

**ALUMINUM SPIR-L-OK JACKET**

This economical, high-quality product incorporates the insulation or combination of insulations of choice within a durable protective metal jacket. The inner carrier piping material may be as required for the service intended. Aluminum Spir-l-ok is constructed for applications with temperatures ranging from -200 degrees to +450 degrees Fahrenheit. Projects requiring pipe to carry Steam, Condensate, Hot Water, Hot Oil, Process Fluids, Cryogenic Gases, etc., are ideally suited for Aluminum Spir-l-ok.

Installation savings are important. Lighter weight means easier placement. Trench width (and depths) are reduced due to the thinner pipe walls. This results in time and cost savings in both excavation and backfill. Installation of bigger and longer sections is more practical, and the pipe can often be handled without special lifting equipment. Single lengths up to 40 feet ensure more accurate pipe alignment at time of placement and through the life of the system. Longer lengths save installation time with fewer joints.

The Aluminum Spir-l-ok insulation system is ideally suited for above ground or below ground applications. The owner enjoys the benefits of thermal efficiency and a strong, corrosion resistant, outer jacket that can withstand man-made abuse along with unpredictable weather elements.

**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.

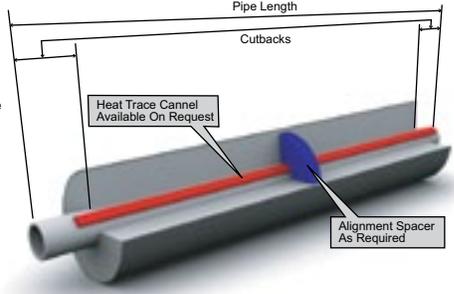
**JACKET**

A special aluminum class 5052-H32 marine grade aluminum metal with 16-gauge wall thickness. Jacket shall be watertight and be able to withstand 5 foot water head test.

**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
¾"	1.05"	6.25"	2.73"	2.25lb
¾"	1.05"	8.25"	3.73"	2.75lb
1"	1.32"	6.25"	2.60"	2.25lb
1"	1.32"	8.25"	3.60"	2.75lb
1 ½"	1.90"	6.25"	2.30"	2.25lb
1 ½"	1.90"	8.25"	3.30"	2.75lb
2"	2.38"	6.25"	2.07"	3.00lb
2"	2.38"	8.25"	3.07"	4.00lb
3"	3.50"	6.25"	2.50"	3.60lb
3"	3.50"	8.25"	3.50"	4.60lb
4"	4.50"	8.25"	2.00"	5.45lb
4"	4.50"	10.25"	3.00"	6.85lb
4"	4.50"	12.75"	4.12"	8.28lb
6"	6.62"	10.25"	1.81"	9.10lb
6"	6.62"	12.75"	3.00"	10.55lb
8"	8.62"	12.75"	2.00"	10.75lb
8"	8.62"	15.75"	3.56"	13.20lb
10"	10.75"	15.75"	2.50"	15.25lb
10"	10.75"	18.00"	3.62"	18.00lb
12'	12.75"	18.00"	2.62"	22.15lb

- HDPE SDR-17 to HDPE SDR-7 Core Pipe available.
- 20' or 40' lengths available.
- 12"x4" cutbacks for ¾" to 6" core pipe 8"x8" cutbacks for 8"-12" core pipe.
- 2lb - 4lb density rigid CFC free polyurethane foam.
- Insulated pipe with heat trace on request.
- Pipe ends are sealed with butyl mastic (lions oil).

**FITTINGS**

Shall be heat fusion butt-welded to adjacent pipe sections. Fittings are either HDPE butt 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.