

TAPERED INSULATION

ROOF APPLICATIONS

Insulation is a vital component of a building's envelope. For building designers requiring the highest quality rigid insulation, ThermalStar® Tapered Insulation 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 Tapered Insulation meets or exceeds ASTM C578 standards, providing an HFC free, recyclable rigid insulation with a low Global Warming Potential (GWP).

PHYSICAL PROPERTIES

PROPERTY	ASTM TEST METHOD	TAPERED INSULATION					
		10	13	15	25	40	60
Compressive Strength (psi) at 10% Deformation ¹	D1621	10	13	15	25	40	60
ASTM Classification	C578	Type I	Type VIII	Type II	Type IX	Type XIV	Type XV
R-value per inch at 75°F Mean Temperature	C518	3.9	3.9	4.2	4.4	4.4	4.5
R-value per inch at 40°F Mean Temperature	C518	4.2	4.3	4.6	4.8	4.8	4.9
R-value per inch at 25°F Mean Temperature	C518	4.4	4.5	4.8	5.0	5.0	5.1
Flexural Strength (psi)	C203	25	30	35	50	60	75
Water Absorption (% by volume) 24 Hour Immersion	C272	3.0	2.0	2.0	1.0	1.0	1.0
		24 Hour Immersion & 24 Hours @ 50% RH	0.3	0.3	0.3	0.3	0.3
Water Vapor Permeance at 1" Thick (perms)	E96	5.0	3.5	3.5	2.5	2.5	2.5
Surface Burning - Flame Spread	E84	<25	<25	<25	<25	<25	<25
Surface Burning - Smoke Developed	E84	<450	<450	<450	<450	<450	<450
Maximum Use Temperature	-	Short Term (10-15 minutes) 180°F, Long Term 165°F					

¹ ThermalStar Tapered Insulation 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 Tapered Insulation 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
- NFPA 285 Approved Assemblies - UL ER16529-01

WARRANTY

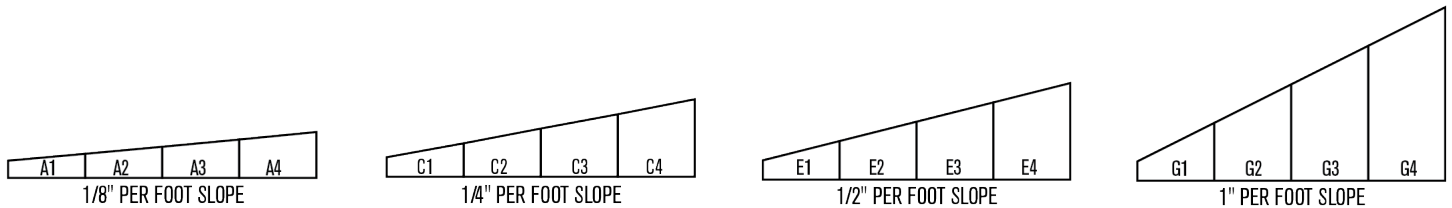
ThermalStar Tapered Insulation is backed by a limited lifetime warranty for physical and thermal performance. See separate ThermalStar warranty for terms and conditions.

STANDARD PRODUCT OFFERINGS

Atlas has a dedicated tapered department to help meet the design and specification needs of your project. ThermalStar Tapered Insulation is offered in a one-layer, integral system or modular approach.

COMPRESSIVE STRENGTH	10 psi, 13 psi, 15 psi, 25 psi, 40 psi, 60 psi
SIZE	4'x4' and 4'x8' panels
THICKNESS	1/2" to 24" in a single layer

EXAMPLE TAPERED CROSS-SECTIONS



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

**GREATER COVERAGE
GREATER AVAILABILITY**



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