

SECTION 08555

FIBERGLASS WINDOWS

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes: Fiberglass windows with painted exterior and interior finish of the following type:
 - 1. Single-hung windows.

1.02 SUBMITTALS

- A. Submit shop drawings to Architect.
- B. Submit product data to Architect.
- C. Samples
 - 1. Submit corner section to Architect.
 - 2. Including glazing system, quality of construction, and specified finish.

1.03 QUALITY ASSURANCE

- A. Overall Standards: Comply with ANSI/AAMA/101/I.S.2, except as otherwise noted herein.
- B. Qualifications:
 - 1. Manufacturer Qualifications:
 - a. Minimum ten years experience in producing fiberglass windows.
 - b. Member AAMA, NFRC.
- C. Regulatory Requirements: Comply with requirements for 2006 International Building Code.
- D. Certifications for insulated glass windows:
 - 1. AAMA: Windows shall be Silver Label certified with label attached to frame per AAMA requirements.
 - 2. NFRC: Windows shall be NFRC certified with temporary U-factor label applied to glass and an NFRC tab added to permanent AAMA frame label.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Provide cardboard corner boots and full stretch wrap shipping protection.
- B. Follow manufacturer's instructions on label applied to windows.

1.05 WARRANTY

- A. Commercial Warranty:
 - 1. 10 year warranty.
 - 2. Guarantee windows against defects in materials and workmanship including costs for parts and labor. Wood veneer surfaces are required to be finish coated per manufacturer's instructions.

PART 2 – PRODUCTS

2.01 MANUFACTURED UNITS

- A. Milgard Ultra as manufactured by Milgard Manufacturing, Inc. Tacoma, WA
- or
- B. 325 Series as manufactured by Serious Materials, Longmont, CO
- or
- C. Fibertec fiberglass window system as manufactured by Fibertec, Concord, ON, Canada
- or
- D. Approved equal.

2.02 MATERIALS

- A. Fiberglass: AAMA 305 glass fiber reinforced thermoset profile.

2.03 GENERAL PERFORMANCE REQUIREMENTS

- A. Thermal Performance: Center of glass U-value 0.25, SHGC 0.40, VT 0.70.
- B. Forced Entry ASTM F-588 Grade 20, Air infiltration 0.07, Water resistance 6.89 psf, Structural test pressure 45.11 psf.

2.04 WINDOW TYPES

- A. Single-Hung with Z-Bar flush fin retrofit trim or anchor straps.
 - 1. Frame: Minimum 3-1/4 inch (108 mm) deep, multi-chambered foam-filled 0.090" fiberglass pultrusion.
 - 2. Sash: Minimum 1-9/16 inch (39.7 mm) deep, multi-chambered foam-filled 0.090" fiberglass pultrusion.
 - 3. Sightlines: Equal for operating and fixed sash.
 - 4. Structural Class: H-C30.
 - 5. Hardware:
 - a. Concealed block and tackle balancer.
 - b. Sash lift.
 - c. Cam-style lock and keeper, ultra-lift balances.
 - 6. Weatherstripping: Foam filled seal and fin seal polypropylene pile.

2.05 GLAZING

- A. Insulated Glass Units: ASTM E 774, Class A, 7/8 inch (22 mm) thick overall:
 - 1. Glazing Type: Coating shall be "LoE-272" as manufactured by Cardinal or "Solarban 60" as manufactured by PPG. Argon fill. Tempered glass where specified and/or required.
 - 2. Spacer type: Foam based warm edge spacer system.

2.07 INSECT SCREENS:

- A. Provide tight-fitting screen for operating sash with hardware to allow easy removal.
 - 1. Screen Cloth: Fiberglass screen mesh
 - 2. Frame: Roll formed aluminum frame

2.08 FABRICATION

- A. Fabricate frames and panels with milled and mitered joints and mechanically joined corners. Trim and finish corners to match adjacent surfaces.
- B. Provide concealed metal reinforcement in sash frame for attaching lock mechanism.
- C. Factory exterior wet silicone glaze with snap-on fiberglass glazing stops matching interior sash and frame finish, except where field glazing is required due to large window unit dimensions (over 40 sf (3.72 m²)). Insulating units shall be reglazeable without dismantling sash framing.

2.09 FINISH

- A. Frame and Sash.
 - 1. Exterior: Paint color is baked on enamel to match exterior finish of existing windows.
 - 2. Interior: White baked on enamel.
- B. Hardware: Oil-rubbed bronze finish
- C. Screen Frame Color:
 - 1. Exterior Mounted Screens: Match frame to exterior window frame and sash color.

2.10 SOURCE QUALITY CONTROL

- A. Inspect windows in accordance with manufacturer's Quality Control Program

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine openings in which windows will be installed.
 - 1. Verify that fasteners in framed walls are fully driven and will not interfere with window installation.
- B. Coordinate with responsible entity to correct unsatisfactory conditions.
- C. Commencement of work by installer is acceptance of substrate conditions.

3.02 INSTALLATION

- A. Install windows in framed walls in accordance with AAMA 2400.
 - 1. Provide continuous shim support along full length of sill.
- B. Do not remove temporary labels.
- C. Install insect screens on operable sash.

3.03 CLEANING

- A. Remove temporary labels and retain for Closeout Submittals.
- B. Clean soiled surfaces and glass using a mild detergent and warm water solution with soft, clean cloths.

END OF SECTION