

Macrolux®

MULTI WALL POLYCARBONATE SHEETS

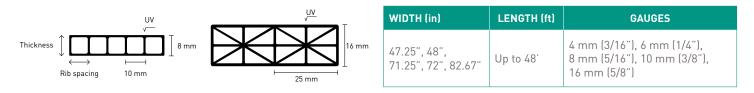
15 YEAR LIMITED WARRANTY AND 15 YEAR NON PRORATED WARRANTY AVAILABLE

∠Macrolux[®]



Colors available: High Diffused HD Soft White, Clear, Opal, Bronze, Grey, Blackout.

Sheet thickness



Product range and properties

CHARACTERISTICS	TWIN WALL				TRIPLE WALL		X WALL
Sheet Thickness (mm)	4	6	8	10	8	10	16
Weight (lb/ft²)	0.16	0.26	0.31/0.35	0.35	0.31	0.35	0.51/0.55
Weight (g/m²)	800	1300	1500 / 1700	1700	1500	1700	2500/2700
Thermal Insulation BTU/hr-ft²-°F (U-Value / R-Value)	0.72 / 1.39	0.65 / 1.54	0.58 / 1.73	0.55 / 1.82	0.50 / 2.00	0.44 / 2.27	0.35 / 2.86
Cold Forming Radius (Minimum Permissible) (in)	29.5	39.4	49.2	59.1	51.18	N/D	118.11
Heat Expansion Coefficient (Inch/ft°F)	3.6x10 ⁻⁵						
Max. permanent service temperature w/o load (°F)	248	248	248	248	248	248	248
Possible expansion due to heat and moisture (in/ft)	0.036	0.036	0.036	0.036	0.036	0.036	0.036
Weighted Sound Reduction Index (db)	N/A	10	14	16	14	N/D	21
Light transmission (%)							
Clear	82	80	80	80	72	72	59
Bronze	52	50	50	46	50	46	31
Opal	61	55	54	54	54	54	32
HD Soft White	N/A	N/A	77	N/A	67	67	54
Black and White	N/A	N/A	0	0	0	0	0
Opal Ice	32	32	32	32	32	32	N/A



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 autters or drain.



IQ Relax - Offers high thermal insulation without sacrificing natural light. The Macrolux® 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.

Multi wall accessories



H-Channel UV Protected 24' lenght

U-Channel UV Protected 12' lenght

Vented and Non vented tape 150' roll

Loading Guidelines

Maximum purlin spacing (inches) Sheet deflection - 1"

	4' WIDE SHEET				6' WIDE SHEET			
Load (lbs/ft²)	15	30	45	60	15	30	45	60
6 mm	31"	24"	12"	*	25"	9"	*	*
8 mm	38"	28"	18"	10"	36"	26"	12"	*
10 mm	45"	34"	28"	24"	44"	33"	27"	20"
16 mm	75"	43"	36"	30"	60"	40"	36"	30"

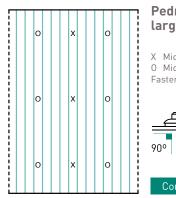
Polycarbonate Guide for Cutting, Storage and Installation

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 Macrolux USA for the expansion rate on colored materials). Predrill screw holes 1/4" larger than screw diameter.

Screw attachment



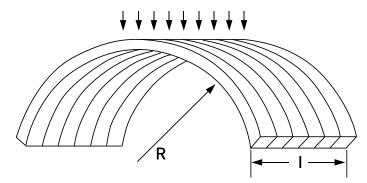
Pedrill Screw Holes 1/4" larger than Screw diameter.

X Mid-Sheet fasteners for 48" sheet O Mid-Sheet fastener for 72" sheet Fasten sheets in all four corners



Sheet orientation

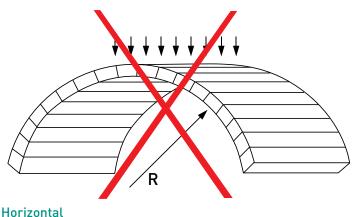
Ribs should always run vertical



Vertical



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 650o F



15 Year Limited Warranty & 15 Year Non Prorated Warranty

Macrolux® Multi Wall sheets are available in both a 15 Year Limited Warranty & 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 Macrolux® Multi Wall sheets will withstand breakage caused by hail stones of up to 23mm in diameter for the life of the warranty.

Macrolux® 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 248 °F).

Special Notes:

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



This information and our product application recommendations are illustrative and must be verified for each project.

The pictures presented are merely illustrative.