

SAR - Super Abrasion Resistant Acrylic Sheet

SAR super abrasion-resistant acrylic sheet is produced by applying a very hard, highly cross-linked polysilicate (a silicon polymer or polysiloxane) coating to an acrylic substrate. This coating provides SAR sheet with a surface that has 45 times the abrasion resistance of uncoated acrylic, making it an attractive material for applications requiring the safety, optical and aesthetic qualities of acrylic along with a highly abrasion-resistant surface.

LIGHT WEIGHT AND FABRICATION FLEXIBILITY CUT INSTALLATION COSTS

At half the weight of glass, SAR makes handling easier and safer, and installation less costly and time consuming. It can be cut and fabricated at the installation site using power tools. In fact, SAR is ideal for replacement installations; because it is readily fitted into existing frames.

STANDARD SIZES & THICKNESS

Standard Sheet Size: 3.050m x 2.030m

Thickness: 3,6,8,10mm

Grades: - Single Sided Exterior

- Double Sided Exterior

Special thickness & sizes on request, including cut-to-size parts.

COLOURS, FORMULATIONS & FINISHES

SAR is available in Australia in Clear 3mm, 6mm, 8mm & 10mm. Translucent, Tints and Solid colours can be coated with SAR upon request. Please allow 6-8 weeks for delivery. There might be minimum order quantities applicable for custom orders.

OPTICAL CLARITY OUTSHINES OTHER MATERIALS

SAR in 30mm thickness transmits 93% white light, compared to 66% for an all polycarbonate sheet and 55% for bullet-resistant glass. Also, its edges are clear, avoiding the massive appearance of thick glass with its greenish tinted edge. That adds up to the sparkling clear, open look that is more appealing to customers.

CHEMICAL RESISTANCE

SAR surface coating is resistant to many chemicals, for more information please contact Allplastics. It is important to remember that the edges of SAR are not coated. When using SAR for an application that will expose it to chemicals, be sure to seal the uncoated edges to prevent contact with the chemicals.

WEATHERABILITY

SAR acrylic sheet is outstanding in its ability to withstand continuous exposure to sun and ultraviolet radiation. No other type of plastic sheet offers such outstanding clarity, strength, and light transmittance in combination with long term outdoor performance.

THERMAL PROPERTIES

SAR acrylic sheet is a much better thermal insulator than glass. The rate of heat transfer through glass is four times greater than that through acrylic sheet.

THERMOFORMABILITY

SAR has limited formability. Design parameters are available from Allplastics. Moderate contours are often desirable and can be easily obtained without heating SAR sheet. Sheets can be snapped into curved channel supports, provided the radius of curvature is in excess of 180 times the thickness of the sheet. Do not attempt to cold form SAR on sheets smaller than 600mm x 400mm because localized curvature to a radius <180 times would craze the coating. Either handling or thermal change of larger sheets may result in localised excessive curvature and coating failure.

SAR™ AGENCY AND CODE APPROVALS

For a complete list of approved standards please contact Allplastics.

APPLICATIONS

SAFETY GLAZING

- Schools, Hospitals, Libraries
- Service
- Doors
- Press Box Glazing
- Skylights (flat)
- Sound Barriers
- Hockey Spectator Guards
- Zoo enclosures

TRANSPORTATION

- Transit Bus Windows
- Automotive Sun Roofs
- School, Limousine & Aircraft Windows
- Marine Portholes, Windshields

EQUIPMENT FACES AND COVERS FOR BUSINESS EQUIPMENT

- Computer Panels
- Tape Drive Windows
- Disc Drive & Printer Covers
- Terminal Screen Faces
- Jig for Printed Circuit
- Laser Scanners

APPLIANCE WINDOWS & PANELS, TIMER FACES AND COVERS

- Gas Pump Glazing
- Electronic Game Faces
- Baby Incubators
- Vending Machine Glazing
- Blood Analyzer Panels
- Dashboard Panels & Solar Cell Covers
- Food Sneeze Guards
- TV Face Screens
- Menu Boards

DISPLAY STORE FIXTURES

- Merchandise Covers & Cases
- Directory & Scanner Panels
- Memo Boards & Picture Framing
- Museum Cases & Exhibits
- Solarium & Security Glazing

MAINTENANCE (OHAS)

- Guides
- Forklifts & Conveyor Shields
- Viewing Ports
- Machine Guards
- Equipment Enclosures

