



# AEGION<sup>®</sup>



## Stronger. Safer. Infrastructure.<sup>®</sup>

### Installation Method

The Liner<sup>®</sup> can be installed using one of two installation methods, based on the diameter of the pipeline. The two methods, folding and flexing, are similar in nearly every aspect with the exception of the diameter reduction method.

#### Folding Installation Method

1. Minimal excavations are required for installation and to remove any existing fittings.
2. The polyethylene pipe selected for the project is fused into lengths suitable for installation. This can be the entire length or shorter segments to accommodate available work space. If shorter segments are used, they will be fused together prior to entering the diameter reducing machine.
3. The fused pipe is pushed through the diameter reduction machine, which alters the shape of the pipe, resulting in a diameter reduction of up to 40% of the cross-sectional area. The shape is maintained by banding the folded pipe.
4. The liner is inserted into the host pipe.
5. Once the liner is in place, it is cut to length, end fittings are attached and the liner is pressurized to snap the bands.
6. Intermediate fittings are installed and the completed line is pressure tested, disinfected and returned to service. Access points are backfilled and reinstated.

#### Flexing Installation Method

1. Minimal excavations are required for installation and to replace any existing fittings.
2. The polyethylene pipe selected for the project is fused into lengths suitable for installation. This can be the entire length or shorter segments to accommodate available work space. If shorter segments are used, they will be fused together prior to entering the diameter reducing machine.
3. The fused pipe is pushed through the roller reduction machine, resulting in a diameter reduction of up to 20% of the outer diameter of the original pipe.
4. The liner is inserted into the host pipe.
5. Once the liner is in place, it is allowed to revert to its original diameter. To speed the process, the liner can be pressurized with cold water.
6. The liner is cut to the required length and all end and intermediate connections are installed using standard fused or mechanical fittings.
7. The completed line is pressure tested, disinfected and returned to service. Access points are back-filled and reinstated.