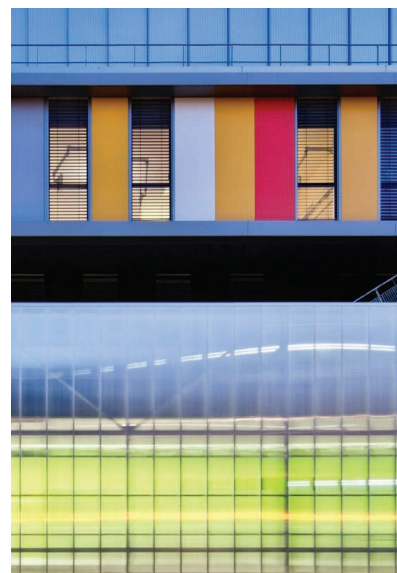


DANPALON[®] GLAZING MATERIAL

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.

Centre Hospitalier Sud Francilien, France
Glazing: Danpalon® 16mm | Architect: Groupe-6 Architectes

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.



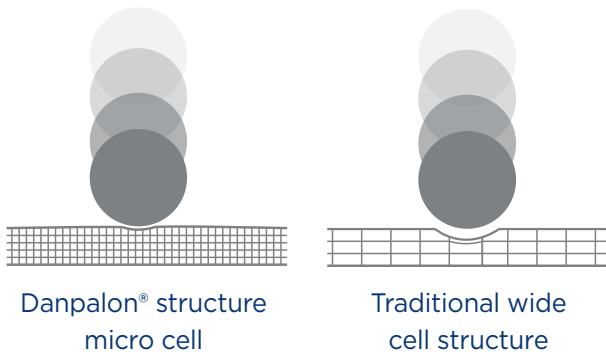
Gymnasium Posco, Korea | Danpalon® Single Glazing, 16mm | Architect: Posco A&C

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.



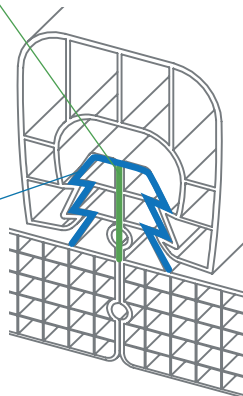
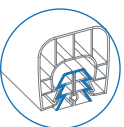
HIGH IMPACT AND WEATHER RESISTANCE

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.

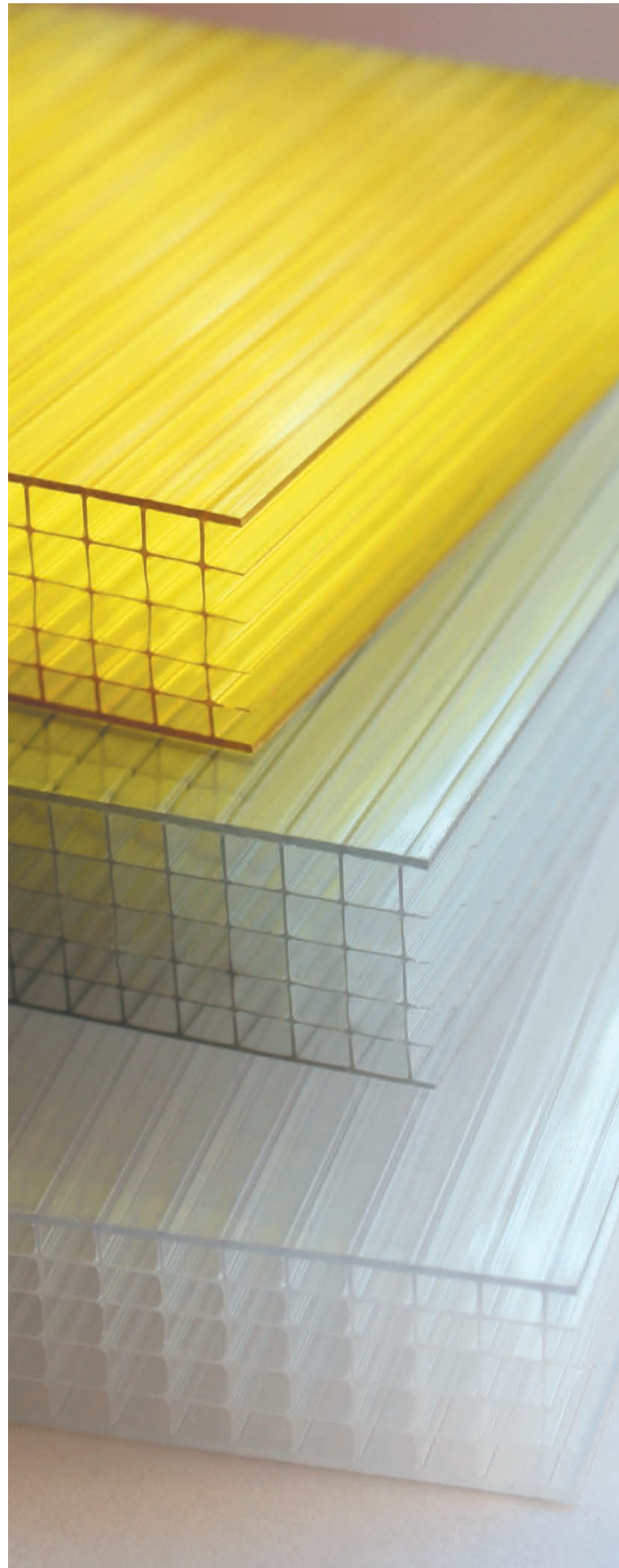
Air Tightness



Water Tightness



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

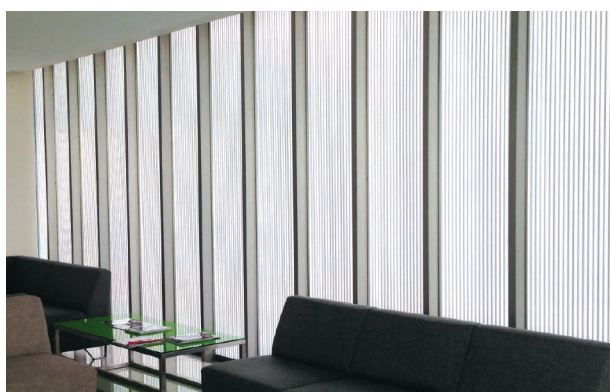


DANPALON® 3DLITE

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.

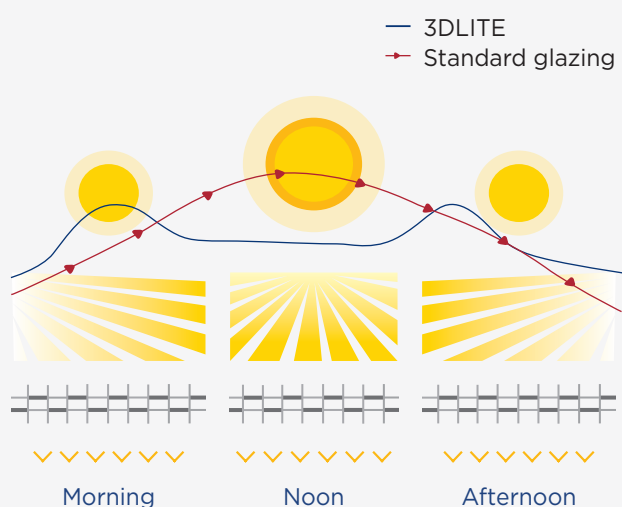


3DLITE STRUCTURE

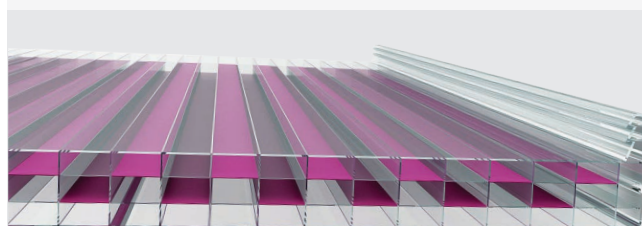
Balancing daylight throughout the day

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.

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.



BENEFITS

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

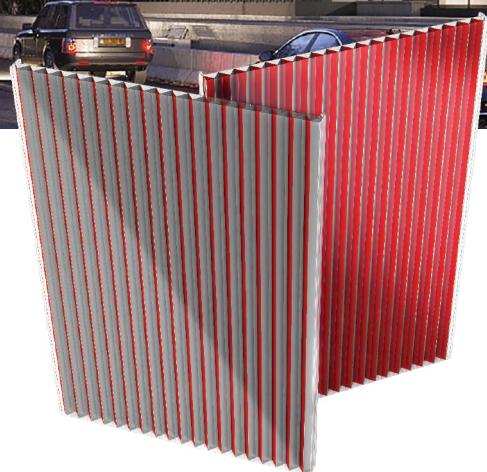
DANPALON® KINETIC PANEL

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

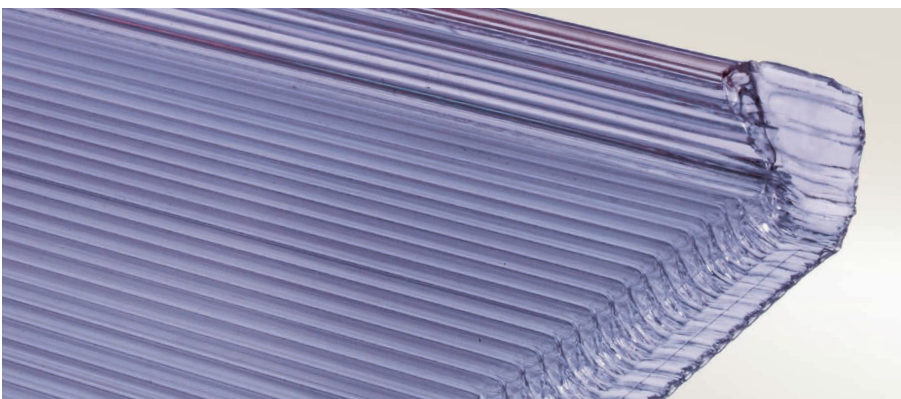
S - Short term contact
I - Immediate Attack

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



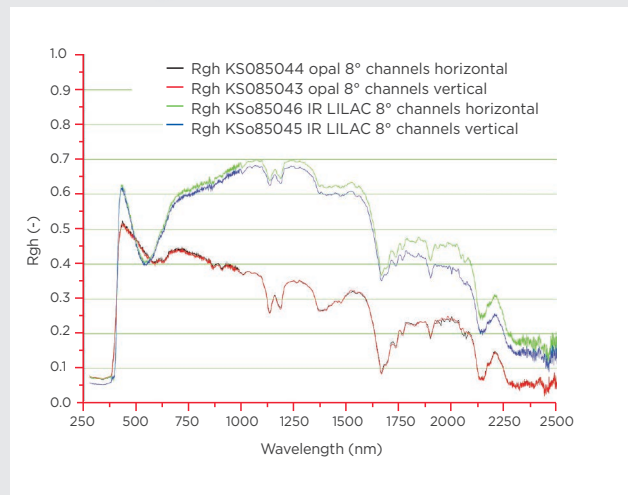
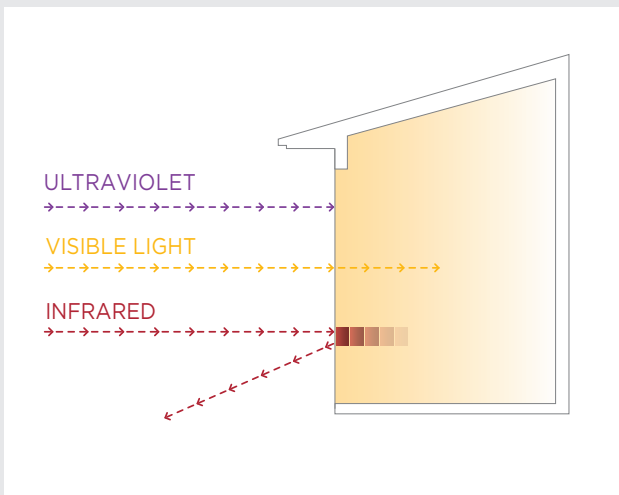
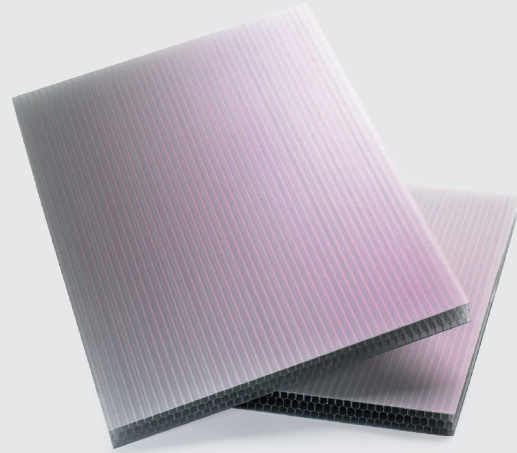
The welded edges provide a clean and effective solution that prevents water, dirt or insects from getting inside the microcells.

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).



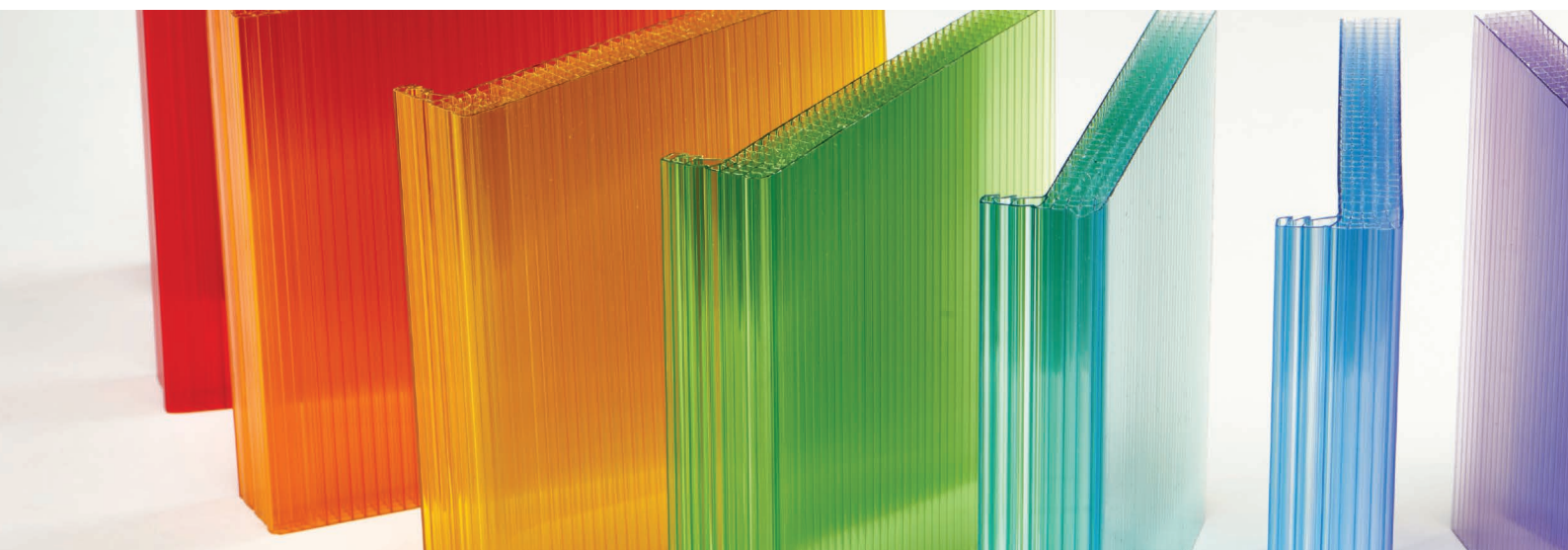
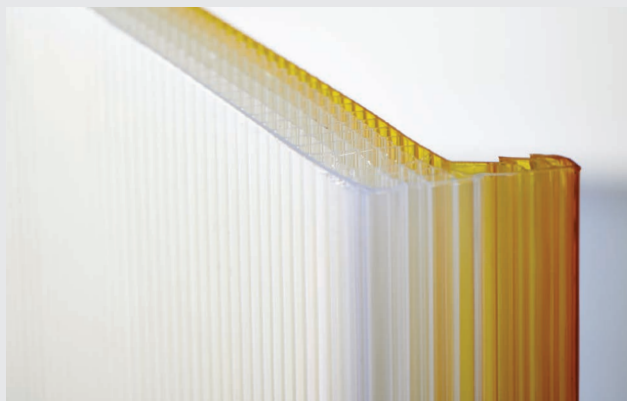
OPAQUE AND TRANSLUCENT



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



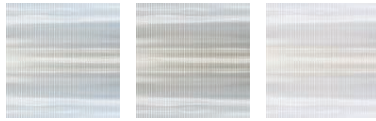
Collège Bessou, Béziers
Glazing: Danpalon® Printed, 16mm
Architect: MPM Architectes



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

LET OUR COLOURS INSPIRE YOU

SHADES OF WHITE

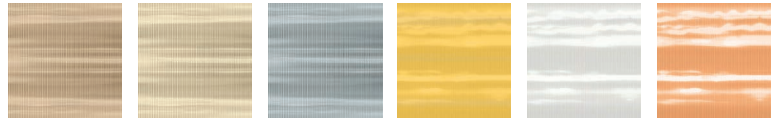


Clear

Ice

Opal

METALLIC



Amber

Bronze

Reflective
Grey

Gold*

Reflective Ice

Copper*

SOFTLITE SHADES OF WHITE

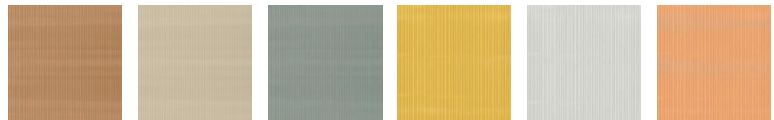


Softlite Clear*

Softlite Ice

Softlite Opal*

SOFTLITE METALLIC



Softlite Amber*

Softlite Bronze*

Softlite
Reflective Grey*

Softlite Gold*

Softlite
Reflective Ice*

Softlite Copper*

COLOURFUL



Blue

Sapphire Blue*

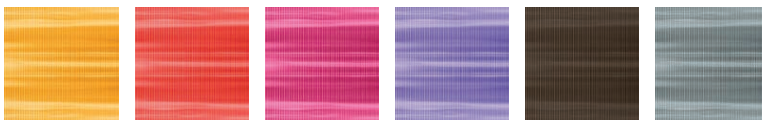
Arctic Blue*

Green

Lime Green*

Empire Green*

Yellow



Orange

Red

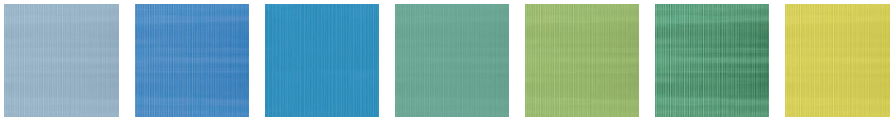
Magenta*

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



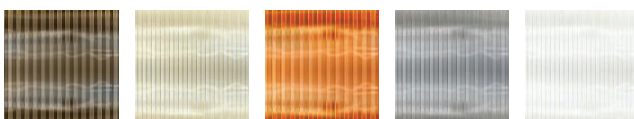
Blue*

Lime Green*

Green*

Red*

Violet*



Chocolate*

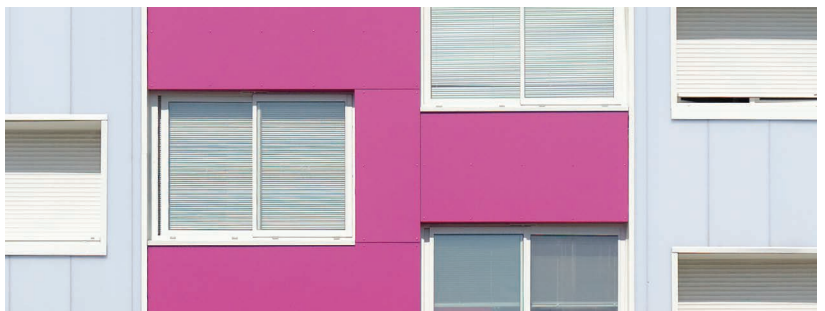
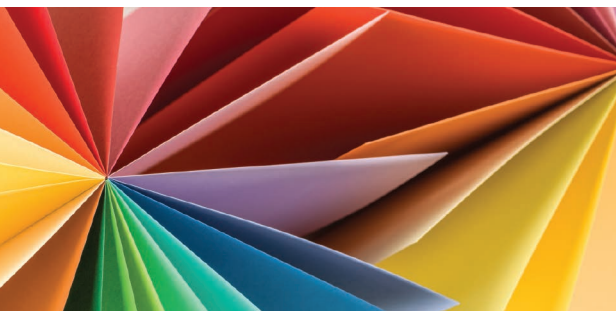
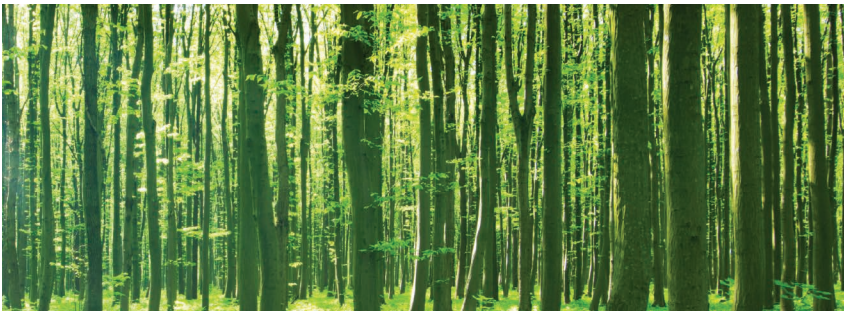
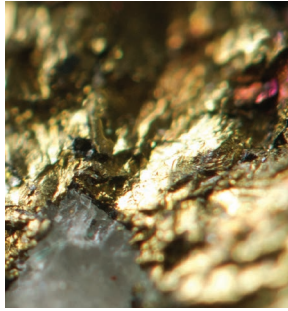
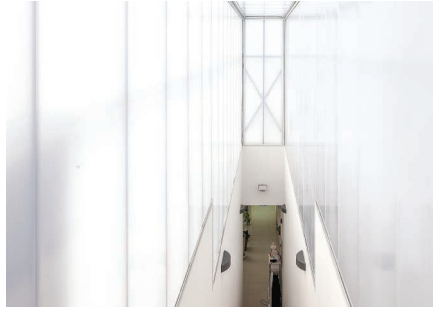
Ivory*

Orange*

Grey*

White

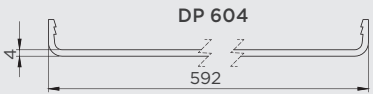
*Not stocked in Australia. Available to order.



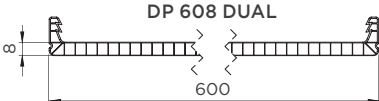
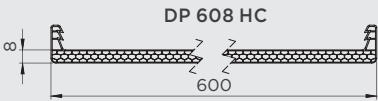
PANELS IN STOCK

PANELS AVAILABLE TO ORDER

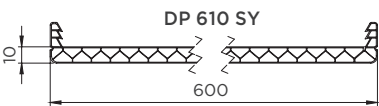
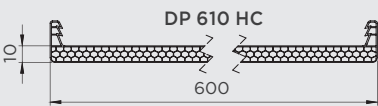
4 MM



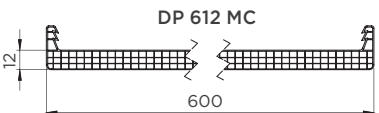
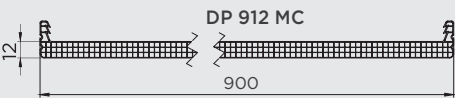
8 MM



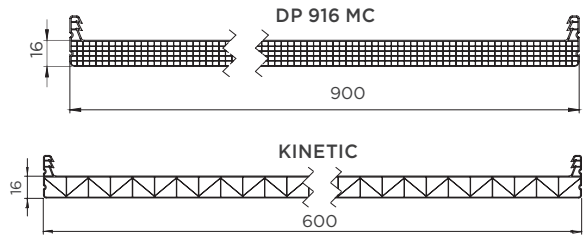
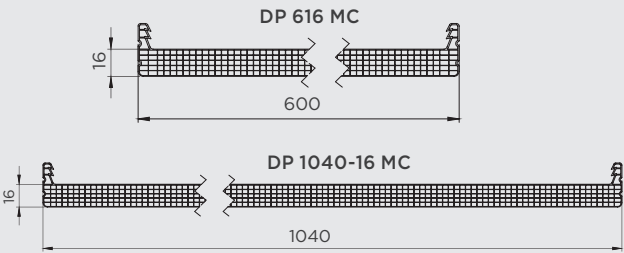
10 MM



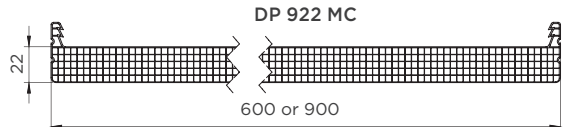
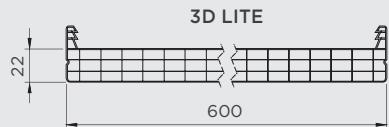
12 MM



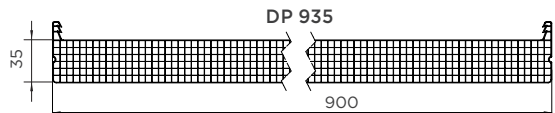
16 MM



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 |
| | | ST% | 16 | 16 | 19 |
| | | SR% | 24 | 31 | 31 |
| | | SHGC | 0.28 | 0.27 | 0.29 |
|  | 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 |
| | | ST% | 79 | 62 | 53 |
| | | SR% | 11 | 29 | 36 |
| | | SHGC | 0.81 | 0.64 | 0.55 |
|  | 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.

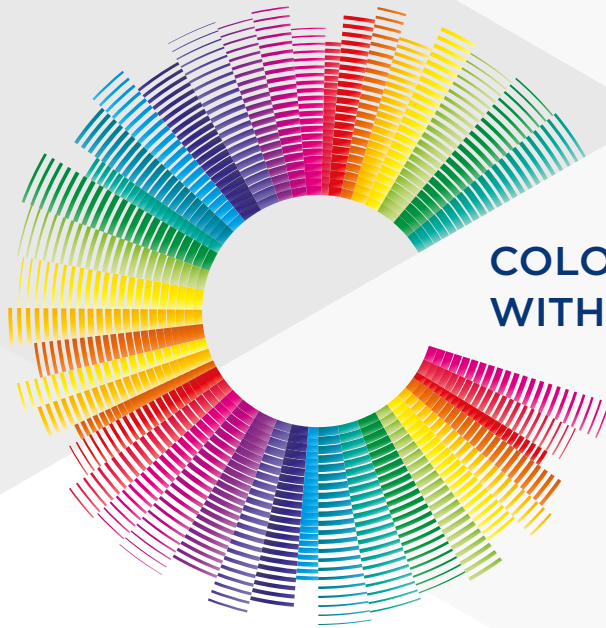
| | | DP4 | DP8 / DP10 / DP12 | DP16 / DP22 | DP35 |
|---|---------------|------|-------------------|-------------|------|
| Premium Colours | | | | | |
|  | ARCTIC BLUE* | LT% | | 17 | |
| | | ST% | | 29 | |
| | | SR% | | 24 | |
| | | SHGC | | 0.39 | |
|  | EMPIRE GREEN* | LT% | 49 | 22 | 18 |
| | | 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 <ul style="list-style-type: none"> Weathering Evaluation 110mo Florida Weathering Evaluation Colour Change Yellowing Index Light Transmission Heat Exposure 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 |
| | | Impact, Cyclic wind loading shall not decrease after 110 months of exposure to Florida weather |
| | ASTM D2244 | No more that 3.0 units Delta E after 60 months |
| | ASTM D1925 | No more than 10 points after 60 months |
| | ASTM D1003 | Will not decrease more than 6% after 10 years |
| | 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 <ul style="list-style-type: none"> (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