

ThermalStar TS was created specifically for commercial roofing applications, available in a full range of compressive strengths and sizes. With proven properties, including warranted long-term, and stable thermal performance, TS rigid insulation ensures your building will be as comfortable on the inside as it is durable outside.



EPS ^{X®} technology advantage		Moisture Resistant	((R) Stable R-value		Environmentally Friendly		
Property & ASTM Test Method	ASTM Test Method	101-M	Product ID 101-M 121-M 151-M		201-M	251-V	351-V	
Compressive Strength (minimum psi) at 10% Deformation	D1621	10	15	20	25	40	60	
R-value (minimum) at 75°F mean temp	C518	3.7	3.9	4.0	4.2	4.4	4.5	
R-value (minimum) at 40°F mean temp	C518	4.0	4.2	4.4	4.6	4.8	4.9	
R-value (minimum) at 25°F mean temp	C518	4.3	4.4	4.6	4.8	5.0	5.1	
ASTM Classification	C578	Type I	Type VIII	Type II	Type IX	Type XIV	Type XV	
Coefficient of Linear Expansion	-	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035	
Flexural Strength (typical psi)	C203	22	30	35	53	60	75	
Water Absorption % by volume, maximum after 24 hr immersion	C272	3.0	2.5	2.0	2.0	1.25	1.0	
Water Vapor Permeance at 1" Thick (perms)	Typical E96	4.0	3.5	3.0	2.5	2.5	2.5	
Surface Burning- Flame Spread and Smoke Developed	E84	E84 Flame Spread <20, Smoke Developed <400 [meets code]						
Maximum Use Temperature	- Short Term (10–15 minutes) 180°F, Long term 165°F							

Standard features include:

- Standard Size: 48" x 48", or 48" x 96", or specify
- Drainage: specify taper dimension or flat





Advantages of TS:

STABLE R-VALUE:

While XPS products have a higher initial R-value, TS' thermal properties do not degrade over time, allowing the R-value to remain the same over its entire service life.

ENVIRONMENTALLY FRIENDLY:

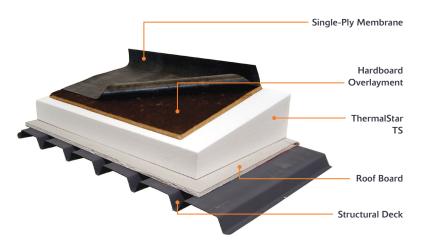
XPS utilizes HCFC gases in its insulating cells to achieve an initial higher R-value and has an extremely high global warming potential (GWP) of 1430, whereas the insulating cells of TS simply contain air, providing an environmentally friendly solution with a GWP of zero.

RECYCLABLE:

TS is readily accepted for recycle. Visit epspackaging.org to locate a drop-off location nearest you.

FIGURE 1:

Typical Tapered Roof Installation



For performance you can trust, and a low cost and valuable solution you will appreciate, specify ThermalStar TS rigid insulation on your next project.





INSTALLATION AND HANDLING

TS can be handled much the same as any other foam or wood sheathing, using similar tools or a simple utility knife to customize panels to fit the application.

SAFETY

SDS for this product are available at atlaseps. com. Dust generated from sanding or cutting TS should be avoided using a dust mask. TS insulation is combustible and the product should be protected from ignition sources such as open flames or welder's torch. Applications not specifically listed in UL ER16529.1 require permanent separation of TS insulation from the interior of the building by a thermal barrier such as drywall or concrete for fire safety.

WARRANTY

TS Insulation is backed by a limited lifetime warranty for physical and thermal performance.

CODE COMPLIANCE

ThermalStar TS insulation complies with the model building codes when properly installed:

- Surface Burning UL BRYX.R16529
- Physical Properties UL QORW.R16529
- CAN/ULC S102.2, S701 ULC BOZCC. R16529
- International Energy Conservation Code
- International Residential Code (IRC) ICC-ES ESR-1962, UL16529-1
- International Building Code (IBC) ICC-ES ESR-1962, UL16529-1
- ASTM C578 See product marketing for Type
- Roof Assembly Approvals UL TGFU. R16529

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