

# LAMINATED ROOF INSULATION

#### SLIP SHEET AND RETROFIT ROOF

Insulation is a vital component of a building's envelope. For building designers requiring the highest quality rigid insulation for roof applications, ThermalStar® Laminated Roof Insulation (LRI) provides unmatched quality, with a stable long term R-value that will last the lifetime of your structure.

Manufactured under an industry leading quality control program monitored by UL and ICC-ES, ThermalStar LRI meets or exceeds ASTM C578 standards, providing an HFC free, recyclable rigid insulation with a low Global Warming Potential (GWP).

## **PHYSICAL PROPERTIES**

### LAMINATED ROOF INSULATION (LRI)

PROPERTY	ASTM TEST METHOD	10	13	15
Compressive Strength (psi) at 10% Deformation <sup>1</sup>	D1621	10	13	15
ASTM Classification	C578	Type I	Type VIII	Type II
R-value per inch at 75°F Mean Temperature	C518	3.9	3.9	4.2
R-value per inch at 40°F Mean Temperature	C518	4.2	4.3	4.6
R-value per inch at 25°F Mean Temperature	C518	4.4	4.5	4.8
Flexural Strength (psi)	C203	25	30	35
Water Absorption (% by volume) 24 Hour Immersion	C272	1.0	1.0	1.0
Water Vapor Permeance (perms)	E96	0.3	0.3	0.3
Surface Burning - Flame Spread	E84	<25	<25	<25
Surface Burning - Smoke Developed	E84	<450	<450	<450
Maximum Use Temperature	-	Short Term (10-15 minutes) 180°F, Long Term 165°F		

<sup>1</sup> ThermalStar LRI is elastic up to 1% deformation. A safety factor of 3 is recommended for long term loads to minimize long term deflection.

## **CODE COMPLIANCE**

ThermalStar LRI complies with the model building codes when properly installed, as found in the following code reports and classification listings:

- ASTM C578 (See product marking for type)
- Physical Properties UL QORW.R16529
- Surface Burning UL BRYX.R16529
- CAN/ULC-S102.2, S701 ULC BOZCC.R16529

- International Energy Conservation Code (IECC) ICC-ES ESR-1962, UL ER16529-01
- International Residential Code (IRC) ICC-ES ESR-1962, UL ER16529-01
- International Building Code (IBC) ICC-ES ESR-1962, UL ER16529-01
- Roof Assemblies UL TGFU.R16529

# WARRANTY

ThermalStar LRI is backed by a limited lifetime warranty for physical and thermal performance. See separate ThermalStar warranty for terms and conditions.

### STANDARD PRODUCT OFFERINGS

COMPRESSIVE STRENGTH	10 psi, 13 psi	
SIZE	4'x50' fanfold	
THICKNESS (R-VALUE)	3/8", 1/2"	

#### FOR ADDITIONAL RESOURCES, VISIT THE ROOF INSULATION SECTION OF OUR WEBSITE ATLASMOLDEDPRODUCTS.COM



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