DANPAL® FAÇADE SYSTEM

Single Glazed Translucent Facade


THE OPTIMAL BALANCE OF SOLAR AND THERMAL DYNAMICS

When it comes to the perfect facade, finding the equilibrium is key. Excess light results in undesired glare and intolerable ambient heat. Using materials with superior flexibility, transparency, and tonal qualities compared to glass, Danpal system delivers the perfect balance of light and thermal dynamics for any facade. Thanks to excellent insulating properties, Danpal’s facade systems assure balanced thermal comfort, while their transparency ensures ultimate visual comfort with homogenous light diffusion.

GIVING ARCHITECTS THE ABILITY TO PLAY WITH LIGHT

Danpal’s façade glazing materials give architects the artistic freedom to experiment with daylight in ever more creative and inventive ways. Architects can control the amount of light, choose whether to integrate with glass, or hide various elements. Our extensive range of colours, textures, finishes, reflections, and lighting offer architects a rich palette for creating inspired facades that illuminate the user’s experience during the day, while our lighting options transform the façade into a light box at night.

TRANSLUCENT GLAZING - SUPERIOR LIGHT DIFFUSION

The glazing panel’s unique structure transmits an even diffusion of natural light. Specifically designed for architectural daylight applications, the tight spacing between the ribs produces an aesthetically appealing look.

UNPARALLELED DESIGN FLEXIBILITY

Create a “clean look” from the e

HIGH SECURITY

The double “click” locking seam enables higher load resistance and safer.
UNIQUE BENEFITS:
• High impact resistance
• UV protection
• Homogenous light diffusion
• Light weight
• Freedom of design
• Superior air and water tightness
• Highly secure
• Certified system
• Easy installation
• Made with Microcell technology

1. System frame adapted to different panels
2. Perimeter details designed to deal with building and regulation requirements
3. Thermally broken product frame with special foam
4. Range of Danpalon® panels
5. Various connectors integrated into the system

HIGH THERMAL INSULATION
The Danpal Façade’s unique cell structure applies better thermal insulation. This results in improved ‘U’ and ‘R’ Values, offering significant energy efficiencies.

HIGH IMPACT RESISTANCE & STRENGTH
The panel’s special micro cell structure offers the highest resistance to impact and hail damage.

SUPERIOR AIR AND WATER TIGHTNESS
Connecting system assures the prevention of air and water penetration into the building.

EXTENDED UV PROTECTION
Danpal facade system offers top quality co-extended UV protection Danpalon Panels resulting in a longer system life.

EASY CONSTRUCTION
Quick, simple and cost effective installation.
TRADITIONAL SYSTEM
Economical façade system with basic framing

SEAMLESS SYSTEM
Large-spanning façade system with basic framing

ADVANCED NM SYSTEM
Advanced facade system with integral frame

THERMAL ADVANCED AIRPT SYSTEM
Advanced facade system with integrated subsill and frame and thermal break for advanced performance
CONTROLITE® SYSTEM

- Compatible with Seamless Façade system
- Maximizes winter daylight; blocks summer heat
- A self-optimizing system for maximum comfort

HOW IT WORKS

An external sensor detects the direction of the sun; internal sensors register the level of light inside the building. The intelligent system then balances light levels, solar heat, and shade to transmit uniformly diffused light and create a comfortable indoor environment.

International version

Fully closed

Fully opened

Early morning or late afternoon

Summer midday

Cloudy days

Controlite® compared to traditional glazing — summer

Controlite® compared to traditional glazing — winter

Controlite® blocks 80% of solar heat gain (W/m²).

Controlite® increases daylight transmittance by 100%.

*Comparable glazing: 30% insulating, Low E-glass, or 25mm opal multiwall polycarbonate.
NEXT GENERATION INTERNAL SOLAR AND THERMAL SIMULATION

Danpal uses state-of-the-art software to predict and plan the amount of daylight in the façade. Taking into account the systems’ physical characteristics (light transmission, solar factor, U value, etc.), it creates a simulation of daylight and energy consumption, mapping the daylight and energy in the structure. Architects can “play” with different product specification options and the façade area, in order to choose the perfect facade for their energy and lighting needs - ensuring optimum energy efficiency, luminous comfort and protection from glare.

• Dynamic internal daylight map simulation
• Dynamic internal energy consumption simulation
### TRADITIONAL SPANS

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*Not stocked in Australia. Lead time 10 weeks. Design load 1 kPA (ultimate) 0.7 kPA (serviceable). Deflection criteria span / 50. Consult Danpal for any other situations.

### SPECIFICATIONS

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<tr>
<th>Panel length</th>
<th>Up to 11.98m in stock (longer panels can be made to order)</th>
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<td>Special finishes</td>
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<td>Suitable for panel</td>
<td><strong>NM system</strong> 10, 16 <strong>AirPT system</strong> 16, 22</td>
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<td>Water/Air permeability 50 Pa m³/(h.m)</td>
<td>Positive Pressure - 0.20 Positive Pressure - 0.30</td>
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<tr>
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<td>Negative Pressure - 0.13 Negative Pressure - 0.10</td>
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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 over 30 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.

Danpal® Single Glazed Facade is an integral part of Danpal’s range of systems - giving you a complete solution

www.danpal.com.au