



TY-CON™

Conductive Gasket

for use in TYTON JOINT® and HDSS® Pipe



PIPE
FABRICATION
RESTRAINED JOINTS
FITTINGS
GASKETS
COATINGS & LININGS



U.S. PIPE

A QUIKRETE® COMPANY

CONTENTS

GENERAL INFO

TY-CON Gasket 4"–12"	2
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ASSEMBLY INSTRUCTIONS

Assembly Instructions	3
Alternate Methods of Assembly	5
Field-Cut Pipe	6

SPECIFICATIONS

Pipe Diameters	7
Bell Dimensions	8

NOTES	9
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The logo for U.S. PIPE, featuring the letters "U.S." in a large, bold, white sans-serif font above the word "PIPE" in a smaller, bold, white sans-serif font. The text is set against a solid red rectangular background. The entire logo is positioned in the bottom right corner of the page, partially overlapping a background image of water splashing.

U.S.
PIPE

GENERAL INFO

GASKETS 4"–12"

ANSI/AWWA STANDARDS

ANSI/AWWA C111/A21.11, Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.

Tyton Gaskets are furnished in accordance with ANSI/AWWA C111/A21.11.

The patented U.S. Pipe TY-CON Conductive Gaskets are for use in Ductile-Iron pipe and fittings provided with the time proven TYTON JOINT®, and HDSS® restrained joint. TY-CON gaskets are intended to provide pipe joint conductivity for thawing service connections in cold climates.

The TY-CON Gasket utilizes Copper-Bronze segments molded into the gasket to make contact between the bell and spigot. This provides a reliable electrical current path that is not affected by soil, or pipe movements, while maintaining the full range of deflection capabilities.

The TY-CON Conductive Gasket has a 350-psi working pressure rating and are available in Styrene-Butadiene Rubber (SBR) with a soft rubber bulb and harder heel joined in a strong vulcanized bond. No reclaimed rubber is used in the process. All gaskets meet the requirements of the National Sanitation Foundation (NSF) Standard ANSI/NSF-61, Drinking Water System Components – Health Effects. The TY-CON Gasket conforms to ANSI/AWWA C111/A21.11

The gasket material has a maximum service temperature rating of 150°F and is used as the predominant gasket material for Drinking Water, Sea Water, Sanitary Sewer, Reclaimed Water, Raw Water, & Storm Water.

NOTE:

The TY-CON gasket should not be used as a joint bonding method for Cathodic Protection (CP) applications or as a joint restraint device.

U.S. Pipe does not advise, or make suggestions, or give details for Amperage or time limits to use to thaw frozen water lines.

ASSEMBLY INSTRUCTIONS

INSERTION OF GASKET *(Figure 1)*

Before inserting the TY-CON gasket, lightly remove any heavy asphalt coating from the Retainer bead of the bell, and the spigot as shown by the red arrows. (Figure 5a and 5b, page 4) to the dimensions on table. (Page 4) Use a stiff/course wire brush, or equivalent, to buff off/remove any heavy or thick asphalt from the locations where the copper segments will be positioned at the 12 and 6 o'clock positions. After this area is prepared, the gasket seat should be thoroughly inspected to be certain it is clean and free of all foreign matter in the socket, i.e., mud, sand, cinders, gravel, pebbles, trash, frozen material, etc. in the gasket seat that may cause a leak.

The gasket must be wiped clean with a clean cloth, flexed, and then placed into the socket with the rounded bulb end entering first. Looping the gasket in the initial insertion will facilitate seating the gasket heel evenly around the retainer seat. 4" and 6" will require two loops to install the gasket and 8" through 12" sizes require only one loop. (Figure 1) Push the loop down to finish installation of the gasket. When installing the TY-CON gasket in sub-freezing weather, the gaskets must be kept at a temperature of at least 40°F, prior to their use. This can be accomplished by storing the gaskets in a heated area or keeping them immersed in a tank of warm water. If the gaskets are kept in warm water, they should be dried before placing in the pipe socket.

APPLICATION OF LUBRICANT *(Figure 2)*

After installation of the gasket, a thin film of Tyton Joint Lubricant should be applied to the inside surface of the gasket, which will come in contact with the plain end of the pipe. In warm, dry weather conditions, the lubricant can dry out, especially when applied to warm or hot pipe. It may be necessary to add a small amount of water to hydrate the lubricant. Only Tyton Joint Lubricant should be used. Spray-on lubricants should not be used, as they may not provide sufficient lubricity. The plain end of the pipe must be cleaned of all foreign matter on the outside from the end to the two assembly stripes. Frozen materials may cling to the pipe in cold weather and must be removed. A thin film of lubricant is applied to the outside of the plain end for about 3" back from the end. Do not allow the plain end to touch the ground or trench side after lubricating since foreign matter may adhere to the plain end and cause a leak.

INITIAL ENTRY OF PLAIN END IN SOCKET *(Figure 3)*

The plain end of the pipe should be aligned and carefully entered into the socket until it just makes contact with the gasket. This is the starting position for the final assembly of the joint. Note the two painted stripes on the plain end.

COMPLETELY ASSEMBLED JOINT *(Figure 4)*

Insert the spigot until the back edge of the first painted stripe (or the assembly mark) is flush with the bell face. Joint deflection may be achieved after the pipe is fully inserted.

ASSEMBLY GUIDE

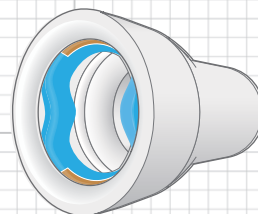


Figure 1

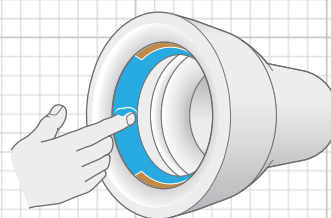


Figure 2

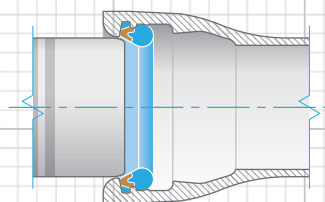


Figure 3

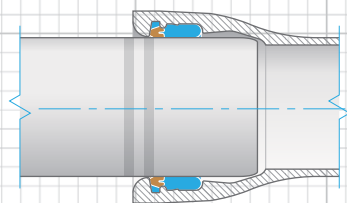


Figure 4

CAUTION: The inside of the socket, the gasket, and the plain end to be inserted must be kept clean throughout the assembly. Joints are only as watertight as they are clean. If the joint is somewhat difficult to assemble, inspect for proper gasket positioning, adequate lubrication, and foreign matter in the joint.

ASSEMBLY INSTRUCTIONS

Figure 5a

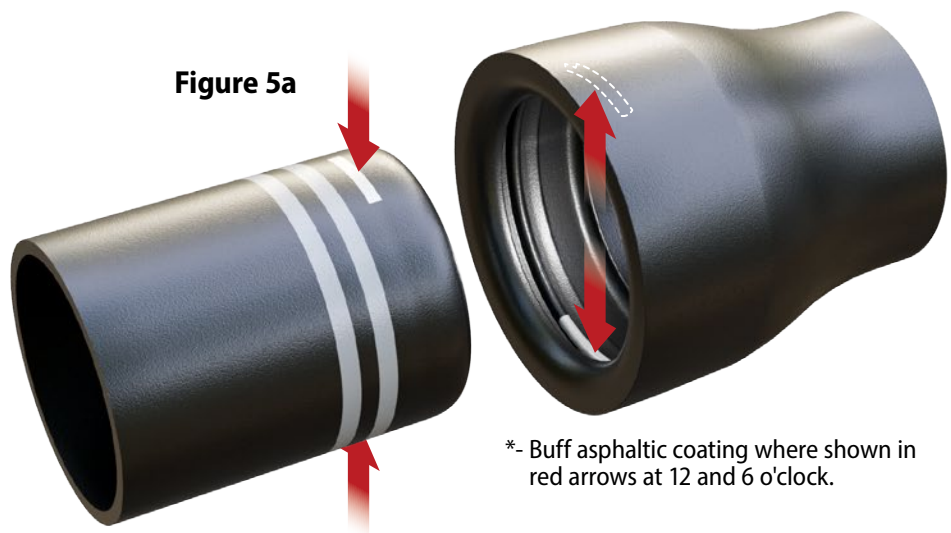


Figure 5b

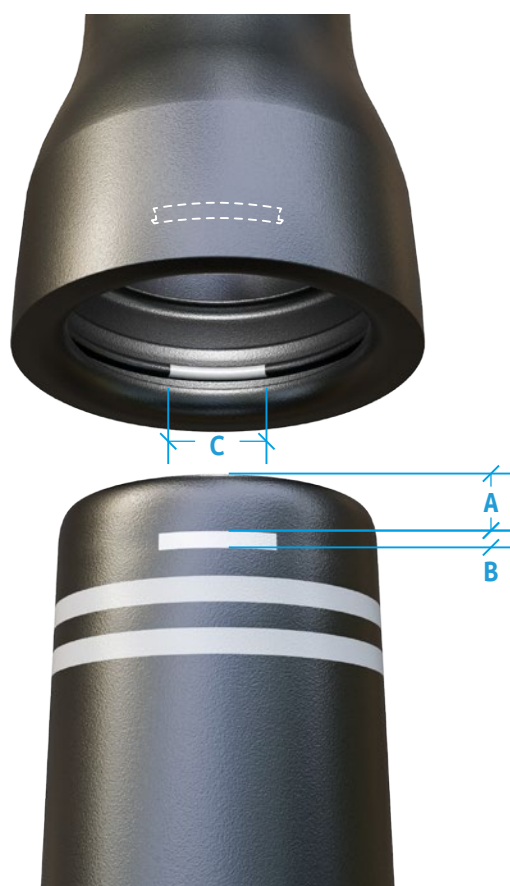


Table			
Size	A (Inch)	B (Inch)	C (Inch)
4	3/4	5/8	3
6	3/4	5/8	3
8	1	3/4	3
10	1-1/8	3/4	3
12	1-1/8	3/4	3

NOTE: Installation of TY-CON gasket will be similar in both TYTON JOINT pipe, and HDSS restrained joint pipe.

NOTES

NOTES

U.S. Pipe, A Quikrete® Company, is the leading manufacturer and a principal supplier of highly engineered ductile iron pipe and fabrication in the United States and Canada. Providing custom solutions to owners, engineers and contractors for even the most demanding applications, including water transmission and distribution lines, plant piping, intake and outfall lines, and other diverse applications.

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Materials and specifications are subject to change
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Our products are manufactured in conformance
with national standards so that our customers
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appurtenances that do not comply with recognized
standards may jeopardize the performance and
longevity of the project.



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