ARCTIC PIPE & UTILITIES LLC

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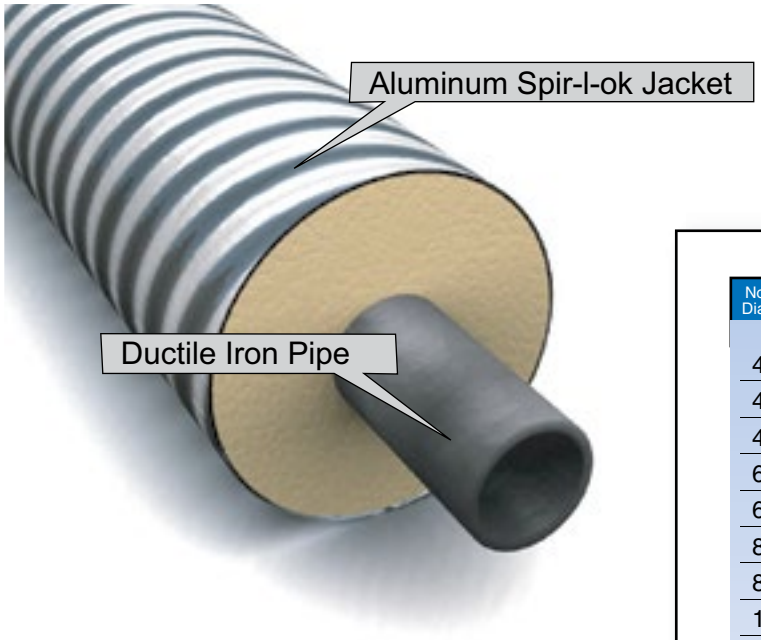
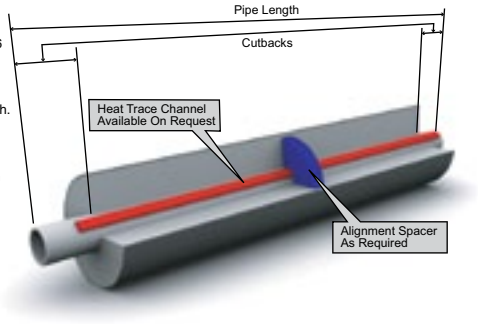
Aluminum Spir-l-ok Jacket
Ductile Iron Pipe



Nominal Diameter	Pipe Diameter	Jacket Diameter	Insulation Thickness	Approx. Weight Per LF SDR-11
4"	4.80"	8.25"	1.85"	16.25 lb
4"	4.80"	10.25"	2.85"	17.50 lb
4"	4.80"	12.75"	4.10"	18.85 lb
6"	6.90"	10.25"	1.80"	24.52 lb
6"	6.90"	12.75"	3.05"	25.86 lb
8"	9.05"	12.75"	1.98"	33.83 lb
8"	9.05"	15.75"	3.48"	36.17 lb
10"	11.10"	15.75"	2.45"	44.49 lb
10"	11.10"	18.00"	3.95"	47.18 lb
12"	13.20"	18.00"	2.90"	56.25 lb
12"	13.20"	22.00"	4.40"	61.25 lb

- Ductile Iron Class 50 to Class 56 Core Pipe available.
- 18.25' lengths available.
- Insulated up to bell x Stab depth.
- 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).
- 16GA Aluminum Jacket is standard. Jacket ID used is +- average



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 Ductile Iron piping is used for potable water, sewer and storm drain applications. in 18.25 foot lengths with Standard (Ductile Iron) fittings.

SERVICE PIPE
Carrier pipe shall be Ductile Iron, Pressure or Special Class as specified, in nominal lengths standard to the industry for the specified product. Pipe and fittings shall contain an internal cement lining and be coated inside and out with a bit mastic seal coat. Systems operating over 120°F shall not be coated internally. Preinsulated pipe sections shall be insulated from the bell end to just short of the spigot insertion stop mark. Joints shall be bell and spigot, push-on type, with SBR gaskets for cold applications, or EPDM gaskets for applications operating over 140°F. Mechanical or restrained joints may be used if required by the project. Maximum operating temperature with EPDM gaskets is 250°F.

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 high-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.

FITTINGS
Fittings shall be Ductile Iron with gasket joint similar to that of the ductile iron pipe. Push on and mechanical-joint style fittings may or may not be pre-insulated. They are insulated with formed over sized polyurethane half shell kits. Concrete thrust blocks are poured at all changes of direction. Thrust block design and sizing is the responsibility of the design engineer. At the Engineer's option, restrained-joint fittings when used with restrained-joint piping, may not be thrust blocked and shall be field insulated with urethane foam insulation, jacketed.

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.