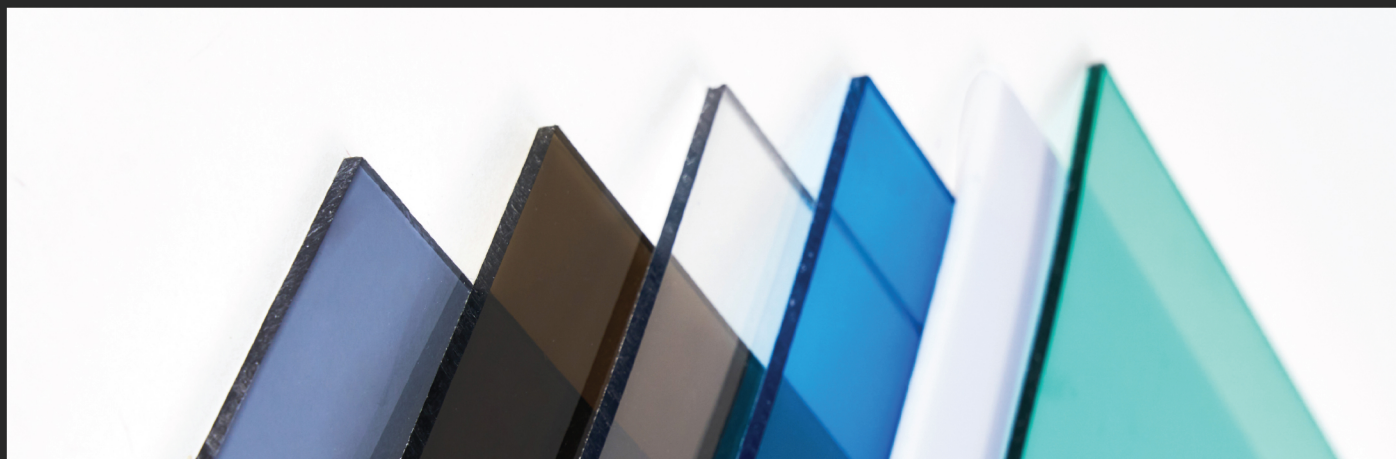


DURALON POLYCARBONATE

Solid Polycarbonate



Variations

Thickness (mm)	Dimensions (ft x ft)	Type
1.5, 2.0, 3.0, 4.5	4 x 100	Roll
4.5	4 x 8, 4 x 16	Panel
6.0	4 x 8, 4 x 10, 4 x 12, 4 x 16, 4 x 20, 7 x 16, 7 x 19	
8.0	4 x 8, 4 x 16	
10.0	4 x 8, 4 x 16	

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



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 87.60% luminous transmission.



Flame Retardancy

Self-extinguishing; does not amplify flames or give off toxic gases and has a B1 GB 8624-2012 rating.



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.



Sound Insulation

Superior acoustic insulation, ideal as sound barriers.



Heat Insulation

Good thermal insulation performance, minimizing heat consumption.

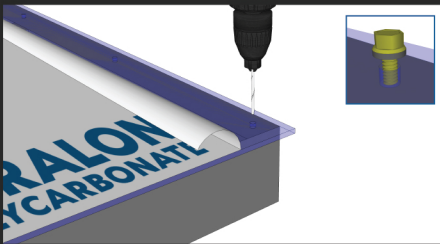


Formability

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

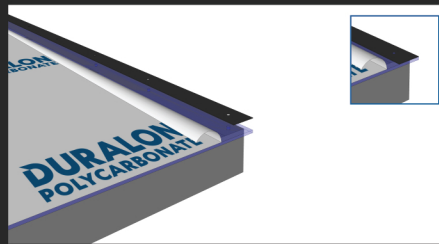
Installation Guide

Solid Polycarbonate Installation using Aluminum Flatbar on Edges



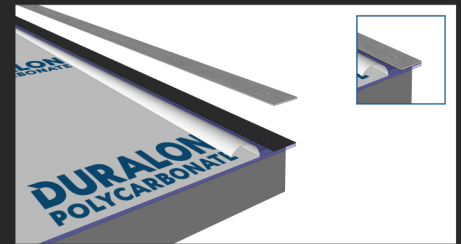
Step 1

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



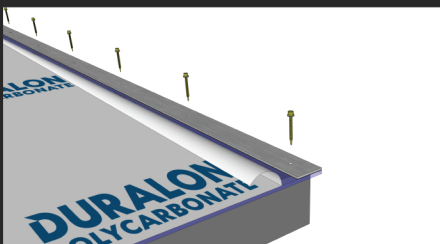
Step 2

Stick the rubber tape along the edge.



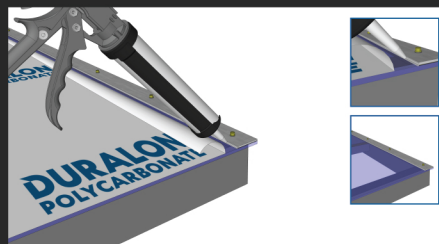
Step 3

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



Step 4

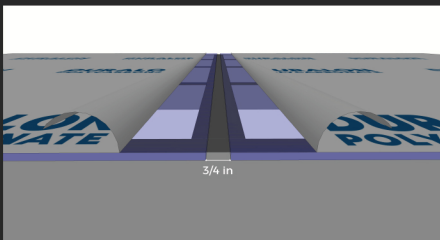
Secure the aluminium flat bar onto the frame using tekscrews. Be careful not to overtighten.



Step 5

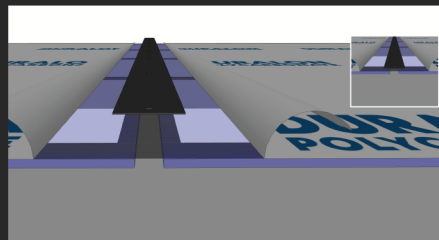
Apply sealant along the sides of the flatbar and completely remove the protective cover.

Solid Polycarbonate Installation using Aluminum Flatbar in between Panels



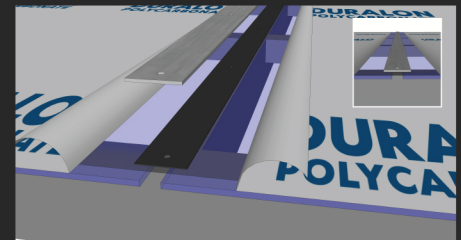
Step 6

Peel a portion of the protective film along the panel edges. Leave a space gap of up to $\frac{3}{4}$ inch between sheets for thermal expansion.



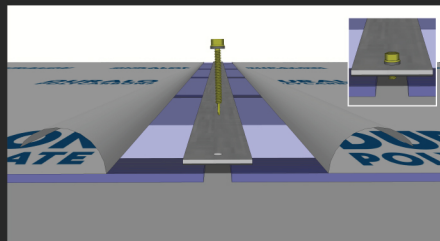
Step 7

Stick the rubber tape evenly between the panels.



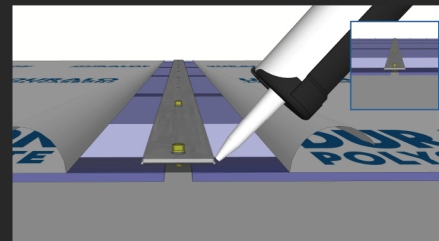
Step 8

Place the aluminium flatbar on top of the rubber tape.



Step 9

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 10

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
Elongation at break	ISO 527-2:1993/Cor.1:1994	Sample Type: Type 1A Gauge Length: 50mm Tensile Speed: 50mm/min	85%
Density	ISO 1183-1:2004	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)
Tensile modulus	ISO 527-1:2012 & ISO 527-2:2012	Specimen: Type 1B; Specimen width at narrow portion: 9.988 mm; Specimen thickness: 5.790 mm	2340 MPa
Tensile stress at yield			65.8 MPa
Tensile strain at yield			6.3%
Tensile stress at fracture			53.1 MPa
Nominal tensile strain at fracture			55%

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.

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POLYCARBONATE

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