



# Lustrolite 100<sup>®</sup>

Suitable for use in Class A Fire Rated Applications



## High Performance Polymer Wall Panels

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Possessing all the amazing features of Lustrolite 100, we take it further with additional fire and impact resistant class polymers with state of the art



Retail and Hospitality Wall Panels

Ideal for a range of non-structural, fire rated wall panel applications in a plethora of construction settings, Lustrolite 100® is fast becoming the choice of designers, architects and engineers.



Elevator Wall Panels



Bathroom and Shower Wall Panels

of Lustrolite®, Lustrolite 100® goes a step  
further to provide impact resistance created by combining first  
class manufacturing techniques.



Commercial Wall Panels and Partitions



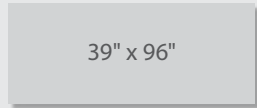
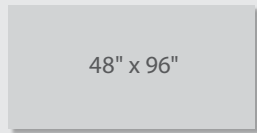
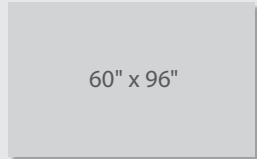
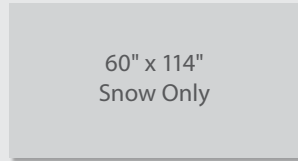
Restroom Door and Partition Panels



Decorative Wall Panels

## Stocked Panel Sizes

Lustrolite 100® is 5/32" (4mm) thick, and is available in a range of panel sizes.



Additional sizes and colors may be available subject to MOQ and other conditions.

## Durability

Lustrolite 100® offers exceptional impact resistance and is extremely resilient against scratching, chipping, cracking, warping, staining, peeling and flaking.

## Workability and Installation

Lustrolite 100® can easily be worked in the shop or on site due to its lightweight and as it can be cut, sawn, drilled and finished using standard woodworking tools.

Compared to tiles and glass, installation is a breeze requiring only double sided tape and neutral cure silicone.

## Opacity and Lighting

Lustrolite 100® is opaque, however it can be effectively side and top lit.

Special lighting accents can also be easily created by routing the color layer and back lighting the panel.

## Scratch and Chemical Resistance

A high performance hard coat on the panel's face side provides exceptional scratch and chemical resistance whilst promoting effortless cleaning.

Lustrolite 100® is compatible with a range of chemicals and cleaners including acetic acid, mineral spirits, kerosene, ammonia based cleaners, citrus cleaners, bleach, alcohol and TSP.

## Environment Friendly

All color pigments used in the manufacture of Lustrolite 100® do not contain heavy metals such as lead.

No Volatile Organic Compounds (VOCs) are produced or released in manufacture or use.

## Color Robustness

The permanently color fused layer on the reverse side of Lustrolite 100® is guaranteed not to delaminate or peel and is vastly more resilient to scratching compared to back painted glass.

## Hygiene

Panel surfaces do not promote or harbor mold or bacteria growth or transmission.

## Cleaning and Maintenance

Panel surfaces can easily be kept clean using warm soapy water and a dampened chamois or microfiber cloth. Harsh and volatile chemicals and cleaners are not required.

## Lustrolite 100® Color Range

Due to the nature of the printing process, the colors and images depicted throughout this brochure may vary compared to the actual finished products' colors. Images and colors are to be used as a guide only.

Lucent

Snow

Ice

Dune

Iron

Coal



# EGR Polymer Panel Technical Data Sheet - Lustrolite 100®

## General Properties

| Properties                         | Test Method               | Lustrolite 100                           |
|------------------------------------|---------------------------|--|
| Thickness                          |                           | 5/32" (4mm)                              |
| Specific gravity                   | ASTM D-792                | 1.2                                      |
| Water absorption                   | ASTM D-570                | 0.15%                                    |
| Gloss*                             | AS/NZS 1580.602           | > 90%                                    |
| Tensile strength                   | ASTM D-638                | 60MPa                                    |
| Elongation at Yield                | ASTM D-638                | 6%                                       |
| Tensile modulus                    | ASTM D-638                | 2410MPa                                  |
| Flexural strength                  | ASTM D-790                | 96 MPa                                   |
| Flexural modulus                   | ASTM D-790                | 2410MPa                                  |
| Izod impact strength, Milled Notch | ASTM D-256                | 950J/m                                   |
| Pencil Hardness*                   | ASTM D-3363               | > 6H                                     |
| Erichsen Hardness*                 | ISO 4586-2 (DIN EN 438-2) | ≥ 0.5N                                   |
| Abrasion                           | ASTM D-1044               | < 10 % Gloss                             |
| HDT 264 Psi, 1.82MPa               | ASTM D-648                | 269.6°F (132°C)                          |
| CTE, -22°F to 86°F (-30°C to 30°C) | ASTM D-696                | 0.65mm/36"/18 °F<br>(0.7mm/1,000mm/10°C) |
| Vicat softening point              |                           | 304°F (151°C)                            |
| Continuous service temperature     |                           | 212°F (100°C)                            |
| Max temperature, short term        |                           | 302°F (150°C)                            |

\* Internally tested by EGR

## Chemical Resistance

Lustrolite 100 is chemically resistant to the following substances:

- Kerosene
- Bleach
- Mineral Spirits
- 10% Citric Acid
- Lemon Juice
- Vinegar
- Coffee
- Liquid Soap
- Glass Cleaner

Lustrolite 100 should not be exposed the following substances:

- Acetone
- Methylated Spirits
- Abrasive Cleaners
- Aggressive Solvents such as Toluene.

## Fire Properties & Use in Class A FR Situations

The major building codes in the USA recommend NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, for testing thermoplastics to be used as interior finishes. This full-scale test is considered more appropriate for determining the hazard of an interior finish (compared to ASTM E84 test methods), especially for certain plastics that can drip or melt and fall to the floor.

Lustrolite 100 complies with NFPA 286 requirements for interior finishes. Because Lustrolite 100 meets NFPA 286 criteria, it is permitted for use anywhere that a Class A material (in accordance with ASTM E84) is required. However, as Lustrolite 100 is a combustible thermoplastic, appropriate fire precautions should always be observed.

| Properties                     | Test Method (DOT)              | Requirement   | Result              |
|--------------------------------|--------------------------------|---|---------------------|
| Flame spread                   | NFPA 286 – 2015 edition (2016) | Must not spread to the ceiling or the outer extremities | Meets criteria      |
| Flashover                      | NFPA 286 – 2015 edition (2016) | Must not occur  | Meets criteria      |
| Peak Heat release              | NFPA 286 – 2015 edition (2016) | Must be < 800kW   | Meets criteria      |
| Smoke released                 | NFPA 286 – 2015 edition (2016) | Must be below 10,764 sf (1000sqm)                       | Meets criteria      |
| Flame spread rating            | CAN/UL S102.2-10 (2018)        | Class A = 0-25, Class B = 26-75<br>Class C = 76-200     | 25 (meets class A)  |
| Smoke developed classification | CAN/UL S102.2-10 (2018)        | Class A, B and C = < 450                                | 370 (meets class A) |
| Burning behavior               | UL94 (2008)                    |   | V-0**               |

References to the product's performance under the testing standards above are informational only. Please consult qualified building professionals to ensure that Lustrolite 100 is suitable and compliant for the chosen application as per local building code requirements.

\*\* Refer to manufacturer data. Property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

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EGR Lustrolite 100 panels are designed and manufactured as a decorative finish for indoor use only. Lustrolite 100 is designed to be attached on to a solid wall or structure in accordance with local building regulations and the Lustrolite 100 Installation & Specifications Guide. Lustrolite 100 is for decorative purposes only and cannot be used as structural building elements. Images and colors should be used as a guide only. © 2018 / Patent Pending. Oakmoore Pty. Ltd. Trading as EGR. ABN: 13 056 159 570 \*10 Year Limited Warranty. The Lustrolite 100 Warranty covers faulty materials for a period of 10 years from the date of sale by EGR subject to the terms, conditions and exclusions contained within the entire warranty document. 172-201017 V19 280618