



NO-HUB JOINT INSTALLATION AND TESTING

**Couplings For
Hubless Cast Iron
Soil Pipe and
Fittings**



U. S. Patent 4,358,839
Canada Patent 1,233,910

BRACING:

To prevent movement, horizontal pipe and fittings 5" and larger should be suitably braced by the use of blocks, rodding, or other suitable methods at every branch or change of direction.

TEST:

For best results, testing of one floor (ten feet) at a time is recommended. If more than one floor at a time is tested, the system should be properly restrained; all bends, changes of direction, and ends of runs should be restrained.

COUPLING MATERIALS:

TYLER NO-HUB sealing sleeves are made of Neoprene conforming to ASTM C564. Chemical characteristics of Neoprene assure that the gasket will not decay or deteriorate from contact with effluents in the pipe or chemicals in the soil or air around the pipe.

MATERIAL SPECIFICATION:

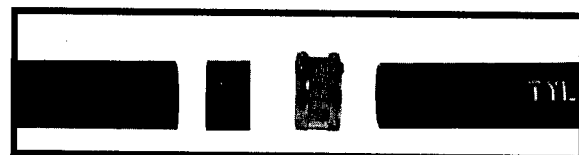
BANDS—Type 301 AISI Stainless Steel—Minimum tensile 165,000 psi.

SCREW HOUSING—Type 301 AISI Stainless Steel.

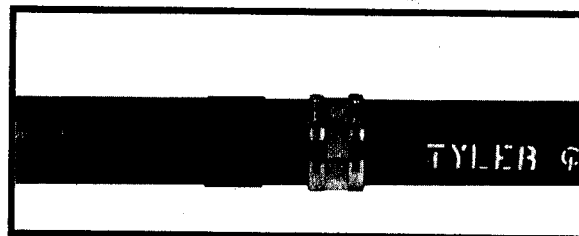
SCREW—Type 305 AISI Stainless Steel; 5/16 hex head slant shoulder.

SHIELD—Type 301 AISI Stainless Steel—Bright annealed; Rockwell B-85 minimum.

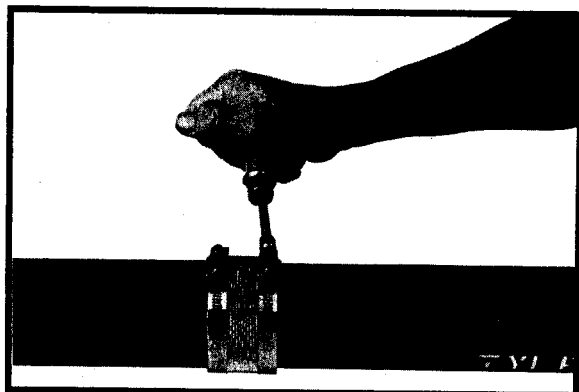
SEALING SLEEVE—High quality neoprene elastomer compound, durometer 70 ± 5 per ASTM D 2240



1. Loosen screws, separate shield and sleeve. Slip shield over one spigot.



2. Insert spigots into sleeve. Be sure that both spigots butt on center retainer inside sleeve.



3. Position shield over sleeve, tighten screws alternately to proper torque.

STANDARD COUPLING JOINING SUGGESTIONS

This is a guideline for connecting hubless pipe and fittings with TYLER ϕ NO-HUB® couplings. These suggestions are based upon accepted industry standards and practices. More detailed information about coupling dimensions, installation practices and restraints may be found in the cast iron soil pipe industry publication CISPI-310.

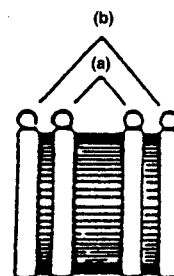
BEFORE JOINING

1. TYLER couplings should be installed with a calibrated torque wrench set at 60 inch pounds (1 1/2"-10" or 80 inch pounds (12" & 15").
2. When using field-cut pipe, the ends should be cut square.
3. With all sizes, the pre-joining procedure is:
 - a. Install the neoprene sealing sleeve on one end of the pipe or fitting to be joined, then
 - b. Place the stainless steel shield on the other end, and
 - c. Insert both ends into the sealing sleeve until they butt against the molded center stop.
 - d. Center the shield over the sealing sleeve and tighten all clamps to snug fit. For final tightening, see below:



1 1/2", 2", 3", 4" SIZES

A. Tighten bands alternately and firmly.



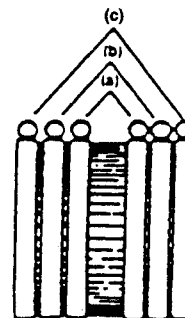
5", 6", 8", 10" SIZES

- A. First, tighten inner bands (a).
- B. Then, tighten the outer bands (b).

12" and 15" SIZES

(Note: torque to 80 inch pounds.)

- A. First, tighten inner bands (a).
- B. Next, tighten the center set of bands (b).
- C. Finally, tighten the outer bands (c).

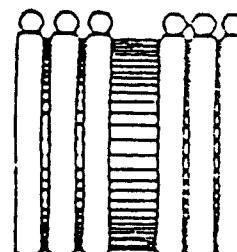


Min-Max Note:

When working with min/max conditions on the OD of pipe and fittings, follow this tightening sequence:

First torque the minimum side, 3-2-1 and 3-2-1 again. Then torque the maximum side, 4-5-6 and 4-5-6 again. Finally, torque 2-1 on the minimum side, and 4-5-6 on the maximum side.

MIN. 1 2 3 MAX. 4 5 6





CUTTING INSTRUCTIONS FOR CAST IRON SOIL PIPE

Cast Iron Soil Pipe may vary somewhat in toughness and resiliency. Usually, best cuts are made by using a twin-lever snap cutter or a ratchet type cutter equipped with a chain and equally spaced beveled cutting wheels.

The following cutting procedure has been found to produce consistently good cuts:

1. Position chain around pipe so that the maximum number of wheels are in contact with the pipe. Excessive space between the first and last wheel in contact with the pipe is almost certain to produce a poor quality cut.
2. Score the pipe before the final pressure is applied to complete the cut. Apply only enough pressure to make the cutter wheels indent the pipe.
3. Release the pressure and rotate tool a few degrees; then apply a quick final pressure to complete the cut. If a piece of pipe is unusually tough, score the pipe several times and a good cut can be made.

NOTE: If the cutter wheels become flattened or dull, it will be very difficult (if not impossible) to obtain a satisfactory cut. The life of the chain can be extended by reversing the chain to obtain equal use of all the wheels. It is also important to keep the mechanical features of a cutter in good working order.

PIPE SPECIFICATION

TYLER hubless cast iron soil pipe and fittings comply with ASTM A888 and/or CISPI Standard 301, (latest revision); and comply with Federal Specification WW-P-401E (Type III).