

## FLUTE FILL

### COMMERCIAL ROOF APPLICATIONS

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

### PHYSICAL PROPERTIES

PROPERTY	ASTM TEST METHOD	FLUTE FILL		
		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	3.0	2.0	2.0
		24 Hour Immersion & 24 Hours @ 50% RH	0.3	0.3
Water Vapor Permeance at 1" Thick (perms)	E96	5.0	3.5	3.5
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 Flute Fill 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 Flute Fill 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 Assembly Approvals - UL TGFU.R16529, UL TGKX.666

## WARRANTY

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

## PRODUCT OFFERINGS

<b>COMPRESSIVE STRENGTH</b>	10 psi, 13 psi, 15 psi
<b>SIZE</b>	8' lengths
<b>THICKNESS</b>	1/2" to 4"
<b>PROFILE</b>	Precisely CNC cut to fit roof profile. Available with tapered, square, beveled or profile cut edges

FOR ADDITIONAL RESOURCES, VISIT THE ROOF INSULATION SECTION OF OUR WEBSITE [ATLASMOLDEDPRODUCTS.COM](https://atlas molded products.com)

**GREATER COVERAGE  
GREATER AVAILABILITY**



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