SECTION 081600
GLIDING PATIO DOORS
(ANDERSEN® 100 SERIES GLIDING PATIO DOORS)

PART 1 - GENERAL

SPECIFIER NOTE: DATA CONTAINED IN THIS GUIDE SPEC IS ACCURATE AS OF NOVEMBER 2010. DUE TO ONGOING PRODUCT CHANGES, THIS DATA MAY CHANGE OVER TIME. CONSULT MANUFACTURER FOR COMPLETE PRODUCT DETAILS.

1.1 SUMMARY

A. Section Includes:
   1. Gliding patio doors.

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.

1.2 ACTION SUBMITTALS

A. Product Data: Manufacturer's product data and installation guides.

B. Sustainable Building Submittals:

SPECIFIERS NOTE: RETAIN SUBPARAGRAPH BELOW AND ENERGY PERFORMANCE CERTIFICATION PARAGRAPH IN QUALITY ASSURANCE ARTICLE IF WOOD DOORS ARE REQUIRED TO BE CERTIFIED.

   1. Energy Performance:
      a. Provide NFRC 100 Certified performance values meeting or exceeding values specified in Performance Criteria Article.

SPECIFIERS NOTE: RETAIN SUBPARAGRAPH BELOW AND RECYCLED CONTENT CERTIFICATION PARAGRAPH AND "FOREST CERTIFICATION" PARAGRAPH IN QUALITY ASSURANCE ARTICLE IF WOOD DOORS ARE REQUIRED TO BE CERTIFIED.

   2. Recycled Content:
      a. Provide third party certified values in percent by weight of recycled content per ISO 14021 Standard for each product specified.
      b. Provide statement indicating total cost for each product containing recycled content.

SPECIFIERS NOTE: RETAIN SUBPARAGRAPH BELOW IF WOOD DOORS ARE REQUIRED TO BE QUALIFIED FOR REGIONAL MATERIALS.

   3. Regional Materials:
      a. Provide door manufacturer's Product Data for regional materials within [**500**] miles of project location, indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material.
      b. Provide statement indicating cost for each product containing regional material and the fraction by weight that is considered regional material.

SPECIFIERS NOTE: RETAIN PARAGRAPH BELOW IF DOORS ARE REQUIRED TO BE CERTIFIED FOR INDOOR AIR QUALITY.

4. Indoor Environmental Quality.
   a. Provide third party certification that door materials used on project, including factory applied finishes, meet indoor air quality standards for low emitting materials under California CA Section 01350 Specifications.

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

D. Color Samples: Selection and verification samples, including the following:
   1. Hardware: Samples indicating typical finish on window hardware.

1.3 INFORMATIONAL SUBMITTALS

A. Quality Assurance/Control Submittals:
   1. Performance Data: Manufacturer's published performance data for specified products.

1.4 CLOSEOUT SUBMITTALS

A. Warranty documents specified herein.

B. 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.

1.5 QUALITY ASSURANCE

SPECIFIERS NOTE: RETAIN OPTION IN MANUFACTURER QUALIFICATIONS PARAGRAPH BELOW IF REQUIRED FOR PROJECT OR MEETING FSC CERTIFICATION IS A REQUIREMENT. ANDERSEN CORPORATION HAS SUPPORTING DOCUMENTATION AVAILABLE UPON REQUEST.

A. Manufacturer Qualifications: A manufacturer capable of fabricating doors that meet or exceed Performance Criteria indicated and of documenting this performance by inclusion in lists and by labels, test reports, and calculations.

B. 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.

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

D. Certifications:

1. National Fenestration Rating Council (NFRC). Products shall be certified and labeled for U-Factor, Solar Heat Gain Coefficient (SHGC), and Visible Transmittance per NFRC 100 and 200 Procedures. Unique glass types that are special ordered may not apply, check with Manufacturer.
2. Window and Door Manufacturers Association (WDMA). Products shall be certified and labeled per WDMA Hallmark Certification Program to the AAMA/WDMA/CSA 101/I.S.2/A440 industry standard.
3. Insulating Glass Units: Provide insulating glass units permanently marked with certification label of Insulating Glass Certification Council (IGCC) indicating compliance.

SPECIFIER NOTE: RETAIN CERTIFICATION LABEL REQUIREMENTS PARAGRAPH ABOVE OR BELOW.

4. Insulating Glass Units: Provide insulating glass units permanently marked with certification label of Insulating Glass Manufacturers Association of Canada (IGMAC) indicating compliance with CAN/CGSB or ASTM E2190.

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

E. Pre-Installation Meetings: Pre-Installation Meetings: Conduct meeting at Project site to comply with requirements in Division 01 Section – Project Management and Coordination.

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

1.6 DELIVERY, STORAGE, AND HANDLING

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

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

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

D. 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.

1.7 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 per 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.

1.8 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 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 Corporation
      100 4th Ave. N.
      Bayport, MN 55003-1096.
      Phone: (800) 299-9029.
      Fax: (800) 752-9230.
      E-mail: technicalsupport@andersenwindows.com
      www.andersenwindows.com.
      Local Contact: <Specify contact information provided by local Andersen representative.>

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.

2.2 PERFORMANCE CRITERIA

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. Comply with AAMA/WDMA/CSA 101/I.S.2/A440.
   2. Performance Class: <Specify performance class.>
   3. Performance Grade: <Specify performance grade.>
   4. U-Factor (NFRC 100): <Specify U-Factor.>
   5. Solar Heat Gain Coefficient (SHGC) (NFRC 200): <Specify SHGC.>

6. Outdoor-Indoor Transmission Class (OITC) (ASTM E90): <Specify OITC.>
7. 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/WDMA/CSA 101/I.S.2/A440, 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, per 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.>

2.3 MANUFACTURED UNITS

A. Proprietary Product/Systems:
   1. Andersen® 100 Series Gliding Patio Doors.

SPECIFIER NOTE: EDIT ARTICLE BELOW TO SUIT PROJECT REQUIREMENTS. IF SUBSTITUTIONS ARE PERMITTED, EDIT TEXT BELOW. ADD TEST 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.

2.4 MATERIALS

A. Frame and Door: Fabricated from Fibrex® composite material, in the following color:

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

   1. Interior Frames:
      a. Color: White.
   2. Exterior Frames:
      a. Color: White.
      b. Color: Sandtone.
      c. Color: Terratone®.
      d. Color: Cocoa Bean.
      e. Color: Dark Bronze.

SPECIFIER NOTE: RETAIN ONE OF THE FOLLOWING FLANGE TYPES AND DELETE TYPES NOT REQUIRED FOR PROJECT.

B. Frame Options; Provide frames with the following flange style:
   1. 1-3/8” Flange Setback.

2. 1” Flange Setback with Stucco Key.
3. Replacement Configuration.

C. Weatherstripping:
1. Active Panel: Dual pile polypropylene weatherstrip full perimeter of frame and at meeting stile.
2. Stationary Panel: Felt weatherstrip at head, stationary side and sill.

2.5 GLAZING

A. General: Tempered insulating glass units certified through the Insulating Glass Certification Council as conforming to the requirements of IGCC. Provide dual sealed units consisting of polyisobutylene primary seal and silicone secondary seal. Provide metal spacers with bent or soldered corners.

SPECIFIER NOTE: RETAIN CERTIFICATION REQUIREMENTS PARAGRAPH ABOVE OR BELOW.

B. General: Tempered insulating glass units certified through the Insulating Glass Manufacturers Alliance of Canada (IGMAC) conforming to the requirements of Canadian General Standards Board CAN/CGSB 12.8. Provide dual sealed units consisting of polyisobutylene primary seal and silicone secondary seal. Provide metal spacers with bent or soldered corners.

SPECIFIER NOTE: SELECT BETWEEN THE FOLLOWING STANDARD GLAZING OPTIONS. CONSULT AN ANDERSEN REPRESENTATIVE FOR ADDITIONAL GLAZING OPTIONS. IN ADDITION TO COMPLYING WITH SAFETY GLAZING REQUIREMENTS, TEMPERED GLASS MAY BE REQUIRED BECAUSE OF WINDOW SIZE AND WIND LOAD. CONSULT ANDERSEN CORPORATION FOR ASSISTANCE IN SPECIFYING THE APPROPRIATE GLAZING TYPE.

C. Dual-Pane 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.

SPECIFIER NOTE: WHERE PATTERNED GLASS IS REQUIRED FOR PROJECT, DELETE PARAGRAPH ABOVE AND RETAIN PARAGRAPH BELOW WITH APPROPRIATE PATTERNED GLASS TYPE. DELETE TYPES NOT REQUIRED FOR PROJECT.

2. Glass: Tempered insulating glass units consisting of an outboard lite of clear tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT and the following patterned glass:
a. Inboard Pattern Glass Lite:
1) Cascade.
2) Fern.
3) Obscure.
4) Reed.
b. Air Space: 3/4 inch (76 mm).
3. Filling: Fill space between glass lites with argon gas blend.

D. SmartSun™ Low-E Glass, Low SHGC, Argon Gas 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.

SPECIFIER NOTE: WHERE PATTERNED GLASS IS REQUIRED FOR PROJECT, DELETE PARAGRAPH ABOVE AND RETAIN PARAGRAPH BELOW WITH APPROPRIATE PATTERNED GLASS TYPE. DELETE TYPES NOT REQUIRED FOR PROJECT.

2. Glass: Tempered insulating glass units consisting of an outboard lite of clear tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT and the following patterned glass:

a. Inboard Pattern Glass Lite:
   1) Cascade.
   2) Fern.
   3) Obscure.
   4) Reed.
b. Air Space: 3/4 inch (75 mm).

3. SmartSun Low-E 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.

E. High-Performance™ Low-E4® SmartSun™ Glass, Low SHGC, Argon Gas 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.

SPECIFIER NOTE: WHERE PATTERNED GLASS IS REQUIRED FOR PROJECT, DELETE PARAGRAPH ABOVE AND RETAIN PARAGRAPH BELOW WITH APPROPRIATE PATTERNED GLASS TYPE. DELETE TYPES NOT REQUIRED FOR PROJECT.

2. Glass: Tempered insulating glass units consisting of an outboard lite of clear tempered glass conforming to ASTM C1048, Type 1, Class 1, q3, Kind FT and the following patterned glass:
   a. Inboard Pattern Glass Lite:
      1) Cascade.
      2) Fern.
      3) Obscure.
      4) Reed.
   b. Air Space: 3/4 inch (76 mm).
3. Magnetron sputtering vapor deposition (MSVD) TiO2 coating applied to the No. 1 surface.
4. High-Performance™ Low-E4 Sun Glass Coating: Magnetron sputtering vapor deposition (MSVD) Low-E coating applied to the No. 2 surface.
5. Filling: Fill space between glass lites with argon gas blend.

F. STC Glass: Manufacturer's proprietary sound transmission class glass type.

2.6 HARDWARE

A. Roller Assembly: Provide operating panels with adjustable roller assembly consisting of self-lubricating tandem wheels operating on ball bearings. Provide 2-tandem rollers for each operating panel.

SPECIFIER NOTE: 6-PIN KEY CYLINDER IS OPTIONAL. RETAIN, EDIT, OR DELETE THE FOLLOWING PARAGRAPH TO SUIT PROJECT REQUIREMENTS.

B. Lock Lever: Die cast zinc reach–out hook bolt locking mechanism. Design lock to prevent automatic locking when door is closed.

SPECIFIER NOTE: RETAIN ONE OF THE FOLLOWING TWO OPTIONS PER PROJECT REQUIREMENTS.

1. Provide blank cover at exterior.
2. Provide 6-pin keyed cylinder.

SPECIFIER NOTE: OPTIONAL AUXILIARY AND 6-PIN KEY CYLINDER EXTERIOR KEYED LOCKS SHIPPED SEPARATELY.

C. Gliding Interior Handle: Die Cast aluminum operating handle pull with white powder-coated finish:

D. Gliding Exterior Handle: Die cast aluminum operating handle pull with powder-coated finish to match exterior finish.

SPECIFIER NOTE: AUXILIARY FOOT LOCKS ARE OPTIONAL ON 2 AND 4 PANEL DOORS. DELETE PARAGRAPH IF NOT REQUIRED.

E. Auxiliary Foot Lock: Provide operating panels with auxiliary foot lock consisting of a spring loaded plunger that engages a grommet in sill. Provide auxiliary foot locks in the following finish or color:
   1. Color: White.

2.7 JOINING SYSTEMS

SPECIFIER NOTE: ANDERSEN WINDOWS STRONGLY RECOMMENDS CONSULTATION WITH AN EXPERIENCED STRUCTURAL ENGINEER, ARCHITECT, OR CONTRACTOR AND A LOCAL ANDERSEN REPRESENTATIVE WHEN SPECIFYING ANDERSEN JOINING SYSTEMS. CONSULT AN ANDERSEN REPRESENTATIVE FOR JOINING OPTIONS WHEN JOINING IMPACT RESISTANT WINDOW PRODUCTS.

SPECIFIER NOTE: IF REQUIRED FOR PROJECT, RETAIN ONE OF THE 1-WAY OR 2-WAY COMBINATIONS BELOW AND RELATED SUBPARAGRAPH. DELETE COMBINATIONS NOT REQUIRED FOR PROJECT.

A. LVL Reinforced Joining - 1-way Combination: Provide 4-9/16 inch (116 mm) by 3/4 inch (19 mm) laminated veneer lumber (LVL) joining with extruded anodized aluminum trim receptor end cap.
   1. Provide corrosion resistant screws and bolts for fastening reinforcement members to wood frame and fastening end brackets to reinforcement members.

B. Gusset Plates: Galvanized steel plates as recommended by door manufacturer for specific application.

C. Fasteners: Corrosion-resistant screws as provided by door manufacturer for fastening reinforcement members and gusset plates to wood frame. Other fasteners are provided by door installer.

D. Sealant: As recommended by door manufacturer.

E. Exterior Vinyl Trim Strips: Provide for each joining method used.
   1. Color: Match door exterior color.

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.

2.8 ACCESSORIES

SPECIFIER NOTE: COORDINATE SPECIFICATIONS FOR GRILLE MATERIAL OF ADJACENT UNIT FOR JOINED UNITS OF DIFFERENT TYPES. STANDARD GRILLE WIDTH IS 3/4 INCH (19 MM). HARDWOOD MAPLE GRILLES ARE PROVIDED FOR PICTURE WINDOWS AND ARE AVAILABLE FOR OTHER WINDOW TYPES ON SPECIAL ORDER. CONSULT AN ANDERSEN REPRESENTATIVE FOR ADDITIONAL GRILLE OPTIONS.

2.9 GRILLES

A. Finelight™ Grilles: Provide contour profile aluminum muntin bars permanently mounted within insulating glass unit where indicated on Drawings.
   1. Grille Intersections: ABS concealed plastic connectors with nylon end keepers.

SPECIFIER NOTE: RETAIN PROJECT REQUIRED FINISH SUBPARAGRAPH BELOW. DELETE SUBPARAGRAPHS NOT REQUIRED. SPECIFY IF INTERIOR COLOR IS DIFFERENT THAN EXTERIOR COLOR.

2. Exterior and Interior Surface: White color painted finish.
3. Exterior and Interior Surface: Sandtone color painted finish.
4. Exterior and Interior Surface: Terratone® color painted finish.
5. Exterior and Interior Surface: Cocoa Bean color painted finish.
6. Exterior and Interior Surface: Dark Bronze color painted finish.
7. Width: 3/4 inch (19 mm).

SPECIFIER NOTE: RETAIN REQUIRED GRILLE WIDTH ABOVE OR BELOW. DELETE SUBPARAGRAPHS NOT REQUIRED.

8. Width: 1 inch (25 mm).
9. Pattern as indicated on Drawings

SPECIFIER NOTE: SELECT BETWEEN THE GLIDING OR RETRACTABLE INSECT SCREEN OPTIONS.

2.10 INSECT SCREENS

A. Gliding Insect Screens: Provide gliding patio doors with gliding insect screen installed on exterior.

1. Insect Screen Door Frame: 0.040 inch (1 mm) roll formed aluminum frame with chromate conversion coating in the following polyester painted color.

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

a. Color: White.
b. Color: Sandtone.
c. Color: Terratone®.
d. Color: Cocoa Bean.
e. Color. Dark Bronze

2. Insect Screen Cloth: 18 by 16 glass fiber mesh, charcoal color finish.
3. Rollers: Insect screen doors operate on injection molded bottom rollers with self contained leveling adjusters engaged in sill track.
4. Operating Handles: Polycarbonate operating handles to receive locking mechanism in the following color.

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

a. Color: White.
b. Color: Black.

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

2.11 FABRICATION

A. Door Stiles and Rails: Fibrex® material frame member co-extruded interior and exterior colored cap stock and with co-extruded flanges for installation.

B. Sill: 0.100 inch (2.5 mm) PVC extrusion.

C. Weatherstripping: Factory-applied to unit frame.

D. Glazing: Factory-glazed with glazing sealant and interior trim stops.

PART 3 - EXECUTION

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

3.1 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 (76 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.

3.2 INSTALLATION

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

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

   5. Field-assemble multiple units before installation per manufacturer's installation guides.

B. Interface With Other Work:
   1. Perform installation per Manufacturer's instructions.
   2. Install units plumb, level, square, true to line, without distortion, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction. Install drip cap at head of single units and joined assemblies.

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 Section 079200 – Joint Sealants.
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.

3.3 FIELD TESTING

SPECIFIER NOTE: COORDINATE ARTICLE BELOW WITH CONDITIONS OF THE CONTRACT AND WITH DIVISION 01 QUALITY CONTROL. TESTING EQUIPMENT SHALL BE CALIBRATED PER SECTION 9 OF ASTM E1105: STANDARD TEST METHOD FOR FIELD DETERMINATION OF WATER PENETRATION OF INSTALLED EXTERIOR WINDOWS, SKYLIGHTS, DOORS AND CURTAIN WALLS, BY UNIFORM OR CYCLIC STATIC AIR PRESSURE DIFFERENCE, WHERE THE WATER TEST PRESSURE SHALL BE RUN AT 2/3 (0.667) OF THE WATER TEST PRESSURE USED TO ACHIEVE THE PRODUCTS RATED DESIGN PRESSURE. THE NUMBERS OF PRODUCTS TESTED SHALL BE AGREED AND WRITTEN IN THE PROJECT SPECIFICATION AND SHALL NOT EXCEED 1PERCENT OF THE TOTAL NUMBER OF OPENINGS UNLESS AGREED UPON FIELD TESTING.

A. General: If applicable, test units per with the following procedures:
   1. Inspect units and verify installation per Manufacturer's instructions.
   2. For products installed less than 6 months, comply with AAMA 502-08 Voluntary Specification for Field Testing of Windows and Sliding Glass Doors, Procedure B.
   3. For products installed longer than 6 months, comply with AAMA 511-08: Voluntary Guideline for Forensic Water Penetration Testing of Fenestration Products. If test indicates that field testing of units is necessary, test product as indicated in paragraph 1 above.
   4. Do not proceed with installation of additional units until unacceptable conditions are corrected.

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 site.

END OF SECTION