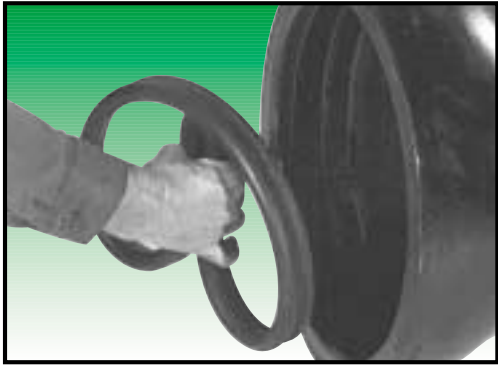


Griffin Push-On Joint Ductile Iron Pipe Push-On Joint Assembly

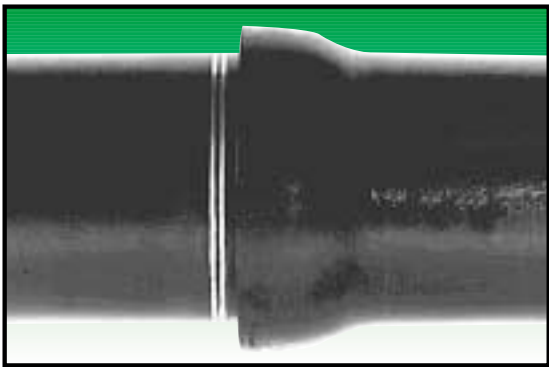
1. Thoroughly remove all traces of foreign material from the gasket groove and bell socket. Foreign material under the gasket may cause a leak. Make a small loop in the gasket and insert in socket. For pipe sizes larger than 20", it may be necessary to make 2 loops in the gasket (6 and 12 o'clock). Assure that the gasket faces the correct direction and is properly seated. **Note:** in cold weather, gaskets should be warmed to facilitate installation.



2. Apply pipe lubricant to the exposed surface of gasket and the plain-end of the pipe. Do not apply lubricant to the bell socket or the surface of the gasket in contact with the bell socket. Make sure the plain-end does not contact the ground to avoid having dirt adhere to the lubricant. Lubricant should extend up to the spigot stripes on the plain-end.

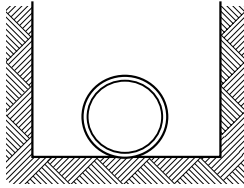


3. Make sure the plain-end is beveled per Griffin Pipe recommendations. Square or sharp edges may damage or roll the gasket causing a leak. The plain-end should be in reasonably straight alignment and carefully guided into the socket. After contacting the gasket, the joint is completed by pushing the pipe until fully seated in the socket. The spigot stripes are used for reference to indicate proper assembly.

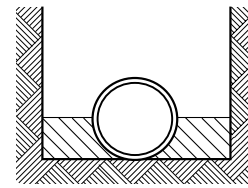


4. Small pipe can be pushed into the bell with a long bar. Larger pipe requires additional force such as a jack, come-along or backhoe. When using a backhoe the pipe can be swung into position while fastened to the backhoe bucket with a sling. The pipe can then be pulled/pushed into the socket while attached to the sling. Alternately, the sling can be removed after positioning the pipe and the backhoe bucket can be used to push on the bell face for proper insertion. Care should be taken not to damage the bell when using this method.

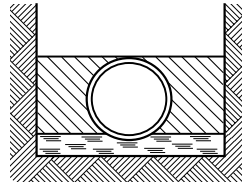
Griffin Push-On Joint Ductile Iron Pipe Standard Trench Laying Conditions



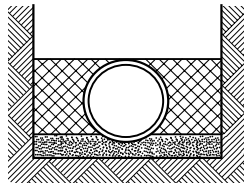
Type 1* Flat-bottom trench† with loose backfill



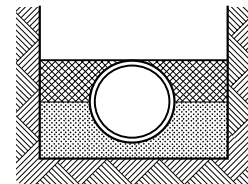
Type 2 Flat-bottom trench† with backfill lightly consolidated to centerline of pipe



Type 3 Pipe bedded in 4-in. (100-mm) minimum loose soil‡ with backfill lightly consolidated to top of pipe



Type 4 Pipe bedded in sand, gravel or crushed stone to depth of 1/8 pipe diameter, 4 in. (100mm) minimum with backfill compacted to top of pipe. (Approximately 80% Standard Proctor, AASHTO§ T-99)



Type 5 Pipe bedded to its centerline in compacted granular material, 4 in. (100mm) minimum under pipe. Compacted granular or select material‡ to top of pipe. (Approximately 90 percent Standard Proctor, AASHTO§ T-99)

Note: Consideration of the pipe-zone embedment conditions included in this figure may be influenced by factors other than pipe strength. For additional information on pipe bedding and backfill, see ANSI/AWWA C600.

* For pipe sizes 14 in. (356mm) and larger, consideration should be given to the use of laying conditions other than Type 1.

† “Flat-bottom” is defined as undisturbed earth.

‡ “Loose soil” or “select material” is defined as native soil excavated from the trench, free of rocks, foreign materials and frozen earth.

§ American Association of State Highway and Transportation Officials, 444 N. Capital St. N.W., Suite 225, Washington, DC 20001

