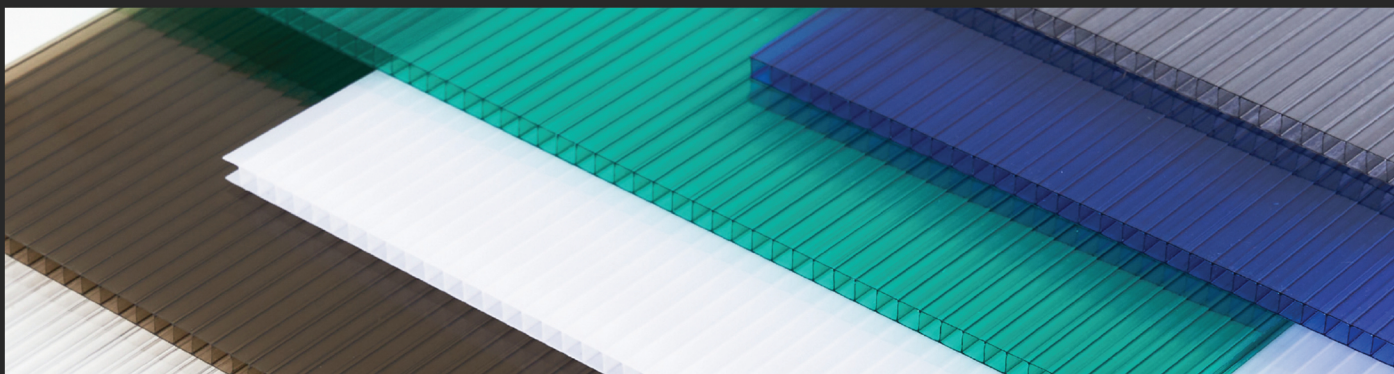


DURALON POLYCARBONATE

Twin-Wall Polycarbonate



Variations

Thickness (mm)	Dimensions (ft x ft)	Type
6.0	4 x 2, 4 x 8, 4 x 10, 4 x 12, 4 x 16, 4 x 19, 4 x 20, 4 x 28, 6 x 16, 6 x 19, 6 x 20	Panel
8.0	4 x 8, 4 x 16, 6 x 19	
10.0	4 x 8, 4 x 12, 4 x 16, 4 x 19, 4 x 20, 6 x 16, 6 x 19, 6 x 20	

Colors: Bronze, Clear, Blue, Green, White,



Lightweight

Only half the density of glass, which could save delivery and installation cost.



Impact Strength

Greater impact strength compared to annealed glass.



High Clarity

Up to 86% light transmission rate.



Flame Retardancy

Self-extinguishing; does not amplify flames or give off toxic gases.



Thermal Stability

Minimal property changes within the temperature range of -40°C to 120°C.



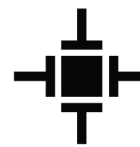
Weatherability

Co-extruded UV layer enables long-term UV radiation protection.



Heat Insulation

Good thermal insulation performance, minimizing heat consumption.

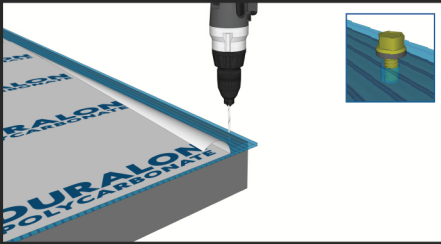


Formability

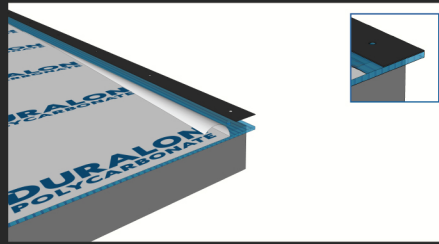
Ease of fabrication; a huge range of shapes and sizes can be formed.

Installation Guide

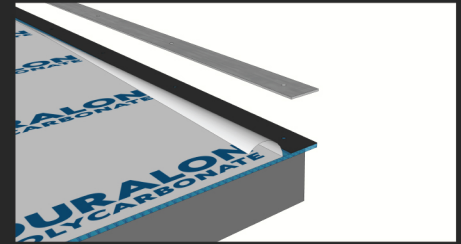
Twin-wall Polycarbonate Installation using Aluminum Flatbar on Edges



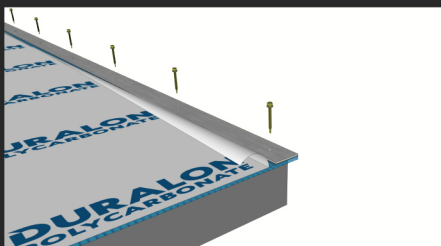
Step 1
Peel the protective cover along the edges and predrill holes 50% larger than its diameter size.



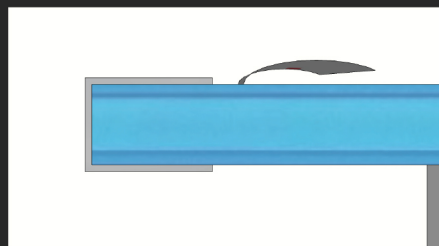
Step 2
Stick the rubber tape along the edge.



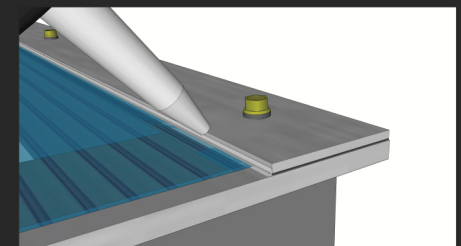
Step 3
Place the aluminium flat bar on top of the rubber tape.



Step 4
Secure the aluminium flat bar onto the frame using tekscrews. Be careful not to overtighten.

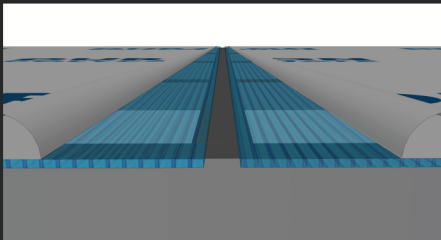


Step 5
Peel the protective cover along the front edge of the panel and affix the aluminum U-clip against the edge to cover the hollow area.

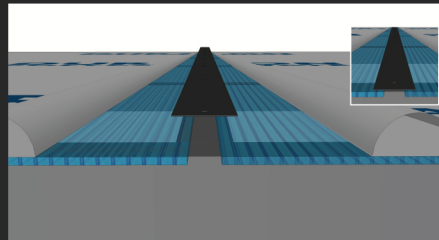


Step 6
Apply sealant along the sides of the flatbar and completely remove the protective cover.

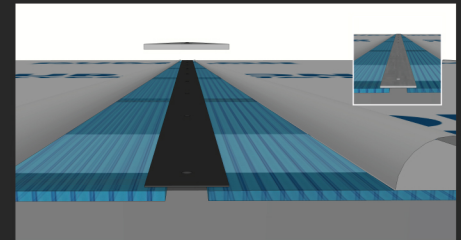
Twin-wall Polycarbonate Installation using Aluminum Flatbar in between Panels



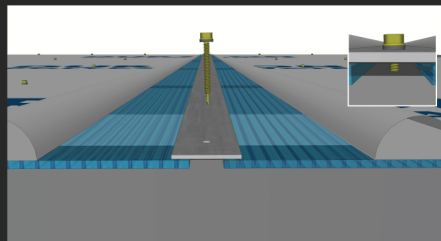
Step 7
Peel a portion of the protective film along the panel edges. Leave a space gap of up to 3/4 inch between sheets for thermal expansion.



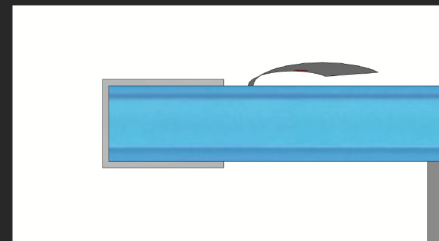
Step 8
Stick the rubber tape evenly between the panels.



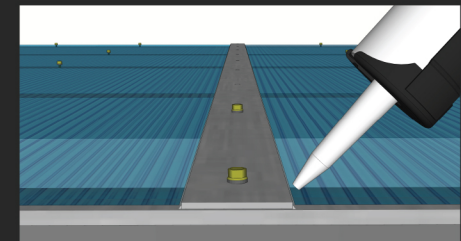
Step 9
Place the aluminium flatbar on top of the rubber tape.



Step 10
Secure the aluminium flat bar onto the frame using tekscrews. To prevent damage due to thermal expansion, make sure that the tekscrew is not touching the polycarbonate.



Step 11
Peel the protective cover along the edge of the panel and affix the aluminum U-clip against the edge to cover the hollow area.



Step 12
Apply sealant along the sides of the flatbar and remove the rest of the protective cover.

Technical Data

Test Item	Test Method	Test Condition	Result
Shore Hardness	ISO 868:2003	Specimen thickness: 6.34mm	Shore D: 74
Flexural Strength	ISO 178:2010(E) Method A	Specimen: 80×9.98×4.05mm Testing speed: 2.0mm/min Span: 64mm	88.7MPa
Flexural Modulus			2171MPa
IZOD notched Impact strength	ISO 180-2000Amd.1:2006	Specimen: ISO 180/A The capacity of pendulum: 5.5J	81kJ/m ² (P partial break)
Impact Resistance	With reference to ASTM D5420-10	Specimen thickness: 5.92mm (high of arc) Geometry: GC (Ø15.86mm) Strike weight: 2.0kg	Energy: 16J
Heat deflection temperature	ISO 75-1:2004 and ISO 75-2:2004 Method B	Specimen: 80×9.98×4.05mm Tff0.45 Rate of temperature: 120°C/h Span: 64mm	136°C
Total luminous transmittance	ASTM D1003-11 Method A	Specimen thickness: 2.10mm Light source: C	87.60%
Haze	ISO 14782:1999/Cor.1:2005	Specimen thickness: 2.07mm Light source: D65	1.10%
Rockwell Hardness	ISO 2039-2:1987	HRR	123
Tensile Strength			60.9MPa
Elongation at break	ISO 527-2:1993/Cor.1:1994	Sample Type: Type 1A Gauge Length: 50mm Tensile Speed: 50mm/min	85%
Tensile Modulus	ISO 527-2:1993/Cor.1:1994	Sample Type: Type 1A Gauge Length: 50mm Tensile Speed: 1mm/min	2291MPa
Density	ASTM D1003-11 Method A	Ethanol	1.193g/cm ³
Thermal Conductivity	ISO 8301-1991	Mean temperature: 29.97°C Temperature difference: 17.29°C	Thermal Conductivity: 0.132 W/(m·K)

Disclaimer Notice: This information is given in good faith and to the best of our knowledge, but without any warranty. Users of our materials should determine the suitability for a specific application. It is always advisable to do preliminary testing.