

RayLite®

Expanded Polystyrene Insulation

072000/DFP



RayLite® brand expanded polystyrene (EPS) is lightweight closed cell, rigid insulation formed by the expansion of polystyrene beads in a closed mold. RayLite® has excellent long term thermal and moisture resistance. RayLite® is available in a variety of densities, sizes and shapes for your insulation, construction, Geofoam, packaging and OEM applications.

RayLite® EPS meets or exceeds ASTM C578 specifications through strict quality control using state of the art manufacturing technology. RayLite® is UL listed, FM approved and third party inspected by RADCO. Since 1966, DiversiFoam Products has been an industry leader with a strong commitment to engineering excellence, competitive pricing, outstanding quality and customer service. All expanded polystyrenes are not created equal. By specifying RayLite® brand EPS you can be sure you are getting the very highest quality materials for your application. Like other polystyrene products, RayLite® EPS is recyclable.

Typical Physical Properties of RayLite® EPS Insulation

Specification Reference		ASTM C578-08	Type XI	Type I	Type VIII	Type II	Type IX	Type XIV
Property	Units	ASTM Test	0.75#	1#	1.25#	1.5#	2#	2.4#
Density, Minimum	(PCF)	C303 or D1622	0.70	0.9	1.15	1.35	1.8	2.4
Thermal Conductivity	at 25° F BTU/(hr.)	C177 or C518	—	0.23	0.22	0.21	0.2	—
K factor	at 40° F (sq. ft.)(F/in.)	—	—	0.24	0.235	0.22	0.21	—
	at 75° F	—	—	0.26	0.255	0.24	0.23	—
Thermal Resistance	at 25° F per inch		3.45	4.35	4.54	4.76	5	4.80
Values R	at 40° F thickness	—	3.30	4.17	4.25	4.55	4.76	4.60
	at 75° F		3.10	3.85	3.92	4.17	4.35	4.20
Strength Properties								
Compressive 10% Deformation	psi	D1621	5	10-14	13-18	15-21	25-33	40
Flexural	psi	C203	10	25-30	30-32	40-50	55-75	60
Tensile	psi	D1623	—	16-20	17-21	18-22	23-27	—
Shear	psi	D732	—	18-22	23-25	26-32	33-37	—
Shear Modulus	psi	—	—	280-320	370-410	460-500	600-640	—
Modulus of Elasticity	psi	—	—	180-220	250-310	320-360	460-500	—
Moisture Resistance								
WVT	perm. in	E96	2.0-5.0	2.0-5.0	1.5-3.5	1.0-3.5	0.6-2.5	2.5
Absorption (vol.)	%	C272	less than 4.0	less than 4.0	less than 3.0	less than 3.0	less than 2.0	2.0
Capillarity	—	—	none	none	none	none	none	none
Coefficient of								
Thermal Expansion	in./in.)(F)	D696	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035
Maximum Service Temperature								
Long -term	° F	—	167	167	167	167	167	167
Intermittent			180	180	180	180	180	180

All values based on data available from Huntsman Chemical Corporation, NOVA Chemical Company, and BASF Corporation. Caution: Like most construction materials, EPS is combustible and may constitute a fire hazard if improperly installed or stored. Current model building code requirements should be met for adequate protection or separation from occupied areas.



www.diversifoam.com

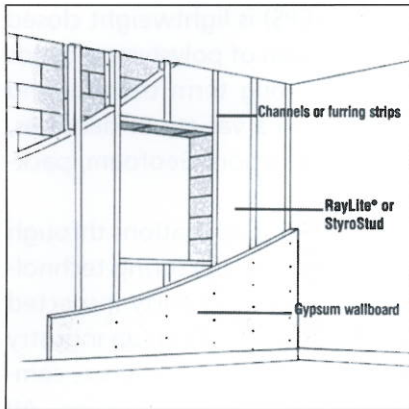
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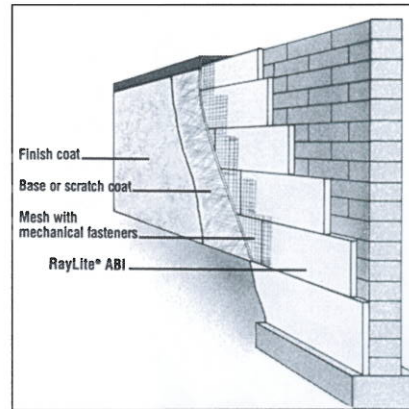
APPLICATIONS



Interior Walls

- Quick, easy installation.
- New or retrofit applications.
- Moisture resistant.
- Long-term performance.

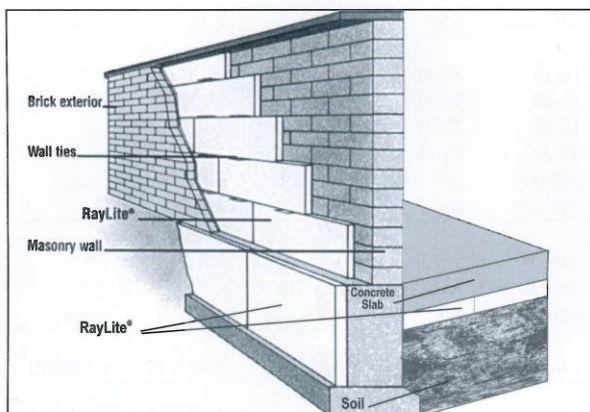
RayLite® insulation can be applied to interior masonry or concrete walls with several attachment techniques. RayLite® is used with either "Z" channel furring, wood furring strips or several formed metal strip systems. RayLite® is also available as StyroStud with integral wood furring strips. StyroStuds are available with 16" or 24" o.c. furring strips.



Stucco/Exterior Finish Insulation

- New or retrofit applications.
- Excellent moisture resistance.
- Low maintenance.
- Reduces air infiltration.

Exterior insulation systems are an ideal way to completely wrap a building in a durable insulation package that helps to eliminate air and water infiltration. Tough stucco or EIFS finishes over RayLite® aged board insulation (ABI) provide an attractive, low maintenance building finish. RayLite® ABI may be cut into many special shapes for use as cornices, arches, columns, letters, logos, or virtually any shape you can dream of.

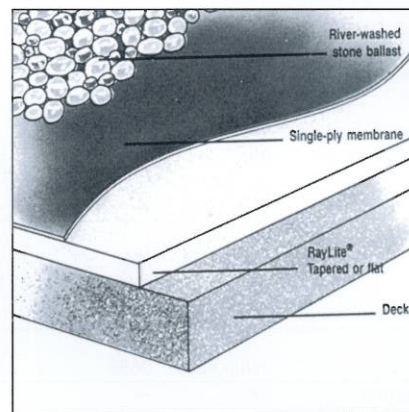


Cavity Walls/Below Grade/Underslab

- Resists moisture penetration.
- Fits tightly between ties.
- Easy to cut and install, or have precut to size.
- Long-term insulating value.

RayLite® can be used to provide a durable insulation barrier between inner and outer cavity walls. Maintain appropriate air space between RayLite® and outer wall for optimum moisture resistance. RayLite® is available in a variety of compressive strengths and thicknesses to fit your requirements for below grade or underslab applications. Refer to the physical properties listed on the front page to find the correct type for your project.

Form # 011B 2013



Roofing Insulation

- Thermal efficient, low cost insulation
- Excellent long-term R-values.
- Tapered for positive drainage.
- Compatible with many membrane systems.
- U.L. Listed, FM approved.

RayLite® is an excellent choice for roofing applications. It has superior long-term thermal and moisture characteristics, RayLite® can be tapered to provide positive slope to drain. DiversiFoam Products tapered engineering staff provides technical assistance and detailed shop drawings.