

PIXALUX[®]

STRUCTURAL LIGHT PANEL



PIXALUX[®]

MANUFACTURING AUSTRALIA



WHAT IS PIXALUX®?

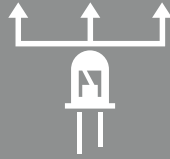
Pixalux® light panels are an innovative lighting product for architectural, commercial and retail design applications.

The innovative aspect of Pixalux® light panels is the ability to use a lighting source as a direct structural element.

PIXALUX®

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PIXALUX® FEATURES



Even light distribution

Pixalux® light panels emit light evenly across their entire surface



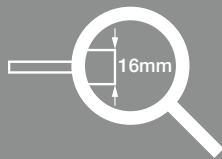
Frameless

Unlike other light panel products, Pixalux® light panels do not require a frame as they're structurally sound



Robust

Pixalux® light panels are solid bonded sheets of acrylic making them stronger and more durable than comparable light sources



Thin profile

Pixalux® light panels are only 16mm thick making them discrete and easy to integrate



Low power consumption

Pixalux® light panels use ultra efficient LED technology



Cool running

Pixalux® light panels do not emit heat from the panel surface because they're edge lit, making them ideal for sensitive environments



Adaptable

We can fit Pixalux® light panels with a variety of different Pixalux® specific LED types to meet user needs

HOW DOES PIXALUX® WORK?

Pixalux® light panels are LED edge lit light panels. Patented technology enables the light input along the edge of a panel to evenly illuminate the entire surface of the panel. This is a more efficient method of lighting as it enables a large area of light from a small input. The soft diffused light produced from this process is far more desirable than a

typical point source light which can cast large shadows and are harsh on the eye when looked at directly.

Pixalux® light panels are structural because they are made from solid sheets of acrylic bonded together, eliminating the need for bulky frames or supporting structures.



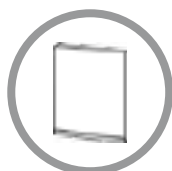
Panel face is illuminated

Light input from the edge

TECHNICAL SPECIFICATIONS



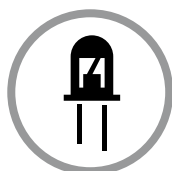
A Pixalux® light panel as shelving at the Powerhouse Museum gift shop, Sydney



PANEL PROPERTIES

Pixalux® light panels are made from high quality Shinkolite acrylic. Shinkolite is a highly uniform, optical grade material designed specifically for light transmission applications.

Panel properties	
Density	1.18 g/cm ³
Weight / m ²	18.9 kg/m ²
Tensile strength	70 MPa
Flexural strength	116 MPa
Plastic grade	7
Operating temperature	-10°C to 50°C



LED PROPERTIES

We only use the highest quality LED's in our Pixalux® light panels which is why our Pixalux® white LED's are sourced from Osram in Germany, a world leader in LED lighting technology.

LED properties	
LED type	Pixalux® white
Manufacturer	Osram
Model	Duris E3
Power input	12V DC
Lifespan	50,000 hours
Power consumption	14W/m
LED's/m	120/m
LED pitch	25 mm
Colour temperature	5700 K
Colour rendering index (CRI)	85

APPLICATIONS

RETAIL & SHOP-FITTING



CLOCKWISE FROM TOP: Sunglass
Hut Sydney; PMA showroom;
Powerhouse Museum gift shop.



Pixalux® light panels excel in a retail environment where they illuminate products evenly from above and below. The beauty of Pixalux® light panels is the endless range of configurations they enable for product display. In many applications the panels have replaced shelving by directly illuminating products from below, enabling a greater focus to be directed onto the product.

Key features:

- Evenly distributed surface light eliminates shadows
- Directly illuminates products
- Can be retrofit into existing fit-outs
- Long life LED's rated to 50,000 hrs
- Durable construction for daily use
- No UV or heat output ideal for sensitive products

APPLICATIONS JOINERY



CLOCKWISE FROM TOP RIGHT: PMA showroom; David Jones, Sydney; PMA showroom; Sunglass Hut, Sydney.

Thanks to an innovative structural design, Pixalux® light panels are transforming how integrated lighting is done. With a 16mm profile and strength that matches typical joinery materials, Pixalux® light panels integrate seamlessly into a wide range of joinery applications.

Key features:

- 16mm thickness matches common materials
- Strong like MDF and other joinery materials
- Range of mounting options
- Can be retrofit or built into new projects
- Modular design

APPLICATIONS DISPLAY



CLOCKWISE FROM TOP: National War Memorial, Canberra; PMA showroom; Sydney Jewish Museum.



With a large, evenly illuminated surface, Pixalux® light panels are ideal for display applications. Due to the innovative structural construction of the panels, graphics can be applied directly to the panel surface, and installed in a wide range of configurations without the need for unsightly frames and support structures. At only 16mm thick, Pixalux® light panels provide a frameless solution capable of the utmost discretion.

Key features:

- Evenly illuminated surface
- Single or double sided, independent illumination
- Inherent structural integrity
- Only 16mm thick
- Low power consumption
- No heat output

APPLICATIONS SIGNAGE



Clockwise from top left: 1-3, PMA showroom; National Maritime Museum, Sydney; Sunglass Hut, Sydney; Coles, Chadstone.

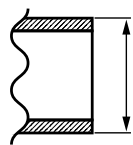
With a large, evenly illuminated surface, Pixalux® light panels are ideal for signage applications where backlit graphics are required. Permanent graphics can be applied directly to the panel surface or an existing mounting system can be used where interchangeable graphics are required. Panels can be easily integrated into many applications thanks to the thin profile.

Key features:

- Evenly illuminated surface
- No frames
- Single or double sided illumination
- Only 16mm thick
- Low power consumption

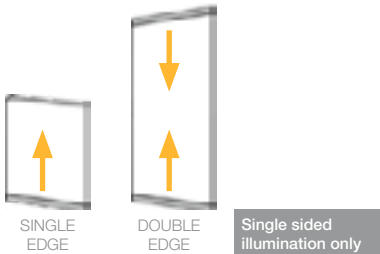
PRODUCT SPECIFICATION

Pixalux® light panels are available with a range of different finishes, mounting types, connectivity options, and accessories to ensure that they meet user requirements.



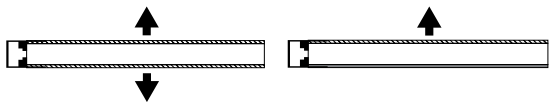
Size

Max Length	Depth (mm)				
	Single edge lit			Double edge lit	
	300	400	450	600	800
1200 mm	Yes	Yes	Yes	Yes	Yes
1500 mm	Yes	Yes			
1800 mm	Yes				



Illumination

Illuminated sides	
Double sided	Single sided



Panels can illuminate one or both faces. Single sided panels use an opaque sheet of white acrylic as the reflector panel.



Edge finish

Edge material
White (opaque)
Black (opaque)
Brushed Aluminium (opaque)
Opal (translucent)

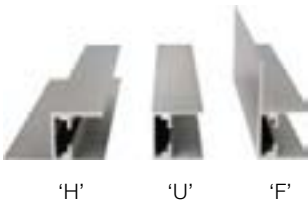
A large range of different edge finishes are available as a special order.



Mounting

Extrusion type
'U' profile
'H' profile
'F' profile

Extrusion finish
Natural anodised
White powder coat



Pixalux® light panels can be fitted with different types of aluminium extrusions. The extrusions are used for mounting the panel and housing the LED strip.

PRODUCT SPECIFICATION

LED



Colour	Power (<450mm)	Power (>450mm)
Pixalux® white	14.0 W/m	28.0 W/m
CW / WW*	19.2 W/m	38.4 W/m
RGB**	14.4 W/m	28.8 W/m

Pixalux® light panels can be illuminated with a range of LEDs to suit user needs.

*CW/WW = Cool White / Warm White

**RGB = Red/Blue/Green infinitely adjustable colour range

Connectivity



Power supply	Wire termination
12 W	Tinned ends
25 W	Crimped ends
60 W	DC jack 2.1mm

We supply a range of different connectivity options to suit your needs. All power supplies used are 12V Meanwell constant voltage power supplies that adhere to Australian Standards.



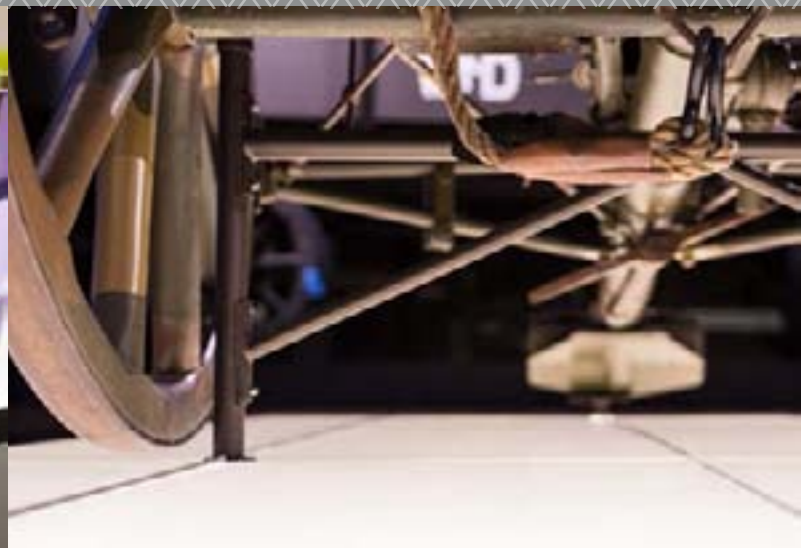
ABOVE: Pixalux® panels illuminate sunglasses at Sunglass Hut Sydney

PRODUCT COMPARISON

As a new, innovative product, there are no direct competitor products to Pixalux® light panels. In the table below, a Pixalux® light panel is compared to products that have similar applications.



	Pixalux® light panel	Light box	Laminated wall shelf
Panel thickness	16 mm	50 - 200 mm	16 - 32 mm
Frame	No	Yes	N/a
Illuminated	Yes	Yes	No
Double sided illumination	Yes	Yes	No
Modulus of elasticity	3.2 GPa	N/a	2.5 GPa (for MDF)
Power consumption	14 W/m (single edge lit only)	40 W/m (generic competitor product)	None
Can have graphics applied	Yes	Yes	N/a



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