

ALTUGLAS® ELIT

(Edge Lit Technology)



SPECIAL ACRYLIC SHEET
FOR ILLUMINATED SIGN & P.O.S

INTRODUCTION

ALTUGLAS REGISTERED TRADEMARK

Altuglas® is the Atoglas registered trademark for polymethylmethacrylate cast and extruded sheets.

APPLICATION

Altuglas Elit has been designed especially for the manufacture of point of sale advertising displays, illuminated signs, and poster boxes.

Altuglas Elit is however, a new material which can be used by designers in many new and original applications such as illuminated balcony guards for shopping centers, or illuminated pieces of furniture.

ALTUGLAS ELIT

Altuglas Elit (Edge Lit Technology) is a patented acrylic sheet with the ability to transmit and diffuse the light coming through its edges. The light then comes out through the sheet face creating bright and evenly illuminated display panels.

This new technology allows designers and signmakers to dispose of traditional bulky display boxes used for illuminated signs and replace them with slim line designs. The fluorescent tubes are no longer placed behind the sheet, but are concealed in the side profiles.

Altuglas Elit sheets can be curved to create complex and original shapes.

AVAILABLE SIZES

Altuglas Elit standard size is 3050 x 2030 mm. Cut to size sheets are also widely available through our distributors.

Two thicknesses - 8 mm and 10 mm - have been selected to provide the optimum performance efficiency for the light to enter the edge.

TECHNICAL RECOMMENDATIONS

ALTUGLAS ELIT GENERAL PROPERTIES

Altuglas Elit benefits from all the mechanical, thermal and weathering properties of Altuglas sheet.

Physical properties:

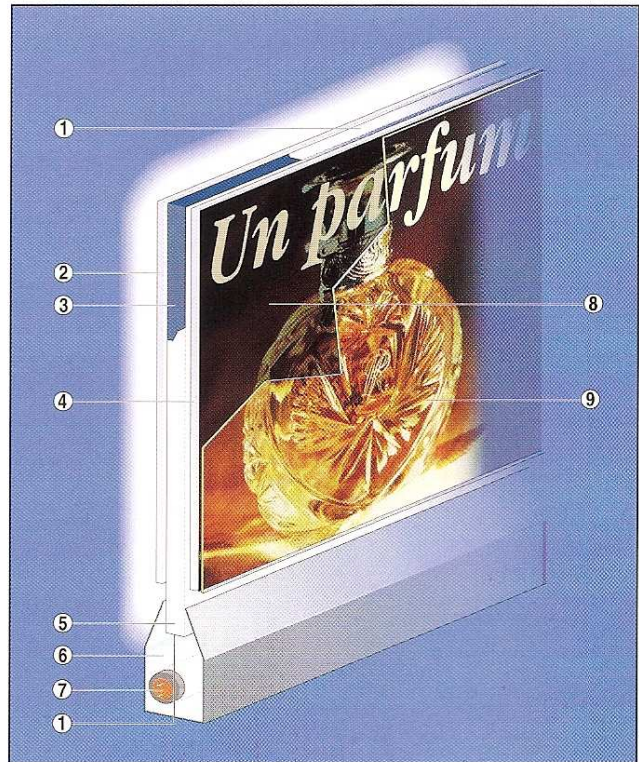
- Density	(ISO 1183)	1.19
- Tensile modulus	(ISO 527)	3 300 MPa
- Charpy impact strength	(ISO 179/1 D)	12 KJ/m ²
- Linear expansion coefficient	(EN 2155)	0.065 mm/m/°C
- Forming temperature		160 to 180 °C

MANUFACTURING RECOMMENDATIONS FOR SIGNS AND POSTER BOXES

Figure 1 shows the way sign and display boxes can be manufactured with Altuglas Elit. The fluorescent tubes⁽⁷⁾ are set along the edges of the Altuglas Elit sheet and concealed in profiles whose thickness depends on the diameter of tubes used.

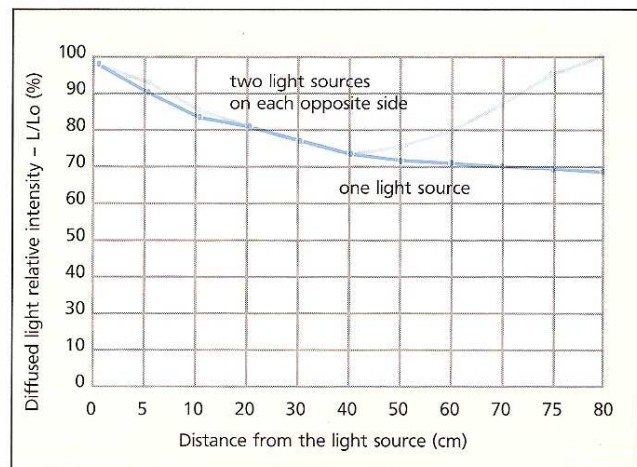
Altuglas Elit efficiency can be optimised when the following points are observed:

- ▲ Edges where the light enters need to be diamond polished to maximise the amount of light entering the sheet. It is most important that the polished edges remain perfectly flat, as a rounded edge will affect the amount of light the panel will receive.
- ▲ Use mirror reflective tapes on non source edges or in the frames to reflect the beam lights coming out from the sheet.
- ▲ Depending on the graphic substrate used, a diffusing opal Altuglas sheet⁽⁴⁾ is recommended to be inserted between the graphic medium⁽⁸⁾ and the face of Altuglas Elit.
- ▲ Each lamp used along one edge of an Altuglas Elit sheet can illuminate it up to a distance of 600 mm from the light source. Two opposite sources will evenly illuminate large Altuglas Elit panels up to 1200 mm.



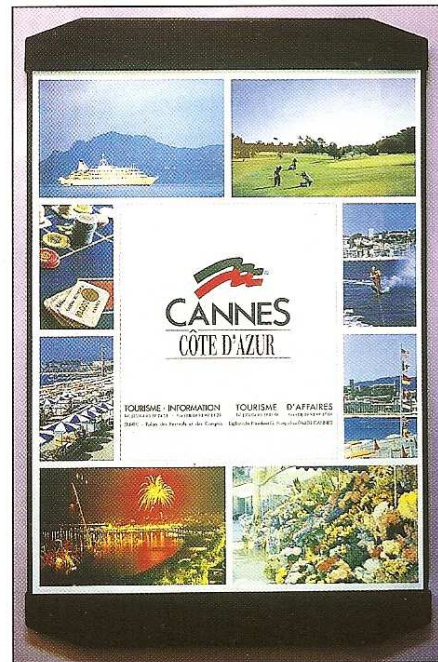
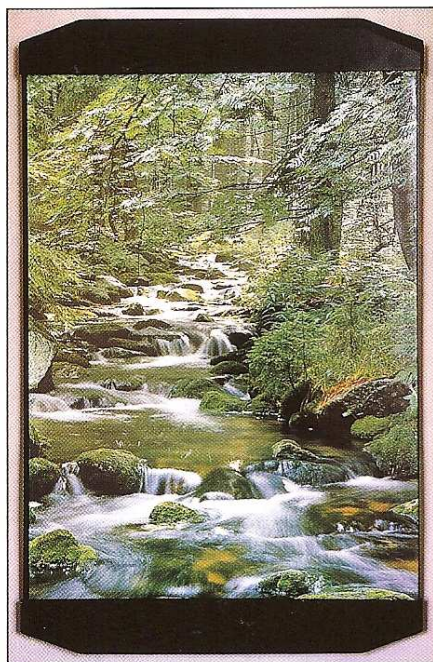
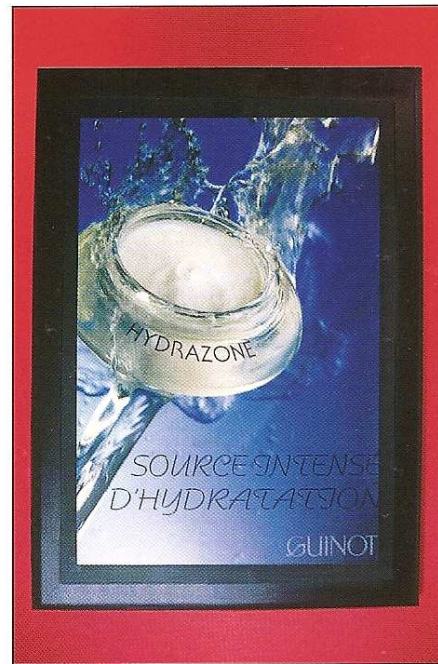
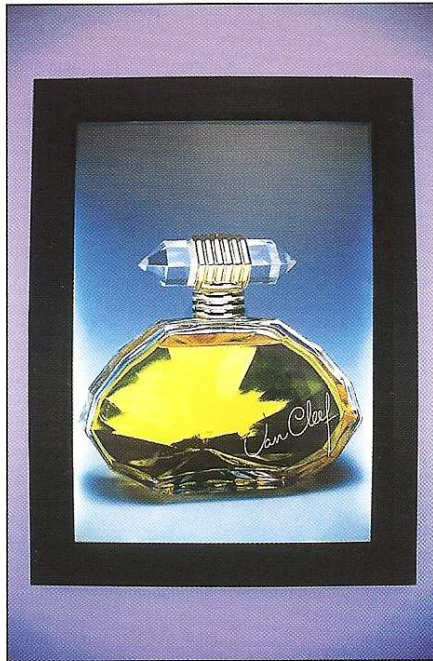
- | | |
|---|--------------------------------|
| ① Polished edge | ⑥ Reflective frame |
| ② Altuglas white acrylic sheet ref. 101 47005 | ⑦ Fluorescent tube |
| ③ Reflective adhesive tape | ⑧ Advertising poster |
| ④ Altuglas white diffusing acrylic sheet (optional) | ⑨ Clear Altuglas acrylic sheet |
| ⑤ Altuglas Elit | |

Altuglas Elit: Diffused light v/s distance from the light source (Panel total width: 80 cm)



EXAMPLES OF SIGNS

ALTUGLAS ELIT



MAINTENANCE

Cleaning of Altuglas Elit must be carried out very carefully as any scratch on the sheet will be illuminated once the panel lit.
Daily maintenance: clean with a solution of water and mild household detergent.

Deep cleaning: use Altuglas Polish.

Polishing: use Altuglas Polish.

Drying: without rubbing, dry with a moist chamois leather.

Do not clean, using abrasive powder product or solvents (e.g. trichlorethylene).