

Polymer Panel Technical Data

Stylelite – High Gloss

Product Description

Stylelite High Gloss acrylic sheet and laminated panels are a vivid high gloss solution for premium furniture and joinery applications. Stylelite is available in a range of coextruded solid colours and is offered as sheet for lamination or as a complete laminated panel.

General Properties

Sheet Specification

| Properties | Specifications | Test Method |
|------------------------------------|---|---------------------------|
| Sheet Thickness | 1.0mm ± 0.1mm | |
| Colour** | dE < 1.0 for Solid Colours dE < 1.5 for Metallic Colours | AS/NZS 1580.600 |
| Gloss** | >85% for Gloss Colours | AS/NZS 1580.602 |
| Specific gravity | 1.09 | ASTM D-792 |
| Water absorption | <0.5% | ASTM D-570 |
| Tensile strength | 70 MPa | ASTM D-638 |
| Elongation at Yield | 4% | ASTM D-638 |
| Tensile modulus | 3,000 MPa | ASTM D-638 |
| Flexural strength | 100 MPa | ASTM D-790 |
| Flexural modulus | 3,000 MPa | ASTM D-790 |
| Izod impact strength, Milled Notch | 15J/m | ASTM D-256 |
| Pencil Hardness** | 4H | ASTM D-3363 |
| Erichsen Hardness** | 0.5N | ISO 4586-2 (DIN EN 438-2) |
| HDT 264 PSI, 1.82MPa | 89°C (192°F) | ASTM D-648 |
| CTE, -30°C to 30°C | 0.7mm/1000mm/10 °C | ASTM D-696 |
| Vicat softening point | 104°C (219°F) | |
| Continuous service temperature | 77°C (170°F) | |
| Degradation temperature | > 275°C (>530°F) | |

Board Specification

| | |
|-----------------|--------------------------------|
| Board Thickness | 18mm nominal |
| Board Weight | 13.5 kg/m ² Typical |
| Environmental | E0 MR or TITLE VI |

** Internally tested by EGR

Applications

Stylelite sheet and panel have many applications such as cabinet faces, store fixtures, feature panels and furniture surfaces. The panels are designed for any interior vertical surface and the panels can be edge finished in a variety of ways to suit the needs of the end application. Stylelite sheet can be laminated to many different wood substrates using a variety of bonding methods. The laminated panels are bonded with high performance PUR adhesive and can be supplied double sided or with a textured ABS balancing layer.

Stylelite – High Gloss

Chemical Resistance

Stylelite is an inert and very stable polymer and is resistant to the following substances: Kerosene, Mineral Turpentine, lemon juice, Vinegar, Coffee, Soaps and most mild household cleaners. Stylelite should not be exposed to the following substances: Acetone, Methylated Spirits, Glass Cleaners, Abrasive Cleaners, and aggressive solvents such as MEK or Toluene.

Edge Finishing

A near seamless appearance can be achieved using edge bands applied with a thin layer of transparent EVA or PUR adhesive. Edge bands options include 1.0 mm matching solid colours and patterns.

Lamination

Stylelite sheet can be laminated to a variety of substrates. Best results will be achieved using PUR adhesive applied through an automated lamination process. Other adhesives such as liquid PUR cross linked EVA or water based contact adhesives can also be used for less technical applications. Typical substrates for laminated panels include MDF, HDF and Plywood.

Care and Maintenance

For general cleaning use warm soapy water and a clean microfiber cloth. Liquid dishwashing detergent is an ideal cleaner. For scratches and scuffs the face of the gloss panels can be refinished using liquid polishes suitable for acrylic and a clean microfiber cloth. Manual or machine buffing are both effective. Care must be taken with machine buffing to not overheat the material so a slow buffing speed is desirable.

Fabrication

Laminated panels can be cut, drilled and shaped using normal woodworking tools and machinery. Best results will be achieved using sharp carbide tipped tools that are designed to remove swarf quickly. Panels should always be clamped or secured firmly during fabrication to avoid vibration and potential for chipping. The face protective film should be left in place throughout the fabrication and installation process. Panels should be fixed at a maximum of 300 mm (12") centers for all drawer fronts end panels and other cladding. Cabinet Doors should have hinges placed at no greater than 400 mm (16") centers.

Warranty

Stylelite sheet and panels are covered by a 10 year indoor warranty for use in vertical applications only.

Fire Properties

Joinery, fittings and furniture are generally exempt from fire performance criteria with most international building standards. Material has been tested under and passed following fire standards: using EO MR MDF substrate.

For Australia, AS/NZS 1530.3 and AS 3837 and achieving a group 4.

For USA, ASTM E84, Flame spread 155 and smoke developed 400.

Building specifiers should always consult with qualified building professionals to ensure that the material is suitable and compliant for the chosen application as per local building code requirements.

Differences in thickness, substrate, colour form, fixings or adhesive may affect the rating.