INFO BRIEF #8

www.duraline.com



PROPER SQUEEZE-OFF PROCEDURE

This specification describes procedures to be utilized for the squeeze-off of Dura-Line PolyPipe® polyethylene gas piping products.

References:

ASTM D2513 "Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing and Fittings"

ASTM F1041 "Standard Guide for Squeeze-Off of Polyolefin Gas Pressure Pipe and Tubing"

"Standard Specification for Tools to Squeeze-off Polyethylene (PE) Gas Pipe and Tubing"

Equipment:

Tools used to squeeze-off polyethylene gas pipe and tubing shall conform to the requirements of ASTM F1563.

Safety Precautions:

Pressure control situations requiring squeeze-off may involve working in the vicinity of escaping gas. Consider the possibility and potential hazard of static electricity and observe safety precautions. Safety precautions involving static electricity generally include the following:

- 1. Performing the squeeze-off in operation in separate bell hole isolated from the blowing gas,
- 2. Grounding the squeeze-off tool, and
- 3. Application of soapy water solution and wet non-synthetic cloth (such as cotton or burlap) or commercially available electrostatic discharge fluid and polyethylene tape wrap to the pipe surface to provide for dissipation of static charge to the ground.

Prior to beginning the squeeze-off procedure, ensure the tool is the proper size, is functioning properly and is properly adjusted for the squeeze-off to be done.

Squeeze Procedure:

- 1. Center and square the squeeze-off tool on the pipe. Always make sure to locate the squeeze-off tool three pipe diameters or 12", whichever is greater, from any fusion joint (1.5 diameters for a butt fusion joint) or mechanical fitting.
- 2. Squeeze the pipe with the squeeze-off machine being careful not to deform the pipe at a rate higher than 2" per minute.
- 3. Squeeze the pipe until the flow of gas ceases or the mechanical stops built into the machine are contacted, whichever comes first. On some tools, a mechanical lock-off device must be manually engaged.

CAUTION: Continuation of the squeeze-off procedure beyond this point could damage the pipe or equipment.

CAUTION: Caution must be exercised during cold temperatures because the pipe may be more susceptible to squeeze-off damage.

NOTICE: The data contained herein is a guide to the use of PolyPipe® polyethylene pipe by Dura-Line and fittings and is believed to be accurate and reliable. However, general data does not adequately cover specific applications, and its suitability in particular applications should be independently verified. In all cases, the user should assume that additional safety measures may be required in the safe installation or operation of the project. Due to the wide variation in service conditions, quality of installation, etc., no warranty or guarantee, expressed or implied, is given in conjunction with the use of this material.





PROPER SQUEEZE-OFF PROCEDURE

Release Procedure:

- 1. Remove the squeeze-off tool in a controlled manner being sure not to release the squeeze at a rate faster than 1/2" per minute. If the tool has a mechanical lock-off device, disengage it.
- 2. After squeeze-off pressure has been released, re-round the pipe. Rounding can be accomplished by rotating the squeeze-off tool 90 and applying enough force to round the pipe or by using a special tool designed for this purpose.
- 3. After pipe has been re-rounded perform an inspection of the squeezed-off area to determine whether damage to the pipe has occurred. Whitening of the pipe, and cracking or crazing of the pipe surface is evidence of pipe damage.

If pipe damage is noted, the section of damaged pipe should be cut out and replaced in a timely manner.

4. Permanently mark the squeeze-off location prior to backfill so as to prevent the pipe from being squeezed-off in that location again.

CAUTION: Never squeeze-off a pipe in the same location more than once

For other concerns, contact the Dura-Line Engineering Department at (800) 433-5632.

NOTICE: The data contained herein is a guide to the use of PolyPipe® polyethylene pipe by Dura-Line and fittings and is believed to be accurate and reliable. However, general data does not adequately cover specific applications, and its suitability in particular applications should be independently verified. In all cases, the user should assume that additional safety measures may be required in the safe installation or operation of the project. Due to the wide variation in service conditions, quality of installation, etc., no warranty or guarantee, expressed or implied, is given in conjunction with the use of this material.

