

SECTION 08800

GLASS AND GLAZING

PART 1 GENERAL

1.01 SUMMARY

- A. Related Sections:
 - 1. 08110 - Steel Doors and Frames.
 - 2. 08410 - Aluminum Swing Entrances
 - 3. 08420 - Aluminum Storefront System
 - 4. 08520 - Aluminum Windows.

1.02 REFERENCE

- A. Flat Glass Marketing Association (FGMA): Glazing Manual, Latest Edition.
- B. CPSC Standard 16CFR 1201 Category II.
- C. ASTM C1037 - Specification for Flat Glass.
- D. ASTM C1048 - Specification for Heat Treated Glass - Kind HS, Kind FT Coated and Uncoated Glasses.
- E. ANSI Z97.1 - Safety Performance and Methods of Test for Safety Glazing Materials Used in Buildings.

1.03 SUBMITTALS

- A. Product Data: Manufacturer's specifications, recommendations for setting blocks, spacers and edge clearance and installation instructions.
- B. Samples:
 - 1. Glass: 6 inch by 6 inch samples of each type and color of glass specified.
 - 2. Glazing Accessories: 12 inch long samples of each type specified.
- C. Color Charts: For preformed glazing materials, and glazing sealant.
- D. Certificate of Compliance: Certification of tempered and laminated glass complying with Consumer Product Safety Commission 16CFR 1201-CII.

1.04 QUALITY ASSURANCE

- A. Labels:
 - 1. Label each unit of glass with manufacturer's sticker showing quality, grade, thickness, and type of glass.
 - 2. Labels shall remain in place until approval by the A/E.
- B. Trademarks: Each panel of tempered glass shall bear the manufacturer's trademark.
- C. All glass of each type shall be applied by the same manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Glazing: Ford Glass Division, Guardian, LOF, PPG., St. Gobain Architectural Glass Products, or Viracon.
- B. Fire Rated Safety Glazing: Superlite by St. Gobain.
- C. Glazing Sealant: Dow Corning 999-A Silicone Building and Glazing Sealant or General Electric Contractors 1000 Sealant.
- D. Backer Rod: Dow Corning Ethafoam SB polyethelene cord or butyl rubber foam cord.
- E. Moisture-Resistant Paint for Frameless Mirror Glass: Palmer Products Corp., Mirro-Bac Paint.
- F. Bond Sealer Coat for Mirrors: Palmer Products Corp., Mirro-Mastic Bond.
- G. Mirror Adhesive: Palmer Products Corp., Mirro-Mastic.

2.02 MATERIALS

- A. Tempered Glass: Comply with ASTM C1036 and further processed according to ASTM C1048, Kind FT, which has been fully tempered by the manufacturer's standard horizontal process. Minimum thickness of 1/4".
- B. Fire Rated Glazing:
 - 1. Wired Glass: ASTM C1036-85, Type II, Class 1, Form 1, Quality q8, Baroque Pattern, Mesh M2, bearing UL label.
 - 2. Safety Glazing: ASTM E152-81a, ASTM E163-84, ASTM E119-88, NFPA 80, NFPA 251, NFPA 252, NFPA 257, CPSC 16 CFR Part 1201, bearing

UL label.

- C. Wall Mirrors: 1/4" tempered or laminated glass with electrolytic copper plated backing, guaranteed for 1 year.
- D. Glazing Materials:
 - 1. Glazing Sealant: Curing type gunable elastomeric sealant complying with TT-S-001543A, Type II Class A. Color as selected by A/E.
 - 2. Unshimmed Glazing Tape: Butyl-polyisobutylene with 20 to 30 "Shore A" hardness, self-sticking; color as selected by Architect.
 - 3. Pre-Shimmed Glazing Tape: Butyl-polyisobutylene with built-in synthetic rubber spacer; 20 to 30 "Shore A" hardness, self-sticking.
 - 4. Setting Blocks: Solid neoprene, 80 to 90 Shore A durometer hardness; sizes as required.
 - 5. Edge Blocks: Solid neoprene, 60-70 Shore A durometer hardness; sizes as required.
 - 6. Shims: Solid neoprene, 40 to 60 Shore A durometer hardness; sizes as required.
 - 7. Glazing Gaskets: Compression gaskets, closed cell, neoprene, EPDM or silicone rubber composition designed to provide a water-resistant seal between glass and frame.
 - 8. Primers and Cleaning Agents: Type recommended by the sealant, glass, and glazing accessories manufacturer.

PART 3 EXECUTION

3.01 INSPECTION

- A. Verify that glazing frames are acceptable for the correct installation of glass and glazing accessories.

3.02 INSTALLATION

- A. Glass Cutting: Make cuts clean, only moderately convoluted, with flare or bevel not exceeding 1/8 of glass thickness.
 - 1. Unacceptable defects:
 - a. Impact chips, spalls, nipped edges.
 - b. Flake chips, or shark teeth deeper than 1/4 of glass thickness.
 - c. Serration hackle deeper than 1/8 of glass thickness.
- B. Comply with recommendations of FGMA Glazing Manual, glass manufacturer, manufacturer of sealant and other glazing accessories.

- C. Do not attempt to cut, seam, nip, or abrade glass tempered or heat strengthened.
- D. Remove and replace glass broken, chipped, cracked, abraded, or damaged during construction.
- E. Install wall mirrors and fasten with non-corrosive, theft-proof, concealed hangers according to standard practices. [Fasten with mirror adhesive according to manufacturers instructions.]
- F. Manufacturer's label showing strength, grade, thickness, type, and quality of glass shall remain on each piece of glass until it has been set and inspected.
- G. Guarantee work to be waterproof.

3.03 CLEANING

- A. After glass has been inspected and approved, remove all labels and wash and polish glass on both faces before the final approval on the project.
 - 1. Comply with glass manufacturer's recommendations for cleaning materials and methods.

END OF SECTION