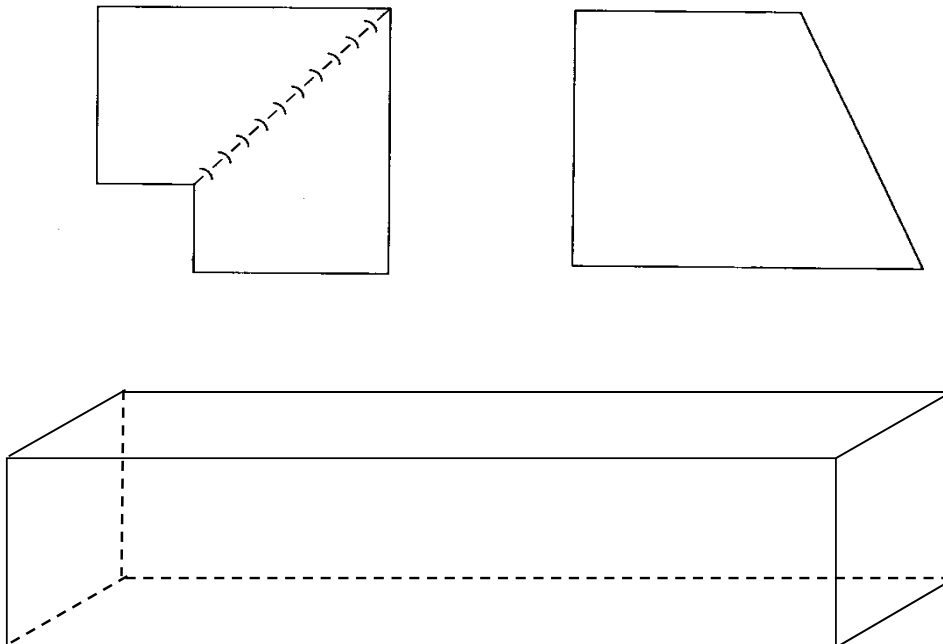


LANGDON Inc.

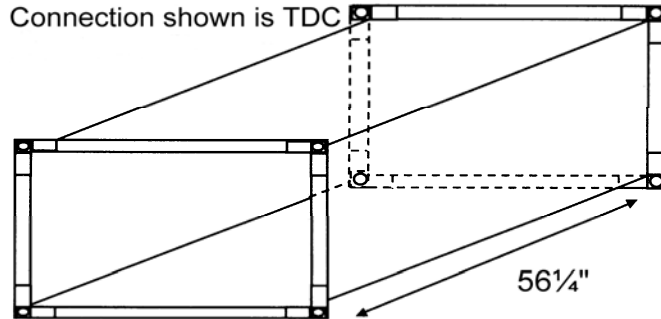
Rectangular Duct & Fittings

ALUMINUM, GALVANIZED, GALVANNEAL, PVC AND STAINLESS STEEL

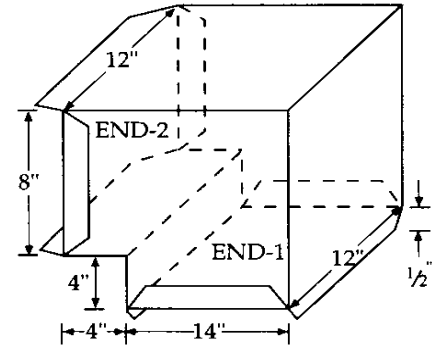


9865 WAYNE AVENUE • CINCINNATI, OHIO 45215
PHONE (513) 733-5955 FAX (513) 733-8050

Rectangular Duct & Fitting Specifications



CONNECTION SHOWN IS S & DRIVE



Static Pressure: *System* _____ *Supply* _____ *Return* _____

General : Provide static pressure, quantity, type, size, liner type (if required) and connection for fittings and ductwork.

Construction : Rectangular duct and fittings to be fabricated in accordance with 2005 SMACNA "HVAC Duct Construction Standards, Metal and Flexible. Conform to the requirement in the referenced standards for metal thickness, conduits or tie rod applications and joint types. External reinforcement is to be field installed and coordinated with duct hangers.

Metal : Galvanized Steel of ASTM Standard A527 and 2005 SMACNA Standards.

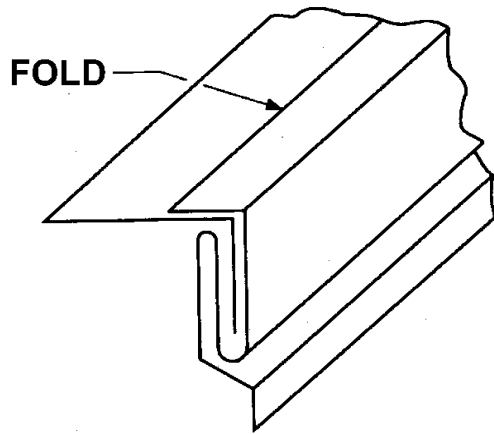
Fittings : Bead duct sizes that are 19" and larger, longitudinal seam shall be pittsburgh lock. Fabricate elbows, transitions, offsets, mitered elbows (turning vanes are available by request) and 90° branch connections in accordance with SMACNA 2005 standards.

Ductwork : Bead duct sizes that are 19" and larger, longitudinal seam shall be pittsburgh lock. Standard TDC ductwork length is 56 1/4" and S & Drive is 59".

Connections : Ductwork and fittings are S & Drive or TDC flange connection.

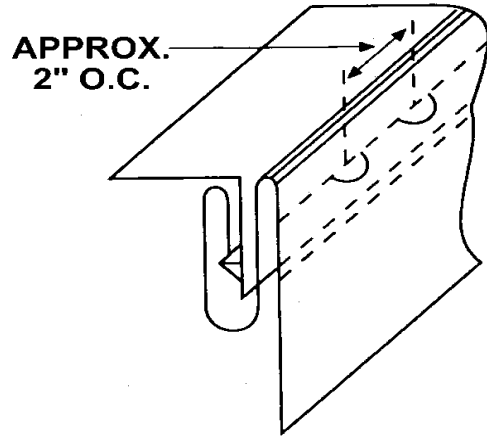
Liner : 1" thick acoustical liner (Unless specified otherwise). Liner to be secured with adhesive and mechanical fasteners per SMACNA.

Sealant : Non- hardening, non- migrating mastic or liquid elastic sealant specifically for sealing fittings or longitudinal seams in ductwork. (Seal class A or B, N/A for seal class C and 2" W.G.)

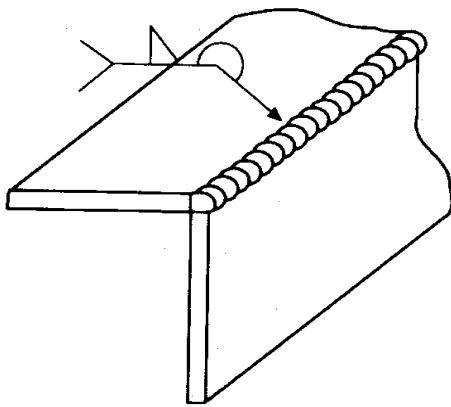


**PITTSBURGH LOCK SEAM
CONSTRUCTION**

**Standard for straight duct and fittings 26 to 18 Gauge*

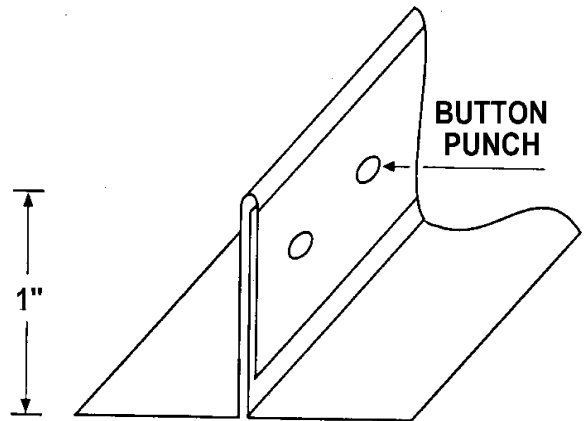


**BUTTON PUNCH SNAP LOCK
CONSTRUCTION**



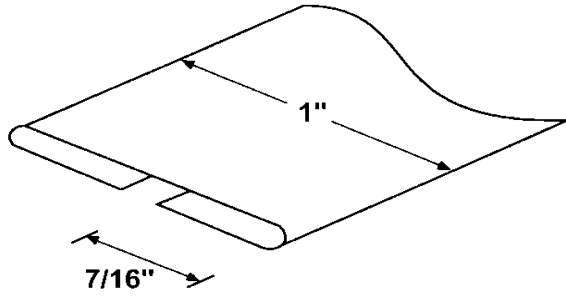
**WELDED
CONSTRUCTION**

**Standard for straight duct and fittings 16 Ga. to 1/4\" plate*

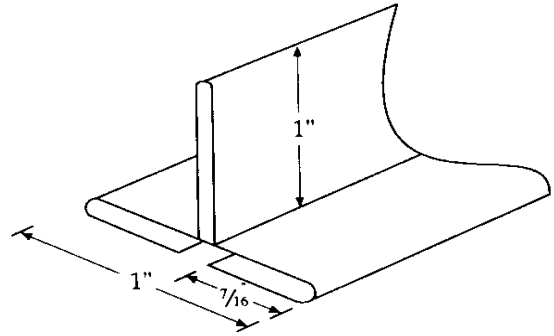


**STANDING SEAM
CONSTRUCTION**

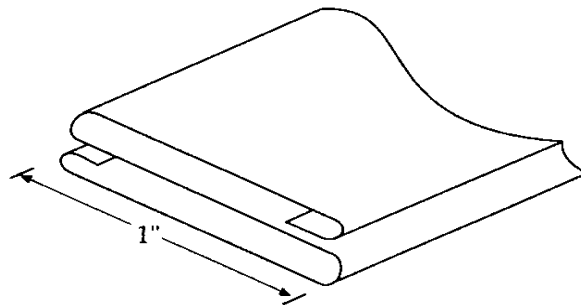
** For larger ductwork and fittings*



FLAT DRIVE CLEAT CONNECTION

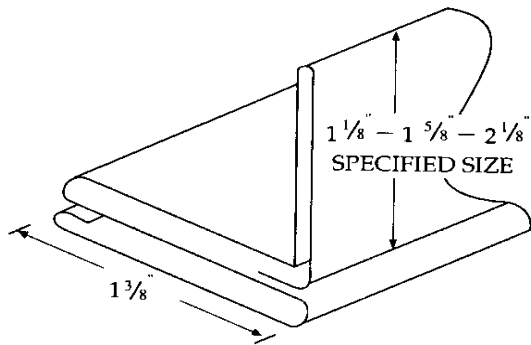


STANDING DRIVE CLEAT



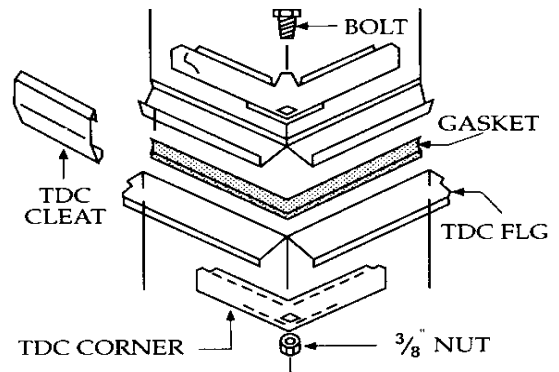
FLAT "S" CLEAT CONNECTION

*NOTE UNDERLINE DUCTWORK "S" DIMENSION



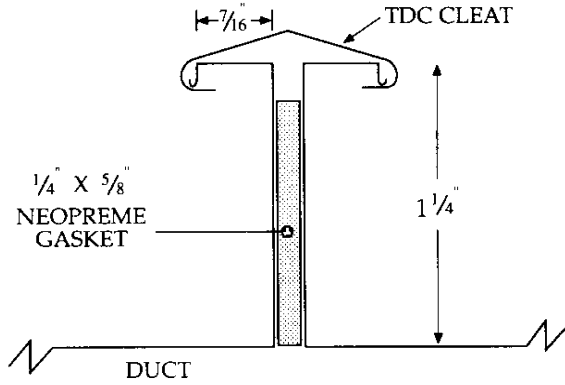
STANDING "S" CLEAT CONNECTION

* NOTE UNDERLINE DUCTWORK "S" DIMENSION

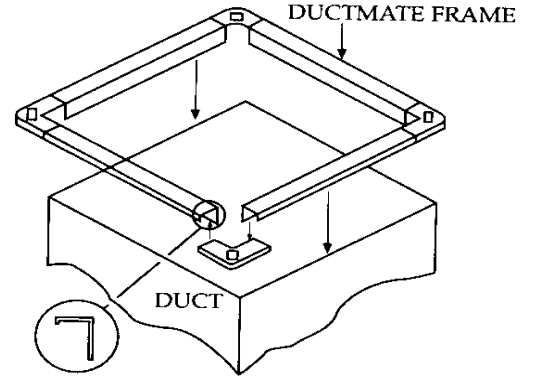


TRANVERSE DUCT CONNECTION

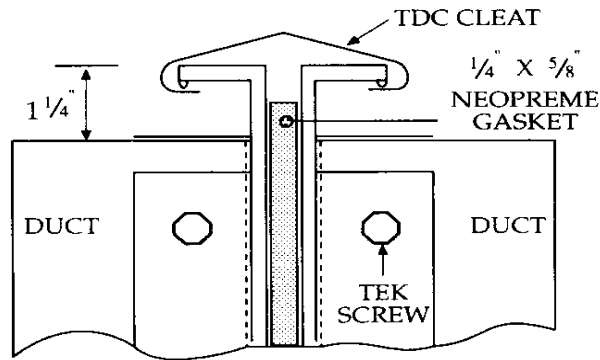
TDC 26 GAUGE TO 18 GAUGE DUCTWORK



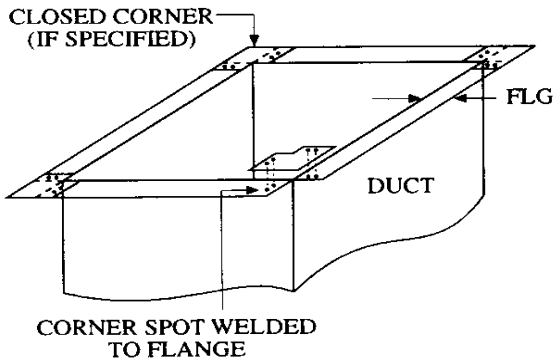
TRANVERSE DUCT CONNECTION



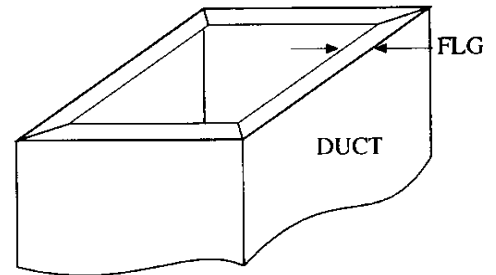
DUCTMATE CONNECTION



**DUCTMATE CONNECTION
(SECTION)**

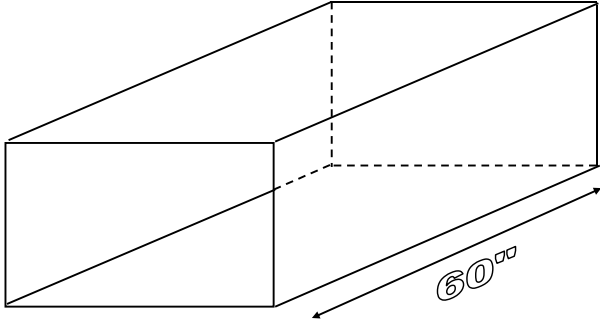


FLANGE OUT DUCT CONNECTION



FLANGE IN DUCT CONNECTION

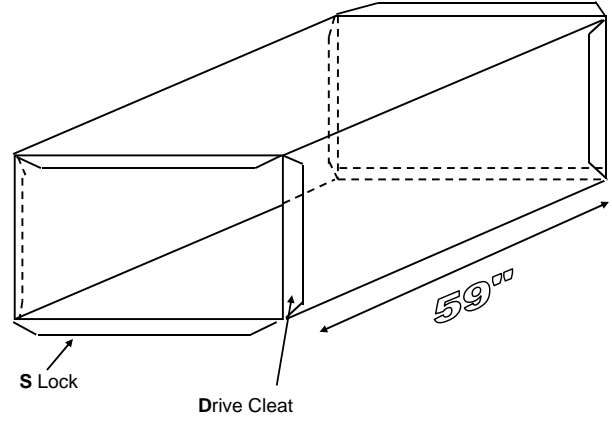
**STANDARD FINISH LENGTH
RECTANGULAR DUCT - RAW**



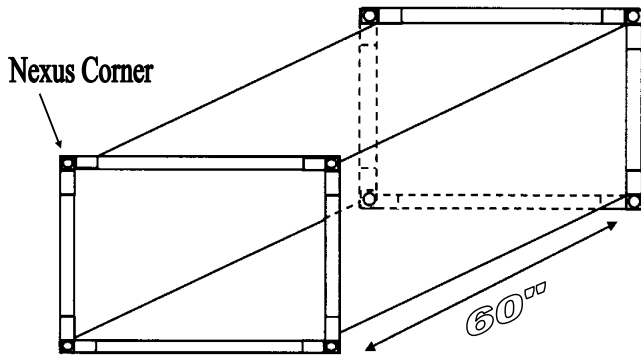
SPECIFY

- Material
- Gauge
- Seam
- Connection

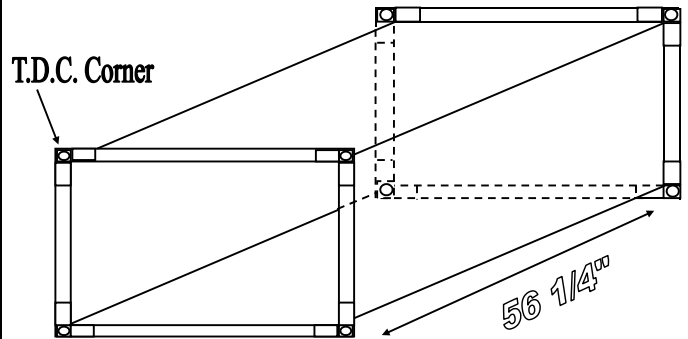
**STANDARD FINISH LENGTH
RECTANGULAR DUCT - S&D CONNECTION**



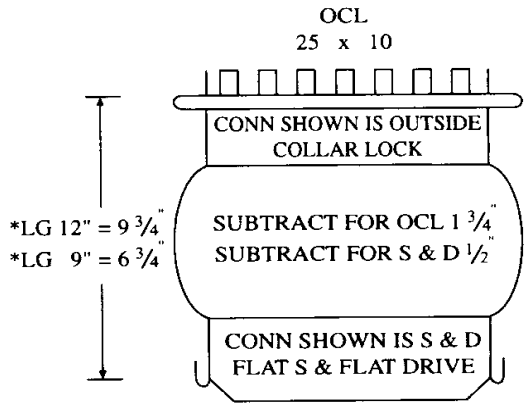
**STANDARD FINISH LENGTH
RECTANGULAR DUCT - NEXUS CONNECTION**



**STANDARD FINISH LENGTH
RECTANGULAR DUCT - T.D.C. CONNECTION**



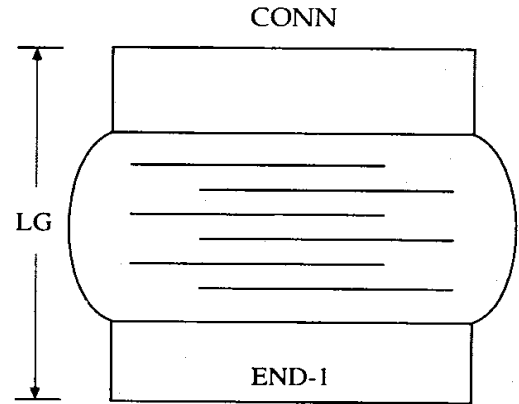
EXAMPLE



*LG 12" = 9 3/4"
*LG 9" = 6 3/4"

* NOTE STOCK LENGHT 9" AND 12"

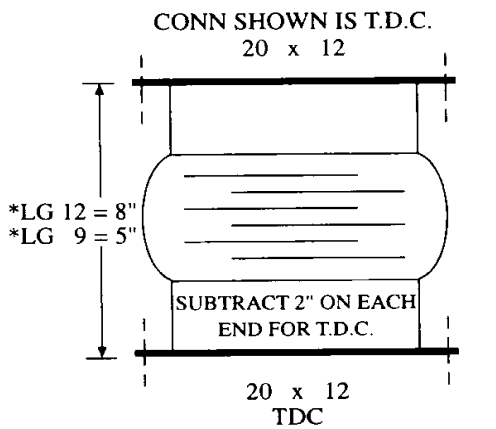
FLEX CONNECTION



SPECIFY
● Connection
● Length

FLEX CONNECTION

EXAMPLE

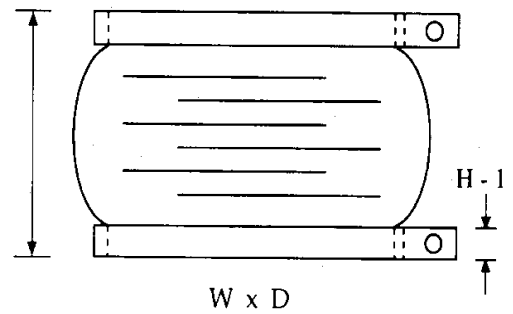


*LG 12 = 8"
*LG 9 = 5"

* NOTE STOCK LENGHT 9" AND 12"

FLEX CONNECTION

(SPECIFY STRAP GUAGE AND HOLE DIA)



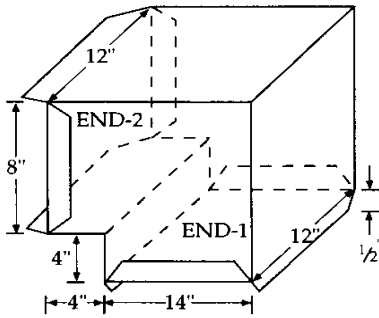
* NOTE STOCK LENGHT 6", 8", 10", 12"

SPECIFY
● Length

**FLEX CONNECTION
WITH HOLD DOWN STRAPS**

EXAMPLE

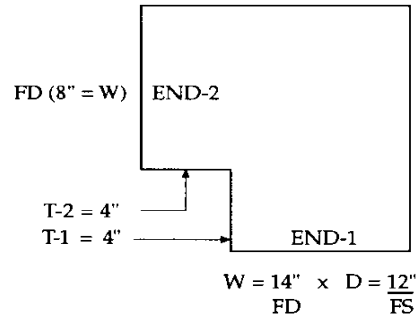
CONNECTION SHOWN IS S & DRIVE



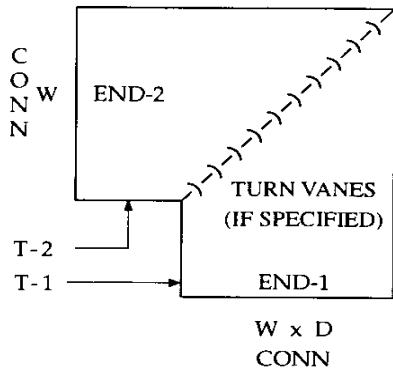
SQUARE 90° ELBOW

EXAMPLE

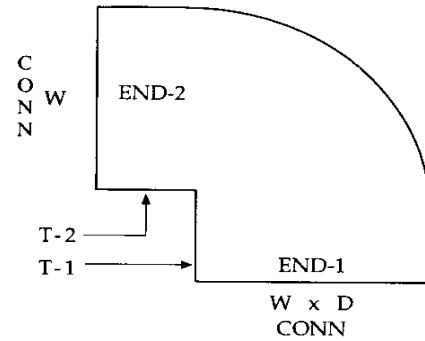
CLEAT SHOWN IS FLAT-S & FLAT DRIVE



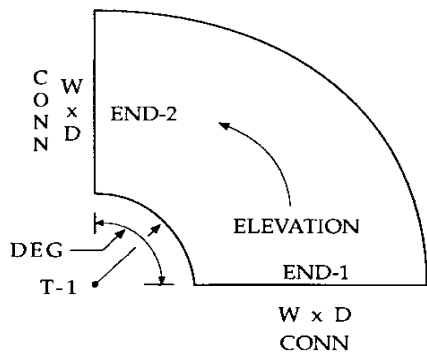
SQUARE 90° ELBOW



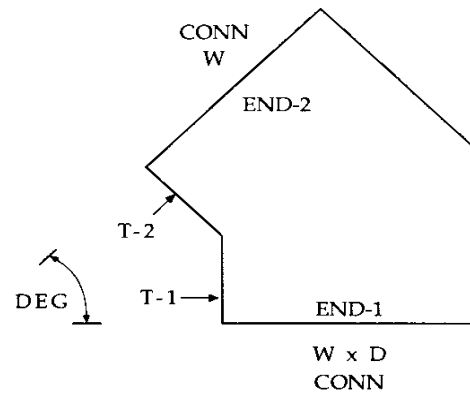
SQUARE 90° ELBOW



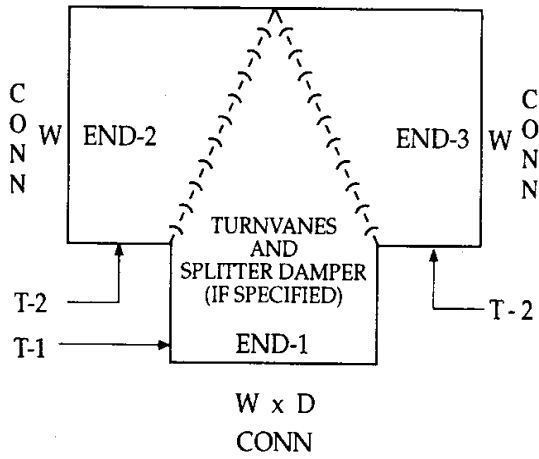
SQUARE THROAT RADIUS HEEL ELBOW



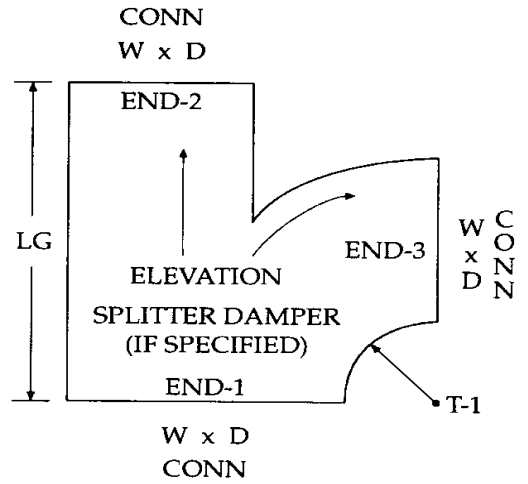
RADIUS ELBOW



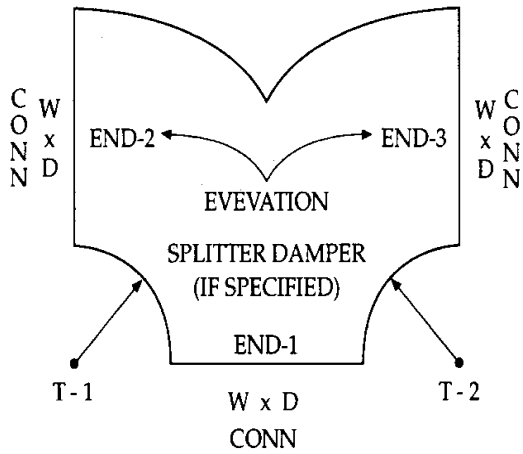
ANGLE ELBOW



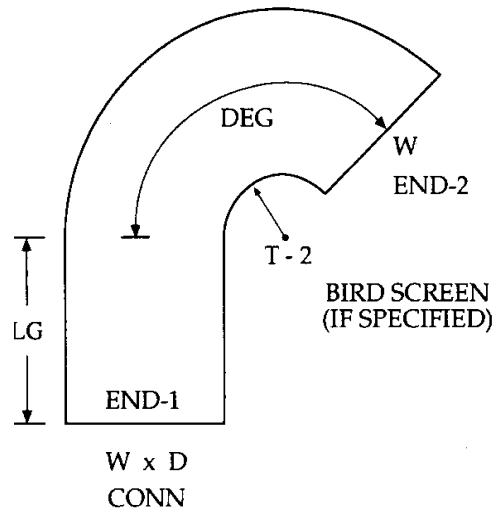
SQUARE TEE



RADIUS SIDE TAKEOFF



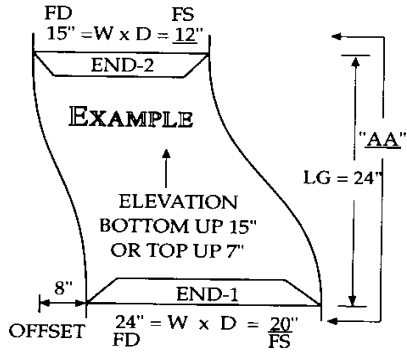
RADIUS TEE



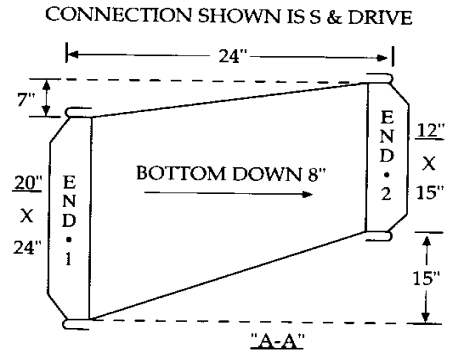
RADIUS GOOSENECK

EXAMPLE

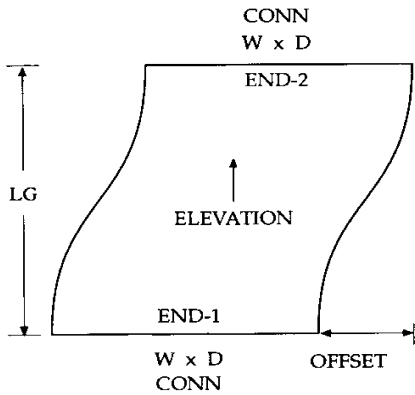
CLEAT SHOWN IS FLAT S AND FLAT DRIVE



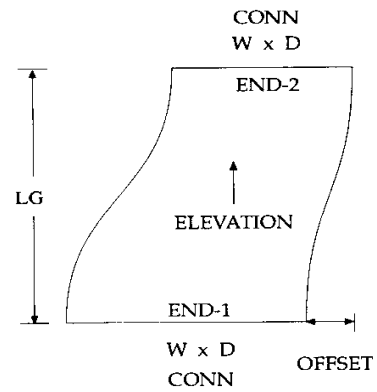
TRANSITION R to L / O.G. OFFSET



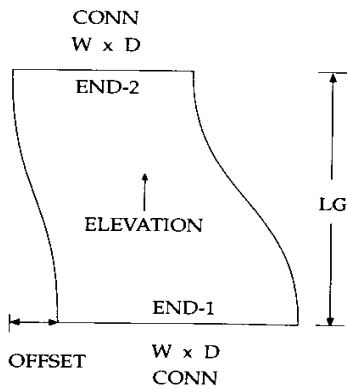
TRANSITION R to L / O.G. OFFSET



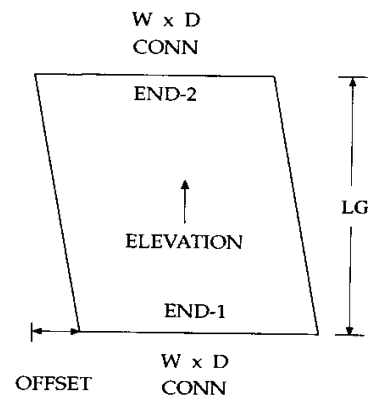
LEFT to RIGHT / O.G. OFFSET



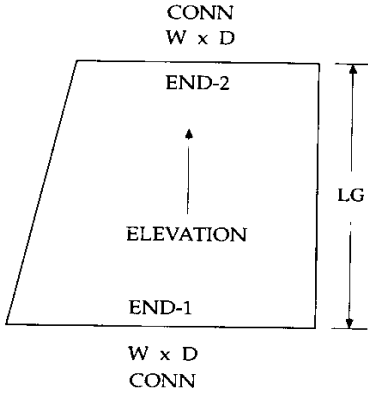
TRANSITION LEFT to RIGHT / O.G. OFFSET



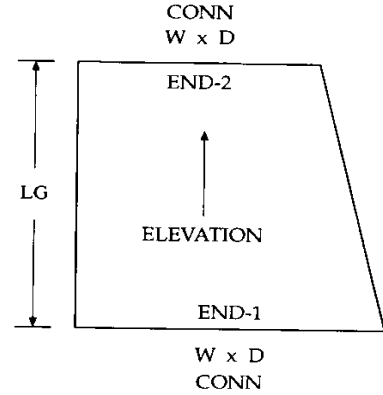
TRANSITION RIGHT to LEFT / O.G. OFFSET



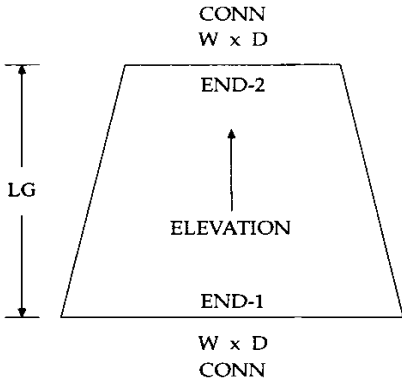
RIGHT to LEFT / DOG LEG OFFSET



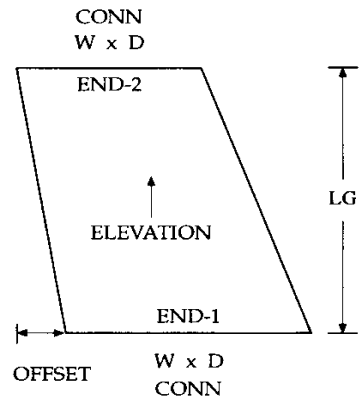
STRAIGHT RIGHT TRANSITION



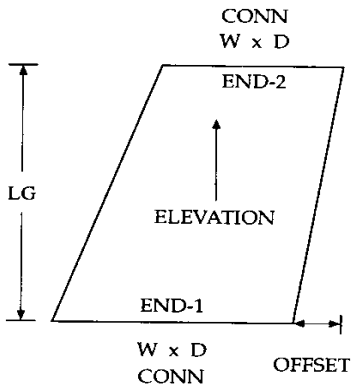
STRAIGHT LEFT TRANSITION



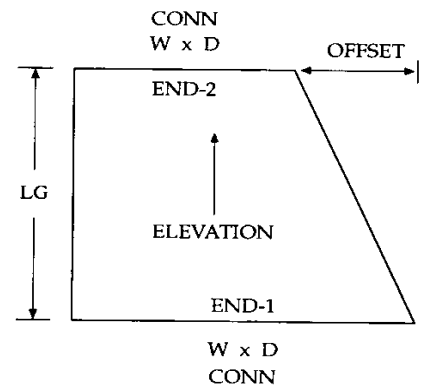
CENTERLINE TRANSITION



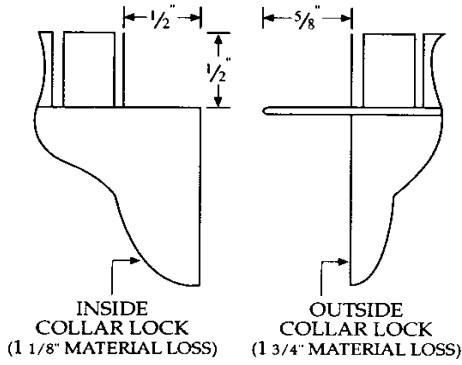
TRANSITION RIGHT to LEFT / DOG LEG OFFSET



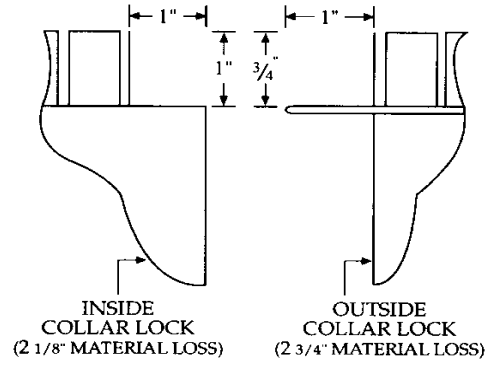
TRANSITION LEFT to RIGHT / DOG LEG OFFSET



TRANSITION OFFSET

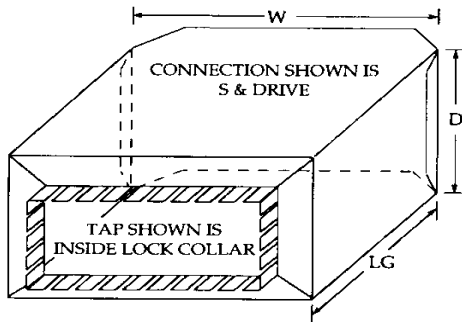


SMALL TAP COLLAR CONNECTION DETAIL

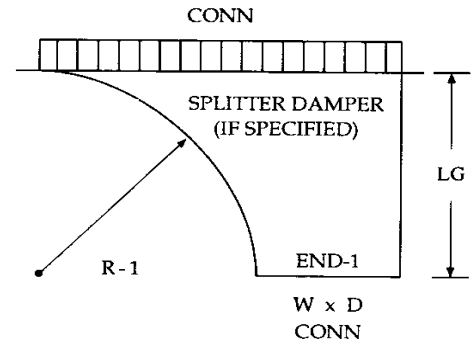


LARGE TAP COLLAR CONNECTION DETAIL

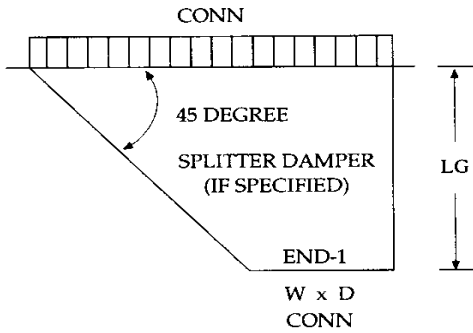
EXAMPLE



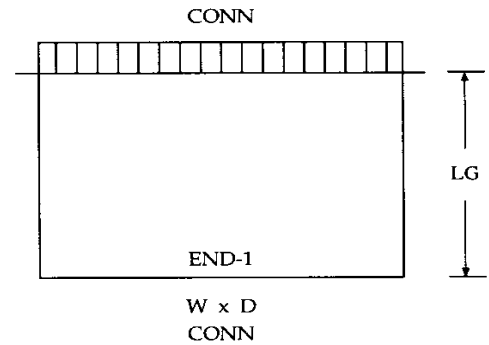
TAP COLLAR



RADIUS TAP

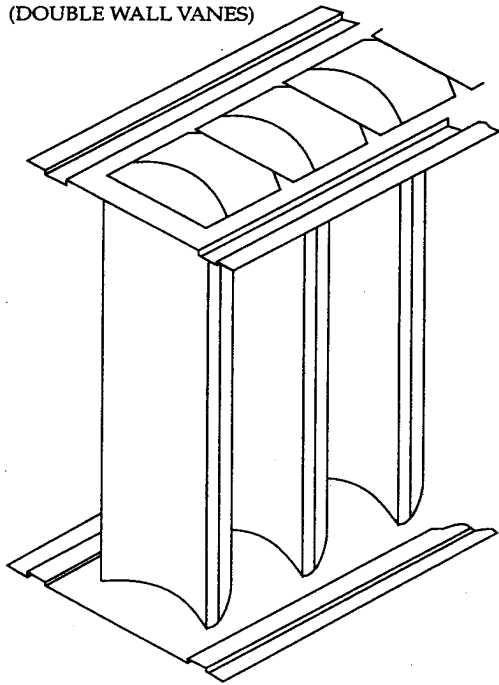


45° ANGLE TAP

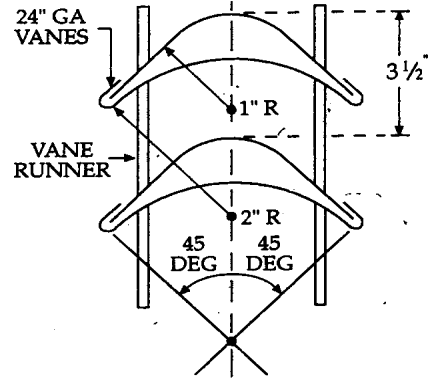


STRAIGHT TAP

(DOUBLE WALL VANES)



PLAN VIEW



DETAIL OF VANE RUNNER

