

## Technical Note 826 - Handling Fabricated Fittings

### Handling Fabricated Fittings

Some DriscoPlex™ fittings are fabricated by fusing specially cut segments of pipe together to obtain the desired fitting. Because of their configuration and construction, 16" IPS and larger fabricated fittings require special handling and connection methods during installation.

DriscoPlex™ polyethylene pipe and fittings are generally very robust, however excessive stress and strain from improper handling can damage larger fabricated fittings. Pipe and fitting assemblies should be installed using the least possible amount of moving and lifting. A fabricated fitting must never be used as the point of attachment for handling or pulling a piping assembly.

When pipe has been joined to more than one outlet of a 16" IPS or larger fabricated wye, tee or elbow, it is extremely difficult to lift and move the entire assembly without overstressing and damaging the fitting. **Performance Pipe does not recommend joining to more than one outlet of a fabricated fitting before moving the pipe and fitting assembly to its final location. Any damage caused by such improper handling is the responsibility of the installer.**

When installing 16" IPS and larger fabricated fittings, Performance Pipe recommends fusing the fitting to the end of the pipe string, and making the remaining one or two connections after the assembly is in its final position. The remaining connections can be made using flanges, suitable mechanical connections, electrofusion, or butt fusion. If flanges are used, they should be installed on the remaining one or two fitting outlets before moving the assembly into its final location.

When mechanical connections are used, suitable mechanical couplers typically require ID stiffeners in the pipe bore, so it may be necessary to fuse pups (short pipe lengths) to the remaining fitting outlets, and then install stiffeners in the ends of the pups before placing the fitting and pipe assembly into position.

Electrofusion couplings are available for some larger pipe sizes. When used, these couplings may require the use of a pup on remaining outlets to provide sufficient length for electrofusion couplings.

Butt fusion can be performed in the trench but it is usually necessary to over excavate the trench sides and bottom to allow adequate clearance to operate the fusion machine. Support for the butt fusion machine should be provided with blocks or a platform. *Do not use the pipe to support the fusion machine.* Typically, the fitting should be held in the fixed clamps of the machine. After the joint is complete and properly cooled, the machine is rotated around the pipe and lifted off. **When making a butt fusion in the trench to 16" IPS and larger fabricated fittings, do not lift the fused pipe and fitting assembly out of the butt fusion machine. Any damage caused by such improper handling is the responsibility of the installer.**

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