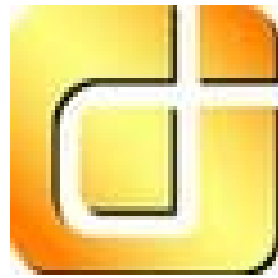


POLYCARBONATE



“POLY TOP”

The TOP of Polycarbonate

by

D-TENTION CO., LTD.

INTRODUCTION

What is

Polycarbonate ?



POLYCARBONATE

Polycarbonate was invented almost simultaneously in the USA and in Germany in 1956.

Polycarbonate is a clear and very tough amorphous resin, made by polymerization of bisphenol A, which comes from the synthesis of natural oil and gas.

Polycarbonate sheet are made from thisresins, by heating the raw material (resin granulate) and extruding it into sheet.

This is possible because polycarbonate is a thermoplastic polymer, which maintains its excellent properties after heating and forming.

PC' APPLICATION

A) Indoor applications:

- *Ceilings*
- *Partitions*
- *Signage*
- *Furniture & Displays, etc.*

B) Outdoor applications:

- *Skylights*
- *Canopies*
- *Walkways*
- *Barrel vaults*
- *Structural domes*
- *Pool enclosures*
- *Shopping center roofing*
- *Football stadium roofing*
- *Signage, etc.*

WHY USE PC?

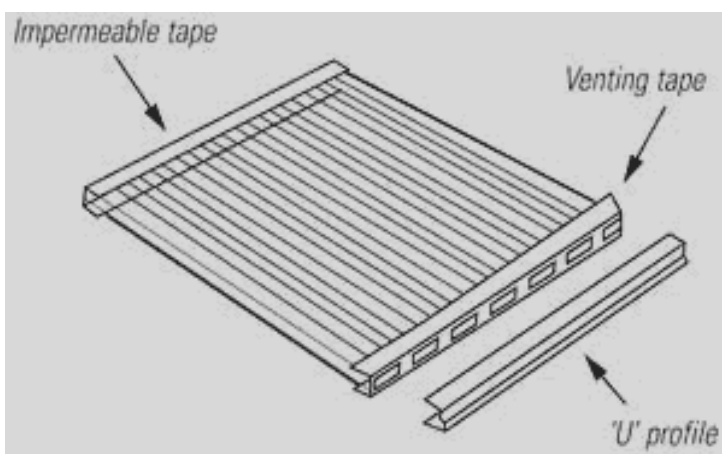
- *High impact strength - 250 times stronger than glass, 20 times stronger than acrylic.*
- *Virtually unbreakable over a wide temperature range (-20 C to +120 C), able to withstand shattering, cracking, crazing or even breaking.*
- *Design freedom – light weight, highly flexible, easy to fabricate on site. Can be easily cold formed, and will not crack or splinter when fabricated.*
- *Good fire characteristics – self extinguished material. The sheet does not contribute to flame spread. When subjected to flames from spreading fire, the material only melts away and form holes which release smoke, gases and heat. It does not emit toxic gases.*
- *High light transmission – high degree of light transmission while blocking harmful Ultra Violet rays.*
- *Excellent weatherability – 1 side with UV co-extruded, to give longer lifespan of material.*
- *10 years warranty – against discoloration, loss of light transmission, and loss of strength due to weathering.*

PRODUCT AVAILABILITY

| Color | Color Code | Light Transmission % | Light Transmission |
|--------------|-------------------|-----------------------------|----------------------------|
| Clear | D-01 | Approx. 82% | Maximum Light Transmission |
| Opal | D-12 | Approx. 18% | Defuse Light Transmission |
| Bronze | D-06 | Approx. 21% | Reduce Light Transmission |
| Grey | D-05 | Approx. 12% | Reduce Light Transmission |
| Green | D-03 | Approx. 42% | Reduce Light Transmission |
| Ocean Blue | D-02 | Approx. 52% | Reduce Light Transmission |
| Blue | D-04 | Approx. 9% | Reduce Light Transmission |

PRE-INSTALLATION GUIDELINES

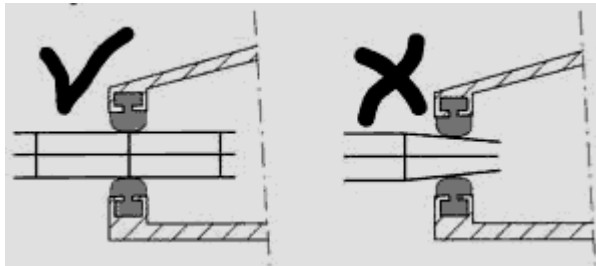
*** Top end channels sealed with an impermeable tape and bottom end channels sealed with perforated filter tape.**



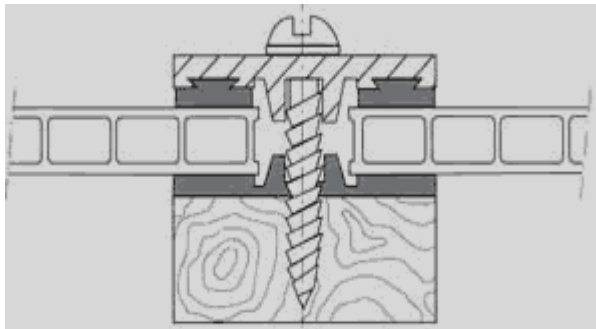
- **Integrated filter minimizes dust / insect**
- **Condensation water drainage possibility.**

GLAZING SYSTEMS

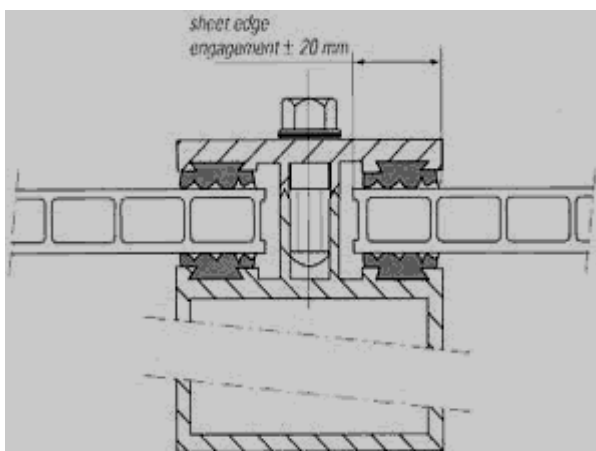
- Rebate depth @ minimum 20mm engagement and an allowance for thermal expansion.



DRY GLAZING



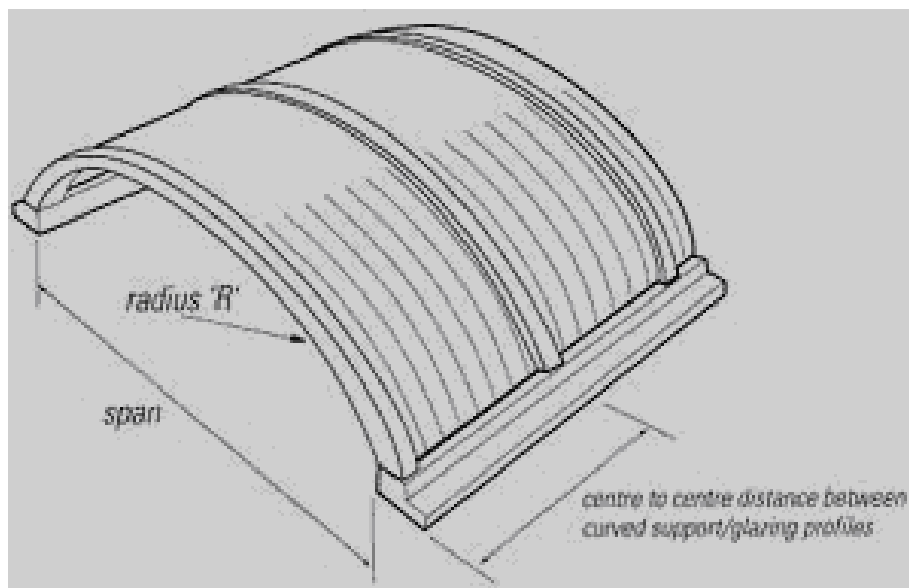
*** Never use PVC gaskets!**



Curved Glazing

Minimum radius values

| Polycarbonate sheet thickness | Min. radius in mm |
|-------------------------------|-------------------|
| 6 | 1050 |
| 8 | 1400 |
| 10 | 1750 |



CLEANING AND MAINTENANCE

- **Periodic cleaning using proper procedures are recommended to pro long the life span of material.**
- **Wash with mild soap or detergent with lukewarm water.**
- **Use soft cloth or sponge to gently wash-off / loosen dirt and then rinse it well with clean water.**
- **Avoid the use of abrasive cleaners or cleaning implements that may affect the sheet.**