



+44 (0) 20 8665 0558

@ [info@chelsea-fusion.com](mailto:info@chelsea-fusion.com)

 [www.chelsea-fusion.com](http://www.chelsea-fusion.com)

PRODUCT MANUAL



## SCREEN PRINTED GLASS

Screen printing involves the printing of coloured frits/enamels or metallic oxides onto the glass using a silk screen stencil. Once these have been applied, they are fired and fused to the glass surface during the toughening/tempering process.

Screen printing offers designers, architects and specifiers a wealth of creative possibilities when designing for internal or external decorative architectural glass, ranging from single commissioned pieces to complete glass façades.

The printing of any pattern or graphic for either a single panel or volume production run can be easily achieved with access to an unlimited palette of vibrant transparent, translucent or opaque colours. These can be printed singularly or overlaid. Due to the nature of the manufacturing process, the frits/enamels are very hardwearing and UV resistant.

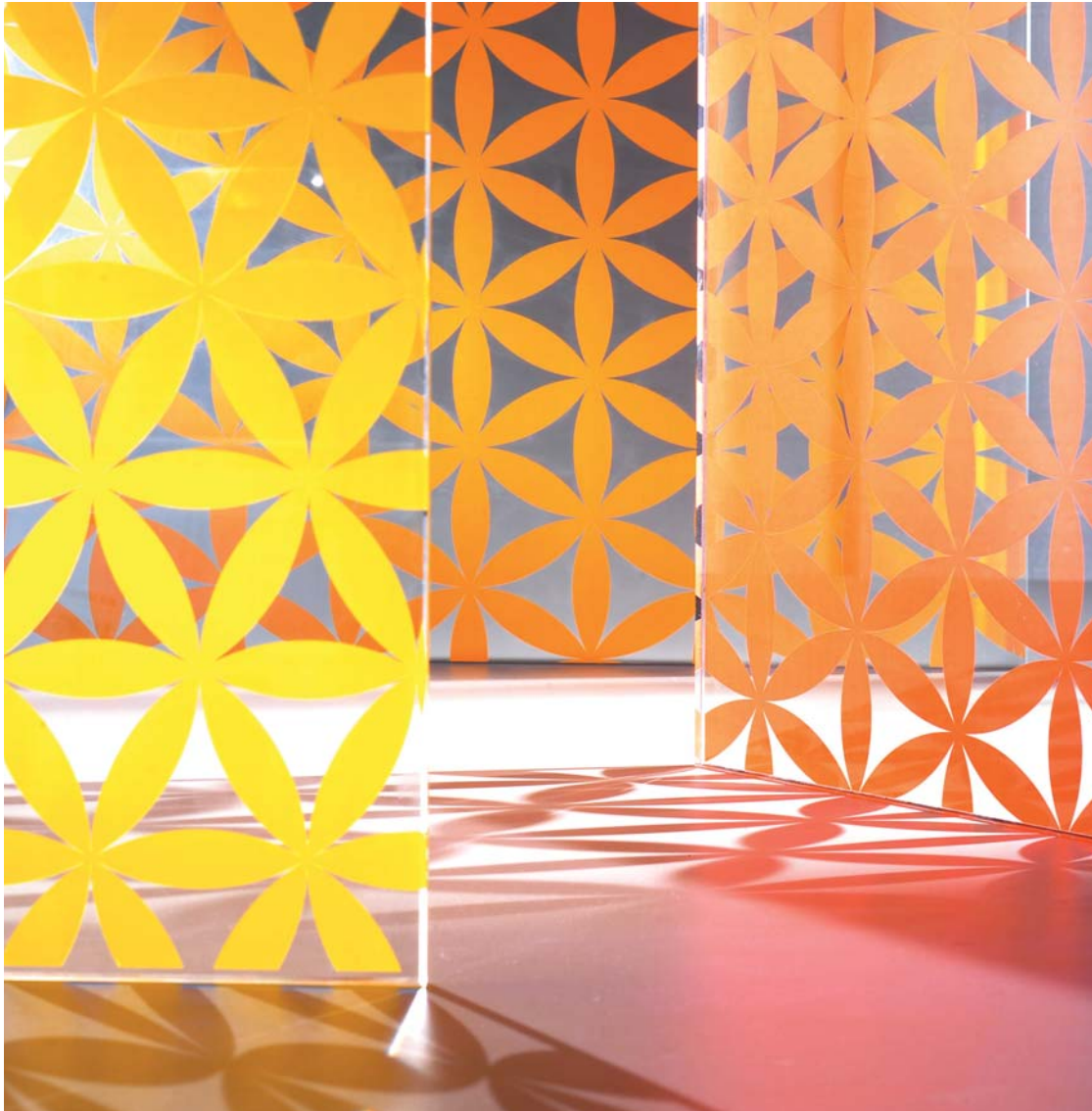
A wide range of surface finishes including sandblasting, etching, applied transparent and opaque colours and mirroring can also be applied to further enhance this process.

The process allows for high volume and repeat production of any design or graphic and is a low-cost alternative to other decorative glass finishes.

### Artwork

Vector graphics are the most suitable type of artwork for sandblasting such as AI and EPS file formats. Before submitting artwork to us, please ensure all text is converted to vector outlines and that any compound paths or clipping masks have been applied and expanded where necessary. For more information on vector graphics please contact our Sales Team.





**SPECIFICATION:** Toughened (tempered) glass, laminated to BS EN 12600, BS 6206 Class A or required national safety standard.

**MAX. PANEL SIZE:** 1500mm x 3600mm

**THICKNESS:** 6mm, 8mm, 10mm, 12mm, 15mm, 19mm, 25mm  
Additional thicknesses on request.

**GLASS TYPE:** Low Iron (crystal clear) - as standard  
Float Glass (slight green tint)  
Body Tinted (transparent coloured)  
Mirror Backed

**EDGE FINISHES:** Polished all round (PAR)  
Arrised (AAR)  
Ground (GAR)

**SURFACE FINISHES:** Sandblast or acid etch to front face of glass.

**APPLIED:** Opaque colours, transparent colours or mirror finish can be applied to the rear of the glass.

**OPTIONS:** Shaped, drill holes, notched, waterjet cut.

**TOLERANCES:** 2mm +/- (glass size)

## APPLICATIONS

Screens

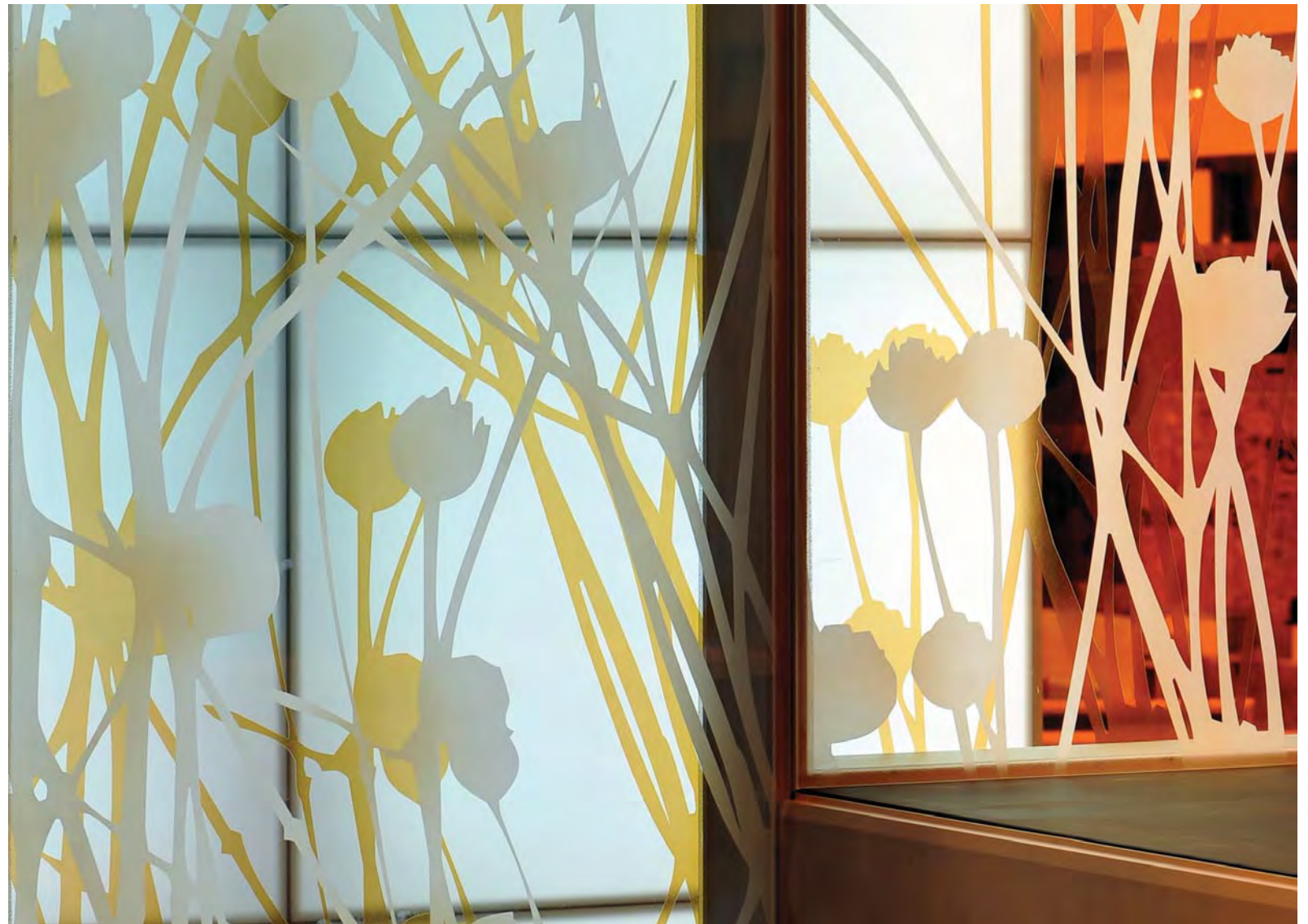
Signage

Flooring

Counters

Lighting

Furniture







## INTRODUCTION

For over 40 years, Chelsea Artisans & Fusion Glass Designs have developed a creative and commercial approach to the design, manufacture, supply project management and installation of architectural decorative glass.

Many years of experience, extensive technical knowledge and our ability to overcome technical and creative challenges has enabled us to be commissioned on a wide range of major projects in the UK and internationally. The work we have produced is widely admired for both its quality and originality.

## PROCESSING

Chelsea Artisans & Fusion Glass Designs provide a full in-house glass processing service including the processing of float, low iron, mirrored and back-painted glass in 4mm-25mm thicknesses.

## DESIGN

If the standard range of products does not fulfil a project's requirements, our in-house Design Service is available to provide bespoke solutions:

- Colour matching to RAL, Pantone or Dulux Trade references
- Patterns
- Textures
- Full artwork to client's brief.

## SAFETY & STANDARDS

All glass produced by Chelsea Artisans & Fusion Glass Designs:

- Conforms to BS 6206, BSEN 12600 and required international safety glass standards
- Can be combined with fire rated glass to specification
- Can be integrated into insulated/double glazed units.

## INSTALLATION

Chelsea Artisans & Fusion Glass Designs offer a project management and installation service throughout the UK.

## APPLICATIONS

These include but are not limited to the following:

- Cladding
- Partitions
- Screens
- Canopies
- Flooring
- Stair treads
- Balustrades
- Doors
- Signage
- Reception desks
- Furniture
- Features
- Commissions

## DIAMOND SYSTEM

The renowned and unique range of patented products that set the standard for impact resistance and safety using annealed glass. Tested to withstand the severest impact and also to resist explosive blast, Diamond System products also enhance the versatility of glass and provide designers and architects with greater scope to explore new applications.

**DIAMOND DÉCOR®:** Coloured or digitally printed panels.

**DIAMOND DÉCOR® SATINOVO:** Coloured panels with satin acid etched finish to front face.

**DIAMOND MIRROR®:** High quality clear silver or tinted mirror.

**DIAMOND MIRROR® SATINOVO:** High quality clear silver or tinted mirror with satin acid etched finish to front face.

These products can be tailored to clients' requirements:

- Range of surface finishes available
- Cut-outs, drill holes, countersunk holes
- Large panel sizes available
- Impact resistant to BS 6206 Class A and shatterproof
- Full range of polished/anodised/coloured edge trims available.

## FUSION GLASS : KILN FORMED

With an extensive kiln cast glass facility, we are able to provide a wide range of standard and bespoke kiln formed products.

**TEXTURED & PATTERNED:** Glass is heated to form over refractory moulds.

**fbloc®:** Monolithic fused glass block.

**rbloc®:** Fused recycled glass which gives it a rich, organic and crystalline structure.

These products can be tailored to a client's requirements:

- Curved to a radius
- Cut to complex shapes
- Toughened or laminated
- Range of applied surface finishes and colours available.

## FUSION GLASS : SURFACE DECORATION

Surface decoration involves more traditional forms of glass decorating methods. These can be applied to toughened, laminated, kiln formed and curved glass in various effects which can be layered and have colour or mirror applied.

**SANDBLAST:** Effects range from simple frosting and etching to more complex deep-carved 3-dimensional work.

**SCREEN PRINT:** Patterns or graphics printed onto glass in hard wearing UV-resistant frit enamel colours which fuse to the glass through the toughening/tempering process.

## FUSION GLASS : LAMINATE

An ideal product for use in structural, acoustic and decorative applications as the process allows for a wealth of possibilities. As well as the PVB (polyvinyl butyl) or EVA (ethylene-vinyl acetate) interlayer, other materials can be laminated between glass sheets. Our standard range of products include:

**COLOUR LAMINATE:** Opaque & transparent coloured interlayers.

**MESH LAMINATE:** Metal mesh in various colours and patterns.

**FABRIC LAMINATE:** Fabrics in various colours, textures and patterns.

**DIGITAL PRINT LAMINATE:** Digitally printed high-resolution image interlayer.

Processing options:

- Flat sheets
- Curved to a radius
- Annealed or toughened glass of any thickness can be used to create safety glass.

## DIMENSIONS

**DIAMOND DÉCOR® & DIAMOND MIRROR®**

Maximum panel size = 1150mm/1200mm x 3000mm

Thicknesses = 6mm, 8mm, 10mm, 12mm, 15mm, 18mm, 19mm, 25mm

**KILN FORMED SHEET**

Maximum panel size = 3100mm x 2100mm

Thicknesses = 6mm, 8mm, 10mm, 12mm, 15mm, 19mm, 25mm  
(also available as laminates)

**fbloc®**

Maximum panel size = Dependant on glass thickness

Thicknesses = 50mm - 130mm (130mm in fused cast blocks)

**rbloc®**

Maximum panel size = 1200mm x 2000mm

Thicknesses = 20mm, 25mm (additional thicknesses on request)

**SANDBLASTED GLASS**

Maximum panel size = 3210mm x 5500mm

**LAMINATED GLASS**

Maximum panel size = 2100mm x 4700mm

Thicknesses = 10mm, 14mm (additional thicknesses on request)

FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE  
OR CONTACT OUR SALES & TECHNICAL TEAM.