

HDPE JACKET AND CORE PIPE TOUGH, NON-CORROSIVE, SEAMLESS

High Density Polyethylene has proven to be the most reliable and structurally strong material available as a standard jacketing and core pipe material. Not only is HDPE the standard protective jacketing material in Europe, it is fast becoming the standard jacket in America.

The tough, rugged nature of HDPE complements its flexibility and structural strength, guarding against cracking, star-crazing or other damage often caused by abuse or rough handling, as observed in other jacket materials. HDPE jacketing is non-corrosive, requiring no cathode protection or special coatings. In fact, HDPE jacketing has more ultra-violet (UV) inhibitor than any other jacketing material and can be used for aboveground installations.

The seamless property of HDPE jacketing insures the watertight integrity of HDPE. Each length of factory-preinsulated pipe is "pressure tested" when polyurethane foam is injected between the HDPE jacket and the steel pipe, using state-of-the-art, high pressure polyurethane foam equipment. The expanding polyurethane foam flows between specially designed support spacers, completely filling the annular space while exerting pressure against the jacket, insuring that the jacket is watertight without any pinholes, cracks or crazes that can allow moisture penetration into the insulation.

GENERAL

Preinsulated HDPE-Jacketed Steel Piping Systems suitable for Chilled Water, Heating Water, Domestic Hot & Cold Water, Process Fluids, Low Pressure Steam (15 PSIG Max.), Condensate Return and Cryogenic Services.

SERVICE PIPE

Carrier pipe shall be steel ASTM A-53, Grade B., ERW (Type E) or seamless (Type S), standard weight for sizes 2" and larger, and shall be ASTM A-120/A-53, Grade F (Type F), standard weight for sizes 1-1/2" and smaller. Seamless pipe smaller than 2" shall be ASTM A-106, or A53, Grade B. Condensate return piping shall be Schedule 80. When practical, piping shall be provided in 40-foot double-random lengths. All carbon steel pipe shall have ends cut square and beveled for butt-welding. Straight sections of factory insulated pipe shall have 6" of exposed pipe at each end for field joint fabrication.

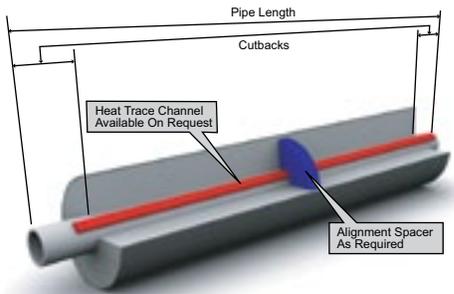
INSULATION

Insulation shall be rigid, 90 to 95% closed cell polyurethane with 2.0 to 4.0 pounds per cubic foot density and a "K" factor of .14 at 75°F per ASTM C 518. The polyurethane foam shall be CFC-free and comply with HH-I-1751/4. The polyurethane foam shall be injected into the annular space with low-pressure foam equipment. Centering spacers shall be factory-installed to insure uniform insulation around the pipe. Insulation thickness shall be as shown on the table in the contract drawings, but not less than 1.3". Maximum temperature rating is -40°F to 240°F.

JACKET

The outer protective jacket shall be High Density Polyethylene (HDPE) per ASTM D 1248, Type III, Category 5, Class C, Grade E4710. The HDPE jacket shall be seamless and pressure-tested for watertight integrity during foaming.

| Nominal Diameter | Pipe Diameter | Jacket Diameter | Insulation Thickness | Approx. Weight Per LF SDR-11 |
|------------------|---------------|-----------------|----------------------|------------------------------|
| 3/4" | 1.05" | 6.62" | 2.78" | 5.85lb |
| 3/4" | 1.05" | 8.62" | 3.78" | 7.00lb |
| 1" | 1.32" | 6.62" | 2.65" | 6.05lb |
| 1" | 1.32" | 8.62" | 3.65" | 7.25lb |
| 1 1/2" | 1.90" | 6.62" | 2.36" | 6.85lb |
| 1 1/2" | 1.90" | 8.62" | 3.36" | 8.00lb |
| 2" | 2.38" | 6.62" | 2.12" | 7.45lb |
| 2" | 2.38" | 8.62" | 3.12" | 9.00lb |
| 3" | 3.50" | 6.62" | 1.56" | 9.80lb |
| 3" | 3.50" | 8.62" | 2.56" | 10.60lb |
| 4" | 4.50" | 8.62" | 2.06" | 13.60lb |
| 4" | 4.50" | 10.80" | 3.15" | 15.45lb |
| 4" | 4.50" | 12.80" | 4.15" | 17.00lb |
| 6" | 6.62" | 10.80" | 2.08" | 23.00lb |
| 6" | 6.62" | 12.80" | 3.31" | 24.75lb |
| 8" | 8.62" | 12.80" | 2.08" | 35.00lb |
| 8" | 8.62" | 15.87" | 3.62" | 37.50lb |
| 10" | 10.75" | 15.87" | 2.56" | 48.00lb |
| 10" | 10.75" | 16.37" | 2.81" | 49.80lb |
| 12" | 12.75" | 16.37" | 1.81" | 62.00lb |
| 12" | 12.75" | 20.00" | 3.62" | 74.00lb |



- Steel Pipe Sch 40 and Sch 80 pipe available.
- 20' or 40' lengths available.
- 12"x4" cutbacks for 3/4" to 6" core pipe 8"x8" cutbacks for 8"-12" core pipe.
- 2lb to 4lb density rigid CFC free polyurethane foam.
- Insulated pipe with heat trace on request.
- Pipe ends are sealed with butyl mastic (lions oil).

MOISTURE BARRIER

Mastic moisture barriers shall be factory-applied to each pipe end. End seals shall be mastic completely sealing the exposed end of the insulation.

FITTINGS

Carrier fittings shall be welded, except sizes smaller than 2" shall be socket-welded. If requires by project specifications, welds shall be radiographically inspected. Fittings include expansion loops, elbows, tees, reducers and anchors.

FIELD JOINT CLOSURES

All joints shall be field-insulated per the manufacturer's recommendation, using two foam half shells and sealed with a full-length heat shrinkable wrap and closure.