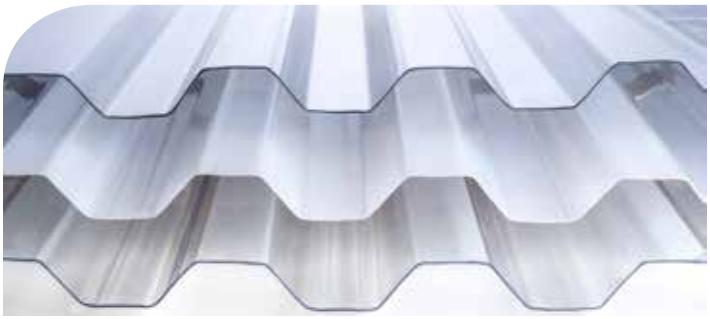
Macrolux®

CORRUGATED POLYCARBONATE SHEET PRODUCT

10 YEAR NON PRORATED WARRANTY

Macrolux®



MACROLUX® ROOFLITE® CORRUGATED POLYCARBONATE PANELS are designed for applications requiring a lightweight, rigid covering which is virtually unbreakable while still offering high light transmission.

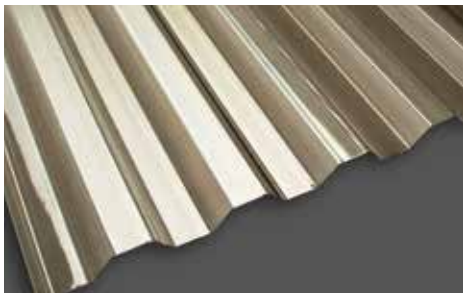
Applications:

- Sidelights
- Pool & Patio Covers
- Sunrooms
- Skylights
- Canopies
- Vertical Partitions
- Greenhouses
- Walkway Covers
- Dividers
- Garden Sheds
- Carports
- Fencing

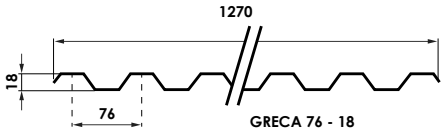
Features & Benefits:

- Macrolux® Rooflite® produces bigger, brighter plants and vegetables.
- High light transmission optimizes plant growth.
- 100% light diffusion scatters light in greenhouses promoting uniform growth.
- Diffusion softens light and reduces harsh solar energy avoiding hot spots that damage plants and makes a comfortable work and living environment.
- No Drip feature prevents condensation from forming droplets and dripping on the plants which can spread disease and damage plants.
- Promotes higher crop yields and eliminates shadows.
- Panel offers privacy while still allowing in natural light for growing.
- Available in Greca, Omega and Roma profiles.
- 10 year non prorated warranty on yellowing and breakage caused by hail.
- Macrolux® Rooflite® High Diffused Polycarbonate Greenhouse Covering 100% Light Diffusion 90% Light Transmission.

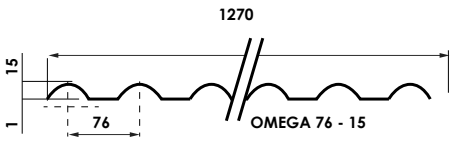
Profiles

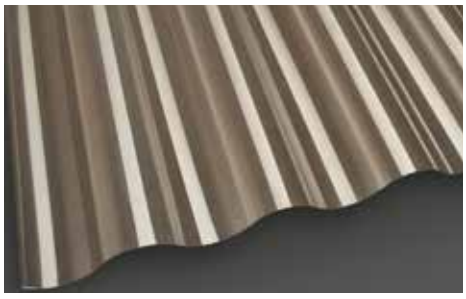


Greca 76-18

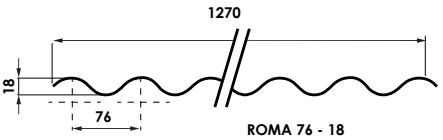


Omega 76-18





Roma 76-18



Benefits

- Recyclable
- Light wieght easy to handle
- Energy efficient
- High light transmission
- Co-extruded UV 1 side
- Virtually unbreakable

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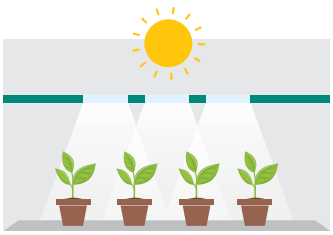
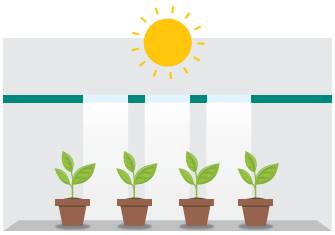
Physical Properties

CHARACTERISTICS	ROMA (SINE WAVE)	GRECA	OMEGA
Nominal Width	50" & 26"	50" & 26"	50" & 26"
Nominal Thickness (mm)	0.8	0.8	0.8
Corrugation Pitch (mm)	76	76	76
Corrugation Height	18	18	18
Weight: lbs/sf	0.22	0.23	0.23
Light Transmission ASTM-D1003 (%)			
Clear	90		
Bronze	48		
Opal	60		
HD Soft White	PAR Ligh 90% with 100% Light Diffusion		

- Lengths up to 48 foot.
- Custom colors available by special order.



Diffused light



Direct light

Greca Corrugated HDSoft White PC Greenhouse Covering

Shadows with clear covering

No shadows with HD Soft White

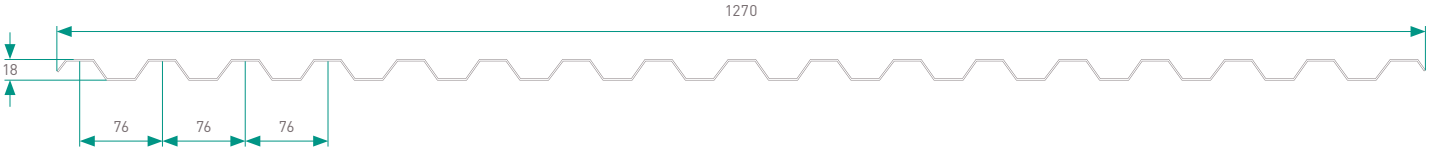
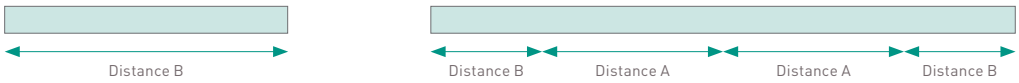


Table A. Physical properties

PROPERTY	TYPICAL VALUE							
Thickness	0.8 mm	0.031"	0.9 mm	0.035"	1 mm	0.039"	1.2 mm	0.047"
Weight	1.13 kg/m²	0.23 lb/ft²	1.20 kg/m²	0.25 lb/ft²	1.30 kg/m²	0.27 lb/ft²	1.56 kg/m²	0.32 lb/ft²
Width	Nominal (Sheet max) 1270 mm (50")			Useable 1220 mm (48")				
Length	Up to 10.97 meters (36')							
Available colors	Clear, Opal, Bronze and HD Soft White							
Thermal expansion	0.065 mm/m °C							
Minimum radius of curvature	4 meters (13 1/8')							
Minimum slope	5%							
Recommended fixing	Self-drilling 6.3 x 60 mm (1/4"x 2 3/8") with EPDM gasket every 304 mm (12") Self-tapping for wood 6.5 x 75 mm (1/4"x 3") with EPDM gasket max every 304 mm (12") Seaming plug max every 300 mm (11 4/5") To avoid buckling, it is necessary to oversize the holes in 1/8".							
Spacer made of foamed PE	Not available							

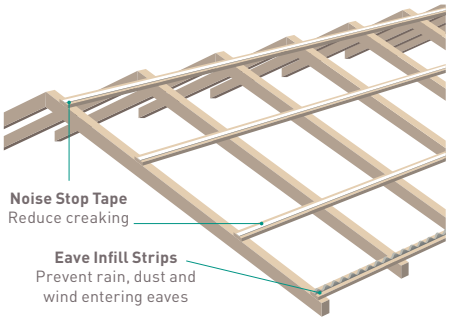
Table B. Breaking strength values (*) for evenly distributed loads



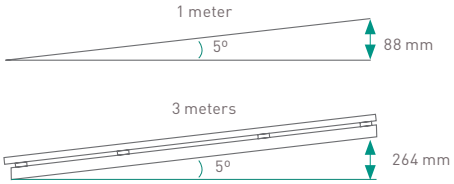
THICKNESS	DISTANCE A				DISTANCE B			
mm	13 lb/ft²	19 lb/ft²	25 lb/ft²	31 lb/ft²	13 lb/ft²	19 lb/ft²	25 lb/ft²	31 lb/ft²
0.8	1050 mm (41 1/3")	1000 mm (39 1/3")	900 mm (35 1/2")	850 mm (33 1/2")	850 mm (33 1/2")	800 mm (31 1/2")	750 mm (29 1/2")	700 mm (27 1/2")
0.9	1100 mm (43 1/3")	1000mm (39 1/3")	950mm (37 1/3")	900 mm (35 1/2")	900 mm (35 1/2")	800 mm (31 1/2")	750 mm (29 1/2")	700 mm (27 1/2")
1.0	1150 mm (45 1/3")	1050 mm (41 1/3")	950 mm (37 1/3")	900 mm (35 1/2")	900 mm (35 1/2")	850 mm (33 1/2")	800mm (31 1 /2")	750mm (29 1/2")
1.2	1150 mm (45 1/3")	1050 mm (41 1/3")	1000 mm (39 1/3")	950 mm (37 1/3")	950 mm (37 1/3")	850 mm (33 1/2")	800 mm (31 1/2")	750 mm (29 1/2")

(*) Breaking strength values (safety coefficient 1.5)

Purlins & accessories



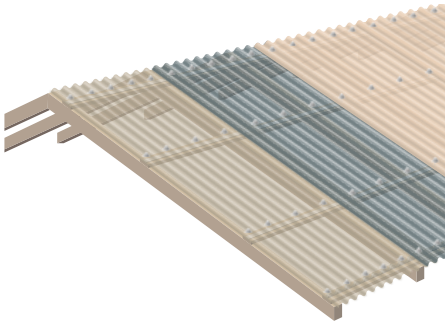
1. Ensure that your roof pitch is at least 5°, ie. 88mm rise per lineal meter.This will ensure adequate water run off.



2. Allow for ventilation, particularly at the highest point, to minimize heat build-up and provide air circulation. Good ventilation will also minimize condensation in cold weather.

3. For roofing, purlin/batten spacings should be no more than those shown in **Table B** Maximum Purlin Spacings.

Sheet & fixings



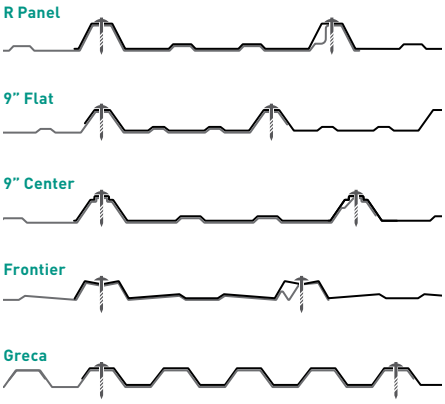
1. Ensure that the UV surface protected side faces the sun. This is the side of the label and refer to the inkjet message. When installed as a wall or fence it is recommended that the UV protected side is facing the most sun. The life of the sheet may be shortened and discolouration may occur due to the unprotected side being exposed to UV radiation.

2. The sheet can be easily cut with a pair of shears, a fine-toothed handsaw or a circular saw with a cut-off blade suitable for plastic.

3. For roof laying, start with the lower sheets first, keeping side laps away from prevailing wind. Allow on overhang of 50mm. Temperature changes will cause expansion and contraction, so make allowances for thermal movement. Resistance to movement can cause buckling.

4. Side laps will differ by profile. Install as shown on **Table C**.

Table C. Side laps



5. To ensure maximum performance of the sheet, and to avoid buckling, it is necessary to oversize the holes and center the fixings.

Pre-drill your fixing holes, using a 9mm drill. Fix the sheet through the center of the pre-drilled holes, perpendicular to the purlins/battens. A (5/16") drill hex driver bit should be used. Only tighten the fixings enough to prevent rattling. Over tightening may cause distortion and undue stress with possible failure resulting. In normal conditions, use the fixing spacings shown in **Table A** - Fixing spacings-Standard Installation.

As a guide, you will need approximately 7 fixings per lineal meter. This depends on your purlin spacings and wind conditions.

10 Year Non Prorated Warranty

Macrolux® Rooflite® Corrugated Polycarbonate sheets come with a 10 Year Non Prorated Warranty against loss of light transmission caused by yellowing and breakage caused by hail.

The corrugated PC panels come with a UV coextruded protection on the exterior surface which protects the sheet from degradation and discoloration caused by UV rays. The "No Drip" anti condensation feature is available on the interior surface of the panel.

Virtually unbreakable, these corrugated sheets will withstand breakage caused by hail stones of up to 20mm in diameter for the life of the warranty.

Macrolux® Rooflite® 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 212o 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 request.

Macrolux® USA