



ThermaGlas™

Multi-Wall Structured Polycarbonate Sheets



Solar Smart.
Selective Solar Control Technology

Overview

ThermaGlas is available in a variety of tints and special pigments, providing solutions for applications as diverse as production, propagation, holding areas, and retail garden centers.

ThermaGlas products feature built-in condensation control so durable and effective it's warranted for 10 years. The result is higher light transmission and reduced moisture-related disease.

ThermaGlas 8mm triple-wall polycarbonate offers excellent light transmission, while providing up to 60% more energy efficiency than glass, and 25% more efficiency than 8mm twin-wall acrylic.

www.PalramAmericas.com

Main Benefits

- Superb thermal insulation—*saves energy*
- Impact resistance—*virtually unbreakable*
- Built in condensation control
- Light weight
- Weather and UV resistant
- Low flammability (available with CC1 rating)
- Easy to work with and install using ordinary tools
- Rigid, yet capable of cold-forming to an arch
- Wide service temperature range
- 10 year limited warranty
- Available in 47¼", 48", 71¼" & 72" widths

Typical Applications

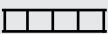
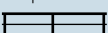
- Commercial greenhouses
- Retail garden centers
- Packing & holding areas
- Skylights and sidelights
- Signs and displays
- Covered walkways
- Industrial roofing & glazing
- Swimming pools

SUNLITE® multi-wall polycarbonate—a sister product of *ThermaGlas*—is also available for similar applications. SUNLITE does not feature guaranteed built-in condensate control.



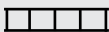

Table of Typical Properties

See the *ThermaGlas Technical and Installation Guide* for additional specifications and details.

H.D.T. (264 p.s.i.)		222 °F					
Thermal Expansion Delta T @ 104 °F		0.03 in./ft. clear & opal 0.054 in./ft. bronze					
Service Temperature Range		-40 °F to +250 °F					
Light Transmission							
Product / Profile	Thickness	Color or Tint					
		Clear	Bronze*	White Opal	SLT	SolarSoft 80	Solar Ice*
 Twin-Wall	4mm	82%	35%	30%			
	6mm	80%	35%	20%			
	8mm	80%	35%	45%	60%	80%	25%
	10mm	79%	35%	30%			
 Triple-Wall	8mm	76%	35%	45%			
	10mm	76%	35%	48%			
	16mm	76%	35%				25%

* Available subject to minimum order requirements.

Thickness, Weight & Insulation Values

Product / Profile	Thickness		Weight		R-Factor	U-Value
	inch	mm	lb/psf	g/m ²		
 Twin-Wall	5/32	4	0.16	800	1.49	0.67
	1/4	6	0.27	1,300	1.62	0.62
	5/16	8	0.31	1,500	1.72	0.58
			0.35	1,700	1.72	0.58
3/8	10	0.35	1,700	1.89	0.53	
 Triple-Wall	5/16	8	0.35	1,700	1.99	0.50
	3/8	10	0.41	2,000	2.08	0.47
	5/8	16	0.55	2,700	2.36	0.42

Products, Colors and Dimensions

Standard Products: ThermaGlas is manufactured with built-in anti-condensation properties on one side of the panel and ±100% UV protection on the other side of the panel. ThermaGlas UV2® with UV protection on both sides of the panel is also available for exterior applications or open-roof greenhouses.

Standard Colors: Clear (transparent), Bronze, White Opal

Standard Widths: 47¼", 48", 71¼" and 72"



PALRAM AMERICAS

9735 Commerce Circle
Kutztown, PA, 19530 USA
Tel: 800.999.9459
palramamericas@palram.com



Authorized Distributor

Inasmuch as PALRAM Industries has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the material's suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any PALRAM Industries patent covering such use or as recommendations for use of such materials in the infringement of any patent. PALRAM Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our company policy of continual product development you are advised to check with your local PALRAM Industries supplier to ensure that you have obtained the most up to date information.



Available with SolarSmart™ Technology

Some ThermaGlas products are part of Palram's SolarSmart™ family of products. SolarSmart products are designed to selectively transmit or screen certain wavelengths of solar radiation in order to achieve benefits for specific environments or applications. As an example, ThermaGlas SLT provides good PAR light transmission, but reduces solar transmission perfect for retail garden centers. For more information, contact your Authorized Palram Representative.

Flammability

ThermaGlas sheets are essentially self-extinguishing and comply with the most demanding of international resistance standards defined in the field of plastics, as indicated by the representative results in the table below.

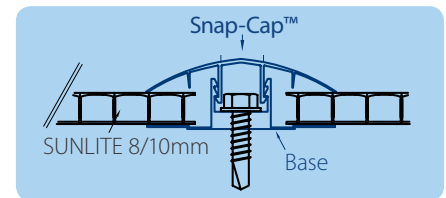
Country	Standard	Classification*
United States	ASTM D-635	CC-1
United States	ASTM E-84	Class A

* Classification is dependent on product thickness

ThermaGlas "Snap-Cap™" Glazing System

The "Snap-Cap" Glazing System includes a unique polycarbonate "Snap-Cap." This attractive and functional member snaps down into the extra strong aluminum support rafter.

This heavy-duty, UV- and weather resistant "Snap-Cap" is designed to receive a "Snap-Cap" member without having to drill holes or use



threaded fasteners and helps reduce thermal conduction. The result is easier installation, more strength, and greater energy efficiency, compared to all plastic or all aluminum systems.

Warranty

ThermaGlas features a 10 year warranty against loss of light transmission due to yellowing, damage due to hail impact, and for condensation control performance (see warranty for details).