

# **skiezlight**

polycarbonate sheet



**HIGH PERFORMANCE  
GLAZING MATERIAL**

## skieilight polycarbonate sheet



### INTRODUCTION

Produced from high quality virgin polycarbonate resins, Our polycarbonate sheet is a great alternative material for architectural roofing and glazing applications. Polycarbonate sheet offers excellent impact strength, weather-resistance, heat-insulation, high transparency, UV stability, flame-resistance and good electrical and dielectric properties.

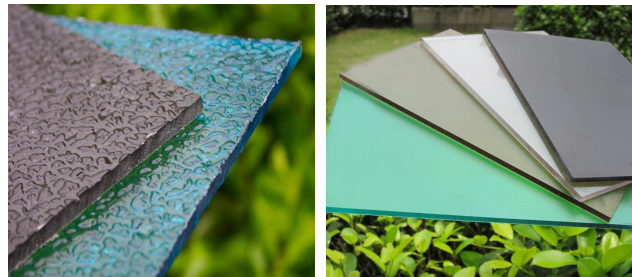
### SPECIFICATIONS

Available Profile : Plain, Embossed, Frosted series  
 Available Thickness : 1 mm to 25mm  
 Available Width : 1212 mm to 2100 mm  
 Available Length : upon request

Manufacturing Tolerance: Overall Gauge  $\pm 0.03$ mm

### APPLICATIONS

Polycarbonate sheet is ideal for use in a wide range of applications where clarity and impact strength is essential. Typical applications for polycarbonate sheet include skylights and sidelights in roof and walls, acoustical barriers on roadsides, indoor partitions, advertising and signage, stationary and mobile shields of all type, and so on.



Tensile Strength	MPa	62	ASTM D638
Light Transmission	%	60 ~ 86	ASTM D1003
Specific Gravity	g/cm <sup>3</sup>	1.2	ASTM D792
Water Absorption	%	0.15	ASTM D570
Deflection Temperature	°C	132	ASTM D648
Thermal Conductivity	W/m <sup>2</sup> X °C	0.19	ASTM C177
Rockwell Hardness	HRR	118	ASTM D785
Flexural Stress	MPa	98	ASTM D790
Flame Class Rating (3)	mm	0.8	UL94

#### High Impact Strength

Our polycarbonate sheet is virtually un-breakable, when used as internal or external glazing can improve the burglary resistance. It can also protect against vandalism when used as external installations.

#### Light Transmission

Providing long-lasting clarity over a wide range of weather conditions and environments, our polycarbonate is ideally suited to a wide variety of building and construction applications which requires good light transmission.

#### Sound Reduction

Installing our polycarbonates sheet into single or in overglazing with glass meets the acoustic requirements for today's glazing.

#### Thermal Insulation

When using our polycarbonate sheet as single or in combination with glass, considerable energy cost savings can be achieved by preventing excessive heat loss.

#### Solar Control

Coloured polycarbonate sheet significantly reduce solar heat gain, cuts down the brightness of sunlight to a pleasant level, helping to maintain comfortable interior building temperatures.

#### UV Protection

Our Polycarbonate sheet range features a proprietary UV protected surfaces, giving excellent durability to outdoor weathering, thus this side must always be installed facing outwards.

#### Installation

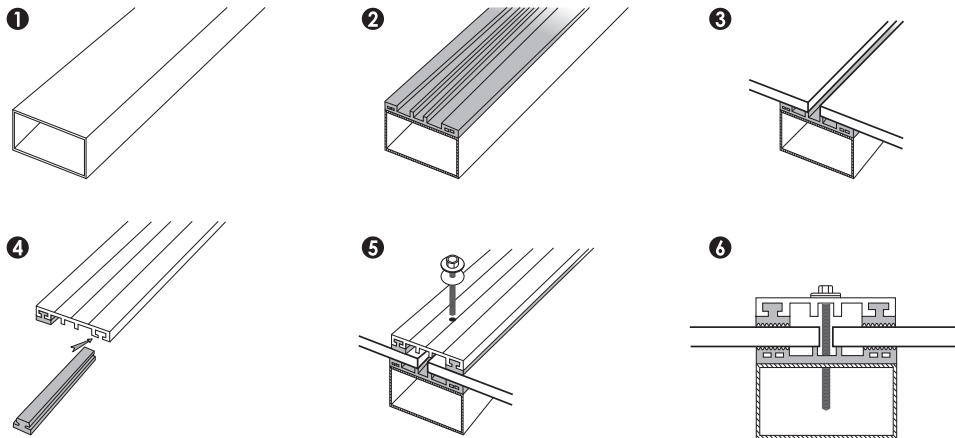
Recommended for curved installations. Our polycarbonate sheet can be easily cold formed into gentle curves which make it ideal for skylights, covered walkways, barrel vaults etc.

#### Warranty

Our polycarbonate sheet is locked by a ten-year limited warranty against yellowing, loss of light transmission and breakage (request details of limited warranty and maintenance instructions)

\* Terms & Conditions Applied

## INSTALLATION PROCEDURES



- The surfaces of beams of the framework must be level and smooth without any burr or burr/
- The paint must be dry completely on the framework without any solvent remains.
- Put and glue the gaskets and framework together.
- Check the centre distance of rafters and purlins on framework accordance with design.
- Lination should be done with a soft pencil on themasking film before cutting the sheet.
- Fixed the sheets on the framework by an assembly system, which consists of aluminum linkage profile and santoprene gaskets.

## COLD BENDING

Our polycarbonate sheet may be cold bent on-site with the minimum radius as a function of the sheet thickness. As a guideline, the material can be radiused to 100 times the thickness. See the chart for recommended minimum radii.

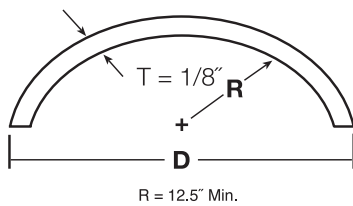
### Cold Bend Formula

$$R = T \times 100$$

Example:

### Cold Bend Radii

Sheet Thickness	1/8"	3/16"	1/4"
Minimum Radius	12.5"	18.7"	25.0"

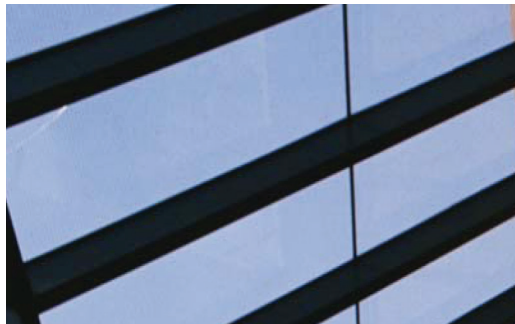


## EXPANSION ALLOWANCES

As a general guideline, glazing systems should be designed to allow 1/16" per foot of length and width for expansion of polycarbonate in the sash.

### Expansion Allowance & Edge Engagement Examples

Sheet Size	24" x 24"	24" x 36"	36" x 48"	48" x 60"
Expansion Allowance	1/8" x 1/8"	1/8" x 3/16"	3/16" x 1/4"	1/4" x 5/16"
Edge Engagement	3/8"	1/2"	9/16"	3/4"
Rabbit Depth	1/2"	11/16"	13/16"	1 1/16"



## PRECAUTIONS FOR SOLID SHEET APPLICATION

1. Do not store PC sheets in direct sunlight or rain. PC sheets awaiting installation on site must do the same as above.
2. Do not remove or damage the masking film until sheets are properly installed.
3. The position of drill hole should be at least 40mm from the edge of sheet. The diameter of holes must be 50% larger than that of bolts or screws to allow for thermal expansion.
4. The UV protected surface of the sheet is covered with printed masking film and must face the sun.
5. Peel back approximately 50mm of masking film from all sheet edges before installation.
6. Never nail a sheet directly onto the frame.
7. Sealant and gasket must be compatible to PC. It is strongly advised that PVC gaskets must not be used at all times.
8. The sheets must not, at any time, come into contact with alkaline and organic solvents such as: alkali, alkaline salts, esters, ethers, amines, paints, abrasive cleaners and oil.

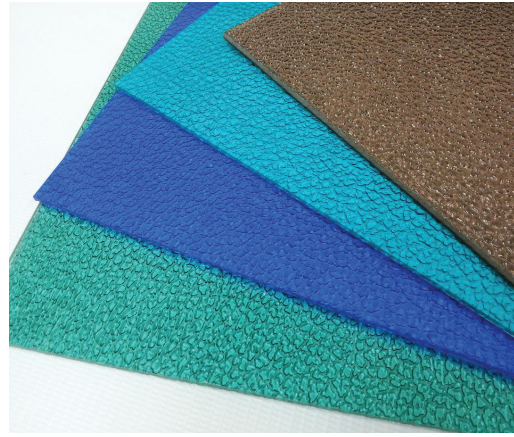
## CUTTING

OUR polycarbonate sheet may be cut using most types of conventional power saws utilizing triple chip blade designs. Be sure to leave the protective masking intact when cutting to prevent marring of the surface.

Warning: Failure to use proper blades or cutting an unsecured sheet may cause injury and/or destruction of the material.

## CLEANING AND MAINTENANCE

Under normal conditions, Our polycarbonate sheet should be washed on a regular basis with a mild solution of soap and warm water, using a soft cloth or sponge. To prevent water spots, thoroughly dry polycarbonate sheet with a chamois or sponge. Do not use abrasive cleaners or sharp instruments such as razor blades or scrapers that may gouge the surface. For graffiti removal, organic solvents, such as butyl cellosolve, kerosene, VM & P naphtha or mineral spirits, work very well. Methanol, denatured ethanol, and isopropyl alcohol are also excellent cleansing agents. It is important to rinse off the surface thoroughly after cleaning.



### DISCLAIMERS:

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