

JELD-WEN.

SECTION 085213 ALUMINUM-CLAD WINDOWS JELD-WEN Custom Epic Series

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Wood Windows: **Epic Double-hung windows.**

1.2 REFERENCES

- A. Window and Door Manufacturers Association (WDMA):

1. AAMA/WDMA/CSA 101/I.S.2/A440 North American Fenestration Standard / Specification for windows, doors, and skylights (NAFS)
2. WDMA I.S.4; Industry Specification for Preservative Treatment for Millwork

- B. ASTM International (ASTM):

**** NOTE TO SPECIFIER ** In applications where hurricane resistance is not required, Delete ASTM E 1886 and E 1996 references.**

1. ASTM E 1886 - Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.
2. ASTM E 1996 - Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.

- C. National Fenestration Rating Council (NFRC):

1. NFRC 100 - Procedure for Determining Fenestration Product U-Factors.
2. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence.

**** NOTE TO SPECIFIER ** Delete Florida TAS information if project is not within the high velocity hurricane zone.**

- D. South Florida Building Code Impact Test Procedures (Miami-Dade TAS):

1. TAS 201 - Impact Test Procedures.
2. TAS 202 - Criteria for testing Impact and Non-Impact Resistant Building Envelope Components using Uniform Static Air Pressure.
3. TAS 203 - Criteria for testing Products Subject to Cyclic Wind Pressure Loading.

- E. Forest Stewardship Council® (FSC®): FSC Chain-of-Custody Certification.

1.3 SUBMITTALS

- A. Submit under provisions of Section 00 13 00 Administrative Requirements.

- B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

- C. Shop Drawings: Submit shop drawings indicating details of construction, flashings and relationship with adjacent construction.

- D. Selection Samples: For each factory-finished product specified, two complete sets of color chips representing manufacturer's full range of available finishes.

- E. Verification Samples: For each factory-finished product specified, two samples, minimum size 6 inches (150 mm) square, representing actual finishes.

- F. Quality Assurance Submittals:

1. Design Data, Test Reports: Provide manufacturer test reports indicating product compliance with indicated requirements.
2. WDMA Hallmark certification.

- G. Closeout Submittals: Refer to Section 01 70 00 Execution and Closeout Requirements Closeout Submittals.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum __ years installing similar assemblies.

B. Certifications: WDMA Hallmark certification label indicating assemblies meet the design requirements.

C. Mock-Up: Provide a mock-up for evaluation of installation techniques and workmanship.

1. Mock-ups shall incorporate surrounding construction, including wall assembly fasteners, flashing, and other related accessories installed in accordance with manufacturer's approved installation methods.
2. Do not proceed with remaining work until workmanship is approved by Architect.
3. Modify mock-up as required to produce acceptable work.
4. At Substantial Completion, approved mockups may become part of completed Work.
5. Demolish mockups and remove from site.

D. Pre-installation Meeting: Conduct pre-installation meeting on-site two weeks prior to commencement of installation.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards.

B. Deliver and store assembly materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact. Protect from damage.

1.6 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.7 WARRANTY

A. Manufacturer's Standard Warranty: Assemblies will be free from defects in materials and workmanship from the date of manufacture for the time periods indicated below:

1. Basic Product Coverage: **[Owner 20 years]** {
2. Finish on Metal Clad Exteriors: Coverage is for peeling, checking, cracking, or exhibiting excessive chalk, fade or color change.
 - a. AAMA 2605: 30 Years.
 - b. AAMA 2603/2604: 10 years.
3. Factory Interior Finish on Wood Products: 1 Year.
4. AuraLast Protection for wood products **[Commercial: 20 years]**.
 - a. Coverage is for wood decay and/or termite damage in pine wood components.
5. Glazing:
 - a. Stress Cracks: 1 Year. Applies to sealed glass units installed in windows and patio doors. Laminated glass and special glazings are excluded. Coverage includes replacement glass and skilled labor necessary to replace the glass. Stress cracks occur when, in the first year after manufacture, the glass develops a crack without sign of impact.
 - b. Accidental Glass Breakage: Applies to Products ordered with double-strength or thicker glass. Not covered: damage attributable to acts of nature (e.g. fire, hurricane, etc.), civil disorder, building settling, structural failures of walls or foundations or improper installation, construction job-site mishaps, storage, or handling. Special glazings and ImpactGard glass are not covered by this glass breakage warranty.
 - c. Triple-Glazed Glass Units: 20 Years.
 - d. Specialty Glazing: 5 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: JELD-WEN, Inc.;

Premium Window and Doo LLC 3724-a Covenant Rd. Columbia, S.C. 29204 Chris Smyrl
803-600-2432 csmryrl@pwandd.com

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 – Product Requirements.

2.2 ALUMINUM-CLAD WINDOWS - GENERAL

A. Design Requirements:

1. Compliance: Provide assemblies capable of complying with requirements indicated, based on testing manufacturer's patio doors that are representative of those specified.
2. Test Size: In compliance with requirements of AAMA/WDMA/CSA 101/ I.S.2/A440.
3. Structural Requirements: Provide assemblies complying with requirements indicated:

B. Installation Accessories:

1. Flashing: Refer to Section 07600 - Flashing and Sheet Metal.
2. Sealants: Refer to Section 07920 - Joint Sealants.
3. Sealants: Manufacturer recommended sealants maintain watertight conditions.

C. Materials:

**** NOTE TO SPECIFIER ** AuraLast® is a trademark preservative treatment by JELD-WEN and is distinguished from traditional preservation methods**

by its minimum treatment penetration of 92 percent.

1. Exterior Cladding: Extruded aluminum.
 2. Interior Wood:
 - a. Material: **AuraLast Pine**
- D. Interior Finishes for Windows:
- a. Finish: **Natural**
- E. Exterior Finishes for windows:
1. AAMA 2605 PVDF Colors
 - a. Color: **[Brilliant White]**
- ### 2.3 ALUMINUM-CLAD WINDOW ASSEMBLIES
- A. Basis of Design: Custom EPIC Series window assemblies as manufactured by JELD-WEN, Inc.
- B. Window Fabrication:
1. Double-hung windows.
 - a. Frame: Corner joints mechanically fastened.
 - b. Sash: Corner joints mortised and tenoned, glued and nailed from interior.
 - c. Glass: Mounted using silicone glazing compound on exterior, secured with interior applied profiled wood stops.
- C. Frames:
1. Material: Select kiln-dried pine AuraLast treated wood.
 2. Casement, Awning and Picture Base Frame: 3-3/8 inch (85.7 mm).
 3. Double-Hung Window Base Frame: 5-9/16 inch (141 mm).
 4. Cladding: 0.050 inch (1.27mm) extruded aluminum.
- D. Sash: Select kiln-dried pine AuraLast treated wood.
1. Cladding: **Extruded aluminum.**
 2. Sash Thickness:
 - a. Double-Hung Windows: 1-3/4 inches (44 mm).
- E. Exterior Trim:
1. Casing: **Aluminum 2 inch Brickmould**
 2. Sill Nosing: **[Standard Sill Nosing]**.
- F. Factory Applied Extension Jamb: Provide on four sides of frame interior 5/4 up to 7-1/2 inch (190.5 mm).
- G. Weatherstripping: Foam lined jamb liners forming a compression seal against sash stiles, dual durometer bulb seal between top and bottom rails of sash and frame, and bulb seal between top rail and header, and between sash meeting rails.
- H. Window Hardware:
1. Double-Hung Windows:
 - a. Balance: Compression type block and tackle.
 - b. Lock: Sash Locks (Standard).
 - 1) Color: **White**
 - c. Finger Lifts: **No Finger Lifts**
 - d. Sash retainer: Recessed top and bottom.
 - e. Jamb Liner Color: **[White]**.
 2. Fixed Windows: None.
- I. Glazing for Windows:
1. Glazing: Insulated glass.
 - a. Description: Two panes of glass utilizing continuous roll formed stainless steel spacer and dual seal sealants.
 - b. Glass Type: **[Tempered]**
 - c. Overall Nominal Thickness: 3/4 inch (19 mm).
 - d. Glass Coating: **SunStable**
 - e. Glass Protection: Plastic preserve film on interior and exterior of glass.
 - f. Neat Glass: **[No]**.
 - g. Glass Options: **Argon**
 - h. Spacer Color: **Black**
- J. Exterior Insect Screens:
1. No Screen
- K. Grilles:
1. Type: Simulated Divided Lites (SDL).
 - a. Exterior Muntins:
 - 1) Material: Extruded aluminum permanently applied to exterior of insulating glass unit.
 - 2) Profile: Putty.

- (a) Width: **7/8 inch**
- 3) Pattern: **Match Existing**
- 4) Finish: **[Brilliant White]**
- b. Grid Finish: **[Light Bronze (Standard)]**
- c. Interior Muntins:
 - 1) Material: **Clear pine permanently bonded to interior of insulating glass unit.**
 - 2) Interior Bar Profile (Options Vary Depending on Grille Selection): **[Putty].**
- d. Pattern: **Match existing**

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Inspect and prepare openings and substrates using the methods recommended by the manufacturer for achieving best result for the substrates under project conditions.
 - 1. Inspect assembly components prior to installation.
 - 2. Verify rough opening conditions are within recommended tolerances.
 - 3. Form sheet metal sill pan in accordance with manufacturer's recommendations.
 - 4. Prepare assembly components for installation in accordance with manufacturer's recommendations.
- B. Do not proceed with installation until openings and substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.
- C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.

3.2 INSTALLATION

- A. Install assemblies in accordance with manufacturer's installation guidelines and recommendations including the following.
- B. Installation of Windows with Exterior Trim: Insert windows into rough opening.
 - 1. Shim side jambs straight.
 - 2. Inspect window for square, level and plumb.
 - 3. Fasten window through exterior trim around entire window.
 - 4. Test and adjust for smooth operation of window.
 - 5. Set all nails below wood surface.
- C. Installation of Windows Without Exterior Trim: Insert windows into rough opening.
 - 1. Inspect window for square, level and plumb.
 - 2. Fasten window through jamb, shim and into rough opening jamb.
 - 3. Test and adjust for smooth operation of window.
 - 4. Set all nails below wood surface.
 - 5. Ensure seal between sill pan and inside face of windowsill.
 - 6. Install backer rod and sealant at exterior jambs and head.
 - 7. Apply backer rod and sealant on exterior below sill. Leave gaps for drainage.
 - 8. Seal interior joints between rough opening and jambs with backer rod and sealant.

3.3 FIELD QUALITY CONTROL

- A. Manufacturers' Field Services: Field inspections.

3.4 CLEANING AND PROTECTION

- A. Clean the exterior surface and glass with mild soap and water.
- B. Protect installed windows from damage.
- C. Remove and dispose of protective film from glass; touch-up, repair or replace damaged components and assemblies before Substantial Completion.

END OF SECTION