CLAD CASEMENT

SPECIFICATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Factory assembled aluminum clad wood casement windows [including fixed units], glass and glazing, operable hardware, weatherstripping, insect screen, and [grilles].
- B. Anchorages, attachments, and accessories.

1.02 RELATED SECTIONS

- A. Section 01340 Shop Drawings, Product Data, and Samples.
- B. Section 01610 Delivery, Storage, and Handling.
- C. Section 01710 Final Cleaning.
- D. Section 07200 Batt and Blanket Insulation.
- E. Section 07920 Sealants and Caulking.
- F. Section 08800 Glass and Glazing.

1.03 REFERENCES

- A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
 - 1. ASTM E-283 Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
 - ASTM E-547 Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Difference.
 - 3. ASTM E-330 Structural Performance of Exterior Windows, Curtain Walls, and Doors under Uniform Static Air Pressure Difference.
- B. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA):
 - AAMA/WDMA/CSA 101/I.S.2/A440-11 North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- C. WINDOW & DOOR MANUFACTURERS ASSOCIATION (WDMA):
 - 1. WDMA I.S-4 07 Industry Standard for Water-Repellent Preservative Treatment for Millwork
- D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- E. NATIONAL FENESTRATION RATING COUNCIL (NFRC)

1.04 PERFORMANCE CRITERIA

- A. Casement units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11.
- B. Air leakage shall not exceed 0.30 cfm per sq.ft. of sash when tested in accordance with ASTM E-283 at 1.57 psf.
- C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
- D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E-330.

1.05 SUBMITTALS

- A. Shop drawings shall be submitted in accordance with Section 01340.
- B. Product data in the form of general catalogs, test lab reports, product performance, and warranty information shall be submitted in accordance with Section 01340.
- C. Samples showing glazing, quality of construction, and finish shall be submitted in accordance with Section 01340.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. In compliance with Section 01610, window units shall be delivered undamaged, with protective packaging and fitted with sash shipping blocks. Complete installation and finishing instructions shall be included.
- B. Store units in a clean, dry place off the ground in an upright position.

CLAD CASEMENT

SPECIFICATIONS

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Pinnacle Series Aluminum Clad Wood Casement window units [including fixed units] as manufactured by Windsor Windows & Doors.

2.02 MATERIALS

- A. Frame: Shall be select pine treated with water repellent preservative, assembled with hardware installed. Exposed exterior portion shall be extruded aluminum sealed at corners with injected silicone and nylon corner keys. Lock and hinge side stops are face nailed. Jamb thickness shall be 1-1/4". Standard set up jamb width shall be 4-9/16" (4-1/8" basic jamb with 7/16" extender). Other jamb extension available to match finished wall thickness. Vinyl hinged nailing fin and drip cap are utilized for frame installation. Rigid aluminum nail fin and color matched drip cap option is available. Natural Alder and Fir interior option is available.
- B. Sash: Wood interior shall be select pine treated with water repellent preservative. Corners shall be mortise and tenon construction that is fastened with screws. Exterior surfaces shall consist of aluminum extrusion with lapped corners sealed with silicone and foam gaskets. Foam tape is applied to the back side of glass stop. Natural Alder and Fir interior option is available.
- C. Finish: All aluminum exterior surfaces shall be covered with a factory applied, polyester powder-coat paint in 22 standard and 20 feature colors. Anodized colors are also available.
- D. Glazing: Shall be 3/4" double pane LoE 366 insulating glass as standard, glazed with double-faced tape plus a full perimeter bead of silicone, and interior wood stops. A wide array of other glass options is offered including clear, tinted, tempered, and obscure. Cardinal's PreserveTM option is available on all LoE 366, glass. It is a removable, factory-applied protective film adhered to both interior and exterior surfaces of the glass.
- E. Weatherstripping: Shall be closed-cell foam encased in TPE film. It shall be installed as a full perimeter seal for positive protection against air and water infiltration. Additional weatherstrip is applied to the top rail and stiles for added protection against water penetration.
- F. Hardware: Casements shall include a sealed hardened steel worm gear sash operator with a folding/nesting handle. The operator will be a dyad on units under 20" wide and a dual arm on units 20" and wider. Heavy duty concealed <u>adjustable</u> hinges open to 90 degrees and have an easy detach arm. Operator and hinge components have an electrocoated polymer corrosion resistant coating. Interior hardware finish options include champagne, black, bronze, white, brass, oil-rubbed bronze, and satin nickel. The concealed, sequential locking system utilizes 1 locking point through 26" sizes, 2 locking points on 32" through 44" sizes, and 3 locking points on 50" through 74". Special egress hardware and coastal hardware are optional.
- G. Screens: Shall be fiberglass screen set in painted aluminum frame. Finish options include Champagne, White, Bronze, Black, or Wood Interior. Retractable screens are available as an option. Retractable screens will operate from the top down with a positive latch at sill. Screen head covers, side tracks, and lift rail will be finished with wood veneer, and available in Pine, Alder, or Fir species. BetterVueTM screen cloth is standard on both screen options. UltraVue screen cloth option is available on the standard screen only. Our insect screens are intended to allow air and light in and keep insects out. The screen is not intended to stop children, adults or animals from falling out an open window.
- H. Grilles: (Extra when specified) White, cinnamon, bronze, tan, ivory, hunter green, or black aluminum inner grilles (in air space) are available in 3/4" a profiled shape. Two-toned inner grilles (3/4" profiled only) are available with a white interior, and a bronze, green, tan, ivory, or black exterior. Windsorlite (WDL) simulates true divided lite, but is created by adhesively fixing the wood interior and aluminum exterior to the surfaces of the insulated glass; when ordered interior primed, the interior WDL bars will be cellular PVC. WDL is available in 7/8" and 1-1/4" standard, 5/8" putty, and 7/8" putty with standard interior. All are available with or without inner bar between the glass. Exterior bars are available in 22 standard and 20 feature colors.

CLAD CASEMENT

SPECIFICATIONS

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that there is no visible damage to the unit before installation.

3.02 INSTALLATION

- A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
- B. Install the window unit in accordance with the manufacturer's recommendations. On operating units, remove shipping blocks after unit is fully installed.
- C. Install sealant, backing material, and insulation around opening perimeter in accordance with Section 07900 and Section 07920.

3.03 ADJUSTMENT AND CLEANING

- A. Operate unit and verify that all hardware operates freely. Make any adjustments necessary.
- B. Cover the window unit to avoid damage due to spray paint, plaster, and other construction operations.
- C. Remove all visible labels and instructions.
- D. Final cleaning of glass in accordance of Section 01710

CLAD PUSH-OUT CASEMENT

SPECIFICATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Factory assembled aluminum clad wood casement push-out windows [including fixed units], glass and glazing, operable hardware, weatherstripping, insect screen, and [grilles].
- B. Anchorages, attachments, and accessories.

1.02 RELATED SECTIONS

- A. Section 01340 Shop Drawings, Product Data, and Samples.
- B. Section 01610 Delivery, Storage, and Handling.
- C. Section 01710 Final Cleaning.
- D. Section 07200 Batt and Blanket Insulation.
- E. Section 07920 Sealants and Caulking.
- F. Section 08800 Glass and Glazing.

1.03 REFERENCES

- A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
 - 1. ASTM E-283 Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
 - ASTM E-547 Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Difference.
 - 3. ASTM E-330 Structural Performance of Exterior Windows, Curtain Walls, and Doors under Uniform Static Air Pressure Difference.
- B. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA):
 - AAMA/WDMA/CSA 101/I.S.2/A440-11 North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- C. WINDOW & DOOR MANUFACTURERS ASSOCIATION (WDMA):
 - 1. WDMA I.S-4 07 Industry Standard for Water-Repellent Preservative Treatment for Millwork
- D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- E. NATIONAL FENESTRATION RATING COUNCIL (NFRC)

1.04 PERFORMANCE CRITERIA

- A. Casement units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.-2/A440-11
- B. Air leakage shall not exceed 0.30 cfm per sq.ft. of sash when tested in accordance with ASTM E-283 at 1.57 psf.
- C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
- D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E-330.

1.05 SUBMITTALS

- A. Shop drawings shall be submitted in accordance with Section 01340.
- B. Product data in the form of general catalogs, test lab reports, product performance, and warranty information shall be submitted in accordance with Section 01340.
- C. Samples showing glazing, quality of construction, and finish shall be submitted in accordance with Section 01340.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. In compliance with Section 01610, window units shall be delivered undamaged, with protective packaging and fitted with sash shipping blocks. Complete installation and finishing instructions shall be included.
- B. Store units in a clean, dry place off the ground in an upright position.

CLAD PUSH-OUT CASEMENT

SPECIFICATIONS

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Pinnacle Series Aluminum Clad Wood Casement Push-Out window units [including fixed units] as manufactured by Windsor Windows & Doors.

2.02 MATERIALS

- A. Frame: Shall be select pine treated with water repellent preservative, assembled with hardware installed. Exposed exterior portion shall be extruded aluminum sealed at corners with injected silicone and nylon corner keys. Lock and hinge side stops are face nailed. Jamb thickness shall be 1-1/4". Standard set up jamb width shall be 4-9/16" (4-1/8" basic jamb with 7/16" extender). Other jamb extension available to match finished wall thickness. Vinyl hinged nailing fin and drip cap are utilized for frame installation. Rigid aluminum nail fin and color matched drip cap option is available. Natural Alder and Fir interior option is available.
- B. Sash: Wood interior shall be select pine treated with water repellent preservative. Corners shall be mortise and tenon construction that is fastened with screws. Exterior surfaces shall consist of aluminum extrusion with lapped corners sealed with silicone and foam gaskets. Foam tape is applied to the back side of glass stop. Natural Alder and Fir interior option is available.
- C. Finish: All aluminum exterior surfaces shall be covered with a factory applied, polyester powder-coat paint in 22 standard and 20 feature colors. Anodized colors are also available.
- D. Glazing: Shall be 3/4" double pane LoE 366 insulating glass as standard, glazed with double-faced tape plus a full perimeter bead of silicone, and interior wood stops. A wide array of other glass options is offered including clear, tinted, tempered, and obscure. Cardinal's PreserveTM option is available on all LoE 366, glass. It is a removable, factory-applied protective film adhered to both interior and exterior surfaces of the glass.
- E. Weatherstripping: Shall be closed-cell foam encased in TPE film. It shall be installed as a full perimeter seal for positive protection against air and water infiltration. Additional weatherstrip is applied to the top rail and stiles for added protection against water penetration.
- F. Hardware: Casements shall include a lever-activated multi-point locking system. Hinges are concealed and adjustable, with a built in friction arm to help sash stay open in any position. Locking hardware and hinge components have an electrocoated polymer corrosion resistant coating. Interior hardware finish options include satin nickel, black, white, oil-rubbed bronze, and faux bronze. Special egress hardware and coastal hardware are optional.
- G. Screens: (Optional) Shall be retractable type with BetterVueTM screen cloth as standard. Retractable screens will operate from the top down with a positive latch at sill. Screen head covers, side tracks, and lift rail will be finished with wood veneer on both exterior and interior sides, and available in Pine, Alder, or Fir species. Our insect screens are intended to allow air and light in and keep insects out. The screen is not intended to stop children, adults or animals from falling out an open window.
- H. Grilles: (Extra when specified) White, cinnamon, bronze, tan, ivory, hunter green, or black aluminum inner grilles (in air space) are available in 3/4" a profiled shape. Two-toned inner grilles (3/4" profiled only) are available with a white interior, and a bronze, green, tan, ivory, or black exterior. Windsorlite (WDL) simulates true divided lite, but is created by adhesively fixing the wood interior and aluminum exterior to the surfaces of the insulated glass; when ordered interior primed, the interior WDL bars will be cellular PVC. WDL is available in 7/8" and 1-1/4" standard, 5/8" putty, and 7/8" putty with standard interior. All are available with or without inner bar between the glass. Exterior bars are available in 22 standard and 20 feature colors.

CLAD PUSH-OUT CASEMENT

SPECIFICATIONS

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that there is no visible damage to the unit before installation.

3.02 INSTALLATION

- A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
- B. Install the window unit in accordance with the manufacturer's recommendations. On operating units, remove shipping blocks after unit is fully installed.
- C. Install sealant, backing material, and insulation around opening perimeter in accordance with Section 07900 and Section 07920.

3.03 ADJUSTMENT AND CLEANING

- A. Operate unit and verify that all hardware operates freely. Make any adjustments necessary.
- B. Cover the window unit to avoid damage due to spray paint, plaster, and other construction operations.
- C. Remove all visible labels and instructions.
- D. Final cleaning of glass in accordance of Section 01710