

Palsun

Flat Solid Polycarbonate Sheet



Overview

Palsun combines superior impact resistance and clarity, making it the material of choice for many demanding applications. It is virtually unbreakable, yet it is as transparent as glass at less than half its weight.

Palsun can be cold bent and easily fabricated and formed, making it ideal for barrel vault roofing, skylights, architectural roofing and glazing.

Clear, translucent and opaque Palsun sheets are also ideal as machine guards, sound barriers, anti-vandal and safety glazing. Palsun diffuser and LB sheets are extensively used in durable light boxes.

Main Benefits

- ❖ High impact resistance – virtually unbreakable
- ❖ High clarity and light transmission
- ❖ Weather and UV resistant
- ❖ Wide service temperature range
- ❖ Blocks harmful UV radiation
- ❖ Good acoustical insulation
- ❖ Lightweight
- ❖ Easy to handle and install
- ❖ Versatile, formable and machinable



Typical Applications

Architecture

- ❖ Transparent acoustic barriers
- ❖ Sport venues
- ❖ Skylights
- ❖ Shopping centres
- ❖ Covered walkways

Construction

- ❖ Sun rooms and conservatories
- ❖ Peroglas and covered patios

Safety and Security Glazing

- ❖ Safety glazing
- ❖ Machine guards
- ❖ Bus stops and telephone booth
- ❖ Shield for police and security forces
- ❖ Glazing in public transportation
- ❖ Safety windshields for cars
- ❖ Eye protection visors for helmets

Sign & Graphics

- ❖ Signboards and illuminated signage
- ❖ Light fixtures

Palsun

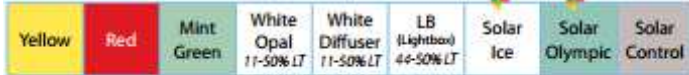
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Colours

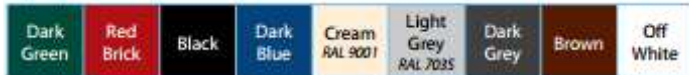
Transparent



Translucent



Opaque



*Custom colors and solar transmissions are available upon request, subject to a minimum order.

Palsun Product Range

Product	Description
alsun	General purpose flat solid polycarbonate sheet for interior use
alsun	Flat solid polycarbonate sheet, UV protected on one side
alsun UV2	UV protection on both sides
alsun EM	Embossed surface
alsun FR	Fire retardant, better flammability ratings
alsun Matte	Matte finish on one side
alsun LB	Diffused sheet for light box applications
alsun Solar	Efficient heat-blocking with metallic appearance
alsun Control	Advanced heat-blocking with high transparency
alsun Breeze	
alsun Algard	Abrasion resistance on one or both sides

Palsun Typical Physical Properties

Property	Method	Conditions	Units	Value
Density	D-792	-	g/cm ³	1.2
Heat deflection temp	D-648	Load:1.82MPa	°C	130
Service temperature	-	-	°C	-50to100
Thermal conductivity	C-177	-	W/mK	0.21
Coefficient of LTE	D-696	-	Cm/cm [°] C	0.065
Rockwell hardness	D-785	-	R Scale	125R
Tensile strength at yield	D-638	10mm/min	MPa	65
Tensile strength at break	D-638	10mm/min	MPa	60
Elongation at yield	D-638	10mm/min	%	6
Elongation at break	D-638	10mm/min	%	>90
Tensile modulus of elasticity	D-638	1mm/min	MPa	2,300
Flexural strength	D-790	1.3mm/min	MPa	100
Flexural modulus	D-790	1.3mm/min	MPa	2,600
Impact falling weight	ISO6603/1	3mm sheet	J	158

Flammability

Product	Standard	Classification
Palsun	EN 13501	B, s1, d0
	BS 476/7	Class 1
	NSP 92501, 4	M2
	DIN 4102	B1
	UL Classified	V2
Palsun FR	ASTM D-635	CC1
	UL 94	V0