

SECTION 08800 - GLAZING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Glass and glazing for interior and exterior metal frames and doors.
2. Glass and glazing for Pharmacy privacy walls.
3. OGP exterior door glazing, furnished and installed by Owner.

B. Related Requirements:

1. Section 08110 - Steel Doors and Frames: Glazed doors and fixed window frames.
2. Section 08710 - Door Hardware: Hardware coordination.
3. Appendix A – Products and Work By Owner or Separate Contractor
 - a. General procedures related to Owner furnished products.
 - b. Manufacturers, suppliers, vendor contacts and product names and numbers related to Owner furnished products.

1.2 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the test by these basic designations only.

B. American National Standards Institute (ANSI):

1. ANSI Z97.1 - Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings.

C. ASTM International (ASTM):

1. ASTM C920 - Specification for Elastomeric Joint Sealants.
2. ASTM C1036 - Flat Glass.
3. ASTM C1048 - Heat-Treated Flat Glass - Kind HS, Kind FT Coated and Uncoated Glass.
4. ASTM D2000 - Classification System for Rubber Products in Automotive Applications.
5. ASTM E 1886 - Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.
6. ASTM E 1996 - Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.
7. ASTM E2074 - Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies.

D. Flat Glass Marketing Association (FGMA):

1. FGMA - Glazing Manual and Glazing Sealing Systems Manual.

E. National Fire Protection Agency (NFPA):

1. NFPA 252: Standard Methods of Fire Tests of Door Assemblies.
2. NFPA 257: Standard on Fire Test for Window and Glass Block Assemblies.

F. Consumer Product Safety Standards for Architectural Glazing.

1. CPSC 16 CFR, Part 1201.

G. Underwriters Laboratories, Inc. (UL):

1. UL 10B - Fire Tests of Door Assemblies.

1.3 QUALITY ASSURANCE

- A. Conform to FGMA Glazing Manual for glazing installation methods.
- B. Provide permanent labeling for safety glass indicating conformance with specified standards.
- C. Fire-Protection-Rated Glazing Labeling: Permanently mark fire-protection-rated glazing with a UL label of certification or label of certification of a testing agency acceptable to Authorities Having Jurisdiction. Label shall indicate manufacturer's name, test standard, whether glazing is for use in fire doors or other openings, whether or not glazing passes hose-stream test, whether or not glazing has a temperature rise rating of 450 degrees and the fire-resistance rating in minutes.

PART 2 PRODUCTS

2.1 OWNER FURNISHED PRODUCTS

- A. Owner's Supplier will furnish the OGP exterior door glazing as specified in Appendix A (Section 08800) for installation by Owner's Supplier.

2.2 GLASS MATERIALS

- A. Tempered Glass: ASTM C 1048, Kind FT (Fully Tempered), Condition A (Uncoated), Type I (Transparent Glass, Flat), Quality q3 (Glazing Select).
 - 1. Conform to ANSI Z97.1 and CPSC 16CFR Part 1201.
 - 2. Tempered glazing panels as specified in the Glass Schedule below (including doors, sidelights, storefronts, and transoms) shall comply with the CPSC 16CFR Part 1201 criteria for Category I or II as follows:
 - a. Glazing Panels 9 sq. ft. or less: Category I.
 - b. Glazing Panels more than 9 sq. ft.: Category II.
 - c. Thickness:
 - 1) Doors and Window Frames: 1/4 inch unless otherwise shown or specified.
 - 2) Pharmacy Privacy Walls: 1/2 inch.
 - 3. Clear: Class 1 (Clear).
 - 4. Tinted: Class 2 (Tinted Heat Absorbing and Light Reducing).
 - a. Color: Gray tint or bronze tint (match existing).
- B. Insulated Units: Double pane units, with hermetically sealed air space between.
 - 1. Clear: Both inner and outer panes of clear glass
 - 2. Tinted: Inner pane of clear glass and outer pane of tinted glass.
 - 3. Unit Thickness: 1 inch thick units; 1/4 inch thick tempered inner and outer panes, with 1/2 inch air space.
- C. Fire-Protection-Rated Glazing, General: Listed and labeled by a testing agency acceptable to Authorities Having Jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 252 for door assemblies and NFPA 257 for window assemblies.
 - 1. Vision Light Metal Frame: Manufacturer's standard frame formed of 0.048-inch- thick, cold-rolled steel sheet and approved for use in doors of fire-protection rating indicated. Factory prime for field painting. Size as indicated on Drawings.
 - 2. Laminated Ceramic Glazing: Laminated glass made from two plies of clear, ceramic flat glass; 5/16-inch total nominal thickness; for fire doors and frame assemblies rated up to 1-1/2 hours, tested and certified to meet requirements of standard UL 10B and CPSC 16CFR Part 1201 criteria for Category I and Category II applications. Provide the following product:
 - a. FireLite Plus by Nippon Electric Glass Company, Ltd., and distributed by Technical Glass Products, Snoqualmie, WA, (800) 426-0279.
 - 3. Glazing Tape: Closed cell polyvinyl chloride (PVC) foam, coiled on release paper over adhesive on two sides, maximum water absorption by volume of 2 percent. Glass panels that exceed 1,393 sq. inches for 90-minute ratings shall be glazed with fire-rated glazing tape supplied by manufacturer.

- D. Identification:
 - 1. Each unit of tempered glass shall be permanently identified by the manufacturer. The identification shall be etched or ceramic fired on the glass and be visible when the unit is glazed.

2.3 GLAZING COMPOUNDS

- A. Polysulphide Sealant: Two component, chemical curing, non-sagging type; cured Shore A hardness of 15-25.
- B. Silicone Sealant: Single component, chemical curing; capable of water immersion without loss of properties; non-bleeding, non-staining; cured Shore A hardness of 15-25.
 - 1. Color: Clear.
- C. Acrylic terpolymer compounded especially for glazing; non-hardening, non-staining, and non-bleeding.

2.4 GLAZING ACCESSORIES

- A. Setting Blocks: Resilient blocks of 70 to 90 Shore A durometer hardness; compatible with glazing sealant.
- B. Spacers: Resilient blocks of 40 to 50 Shore A durometer hardness; self adhesive on one side; compatible with glazing sealant.
- C. Filler Rods: Closed cell or jacketed foam rods of polyethylene, butyl, neoprene, polyurethane, or vinyl; compatible with glazing sealant.
- D. Joint Cleaners, Primers, and Sealers: As recommended by glazing sealant manufacturer.
- E. Gaskets: ASTM D2000, SBC 415 to 3BC 620; extruded or molded neoprene or EPDM, black.
- F. Stainless Steel Frame (Pharmacy Privacy Wall Glass Frame): CRL Brushed Stainless Anodized Wet Glaze 1-1/2" Deep "U" Channel, Catalog No. WU1BSCL, by C.R. Laurence Company, Inc. Los Angeles, CA, (800) 421-6144.
- G. Aluminum Angle (Pharmacy Privacy Wall Glass Retainer): CRL 1" Satin Anodized Angle Extrusion. Catalog No. D1634A, by C.R. Laurence Company Inc., Los Angeles, CA (800) 421-6144.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify surfaces of glazing channels or recesses are clean, free of obstructions, and ready for work of this Section.
- B. Beginning of installation means acceptance of substrate.

3.2 PREPARATION

- A. Clean contact surfaces; prime or seal where recommended by sealant manufacturer for intended application.
- B. Inspect glass edges immediately prior to setting; discard those with edge damage that will contribute to glazing failure.

3.3 GLAZING

- A. Locate setting blocks at quarter points of sill; set in sealant if heel or toe bead is required.
- B. Install spacers inside and out except where preshimmed tape or glazing gaskets are to be used.
- C. Set each piece in a series to other pieces in pattern draw, bow, or other visually perceptible characteristics.

- D. Provide glazing sealants and gaskets as required for particular glazing application. Coordinate with other Sections for material compatibility.
- E. Gaskets:
 - 1. Provide adequate anchorage, particularly for driven-in wedge gaskets.
 - 2. Miter and weld ends of channel gaskets at corners to provide continuous gaskets.
 - 3. Seal face gaskets at corners with sealant to close opening and prevent withdrawal of gaskets from corners.
- F. Do not leave voids in glazing channels except as specifically indicated or recommended by glass manufacturer. Force sealant into channel to eliminate voids. Tool exposed surfaces to slight wash away from joint. Trim and clean promptly.
- G. Do not allow sealant to close weeps of aluminum framing.
- H. Provide filler rod where sealants are used in the following locations:
 - 1. Head and jamb channels.
 - 2. Colored glass over 75 united inches in size.
 - 3. Clear glass over 125 united inches in size.

3.4 INSTALLATION BY OWNER’S SUPPLIER]

- A. OGP exterior door glazing will be installed by Owner’s Supplier as specified in Appendix A (Section 08800).]

3.5 ADJUSTING AND CLEANING

- A. Immediately prior to Walmart acceptance of Project, replace broken or otherwise damaged glass. Wash and polish glass inside and out.

3.6 GLASS SCHEDULE

- A. Provide type of glass specified for the applications scheduled as follows:

APPLICATION/LOCATION	TYPE OF GLASS
Interior Windows	Clear tempered glass unless otherwise shown or specified
Interior Hollow Metal Doors	Clear tempered or fire-protection-rated glass as scheduled on the drawings.
Pharmacy Privacy Walls	Clear tempered glass.

END OF SECTION