

Ceramic Frit

Product Description

Ceramic Frit is a pigmented glass enamel permanently fused to the glass surface, fired at temperatures in excess of 1200°F. This product is available in solid, metallic and translucent colors. Goldray Industries offers both traditional silkscreened ceramic frit and the patented DecoTherm Digital Ceramic Imaging Process (see *What is DecoTherm?* below). Both products are available in laminated or monolithic form.

What is DecoTherm?

The DecoTherm process is an innovative way to decorate glass using digital ceramic images. DecoTherm Digital Ceramic Frit Glass Decoration is a patented process for placing graphic designs permanently on the glass without the maintenance issues of sandblasting or the set up costs associated with screen printing.

Features and Benefits

- Cost effective
- Low maintenance
- Highly durable
- Abrasion resistant
- Long lifetime
- Available in myriad colors and patterns
- Can be recycled
- Available in laminated or monolithic form

Applications

- Balustrades
- Bus shelters
- Canopies
- Ceiling tiles
- Elevator interiors
- Interior glazing
- Public art
- Signage
- Spandrel
- Store fronts
- Sunshades
- Vanity tops
- Wind walls

Applicable Industry Standards

- ASTM C1036 - Standard Specification for Flat Glass
- ASTM C1048 - Standard Specification for Heat-Treated Flat Glass--Kind HS, Kind FT Coated and Uncoated Glass
- ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass

Ceramic Frit

Capabilities

Glass Thicknesses

- 3mm (1/8") to 19mm (3/4")

Patterns

- Large selection of in-house patterns and comprehensive graphics lab for creating custom patterns

Colors

- Virtually limitless color palette
- Most orders accompanied by a color chip can be matched to one delta E

Edgework

- Standard edge for screen printed glass is a seamed edge
- Polishing and grinding available

Fabrication

- Available on this product (See *Edgework and Fabrication* section in this binder.)

Surface

- Exterior applications must be on an interior surface and not exposed to the elements

Heat Treating

- This product is available on either fully tempered or heat strengthened glass

Technical Data

Film Thickness

- ~15 microns

Acid resistance

- 15 min. 10% Citric Acid produces slight iridescence

Alkali Resistance

- < 0.10 weight loss

Heavy Metal Release

- N/A

Average Opacity

- Varies upon pattern and application

Color Tolerance

- 1 delta E (CIE LAB) (ASTM D 2244)

Maintenance

Follow Goldray's standard *Glass Cleaning* instructions found in this binder.

Warranty

A typical 5 year limited warranty is available for Goldray glass coated with Ceramic Frit. Contact the Goldray sales office for specific terms and conditions.