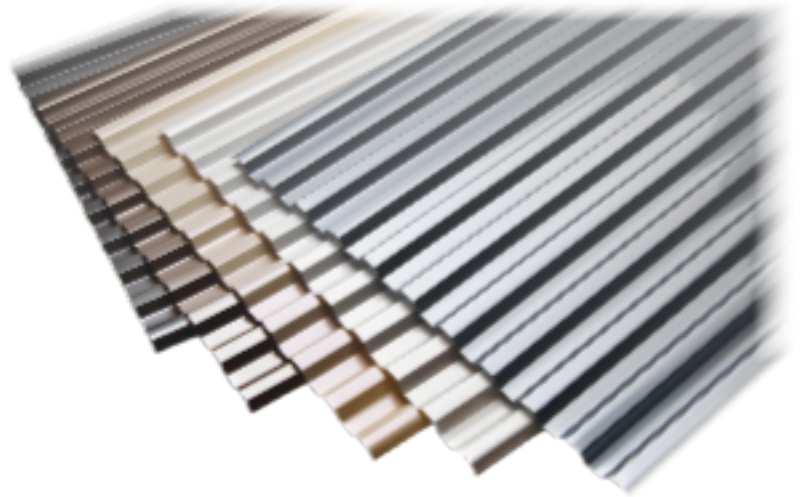


Laserlite® 3000

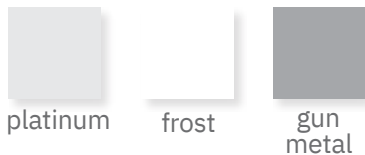
Product Data Sheet

Ultimate comfort



Technical details to help with your project design

Colour



Profile



Lengths available

1.8m, 2.4m, 3.0m, 3.6m, 4.2m, 4.8m, 5.4m, 6.0m, 7.2m, 9.0m

Sheet width

Corrugated 840mm

Greca 810mm

Cover width

Corrugated 755mm

Greca 760mm

Compliances

Design and Installation ¹	AS 1562.3:2006
Impact Resistance	AS/NZS 4257.6:1994
99.9% UV Resistant	ISO 9050:2003
Resistance to Wind Pressures for Non Cyclone Regions	AS 4040.2:1992
SAA Loading code Part 2 – Wind Loads	AS 1170.2:2002
Cyclone Testing	TR440
Heat & Smoke Release Rates	AS/NZS 3837:1998
Early Fire Hazard Test	AS 1530.3:1999
Plastic Roof and Wall Cladding Material – Polycarbonate ³	AS 4256.5:2006
Diffuse Light Transmission	AS/NZS 4257.4:1994
Colourfastness & Impact Resistance following UV exposure	AS/NZS 4257.7:1994
Outdoor Durability	AS 1745.1:1989
Dimensional Properties	AS/NZS 4257.1:1994

1. Installation must comply to the local building code. Local council approval may be required.

Laserlite® standard installation instructions apply as indicated in installation brochure.

Laserlite® 3000

Product Data Sheet



UV Protection Laserlite® 3000 Polycarbonate Roofing prevents the transmission of more than 99.9% of harmful UV radiation, measured to standard ISO 9050:2003. Its co-extruded UV barrier protects the sheet from UV

degradation and discolouration. It remains stable under extreme climatic conditions (-30°C to +120°C).



Wind Load

Laserlite® 3000 Polycarbonate Roofing is suitable for use in high wind load areas. Corrugated and Greca profiles meet the requirements of AS 1170.2.2002 SAA Loading code Part 2 - Wind Loads.

Corrugated and Greca profiles also meet the requirements of TR440 (Guidelines for the testing and evaluation of products for cyclone prone areas) for fatigue loading, for the permissible stress design pressure of 3.0kPa, for a multiple span of 600mm end span and 900mm internal spans using 14 gauge hex head screws with cyclone assemblies. Deemed to comply to the Darwin Cyclone Area certification numbers M/133/1 and M/133/2 apply. Please visit our website for further details and specific installation instructions.

Fire Performance



Laserlite® 3000 Polycarbonate Roofing is self extinguishing, stops the spread of flame and also has excellent fire resistant properties. Therefore, this product complies with many fire related tests, including Heat and Smoke Release Rates (AS/NZS

3837:1998) and Early Fire Hazard Test (AS 1530.3-1999).

Advanced Weatherguard™ Technology



Laserlite® 3000 features Advanced Weatherguard™ technology, a special protective material that is designed to significantly extend the life and performance

of the sheet as follows

- Protects the sheet from harmful UV rays up to 50% longer+
- Maintains sheet colour and clarity up to 50% longer +
- Resists 25% larger hail stones up to 40% longer+

Laserlite® 3000 features Comfort Cool™ technology, Offering:



- Up to 50% better heat reduction performance+
- Reduced glare for ultimate comfort

+ As compared to other polycarbonate corrugated sheet products.



Lifetime Warranty against loss of light transmission, that for the commercial life of the Products (subject to the terms below) they will not lose the ability to transmit light* *The loss of light transmission will not exceed 11% in the first 15 years (0.7% per year) from the date of manufacture and 1% per year

thereafter as long as the sheet lasts in its original installation for the life of the product to the original purchaser. (when tested in accordance with AS/NZS 4257.4-1994 Determination of diffuse light transmission).

10 year Warranty against Weather Breakage

Laserlite® 3000 corrugated sheet will resist damage from hail measuring up to 25mm for a period of 10 years limited to the original purchaser.

*Refer to full warranty terms & conditions at laserlite.com.au.
Product Liability Clause: This information and our technical advice whether verbal, in writing or by way of trials, are given in good faith but without warranty. Our advrost does not release you from the obligation to verify the information provided in our safety data and technical information sheets and to test the products as to their suitability for the intended use and processes. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and therefore entirely your own responsibility. Our products are sold in accordance with the current version of our Terms and Conditions of Sale. The information contained in this brochure is to the best of our knowledge accurate, but all recommendations are made without any warranty whatsoever.

Technical Data	Value
Thermal Expansion	2.1mm per 3m per 10°C
Thermal Conductivity	0.17 W/m°C
Vicat softening point	135°C (AS 1462)
Tensile Strength	65 Mpa (AS 1145-1989)
Impact Strength	Exceeds 12 joules (AS4257.6-1994) Approx 250 times more than glass
Corrugation retention	No change for up to 2 hours at 100°C

1Thermal Expansion – calculate from ambient temperature at time of installation.
2Impact resistance can decline with age

	Test conditions	Units	Standards	Makrolon Resin Value	
Rheological Properties Melt Volume					
C – Flow rate Melt Mass – Flow rate	300°C; 1.2kg	cm3/(10min)	ISO 1133	6	
Moulding shrinkage Parallel/normal	300°C; 1.2kg	g/(10min)	ISO 1133	6.5	
Mechanical Properties					
Tensile modulus Yield Stress Yield					
C Strain Nominal tensile strain at break	1mm/min	MPa	ISO527	2350	
C Stress at break Strain at break Tensile	50mm/min	MPa	ISO527	65	
C Creep modulus Tensile Creep	50mm/min	%	ISO527-1;2	6.3	
C modulus CHARPY impact strength	50mm/min	%	ISO527	>50	
C CHARPY impact strength IZOD	50mm/min	MPa	ISO527-1;2	70	
C Notched impact strength IZOD	50mm/min	%	b.o ISO527-1;2	120	
C Notched impact strength	1 hr	MPa	ISO 899-1	2200	
C Thermal Properties	1000h	MPa	ISO 899-1	1900	
C Glass transition temperature	23°C	KJ/M2	ISO 179-1eU	NB	
C Temperature of deflection under load	-30°C	KJ/M2	ISO 179-1eU	NB	
C Vicat Softening temperature Co-efficient of linear thermal expansion	23°C; 3mm	KJ/M2	b.o ISO 180-4A	95	
C	-30°C; 3mm	KJ/M2	b.o ISO 180-4A	16C(P)	
C Burning Behaviour UL 94	10°C/min	°C	ISO 11357-1,-2	148	
C (UL Recognition)	1.80 MPa	°C	ISO 75-1;2	128	
C Oxygen index	0.45 MPa	°C	ISO 306	148	
C	50 N; 50°C/h	°C	ISO 306	148	
C	23 to 55°C	10-4/K	ISO 11359-1;-2	0.65	
C	1.5mm	Class	UL94	HB	
C	0.75mm			V-2	
C	10mm			V-O(CL)	
C	Procedure A	%	ISO 4589-2	27	
C	1.5mm			850	
C	2.0mm			850	
C	3.0mm			930	
Glow wire test (GWFI)					
Electrical properties					
C Relative permittivity	100 Hz		IEC 250	3.1	
C Relative permittivity	1 MHz		IEC 250	3.0	
C Dissipation factor	100 Hz	10-4	IEC 60250	5	
C Dissipation factor	1 MHz	10-4	IEC 60250	95	
C Volume resistivity		Ohm. m	IEC 60093	1E14	
C Surface resistivity		Ohm	IEC 60093	1E16	
C Electrical strength	1mm	kV/mm	IEC 60243-1	34	
C Comparative tracking index (CTI)	Solution A	Rating	IEC 112	250	
Other properties					
C Water absorption (saturation value)	Water at 23°C	%	ISO 62	0.30	
C Water absorption (equilibrium value)	23°C / 50% r.h	%	ISO 62	0.12	
C Density		Kg/M3	ISO 1183-1	1200	
C Glass fibre content		%	ISO 3451-1	-	
Material Specific properties					
C Viscosity number		cm3/g	ISO 1628-1	64	
C Refraction index	Procedure A	-	ISO 489	1.587	
Physical properties					
		Corrugated	Greca		
Nominal Overall Width (mm)		840	810		
Nominal Cover width (mm)		755	760		
Nominal thickness (mm)		0.8	0.8		
Nominal pitch (mm)		75.5	76.0		
Nominal depth of corrugation (mm)		17.5	17.5		
Kg per Lineal metre		0.92	0.93		
Kg per m2		1.10	1.13		
Product Performance data					
	Diffuse Light transmission AS 4257.4	Shading Co-efficient Ratio*	Solar Heat Gain Co-efficient (SHGC)	U Value	UV Transmittance
Platinum	18%	0.31	0.27	7.2	<0.04
Frost	47%	0.37	0.32	7.19	<0.04
Gunmetal	16%	0.34	0.29	7.2	<0.04

C= These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO10350 (Plastics acquisition and presentation of comparable single=Point data, 1993) NB= Non Break

* based on the warming effect of the sun's rays through a sheet vs 3mm float glass (300-2500nm)

For further technical assistance please refer to your local Laserlite® distributor.
Contact details - laserlite.com.au

