

Cabot's Lumira™ Aerogel

Translucent Insulation

Description:

Lumira™ aerogel is the most highly insulating translucent insulation (TI) currently available anywhere. Aerogel is an ultralight nanomaterial that has very low thermal conductivity combined with excellent light scattering properties. Lumira aerogel, produced by Cabot Corporation in a granular form, delivers unparalleled translucent insulation while achieving between 14%-20% VLT as measured within the panel assembly. Lumira is only available for 2.75" (70mm) panels with select grid-core and face sheet options.



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Performance Data: 2.75" (70mm) Panel

FRP Face Sheet Combinations		Visible Light Transmission (VLT) %				
Exterior FRP	Interior FRP	0.53 U	0.29 0.23* U	0.22 0.14* U	0.18 0.10* U	0.05* U
Greenish Blue	White	25%	14%	5%	3%	14%
Aqua	White	29%	17%	6%	4%	15%
Rose	White	30%	18%	6%	4%	16%
Ice Blue	White	35%	20%	8%	6%	21%
White	White	20%	15%	8%	5%	14%
Crystal	White	35%	20%	12%	8%	20%
Crystal	Crystal	50%	30%	15%	10%	NA

= Air Gap Only
 = Fiberglass TI
 = Cabot's Lumira™ Aerogel

Performance Data: 4.00" (100mm) Panel

FRP Face Sheet Combinations		Visible Light Transmission (VLT) %			
Exterior FRP	Interior FRP	0.55* U	0.15* U	0.08* U	aerogel not available
White	White	20%	12%	5%	aerogel not available
Crystal	White	35%	14%	7%	aerogel not available
Crystal	Crystal	50%	17%	8%	aerogel not available

*Indicates U-factors for thermally broken panels. U-value SI conversion: 1.0 W/m²K = 0.176 Btu/hr/ft²/°F

Approximate values by ASTM E-972. Visible light transmission values over 30% are not recommended for most applications.

Panel U-factors include panel grid-core. NFRC certified system U-factors vary depending on framing.