

# Multi Wall Polycarbonate Sheet Product



**Resolite**®

A DIVISION OF STABILIT AMERICA



- 2 Side UV Protection
- Heat Reflective



#### Colors Available

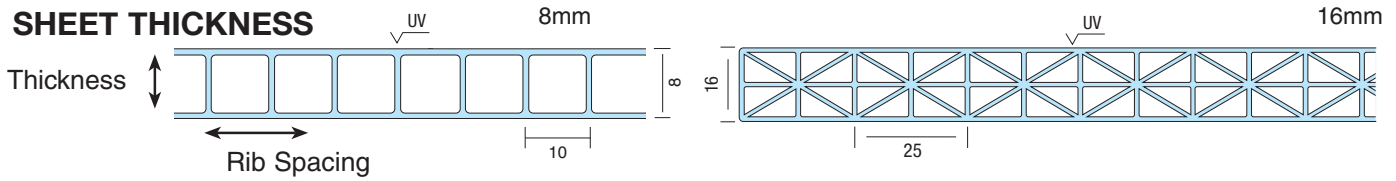
- High Diffused HD Soft White
- Clear
- Opal
- Bronze
- Grey
- Blackout

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10 & 15 YEAR NON PRORATED WARRANTY AVAILABLE

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## POLYCARBONATE MULTI WALL SHEET



Width (in.)	47.25", 48", 71.25", 72" and 82.67"
Length (ft.)	Up to 48'
Gauges	4mm(3/16"), 6mm(1/4"), 8mm(5/16"), 10mm(3/8"), 16mm(5/8")

### TECHNICAL DATA Product Property Table

Property/ Thickness	Unit	4mm	6mm	8mm Twin	8mm Triple	10mm	16mm
Thermal Insulation	U-Value	0.72	0.62	0.58	.54	0.53	0.42
	R-Value	1.39	1.62	1.73	1.86	1.89	2.40
Cold Forming Radius (Minimum Permissible)	Inch	29.5	39.4	49.2	51.18	59.1	94.5
Heat Expansion Coefficient	Inch/ft°F	4x10 <sup>-4</sup>	4x10 <sup>-4</sup>	4x10 <sup>-4</sup>	4x10 <sup>-4</sup>	4x10 <sup>-4</sup>	4x10 <sup>-4</sup>
Max. Permanent Service Temperature w/o Load	°F	212	212	212	212	212	212
Possible Expansion Due to Heat and Moisture	Inch/Inch	0.003	0.003	0.003	0.003	0.003	0.003
Weighted Sound Reduction Index	db	N/A	10	14	14	16	21

### MAKROLON Product Range

Sheet Thickness	4mm	6mm	8mm	8mm	10mm	16mm
Sheet Type	Twin	Twin	Twin	Triple	Twin	X Wall
Weight (lb/ft <sup>2</sup> )	0.16	0.26	0.31 0.35	0.31	0.35	0.51
Weight (g/m <sup>2</sup> )	800	1300	1500 1700	1500	1700	2500
Light Transmission (%) Clear	82	82	81	72	80	59
Light Transmission (%) Bronze	52	50	50	NA	46	31
Light Transmission (%) Opal	61	55	54	N/A	54	54
Light Transmission (%) HD Soft White	N/A	N/A	77	68	N/A	55
Light Transmission (%) Light Deprivation Black and White	N/A	N/A	0	N/A	N/A	0

### Special Features Available:

**No Drip** – anti condensate that inhibits the formation of condensation into droplets by reducing surface tension making the condensation run off the sheet into the gutters or drain.

**IQ Relax** – offers high thermal insulation without sacrificing natural light. The Makrolon panels are coextruded with an advanced additive technology that adapts to weather conditions which helps maintain a comfortable temperature inside the structure. During summer months IQ Relax reflects heat and solar energy while in winter it keeps the heat in.

**IQ Select** – designed for retail garden centers offering high light transmission while reflecting the solar energy making the temperature of the shopping environment very comfortable.

**Light Deprivation Panel** - 0% light transmission multi wall polycarbonate sheet with the option of black, white or combination of both colors. This sheet is designed for the end and side walls of a greenhouse which requires a light deprivation system.



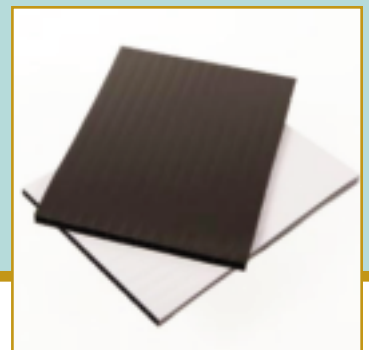
Standard H-Profile



Standard U-Profile

### Multi Wall Accessories

H-Channel UV Protected	24' length
U-Channel UV Protected	12' length
Vented and Non Vented Tape	150' roll



## Loading Guidelines:

For a 4' wide sheet:

Maximum Purlin Spacing (inches) Sheet Deflection - 1"				
Load (lbs/ft²)	15	30	45	60
6mm	31"	24"	12"	*
8mm	38"	28"	18"	10"
10mm	45"	34"	28"	24"
16mm	75"	43"	36"	30"

For a 6' wide sheet:

Maximum Purlin Spacing (inches) Sheet Deflection - 1"				
Load (lbs/ft²)	15	30	45	60
6mm	25"	9"	*	*
8mm	36"	26"	12"	*
10mm	44"	33"	27"	20"
16mm	60"	40"	36"	30"

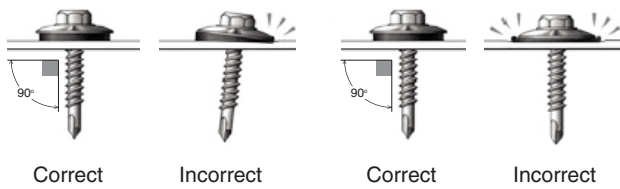
## Polycarbonate Guide for Cutting, Storage and Installation

**Cutting:** To cut sheet width and length use circular saw and fine tooth plywood blade (at least 10 teeth per inch). Cut sheets before taking off protective poly film. Clean sheet flutes out after cutting with vacuum or blow out channels with an air compressor before installation.

**Storage:** Store sheets out of direct sunlight in a dry area. Keep sheets in a well ventilated location.

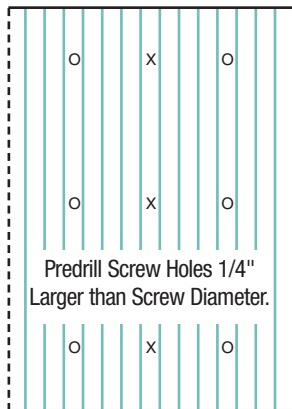
**Thermal Expansion:** For each linear foot, allow 1/32" for expansion or contraction of sheet for every 100 degree temperature differential (contact Resolite for the expansion rate on colored materials). Pre-drill screw holes 1/4" larger than screw diameter.

### Screw Attachment



Fasten screws tight without dimpling sheet

Pre-drill Screw Holes 1/4" Larger than Screw Diameter.



Sheet Fastening Positions

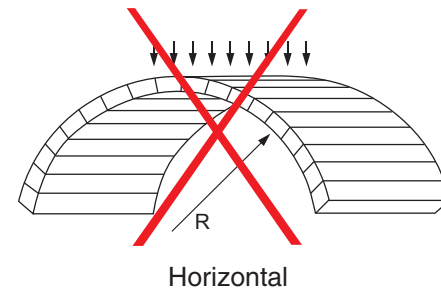
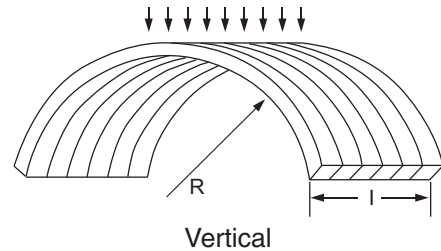
X = Mid-Sheet fasteners for 48" sheet

O = Mid-Sheet fastener for 72" sheet

Fasten sheets in all four corners

### Sheet Orientation:

Ribs should always run vertical



### Fire Rating: 8mm

ASTM	CLASSIFICATION
ASTM E84-01	Cass A (NFPA); Class I (UBC)
ASTM D635-74	Class CC1
ASTM D2843-93	Low Smoke Density (UBC standard No. 26.5)
ASTM D1929-68	Self Ignition Temperature greater than 650° F





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## 10 & 15 Year Non Prorated Warranty

**Makrolon** Multi Wall sheets are available in both a 10 & 15 Year Non Prorated Warranty against loss of light transmission caused by yellowing and breakage caused by hail.

The polycarbonate panels come with U.V. coextruded protection on the exterior surface. This protection will prevent the sheets from discoloration and degradation causing the sheet to become brittle and lose light transmission. Two sided co-extruded UV protection is available as well as the "No Drip" anti condensate feature.

Virtually unbreakable, the Makrolon Multi Wall sheets made with Makrolon resin will withstand breakage caused by hail stones of up to 20mm in diameter for the life of the warranty.

**Makrolon PC** greenhouse covering prevents the transmission of over 99.9% of harmful radiation resulting from UV rays. It maintains its mechanical and structural integrity under extreme weather conditions (up to 212° F).

### Special Notes:

1. The installation must comply with the IMSA Plastics guidelines for warranty to be valid. Local authorization may be required.
2. Installation guidelines available on request.

For additional information or questions contact Resolite at 888-RESOLITE (737-6548).



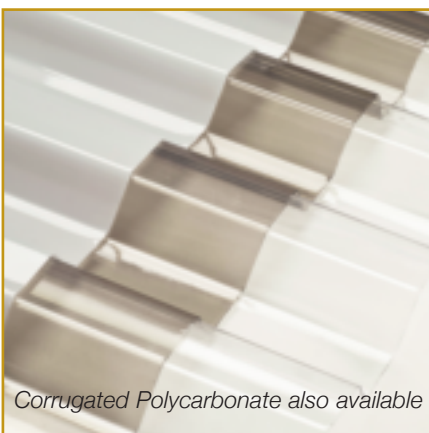
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Corrugated Polycarbonate also available