

## INSTRUCTIONS ON HOW TO GLUE & BOND PERSPEX

All grades of PERSPEX can be bonded using acrylic cements. A range of TENSOL cements and EVO-PLAS adhesives is produced and supplied by [www.theplasticshop.co.uk](http://www.theplasticshop.co.uk)

The correct selection of adhesive is vital in order to produce bonds with good strength, durability and optical clarity.

### LAMINATION/FACE TO FACE BONDING

Two sheets of PERSPEX may be laminated together using the solvent-free clear adhesive TENSOL 70 from the EVO-PLAS range. TENSOL 70, applied with the appropriate EVO-PLAS application kit, will produce a bond which is durable in external applications, has excellent optical clarity and good mechanical strength. For laminating PERSPEX to polycarbonate (eg CARBONEX), or for encapsulating items between the sheets, EVO-PLAS TU 1908, a clear, flexible polyurethane adhesive is suggested.

### EDGE BONDING

Solvent welding is the quickest and easiest way of forming edge bonds. The best results can be easily and safely achieved when ETRU-FIX/TENSOL 12 are applied achieved using the appropriate EVO-PLAS application kit. Features of this system - which is intended for **indoor** applications - include good resistance to stress crazing, even on line-bent sections, and high clarity, bubble-free bonds. Filled systems such as TENSOL 12 offer slightly better gap filling properties.

For external applications, a highly durable adhesive such as TENSOL 70 is required.

When cementing PERSPEX XT items, great care must be taken when using TENSOL 12 or TENSOL 70, in order to avoid stress crazing. This is most critical on line bent joints, where either ETRU-FIX or EVO-PLAS TU 1908 may be more appropriate.

### **BONDING TO OTHER SUBSTRATES** (metal, wood, Glass etc)

The easiest way to bond PERSPEX to other substrates is by using a cyanocrylate adhesive. EVO-PLAS TC 731, with its low bloom and special adhesion promoter system is suggested. As well as being useful for bonding small areas of PERSPEX to PERSPEX, this system is also suitable for attaching fittings to PERSPEX.

Where there are high mechanical strength requirements, then a toughened acrylic adhesive, such as EVO-PLAS TA 431, is to be preferred.

### **SEALING**

Joints in PERSPEX and a variety of other materials can be effectively sealed with a suitable, acrylic compatible silicone sealant. In order to avoid stress-crazing, the sealant needs to be neutral cure. A low modulus type, such as EVO-PLAS Low Modulus Silicone Sealant will best accommodate any movement in/between the components.

The EVO-PLAS range of adhesives, Cleaning solvents, MIRROR ADHESIVE and ANTI-STATIC CLEANER is available from most PERSPEX stockists and distributors. Alternatively please contact Bostik Findley directly (on +44 1785 272 727) - see Appendix for full address.

Before cementing, the user should study the safety Data Sheets and ensure that the adhesive is suitable for the intended application.

### **PRINTING, PAINTING AND SURFACE DECORATION**

PERSPEX can be readily screen printed, painted or hot-foil stamped. Paints and screen inks formulated for use on acrylic sheet must be used and it is strongly recommended that the sheet surfaces are washed before decorating to obtain maximum service life outdoors. Screen inks are available for thermoforming and it is important to ensure that any screen inks or paints applied to PERSPEX have adequate UV stability. For further details of the surface decoration of PERSPEX, please see **PXTD 261, PERSPEX for Corporate Imaging.**