



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 core pipe and jacketed piping 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 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 piping is used for potable water, sewer and storm drain applications. in 20 or 40 foot lengths with Standard Component (HDPE) fittings.

SERVICE PIPE

Carrier pipe shall be high density polyethylene (HDPE), conforming to ASTM D-3350. Pipe and fittings are manufactured from extra high molecular weight polyethylene compound E4710 and fabricated to Standard Dimensional Ratio (SDR) wall thickness in standard IPS sizes. Available pressure ratings range from 50 psi (SDR-32.5) to 255 psi (SDR-7.3) at 73° F, with operating temperatures from -50°F and lower, to +140°F by applying an appropriate design factor.

INSULATION

Insulation shall be rigid, 90 to 95% closed cell polyurethane with 2 to 4 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.

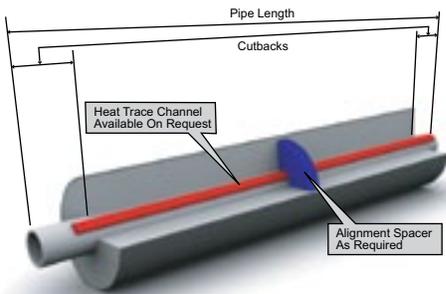
JACKET

The outer protective jacket shall be High Density Polyethylene (HDPE) per ASTM D 1248, Type III, Category 5, Class C, Grade E4710, 150" thick jacket max. The HDPE jacket shall be seamless and pressure tested for watertight integrity during foaming.

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.

Nominal Diameter	Pipe Diameter	Jacket Diameter	Insulation Thickness	Approx. Weight Per LF SDR-11
3/4"	1.05"	6.63"	2.79"	2.50lb
3/4"	1.05"	8.45"	3.70"	3.10lb
1"	1.32"	6.63"	2.63"	2.90lb
1"	1.32"	8.45"	3.56"	3.13lb
1 1/2"	1.90"	6.63"	2.36"	2.65lb
1 1/2"	1.90"	8.45"	3.27"	3.33lb
2"	2.38"	6.63"	2.12"	2.85lb
2"	2.38"	8.45"	3.03"	3.53lb
3"	3.50"	8.45"	2.47"	4.18lb
3"	3.50"	10.80"	3.65"	5.89lb
4"	4.50"	8.45"	1.97"	4.95lb
4"	4.50"	10.80"	3.15"	6.70lb
4"	4.50"	12.90"	4.20"	8.10lb
6"	6.63"	10.80"	2.08"	8.99lb
6"	6.63"	12.90"	3.13"	10.45lb
8"	8.63"	12.90"	2.12"	10.65lb
8"	8.63"	15.87"	3.62"	13.38lb
10"	10.75"	15.87"	2.56"	20.15lb
10"	10.75"	16.37"	2.81"	21.00lb
12"	12.75"	16.37"	1.81"	24.92lb
12"	12.75"	20.35"	3.80"	28.89lb



- HDPE SDR-17 to HDPE SDR-7 Core 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.
- 2-lb density rigid CFC free polyurethane foam.
- Insulated pipe with heat trace on request.
- Pipe ends are sealed with butyl mastic (Itons oil).

FITTINGS

Shall be heat fusion butt-welded to adjacent pipe sections. Fittings are either HDPE but fused bare fittings, insulated with a two piece polyurethane foam half shell set with a Polyurea jacket, or a preinsulated HDPE fitting with a appropriate HDPE stub.

FIELD JOINT CLOSURES

All joints shall be field-insulated per the manufacturer's recommendation, using a two-part foam injection method or a pre-formed half shell with a full-length Aluminum Band.