



Laserlite<sup>®</sup> Twinwall is a premium multiwall polycarbonate sheet that is an ideal combination of a lightweight glazing panel with excellent impact resistance and has an industry leading **15 Year Warranty** against loss of light transmission. Laserlite<sup>®</sup> Twinwall is the first choice for almost any demanding glazing application, can meet most architectural requirements and has excellent thermal and acoustic properties.

All of this in a modern and stylish product with a range of colours and tints - the **perfect combination for your next project.** 

#### **Available Colours & Thicknesses**

Laserlite® Twinwall is available in thicknesses of **6mm and 8mm, in 1220mm widths and 5800mm lengths.** Stock lengths are cut from these to suit each individual project requirement.



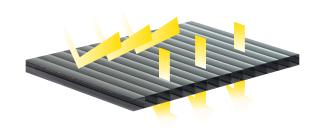
# **Advantages of Laserlite® Twinwall Polycarbonate**

- · Reduces heat without sacrificing light
- Absorbs almost 100% of sunlight UV radiation
- 250 times stronger than glass and 20 times stronger than acrylic
- · Very light, very strong and virtually unbreakable
- Capable of withstanding temperature fluctuations from -20°C to 120°C
- · 15 year limited warranty against loss of light transmission

Manufactured by PT Impack Pratama Industri TBK, a global leader in the design and manufacture of thermoformed polymers, Laserlite<sup>®</sup> Twinwall polycarbonate sheet offers superior clarity, durability and unmatched design flexibility and structural integrity that surpasses other glazing material.

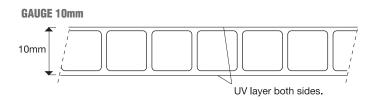
#### **How it Works**

Being a multiwall product, Laserlite<sup>®</sup> Twinwall offers reduced thermal buildup under the sheet as compared to single skin products. Whilst allowing sufficient light transmittance Laserlite<sup>®</sup> Twinwall should be considered where heat reduction is a design consideration.



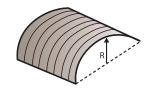
### **Light & Heat Transmission**

	clear	bronze tint	grey tint	opal
Light Transmission %	86%	25%	11%	18%
Heat Transmission % <sup>‡</sup>	76%	30%	24%	29%
Shading Coefficient	0.90	0.59	0.54	0.39
Solar Heat Gain Coefficient	0.79	0.52	0.47	0.34



For bending installation, please see the below radius table:

Thickness (mm)	Minimum Radius (mm)		
6 mm	750 mm		
8 mm	900 mm		



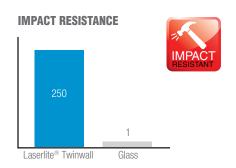
## **The Glazing System**

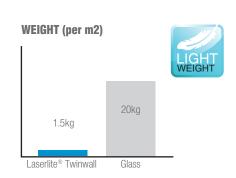
The H-Bar system makes handling and installation easy and flexible. The Laserlite® Twinwall sheets simply slot into the H-Bar ready for fixing to the structure. The glazing bar system allows for thermal expansion and eliminates the need for penetrations through the sheet, making the structure watertight.

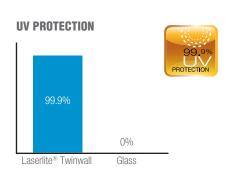


#### **Comparison to Glass**

Based on 6mm clear Laserlite® Twinwall vs 8mm clear standard glass







<sup>\*</sup>Above data applies for Laserlite® Twinwall 8mm only



- **1.** Laserlite<sup>®</sup> Twinwall is UV 2 treated, this means both sides are UV protected therefore any side can face the sun. Before installation, do not remove the masking film. After installation, masking film should be removed within a maximum of 48 hours.
- **2.** A fine tooth saw or sharp knife can be used to cut the sheets. After trimming to the desired size, ensure the edges are free of burs and debris and are dry.
- **3.** Always install the sheets with the flutes facing vertically. Allow at least a 5° slope to allow for water flow, particularly important for roofing installations.
- **4.** Oversize holes should be drilled 2mm larger than the diameter of the fasteners to allow for thermal expansion and contraction.
- **5.** During installation, sheet ends should be sealed with polycarbonate U profiles to prevent condensation, algae and insects within the sheet walls (see Laserlite® Twinwall installation instructions at alsynite.co.nz). Alsynite supplies all Laserlite® Twinwall polycarbonate end [U] and joining profiles [H] for use with Laserlite® Twinwall sheeting.

### **Accessories**



Colours depicted in this brochure are representations offered only as a guide and should not form the basis of a colour selection. Slight colour variation may occur between production runs. Transmitted light and colour may vary in intensity depending on weather conditions. The information contained in this brochure is to the best of our knowledge accurate, but all recommendations are made without any warranty whatsoever, since the conditions of use are beyond our control. This brochure cancels and supersedes all previous publicised information. The company reserves the right to alter and revise, without notice, the information contained herein. ® Registered trademark of Alsynite One New Zealand Ltd. Laserlite® is a registered trademark of Impack Pratama Industri Tbk.

