

SUBMITTAL SHEET

JOB NAME		ITEM TAG
JOB LOCATION		PART NUMBER
CONTRACTOR	DATE	
ENGINEER APPROVAL	DATE	

LEGENDFLEX™

Oxygen Barrier PEX Tubing

Manufactured from Legend's proprietary formulation, which dramatically increases flexibility, while maintaining high strength and durability.

Backed by a 30-year warranty.

The externally-extruded EVOH oxygen barrier reduces oxygen molecule permeation into the water, virtually eliminating corrosion within the system.

Packaged in sunlight-blocking containers or wrap, to protect the tubing from UV-light oxidation.

Numerical foot markings permit circuit loop calculations, preventing excess circuit loop lengths.

Ideal for radiant heating and cooling, geothermal, and snow and ice melt systems.

Available in nominal tubing sizes SDR-9 - CTS Pipe Sizes 3/8", 1/2", 5/8", 3/4", and 1".

Specifications:

Rated Pressure	at Rated Temperature			
160 psi	73°F			
100 psi	180°F			
80 nsi	200°F			





Pictured: LegendFlex

MATERIAL SPECIFICATION

PART	MATERIAL	SPECIFICATION
PEX tubing	Extruded cross-linked Polyethylene resin with ethylene vinyl alcohol (EVOH) external layer	ASTM F876 and F877

PROPERTIES

PROPERTY:	VALUE:
Density	58.6 lb/ft ³
Degree of cross-linking	> 70%
Thermal conductivity	0.22 Btu ft/h ft ² °F
Coefficient of linear expansion	1.27 in. per 100 ft. per 10 °F
Modulus of elasticity at 73.4° F	78,300 psi
Oxygen permeation	< 0.1 grams/m³/day
Bend radius	< 5x tubing outside diameter

DIMENSIONS

Nominal Tubing Size	0D*	Average wall thickness*	Available coil lengths	20 ft. stick	Bend diameter	Weight (lb. per ft.)	Capacity (gal. per ft.)
3/8"	0.500	0.070	500' and 1000'	No	5.00"	0.04	0.0051
1/2"	0.625	0.070	300', 500',1000', and 1200'	Yes	6.25"	0.05	0.0096
5/8"	0.750	0.083	400' and 1000'	No	7.50"	0.07	0.0138
3/4"	0.875	0.097	100', 500' and 1000'	Yes	8.75"	0.10	0.0189
1"	1.125	0.125	500' and 1000'	Yes	11.25"	0.16	0.0312

^{*} In accordance with ASTM F876 and F877 for SDR 9 tubing. Tolerances apply; Consult both specifications for complete details.

Certifications/Listings:

ANSI/NSF 14: Plastic piping system components and related materials. (rfh-listing/not for potable water) ASTM F876/877: Standard specification for cross linked polyethylene (PEX).

Standards:

ASTM F1807, F1960, F2080 and F2098 - Fitting Standards CSA B137.5: Requirement for PEX made in SDR-9.

ISO 15875: Plastic piping systems for hot and cold water installations (PEX).

DIN 4726: Oxygen tightness.

DIN 16892: Cross linked high-density polyethylene (PEX) pipes-general quality requirements and testing.

