

SECTION 08800
GLAZING

PART 1 – GENERAL

1.1 SUMMARY

- A. This section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
 - 1. Windows.
 - 2. Doors.
 - 3. Glazed curtain walls.
 - 4. Glazed entrances.
 - 5. Interior borrowed lites.
 - 6. Storefront framing.
 - 7. Structurally glazed curtain walls.

1.2 SUBMITTALS

- B. Product data: For each glass product and glazing material indicated.
 - 1. Manufacturer's product literature and applicable technical bulletins.
 - 3. Safety glazing certification reports.
- C. Samples: For the following products, in the form of at least 12-inch square Samples for glass.
 - 1. Each color of tinted float glass.
 - 2. Each type of patterned glass.
 - 3. Coated vision glass.
 - 4. Ceramic-coated spandrel glass.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Single firm with minimum 5 years successful experience in the fabrication of glass.
 - 1. Glass of type required for this project must be a certified safety glazing product listed with the Safety Glazing Certification Council by firm, where applicable.
 - 2. Glass of type required for this project must be a certified product listed with the Insulating Glass Certification Council by firm, where applicable.
- B. Installer Qualifications: An experienced installer who has completed glazing similar in material, design, and extent to that indicated for this Project; whose work has resulted in glass installations with a record of successful in-service performance.
- C. Glass standards:
 - 1. ASTM specification C1048 for glass.
 - 2. ASTM specification C1036 for glass.

- D. Safety Glazing: Materials complying with testing requirements of Consumer Products Safety Commission 16 CFR 1201 Category II, and American National Standards Institute ANSI Z97.1. Subject to compliance with requirements, permanently mark safety glass with certification label of Safety Glazing Certification Council.

1.4 WARRANTY

- A. Manufacturer's warranty on insulating glass: Manufacturer's standard warranty agreeing to replace, or credit insulating glass units due to failure of hermetic seal under normal use that is attributed to the manufacturing process, and not due to handling, installing, protecting, and maintaining practices contrary to manufacturer's instructions.
1. Warranty period: Manufacturer's standard warranty for 10 years from date of manufacture.

PART 2 – PRODUCTS

2.1 GLASS PRODUCTS

- A. Annealed Float Glass: ASTM C 1036, Type I (transparent, flat), Quality q³ (glazing select), class as indicated in glass schedule.
- B. Heat-Treated Float Glass: ASTM C 1048; Type I (transparent, flat), Quality q³ (glazing select), class as indicated.
1. Fabrication process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed, unless furnace dimensional constraints prevent so.
 2. Provide Kind HS (heat-strengthened) float glass in place of annealed glass where needed to resist thermal stresses as recommended by the float glass manufacturer.
 3. Provide Kind FT (fully-tempered) float glass in place of annealed where safety glass is indicated.
- C. Ceramic-Coated spandrel glass: ASTM C 1048, Condition B (spandrel glass, one-surface ceramic coated), Type I (transparent, flat), Quality q³ (glazing select), class as indicated in glass schedule.

2.2 FLAT GLAS MATERIALS

- A. Float Glass: annealed: ASTM C 1036
1. Glass: thickness, type, tint: as indicated.
- B. Float Glass: heat-treated: ASTM C 1048
1. Kind: Heat-strengthened.
 - a. Glass: thickness, type, tint: as indicated.

2. Kind: Fully-tempered.
 - a. Glass: thickness, type, tint: as indicated.
3. Acceptable manufacturer:
 - a. Virginia Glass Products Corporation (800-368-3011)

2.3 CERAMIC-COATED SPANDREL

- A. Ceramic-coated spandrel glass
 1. Glass substrate:
 - a. Glass thickness: as selected
 - b. Glass type: as selected.
 2. Coating: Ceramic frit paint.
 - a. Color: as selected from manufacturer's standard colors.
 - b. Custom color: as matched from sample.
 3. Acceptable manufacturer:
 - a. Virginia Glass Products Corporation's CeramSpan (800-368-3011)

PART 3 – EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. General contractor and glazing contractor shall examine all areas, substrates and conditions where glass door assemblies are to be installed. Do not proceed with any work until satisfactory conditions exist for proper installation of all materials.
- B. Clean glazing channels and other framing members receiving glass immediately before glazing.

3.2 GLAZING

- A. General: Comply with written instructions of manufacturers of glass, sealant, gasket, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
 1. Glazing channel dimensions, as indicated on drawings, shall provide necessary bite on glass, minimum edge and face clearance, and adequate sealant thicknesses, with reasonable tolerances.
 2. Protect glass edges from damage during handling and installation. Remove damaged glass from project site and legally dispose of off project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance.
- B. Follow industry best practices, published guidelines of the Glass Association of North America, and applicable manufacturer's recommendations for proper tape, gasket, sealant, and lock-strip glazing.

3.3 PROTECTION AND CLEANING

- A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove non-permanent labels, and clean surface.
- B. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come in contact with glass, remove them immediately as recommended by the glass manufacturer.
- C. Examine glass surface adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for build-up of dirt, scum, alkaline deposits, or stain: remove as recommended by glass manufacturer.
- D. Remove and replace glass that is broken, chipped, cracked, abraded, or damaged in any way, including natural causes, accidents, and vandalism, during construction period.
- D. Wash glass on both exposed surfaces in each area of project not more than four days before date scheduled for inspections that establish date of substantial completion. Wash glass as recommended by glass manufacturer.