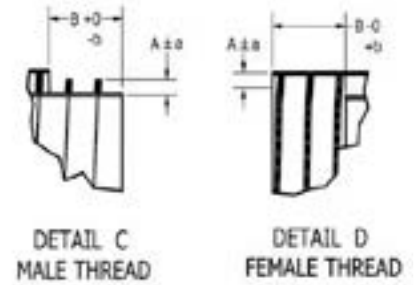


Weholite®

Large Diameter Profile Wall HDPE Threaded Joint



WEHOLITE® THREADING GUIDE:

Threaded Weholite pipe is the preferred joining method for culvert relining applications. The pipe thread is formed by factory removal of a portion of the pipe's profile wall.



Step 1: Prior to threading the pipe, grease the threads to reduce the required threading force.



Step 2: Place pipes in straight alignment.



Step 3: Use nylon slings with a lever or excavator arm to rotate the pipe.



Step 4: Visually inspect the joint to ensure that male and female threads are engaged.

METHODS TO PREVENT POSSIBLE GROUT MIGRATION THROUGH WEHOLITE THREADED JOINTS

There are two methods to prevent flowable cellular grout from potentially penetrating the threaded joint. One method is the use of closed-cell polyurethane spray foam just prior to completing the threading process, and the other is the use of Wehoseal as supplied by Infra Pipes around the completed threaded joint. Both options are outlined below.

Option 1 - Closed cell spray polyurethane foam (commonly used for (commonly used for crack & gap filing installations such as: Great Stuff, Dap, Profoam):



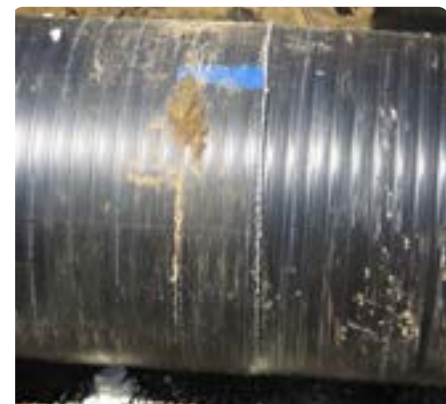
Step 1: Thread the pipe together until 1 complete turn is remaining to complete threading.



Step 2: Using closed-cell polyurethane spray foam, spray foam in the joint around the entire circumference of the pipe.



Step 3: Finish spinning the threaded joint until the thread no longer spins.



Step 4: Wipe off excess foam if necessary.

Option 2 - Wehoseal (Heat shrinkable sleeve for protection of threaded pipe joints):

Wehoseal is a high-performance, heat-shrinkable product intended for sealing polyethylene pipe joints. Wehoseal provides a superior barrier against grout ingress. Specifically designed for bonding to polyethylene pipes and casings, Wehoseal offers a low substrate pre-heat temperature, making the installation of this product simple, forgiving, and, most importantly, reliable.

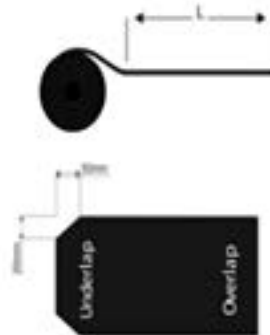
A combination of cross-linked polyethylene backing and a layer of unique hot-melt adhesive results in a long-term, moisture-impermeable barrier. A low installation pre-heat temperature ensures a uniform, consistent bond to the substrate.

Wehoseal is available in two configurations: pre-cut to a specific pipe size and bulk rolls.

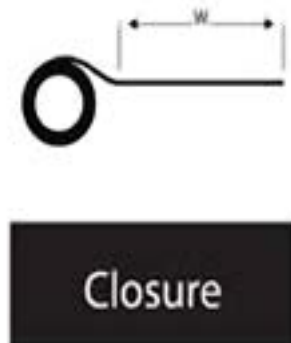
Product Description



Bulk Rolls



Cutting Closure



Step 1: Wehoseal sleeves are shipped in bulk rolls or pre-cut with a pre-attached closure. The adhesive is protected from contamination by an inner liner.

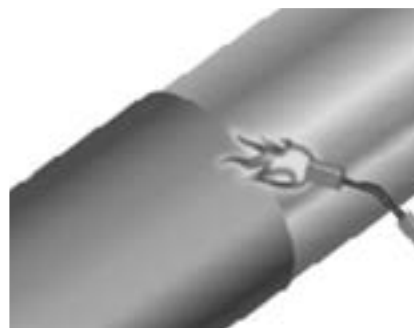
Step 2: Cut the required length (L) of sleeve material from the bulk roll. To ensure the sleeve is ready for installation, check that it is free of dirt or moisture and not damaged.

Step 3: Cut the required length (W) of sleeve material from the bulk roll. To ensure the closure is ready for installation, check that it is free of dirt or moisture and not damaged.

Equipment List



Surface Preparation



Pre-Heat



Step 4: Propane tank, hose, torch & regulator, knife, roller, digital thermometer with suitable probe and standard safety equipment; gloves, goggles, hard hat, etc.

Step 5: Dry the surface of the casing and jacket pipe (width of sleeve + 2" (51mm) on each side) with moderate flame intensity. Clean the surface with a dry, grease and lint-free rag to remove any grease or dirt.

Step 6: Using medium to high intensity flame, pre-heat and activate the surface to be covered with a heat shrink sleeve and a minimum of 2" (51mm) on each side of the sleeve to a minimum temperature of 150°F. The flame shall be kept perpendicular to the pipe and casing surfaces during preheating. Check the temperature around the entire circumference of the pipe with a touch probe.

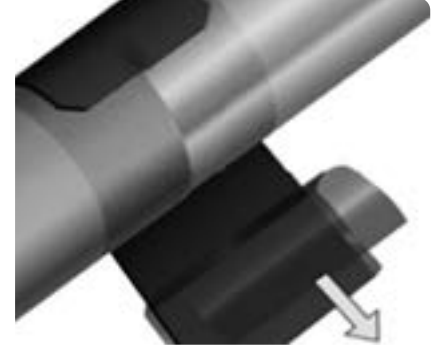
Option 2 - Continued, Sleeve Installation



Step 7: Partially remove the release liner from the sleeve (~6" (152mm) from the edge) and gently heat the adhesive along the underlap with a torch.



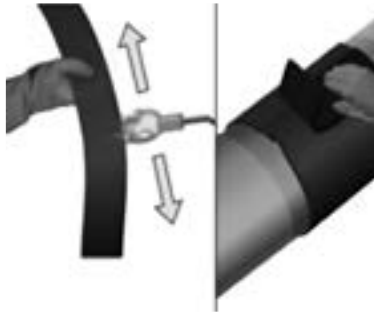
Step 8: Centre the sleeve over the area to be sealed, so that the sleeve overlaps between the 10 and 2 o'clock positions. Press the underlap firmly into place.



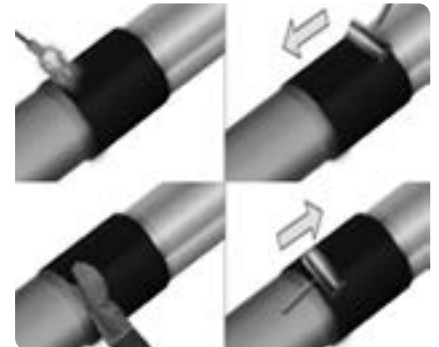
Step 9: Remove the remaining release liner.



Step 10: Wrap the sleeve loosely around the pipe, ensuring the appropriate overlap. Gently heat the backing of the underlap, then heat the adhesive side of the overlap.

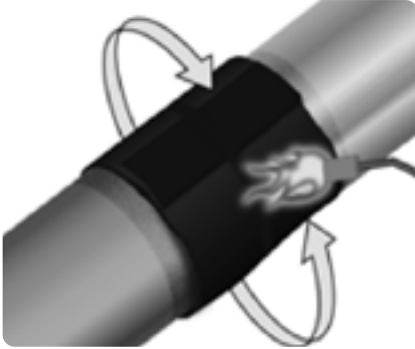


Step 11: Heat the adhesive side of the closure to activate the adhesive, then center it over the overlap and press it firmly down into place.

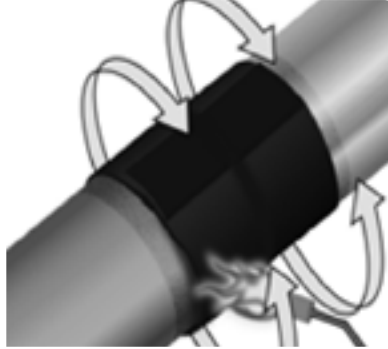


Step 12: Heat the closure with a moderate flame intensity and pat it down with a gloved hand or a roller across its entire length. Make sure the closure is firmly attached to the underlying sleeve and is not lifting anywhere. Smooth any wrinkles by gently working them outward from the center of the closure with a roller or by patting the closure down.

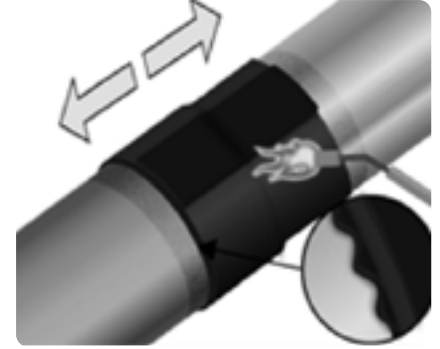
Option 2 - Continued, Quality Check



Step 13: Using the appropriate torch, begin at the centre of the sleeve and heat circumferentially around the pipe. Use broad strokes. If utilizing two torches, operators should work on opposite sides of pipe.

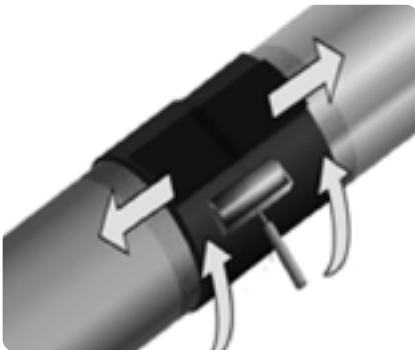


Step 14: Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the remaining side.



Step 15: Shrinking is complete when the adhesive begins to ooze at the sleeve edges all around the circumference. Make sure the edges of the sleeve do not lift anywhere along the circumference of the pipe. Finish shrinking the sleeve with long horizontal strokes over the entire surface to ensure a uniform bond.

Quality Check



Step 16: While the sleeve is still hot and soft, use a hand roller to gently roll the sleeve surface and push any trapped air up and out of the sleeve, as shown above. If necessary, reheat to roll out air.



Step 17: After shrinking, press down on the sleeve to ensure adhesive flow over the entire surface. Special attention should be given to the circumference between 4 and 8 o'clock and to the overlap area. To avoid a channel formation at the step-down, the sleeve should be pressed down. Shrinking is complete when an adhesive ooze begins at the sleeve edges, all around the circumference.



Step 18: As a final check, ensure that the sleeve follows the entire contour of the surface and that there are no cold spots or sleeve burn. Ensure the edges of the sleeve do not lift anywhere along the circumference of the pipe. This can be checked by feeling the edges all around the circumference of the sleeve. If there is edge lifting, the edge should be reworked with additional heat.