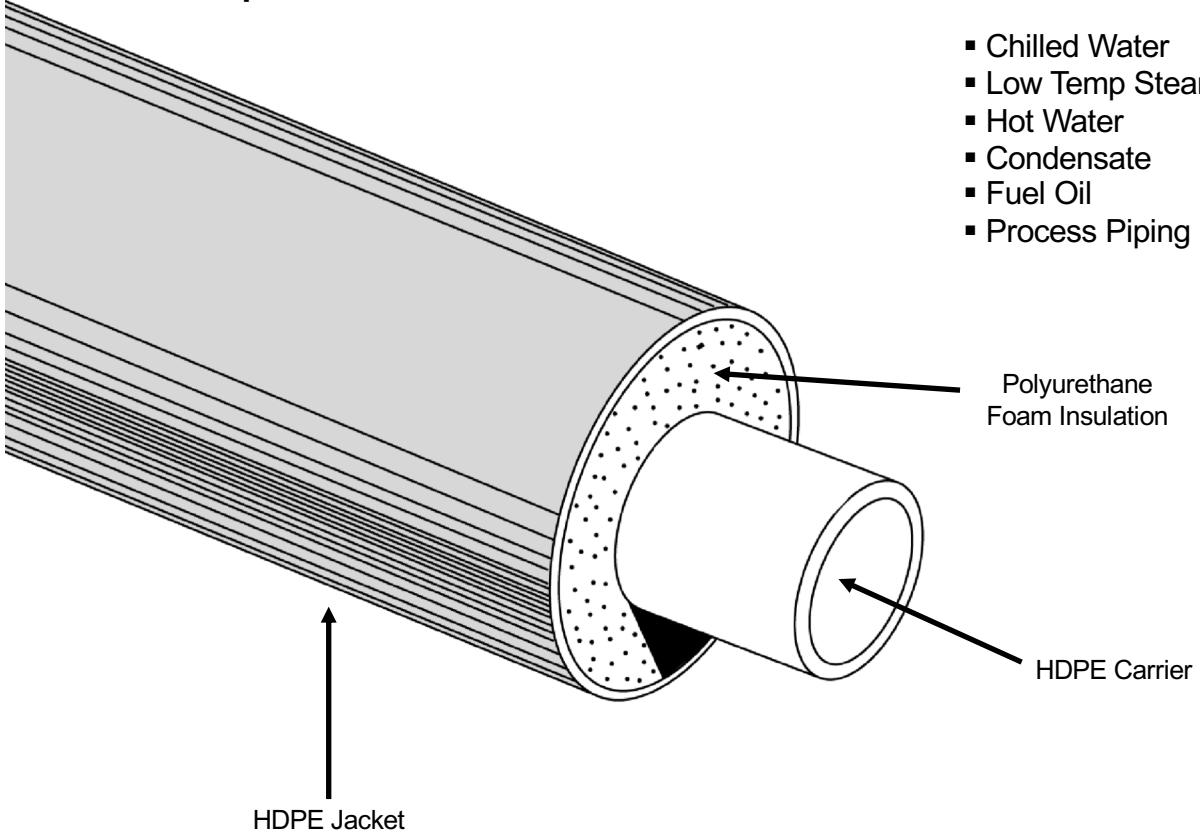


# Insul-8 Pre-Insulated Foam HDPE System

For Temperatures to 210°F Below Ground



Rovanco's Insul-8 Pre-Insulated Foam HDPE System is designed for piping systems below ground. High quality polyurethane foam insulation combined with a durable watertight jacket supplied in 20' or 40' random lengths, means an economical, high-quality system.

Rovanco's System is provided with a jacketing of HDPE. Fittings are factory fabricated, or as specified.

The Insul-8 Pre-Insulated Foam HDPE System comes complete with field joint insulation and jacketing material to make the installation completely watertight. For applications of chilled water, process fluids, hot water, pumped condensate, etc.

To find out more about Rovanco's Insul-8 Pre-Insulated Foam HDPE System, you can visit our factory, phone us (815) 741-6700, visit our website at [www.rovanco.com](http://www.rovanco.com) or e-mail us at [marketing@rovanco.com](mailto:marketing@rovanco.com).

# Specifications for Insul-8 Pre-Insulated Foam HDPE System

## Steel Piping Systems for Chilled or Hot Water, Low Pressure Steam, Condensate, Fuel Oil, and Process Piping Applications

### Carrier Pipe Type:

The pipe shall be made of SDR11 IPS high-density polyethylene (HDPE) resin compound with a minimum cell classification by PE445474C for PE4710 materials per ASTM P3350 and D2837. It shall contain 2% dispersed carbon black. Piping and fittings are available in 10 different pressure classes as designated by dimensional ratios (DR) from 32.5 at 50 psi through 6.3 at 300 psi for water service at 73°. Assembly is by thermal butt fusion for a fast, economical; and long-term performance installation. Other HDPE dimensional ratios (DR) are available.

Other carrier pipe types are also available upon request.

### Insulation:

Insulation shall be a polyurethane foam injected with one shot into the annular space between carrier pipe and jacket. Insulation shall be rigid, minimum 90% closed cell polyurethane with a minimum 2.0 lbs per foot<sup>3</sup> density, compressive strength of 30 psi @ 75°F and a thermal conductivity K factor no higher than 0.180 @ 75°F per ASTM C-518. Maximum operating temperature of urethane foam shall not exceed 250°F.

### Jacketing Material:

The outer casing shall be high density polyethylene (HDPE) conforming to ASTM D3350. Type III, Category 5, Class C and Grade P23/P34. With a minimum of 2% by weight of carbon black. Minimum thickness is 175 mils. No FRP overwrap or spray and wrap jacketing will be allowed. Minimum jacket thickness shall be in accordance with Table 1 below:

Nominal Pipe Size In Inches	Minimum Insulation Thickness In Included	Jacket Size In Inches	Jacket Thickness In Mils
1-1/2	2.15	6.60	200
2	1.91	6.6	200
2-1/2	2.66	8.00	200
3	2.35	8.00	200
4	2.57	10.00	175
5	2.04	10.00	175
6	2.51	12.43	175
8	2.72	14.06	175
10	2.48	15.87	175
12	2.38	17.83	175
14	2.74	19.80	175
16	2.7	22.17	200
18	2.89	24.17	225
20	2.89	26.17	225

\* Larger Pipe Sizes are available upon request

### Fittings:

All fittings will conform to pipe type and will be insulated and jacketed with materials supplied by the system supplier as per manufacturers' standard procedures.

### Insulation of Straight Joints:

Insulation and jacketing materials to be provided by system manufacturer.

### Backfill: (if below ground)

Should be tamped compactly in place so as to assure a stable surface. No rock should be used in the first foot of backfill. 24 inches, top to pipe to grade, of compacted fill shall meet H-20 Highway Loading.

### Leak Detection (optional):

Contact Rovanco for information about available leak detection systems.

### Manufacturer's Assistance:

Rovanco will provide a field service man on-site to properly train the installing personnel in all phases of installation, (if required).

### Approved Vendors:

Insul-8 Pre-Insulated Foam HDPE Systems with by Rovanco, Joliet, Illinois or approved equal. Any alternate supplier must be ISO 9001 Certified and submit their technical data to the engineer ten days prior to bid date to be approved in writing as an equal.