



**SECTION 08 8113
DECORATIVE GLASS GLAZING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Digitally printed glass, including heat-treated, insulating glass units and laminated glass.

1.02 REFERENCE STANDARDS

- A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; current edition.
- B. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test; 2015.
- C. ASTM C724 - Standard Test Method for Acid Resistance of Ceramic Decorations on Architectural-Type Glass
- D. ASTM C1036 - Standard Specification for Flat Glass; 2016.
- E. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.
- F. ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass; 2014.
- G. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2010.
- H. GANA TD 02-0402 - Heat-Treated Glass Surfaces Are Different
- I. GANA 01-0300 - Proper Procedures for Cleaning Architectural Glass Products

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

1.04 MOCK-UPS

- A. See Section 01 4000 - Quality Requirements, for additional mock-up requirements.

1.05 WARRANTY

- A. Provide limited 10-year warranty (See GGI warranty for Alice).

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design Glass Fabricators:
 - 1. GGI - General Glass International; Alice Digital Printed Glass:
www.generalglass.com/#sle.

2.02 GLASS MATERIALS

- A. Float Glass: Provide float glass based glazing unless noted otherwise.
 - 1. Heat-Strengthened and Fully Tempered Types: ASTM C1048, Kind HS and FT.
 - 2. Fully Tempered Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 criteria.
- B. Laminated Glass: Float glass laminated in accordance with ASTM C1172.
 - 1. Laminated Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 test requirements for Category II.

2.03 GLAZING UNITS

- A. Type G-16 - Direct to Glass Ceramic Printing: Ceramic frit is fused into glass creating permanent designs.
 - 1. Applications: Locations as indicated on drawings.

2. Color: As indicated on drawings.
3. Printing Style: As indicated on drawings.
4. Glass Type: **Fully tempered; monolithic** glass system.
5. Thickness: **1/4 inch, 3/8 inch, 1/2 inch, or 3/4 inch, nominal.**
6. Manufacturers:
 - a. GGI - General Glass International; Alice Direct-to-Glass Printing:
www.generalglass.com/#sle.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

- A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.
- B. Verify that the minimum required face and edge clearances are being provided.
- C. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.
- D. Verify that sealing between joints of glass framing members has been completed effectively.
- E. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

- A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.
- B. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.
- C. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.
- D. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.
- E. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.
- C. Monitor and report installation procedures and unacceptable conditions.

3.05 CLEANING

- A. See Section 01 7419 - Construction Waste Management and Disposal, for additional requirements.
- B. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.
- C. Remove non-permanent labels immediately after glazing installation is complete.
- D. Clean glass and adjacent surfaces after sealants are fully cured.

- E. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.
- F. Glass to be cleaned in accordance with:
 - 1. GANA TD 02-0402 - Heat-Treated Glass Surfaces Are Different
 - 2. GANA 01-0300 - Proper Procedures for Cleaning Architectural Glass Products

3.06 PROTECTION

- A. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION