

Makes light work!



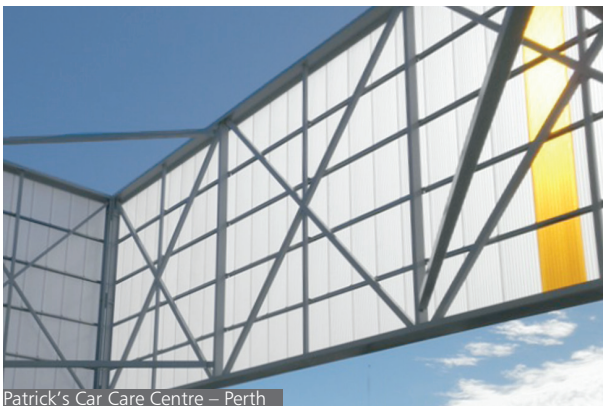
# Profile Free Facades Lexan\* Thermoclick\* Wall Panel



Industrial Warehouse – Austria



Heliport Terminal – N.Z.



Patrick's Car Care Centre – Perth



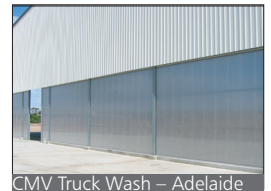
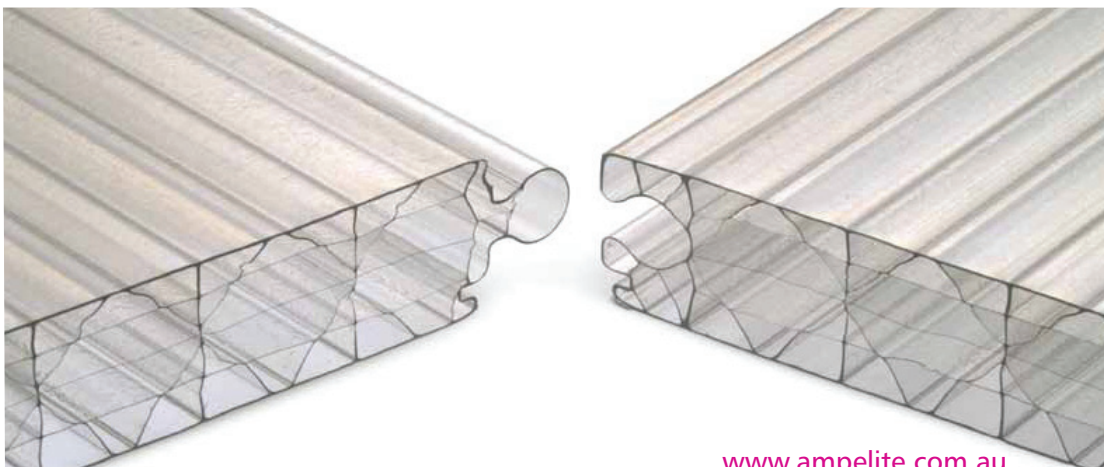
Patrick's Car Care Centre – Perth



Beach House – Merricks



CMV Truck Wash – Adelaide



CMV Truck Wash – Adelaide

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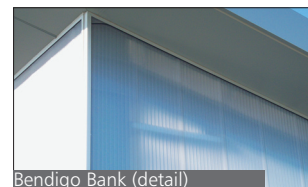
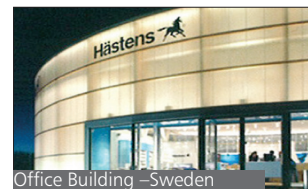
\*Trademark of SABIC Innovative Plastics IP BV

**Lexan\* Thermoclick\* Wall Sheeting** is mainly used in façade applications utilising 40 mm UV protected multiwall X-structure sheeting that has a profiled tongue and groove connection.

The inter-connecting system eliminates the need for vertical profiles, potentially saving costs and enhancing building aesthetics. The X-Structure of the sheet provides exceptional stiffness and thermal insulation.

**Features of Thermoclick\* (LTC404X4000)**

- Unique four wall with X-Structure.
- UV protected surface for long term weather resistance.
- Good light transmission/light diffusion characteristics.
- Extremely high stiffness.
- Excellent thermal insulation.
- High impact strength.
- Easy and fast installation.
- Available in Solar Control IR version for optimal solar heat reduction.
- Aluminium glazing profiles available, for complete installation.



**Thermal insulation**

Lexan\*Thermoclick\* sheet multi-wall structure offers potential advantages where thermal insulation is a major consideration.

The amount of energy transmitted through the sheet per square metre and per degree temperature difference referred to as the K-or U-Value, is only 1.27 W/m<sup>2</sup> K.

**Fire test performance**

Lexan\* Thermoclick\* sheet has good fire performance in accordance with national fire standards. More detailed information is available from all Ampelite offices.

**Impact strength**

Lexan\* Thermoclick\* sheet has outstanding impact performance over a wide temperature range of -40°C up to +100°C. The product is capable of withstanding the extremes of weather – storms, hailstones, snowfall and ice formation.

**UV protection**

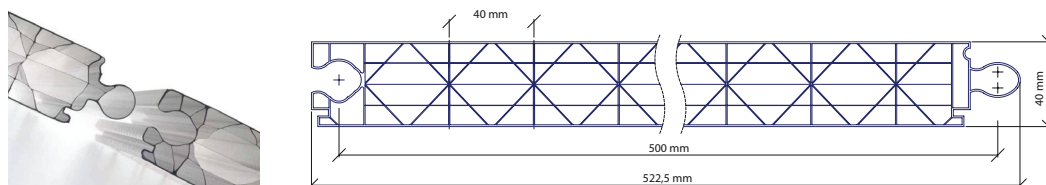
Lexan\* Thermoclick\* sheet has a proprietary UV protected surface to help protect the system against the degrading effects of ultra violet radiation and promotes long-term optical quality under all kind of severe weather conditions. The UV protected surface, indicated on the masking, should always face outwards.

**Property Profile Lexan\* Thermoclick\* LTC404X4000 Test Method**

Panel width	c.t.c. 500 ±2.5 mm Standard	
Standard length	2.0 m, 2.5 m, 3.0 m, 3.5 m, 4.0 m, 4.5 m, 5.0 m, 6.0 m, 6.5 m, 7.0m, 7.5 m, 8.0 m, 9.0 m, 11.8 m ±5 mm	
Panel thickness	40 mm ±0.8 mm	
Weight	4 kg / m <sup>2</sup> ±5%	
Hail impact	diam. 20 mm V <sub>≥21</sub> m/sec	TNO
Temperature resistance	- 40 up to +100°C	UL 746 B
K - value / U - value	1.27 W/m <sup>2</sup> K	DIN 52 619-2
Co-efficient of linear thermal expansion	7 x 10 <sup>-5</sup> 1/°C	DIN 53752

Colour	Colour Code	Light Transmission. LT	Total Solar Transmission. ST	Solar Heat Gain Co-efficient. SHGC	Shading Co-efficient. SC
Clear	112	59%	64%	0.64	0.73
Opal	WH7A092X	50%	57%	0.57	0.66

**Structure and tongue and groove detail**





Community Hub – Churchill, soffit lining

## Installation Guidelines

### Sealing recommendations

In order to minimise moisture build-up and dust contamination inside the sheeting, edge sealing of the open ends is very important. An impermeable tape, and a perforated venting tape are available.

### Standard glazing

For standard glazing applications it is generally recommended to seal the sheeting at the top end with an impermeable tape, and at the bottom end, seal with anti-condensation venting tape. A clearance between the bottom sheet end and the profile platform helps allow for condensation drainage.

### Specific conditions

In extremely dusty environments such as sawmills, welding stations, etc. it is usually advisable to seal both the top and bottom sheet ends with impermeable tape.

### Thermal expansion allowance

Take into account a clearance of approximately 3 mm per linear metre between the sheet top edge and top glazing profile, and between the first and last sheet sides and the side glazing profiles. This thermal expansion clearance is already taken into account when using the specially developed top and bottom glazing profiles available from Ampelite.

### Cleaning recommendations

Periodic cleaning using correct procedures with compatible cleaners is recommended to prolong service life. For general cleaning, it is recommended that the following instructions be adhered to. Clean the surface with high pressure water, mild soap & lukewarm water and/or steam cleaner. Use of additives to the water should be restricted to those compatible with Lexan\* Thermoclick\* sheet. More detailed cleaning information is available from Ampelite offices.

### Important

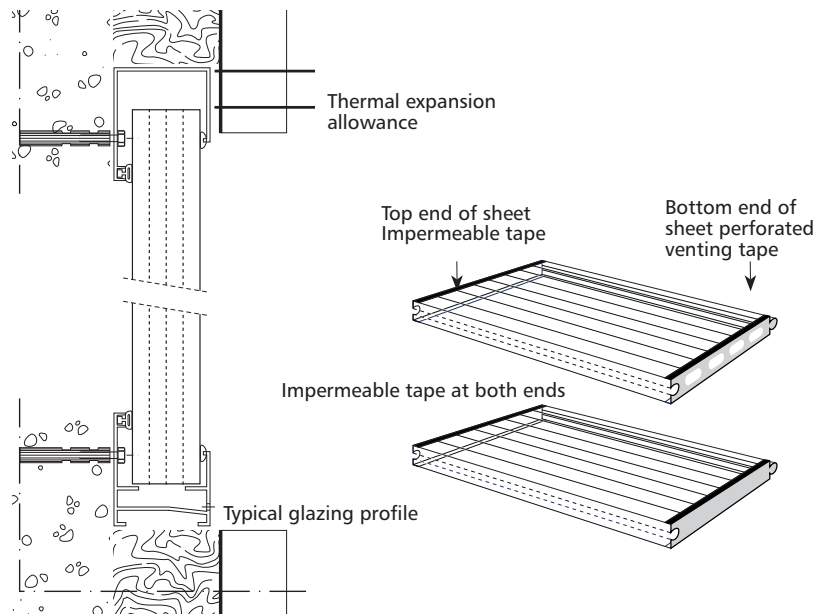
- Never use an abrasive or highly alkaline cleaner on Lexan\* Thermoclick\* sheet.
- Never scrub with brushes, steel wool or other abrasive materials.
- Don't clean Lexan\* Thermoclick\* sheet in the hot sun or at elevated temperatures as it can lead to staining.

### Cutting

Lexan\* Thermoclick\* sheet can be cut easily and accurately with most standard workshop equipment. This includes common circular saws and jigsaws with fine-toothed blades. The panel should be clamped to the worktable to avoid undesirable vibration, and the sawdust should be blown out of the channels.

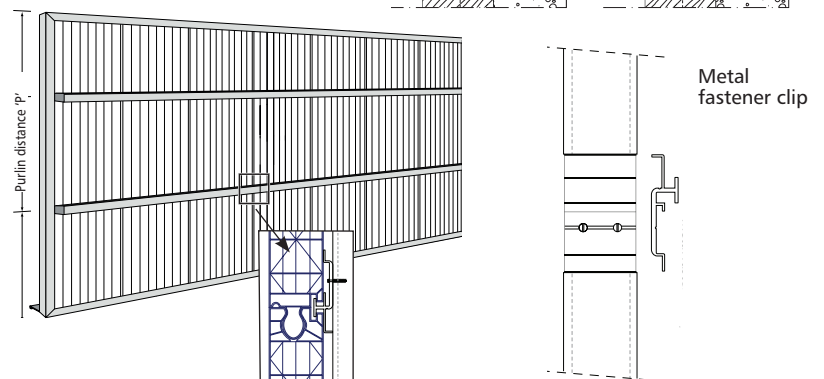
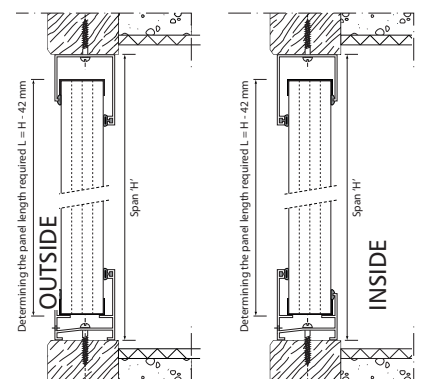
### Storage

Lexan\* Thermoclick\* sheet should be stored and protected against atmospheric influences like sun, rain, etc. Care should be exercised when handling and transporting Lexan\* Thermoclick\* sheet in order to prevent scratches on the panel surface and damage to the panel edges.

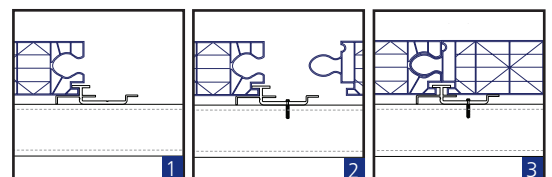


### Vertical wall glazing metal fastener clip installation

Easy to use aluminum glazing profiles and metal fastener clips are available from Ampelite. Lexan\* Thermoclick\* sheet can be installed either from inside the building or from the outside.



- 1 Slide metal fastener clip in place
- 2 Fix clip to purlin
- 3 Slide and click next panel in place

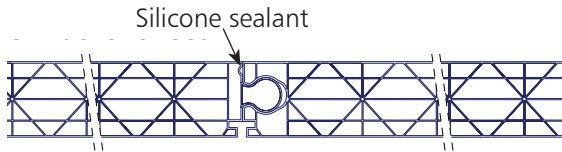


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## Installation Guidelines continued

### Roof glazing

On most sloped roofing applications a minimum fall of 10° is advised to allow for rainwater drainage. For additional watertightness a silicone sealant (compatible with Lexan\* Thermoclick\*) can be applied in the groove between panels.



Never use Lexan\* Thermoclick\* sheeting to support a person's weight during installation or cleaning. A temporary wooden plank supported by the roof structural members should always be used.

### Maximum recommended span 'H'

Lexan\* Thermoclick\* sheet glazing recommendations without intermediate purlins

Wind pressure /suction in N/m <sup>2</sup>	Maximum span 'H' mm
600	2600
900	2350
1200	2100
1500	1850
1800	1600

When glazing height exceeds the maximum recommended span 'H', intermediate horizontal purlins should be used to support the sheet. Fix sheet to the purlins with special non-rusting metal fastening clips positioned in the double sided tie on both panel sides. The distance between the horizontal intermediate purlins should not exceed the maximum recommended span dimensions 'P' as indicated in the table below.

Wind pressure /suction in N/m <sup>2</sup>	Maximum span 'P' mm
600	2500
900	2250
1200	2000
1500	1750
1800	1500



Hangar facility – New York



Maribrynong Secondary College

## Warranty conditions – Lexan\* Thermoclick\* Sheet

### Ten Year Limited Written Warranty

Ampelite Australia Pty Ltd warrant the Lexan\* Thermoclick\* standard sheet against breaking due to loss of impact strength through weathering and against excessive yellowing and loss of light transmission within 10 years of date of sale.

This limited written warranty applies exclusively to standard Lexan\* Thermoclick\* sheet glazing with a gauge of 40 mm in the colour standard clear (112) and opal white (WH7A092X), used correctly in sloping or vertical glazing, handled, stored, processed, installed and maintained according to Ampelite's and SABIC Innovative Plastics' recommendation contained in the technical manual. In all cases the surface bearing the UV protection must be the only side exposed to direct sunlight and the effects of the weather.

This limited warranty does not apply to sheet that has been thermo formed, scratched, abraded or exposed to corrosive materials or chemicals.

If a claim under this limited warranty is justified, Ampelite Australia Pty Ltd will provide the purchaser with replacement material free of charge in accordance with the following schedule

### Time from Original Purchase Date – Material Replacement

Up to 5 years	100%
in 6th year	75%
in 7th year	60%
in 8th year	45%
in 9th year	30%
in 10th year	15%



If replacement material cannot be provided within a reasonable period of time, Ampelite Australia Pty Ltd may opt to refund the original purchase price paid or a portion thereof, in accordance with the above schedule.

*For full warranty details please contact an Ampelite office.*

For further information and full technical data, contact:



Ampelite Australia Pty Ltd ABN 91 487 122 629

*Ampelite is wholly Australian owned. Profits remain in Australia and taxes paid benefit our community.*

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