

Section 08 54 13
Infinity Casement and Awning

Part 1 General

1.1 Section Includes

- A. Ultrex® casement, awning and casement picture window complete with hardware, glazing, weather strip, insect screen, accessories, and attachments.

1.2 Submittals

- A. Shop Drawings: Submit shop drawings under provision of Section 01 33 23.
- B. Product Data: Submit catalog data under provision of Section 01 33 23.
- C. Samples:
 - 1. Submit corner section under provision of section 01 33 23.
 - 2. Include glazing system, quality of construction, and specified finish.
- D. Quality Control Submittals: Certificates: submit manufacturer's certification indicating compliance with specified performance and design requirement under provision of section 01 33 23.

1.3 Delivery

- A. Comply with provisions of Section 01 65 00
- B. Deliver in original packaging and protect from weather

1.4 Storage and Handling

- A. Store window units in an upright position in a clean and dry storage area above ground to protect from weather under provision of Section 01 66 00

1.5 Warranty

- A. Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.
- B. Insulating glass shall be warranted against visible obstruction through the glass caused by a failure of the insulating glass air seal for a period of twenty (20) years from the date of the original purchase.

Part 2 Products

2.1 Manufactured Units

- A. Description: Factory-assembled Ultrex® Infinity casement, awning and casement picture windows as manufactured by Infinity Windows & Doors, Roanoke, Virginia.

2.2 Frame Description

- A. Ultrex®, a fiberglass reinforced pultrusion
- B. Exterior and Interior 0.075 (2 mm)
- C. Frame thickness: 1-5/16" (33 mm)
- D. Frame depth: 2-1/4" (57mm)

2.3 Sash Description

- A. Ultrex®, a fiberglass reinforced pultrusion
- B. Exterior and Interior 0.075 (2 mm)
- C. Composite sash thickness: 1-3/8" (35 mm) for operating units

2.4 Glazing

- A. Select quality complying with ASTM C 1036. Insulating glass SIGMA/IGCC when tested in accordance with ASTM E 2190. STC/OITC ratings are tested to the stated performance level in accordance with ASTM E 90-09.
- B. Glazing Method: 11/16" (18 mm) Insulating glass,
- C. Glass Type:, Low E2, with A Argon Gas, Tempered if required, Obscure if required
- D. Glazing Seal: Silicone bedding on interior; silicone bedding on exterior

2.5 Finish

- A. Exterior: Ultrex with a cross-head extruded acrylic organic coating system. Meets AAMA 624-10 requirements.
 - 1. Exterior Colors: **Base Color - Stone White**, Sierra, Pebble Gray, Bronze, Cashmere, Bahama Brown, Ebony [Exterior colors other than white cost a little more money]
- B. Interior: Ultrex with a cross-head extruded acrylic organic coating system. Meets AAMA 624-10 and 00022716 requirements.

1. Interior Color: Stone White or Sierra. Optional stainable non-wood interior wrap: EverWood™

2.6 Hardware

- A. Lock: Multipoint locking mechanism that is actuated from a single point of operation. The lock mechanism is concealed with only the actuator handle and escutcheon being visible to the interior.
- B. Hinges: Concealed stainless steel track and injection molded shoe
- C. Handle: Die cast detachable folding handle
- D. Roto Gear Operator: E-Gard™ coated hinge arm and housing mechanism
- E. Snubber: Pulls the sash tight to the frame and provides positive engagement to keep the sash in place under structural loads
- F. Color – Applies to handle and locking hardware
 1. White,

2.7 Weather Strip

- A. Frame: Unit features an extruded PVC foam filled bulb that runs continuously around the perimeter of the frame, sealing against the interior face of the sash
 1. Color: Beige
- B. Sash: The sash weather strip is an extruded PVC hollow bulb that attaches to a kerf in the sash; sealing against the inner perimeter of the frame
 1. Color: Black on Bronze, Bahama Brown, and Ebony units, Beige on all other units

2.8 Insect Screen

- A. Factory-installed full screen (removable)
- B. Screen mesh
 - 1. Standard screen mesh: 18 by 16 mesh: Charcoal Fiberglass
- C. Frame color: Stone White

2.9 Accessories and Trim

- A. Installation Accessories: Package of installation hardware for operable units consisting of:
 - 1. Six or Twelve #8 x 3" Torx® truss head installation screws
 - 2. Six or Twelve jamb hole plugs
- B. Interior Frame, Installation and Mulling Accessories:
 - 1. Jamb extension adaptor – shipped loose, G.C to cut and apply as per notes on detail page.
 - 2. Nailing fin
 - 3. Nailing fin drip cap
 - 4. Nailing fin corner gaskets

Part 3 Execution

2.10 Examination

- A. Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required in Section 01 71 00. Report frame defects or unsuitable conditions to the General Contractor before proceeding.
- B. Acceptance of Condition: Beginning installation confirms acceptance of existing conditions.

2.11 Installation

- A. Comply with Section 01 73 00.
- B. Assemble and install window/door unit(s) according to manufacturer's instruction and reviewed shop drawing.
- C. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Section 07 92 00 Joint Sealants.
- D. Install accessory items as required.

2.12 Field Quality Control

- A. Remove visible labels and adhesive residue according to manufacturer's instruction.
- B. Unless otherwise specified, air leakage resistance tests shall be conducted at a uniform static pressure of 75 Pa (~1.57 psf). The maximum allowable rate of air leakage shall not exceed 2.3 L/sm² (~0.45 cfm/ft²).
- C. Unless otherwise specified, water penetration resistance testing shall be conducted per AAMA 502 and ASTM E1105 at 2/3 of the fenestration products design pressure (DP) rating using "Procedure B" – cyclic static air pressure difference. Water penetration shall be defined in accordance with the test method(s) applied.

2.13 Cleaning

- A. Remove visible labels and adhesive residue according to manufacturer's instruction.
- B. Leave windows and glass in a clean condition. Final cleaning as required in Section 01 74 00.

2.14 Protecting Installed Construction

- A. Comply with Section 07 76 00.
- B. Protect windows from damage by chemicals, solvents, paint or other construction operations that may cause damage.

End of Section