







DANPALON® GLAZING MATERIAL

Translucent and Opaque
Microcell Panels with
Standing Seam Connection

-  FACADE
-  CLADDING
-  ROOFING
-  SKYLIGHTS
-  SHADING
-  INTERIOR



SUPERIOR LIGHT TRANSMISSION FOR CUTTING-EDGE ELEGANCE





THE ARCHITECTURE OF LIGHT

The sun: the best natural source of light and energy

Danpalon® harnesses this inexhaustible source, providing exceptional quality of light. Danpalon's glazing material features Microcell panels which offer customers the best combination of translucency and strength, transmitting an even diffusion of natural light, with superior durability and impact resistance.

The optimal solar and thermal balance

Danpalon® provides exceptional quality of light, a rich non-industrial visual appeal and delivers thermal insulation and UV protection. By filtering the amount of light depending on the different daytime hours - Danpalon® contributes to optimal efficiency and significant savings in energy costs.

THE DANPALON® MICROCELL STRUCTURE: 10 TIMES MORE CELLS FOR EXTRA INSULATION, IMPACT AND WEATHER RESISTANCE

EXCEPTIONAL DURABILITY AND THERMAL INSULATION

Danpalon® Microcell panels are manufactured with unique and innovative extrusion technology, providing ten times more cells than the majority of other sheets on the market. The smaller spans between the rib supports give customers the best combination of translucency and strength. Danpalon® Microcell panels are 100% leakproof, offering superior impact resistance and thermal insulation.

SUPERIOR LIGHT DIFFUSION

The Microcell structure transmits an even diffusion of natural light, producing a rich look. Specifically designed for architectural daylight applications, the tight spacing between the ribs produces a superior quality of light, offering unique iridescence - reflecting and dispersing light in a way unmatched by any other material. Danpalon® Microcell panels are available in a range of thicknesses and widths.

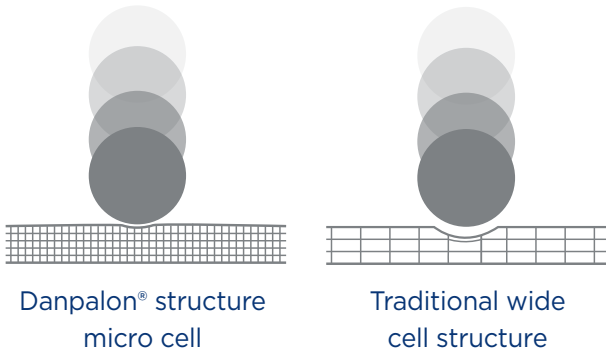


SYSTEM BENEFITS

- 100% leakproof
- Free thermal movement
- Easy installation
- Superior impact resistance
- Exceptional thermal insulation
- Quality diffused daylight
- Cold bending of panels on site
- Reduced substructure
- Environmentally friendly product

HIGH THERMAL INSULATION

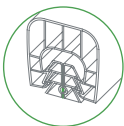
The Danpalon® Microcell design features more cells and layers, which gives the panel significantly lower thermal conductivity.



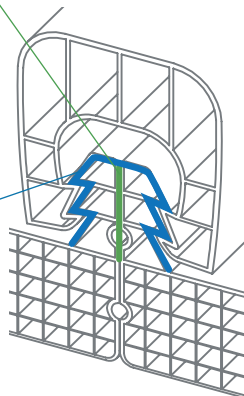
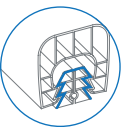
HIGH IMPACT AND WEATHER RESISTANCE

Due to the tightness between the vertical supports, Danpalon® Microcell offers the highest resistance to impact and hail damage. The high concentration of cells provides Danpalon® Microcell with improved mechanical properties and rigidity.

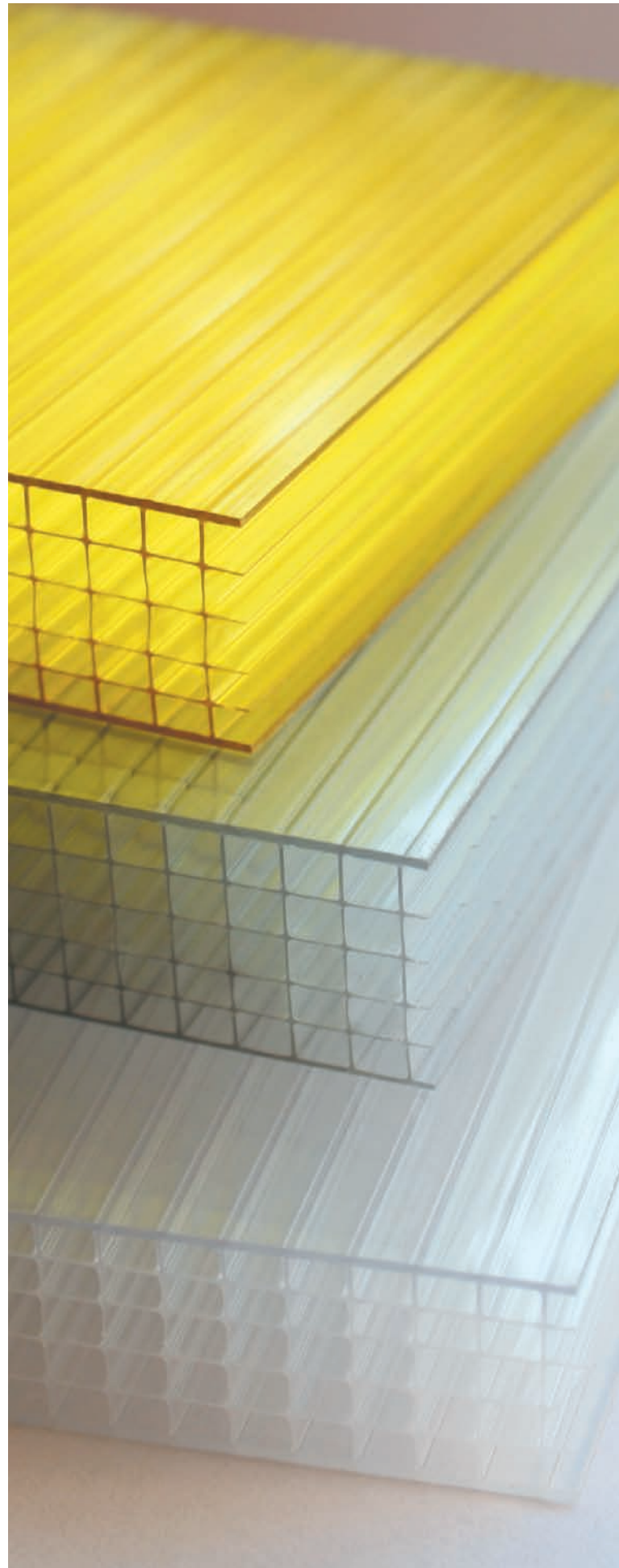
Air Tightness



Water Tightness



- Reinforced safety gauge
- Improved inertia for improved lightness
- The very best air and water tightness available



DANPALON® 3DLITE

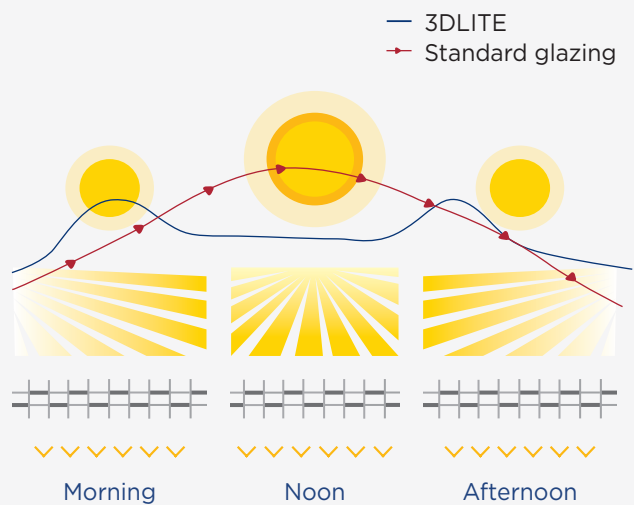
BALANCE YOUR LIGHT

Block direct heat and glare

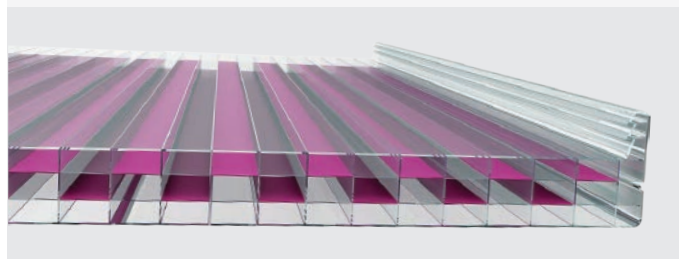
Optimizing natural light in buildings is an ongoing challenge. 3DLITE is an advanced, innovative product developed by Danpal®, enabling architects to design creatively while contributing to energy savings and increased lighting efficiency. 3DLITE contains alternating integrated shading louvres which selectively control sunlight, offering thermal insulation and a special dynamic look.



LIGHT LEVELS DURING THE DAY



3D LITE allows the sun's rays to penetrate through at higher levels during the morning and afternoon, while reducing heat in the middle of the day.



3DLITE STRUCTURE

Balancing daylight throughout the day

3DLITE presents a fixed, cost-effective solution for optimising daylight in office buildings, shopping malls, schools, libraries, stadiums, museums, and more. The alternating integral louvres are specially designed to balance the light throughout the day, reducing heat to the building and scattering the light.

BENEFITS

- Dynamic look
- Flexible solution for summer and winter
- Optimises daylight throughout the day
- Wide variety of colours
- Part of the Danpalon® System

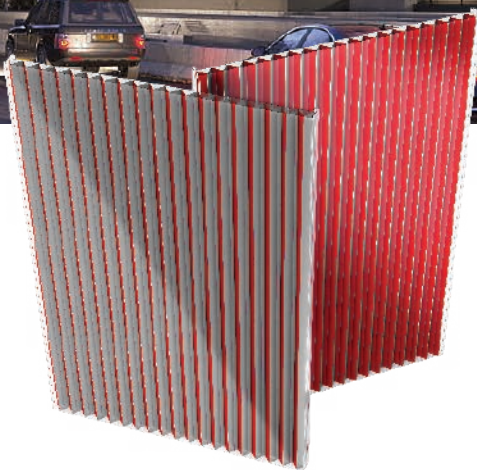
DANPALON® KINETIC PANEL

DUAL COLOUR PANEL WITH DYNAMIC LOOK

Fascinating design is all a matter of perspective. And that's exactly what you get with Kinetic - the dynamic design solution from Danpal that enables the viewer to see a structure in one colour from one direction, and another colour from the other direction - providing a dynamic visual experience that changes depending on your perspective.

Give buildings a new look

With its appealing, innovative exterior, Kinetic revitalizes the appearance of any building - rejuvenating older buildings or adding innovation when planning a new building.



Variety of colour combinations

BENEFITS

- Dynamic look
- The ability to combine two colours in one panel
- Unparalleled choice of colours and colour combinations
- Lightweight
- Part of Danpal's systems

FINISHES

AT DANPAL®, WE OFFER A RANGE OF PANEL SURFACE FINISHES ACCORDING TO ENVIRONMENTAL CONDITIONS AND ARCHITECTURAL REQUIREMENTS

SOFTLITE FOR VISUAL COMFORT

Softlite finishing greatly diminishes glare effects. Softlite is a 100% permanent matt finish applied by co-extrusion on Danpalon® panels of any thickness and colour. The Softlite finishing performance is independently validated to

ensure maximum visual comfort, regardless of the exposure and type of building.

- Reduce “neon” effect
- Increase light diffusion
- Increase feeling of comfort



REFLECTIVE COLOURS FOR THERMAL COMFORT

All panels are available in ‘Reflective’ colours, with Reflective Grey and Reflective Ice locally available.

These heat reflective panels have millions of flat metallic “mirror-like” particles dispersed through them. The light can pass between the particles while the heat is reflected away.

HP - HIGH PROTECTION TREATMENT

Danpalon® HP is an advanced surface treatment that enables higher performance in areas of graffiti removal and protection against environmental pollution.

The Danpalon® HP surface treatment can be applied to most types of Danpalon® panels.



CHEMICAL DESCRIPTION	UNCOATED	COATED
Gasoline	L	L
Toluene	I	L
Acetone	I	L
5% Ammonia	M	L
10% Caustic Soda	M	L
50% Caustic Soda	S	M
GaffiGauard 2010 (Guard Industrie France)	M	L
GaffiGauard Decap Façade Guard (Guard Industrie France)	M	L
GaffiGauard 2030 (Guard Industrie France)	I	L

L - Long term contact
M - Medium term contact

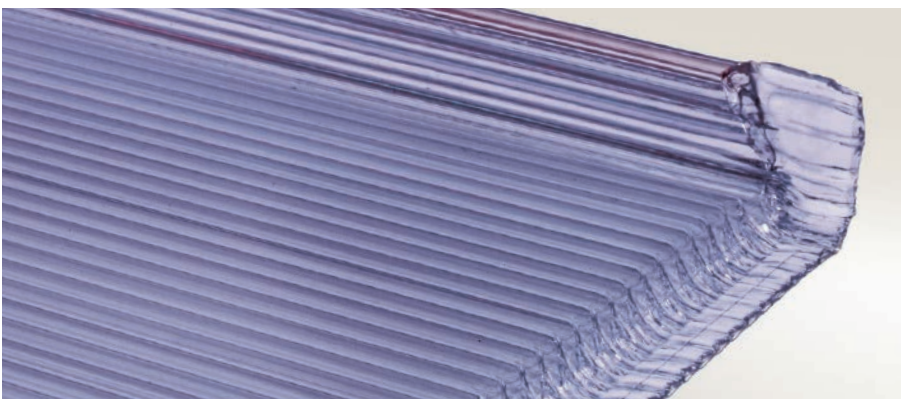
S - Short term contact
I - Immediate Attack

FP - EXTRA FIRE PROTECTION

Danpal FP panels have fire retardant additives embedded into without visually changing their appearance. These specially developed additives significantly reduce smoke and flame in spread. Their superior performance in large scale façade tests makes them an essential choice for use on large buildings, where fire compartmentalization is an important factor in achieving a fire engineered design solution.



HEAT WELDED EDGES FOR PERFECT FINISHING



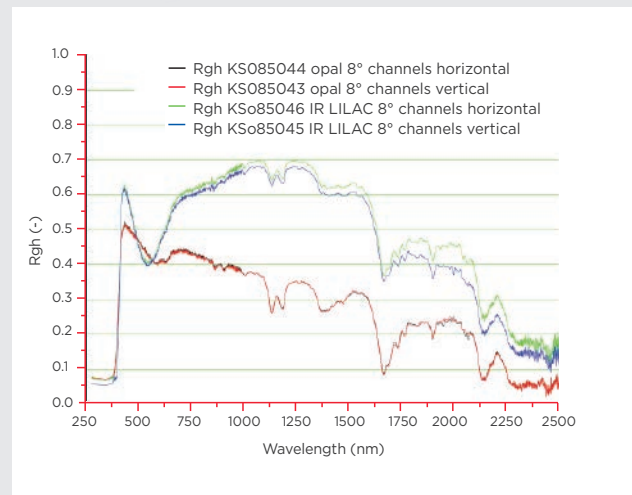
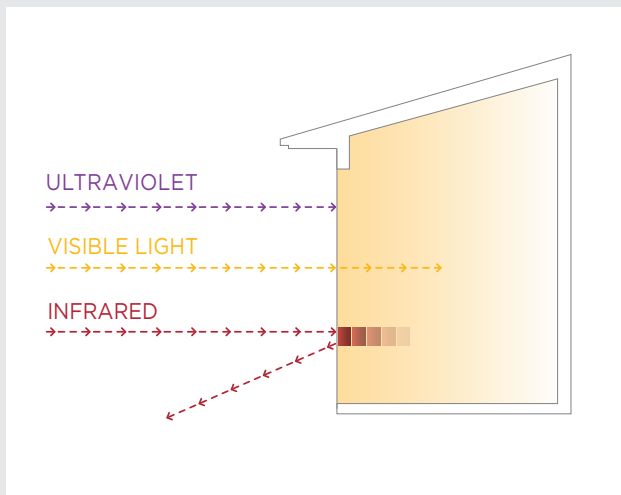
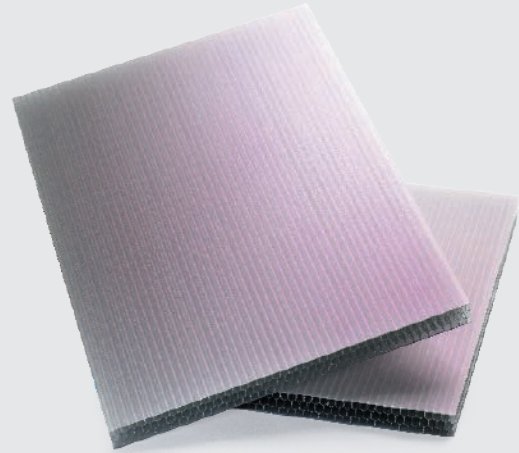
The welded edges provide a clean and effective solution that prevents water, dirt or insects from getting inside the microcells.

COLOURS & TEXTURES

LOW E

Pearl Lilac is an infrared (low E) treatment available on all multicell panels. It can significantly limit solar heat gain without affecting light transmission levels.

It works by selectively blocking solar radiation that is part of the non-visible range. This leads to a reduction in solar loads, enabling significant reductions in air conditioning costs and carbon emissions.



“PEARL LOWE” has improved IR reflectivity characteristics, compared to a similar panel without infrared treatment (as shown in the graph).



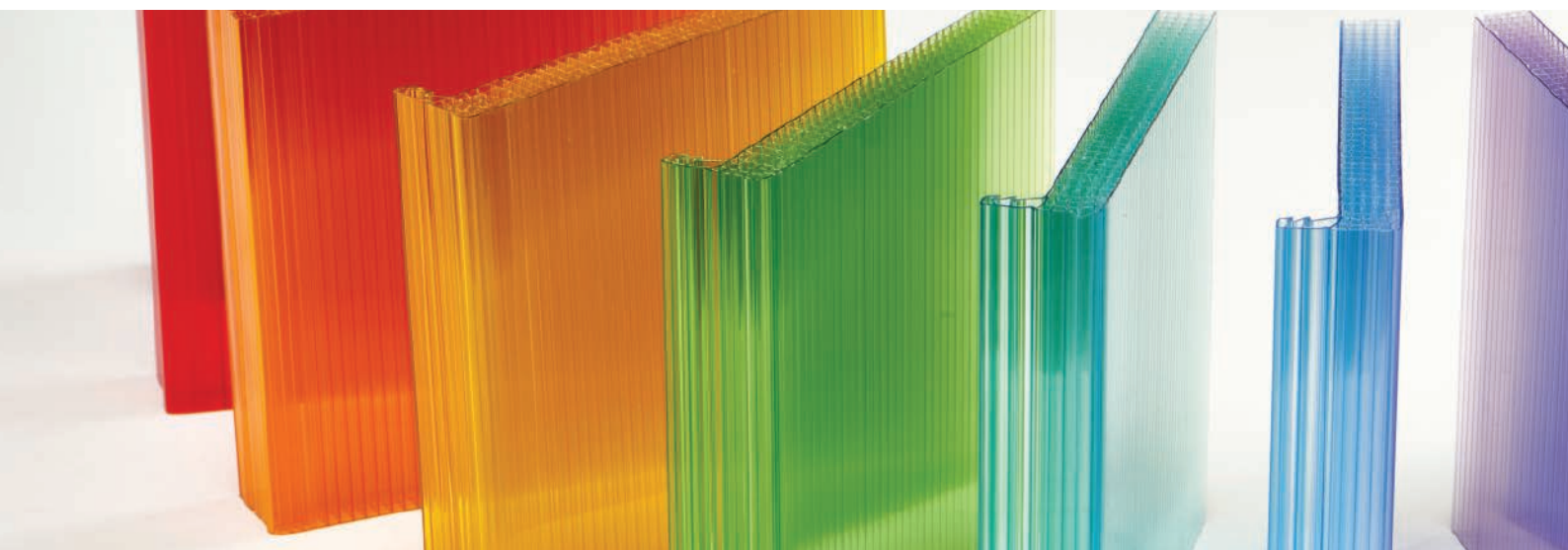
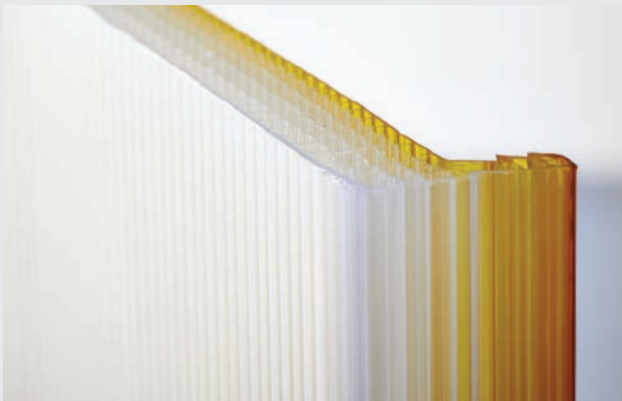
OPAQUE AND TRANSLUCENT



For bright colours with a metallic, lacquered appearance, choose the opaque panels available in a wide range of tints. With Danpal's translucent range, the appearance of the building changes with the light and reflections projected onto the facade at different times of day.

BICOLOUR FOR SPECIAL EFFECT

Our bicolour option enables you to perfectly adapt your facades to the effect you desire, both inside and outside. It is available in the colours of your choice for all Danpal® systems (subject to minimum quantities and lead times).



DANPALON® TEXTURES



Nursery School, France | Glazing: Danpalon® Printed, 16mm | Architect: Weber et Albrech



Oddo Nursery School, Marseille, France
Glazing: Danpalon® Printed, 16mm
Architect: Camille Richard Lenoble



Santoni School, La Garde, France
Glazing: Danpalon® Printed, 16mm
Architect: La Garde, Becker Sylvie

UNLIMITED DESIGN OPTIONS AND STUNNING EFFECTS

As well as creatively playing with light in structures, with Danpalon® textures you can also play with different prints and designs.

Danpalon's textures and prints bring a wide array of design options for interior and exterior walls and ceilings. We provide high quality designs and stunning effects that are perfectly adapted and overlaid. This allows you to create any type of atmosphere or appearance, adding interest to structures and complementing the design.

Add the beauty of texture to structures with Danpalon®.



Secondary School P. Mendes, Arques, France
Glazing: Danpalon® Printed | Architect: Soupey Toth Architecte



Exhibitions House, France | Glazing: Danpalon® Printed, 16mm | Architect: R+4 Architectes



Collège Bessou, Béziers
Glazing: Danpalon® Printed, 16mm
Architect: MPM Architectes



Liberty Creche, Le Petit Quevilly, France
Glazing: Danpalon® Printed, 16mm
Architect: Gérard Bourdon

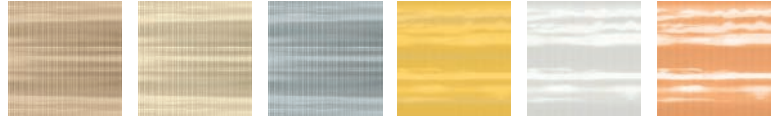
LET OUR COLOURS INSPIRE YOU

SHADES OF WHITE



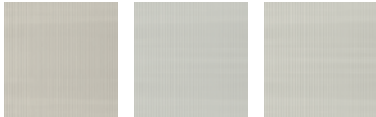
Clear Ice Opal

METALLIC



Amber Bronze Reflective Grey Gold* Reflective Ice Copper*

SOFTLITE SHADES OF WHITE



Softlite Clear* Softlite Ice Softlite Opal*

SOFTLITE METALLIC

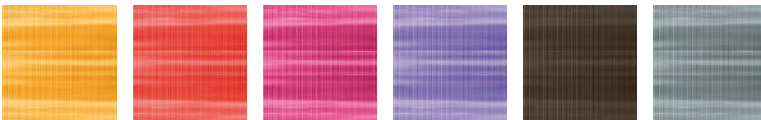


Softlite Amber* Softlite Bronze* Softlite Reflective Grey* Softlite Gold* Softlite Reflective Ice* Softlite Copper*

COLOURFUL



Blue Sapphire Blue* Arctic Blue* Green Lime Green* Empire Green* Yellow



Orange Red Magenta* Purple Brown* Grey

SOFTLITE COLOURFUL



Softlite Blue* Softlite Sapphire Blue* Arctic Blue* Softlite Green* Softlite Lime Green* Softlite Empire Green* Softlite Yellow*



Softlite Orange* Softlite Red* Softlite Magenta* Softlite Purple* Softlite Brown* Softlite Grey*

COLOURFUL OPAQUE



Blue* Emerald Green* Red* Purple* Cream* Ivory* Chocolate* Reflective Grey*

3DLITE

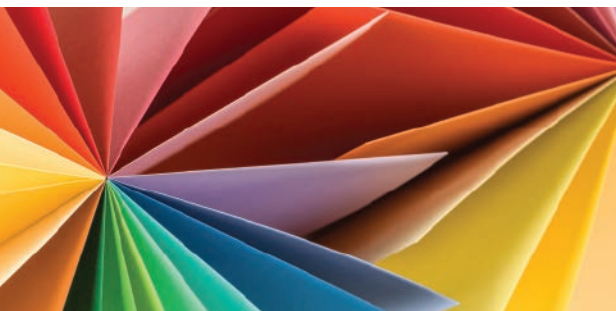
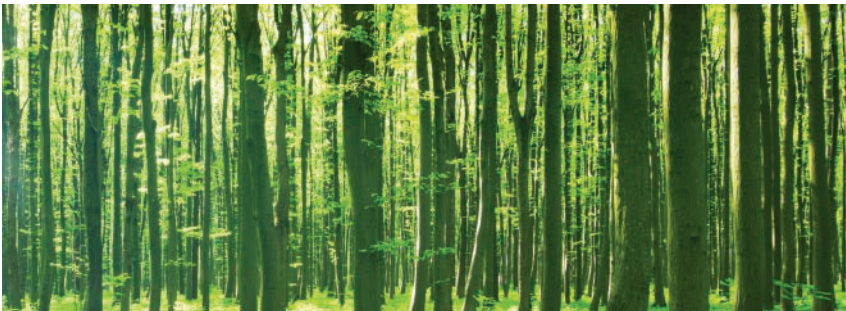
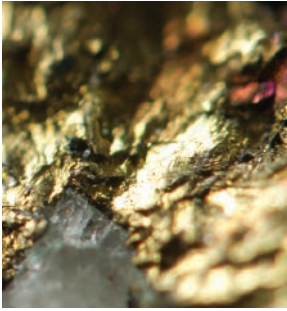
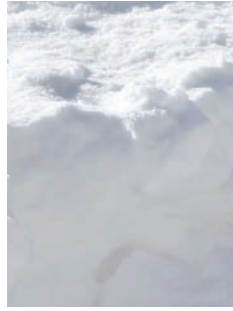


Blue* Lime Green* Green* Red* Violet*



Chocolate* Ivory* Orange* Grey* White

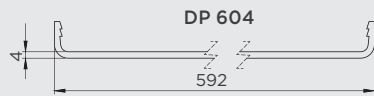
*Not stocked in Australia. Available to order.



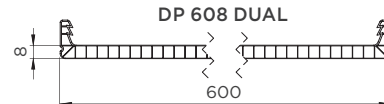
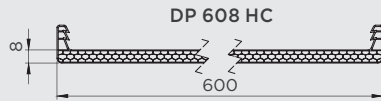
PANELS IN STOCK

PANELS AVAILABLE TO ORDER

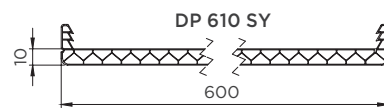
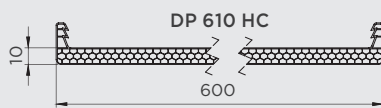
4 MM



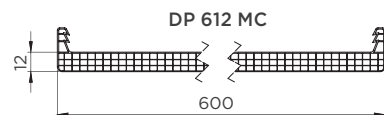
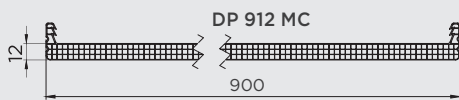
8 MM



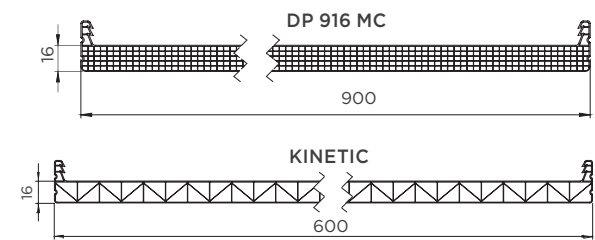
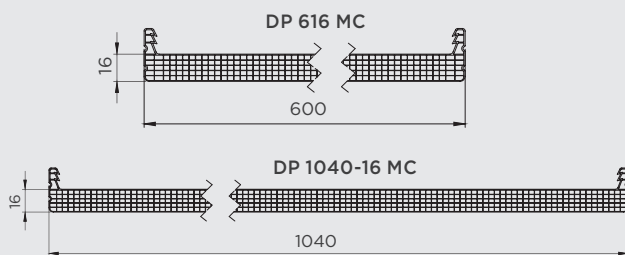
10 MM



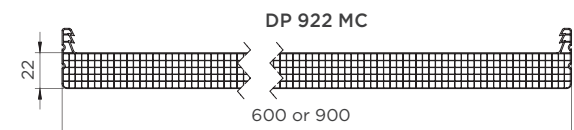
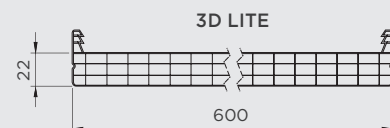
12 MM



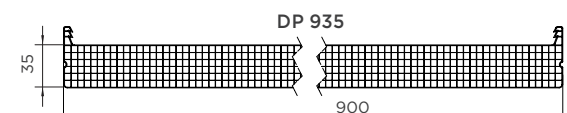
16 MM



22 MM



35 MM




















TECHNICAL FEATURES

	DANPALON® 4mm	DANPALON® 8mm	DANPALON® 10mm	DANPALON® 12mm	DANPALON® 16mm	DANPALON® 22mm	DANPALON® 35mm	3DLITE	KINETIC
Number of walls		4	4	4	6	6	7	4	4
Structure	Solid 4mm	Honeycomb	Honeycomb	Multicell	Multicell	Multicell	Multicell	Multicell	Multicell
Width (mm)	600	600	600	600 900	600 900 1040	600 900	900	600	600
Standard international U-value (W/m² °K)	5.36	2.46	2.11	1.84	1.53	1.5	1.2	1.76	2.3
NFRC U-value* (W/m² °K)	UPON REQUEST	3.3	3.0	2.9	2.5	UPON REQUEST	UPON REQUEST	UPON REQUEST	UPON REQUEST
Weight (g/m2)	5000	1830	2666	2796	3462	3796	4500	3100	2750
Fire classification	AS 5637.1:2015 Group 1								
Minimum slope specific test	5°								
Minimum radius for cold bending	3.2m	2.5m	2.7m	2.8m	3.1m	3.5m	4.4m	5.0m	5.0m
Manufactured according to certification	ISO 9001 ISO 14001								
Impact resistance	AS1562-3								
Technical Book	Specialised reviews to EN standards throughout by SOCOTEC / CSTB Technical Assessment Department of cladding and roofing / Annual monitoring of the production factory by CSTB								

*The NFRC U-value includes standard aluminium framing as per NFRC requirements and must be used when performing calculations for BCA Section J requirements. Thermally broken frames for lower U values are available. Contact Danpal® for more information.



OPTICAL AND SOLAR PROPERTIES

		DP4	DP8 / DP10 / DP12	DP16 / DP22	DP35	
Reflective Colours						
	REFLECTIVE GREY	LT%	19	20	18	20
		ST%	16	16	19	17
		SR%	24	31	31	32
		SHGC	0.28	0.27	0.29	0.27
	REFLECTIVE ICE	LT%		23	18	
		ST%		28	24	
		SR%		51	49	
		SHGC		0.32	0.29	
Standard Colours						
	BLUE	LT%	62	50	49	
		ST%	72	57	51	
		SR%	11	27	33	
		SHGC	0.76	0.6	0.54	
	BRONZE	LT%	37	25	29	
		ST%	41	27	31	
		SR%	8	16	21	
		SHGC	0.51	0.38	0.41	
	CLEAR	LT%	86	67	57	50
		ST%	79	62	53	47
		SR%	11	29	36	39
		SHGC	0.81	0.64	0.55	0.50
	GREEN	LT%	69	51	44	
		ST%	67	52	44	
		SR%	11	23	28	
		SHGC	0.71	0.57	0.5	
	GREY	LT%	41	28	31	
		ST%	51	36	36	
		SR%	9	19	28	
		SHGC	0.59	0.45	0.43	
	ICE	LT%	55	58	47	
		ST%	58	57	46	
		SR%	20	30	35	
		SHGC	0.62	0.60	0.50	
	OPAL	LT%	34	35	21	
		ST%	42	41	28	
		SR%	31	39	45	
		SHGC	0.47	0.45	0.34	
Premium Colours						
	DARK OPAL	LT%		15	10	
		ST%		22	16	
		SR%		51	50	
		SHGC		0.27	0.23	
	GOLD*	LT%		27	18	
		ST%		26	19	
		SR%		26	27	
		SHGC		0.36	0.30	
	ORANGE	LT%	60	41	37	
		ST%	63	49	43	
		SR%	11	24	29	
		SHGC	0.68	0.54	0.49	
	PURPLE	LT%	51	44	32	
		ST%	68	55	43	
		SR%	11	26	30	
		SHGC	0.72	0.59	0.48	
	RED	LT%	60	20	16	
		ST%	63	45	38	
		SR%	11	26	30	
		SHGC	0.72	0.59	0.48	
	YELLOW	LT%	78	53	45	
		ST%	69	48	41	
		SR%	11	23	29	
		SHGC	0.73	0.54	0.47	
	AMBER	LT%		47	35	
		ST%		53	40	
		SR%		27	30	
		SHGC		0.57	0.46	
	COPPER*	LT%			10	
		ST%			26	
		SR%			32	
		SHGC			0.34	
	SAPPHIRE BLUE*	LT%	18	28	21	
		ST%	58	49	39	
		SR%	10	23	27	
		SHGC	0.64	0.55	0.46	







LT - % of visible light transmission (400 - 700nm)

ST - % of total solar radiation transmission (300 - 2800nm)

SR - % of total solar reflection (300 - 2800nm)

SHGC - Solar Heat Gain Coefficient. Total solar energy transmitted through the panel = %ST+0.2x[1-(%st+%sr)].

Tests were performed in accordance with ASHRAE 74-1988 procedures. Figures are indicative and may change within manufacturers' production tolerances.

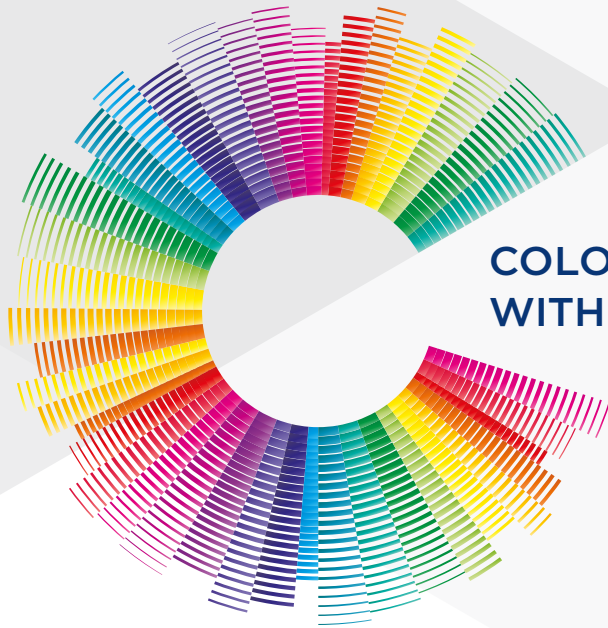
		DP4	DP8 / DP10 / DP12	DP16 / DP22	DP35
Premium Colours					
	ARCTIC BLUE*	LT%			17
		ST%			29
		SR%			24
		SHGC			0.39
	EMPIRE GREEN*	LT%	49	22	18
		ST%	51	26	22
		SR%	8	14	19
		SHGC	0.59	0.38	0.34
	BROWN*	LT%			14
		ST%			16
		SR%			16
		SHGC			0.3
Pearl Colours					
	LILAC*	LT%		38	35
		ST%		30	25
		SR%		44	47
		SHGC		0.35	0.31
	GOLD*	LT%			19
		ST%			22
		SR%			48
		SHGC			0.28
	GREEN*	LT%			30
		ST%			33
		SR%			40
		SHGC			0.38

*Not stocked in Australia. Available to order.

TEST DATA AND TECHNICAL SUMMARY

Test Description	Test Procedure	Results & Note
Weathering		
• Weathering Evaluation	ASTM D4364-84	Successful exposure to concentrated natural sunlight radiation of 56000 MJ/M2(1540MJ/M2 of U.V.) at New River Site, Arizona
• 110mo Florida Weathering Evaluation		Impact, Cyclic wind loading shall not decrease after 110 months of exposure to Florida weather
• Colour Change	ASTM D2244	No more that 3.0 units Delta E after 60 months
• Yellowing Index	ASTM D1925	No more than 10 points after 60 months
• Light Transmission	ASTM D1003	Will not decrease more than 6% after 10 years
• Heat Exposure Evaluation	300°F, 25mins.	The interior and exterior faces do not darken more than 0 units Delta L /ASTM D2244, 0 units yellowing index/ASTM D1925 and 0% light transmission / ASTM D 1003
Accelerated Delamination		
• (Chapter 42 of UBC Code]	300°F, 25mins & sub - zero temp.	The faces do not become readily detached No delamination occurs under load
Vicat Softening Temperature	DIN 53460 Iso 306 VST/B	142°C
Long Service Temperature		-40°C to 120°C
Expansion / Contraction	Linear thermal expansion	0.065mm/m°C
Code Compliance	Codemark Certificate CM 20115	
U.V. Protection	Occasional cleaning with mild soap	
U.V. Filtration	Australian Standard No.1067-1990	Transmission less than 0.1%
ISO Quality Standard	SI ISO 9001	Danpalon® complies with Quality Management Standard SI ISO 9001

*Refer to technical information and consult our technical service department. Whenever reference is made to fire tests, the numerical rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.



COLOUR YOUR ATMOSPHERE WITH THE DANPAL® PALETTE

ABOUT THE COMPANY

Innovative light architecture systems for building envelopes

Danpal® are creators of exceptional light-transmitting architectural systems for building envelopes, providing optimal solar and thermal comfort.

For 50 years, our innovative systems have helped architects to transform light (both natural and artificial) into a powerful and versatile tool, for architectural creations that are internally and externally radiant.

An industry visionary, Danpal® are originators of the Danpalon® translucent panel standing seam system - a light architecture solution used around the world in commercial, education, transport, health, sports and high-tech projects.

Today, the company offers complete systems - providing total solutions for the building envelope. Danpal® designs, manufactures and distributes an unmatched range of daylighting systems for all types of building requirements - from facades, cladding, roofs, skylights, shading, to interior and outdoor applications.

Danpal® systems are built around innovative technologies, deep architectural know-how and the ever evolving needs of our clients. Operating in five continents, Danpal® inspires architectural creativity with its rainbow of light architecture solutions.

Danpalon® Glazing Material is an integral part of Danpal's range of systems - giving you a complete solution



FACADES



CLADDING



ROOFING



SKYLIGHTS



SHADING



INTERIOR

www.danpal.com.au

