

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.

Specifications:

Rated Pressure	at Rated Temperature
160 psi	73°F
100 psi	180°F
80 psi	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/ft³
Degree of cross-linking	> 70%
Thermal conductivity	0.22 Btu ft/h ft² °F
Coefficient of linear expansion	1.1 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	OD*	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' and 1000'	Yes	6.25"	0.05	0.0096
5/8"	0.750	0.083	300', 400', 500' 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	100' and 500'	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. (rph-listing/not for potable water)

ASTM F876/877: Standard specification for cross linked polyethylene (PEX).

Standards:

ASTM F1807, F1960, F2080, F2159, and F3347/3348 - 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 permeability of PEX heating pipes.

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