

SSL 379 TechLite®



Description

The TechLite® insulation system is an innovative, patented, non-fibrous, lightweight foam that is factory jacketed with a flexible, polyester-reinforced PVC covering. It has a wide service temperature range, low smoke and flame spread characteristics and is manufactured in 4' tube lengths and in sheets.

Applications

TechLite® SSL 379 insulation is perfect for a variety of applications including indoor and outdoor applications where traditional metal jacketing is not desired. This product features a self-sealing adhesive strip along the longitudinal seam for installation. Colors are available upon request.

Table 1: Foam Technical Data

Property	Test Method	Value
Flexible open-cell melamine	ASTM C-1410	
Service temperature	ASTM C-1410	-40°F to 350°F
In service temp min-max limits		-150°F to 400°F
Density [lb/ft ³]	ASTM D-3574	0.56 ±0.06
Thermal Conductivity, k [Btu-in/h-ft ² -°F]	ASTM C-177	0.19 at -40°F mean 0.25 at 75°F mean 0.45 at 300°F mean
Indentation force deflection, min [lb 50 in ²]	ASTM D-3574	
Compression at 25%		80
Compression at 65%		160
Tensile Strength min [lb/in ²]	ASTM D-3574	14
Percent Elongation, max	ASTM D-3574	30
Surface burning characteristics, max		
Flame spread index smoke development at 1in thick	ASTM E-84	25/50
Oxygen Index, minimum % oxygen	ASTM D-2863	33
National Fire Protection Association No. 101		Class A
Uniform Building Code 1988 Part VII sec 4201-4203		Class 1
ASTM C-871		Passes
ASTM C-795		Passes
NRC Guide 1.36, Section C, Para 2 (b)		Passes
Boeing Specification, BSS 7239		Meets and Exceeds
Flame spread / smoke development	ATS-1000.001	Meets and Exceeds

Jacket Technical Data

300 series jacketing is made of polyester-reinforced flexible white PVC. It has a smooth surface that recovers from abuse and impact. The total thickness is 0.030 inches. It is washable and never needs painting. Common colors are white, grey, black and blue. Red, orange, yellow, green and brown are also available.

Table 2: Jacket Technical Data

Property	Test Method	Value
Ambient temperature range		-40°F to 140°F
Total weight [oz/yd ²]		28
Cold crack	ASTM D-2136	-10°F
UL 214	Method 5903	Pass
Flame spread / smoke development	ASTM E-84	25/50

Fittings

Rigid PVC fittings covers are supplied with pre-formed TechLite® inserts or diapers. Sheet Stock Material is available in sheet form for tanks and duct work in sizes up to 48" x 96" in thickness from ½" to 3" in ½ inch increments. Other thicknesses are available upon request.

Accessories

Fastener Weld Glue is required to solvent weld all seams.

Factory approved silicone sealant is required to seal any large gaps and to insulate jacket edges from hot surfaces.

Storage

Cartons are not intended for outdoor storage. Protect from rain and other abuse.

Preparation

Apply only to clean, dry surfaces.

General Application

All exposed pipe surfaces must be covered with sufficient insulation. No gaps or thin areas on fittings should be allowed. Seal all seams and covers with Fastener Weld and/or factory approved silicone sealant. Any exposed insulation must be covered with PVC such as end caps or flange covers. Cold systems must have a continuous vapor barrier maintained. Vapor retarder mastic (CP-70 or equal) should be applied every 12ft to butt ends of insulation. Hot systems must be sized to keep the jacket temperature below the softening point of the PVC (approx. 159°F). Keep the jacket temperature below 125°F if at all possible for best performance.

SSL 379 Submittal Sheet

Effective 01/01/2011

TechLite® Insulation

Accessible Products Company
2122 West 5th Place
Tempe AZ 85281
480-967-8888
480-894-6255 Fax

Insulation for pipes, tanks and vessels available in pre-formed or sheet varieties.

Sizes available to fit IPS, CTS and SS tubing sizes. Custom OD and ID sizes optional upon request.

Pipe sizes from ¼" to 12" in preformed 4' sections. All sections have 2" overlapping SSL flaps longitudinally with a 2" jacket overlap circumferentially on one end.

Larger pipe OD's and tanks are covered in V-grooved sections of 4' length. All sections have 2" overlapping SSL flaps longitudinally with a 2" jacket overlap circumferentially on one end.

Pipe Size and Type (IPS, CTS, SST etc.)

Insulation Thickness

Jacket Color/Type

Approved by:

x _____

Date

Outdoor Applications

TechLite® 379 series jacketing contains UV inhibitors and is rated for outdoor use. Bright jacket colors may fade slightly over time due to UV exposure but it will not affect product performance.

Tanks and Vessels

Tanks and vessels can be covered in sheets that are cut and trimmed on site to conform to the object. Alternately, ASJ covered TechLite® foam may be applied to complicated shapes and then covered with 300 series jacket or mastic in a second step. Semi-rigid PVC molded end caps and rolled corners are available as special order from the factory.

Table 3: Recommended Wall Thickness*												
Pipe Size	-150°F* to -64°F*	-65°F* to 0°F	1°F to 34°F	35°F to 60°F	61°F to 95°F	96°F to 120°F	121°F to 150°F	151°F to 220°F	221°F to 250°F	251°F to 300°F	301°F to 350°F	351°F* to 400°F*
1/2"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
3/4"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
1"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
1 1/4"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
1 1/2"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
2"	2 1/2"	2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2"
2 1/2"	2 1/2"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2"
3"	2 1/2"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2"
3 1/2"	2 1/2"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"
4"	3"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"
6"	3"	2 1/2"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	2 1/2"
8"	3"	3"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"
10"	3"	3"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	3"
12"	3"	3"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	3"	3"

Consult factory if more specific information is required.

**Service temperatures outside ASTM C-1410 classifications - Consult factory*