

**Section 08 54 00**  
**Wood-Ultrex® Wood Casement**

**Part 1 General**

**1.1 Section Includes**

Wood-Ultrex®, OR APPROVED EQUAL, Casement and Picture complete with hardware, glazing, weather strip, insect screen, simulated divided lite, jamb extension, and standard anchors, trim and attachments.

**1.2 References**

American Society for testing and Materials (ASTM):

1. E283: Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors
2. E330: Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference
3. E547: Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential
4. E2190: Specification for Sealed Insulating Glass Units
5. C1036: Standard Specification for Flat Glass
6. E2068: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

Window and Door Manufacturer's Association (WDMA): I.S.4: Industry Standard for Water Repellent Preservative Treatment for Millwork

Sealed Insulating Glass Manufacturer's Association/Insulating Glass Certification (SIGMA/IGCC)

American Architectural Manufacturer's Association/Window and Door Manufacturer's Association/Canadian Specifications Association (AAMA/WDMA/CSA):

1. AAMA/WDMA/CSA 101/I.S.2/A440-05: Voluntary Performance Specification for Windows, Skylights, and Glass Doors
2. AAMA/WDMA/CSA 101/I.S.2/A440-08: Voluntary Performance Specification for Windows, Skylights, and Glass Doors

Window and Door Manufacturer's Association (WDMA): Hallmark Certification Program

American Architectural Manufacturer's Association (AAMA): 624-10: Voluntary Specification, Performance Requirements and Test Procedures for Organic Coatings on Fiber Reinforced Thermoset Profiles

National Fenestration Rating Council (NFRC):

1. 101: Procedure for Determining Fenestration Product Thermal Properties

### 1.3 System Description

Design and Performance Requirements:

Product	Air Tested to psf	Water Tested to psf	Certification Rating	Max Overall Width	Max Overall Height
Integrity Wood Casement (3771)	1.57	7.5	LC-PG50-C	36	71 1/8
Integrity Wood Picture (7359)	1.57	7.5	LC-PG50-FW	72	59 1/8
Integrity Wood Picture (5771)	1.57	8.25	LC-PG50-FW	56	71 1/8

Product	Air Tested to psf	Water Tested to psf	Certification Rating	Max Overall Width	Max Overall Height
Integrity Wood Casement (3771) Impact Rated	1.57	8.25	LC-PG55-C	36	71 1/8
Integrity Wood Picture (5771) Impact Rated	1.57	8.25	LC-PG55-FW	56	71 1/8
Integrity Wood Picture (5771) Impact Rated	1.57	8.25	LC-PG55-FW	2	55 1/8

1. Window units shall be designed to comply with ASTM E1996 Wind Zone 3 Missile Level D Rating +55/-55 psf
2. Air leakage shall not exceed the following when tested at 1.57 psf according to ASTM E283: 0.30 cfm per square foot of frame
3. No water penetration when tested at the following pressure according to ASTM E547:9.75 psf
4. Assembly shall with stand a positive or negative uniform static air pressure difference of psf without damage when tested according to ASTM E330
5. Impact and Cycling per ASTM E1996 and E1886 with passing results for Missile Level D and Pressure Cycling of +55/-55 psf

#### **1.4 Submittals**

Shop Drawings: Submit shop drawings for architect record and review.

Product Data: Submit catalog data.

Samples:

1. Submit corner section.
2. Include glazing system, quality of construction, and specified finish

1.5 Quality Control Submittals: Certificates: Submit manufacturer's certification indicating compliance with specified performance and design requirements.

#### **1.6 Quality Assurance**

Requirements: Consult local code for IBC [International Building Code] adoption year and pertinent revisions for information on:

1. Egress, emergency escape and rescue requirements
2. Windows fall prevention and/or window opening control device requirements

#### **1.7 Delivery**

Deliver in original and protect from weather

#### **1.8 Storage and Handling**

Prime and seal wood surfaces, including to be concealed by wall construction, if more than thirty (30) days will expire between delivery and installation.

Store window units in an upright position in a clean and dry storage area above ground to protect from weather.

## 1.9 Warranty

The following limited warranty is subject to conditions and exclusions. There are certain conditions or applications over which Integrity has no control. Defect or problems as a result of such conditions or applications are not the responsibility of Integrity. For a more complete description of the Integrity limited warranty, refer to the Complete and current warranty information that is available at [Integritywindows.com/warranty](http://Integritywindows.com/warranty).

Clear insulating glass with stainless steel spacers is warranted against seal failure caused by manufacturing defects and resulting in visible obstruction through the glass for twenty (20) years from the original date of purchase. Glass is warranted against stress cracks caused by manufacturing defects from ten (10) years from the original date of purchase.

Hardware and other non-glass components are warranted to be free from manufacturing defects for ten (10) years from the original date of purchase.

## Part 2 Products

### 2.1 Manufactured Units

Description: Wood-Ultrex®, OR APPROVED EQUAL, Casement operating exterior swinging windows (and related stationary or picture units) as manufactured by Integrity Windows & Doors, West Fargo, North Dakota

### 2.2 Frame Description

Interior: clear pine exposed surfaces

1. Kiln-dried to moisture content no greater than twelve (12) percent at the time of fabrication
2. Water repellent, preservative treated in accordance with ANSI/NWWDA I.S.4.

Exterior: Fiberglass reinforce Ultrex®, 0.080 inch (2mm) thick

Composite frame thickness: 1 5/16 inches.

Frame depth: 4 9/16 inches.

### 2.3 Sash/Panel Description

Interior: pine

1. Kiln-dried to moisture content no greater than twelve (12) percent at time of fabrication
2. Water repellent preservative treated in accordance with ANSI/NWWDA I.S.4.

Exterior: fiberglass reinforced Ultrex®, 0.110 inch thick

Composite sash thickness: 1 9/16 inches – standard glass; 1 31/32 inches – Tri-pane.

## 2.4 Glazing

Select quality complying with ASTM C1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E2190

Glazing Method: 1 1/16 inch insulating glass

Glass Type: Low E1

Glazing Seal: Silicone bead at interior and exterior

## 2.5 Certified Mulling for Impact

Directional mull limits 1H or 1W only. Maximum span for vertical mull is 71 1/8 inch.

Directional mull limits for 2H or 2W only. Maximum span for horizontal mull is 72 inch.

## 2.6 Finish

Exterior:

1. Pultruded Fiberglass
2. Factory baked on acrylic urethane
3. Meets AAMA 624-10 requirements
4. Color: Stone White, Pebble Gray, Bronze, Evergreen, Cashmere, Ebony – As reviewed and approved by the Owner and Architect.

Interior:

1. White interior factory finish

## 2.7 Hardware

Factory installed dual arm roto-gear operating hardware on casement on call number widths 25, 29, 33 and 37. Factory installed dyad operator hardware on call number widths 17 and 21.

1. Hardened steel drive worm and gear arms with high pressure die cast housing.
2. Detachable folding handle.
3. Sequential locks with removable escutcheon cover and handle.
4. Optional coastal hardware available.

Color:

1. Almond Frost

Window Opening Control Device for operating units

1. Minimum frame OSM: 17 27/32 inch x 31 1/8 inch; Maximum frame OSM: 36" x 71 1/8"
2. WOCD locking assembly: Factory installed. Die cast. Color: Almond Frost
3. WOCD tether assembly: Factory installed. Injection molded nylon. Color: E-Guard color match.

## **2.8 Weather Strip**

Weather stripped at frame and sash perimeter with flexible gaskets.

1. Color: Black

## **2.9 Jamb Extension**

Furnish jamb extension 6 9/16 inches – factory-installed; 6 13/16 inches – shipped loose

1. Finish: White interior factory finish

## **2.10 Insect Screen**

Factory Installed

1. Screen mesh, 18 by 16: charcoal fiberglass
2. Aluminum frame finish: Almond Frost

## **2.11 Accessories and Trim**

Exterior Casing:

1. Non-integral to the unit – fastened to the exterior wall with barb and kerf
2. 2 inch Brick Mould Casing available as a full surround or with sill nosing
3. 3 ½ Flat Casing as a full surround or with sill nosing
4. Color: Stone White, Pebble Gray, Bronze, Evergreen, Cashmere, Ebony, as selected and approved by Owner and Architect.

Installation Accessories:

1. Factory-installed nailing fin at head, sill and side jambs
2. Installation Brackets: Brackets for 4 9/16 inch; 6 9/16 inch

3. Mullion kit: Mullion kit for field assembly of units – Kit includes: instructions, aluminum pins, filler blocks, wood mullion tie, sealant foam tape, interior mullion trim, mullion insulation and nailing fin connectors
4. Structural mullion kit: structural mullion kit for field assembly of units. Kits includes: instructions, reinforcement member, aluminum pins, wood mullion tie, sealant foam tape, interior mullion trim, #8 x 1 3/4 inch screws, #7 x 1 5/8 inch screws, nailing fin connectors and structural brackets
5. Pole operator with adapter for each sash indicated. Mill finish aluminum. Length: (five feet)
6. Installation clips standard with nailing fin on impact glazed windows

## **Part 3 Execution**

### **3.1 Examination**

Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions. Report frame defects or unsuitable conditions to the General contractor before proceeding.

Acceptance of Condition: Beginning on installation confirms acceptance of existing conditions.

### **3.2 Installation**

Assemble and install window/door unit(s) according to manufacturer's instructions.

Install Joint Sealants and related backing materials at perimeter of unit or assembly. Do not use expansive foam sealant.

Install accessory items as required.

Use finish nails to apply wood trim and mouldings.

### **3.3 Cleaning**

Remove visible labels and adhesive residue according to manufacturer's instruction.

Leave windows and glass in a clean condition.

### **3.4 Protecting Installed Construction**

Protecting windows from damage by chemicals, solvents, paint or other construction operations that may cause damage.

End of Section