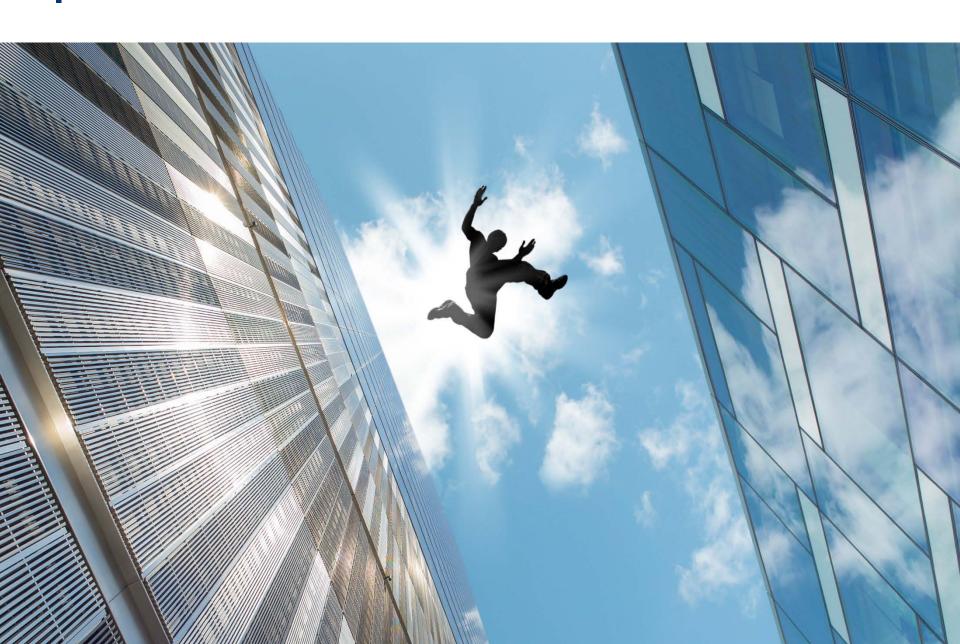
## **DANPAL®** LIGHT ARCHITECTURE SOLUTIONS FOR BUILDING ENVELOPES





## TAKE THE LEAP INTO LIGHT ARCHITECTURE



### CONTENTS

#### **I DANPAL**

- Light Architecture concept
- Who are we?
- Thermal & Solar Planning Systems

#### I FACADE SOLUTIONS

- Controlite System for Facade
- Danpatherm
- Danpal Facade System

#### I CLADDING SOLUTIONS

Danpal VRS System

#### I SKYLIGHT SOLUTIONS

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- Danpalon Roofing System
- Compact

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#### **I FINISHING**

- Softlight
- HP
- Pearl Low E

## I DANPALON® GLAZING MATERIAL

- Danpalon Panel
- Danpalon 3DLITE

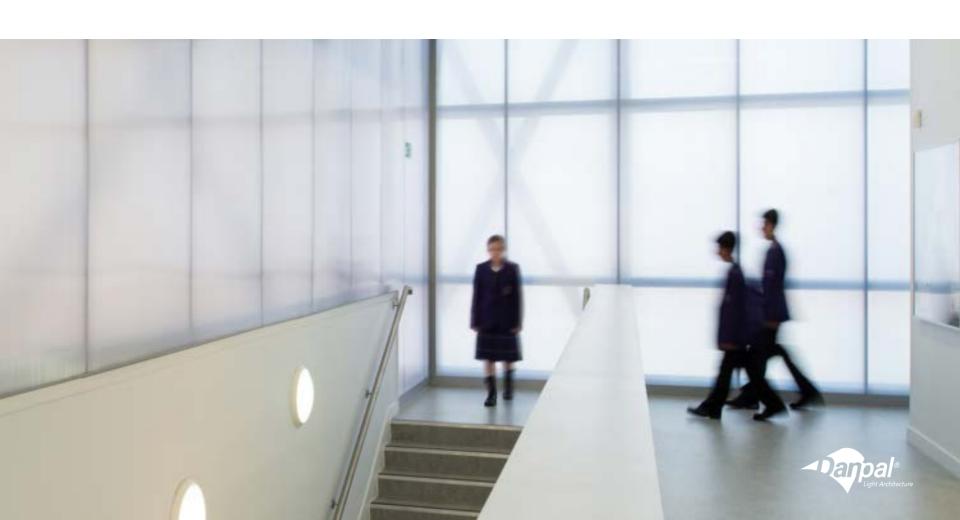
#### **IINTERIOR SOLUTION**

Danpal Interior System



## BRING YOUR NEXT DESIGN TO LIGHT

MUCH LIKE AIR AND WATER, LIGHT IS ESSENTIAL TO LIFE AND ARCHITECTURE ALIKE



## THE ARCHITECTURE OF LIGHT

WHEN YOU CHOOSE DANPAL, YOU CHOOSE LIGHT-TRANSMITTING ARCHITECTURAL PANELING SYSTEMS WITH UNMATCHED DIVERSITY AND CREATIVE POTENTIAL.

WE CALL IT LIGHT ARCHITECTURE.



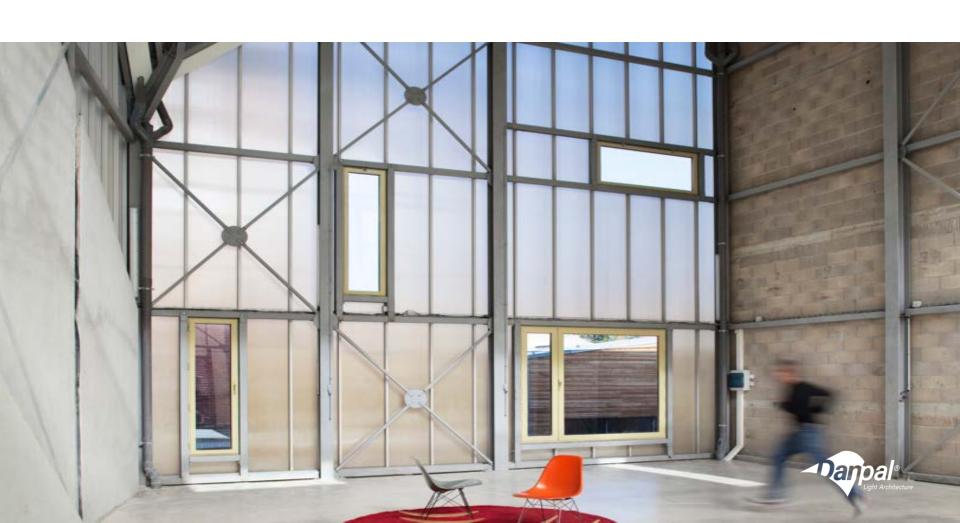
## DANPAL SYSTEMS

TURN ANY ARCHITECTURAL STRUCTURE INTO A WORK OF ART



## DANPAL SYSTEMS

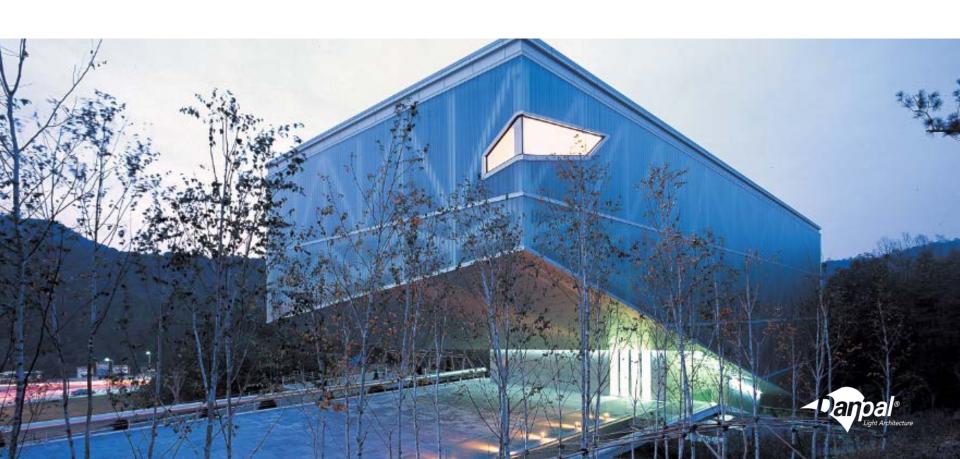
PROVIDE THE OPTIMAL BALANCE OF SOLAR AND THERMAL PERFORMANCE



## WE BRING 50 YEARS OF LIGHT ARCHITECTURE INNOVATION

#### **EVERY GREAT CRAFTSMAN NEEDS GREAT MATERIALS.**

EVERY DANPAL SOLUTION COMES WITH HALF A CENTURY OF EXPERIENCE, HELPING ENSURE YOU CAN CREATE YOUR NEXT MASTERPIECE FROM DESIGN TO IMPLEMENTATION



## GLOBAL VISION, LOCAL FOCUS





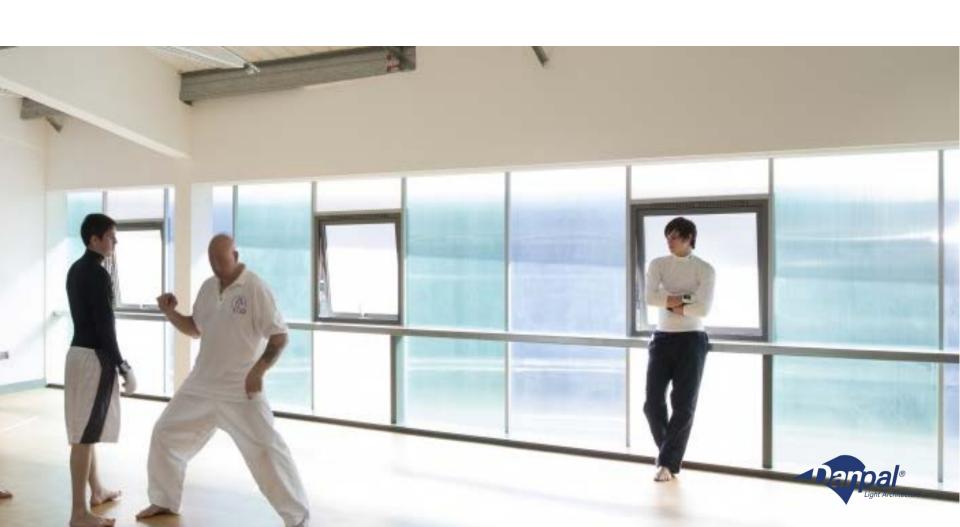
### WHO ARE WE?

- Danpal was established in 1966
- **Danpalon** was launched in 1983
- Danpal manufacture and design translucent polycarbonate systems with high thermal insulation, strong mechanical and light properties.
- Danpal's approach and strategy has always been to work very closely with architects, from the very first steps of the projects until installation on site.
- Global operation in 50 countries by subsidiaries and a distribution chain.
   Production site in Israel and Spain.
- Market leader in its field with over than 10 million m<sup>2</sup> installed



## OUR SERVICE

**CREATE A NEW COMFORT ZONE WITH DANPAL** 



## THERMAL & SOLAR PLANNING





## THE RESULT

#### Three types of reports:

- The energy balance
- The light balance
- The solar balance

#### **REPORTS (PDF)**

- Energy balance
- Light map





## WE ARE SUSTAINABLE

## We believe in maximum comfort through the use of natural light

- Enhances the visual qualities of a space.
- Improves mood and increases productivity.
- Maximum use of natural light, preventing glare.

#### We believe in energy efficiency

- Reduces the need for artificial lighting.
- Reduces air conditioning and heating costs.

#### We believe in sustainable design

- Reduces emissions of greenhouse gases by limiting energy use.
- Integrates in the design of energy efficient buildings.
- Provides the designers the chance to earn points in ecological construction classification systems (LEED Leadership in Energy and Environmental Design).
- Danpalon has implemented and maintains an environmental management system which complies with the requirements of the ISO 14001:2004 norm (expiry 12.07.18).





## DANPAL OFFER 6 APPLICATIONS -COVERING EVERY ASPECT OF THE BUILDING ENVELOPE



#### **FACADES**

Controlite System for Facade



Danpatherm System



Danpal Façade System





#### **CLADDING**

Danpal **VRS System** 





#### **SKYLIGHT**

Controlite System for Roof









Danpavault System





#### **OUTDOOR**

Danpal **Roofing System** 









#### **SHADING**

Danpal Louver System





#### **INTERIOR SOLUTIONS**

**Danpal Interior** System





## **FACADE SOLUTIONS**







Controlite system for façade

Danpatherm system

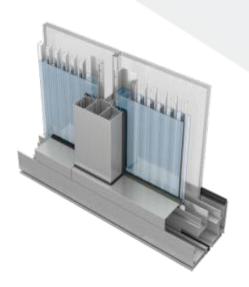
Danpal façade system



## CONTROLITE SYSTEM FOR FAÇADE

# INTELLIGENT DAYLIGHTING SYSTEM

- Delivers optimal comfort in changing daylight conditions
- Energy saving, eco-friendly system
- Reduces heating/cooling costs
- Excellent insulation





## DANPATHERM SYSTEM

UNITIZED
LARGE-SPANNING
HIGH INSULATION
SYSTEM FOR
FAÇADES

- Exceptional thermal insulation
- Factory pre-assembled CASSETTE
- Quick and easy installation
- Clean look no visible aluminum
- Unparalleled wind load resistance





## DANPAL FACADE SYSTEM

## TRANSLUCENT SINGLE GLAZING FAÇADE SYSTEMS

- High thermal insulation
- Clean look no visible aluminium
- Variable levels of light transmission
- Unparalleled wind load resistance
- High Impact resistant





## **CLADDING SOLUTIONS**





## **VRS SYSTEM**

## VENTILATED RAINSCREEN SYSTEM

- Lightweight
- 100% waterproof
- Quick, easy and cost
- effective installation
- Unparalleled design & choice of colors
- Significant panel lengths





## SKYLIGHT SOLUTIONS







Controlite® System for Roofing

**Danpalon Roofing System** 

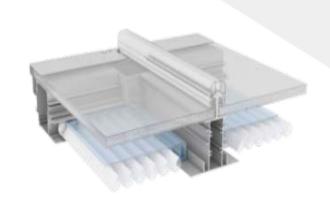
Compact



## **CONTROLITE SYSTEM FOR ROOFING**

## INTELLIGENT DAYLIGHT SYSTEM

- Delivers optimal comfort in changing daylight conditions
- Energy saving, eco-friendly system
- Reduces heating/cooling costs
- Excellent insulation
- Diffused light





## DANPAL® ROOFING SYSTEM

MODULAR
GLAZING
SOLUTION
FOR ROOFS

- Excellent thermal performance
- Superior air and water tightness
- High impact resistance
- Cold Bending of Sheets at Site
- Quick, easy and cost effective installation





## DANPAL® COMPACT SYSTEM

TOTAL
TRANSPARENCY
AND IMPACT
RESISTANCE

- Pure transparency
- Light weight
- Water proof
- Easy installation
- Impact resistance





## **OUTDOOR SOLUTION**





## Danpalon Roofing System

**Danpal Compact System** 



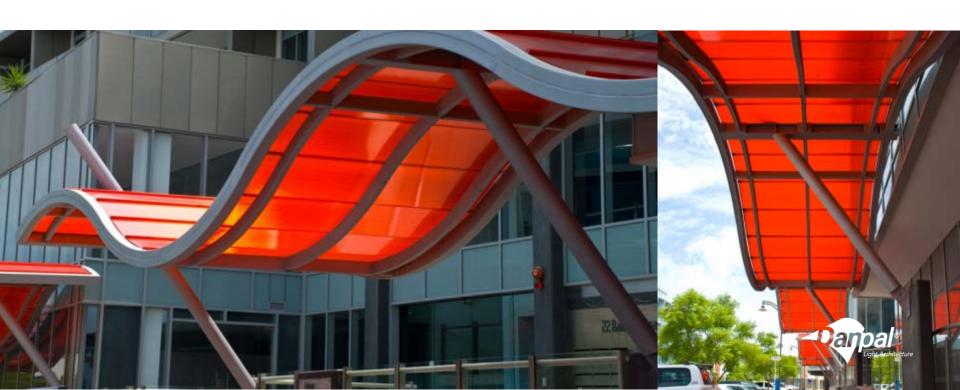


## DANPAL ROOFING SYSTEM

# MODULAR GLAZING SOLUTION FOR ROOFS

- 100% water proof
- Lightweight
- Unique microcells glazing panels structure
- High impact resistance
- Cold bending of sheets at site
- Quick, easy and cost effective installation





## DANPAL COMPACT SYSTEM

# MODULAR GLAZING SOLUTION FOR ROOFS

- 100% water proof
- Lightweight
- Unique microcells glazing panels structure
- Superior air and water tightness
- High impact resistance
- Cold Bending of Sheets at Site
- Quick, easy and cost effective installation





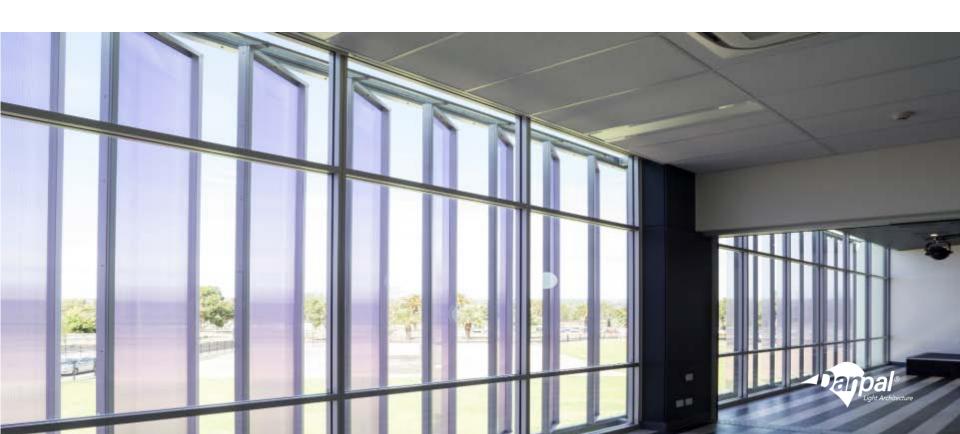
## SHADING SOLUTION





## Danpal Louver system

## Danpal Interior system





## DANPAL® LOUVER SYSTEM

MODULAR
GLAZING
SOLUTION
FOR SHADING

- 100% water Proof
- Lightweight
- Unique microcells glazing panels structure
- Superior air and water tightness
- High impact resistance
- Cold Bending of Sheets at Site
- Quick, easy and cost effective installation





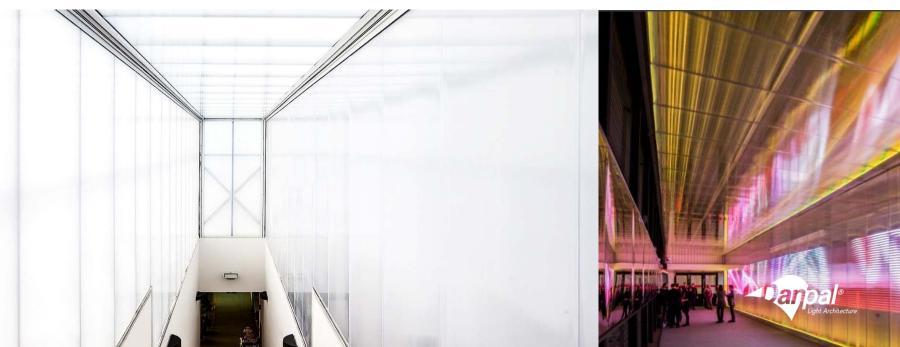


## DANPAL® INTERIOR SYSTEM

INNOVATIVE SOLUTIONS
FOR INTERIORS WITH
A UNIQUE RANGE OF
DISTINCTIVE VISUAL
APPEARANCES

- Wide range of colors
- Unlimited design flexibility
- Lightweight
- Easy to install
- Allows for both open and
- Intimate spaces





## DANPALON GLAZING MATERIAL



## GLAZING MATERIAL

### **Danpalon Panel**

### Danpalon 3DLITE





### DANPALON® PANEL

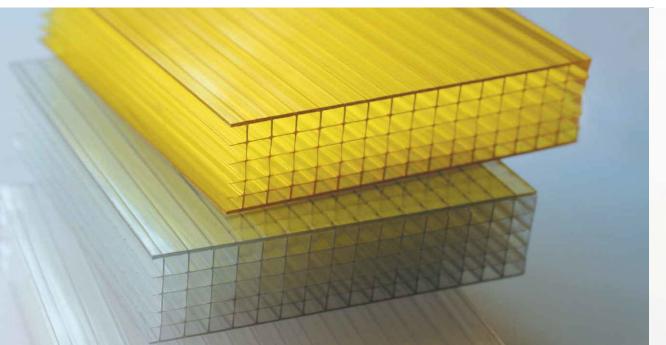
# DANPALON GLAZING MATERIAL

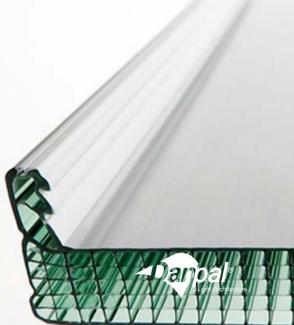
Light diffuse, thermal insulation and UV protection

#### **Benefits**

- Unparalleled impact resistance
- High thermal performance
- High ratio of Wight and strength
- Unequalled aesthetic design
- Environmental friendly product



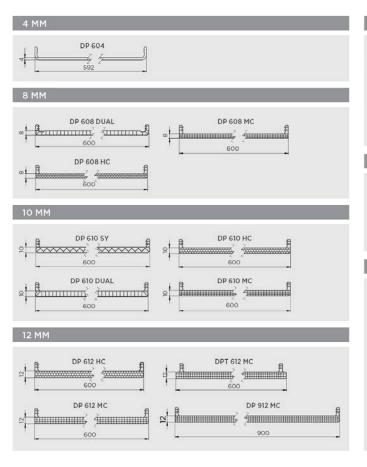


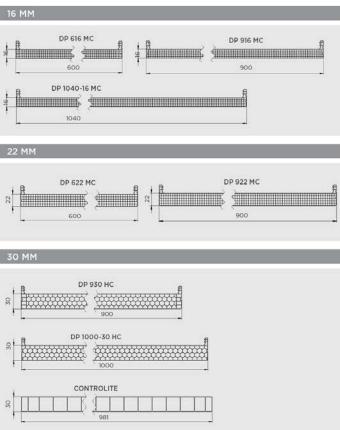


### TYPES OF DANPALON SHEETS

#### Panels structure – honeycomb/multicell

- Standard length: 11.98 meters
- Special lengths can be manufactured upon request







### DANPALON ® OPTICAL & THERMAL PROPERTIES

		4mm Compact	8mm Multicell Honeycomb	10mm Multicell Honeycomb	12mm Multicell Honeycomb	16mm Multicell	<b>22mm</b> Multicell	30mm Honeycomb
Technical Data	<b>K Factor</b> – Quantity of heat transmitted in 1 ft <sup>2</sup>	5.36	2.46	2.11	1.84	1.53	1.50	1.40
	Minimum Curvature Radius	2.90	2.00	2.50	2.60	2.90	3.50	4.20
Reflective Grey	LT % - VISIBLE LIGHT Transmittance	% 20	% 20	% 20	% 20	% 20	% 20	% 20
	ST % - Solar RADIATION Transmittance	% 18	% 18	% 18	% 18	% 17	% 17	% 17
	SR % - Solar Reflection	% 33	% 33	% 33	% 33	% 29	% 29	% 27
	SHGC – Solar Heat Gain Coefficient	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Colorless	LT % - VISIBLE LIGHT Transmittance	% 89	% 71	% 71	% 71	% 63	% 63	% 68
	ST % - Solar RADIATION Transmittance	% 80	% 60	% 60	% 60	% 51	% 51	% 58
	SR % - Solar Reflection	% 17	% 36	% 36	% 36	% 40	% 40	% 34
	SHGC – Solar Heat Gain Coefficient	0.81	0.67	0.67	0.67	0.53	0.53	0.60

- Weight by square meter
- Minimum curvature radius
- Light and heat transmittance
- Solar reflection, according to the thickness and the color of the sheet

**Note**: It must be taken into account that, although DANPALON has a higher thermal insulation, it is always recommended to have natural or artificial ventilation.

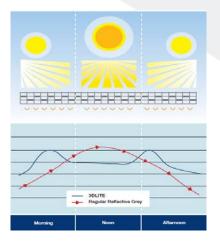


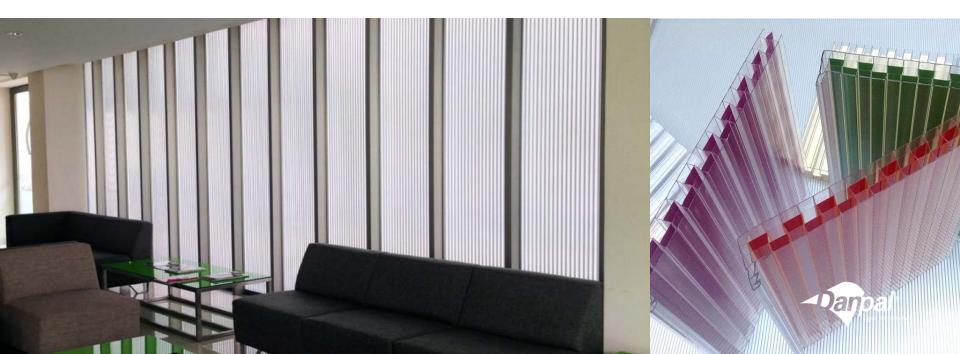
### DANPALON® 3DLITE

# DANPALON 3DLITE

#### **Benefits**

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





## **FINISHING**



### FINISHING

Softlight

HP

Pearl Low E



### **DANPALON SOFTLITE**

# LIGHT DIFFUSION - SOFTLITE

The Danpalon Softlite is a treatment which eliminates the phenomenon known as neon effect (light reflection on the sheet), resulting in a better light diffusion, much appreciated by architects and designers.

with softlite without softlite

\*\*Papar\*\*
\*\*Pa

#### DANPALON HP

# DANPALON HIGH PROTECTION (HP)

#### This panel has a special coating, achieving

- Chemical resistance against solvents (anti-graffiti)
- Better resistance against scratching
- Higher rigidity of the panel
- Prevents dirt accumulation, self-cleaning

Thanks to these advantages you can now consider installing the Danpalon System in places with high transit of persons, without fearing damage.









### PEARL LOW E

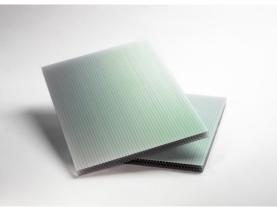
### IRIDESCENT ASPECT

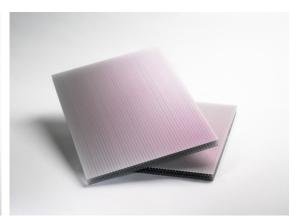
Infrared treatment is a co-extruded finish that can be applied in all panels.

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.



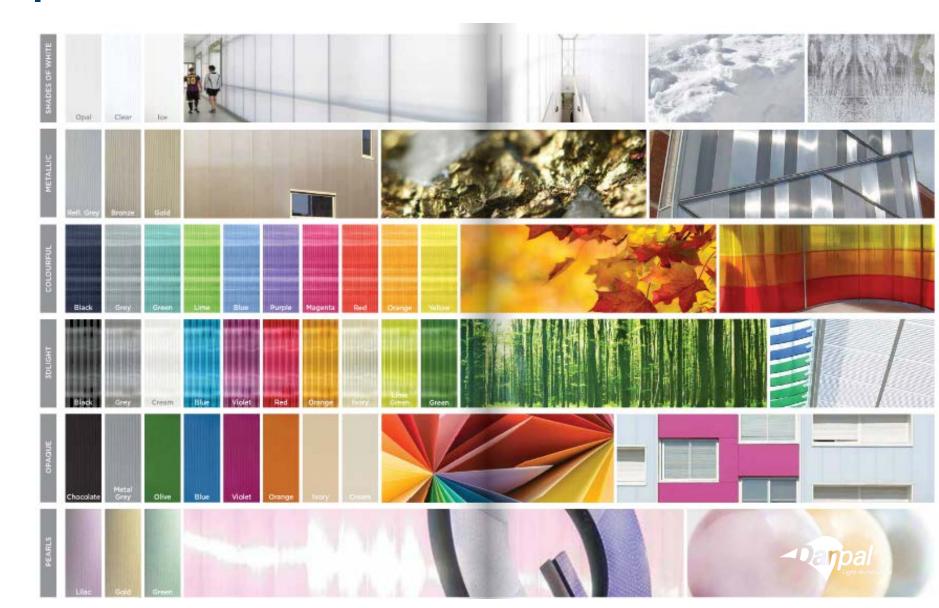






### **COLOR RANGE**

danpal.com/architects-inspiration/color



## THANK YOU



