

# Thermaglas™ Multiwall Polycarbonate

Multi-Wall Structured Polycarbonate Sheet

#### Description and Overview

Thermaglas<sup>™</sup> is a multiwall polycarbonate sheet designed for selective light transmission and radiation. It has proprietary condensate control technology that maximizes light transmission by minimizing water droplet formation that would reflect valuable sunlight. Thermaglas<sup>™</sup>'s condensate protection is built into the bottom of the panel, while the top is coated with a special 99.5% UV protection coat that blocks harmful ultraviolet rays and only transmits beneficial radiation.

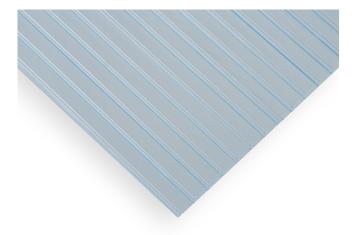
Thermaglas<sup>™</sup> has excellent thermal insulation and is weather resistant. It is Class A fire rated and is self-extinguishing. As a result of its cellular multi-layer structure, Thermaglas<sup>™</sup> is 60% more energy-efficient than similar glass products, and 25% more energy-efficient than 8mm twinwall acrylic.

### **Applications and Uses**

By reducing or eliminating condensate drip, Thermaglas<sup>™</sup> helps prevent various moisture-related diseases in crops and improves crop quality and yield, making it an ideal fit for greenhouses and other applications such as retail garden centers and outdoor signage.

Thermaglas™ may be installed with ordinary tools and cold-formed to arch. Besides greenhouse applications and outdoor signage, it can be used wherever selective light transmission and radiation is needed. This includes anything from packing and holding areas to swimming pool coverings.

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



Thermaglas™ is avilable in clear, bronze, and ice (opal) colors. Available sheet sizes: 48" x 96", 48" x 144", 72" x 96", 72" x 144" Thicknesses: 6mm, 8mm, 10mm

#### Properties and Specifications

Property	Value	Test Method	
Optimal Service Temperature Range	-40°F to +248°F (-40°C to ± 120°C)		
Maximum Service Temperature	270°F (132°C)	ASTM D-648	
Heat Deflection Temperature (Load: 264 PS)	275°F		
VICAT Softening Temperature (Load: 2.2 lb.)	300°F	ASTM D-1525	
Coefficient of Linear Thermal Expansion	3.6 x 10 <sup>-5</sup> in./in.°F	ASTM D-696	
Thermal Conductivity (BTU-in/hr-ft2- °F)	1.45	ASTM C-177	

Properties are typical.

Chem is an abbreviation for chemically affixed with glues, chemicals, or adhesive.

Mech is an abbreviation for mechanically affixed bonding.

Field testing is recommended for any application.

Rev 2 (07/25/2023)





WARNING: This product can expose you to chemicals including

go to www.P65Warnings.ca.gov

Bisphenol A, CAS 80-05-7, which is known to the State of California to

cause birth defects or other reproductive harm. For more information



## **Typical Properties**

Property	Test Method	Units	Values
MECHANICAL			
Tensile Strength At Yield (0.4 in./min.)	ASTM D-638	psi	9,400
Tensile Strength At Break (0.4 in./min.)	ASTM D-638	psi	8,800
Elongation At Yield (0.4 in./min.)	ASTM D-638	%	6
Elongation At Break (0.4 in./min.)	ASTM D-638	%	>90
Tensile Modulus of Elasticity (0.4 in./min.)	ASTM D-638	psi	350,000
Flexural Modulus (0.052 in./min.)	ASTM D-790	psi	380,000
Flexural Strength At Yield	ASTM D-790	psi	14,500
Rockwell Hardness	ASTM D-785	R Scale	118
Density	ASTM D-792	lb/ft³	75
Specific Gravity	ASTM D-792	g/cc	1.2

