Section 08 80 00 - Glazing

This specification guide has been prepared by Skyline to help design professionals create a specification section for architectural glass products, with a focus on Digitally Printed Glass.

Common applications for these types of architectural glass include wall cladding, feature walls, railings, exterior glass, headwalls, partitions, doors, and demountable walls. For assistance with specific product applications, please contact Skyline directly.

Skyline reserves the right to modify these specifications at any time; see our website for updates. Skyline makes no express or implied warranties regarding the content, errors, or omissions in the information provided.

Part 1 – General

1.1 Summary

1.1.1   This section specifies the glazing materials for both interior and exterior applications, with a focus on Digitally Printed Glass.

1.1.2   The products are manufactured by Skyline, providing a range of environmentally conscious and aesthetically innovative solutions suitable for dry and wet interior applications and, in some cases, exterior installations.

1.2 Submittals

1.2.1   Submit product data sheets, samples (4x4, 4x8, or 8x8 inches), and warranty information for each glazing material as specified in this section.

1.2.2   Samples of the specified glazing material and finish must be provided for approval before fabrication.

1.2.3   Submit installation instructions for all products.

1.3 Quality Assurance

1.3.1   Manufacturer's certifications confirm that all products comply with the safety and performance standards, including ASTM, ANSI, and CPSC.

1.3.2   All glazing materials must meet safety criteria and durability requirements for the intended application.

1.4 Warranty

Skyline provides the following warranty terms for each product:

a. Eco-etch glass: 10 years from the date of delivery against manufacturer defects.
b. Laminated glass: 5 years from the date of delivery against manufacturer defects.
c. Digitally Printed glass with Ceramic Frit ink: 10 years from the date of delivery against manufacturer defects.
d. Digitally Printed glass with UV ink: 1 year from the date of delivery against manufacturer defects.
e. Back-Painted glass (Vitracolor®): 10 years from the date of delivery against manufacturer defects.
f. Deep Etch glass: 1 year from the date of delivery against manufacturer defects.
g. Warranties are contingent upon proper handling, cleaning, and installation as per Skyline guidelines.

Part 2 – Products

2.1 Digitally Printed Glass

2.1.1   Product: [____] by Skyline Design, Inc., (773) 278-4660, www.skyline.glass; [or approved substitute.] [substitutions not permitted.]

2.1.2   Digitally printed glass with ceramic frit ink uses advanced inkjet technology to directly transfer intricate designs onto the glass surface. These designs are then permanently integrated into the glass during the tempering process, creating a durable, heat-resistant finish that is ideal for both decorative and functional applications. [To match Architect's sample.]

2.1.3   Digitally printed glass with UV ink (AST™ technique) involves applying a specialty coating to the glass surface before printing with UV-curable ink. The UV ink is then printed directly onto the glass and cured using ultraviolet light, creating a vibrant, durable, and UV-resistant finish. This process allows for high-resolution, customizable designs while maintaining the strength and clarity of the glass. [Transparent] [Translucent] [Opaque] [To match Architect's sample.]

> **Specifier Notes:** Digitally printed glass with ceramic frit ink is especially well-suited for exterior applications, as it is highly resistant to wear and weather. In contrast, UV ink printing is better suited for interior applications, offering vibrant designs that are ideal for protected environments.

2.1.4   Environmental Benefits: Low-emitting, chemical-free, durable and promotes material reuse.

2.1.5   Pattern Name: [Sateen™] [Dogwood 1™] or look up a pattern through www.skyline.glass/patterns.

2.1.6   Pattern Colorway: [To match [Skyline sample No. [000000-000].] [Color Reference No. [].]

2.1.7   Glass Type: [Clear Glass] [Low-iron Glass] [Velvet Clear Glass] [Velvet Low-iron Glass] [Silk Low-iron Glass] [Clear Mirror] [Low-iron Mirror] [Silk Low-iron Mirror] [Bronze Glass] [Grey Glass] [Wave Glass] [Groove Glass] [Pixel Glass]

> **Specifier Notes:** Digitally printing with ceramic frit ink is not available for mirror glass types. UV ink, however, is compatible with Surface 1 of mirror glass types.

2.1.8   Glass Thickness: [__] inch/mm.

2.1.9   Additional Glass Treatment(s): [Annealed.] [Tempered (FT-Ansi-Z97.1).] [Heat Strengthened (HS)] [Monolithic.] [Laminated-ANSI Z87.1).] [Eco-etched.] [Back-Painted.] [Deep Etched.]

> **Specifier Notes:** Digitally printing with ceramic frit ink is not compatible with annealed glass, while UV ink is suitable for a wider range of glass types.

2.1.10   Back-Paint Color: [Vitracolor® Name] [To match [Skyline sample No. [000000-000].] [Color Reference No. [].]

2.1.11   Edge treatment: [Flat polished.] [Seamed.]

> **Specifier Notes:** If Digitally Printed glass, either with Ceramic Frit or UV ink, is specified on Surface 1 (front), it is possible to apply an additional technique to Surface 2 (back), such as Eco-etch, Back-Painting, or Deep Etch techniques, to achieve the desired aesthetic and functionality.
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> For Laminated glass, please note that two glass panels will be required, resulting in four glass surfaces (Surface 1, 2, 3, and 4) and an interlayer. Specify these panels as two distinct layers to ensure proper design and performance.

2.2 Sample Sizes

2.2.1   Samples provided by Skyline will be available in the following sizes: 4x4, 4x8, or 8x8 inches.

Part 3 – Execution

3.1 Installation

3.1.1   Follow Skyline's back-painted glass installation guidelines. www.skyline.glass/document/installation-guide-define-vitracolor-back-painted-glass-products/. Ensure that all glass materials are handled with care, free from moisture or contamination during installation.

3.1.2   Mechanical fasteners are recommended for securing glass.

3.1.3   Ensure that glass substrates are clean, dry, and free of dust prior to installation.

3.1.4   Glass should be stored in a climate-controlled environment until installation.

3.2 Maintenance

3.2.1   Standard glass surfaces: Clean with soft, lint-free cloth and a 4:1 water-to-vinegar mixture. Avoid ammonia-based cleaners.

3.2.2   Vitracolor® and other back-painted glass: Clean using isopropyl alcohol. Do not allow cleaning liquids to seep behind the glass or collect in channels. Avoid suction cups and tape adhesives unless specified by Skyline for these products.

3.2.3   Eco-etch® glass: After using any chemical-heavy solution, rinse thoroughly with clean water to remove any residue or film.

3.2.4   Digitally printed glass with UV ink: Do not clean finished surfaces for at least 30 days after installation.

3.2.5   Deep Etch glass: Do not clean finished surfaces for at least 30 days after installation.

3.2.6   Laminated glass: Do not use vinegar-based solutions. Prevent cleaning liquids from penetrating the glass edges or seams.

3.3 Handling and Storage

3.3.1   Glass must be stored in a climate-controlled space to prevent moisture or condensation build-up.

3.3.2   Handle all finished glass with clean glass gloves to avoid damage to the surface.

3.4 Field Quality Control

3.4.1   Prior to installation, the client is responsible for testing the glass and adhesive products in the intended environment to confirm suitability.

3.4.2   Any defects must be reported to Skyline within 3 days of receipt, prior to installation.

Part 4 – Warranty and Guarantee

4.1 Limited Warranty

4.1.1 Products are covered by a limited warranty against manufacturing defects for a specified period, as outlined in the product description.

4.1.2 The warranty covers defects related to the glass or finish under normal conditions, including proper cleaning and handling.

4.1.3 The warranty does not apply to damage from improper handling, abuse, installation errors, or exposure to harsh environmental conditions.

4.2 Exclusions

4.2.1 The warranty does not cover damage from misuse, mishandling, or installation errors.

4.2.2 It does not apply to finished glass in environments where it comes into prolonged contact with moisture unless specifically stated.

4.3 Warranty Claim Process

4.3.1 Clients must provide written notification of defects within 3 days of receipt of the glass panels, prior to installation.

4.3.2 In the case of a warranty claim, Skyline will review the cause and, at its discretion, repair or replace the affected glass panel.

END OF SECTION