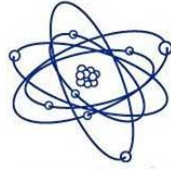




TRICON
Piping Systems, Inc.®



Energy Task Force
Pre-insulated Pipe

Ductile Iron

Service Pipe:

The service pipe shall be Ductile Iron manufactured in accordance with ANSI/AWWA C151/A21-51. Push-on joints and mechanical joints shall be in accordance with ANSI/AWWA C111/A21.11

Insulation:

The insulation shall be a foamed-in-place closed-cell polyurethane that completely fills the annular space between the carrier pipe and the exterior casing. The insulation shall have the following physical properties:

- Minimum Density (lb./cu. ft.) 2.1 ASTM D-1622
- "K" Factor BTU/Hr. sq. ft. °F/in. .147 ASTM C-518
- 90-95 % Closed Cell ASTM D-2856

Exterior Casing: *

The exterior casing shall be

(1) Seamless, extruded white PVC Type 1, Grade 1, Class 12454-B per ASTM D-1784 or

(2) Seamless, High-Density Polyethylene (H.D.P.E.) ASTM D-1248 with the following physical properties:

- ASTM D-638...Ultimate Elongation 850%
- ASTM D-638...Tensile Yield Strength 3300 psi
- ASTM D-3350...Resin Type III, Grade P34
- ASTM D-790...Tangent Flexural Modules 175,000 psi

No tape casings will be allowed.

Fittings:

All fittings shall be mechanical joints and restrained with a mechanical retainer gland or a concrete-poured thrust block. Fittings shall be in accordance with AWWA C110 and AWWA C111.

Field Joints:

If required, all straight joints with an HDPE jacket shall be covered with a wrap of Polyken Tape and covered with an HDPE rockshield. PVC jackets shall be covered with a PVC sleeve and a wrap of Polyken Tape.

Installation:

No Piping shall be installed in standing water. Trenches shall be maintained dry until final field closure is complete. The installation contractor shall handle the piping system in accordance with the directions furnished by the manufacturer and as approved by the architect and engineer. The service piping shall be hydrostatically tested to 1-1/2 times the operating pressure, or as specified in the contract documents. The test shall be maintained for a minimum time of 1 hour. EXERCISE DUE CARE WHEN INSTALLING AND TESTING THE PIPING SYSTEM.

Backfill:

A 4-inch layer of sand or fine gravel shall be placed and tamped in the trench to provide stable and uniform bedding for the piping system. Once the system is in place, the trenches shall be carefully backfilled, and hand tamped in 6" layers until a cover of at least 24" from the top of the pipe has been achieved. The first 12" of backfill shall be sand or fine gravel less than 1/2" in diameter. The remainder of the backfill shall be void of rocks, frozen earth, and foreign material over 6" in diameter. The trench shall be compacted to comply with H-20 Highway loading.

Accessories:

- Heat Tracing