SECTION 08 14 00

WOOD DOORS

(ANDERSEN® ARCHITECTURAL COMMERCIAL DOORS AND SIDELIGHTS)

PART 1 - GENERAL

SPECIFIER NOTE: DATA CONTAINED IN THIS GUIDE SPEC IS ACCURATE AS OF AUGUST 2007. DUE TO ONGOING PRODUCT CHANGES, THIS DATA MAY CHANGE OVER TIME. CONSULT MANUFACTURER FOR COMPLETE PRODUCT DETAILS.

1.1 SUMMARY

A. Section Includes:
   1. Commercial Doors and Sidelights.

SPECIFIER NOTE: ARTICLE BELOW SHOULD BE RESTRICTED TO STATEMENTS DESCRIBING DESIGN OF PERFORMANCE REQUIREMENTS AND FUNCTIONAL (NOT DIMENSIONAL) TOLERANCES OF A COMPLETE SYSTEM. LIMIT DESCRIPTIONS FOR COMPOSITE AND OPERATIONAL PROPERTIES REQUIRED TO LINK COMPONENTS OF A SYSTEM TOGETHER AND TO INTERFACE WITH OTHER SYSTEMS.

1.2 SYSTEM DESCRIPTION

SPECIFIER NOTE: MANUFACTURER RECOMMENDS REFERRING TO WEBSITE FOR MOST CURRENT PRODUCT PERFORMANCE DATA. RETAIN, EDIT, OR DELETE LANGUAGE BELOW TO SUIT PROJECT REQUIREMENTS. REFER TO WWW.ANDERSENWINDOWS.COM FOR PERFORMANCE INFORMATION.

A. Performance Requirements: Provide products/systems that have been manufactured, fabricated, and installed to the following performance criteria:
   1. Structural Performance (ASTM E330) : <Specify performance.>
   2. Air Infiltration Rate (ASTM E 283: <Specify performance.>
   3. U-Factor (NFRC 100) : <Specify U-Factor.>
   4. Solar Heat Gain Coefficient (SHGC) (NFRC 200) : <Specify SHGC.>
   5. Outdoor-Indoor Transmission Class (OITC) (ASTM E90) : <Specify OITC.>
   6. Sound Transmission Class (STC) (ASTM E90) : <Specify STC.>

SPECIFIER NOTE: MANUFACTURER RECOMMENDS REFERRING TO WEBSITE DESIGN PRESSURE ESTIMATOR FOR ADDITIONAL WIND LOAD INFORMATION. RETAIN, EDIT, OR DELETE LANGUAGE BELOW TO SUIT PROJECT REQUIREMENTS

B. Structural Requirements: Provide products/systems capable of withstanding wind loads based on testing units representative of those indicated for Project that pass AAMA/NWWDA 101/I.S.2/NAFS, Uniform Structural Load Test:
   1. Design Wind Loads: Determine design wind loads applicable to Product from basic wind speed indicated in miles per hour (meters per second) at 33 feet (10 meters) above grade, according to ASCE, Section 6, based upon mean roof heights indicated on Drawings.
      a. Basic Wind Speed: <Specify wind speed.>
      b. Importance Factor: <Specify importance factor.>
      c. Exposure Category: <Specify exposure category.>
      d. Wind Load Requirement: <Specify design pressure requirement.>

SPECIFIER NOTE: ARTICLE BELOW INCLUDES SUBMITTAL OF RELEVANT DATA TO BE FURNISHED BY CONTRACTOR BEFORE, DURING OR AFTER CONSTRUCTION. COORDINATE THIS ARTICLE WITH THE ARCHITECT'S AND CONTRACTOR'S DUTIES AND RESPONSIBILITIES IN CONDITIONS OF THE CONTRACT AND DIVISION 01 SUBMITTAL PROCEDURES SECTION.

1.3 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 01 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data and installation guides.

C. Shop Drawings: Provide drawings indicating direction of operable parts, typical jamb, head and sill conditions, and special mullion reinforcement details.

D. Color Samples: Submit selection and verification samples, including the following:
   1. Hardware: Submit samples indicating typical finish on window hardware.
   2. Cladding: Submit color Samples of aluminum cladding.

E. Quality Assurance/Control Submittals: Submit the following:
   1. Performance Data: Provide manufacturer's published performance data for specified products.

F. Contract Closeout Submittals: Submit the following:
   1. Warranty documents specified herein.
   2. Owner's Manual: Bound manual clearly identified with project name, location, and completion date. Identify type and size of units installed. Provide recommendations for periodic inspections, care, and maintenance. Identify common causes of damage with instructions for temporary repair.

SPECIFIER NOTE: ARTICLE BELOW SHOULD INCLUDE STATEMENTS OF PREREQUISITES, STANDARDS, LIMITATIONS AND CRITERIA THAT ESTABLISH AN OVERALL LEVEL OF QUALITY FOR PRODUCTS AND WORKMANSHIP FOR THIS SECTION. COORDINATE ARTICLE BELOW WITH DIVISION 01 QUALITY ASSURANCE SECTION.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity.

SPECIFIER NOTE: PARAGRAPH BELOW SHOULD LIST OBLIGATIONS FOR COMPLIANCE WITH SPECIFIC CODE REQUIREMENTS PARTICULAR TO THIS SECTION. GENERAL STATEMENTS TO COMPLY WITH A PARTICULAR CODE ARE TYPICALLY ADDRESSED IN CONDITIONS OF THE CONTRACT AND DIVISION 01 REGULATORY REQUIREMENTS SECTIONS. REPETITIVE STATEMENTS SHOULD BE AVOIDED.

B. Regulatory Requirements and Approvals: <Specify applicable requirements of regulatory agencies.>

SPECIFIER NOTE: RETAIN PARAGRAPH BELOW IF PREINSTALLATION MEETING IS REQUIRED.

C. Preinstallation Meetings: <Specify requirements for preinstallation meeting.>

SPECIFIER NOTE: ARTICLE BELOW SHOULD INCLUDE SPECIFIC PROTECTION AND ENVIRONMENTAL CONDITIONS REQUIRED DURING STORAGE. COORDINATE ARTICLE BELOW WITH DIVISION 01 PRODUCT REQUIREMENTS SECTION.

1.5 DELIVERY, STORAGE, AND HANDLING

A. General: Comply with Division 01 Product Requirements Section.

B. Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

C. Delivery: Deliver materials in manufacturer's original unopened, undamaged containers with identification labels intact.

D. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

E. Store materials and accessories off ground, under cover, and protected from weather and construction activities.

SPECIFIER NOTE: IN ARTICLE BELOW, STATE PHYSICAL OR ENVIRONMENTAL LIMITATIONS OR CRITERIA FOR INSTALLATION SUCH AS WEATHER, TEMPERATURE, HUMIDITY, VENTILATION OR ILLUMINATION REQUIRED FOR PROPER INSTALLATION OR APPLICATION.

1.6 PROJECT/SITE CONDITIONS

A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication. Record measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

B. Install units in accordance with manufacturer's safety and weather requirements.

SPECIFIER NOTE: COORDINATE ARTICLE BELOW WITH CONDITIONS OF THE CONTRACT AND WITH DIVISION 01 CLOSEOUT SUBMITTALS (WARRANTY) SECTION. USE THIS ARTICLE TO REQUIRE SPECIAL OR EXTENDED WARRANTY OR BOND COVERING THE WORK OF THIS SECTION.

1.7 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project Warranty provisions.

SPECIFIER NOTE: COORDINATE ARTICLE BELOW WITH MANUFACTURER'S WARRANTY REQUIREMENTS. VISIT THE ANDERSEN WEBSITE FOR A COMPLETE DESCRIPTION OF THE STANDARD LIMITED WARRANTY INCLUDING EXCLUSIONS AND LIMITATIONS.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard limited warranty document. Manufacturer's limited warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

PART 2 - PRODUCTS

SPECIFIER NOTE: RETAIN ARTICLE BELOW FOR PROPRIETARY METHOD SPECIFICATION. ADD PRODUCT ATTRIBUTES, PERFORMANCE CHARACTERISTICS, MATERIAL STANDARDS, AND DESCRIPTIONS AS APPLICABLE. USE OF SUCH PHRASES SUCH AS "OR EQUAL" OR "OR APPROVED EQUAL" OR SIMILAR PHRASES MAY CAUSE AMBIGUITY IN SPECIFICATIONS. SUCH PHRASES REQUIRE VERIFICATION (PROCEDURAL, LEGAL AND REGULATORY) AND ASSIGNMENT OF RESPONSIBILITY FOR DETERMINING "OR EQUAL" PRODUCTS.

2.1 MANUFACTURER

A. Provide products from the following manufacturer:
   1. Andersen Windows, Inc.
   2. 100 4th Ave. N.
   3. Bayport, MN 55003-1096.
   4. Phone: (800) 299-9029.
   5. Fax: (800) 752-9230.
   6. E-mail: technicalsupport@andersenwindows.com.

7. www.andersenwindows.com.
8. Local Contact: <Specify contact information provided by local Andersen representative.>

2.2 MANUFACTURED UNITS

A. Proprietary Products/Systems. Wood outswing doors, including the following:
1. Andersen® Architectural Commercial Doors and Sidelights.

SPECIFIER NOTE: EDIT ARTICLE BELOW TO SUIT PROJECT REQUIREMENTS. IF SUBSTITUTIONS ARE PERMITTED, EDIT TEXT BELOW. ADD TEXT TO REFER TO DIVISION 01 PROJECT REQUIREMENTS (PRODUCT SUBSTITUTIONS PROCEDURES) SECTION.

2. Substitutions: No substitutions permitted.

SPECIFIER NOTE: SPECIFY MATERIALS TO BE FURNISHED. THIS ARTICLE MAY BE OMITTED AND THE MATERIALS CAN BE INCLUDED WITH THE DESCRIPTION OF A MANUFACTURED UNIT, EQUIPMENT, COMPONENT, OR ACCESSORY.

2.3 MATERIALS

A. Frame and Sash Members: Fabricated from wood species approved in WDMA Industry Standard I.S.8 in the following frame depth:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED FRAME DEPTH SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

1. Frame Depth: 4-9/16 inch (116 mm) wide.
2. Frame Depth: 5-1/4 inch (133 mm) wide.
3. Frame Depth: 6-9/16 inch (167 mm) wide.
4. Frame Depth: 7-1/8 inch (181 mm) wide.

B. Aluminum Frame Cover: Fabricate from 6063-T5 extruded aluminum in the following color:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED FRAME COLOR SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

1. Frame Color: White.
2. Frame Color: Sandtone.
3. Frame Color: Terratone®.
4. Frame Color: Forest Green.

C. Aluminum Panel Cladding: Fabricate from 0.050 inch (1.3 mm) 6063-T5 aluminum in the following color:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED CLADDING COLOR SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

1. Cladding Color: White painted finish.
2. Cladding Color: Sandtone color painted finish.
3. Cladding Color: Terratone® color painted finish.
4. Cladding Color: Forest Green color painted finish.

D. Weatherstripping: Flexible foam with butt joint corners.

E. Stops: Clear preservative treated wood.

F. Sill: Extruded 6063 aluminum low profile 1/2 inch (13 mm) threshold with compressible bulb weatherstrip in the following finish:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED COLOR BELOW. DELETE COLORS NOT REQUIRED.

1. Color: Mill finish.
2. Color: Bronze anodized.
3. Color: Brass anodized.

2.4 GLAZING

SPECIFIER NOTE: SELECT BETWEEN THE FOLLOWING FOUR GLASS TYPES. DELETE PARAGRAPHS NOT USED.

A. Clear Single Pane Glass Units: Clear, tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT.

B. Clear Insulating Glass Units:
1. Glass: Insulating glass units to consist of 2 lites of clear tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT.
2. Filling: Space between glass lites filled with air.

SPECIFIER NOTE: RETAIN SUBPARAGRAPH ABOVE IF SPACE IS FILLED WITH AIR. RETAIN SUBPARAGRAPH BELOW IF SPACE IS FILLED WITH ARGON GAS BLEND.

3. Filling: Fill space between glass lites with argon gas blend.

C. High-Performance™ Low-E4™ Glass, Low SHGC, Argon Filled Insulating Glass Units:
1. Glass: Tempered insulating glass units consisting of an outboard and inboard lite of clear tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT.
2. Magnetron sputtering vapor deposition (MSVD) TiO2 coating applied to the No. 1 surface.
3. High-Performance™ Low-E4™ Glass Coating: Magnetron sputtering vapor deposition (MSVD) Low-E coating applied to the No. 2 surface.
4. Filling: Fill space between glass lites with argon gas blend.
5. Protective removable polyolefin film applied to glass surfaces No. 1 and No. 4.

D. High-Performance™ Low-E4™ Sun Glass, Argon Blend Filled Insulating Glass Units:
1. Glass: Tempered insulating glass units consisting of an outboard and inboard lite of clear tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT.
2. Magnetron sputtering vapor deposition (MSVD) TiO2 coating applied to the No. 1 surface.
3. High-Performance™ Low-E4™ Sun Glass Coating: Magnetron sputtering vapor deposition (MSVD) Low-E coating applied to the No. 2 surface.
4. Filling: Fill space between glass lites with argon gas blend.
5. Protective removable polyolefin film applied to glass surfaces No. 1 and No. 4.

2.5 HARDWARE

A. Hinges: 4-1/2 inch (114 mm) heavy duty ball bearing hinge with non-removable pin with the following finish:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED COLOR BELOW. DELETE COLORS NOT REQUIRED.

1. Finish: White powder coated painted.
2. Finish: Satin Stainless Steel.
3. Finish: Oil Rubbed Bronze.

B. Locks: <Specify locks in this paragraph or refer to Division 08 Section “Door Hardware.”>

SPECIFIER NOTE: SPECIFY SUBORDINATE OR SECONDARY ITEMS THAT AID AND ASSIST PRIMARY PRODUCTS SPECIFIED ABOVE OR ARE NECESSARY FOR PREPARATION OR INSTALLATION OF THOSE ITEMS.

2.6 ACCESSORIES

SPECIFIER NOTE: CONSULT SPECIFICATIONS OF ADJACENT UNIT GRILLE OPTIONS FOR JOINED UNITS OF DIFFERENT TYPES. CONSULT ANDERSEN CORPORATION FOR ADDITIONAL GRILLE OPTIONS AND CUSTOM PATTERN DESIGNS.

A. Provide removable grilles where indicated on Drawings. Install removable grilles against interior glass with clips and pins. Provide grilles complying with the following:

SPECIFIER NOTE: RETAIN PARAGRAPH ABOVE FOR GRILLES INSTALLED WITH CLIPS AND PINS. RETAIN PARAGRAPH BELOW FOR GRILLES INSTALLED WITH FULL SURROUND AND CLIPS.

B. Provide removable grilles where indicated on Drawings. Install removable grilles against interior glass with full grille surround and clips. Provide grilles complying with the following:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED EXTERIOR FACING SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

1. Exterior Facing: White painted finish.
2. Exterior Facing: Sandtone color painted finish.
3. Exterior Facing: Terratone® color painted finish.
4. Exterior Facing: Forest Green color painted finish.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED INTERIOR FACING SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

5. Interior Facing: Unfinished Maple.
6. Interior Facing: Unfinished Pine.
7. Interior Facing: Unfinished Oak.
8. Interior Facing: Unfinished Mahogany.
9. Interior Facing: Unfinished Cherry.
10. Interior Facing: White painted finish.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED GRILLE WIDTH SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

11. Grille Width: 3/4 inch (19.1 mm) wide.
12. Grille Width: 7/8 inch (22.2 mm) wide.
13. Grille Width: 1-1/8 inches (29 mm) wide.
14. Grille Width: 2-1/4 inches (57 mm) wide.
15. Provide fixed interior grilles where indicated on Drawings. Fixed grilles adhere to interior glass surface with an adhesive tape.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED INTERIOR FACING SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

a. Interior Facing: Unfinished Maple.
b. Interior Facing: Unfinished Pine.
c. Interior Facing: Unfinished Oak.
d. Interior Facing: Unfinished Mahogany.
e. Interior Facing: Unfinished Cherry.
f. Interior Facing: White Fibrex® material.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED GRILLE WIDTH SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

g. Grille Width: 3/4 inch (19.1 mm) wide.

h. Grille Width: 7/8 inch (22.2 mm) wide.
i. Grille Width: 1-1/8 inches (29 mm) wide.
j. Grille Width: 2-1/4 inches (57 mm) wide.

SPECIFIER NOTE: EXTERIOR GRILLES MUST BE USED IN CONJUNCTION WITH FIXED INTERIOR GRILLES.

16. Provide high profile Fibrex® material divided light grilles where indicated on Drawings. Permanently install grilles on exterior of glass to simulate true divided light muntin bars.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED EXTERIOR FACING SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

a. Color: White painted finish.
b. Color: Sandtone color painted finish.
c. Color: Terratone® color painted finish.
d. Color: Forest Green color painted finish.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED GRILLE WIDTH SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

e. Grille Width: 3/4 inch (19.1 mm) wide.
f. Grille Width: 7/8 inch (22.2 mm) wide.
g. Grille Width: 1-1/8 inches (29 mm) wide.
h. Grille Width: 2-1/4 inches (57 mm) wide.

C. Interior Grilles: Provide high-profile wood grilles where indicated on Drawings. Permanently install grilles on interior glass surface with adhesive tape to simulate true divided light muntin bars.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED INTERIOR GRILLE SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

1. Interior Grille: Unfinished Maple.
2. Interior Grille: Unfinished Pine.
3. Interior Grille: Unfinished Oak.
4. Interior Grille: Unfinished Mahogany.
5. Interior Grille: Unfinished Cherry.
6. Interior Grille: White Fibrex® material.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED GRILLE WIDTH SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

7. Grille Width: 3/4 inch (19.1 mm) wide.
8. Grille Width: 7/8 inch (22.2 mm) wide.
9. Grille Width: 1-1/8 inches (29 mm) wide.
10. Grille Width: 2-1/4 inches (57 mm) wide.

SPECIFIER NOTE: SPECIFY THE FOLLOWING SPACE BAR FOR SIMULATED FULL DIVIDED LIGHT APPEARANCE.

11. Provide 5/8 inch (16 mm) wide anodized aluminum spacer permanently mounted within insulating glass unit. Align spacer to grille pattern to simulate full divided light appearance.

SPECIFIER NOTE: RETAIN PARAGRAPH ABOVE FOR 5/8 INCH SPACER. RETAIN PARAGRAPH BELOW FOR 7/8 INCH SPACER.

12. Provide 7/8 inch (18 mm) wide anodized aluminum spacer permanently mounted within insulating glass unit. Align spacer to grille pattern to simulate full divided light appearance.

SPECIFIER NOTE: FOR FINELIGHT™ GRILLES, ADD THE FOLLOWING.

D. Provide contour profile aluminum muntin bars permanently mounted within insulated glass unit where indicated on Drawings.
   1. Grille Intersections: ABS concealed plastic connectors with nylon end keepers.
   2. Width: 3/4 inch (19.1 mm).

SPECIFIER NOTE: RETAIN REQUIRED WIDTH ABOVE OR BELOW.

   3. Width: 1 inch (25.4 mm).
   4. Color: Match unit exterior color.

E. Provide applied wood interior extension jambs members machined from clear or veneered, clear material approved in ANSI/AAMA/NWWDA 101/I.S.2.

SPECIFIER NOTE: THE FOLLOWING CASING PROFILES LISTED BELOW ARE CONSISTENT WITH THE WOOD MOULDING AND MILLWORK PRODUCERS ASSOCIATION (WMMPA) WM SERIES SOFTWOOD MOULDINGS PATTERN CATALOG. CURVED SECTIONS ARE CONSTRUCTED OF LAMINATED WOOD.

F. Interior Trim and Casing: Provide wood casing in the following specie and profile:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED SPECIES SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

   1. Species: Unfinished Maple.
   2. Species: Unfinished Pine.
   3. Species: Unfinished Oak.
   4. Species: Unfinished Mahogany.
   5. Species: Unfinished Cherry.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED PROFILE SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

   6. 2-1/4 inch (57 mm): Colonial Style WM366.
   7. 2-1/4 inch (57 mm): Style WM376.
   8. 2-1/4 inch (57 mm): Ranch WM324.
   9. 2-1/2 inch (57 mm): Colonial Style WM351.
   10. 2-1/2 inch (57 mm): Ranch WM315.
   11. 3-1/4 inch (57 mm): Style WM 445.
   12. 3-1/2 inch (57 mm): Colonial Style WM444.

SPECIFIER NOTE: CONTACT AN ANDERSEN CORPORATION REPRESENTATIVE FOR DECORATIVE ART GLASS PANEL DESIGN OPTIONS.

G. Decorative Art Glass: Hand-assembled stained art glass panels sized to match unit glass opening. Decorative art glass panels sandwiched between 2 lites of tempered glass to form a triple insulating unit. Available in the following came finish. Came joints joined with lead-free solder.
   1. Pattern: <Select from standard patterns.>
   2. Background Glass: <Select from standard color palettes.>
   3. Design Glass: <Select from standard color palettes.>

SPECIFIER NOTE: RETAIN ONE OF THE FOLLOWING CAMING TYPES BELOW.

   4. Caming: Antique finish.
   5. Caming: Brass finish.
   6. Caming: Zinc finish.

SPECIFIER NOTE: DESCRIBE ITEMS THAT ARE SHOP MANUFACTURED, FABRICATED OR ASSEMBLED BEFORE BEING DELIVERED TO THE SITE.

2.7 FABRICATION

A. Preservative Treatment: Treat wood frame members and interior glazing stops after machining with a water repellent preservative in accordance with WDMA I.S.4.

B. Frame Components:
   1. Attach extruded aluminum frame cover to wood frame.
   2. Factory-apply fluropolymer coating (1.5 mil primer and 1.5 mil top coat minimum dry film thickness) to exterior exposed surfaces of aluminum components.

C. Door Panels:
   1. Stiles and Rails: 1-3/4 inch (44 mm) engineered wood cores with laminated veneer interior face and aluminum clad or laminated veneer, exterior face.
   2. Attach stiles to rails using mortise and tenon joints. Reinforce top and bottom rail joints with 5 inch by 3/8 inch (127 mm by 9 mm) diameter lag screws.
   3. Clad exterior door panel surfaces with 0.050 inch (1.3 mm) aluminum cladding.
   4. Factory apply finish paint coating conforming to AAMA 2605 to exterior aluminum frame surfaces.

SPECIFIER NOTE: ADD THE FOLLOWING PARAGRAPH IF INTERMEDIATE HORIZONTAL RAILS ARE REQUIRED TO FACILITATE MOUNTING OF EXIT HARDWARE.

   5. Provide 5-3/4 inch (146 mm) horizontal intermediate rail.
   6. Door Panel Finishes:

SPECIFIER NOTE: RETAIN PROJECT REQUIRED INTERIOR DOOR PANEL FINISH SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

      a. Interior Facing: Unfinished Maple.
      b. Interior Facing: Unfinished Pine.
      c. Interior Facing: Unfinished Oak.
      d. Interior Facing: Unfinished Mahogany.
      e. Interior Facing: Unfinished Cherry.
      f. Interior Facing: White primed finish.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED EXTERIOR FACING SUBPARAGRAPH BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

      g. Exterior Color: White color factory applied high durability coating.
      h. Exterior Color: Sandtone color factory applied high durability coating.
      i. Exterior Color: Terratone® color factory applied high durability coating.
      j. Exterior Color: Forest Green color factory applied high durability coating.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED EXTERIOR CLADDING COLOR SUBPARAGRAPH ABOVE AND DELETE SUBPARAGRAPHS NOT REQUIRED, OR SELECT VENEERED PANEL SURFACE BELOW AND DELETE SUBPARAGRAPHS NOT REQUIRED.

      k. Veneer Panel Surface: Unfinished Oak.
      l. Veneer Panel Surface: Unfinished Pine.
      m. Veneer Panel Surface: Unfinished Maple.
      n. Veneer Panel Surface: Unfinished Mahogany.
      o. Veneer Panel Surface: Unfinished Cherry.
      p. Veneer Panel Surface: White primed finish.

D. Sill: Low profile aluminum extrusion attached to frame jambs.

E. Weatherstripping: Factory applied flexible foam type weatherstripping to full perimeter of frame.

F. Glazing: Factory glazed with silicone glazing sealant applied to exterior glazing stops.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of unit manufacturer.

SPECIFIER NOTE: SPECIFY ACTIONS TO PHYSICALLY DETERMINE THAT CONDITIONS ARE ACCEPTABLE TO RECEIVE PRIMARY PRODUCTS OF THE SECTION.

3.2 EXAMINATION

A. Site Verification of Conditions: Verify that site conditions are acceptable for installation of units, including the following:
   1. Concrete surfaces are dry and free of excess mortar, rocks, sand, and other construction debris.
   2. Masonry openings are square and dimensions are correct.

SPECIFIER NOTE: RETAIN SUBPARAGRAPH BELOW FOR WOOD FRAMING. RETAIN SUBPARAGRAPH ABOVE FOR MASONRY CONSTRUCTION.

   3. Rough openings are square and dimensions are correct.
   4. Sill plates are level.

SPECIFIER NOTE: DELETE THE FOLLOWING SUBPARAGRAPH IS NO WOOD FRAMING ON PROJECT.

   5. Wood frame walls are dry, clean, sound, and well nailed or glued, free of voids and without offsets at joints.
   6. Nail heads are driven flush with surfaces in openings and within 3 inches (75 mm) of rough opening.

B. Do not proceed with installation of units until unacceptable conditions are corrected.

SPECIFIER NOTE: COORDINATE ARTICLE BELOW WITH MANUFACTURER'S RECOMMENDED INSTALLATION REQUIREMENTS.

3.3 INSTALLATION

A. General:
   1. Remove unit components, parts, accessories, and installation guides from carton.
   2. Inspect unit components and verify that components are not damaged and that parts are included before disposing of carton.
   3. Shop-assemble multiple units before installation in accordance with manufacturer's installation guides.

SPECIFIER NOTE: RETAIN SUBPARAGRAPH ABOVE FOR SHOP-ASSEMBLED UNITS. RETAIN SUBPARAGRAPH BELOW FOR FIELD-ASSEMBLED UNITS.

   4. Field-assemble multiple units before installation in accordance with manufacturer's installation guides.

B. Interface With Other Work:

1. Perform installation in accordance with Manufacturer's instructions.
2. Install units level, plumb, square, true to line, without distortion, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
3. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.
4. Install insulation in shim space around unit perimeter to maintain continuity of building insulation. Do not overfill.
5. Hold back exterior siding or other finish materials from edge of unit to allow for expansion and contraction and installation of proper joint sealant with backing materials. Seal perimeter of unit after exterior finish is applied per requirements of Division 07 "Joint Sealants" Section.
6. Finish interior units per requirements specified in related sections. Refer to, and comply with, additional requirements in manufacturer's installation guides.
7. Install optional hardware and unit accessories after cleaning.

SPECIFIER NOTE: SPECIFY ALLOWABLE VARIATIONS BELOW.

C. Site Tolerances:
   1. Adjust operation, insect screens, hardware, and accessories for a tight fit at contact points and weatherstripping for smooth operation and weathertight closure.

SPECIFIER NOTE: SPECIFY THE FINAL ACTIONS REQUIRED TO CLEAN INSTALLED EQUIPMENT OR OTHER COMPLETED WORK TO PROPERLY FUNCTION OR PERFORM. COORDINATE ARTICLE BELOW WITH DIVISION 01 EXECUTION REQUIREMENTS (CLEANING) SECTION AND SPECIFIC PROJECT REQUIREMENTS.

3.4 CLEANING

A. Clean units using cleaning material and methods specifically recommended by window manufacturer.

B. Remove excess sealants, glazing materials, dirt, and other substances.

C. Avoid damaging protective coatings and finishes.

D. Protect unit surfaces from masonry cleaning solution that could damage insulation glass panels or hardware.

E. Remove debris from work site and properly dispose of debris.

SPECIFIER NOTE: SPECIFY PROVISIONS FOR PROTECTING WORK AFTER INSTALLATION BUT PRIOR TO ACCEPTANCE BY THE OWNER. COORDINATE ARTICLE BELOW WITH DIVISION 01 EXECUTION REQUIREMENTS SECTION.

3.5 PROTECTION

A. Protect installed work from damage due to subsequent construction activity on the site.

END OF SECTION