May 14, 2009

To whom it may concern:

This letter is intended to offer suggested practices for installation of gasketed PVC fittings fabricated by Specified Fittings.

Field Cutting:
When an adaptation is needed, solid walled PVC pipe is easily cut with a sharp bladed saw. It is vital that this cut be made straight and square. The cut end must be beveled so it will go through a gasketed or solvent-weld socket. Note that the “steeper” and “taller” the bevel, the easier insertion will be. Specified Fittings recommends beveling pipe ends at least 22 degrees. With each cut, insertion marks should be redrawn. In drawing reference marks, first measure—on the inside of the bell—from the edge of the entry lip to the beginning of the taper at the bottom of the bell. Draw the insertion line ½” to 1-1/2” shorter (including the bevel) than the bell depending on the size.

Gasketed Fittings:
Clean dirt and foreign material from the gasketed socket and the spigot end. The gasket seals the joint against leaks, into or out of the pipeline. DO NOT REMOVE THE GASKET FROM THE RACE FOR CLEANING. Specified Fittings uses locked in rieber gaskets. Gasket lubricant for pipe assembly is recommended at the following rates: An insertion line is required to prevent against over insertion. However, due to bell depth variances amongst pipe manufacturers, factory drawn insertion lines cannot be relied upon when inserting into Specified Fittings’ fittings. Insertion lines should be drawn with specific consideration of Specified Fittings’ gasket bells. To determine placement of insertion line, use a tape measure to determine the depth of the gasket bell from the bell’s entrance. Apply one insertion line at a distance of ½” less than the bell depth and another at a distance of 1” less than the bell depth. Uniformly apply pipe lubricant to the spigot end of the pipe or fitting up to the insert reference mark and to the gasket surface that makes contact with the spigot end of the pipe.

Assembly of the joint is made by sliding the lubricated spigot end into the lubricated gasket bell end. Align the spigot to the socket to be assembled, so that it is near contact with the gasket. Depending on the pipe size, between 500 and 1000 pounds of force may be required for assembly.

Keep the pipe length and fitting bell in proper alignment. Be careful not to let the lubricated section touch the dirt or backfill as foreign material could adhere to the surface and compromise joint integrity. So that previously completed joints in the line will not
be “stacked,” “over-belled,” or inserted past the reference mark, brace the bell while the spigot end is pushed through the gasket. Push the spigot end until the minimum, reference mark on the spigot end is flush with the end of the bell and the maximum insertion reference mark is clearly visible outside the gasket lip of the socket. Joints may be assembled using mechanical equipment provided that the pipe is protected, properly lubed, and aligned. Use a wood block or sheet of plywood to protect the end of the pipe. A come-along may be preferred, but a swing-stab is not recommended. Assembly will require greater effort in cold weather.

**Curvilinear Alignment (without bending the pipe)**

During construction, it may become necessary to make very slight changes in direction. When this situation is encountered, the clearance between the bore inside diameter of the socket and the outside diameter of the spigot may be utilized to accomplish curvilinear alignment without bending of the pipe. Neither the joint nor the pipe should be axially deflected in any manner to cause stress at the joint. Gasket bells on deflection fittings provided by Specified Fittings will accommodate a $1\text{-}1/2$ deg change in direction per joint.

If you have any questions or need more information, please contact me.

Sincerely,
Brad Sukolsky
Specified Fittings