

# 08 80 00 – Glazing

## DIVISION 8 - Openings



### STATEMENT OF PURPOSE & BACKGROUND

- Scope:
  - Glass and Glazing for interior and exterior applications including steel doors and frames, aluminum doors and frames, wood doors, aluminum windows, and other locations as shown on drawings or specified.
- Statement of goals:
  - Provide consistent, high quality glazing that:
    - Meets District standards for safety glazing, maintenance, cleanability, and replacement.
    - Supports district goals for energy efficiency by reduced heat gain/heat loss.
    - Supports district goals for daylighting.
- Revision history of section:
  - 03/19/2013
  - 11/16/2015
  - 09/25/2018
  - 03/11/2021
  - 10/28/2022

### OUTLINE SPECIFICATION

- Part 1 General
  - Provide consistent, high quality glazing that:
    - Conforms to Glass Association of North America Glazing Manual (GANA GM);
    - Conforms to the International Building Code and all applicable local codes.
  - Warranty: Manufacturer's warranty to be 10 years from date of Substantial Completion.
- Part 2 Products
  - Acceptable Manufacturer(s):
    - Guardian Industries Corp.
    - Oldcastle Building Envelope
    - Vitro Architectural Glass
    - Pilkington North America Inc. / NSG Group
    - Viracon Inc.
    - Equivalent manufacturers **approved, in writing, in advance, by the Architect**, may be substituted in accordance with the provisions of the Contract.
  - Provide all insulating units and all tinted units from a single manufacturer.
  - **Glass Types:**
    - **Glass Type 1 – Interior 1/4 inch Vision Glazing u.n.o.:**
      - 1/4 inch clear HS float glass; temper where necessary to meet safety and code requirements.
      - Locations: interior steel frames at borrowed light conditions more than 18 inches above finished floor u.n.o. Use Glass Type #2 at interior doors, door sidelights and where otherwise shown or specified.
    - **Glass Type 2 – Interior 5/16 inch Clear Laminated Glass:**
      - 1/4 inch laminated glass consisting of 2 plies of 1/8 inch clear HS glass laminated with PVB Interlayer, 0.060 inch min. thickness.

- Locations: interior doors and interior steel and aluminum frames at door sidelights, and other locations/conditions requiring safety glass.
  - Provide fire-rated glass where required by code; see Glass Type 7 below.
  - Additional glass types such as insulated, textured, translucent, or obscure may be specified for certain interior locations when discussed with Owner.
- **Glass Type 3 – 1 inch Clear Insulated Glass with Low E:**
    - Outer lite: ¼ inch HS glass with Low E coating on #2 surface, ½ inch airspace, ¼ inch HS annealed glass.
    - Space between lites filled with argon.
    - Locations: Exterior openings on 2<sup>nd</sup> floor and above.
    - Tinted outboard lite may be specified with Owner approval. See notes below.
- **Glass Type 4 – 1 ¼ inch Clear Insulated Laminated Glass with Low E:**
    - Outer lite: ¼ inch HS glass with Low E on #2 surface, ½ inch airspace, two plies of 1/4 inch HS glass laminated with min. 0.060" PVB interlayer.
    - Space between lites filled with argon.
    - Locations: Exterior openings on first floor and lower, and where otherwise shown or required.
    - Tinted outboard lite may be specified with Owner approval. See notes below.
- **Glass Type 5 – 1 inch Insulated Laminated Patterned Glass:**
    - Outer lite: ¼ inch clear HS glass with Low E on #2 surface, ½ inch airspace, two plies of 1/8 inch clear HS glass laminated with min. 0.030" patterned or colored PVB interlayer.
    - Space between lites filled with argon.
    - Locations: Where indicated or specified.
    - Additional glass types such as textured, translucent, or obscure may be specified for certain locations when discussed with Owner.
- **Glass Type 6 – 1 inch Insulated Spandrel Glass:**
    - Outer lite: ¼ inch clear HS glass, ½ inch airspace, ¼ inch clear HS glass with a ceramic frit coating on #4 surface.
    - Space between lites filled with argon.
    - Locations: Where indicated or specified. If used on first floor or lower, laminate inboard lite as in Glass Type #4 above, with ceramic frit on #6 surface. Do not expose frit surface to interior view.
- **Glass Type 7 – Fire Rated Safety Glass:**
    - Nominal 5/8 inch thick laminated fire and impact safety glass.
    - Locations: fire-rated door and window assemblies.
    - Fire ratings: 20 minutes to 3 hours for doors; 20 minutes to 90 minutes for other applications.
    - Basis of Design: Firelite Plus. Equivalent manufacturers approved, in writing, in advance, by the Architect, may be substituted in accordance with Part 2 above.

## NOTES:

- Maximum size for 1/8 inch thick glass is generally 48 inches x 84 inches; verify with glass manufacturer for specific limits for each glass type.
- Glass thickness of 3/16 inch may be used in conformance with manufacturer's recommendations on glass sizes; maximum size of 3/16 inch glass is 50 sq. ft. (verify).
- Clear glass with Low E coating is the preferred insulated glazing material for most standard exterior applications. Laminated glass shall be used at first floor/ground floor exterior openings, and at other exterior and interior locations where shown or specified.
- Tinted glazing may be specified with Owner approval. Use industry standard non-proprietary colors only, to facilitate replacement when necessary.
- Other glazing types for specific or unique applications may be discussed with Owner for consideration.
  
- Part 3 Execution
  - Per Consultant and / or manufacturer specification.
  - Check that glazing channels are free of burrs, irregularities, and debris.
  - Check that glass is free of edge damage or face imperfections. Discard pieces that do not meet these conditions.
  - Remove protective coatings from surfaces to be glazed.
  - Clean glass and glazing surfaces, to remove dust, oil and contaminants; wipe dry.
    - Remove labels as soon as installed.
    - Wash and polish both faces of glass.
    - Remove debris from work site.
    - Replace damaged glass.

End of Section