SECTION 08 52 13.25

ALUMINUM-CLAD-WOOD WINDOWS AND PATIO DOORS

JELD-WEN EPICVUE Series

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* JELD-WEN, Inc.; aluminum-clad-wood windows and patio doors.  
This section is based on the products of JELD-WEN, Inc., which is located at:  
2645 Silver Crescent Dr.  
Charlotte, NC 28273   
Toll Free Tel: 800-535-3936  
Tel: 541-850-2606  
Fax: 541-851-4333  
Email: [request info (Architectural\_Inquiries@jeld-wen.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=JELD-WEN,+Inc.&coid=33445&rep=&fax=541-851-4333&message=RE:%20Spec%20Question%20(08553jwi):%20%20&mf=)  
Web: <http://www.jeld-wen.com/en-us>   
  
[ [Click Here](http://www.arcat.com/arcatcos/cos33/arc33445.html) ] for additional information.  
  
As a JELD-WEN customer, you can count on us to provide reliable products and service. We are a comprehensive source for dependable wood, vinyl and aluminum windows; wood and wood composite interior doors; and wood, steel, engineered wood and fiberglass exterior doors.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Aluminum-Clad-Wood Windows and Patio Doors:
       1. Awning windows.
       2. Casement windows.
       3. Radius and Geometric windows:

\*\* NOTE TO SPECIFIER \*\* Direct Set windows are fixed. In-Sash windows are fixed or operable and come with hardware and screen options.

* + - * 1. Direct-Set.
        2. In-Sash.
      1. In-Swing patio doors.
      2. Out-Swing patio doors.
      3. Sliding patio doors.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. 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
    2. 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.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. 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.
     3. Shop Drawings: Submit shop drawings indicating details of construction, flashings and relationship with adjacent construction.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each factory-finished product specified, two complete sets of color chips representing manufacturer's full range of available finishes.
    2. Verification Samples: For each factory-finished product specified, two samples, minimum size 6 inches (150 mm) square, representing actual finishes.
    3. Quality Assurance Submittals:

\*\* NOTE TO SPECIFIER \*\* Delete Design Data, Test Reports submittal requirements when a propriety specification is used and can be held. Retain Design Data, Test Reports submittal requirement when other products may be submitted as substitution.

* + - 1. Design Data, Test Reports: Provide manufacturer test reports indicating product compliance with indicated requirements.
      2. WDMA Hallmark certification
    1. Closeout Submittals: Refer to Section 01 70 00 - Execution and Closeout Requirements.
  1. QUALITY ASSURANCE
     1. Installer Qualifications: Minimum 2 years installing similar assemblies.
     2. Certifications: WDMA Hallmark certification label indicating assemblies meet the design requirements.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. 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.

\*\* NOTE TO SPECIFIER \*\* Delete one of the two following subparagraphs.

* + - 1. At Substantial Completion, approved mockups may become part of completed Work.
      2. Demolish mockups and remove from site.
    1. Pre-installation Meeting: Conduct pre-installation meeting on site two weeks prior to commencement of installation.
  1. DELIVERY, STORAGE AND HANDLING
     1. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards.
     2. Deliver and store assembly materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact. Protect from damage.
  2. PROJECT CONDITIONS
     1. 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.
  3. WARRANTY
     1. 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:

\*\* NOTE TO SPECIFIER \*\* Delete product types not required.

* + - 1. Basic Product Coverage - Patio Door Units: 20 years.
      2. Basic Product Coverage - Window Units: 20 years.
      3. Clad Finishes: 20 years against peeling, checking, cracking caulk or color change.
         1. AAMA 2605 Clad Finishes: 20 years.
      4. AuraLast Protection for wood products:
         1. Owner-Occupied Single-Family Residence: as long as you own and occupy your residence.
         2. Commercial: 20 years.
         3. Coverage is for wood decay and/or termite damage in pine wood components.

\*\* NOTE TO SPECIFIER \*\* Specialty glazing includes patterned and textured glass. Insulated glass that incorporates a specialty glass may be eligible for an extended warranty but requires input from the manufacturer. Contact a JELD-WEN representative to discuss design options and their effect on the warranty. Delete glass types not required.

* + - 1. Glazing:
         1. Insulated Glass: 20 years.
         2. Triple Glazed Glass: 20 years.
         3. Laminated Glass: 5 years.
         4. Special Glazings: 5 years.

1. PRODUCTS

\*\* NOTE TO SPECIFIER \*\* Product information is proprietary to JELD-WEN. If additional products are required for competitive procurement, contact JELD-WEN for assistance in listing competitive products that may be available.

* 1. MANUFACTURERS
     1. Acceptable Manufacturer: JELD-WEN, Inc., which is located at: 2645 Silver Crescent Dr.; Charlotte, NC 28273 ; Toll Free Tel: 800-535-3936; Tel: 541-850-2606; Fax: 541-851-4333; Email: [request info (Architectural\_Inquiries@jeld-wen.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=JELD-WEN,+Inc.&coid=33445&rep=&fax=541-851-4333&message=RE:%20Spec%20Question%20(08553jwi):%20%20&mf=); Web: <http://www.jeld-wen.com/en-us>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 Product Requirements.
  1. ALUMINUM-CLAD WOOD WINDOWS AND PATIO DOORS - GENERAL
     1. Design Requirements:
        1. Compliance: Provide assemblies capable of complying with requirements indicated, based on testing manufacturer's window that are representative of those specified.

\*\* NOTE TO SPECIFIER \*\* The following subparagraph applies only to windows. Delete if not required.

* + - 1. Test Size: In compliance with requirements of ANSI/AAMA/NWWDA 101 I.S.2/NAFS.

\*\* NOTE TO SPECIFIER \*\* Include patio door design pressure (DP) ratings as part of the performance requirements. Required DP will vary dependent on project site, the location in the building and door size. Coordinate DP with the Structural Engineer. DP ratings and related patio door size and style are available at www.jeld-wen.com or by contacting a JELD-WEN representative. Insert value or refer to drawing information.

* + - 1. Structural Requirements - Provide windows capable of complying with requirements indicated:
         1. Performance Class: As indicated on drawings.
         2. Performance Class: \_\_\_\_\_\_\_\_.
         3. Performance Grade: As indicated on drawings.
         4. Performance Grade: \_\_\_\_\_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Include NFRC ratings as part of the performance requirements. NFRC ratings qualifying for the Energy Star program are based on the performance of whole assembly. Qualifying assemblies vary to fit the needs of different regions throughout the country. NFRC ratings and related JELD-WEN size and styles are available at www.jeld-wen.com or by contacting a JELD-WEN representative. Insert values or the phrase ' As scheduled and indicated on Drawings' as applicable. The following subparagraph applies only to windows. Delete if not required.

* + - 1. NFRC Requirements - Provide windows capable of complying with the following total window ratings:
         1. U-Factor: \_\_\_\_\_\_\_ in accordance with NFRC 100.
         2. Solar Heat Gain Coefficient (SHGC): \_\_\_\_\_\_\_ in accordance with NFRC 200.
         3. Visible Transmittance (VT): \_\_\_\_\_\_\_\_ in accordance with NFRC 200.
    1. Installation Accessories:

\*\* NOTE TO SPECIFIER \*\* Accessories compatible with windows, patio doors and required installation may be specified in this section or in related sections. Coordinate with related sections so as not to duplicate information.

* + - 1. Flashing: Refer to Section 07 60 00 (07600) - Flashing and Sheet Metal.

\*\* NOTE TO SPECIFIER \*\* Delete options for sealants not required.

* + - 1. Sealants: OSI Sealants by Henkel Corporation.
      2. Sealants: Refer to Section 07 92 00 Joint Sealants.
      3. Sealants: Manufacturer recommended sealants to maintain watertight conditions.
    1. Materials:
       1. Exterior Cladding: Extruded aluminum.
       2. Interior Wood:

\*\* NOTE TO SPECIFIER \*\* Delete materials not required.

* + - * 1. Material: As specified by Architect.

\*\* NOTE TO SPECIFIER \*\* Optional. AuraLast is a trademarked preservative treatment by JELD-WEN and is distinguished from traditional preservation methods by its minimum treatment penetration of 92 percent.

* + - * 1. Material: AuraLast Pine.
        2. Material: Knotty Alder.
        3. Material: Mahogany.
        4. Material: Vertical Grain Douglas Fir.
        5. Material: Reclaimed Fir.
        6. Material: Red Oak.
        7. Material: Walnut.
        8. Material: Cherry.
        9. Material: Alder.
        10. Material: White Oak.
    1. Finishes:

\*\* NOTE TO SPECIFIER \*\* Delete options for finishes not required.

* + - 1. Interior Finishes for Windows:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

* + - * 1. Finish: Natural (Standard).
        2. Finish: Primed finish.
        3. Finish: Pre-finished paint.

\*\* NOTE TO SPECIFIER \*\* Delete colors not required.

Color: As selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Ivory.

Color: Black.

Color: Dove.

Color: Gunmetal.

Color: Steele Gray.

Color: Smoke.

Color: Black Frame and Brilliant White Sash.

Color: Brilliant White Frame and Black Sash.

* + - * 1. Finish: Pre-finished stain finish.

\*\* NOTE TO SPECIFIER \*\* Delete colors not required.

Color: As selected by Architect.

Color: Cordovan.

Color: Fruitwood.

Color: Walnut.

Color: Americano.

Color: Charcoal.

Color: Kodiak.

Color: Warm Mocha.

* + - * 1. Finish: Pre-finished clear lacquer finish
      1. Exterior Finishes for Windows:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

* + - * 1. Finish: 0.050 inch (1.27 mm) thick extruded aluminum cladding with fluoropolymer, 3-Coat finish in accordance with AAMA #2605.
        2. Finish: AAMA 2605 PVDF Standard Colors.

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: Black.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Silver.

Color: Steele Gray.

Color: Dark Chocolate.

Color: Hunter Green.

Color: Heirloom White.

Color: Smoke.

Color: Bone White.

Color: Ivory.

Color: Luxury Bronze.

Color: Mocha Cream.

Color: Sea Foam.

Color: Stone.

Color: Flagstone.

Color: Cocoa.

Color: Cranberry.

Color: Surf.

Color: Moss.

Color: Stormy.

Color: Admiral.

Color: Navy.

* + - * 1. Finish: Anodized Finish.

Color: As selected by Architect.

Color: Clear Anodized.

Color: Champagne Anodized.

Color: Light Bronze Anodized.

Color: Medium Bronze Anodized.

Color: Dark Bronze Anodized.

Color: Black Anodized.

* + - 1. Interior Finishes for Patio Doors:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

* + - * 1. Finish: Natural (Standard).
        2. Finish: Primed finish.
        3. Finish: Pre-finished paint.

Color: As selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Ivory.

Color: Black.

Color: Dove.

Color: Gunmetal.

Color: Steele Gray.

Color: Smoke.

Color: Black Frame and Brilliant White Sash.

Color: Brilliant White Frame and Black Sash.

* + - * 1. Finish: Pre-finished stain finish

\*\* NOTE TO SPECIFIER \*\* Delete colors not required.

Color: As selected by Architect.

Color: Cordovan.

Color: Fruitwood.

Color: Walnut.

Color: Americano.

Color: Charcoal.

Color: Kodiak.

Color: Warm Mocha.

* + - * 1. Finish: Pre-finished clear lacquer finish.
      1. Exterior Finishes for Patio Doors:

\*\* NOTE TO SPECIFIER \*\* Standard. Delete finishes not required.

* + - * 1. Finish: AAMA 2605 PVDF Colors.

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: Black.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Silver.

Color: Steele Gray.

Color: Dark Chocolate.

Color: Hunter Green.

Color: Heirloom White.

Color: Smoke.

Color: Bone White.

Color: Ivory.

Color: Luxury Bronze.

Color: Mocha Cream.

Color: Sea Foam.

Color: Stone.

Color: Flagstone.

Color: Cocoa.

Color: Cranberry.

Color: Surf.

Color: Moss.

Color: Stormy.

Color: Admiral.

Color: Navy.

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

* + - * 1. Finish: Anodized Finish.

Color: As selected by Architect.

Color: Clear Anodized.

Color: Champagne Anodized.

Color: Light Bronze Anodized.

Color: Medium Bronze Anodized.

Color: Dark Bronze Anodized.

Color: Black Anodized.

\*\* NOTE TO SPECIFIER \*\* Delete if not required. Also delete options in Part 1 and 3 of this section corresponding to products selected. SELECT a frame color AND a sash color when specifying the sash only color option.

* 1. ALUMINUM-CLAD WOOD WINDOW ASSEMBLlES
     1. Basis for Design: Custom Series aluminum-clad-wood windows assemblies as manufactured by JELD-WEN, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete options for window type not required. Also delete options in the following paragraphs corresponding to window type selection, as described in the notes to specifier

* + - 1. Window Type: Awning Windows.
      2. Window Type: Casement Windows.
      3. Window Type: Radius and Geometric Windows.
    1. Window Fabrication:
       1. General: Aluminum cladding folded and locked at corners.

\*\* NOTE TO SPECIFIER \*\* Delete options for fabrication corresponding to window types not required.

* + - 1. Window Type: Awning Windows.
         1. Frame: Corner joints mechanically fastened.
         2. Sash: Corner joints mortised-and-tenoned.
         3. Glass: Mounted using silicone glazing compound on exterior and acrylic sealant on interior, secured with interior applied profiled wood stops.

Glazing Bead: Contemporary.

* + - 1. Window Type: Casement Windows.
         1. Frame: Corner joints mechanically fastened.
         2. Sash: Corner joints mortised-and-tenoned.
         3. Glass: Mounted using silicone glazing compound on exterior and acrylic sealant on interior, secured with interior applied profiled wood stops.

Glazing Bead: Contemporary.

* + - 1. Window Type: Radius and Geometric Direct Set Windows.
         1. Frame: Corner joints are mechanically fastened.
         2. Glass: Mounted using silicone glazing compound on exterior and acrylic sealant on interior, secured with interior applied profiled wood stops.

Glazing Bead: Contemporary.

* + - 1. Window Type: Radius and Geometric In-Sash Windows.
         1. Frame: Corner joints mechanically fastened.

\*\* NOTE TO SPECIFIER \*\* Contact a JELD-WEN representative to verify if window sizes specified are standard or custom.

* + - * 1. Sash: Standard Size Unit. Corner joints mortised-and-tenoned.
        2. Sash: Custom Size Unit. Mitered corner joints.
        3. Glass: Mounted using silicone glazing compound on exterior and acrylic sealant on interior, secured with interior applied profiled wood stops.

Glazing Bead: Contemporary.

* + 1. Frames:
       1. Kiln-dried pine AuraLast treated wood.
       2. Cladding: 0.050 inch (1.26 mm) extruded aluminum.
       3. Jamb Width: Casement, Awning and Geometric units: 3-3/8 inches (86 mm).
    2. Sashes: Kiln-dried pine AuraLast treated wood.
       1. Cladding: 0.060 inch (1.6 mm) roll-formed aluminum.

\*\* NOTE TO SPECIFIER \*\* DELETE sash thickness for units not project specific.

* + - 1. Sash Thickness:
         1. Awning Windows: 2-3/32 inch (53mm).
         2. Casement Windows: 2-3/32 inch (53mm).
         3. Radius and Geometric In-Sash Windows: 2-3/32 inch (53mm).
    1. Exterior Trim:

\*\* NOTE TO SPECIFIER \*\* SELECT optional casing when construction conditions or aesthetics require inclusion. Delete trim options not project specific.

* + - 1. Casing: Folding Nail Flange (Standard).
      2. Casing: Nail Flange.
      3. Casing: 3-1/2 inch (88.9 mm) Flat Casing.
      4. Casing: 2 inch (50.8 mm) Flat Casing.
      5. Casing: No Exterior Trim.
      6. Casing: Aluminum Kenison Casing.

\*\* NOTE TO SPECIFIER \*\* Delete options for sill nosings not required.

* + - 1. Sill Nosing: 1/2 inch (13 mm) Standard.
      2. Sill Nosing: 2 15/32 inch (60 mm).
    1. Factory Applied Extension Jambs: Provide at all four sides of frame interior

\*\* NOTE TO SPECIFIER \*\* Delete Factory Applied Extensions Jambs for window styles not project specific or when construction does not require extension.

* + - 1. Awning Windows: 4/4 for up to 7-15/16 inch (202 mm).
      2. Awning Windows: 5/4 for up to 12-1/2 inch (317 mm).
      3. Awning Windows: 5/4 to 4/4 Reveal for up to 9-1/8 inch (232 mm).
      4. Casement Windows: 4/4 for up to 7-15/16 inch (202 mm).
      5. Casement Windows: 5/4 for up to 12-1/2 inch (317 mm).
      6. Casement Windows: 5/4 to 4/4 Reveal for up to 9-1/8 inch (232 mm).
      7. Radius and Geometric Windows (Direct Set): 4/4 for up to 7-9/32 inch (201 mm).
      8. Radius and Geometric Windows (Direct Set): 5/4 for up to 12-15/32 inch (317 mm).
      9. Radius and Geometric Windows (Direct Set): 5/4 to 4/4 Reveal for up to 9-3/32 inch (231 mm).
    1. Weatherstripping:

\*\* NOTE TO SPECIFIER \*\* DELETE Weatherstripping for window styles not project specific.

* + - 1. Awning Windows: Continuous foam lined bulb seal between sash interior and all four sides of frame with secondary bulb seal between sash edge and frame
      2. Casement Windows: Continuous foam lined bulb seal between sash interior and all four sides of frame with secondary bulb seal between sash edge and frame.
      3. Radius and Geometric Windows: Continuous foam lined bulb seal between sash interior and all four sides of frame with secondary bulb seal between sash edge and frame.

\*\* NOTE TO SPECIFIER \*\* In applications where both operable and non-operable casement or awning windows are desired, to maintain the aesthetic profile specify "stationary" awning or casement units.

* + 1. Window Hardware:

\*\* NOTE TO SPECIFIER \*\* Specifier needs to carefully select desired options, many have nested options throughout.   
\*\* NOTE TO SPECIFIER \*\* Due to corrosive nature of coastal environments, SPECIFY stainless steel hardware (coastal option) for installations located within 2 miles of the coast.

* + - 1. Awning Windows:

\*\* NOTE TO SPECIFIER \*\* Delete hinges not required.

* + - * 1. Hinges: Corrosion resistant steel.
        2. Hinges: Coastal stainless steel.

\*\* NOTE TO SPECIFIER \*\* Delete operator not required.

* + - * 1. Operator: Steel roto gear with heavy gauge scissor operating arm.
        2. Operator: Coastal stainless steel roto gear with heavy gauge scissor operating arm.
        3. Lock: Concealed.

\*\* NOTE TO SPECIFIER \*\* Delete handle profiles not required.

* + - * 1. Handle Profile: Manual Folding Crank (Standard).

Finish: As selected by Architect.

Finish: White (Standard).

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Polished Chrome.

Finish: Brushed Chrome.

Finish: Oil-Rubbed Bronze.

Finish: Gloss Black.

Finish: Matte Black.

Finish: Satin Nickel.

* + - * 1. Handle Profile: Round Handle.

\*\* NOTE TO SPECIFIER \*\* Delete finish not required.

Finish: As selected by Architect.

Finish: White (Standard).

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Polished Chrome.

Finish: Brushed Chrome.

Finish: Oil-Rubbed Bronze.

Finish: Gloss Black.

Finish: Satin Nickel.

* + - 1. Casement Windows:

\*\* NOTE TO SPECIFIER \*\* Delete hinges not required.

* + - * 1. Hinges: Corrosion resistant steel.
        2. Hinges: Corrosion resistant Coastal, stainless steel.

\*\* NOTE TO SPECIFIER \*\* Delete operator not required.

* + - * 1. Operator: Hardened steel worm gears and dual action heavy gauge steel operating arm (Standard).
        2. Operator: Hardened Coastal, stainless steel worm gears and dual action heavy gauge stainless steel operating arm.
        3. Lock: Concealed.

\*\* NOTE TO SPECIFIER \*\* Delete handle profiles not required.

* + - * 1. Handle Profile: Manual Folding Crank (Standard).

Finish: As selected by Architect.

Finish: White (Standard).

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Polished Chrome.

Finish: Brushed Chrome.

Finish: Oil-Rubbed Bronze.

Finish: Gloss Black.

Finish: Matte Black.

Finish: Satin Nickel.

* + - * 1. Handle Profile: Round Handle.

\*\* NOTE TO SPECIFIER \*\* Delete finish not required.

Finish: As selected by Architect.

Finish: White (Standard).

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Polished Chrome.

Finish: Brushed Chrome.

Finish: Oil-Rubbed Bronze.

Finish: Gloss Black.

Finish: Satin Nickel.

* + - * 1. Handle Profile: No Handle.
      1. Radius and Geometric In-Sash Windows:

\*\* NOTE TO SPECIFIER \*\* Delete hinges not required.

* + - * 1. Hinges: Corrosion resistant steel (Standard).
        2. Hinges: Coastal, stainless steel.
        3. Hinges: Stainless steel leaf for operating radius and geometric sash only.

\*\* NOTE TO SPECIFIER \*\* Delete operator not required.

* + - * 1. Operator: Hardened steel worm gears and dual action heavy gauge steel operating arm (Standard).
        2. Operator: Coastal stainless worm gears and dual action heavy gauge steel operating arm.
        3. Operator: Single arm operator with roto handle for operating octagon only.
        4. Lock: Concealed.

\*\* NOTE TO SPECIFIER \*\* Delete handle profiles not required.

* + - * 1. Handle Profile: Manual Folding Crank (Standard).

Finish: As selected by Architect.

Finish: White (Standard).

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Polished Chrome.

Finish: Brushed Chrome.

Finish: Oil-Rubbed Bronze.

Finish: Gloss Black.

Finish: Matte Black.

Finish: Satin Nickel.

* + - * 1. Handle Profile: Round handle.

\*\* NOTE TO SPECIFIER \*\* Delete finish not required.

Finish: As selected by Architect.

Finish: White (Standard).

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Polished Chrome.

Finish: Brushed Chrome.

Finish: Oil-Rubbed Bronze.

Finish: Gloss Black.

Finish: Satin Nickel.

* + - * 1. Handle Profile: No Handle.
      1. Radius and Geometric: Direct Set Windows: None.

\*\* NOTE TO SPECIFIER \*\* Various types of glass are available. The most common types have been included here. Contact a JELD-WEN representative when other options are required. Reflective glare from glazing has been found to affect the beach nesting of turtles in coastal environments. Some governing authorities require the use of turtle glass which uses tinted glass to achieve an industry-approved, inside-to-outside visible light transmittance value of 45 percent or less (visible spectrum = 400 to 700 nanometers). Verify the requirements for turtle glass with local authorities in coastal environments. Laminated glass uses a vinyl interlayer to provide added security against impact, comfort with higher STC ratings.

* + 1. Glazing for Windows:

\*\* NOTE TO SPECIFIER \*\* Delete options for glazing type and associated subparagraphs not required.

* + - 1. Glazing Type: Insulated glass.
         1. Description: Two panes of glass utilizing continuous roll formed stainless steel spacer and dual seal sealants.

\*\* NOTE TO SPECIFIER \*\* Delete options for strength not required.

* + - * 1. Strength: Annealed (Standard).
        2. Strength: Tempered (Meets CA Urban Fire Code).
        3. Strength: Tempered In/Annealed Out (Meets CA Urban Fire Code).
        4. Overall Nominal Thickness: Awning, Casement, Radius and Geometric - In-Sash: 15/16 inch (23.8 mm).
        5. Overall Nominal Thickness: Geometric and Radius - Direct-Set: 3/4 inch (19 mm).

\*\*\* NOTE TO SPECIFIER \*\* Delete glass coating not required.

* + - * 1. Glass Coating: As selected by Architect.
        2. Glass Coating: Low-E 366 (Standard).
        3. Glass Coating: Low-E.
        4. Glass Coating: Low-E 180.
        5. Glass Coating: Low-E EC.
        6. Glass Coating: Low-E EC (i89 In/366 Out).
        7. Glass Protection: Plastic preserve film on interior and exterior of glass.

\*\* NOTE TO SPECIFIER \*\* Argon option is only available with Low-E coating and cannot be used with capillary tubes. Delete air space gas not required. Installations at elevations above 4,000 feet Mean Sea Level require glazing known as High Altitude glazing with capillary tubes to equalize environmental stress.

* + - * 1. Air Space: Argon (Standard).
        2. Air Space: High Altitude (Above 4000 Foot Elevation).
      1. Glazing Type: Triple Glazing.

\*\* NOTE TO SPECIFIER \*\* Delete thickness not required.

* + - * 1. Overall Nominal Thickness: 1/8 inch (3 mm).
        2. Overall Nominal Thickness: 3/16 inch (7 mm).
        3. Strength: Annealed (Standard).
        4. Strength: Tempered (Meets CA Urban Fire Code).

\*\* NOTE TO SPECIFIER \*\* Delete type not required.

* + - * 1. Glass Coating: As selected by Architect.
        2. Glass Coating: Low-E (Standard).
        3. Glass Coating: Low-E Obscure.
        4. Glass Coating: Low-E Rain.
        5. Glass Coating: Low-E Glue Chip.
        6. Glass Coating: Low-E Seedy Reamy.

\*\* NOTE TO SPECIFIER \*\* Interior insect screens are available for awning, casement and radius and geometric windows. Delete if not required.

* + 1. Interior Insect Screens:

\*\* NOTE TO SPECIFIER \*\* Delete for material not required.

* + - 1. Material: Black UltraVue fiberglass screen cloth (19 x 19 mesh) set in a painted roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Brilliant White.

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: French Vanilla.

Finish: Silver.

Finish: Steele Gray.

Finish: Dark Chocolate.

Finish: Black.

* + - 1. Material: Black UltraVue fiberglass screen cloth (19 x 19 mesh) set in a wood veneer roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Pine.

Finish: Knotty Alder.

Finish: Mahogany.

Finish: Fir.

Finish: Red Oak.

Finish: Walnut.

Finish: Cherry.

Finish: White Oak.

Finish: Alder.

* + - 1. Material: Charcoal (Standard) aluminum screen cloth (18 by 16 mesh) set in painted roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Brilliant White.

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: French Vanilla.

Finish: Silver.

Finish: Steele Gray.

Finish: Dark Chocolate.

Finish: Black.

* + - 1. Material: Silver aluminum screen cloth (18 by 16 mesh) set in painted roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Brilliant White.

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: French Vanilla.

Finish: Silver.

Finish: Steele Gray.

Finish: Dark Chocolate.

Finish: Black.

* + - 1. Material: Bronze aluminum screen cloth (18 by 16 mesh) set in painted roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Brilliant White.

Finish: Desert Sand.

Finish: Chestnut Bronze.

Finish: French Vanilla.

Finish: Silver.

Finish: Steele Gray.

Finish: Dark Chocolate.

Finish: Black.

* + - 1. Material: Charcoal (Standard) aluminum screen cloth (18 by 16 mesh) set in wood veneer roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Pine.

Finish: Knotty Alder.

Finish: Mahogany.

Finish: Fir.

Finish: Red Oak.

Finish: Walnut.

Finish: Cherry.

Finish: White Oak.

Finish: Alder.

* + - 1. Material: Silver aluminum screen cloth (18 by 16 mesh) set in wood veneer roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Pine.

Finish: Knotty Alder.

Finish: Mahogany.

Finish: Fir.

Finish: Red Oak.

Finish: Walnut.

Finish: Cherry.

Finish: White Oak.

Finish: Alder.

* + - 1. Material: Bronze aluminum screen cloth (18 by 16 mesh) set in wood veneer roll formed aluminum frame.
         1. Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Finish: As selected by Architect.

Finish: Pine.

Finish: Knotty Alder.

Finish: Mahogany.

Finish: Fir.

Finish: Red Oak.

Finish: Walnut.

Finish: Cherry.

Finish: White Oak.

Finish: Alder.

\*\* NOTE TO SPECIFIER \*\* SDL Grilles are not available for textured glass. Select grilles, profiles and widths based on the desired aesthetic appearance of the window. Delete if not required.

* + 1. Grilles:

\*\* NOTE TO SPECIFIER \*\* Delete types not required.

* + - 1. Type: Simulated Divided Lites (SDL).
         1. Exterior Muntins:

Material: Extruded aluminum permanently applied to exterior of insulating glass unit.

\*\* NOTE TO SPECIFIER \*\* Delete profile type not required.

Profile: Putty.

\*\* NOTE TO SPECIFIER \*\* Delete widths not required.

Width: 5/8 inch (15.9 mm).

Width: 7/8 inch (22 mm).

Width: 1-1/8 inch (28.5 mm).

Width: 1-3/8 inch (34.9 mm).

Width: 2-5/16 inch (59 mm).

Profile: Contemporary.

Width: 5/8 inches (15.9 mm).

Width: 7/8 inches (22 mm).

Width: 1 1/8 inches (28.5 mm).

Width: 1 3/8 inches (34.9 mm).

Width: 2-5/16 inches (59 mm).

Pattern: As selected by Architect.

Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: Black.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Silver.

Color: Steele Gray.

Color: Dark Chocolate.

Color: Hunter Green.

Color: Heirloom White.

Color: Smoke.

Color: Bone White.

Color: Ivory.

Color: Luxury Bronze.

Color: Mocha Cream.

Color: Sea Foam.

Color: Stone.

Color: Flagstone.

Color: Cocoa.

Color: Cranberry.

Color: Surf.

Color: Moss.

Color: Stormy.

Color: Admiral.

Color: Navy.

\*\* NOTE TO SPECIFIER \*\* Internal shadow bar will give the appearance of a true divided lite and is standard on all SDL units. Internal shadow bar may be deleted at the design professional's option. Delete internal shadow bar if not required.

* + - * 1. Internal Shadow Bar:

Light Bronze (Standard).

Silver.

\*\* NOTE TO SPECIFIER \*\* Delete types not required.

* + - * 1. Interior Spacer Bars:

Black (Standard).

Silver.

Gray.

* + - * 1. Interior Muntins:

\*\* NOTE TO SPECIFIER \*\* Delete material not required.

Material: Pine permanently bonded to interior of insulating glass unit (Standard).

Material: Alder permanently bonded to interior of insulating glass unit.

Material: Fir permanently bonded to interior of insulating glass unit.

Material: Mahogany permanently bonded to interior of insulating glass unit.

\*\* NOTE TO SPECIFIER \*\* Delete profile not required.

Profile: Putty.

Profile: Contemporary.

* + - 1. Grilles Between the Glass (GBG):
         1. Material: Made of roll formed aluminum suspended within the air cavity.

\*\* NOTE TO SPECIFIER \*\* Utilize flat for a narrow aesthetic and a contour profile for a wider aesthetic. Delete profile not required.

* + - * 1. Profile: Flat.

Width: 5/8 inches (15.9 mm).

Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Dark Chocolate.

Color: Black.

* + - * 1. Profile: Contour.

\*\* NOTE TO SPECIFIER \*\* Delete width not required.

Width: 23/32 inches (18.25 mm)

Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Black.

Color: White Ext./Desert Sand Int.

Color: Desert Sand Ext/White Int.

Color: White Ext./Chestnut Bronze Int.

Color: Chestnut Bronze Ext/White Int.

Color: White Ext./Black Int.

Color: Black Ext./White Int.

Color: White Ext/French Vanilla Int.

Color: French Vanilla Ext./White Int.

Color: White Ext./Hartford Green Int.

Color: Hartford Green Ext./White Int.

Color: White Ext./Mesa Red Int.

Color: Mesa Red Ext./White Int.

Width: 1 inch (25.4 mm)

Finish:

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Dark Chocolate.

Color: Black.

Color: White Ext./Desert Sand Int.

Color: Desert Sand Ext./White Int.

* + - * 1. Pattern: As scheduled and indicated on Drawings.
  1. ALUMINUM-CLAD WOOD PATIO DOOR ASSEMBLlES
     1. Basis of Design: Custom Series aluminum-clad-wood patio door assemblies EPICVUE SERIES as manufactured by JELD-WEN, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete options for patio door type not required. Also delete options in the following paragraphs corresponding to patio door type selection, as described in the notes to specifier.

* + - 1. Patio Door Type: Out-swinging patio doors, wood construction.
      2. Patio Door Type: In-swinging patio doors, wood construction.
      3. Patio Door Type: Sliding patio doors, wood construction.
    1. Patio Door Fabrication:
       1. Panels: Select kiln-dried pine AuraLast treated wood and engineered wood substrate core.
       2. Glass: Mounted using silicone glazing compound on exterior and acrylic sealant on interior.
       3. Cladding: Mitered corner joints.
    2. Frames:
       1. Material: Select Kiln-dried pine AuraLast treated wood.
       2. Jamb Width: 4-9/16 inch (116 mm).

\*\* NOTE TO SPECIFIER \*\* Delete frames not required.

* + - 1. Radius Frames: 90 inches (2286 mm).
      2. Radius Frames: 31-5/16 inches (795 mm).
      3. Radius Frames: 37-5/16 inches (948 mm).
      4. Cladding: 0.050 inch (1.27 mm) to 0.70 (1.8 mm) extruded aluminum.

\*\* NOTE TO SPECIFIER \*\* Delete if no swinging door panels.

* + 1. Swinging Door Panels:
       1. Materials: Select kiln-dried pine AuraLast treated wood and engineered wood substrate core.
       2. Cladding: 0.050 inch (1.27 mm) to 0.70 (1.8 mm) extruded aluminum.

\*\* NOTE TO SPECIFIER \*\* Delete thickness not required.

* + - 1. Thickness: 1-3/4 inch (44.5 mm).
      2. Thickness: 2-1/4 inch (56 mm).
      3. Stiles: Narrow 4 inches (101.6 mm).

\*\* NOTE TO SPECIFIER \*\* Delete type not required.

* + - 1. Bottom Rail: Narrow 4 inches (101.6 mm).
      2. Bottom Rail: Standard 6-5/8 (168.3 mm).
      3. Bottom Rail: Wide 11 inch (279.4 mm).
      4. Radius Top Rail:
         1. None (Standard).
         2. Radius Top Rail.

\*\* NOTE TO SPECIFIER \*\* Delete if no sliding door panels.

* + 1. Sliding Door Panels:
       1. Materials: Select kiln-dried pine AuraLast treated wood and engineered wood substrate core.
       2. Cladding: 0.050 inch (1.27 mm) to 0.70 (1.8 mm) extruded aluminum.
       3. Thickness: 1-3/4 inches (44.5 mm).

\*\* NOTE TO SPECIFIER \*\* Delete stiles not required.

* + - 1. Stiles: Narrow 2-3/4 inches (69.8 mm).
      2. Stiles: Wide 4-5/8 inch (117.5 mm).

\*\* NOTE TO SPECIFIER \*\* Delete rail not required.

* + - 1. Rail: Narrow 2-3/4 inches (69.8 mm).
      2. Rail: Wide 4-5/8 inch (117.5 mm).
    1. Exterior Trim for Swing Doors:

\*\* NOTE TO SPECIFIER \*\* Select optional casing when construction conditions or aesthetics require inclusion. Delete casing not required.

* + - 1. Casing: Folding Nail Flange (Standard).
      2. Casing: Nail Flange.
      3. Casing: 3-1/2 inch (88.9 mm) Flat Casing.
      4. Casing: 2 inch (50.8 mm) Flat Casing.
      5. Casing: No Exterior Trim.
      6. Casing: Aluminum Kenison Casing.
    1. Exterior Trim for Sliding Doors:

\*\* NOTE TO SPECIFIER \*\* Select optional casing when construction conditions or aesthetics require inclusion. Delete casing not required.

* + - 1. Casing: Nail Fin (Standard).
      2. Casing: No Drip Cap/No Nail Fin.
      3. Casing: Aluminum 3-1/2 inch (88.9 mm) Flat Casing.
      4. Casing: Aluminum 2 inch (50.8 mm) Flat Casing.
      5. Casing: Aluminum Kenison Casing.
    1. Extension Jambs: Factory applied on all four sides of frame interior, in wall depths up to 6-9/16 inches (304.8 mm).
    2. Weatherstripping:

\*\* NOTE TO SPECIFIER \*\* Delete weatherstripping options not required.

* + - 1. Sliding: Foam filled vinyl wrapped strips at head and side jambs, Polypropylene pile-sealing strip at bottom of operating panel, Vinyl interlocks and compressible foam filled bulbs at meeting stiles.
      2. Out-Swing Patio Door: Continuous dual foam filled bulb seal compressed between exterior of panel and all four sides of frame.
      3. In-Swing Patio Door: Continuous dual foam filled bulb seal compressed between exterior of panel and all four sides of frame.
    1. Hardware:

\*\* NOTE TO SPECIFIER \*\* Delete options for sliding doors not required.

* + - 1. Sliding Doors:
         1. Sliding System: Steel ball bearing tandem rollers in heavy duty housing with cam type slip proof height adjustment (Standard).
         2. Sliding System: Stainless Steel ball bearing tandem rollers in heavy duty housing with cam type slip proof height adjustment (Coastal Application).

\*\* NOTE TO SPECIFIER \*\* Delete options for locks not required.

* + - * 1. Locks: Single Point (Standard).
        2. Locks: Multi Point.

\*\* NOTE TO SPECIFIER \*\* Delete options for handle sets not required.

* + - * 1. Handle Set: Harleston Traditional (Standard).
        2. Handle Set: Whitby Contemporary.
        3. Handle Set: Belmar Transitional.
        4. Handle Set: Contemporary.
        5. Handle Set: Premium.
        6. Handle Set: Legacy.
        7. Handle Set: No Handle.

\*\* NOTE TO SPECIFIER \*\* Delete finishes not required.

* + - * 1. Finish for Harleston Traditional, Whitby Contemporary and Belmar Transitional handle sets:

Finish: White (Standard).

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Satin Nickel.

Finish: Oil-Rubbed Bronze.

Finish: Brushed Brass.

Finish: Matte Black.

* + - * 1. Finish for Premium, Contemporary and Legacy handle sets:

As selected by Architect.

As selected from manufacturer's standard offering.

\*\* NOTE TO SPECIFIER \*\* Delete options for sills not required.

* + - * 1. Sill: Tan colored pultruded fiberglass with solid oak interior trim and stainless steel track cap.
        2. Sill: Black colored pultruded fiberglass with solid oak interior trim and stainless steel track cap.
        3. Sill Pan: Molded ABS plastic sill pan.
      1. Swinging Doors:

\*\* NOTE TO SPECIFIER \*\* Delete hinge options not required.

* + - * 1. Hinges: Adjustable 4x4 heavy gauge solid brass with stainless steel pins (Standard).
        2. Hinges: Standard hinges.
        3. Hinges: Ball Bearing Hinge.
        4. Hinges: 4-1/2 inches (114 mm) ball bearing hinges (square corners).

\*\* NOTE TO SPECIFIER \*\* Delete options for locks not required.

* + - * 1. Locks: Multi Point (Standard).
        2. Locks: Single Point.
        3. Locks: Multi Point Keyed Alike.
        4. Locks: Single Point Keyed Alike.

\*\* NOTE TO SPECIFIER \*\* Delete options for handle sets not required.

* + - * 1. Handle Set: Harleston Traditional (Standard).
        2. Handle Set: Whitby Contemporary.
        3. Handle Set: Belmar Transitional.
        4. Handle Set: Premium.
        5. Handle Set: Contemporary.
        6. Handle Set: Legacy.
        7. Handle Set: No Handle.
        8. Finish for Harleston Traditional, Whitby Contemporary and Belmar Transitional handle sets:

Finish: White (Standard).

Finish: Chestnut Bronze.

Finish: Polished Brass.

Finish: Antique Brass.

Finish: Satin Nickel.

Finish: Oil-Rubbed Bronze.

Finish: Brushed Brass.

Finish: Matte Black.

* + - * 1. Finish for Premium, Contemporary and Legacy handle sets:

As selected by Architect.

As selected from manufacturer's standard offering.

* + - * 1. Sill: Dark bronze anodized aluminum with interior oak trim and adjustable oak threshold in combination with vinyl fin-and-bulb door sweep.
        2. Sill Pan: Provided by others.

\*\* NOTE TO SPECIFIER \*\* Various types of glass are available. The most common types have been included here. Contact a JELD-WEN representative when other options are required. Reflective glare from glazing has been found to affect the beach nesting of turtles in coastal environments. Some governing authorities require the use of turtle glass which uses tinted glass to achieve an industry-approved, inside-to-outside visible light transmittance value of 45 percent or less (visible spectrum = 400 to 700 nanometers). Verify the requirements for turtle glass with local authorities in coastal environments.

* + 1. Glazing for Patio Doors:
       1. Sliding Patio Doors:
          1. Glazing Type: Insulated glass.

Description: Two panes of tempered glass utilizing a continuous roll formed stainless steel spacer and dual seal sealant.

Strength: Tempered (Meets CA Urban Fire Code).

Overall Nominal thickness: 3/4 inch (19 mm).

\*\* NOTE TO SPECIFIER \*\* Delete glass coatings not required.

Glass Coating: As selected by Architect.

Glass Coating: Low-E 366 (Standard).

Glass Coating: Low-E.

Glass Coating: Low-E 180.

Glass Coating: Low-E EC.

Glass Coating: Low-E EC 366 (i89/366 Out).

Glass Protection: Plastic preserve film on interior and exterior of glass.

\*\* NOTE TO SPECIFIER \*\* Argon option is only available with Low-E coating and cannot be used with capillary tubes. Delete air space gas not required. Installations at elevations above 4,000 feet Mean Sea Level require glazing known as High Altitude glazing with capillary tubes to equalize environmental stress.

Air Space: Argon (Standard).

Air Space: High Altitude (Above 4000 Foot Elevation).

* + - 1. Swinging Patio Doors:
         1. Glazing Type: Insulated Wet Interior Glaze.

Description: Two panes of tempered glass utilizing a continuous roll formed stainless steel spacer and dual seal sealant.

Overall Nominal thickness: 3/4 inch (19 mm).

\*\* NOTE TO SPECIFIER \*\* Delete glass coatings not required.

Glass Coating: As selected by Architect.

Glass Coating: Low-E 366 Tempered (Standard).

Glass Coating: Low-E Tempered.

Glass Coating: Low-E 180 Tempered.

Glass Coating: Low-E EC Tempered.

Glass Protection: Plastic preserve film on interior and exterior of glass.

\*\* NOTE TO SPECIFIER \*\* Argon option is only available with Low-E coating and cannot be used with capillary tubes. Delete air space gas not required. Installations at elevations above 4,000 feet Mean Sea Level require glazing known as High Altitude glazing with capillary tubes to equalize environmental stress.

Air Space: Argon (Standard).

Air Space: High Altitude (Above 4000 Foot Elevation).

* + - * 1. Glazing Type; Single Wet Interior Glaze.

Strength: Clear Tempered and Laminated Meets CA Urban Fire Code.

\*\* NOTE TO SPECIFIER \*\* SDL Grilles are not available for textured glass. Select grilles, profiles and widths based on the desired aesthetic appearance of the window. Delete if not required.

* + 1. Grilles:

\*\* NOTE TO SPECIFIER \*\* Delete types not required.

* + - 1. Type: Simulated Divided Lites (SDL).
         1. Exterior Muntins:

Material: Roll-formed aluminum permanently applied to exterior of insulating glass unit.

Profile: Putty.

\*\* NOTE TO SPECIFIER \*\* Delete widths not required.

Width: 5/8 inch (15.9 mm).

Width: 7/8 inch (22 mm).

Width: 1-1/8 inches (28.5 mm).

Width: 1-3/8 inches (34.9 mm).

Width: 2-5/16 inches (59 mm).

Profile: Contemporary.

Width: 5/8 inch (15.9 mm).

Width: 7/8 inch (22 mm).

Width: 1 1/8 inches (28.5 mm).

Width: 1 3/8 inches (34.9 mm).

Width: 2-5/16 inches (59 mm).

Pattern: As selected by Architect.

Finish:

Color: As Selected by Architect.

Color: Brilliant White (Standard).

Color: Desert Sand.

Color: Chestnut Bronze.

Color: Black.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Silver.

Color: Steele Gray.

Color: Dark Chocolate.

Color: Hunter Green.

Color: Heirloom White.

Color: Smoke.

Color: Bone White.

Color: Ivory.

Color: Luxury Bronze.

Color: Mocha Cream.

Color: Sea Foam.

Color: Stone.

Color: Flagstone.

Color: Cocoa.

Color: Cranberry.

Color: Surf.

Color: Moss.

Color: Stormy.

Color: Admiral.

Color: Navy.

\*\* NOTE TO SPECIFIER \*\* Internal shadow bar will give the appearance of a true divided lite and is standard on all SDL units. Internal shadow bar may be deleted at the design professional's option. Delete internal shadow bar if not required.

* + - * 1. Internal Shadow Bar:

Finish: Light Bronze (Standard).

Finish: Silver.

* + - * 1. Interior Spacer Bars:

Finish: Black (Standard).

Finish: Silver.

Finish: Gray.

* + - * 1. Interior Muntins:

\*\* NOTE TO SPECIFIER \*\* Delete material not required.

Material: Pine permanently bonded to interior of insulating glass unit (Standard).

Material: Alder permanently bonded to interior of insulating glass unit.

Material: Fir permanently bonded to interior of insulating glass unit.

Material: Mahogany permanently bonded to interior of insulating glass unit.

\*\* NOTE TO SPECIFIER \*\* Delete profile not required.

Profile: Putty.

Profile: Contemporary.

* + - 1. Grilles Between the Glass (GBG):
         1. Material: Made of extruded aluminum suspended within the air cavity.

\*\* NOTE TO SPECIFIER \*\* Utilize flat for a narrow aesthetic and a contour profile for a wider aesthetic. Delete profile not required.

* + - * 1. Profile: Flat.

Width: 5/8 inch (15.9 mm).

Finish:

Color: As Selected by Architect.

Color: Brilliant White (Standard).

Color: Desert Sand.

Color: Chestnut Bronze.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Dark Chocolate.

Color: Black.

* + - * 1. Profile: Contour.

\*\* NOTE TO SPECIFIER \*\* Delete width not required.

Width: 23/32 inch (18.25 mm).

Finish:

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Black.

Color: White Ext./Desert Sand Int.

Color: Desert Sand Ext/White Int.

Color: White Ext./Chestnut Bronze Int.

Color: Chestnut Bronze Ext/White Int.

Color: White Ext./Black Int.

Color: Black Ext./White Int.

Color: White Ext/French Vanilla Int.

Color: French Vanilla Ext./White Int.

Color: White Ext./Hartford Green Int.

Color: Hartford Green Ext./White Int.

Color: White Ext./Mesa Red Int.

Color: Mesa Red Ext./White Int.

Width: 1 inch (25.4 mm).

Finish:

Color: As Selected by Architect.

Color: Brilliant White.

Color: Desert Sand.

Color: Chestnut Bronze.

Color: French Vanilla.

Color: Hartford Green.

Color: Mesa Red.

Color: Dark Chocolate.

Color: Black.

Color: White Ext./Desert Sand Int.

Color: Desert Sand Ext./White Int.

* + - * 1. Pattern: As scheduled or indicated on Drawings.

1. EXECUTION
   1. EXAMINATION AND PREPARATION
      1. 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.
      2. 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.
      3. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
   2. INSTALLATION
      1. Install assemblies in accordance with manufacturer's installation guidelines and recommendations including the following.

\*\* NOTE TO SPECIFIER \*\* The following paragraph is for use with window units with nailing fins. Delete if not required.

* + 1. Installation of Windows With Nailing Fins: Insert windows into rough opening.
       1. Shim side jambs straight.
       2. Inspect window for square, level and plumb.
       3. Fasten window through nailing fins around entire window.
       4. Test and adjust for smooth operation of window.
       5. Set all nails below wood surface.

\*\* NOTE TO SPECIFIER \*\* The following paragraph is for use with patio door units with nailing fins. Delete if not required.

* + 1. Installation of Patio Doors With Nailing Fins: Insert patio doors into rough opening.
       1. Shim side jambs straight.
       2. Inspect patio door for square, level and plumb.
       3. Fasten patio door through nailing fins around entire patio door.
       4. Test and adjust for smooth operation of patio door.
  1. FIELD QUALITY CONTROL
     1. Manufacturers' Field Services: Perform field inspections as recommended by manufacturer.
  2. CLEANING AND PROTECTION
     1. Clean the exterior surface and glass with mild soap and water.
     2. Protect installed windows from damage.
     3. Remove and dispose of protective film from glass; touch-up, repair or replace damaged components and assemblies before Substantial Completion.

END OF SECTION