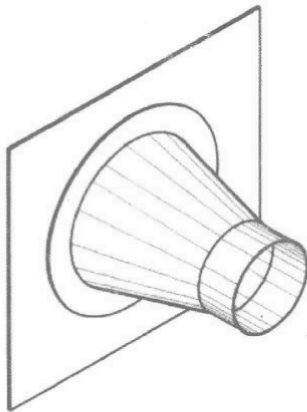
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BRANCH CONNECTIONS

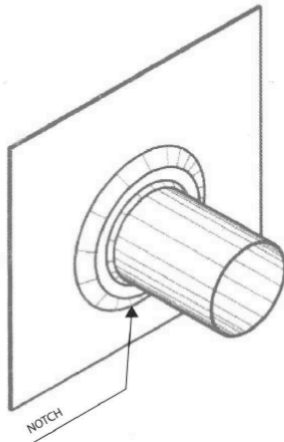


STRAIGHT TAP CONNECTION

45 DEGREE ENTRY $Q=45^\circ$
 $L = 1/4W, 4'' \text{ MIN.}$



CONICAL TAP CONNECTION



SPIN IN TAP CONNECTION

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