



SECTION 08 43 33
LARGE OPENING SLIDING/FOLDING DOORS

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Large Opening Sliding Folding Doors

1.2 RELATED SECTIONS

- A. Section 04 22 00.16 - Surface-Bonded Concrete Unit Masonry.
- B. Section 05 40 00 - Cold-Formed Metal Framing.
- C. Section 06 10 00 - Rough Carpentry.
- D. Section 06 20 00 - Finish Carpentry.
- E. Section 07 21 26 - Blown Insulation.
- F. Section 07 46 33 - Plastic Siding.
- G. Section 07 62 00 - Sheet Metal Flashing and Trim.
- H. Section 07 90 00 - Joint Protection.

1.3 REFERENCES

- A. AAMA/WDMA/CSA 101/I.S.2/A440-08 (NAFS-08) - Standard/Specification for windows, doors, and unit skylights.
- B. AAMA CW-1 0 - Care and Handling of Architectural Aluminum from Shop to Site.
- C. ANSI Z97.1 - Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test.
- D. FSC - Forest Stewardship Council Chain of Custody Certification.

1.4 PERFORMANCE REQUIREMENTS

- A. System Design: Design and size components to withstand dead and live loads caused by pressure and suction of wind acting normal to plane of folding glass wall as calculated in accordance with applicable code.
- B. All products are FSC Chain of Custody Certified.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Detailed drawings prepared specifically for the project by manufacturer. Show opening dimensions, framed opening tolerances, profiles, product components, anchorages, and accessories.
 - 1. Indicate material thickness, fastener locations, glazing and hardware arrangements.
 - 2. Include schedule identifying each unit, with marks or numbers referencing drawings.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples:
 - 1. Aluminum Finish: Two samples, minimum size 2 by 3 inches (50 by 75 mm), representing actual product and color.
 - 2. Glass: Two samples, minimum size 12 inches (300 mm) square, of specified glass, including coatings or frit pattern.
 - 3. Assembly Sample: 24 by 36 inch (600 by 900 mm) assembly complete with glazing, gaskets, fasteners, anchors, and finish; do not proceed with fabrication until workmanship and color are approved by Architect.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic checking and adjustment and periodic cleaning and maintenance of all components.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this Section with minimum 5 years experience in fabrication and erection of glazed window wall systems for projects of similar scope.
- B. Installer Qualifications: Experienced in performing work of this section that has specialized in installation of work similar to that required for this project.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Provide care and handling conforming to AAMA CW-1 0, "Care and Handling of Architectural Aluminum from Shop to Site".
- C. Store products out of contact with the ground, under a weather tight covering, so as to prevent bending, warping, or other damage. Do not cover with unventilated tarps,

polyethylene film, or similar coverings.

- D. Protect factory finishes from damage, precipitation and construction materials until ready for installation.

1.8 PROJECT CONDITIONS

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

1.9 WARRANTY

- A. Wood Components: Five years limited warranty on products with aluminum exteriors or exterior aluminum cladding.
- B. Exterior Wood Product: Three years limited warranty on exterior wood products.
- C. Kynar Aluminum Finish: Ten year limited warranty.
- D. Insulated Glass: Twenty year limited warranty for up to 60 square feet with mill-finish stainless steel spacer or mill or bronze-finish aluminum spacer. Custom glass or glass over 60 square feet will carry whatever warranty period is provided by the manufacturer.
- E. Hardware: Standard hardware 10 year limited warranty against material defects in materials and workmanship. Includes Lift and Slide hardware, M-Series window locks and window hinges, Slide & Seal hardware, and R-Series window hardware and 3-point locks. Other hardware or custom hardware will be covered in accordance with the manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Reveal Windows & Doors by Pacific Architectural Millwork, which is located at: 1435 W. Pioneer St.; Brea, CA 92821; Tel: 562-905-3200; Fax: 562-694-6794; Email:[request info \(info@revealwd.com\)](mailto:request_info(info@revealwd.com)); Web:www.pacmillwork.com|www.revealwd.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 LARGE OPENING SLIDING WOOD DOORS

- A. Bi-Fold Doors: Bi-Fold WA6400 Wood with Exterior Aluminum Cladding Folding View Wall. Provide to fit the openings and configurations indicated on the Drawings. Provide complete with head, sill and jambs, weatherstripping, operating hardware and specified accessories:
 - 1. Configuration: Provide to fit the openings and configurations indicated on the Drawings.
 - 2. Minimum Jamb Depth:
 - a. Out-Swing: 4-5/16 inches.
 - b. In-Swing: 3 inches.
 - 3. Frame and Panels: Complete sliding door system including head, side jambs, thresholds and panels to sizes indicated on the Drawings.
 - a. Panel: Stile and rail panels with standard one lite.
 - 1) Stile and Rail:
 - a) Top rail and stile, 3-1/4 inches thick..

- b) Bottom Rail: 3-1/4 inches.
 - c) Wide Bottom Rail: 6 inches.
 - 2) Exterior: Aluminum clad wood with contemporary edge.
 - 3) Interior: Aluminum clad wood.
 - 4) Interior: Wood.
 - a) Pine.
 - b) Vertical Grain Douglas Fir.
 - c) African Mahogany.
 - d) Custom Species.
 - b. Frame: Extruded aluminum.
 - c. Sill Tracks: Extruded aluminum.
 - 1) Flush track with exterior weep holes.
 - 2) High Flush track with exterior weep holes.
 - 3) Weather-Resistant Track with exterior weep holes.
 - d. Weatherstripping: Head, sill and jamb gaskets that seals the door at the closed position.
 - 1) Weather seal inserted in frame to provide seal at top and between door panels.
 - 2) A bottom gasket that seals each panel with the surface of the floor.
- 4. Glass: Provide manufacturer's standard glass with dry glazing, Comply with safety glazing requirements of ANSI Z97.1 and CPSC 16CFR 1201
 - a. Insulated clear tempered glass dual glazed low-E glass, argon filled with a 1 inch overall thickness. U-value ?????.
 - b. _____ glass as selected by the Architect.
 - c. Simulated Divided Lites: Sculpted profile as selected.
- 5. Hardware:
 - a. Standard man door handle hardware with interior thumb turn.
 - b. Standard man door handle hardware with interior thumb turn and exterior lock system.
 - 1) Man Door Handle Finish:
 - a) Gray Brown.
 - b) Silver.
 - c) Traffic White.
 - c. Trailing Panel Handle
 - 1) Man Door Handle Finish:
 - a) Brushed Aluminum.
 - b) Dark Bronze.
 - d. Handle height centered at 36 inches (914 mm) from bottom of panel.
 - e. Hinges: Anodized aluminum.
 - 1) Brushed Aluminum.
 - 2) Dark Bronze.
 - f. Overhead Rolling Pivoting Hardware: Manufacturer's standard overhead rolling pivoting hardware.
 - 1) Nylon polyamide plastic wheels.
 - 2) Stainless steel wheels.
- 6. Aluminum Finish: Provide same finishes on inside and outside.
 - a. Clear anodized
 - b. Bronze anodized.
 - c. Two coat 70 percent Kynar finish with color as selected from manufacturer range of finishes.
 - d. Two coat 70 percent Kynar finish with custom color.
- 7. Exterior aluminum finish:
 - a. Fluoropolymer-modified acrylic topcoat over fluoropolymer primer meets AAMA 2605 requirements.
 - b. Colors:
 - 1) Standard color as selected by the Architect.

- 2) Custom color as selected by the Architect.
 - c. Anodized Clad Exterior anodized aluminum finish: Electrolytic two-step coloring method meets or exceeds AAMA 611 Class I requirements. Finishes:
 - 1) Light bronze.
 - 2) Medium bronze.
 - 3) Dark bronze.
 - 4) Extra dark bronze.
 - 5) Black.
 - 8. Interior finish:
 - a. Clear treated wood, no prime.
 - b. Primed.
 - c. Prefinished with low gloss, two-component acrylic polyurethane:
- B. Bi-Fold Doors: Bi-Fold W6400 All Wood Folding View Wall. Provide to fit the openings and configurations indicated on the Drawings. Provide complete with head, sill and jambs, weatherstripping, operating hardware and specified accessories:
1. Configuration: Provide to fit the openings and configurations indicated on the Drawings.
 2. Minimum Jamb Depth:
 - a. Out-Swing: 4-5/16 inches.
 - b. In-Swing: 3-7/16 inches.
 3. Frame and Panels: Complete sliding door system including head, side jambs, thresholds and panels to sizes indicated on the Drawings.
 - a. Panel: Stile and rail panels with standard one lite.
 - 1) Stile and Rail:
 - a) Top rail and stile, 3-1/4 inches thick..
 - b) Bottom Rail: 3-1/4 inches.
 - 2) Exterior /Interior: Wood.
 - a) Pine.
 - b) Vertical Grain Douglas Fir.
 - c) African Mahogany.
 - d) Custom Species.
 - b. Frame: Extruded aluminum.
 - c. Sill Tracks: Extruded aluminum.
 - 1) Flush track with exterior weep holes.
 - 2) High Flush track with exterior weep holes.
 - 3) Weather-Resistant Track with exterior weep holes.
 - d. Weatherstripping: Head, sill and jamb gaskets that seals the door at the closed position.
 - 1) Weather seal inserted in frame to provide seal at top and between door panels.
 - 2) A bottom gasket that seals each panel with the surface of the floor.
 4. Glass: Provide manufacturer's standard glass with dry glazing, Comply with safety glazing requirements of ANSI Z97.1 and CPSC 16CFR 1201
 - a. Insulated clear tempered glass dual glazed low-E glass, argon filled with a 1 inch overall thickness.
 - b. _____ glass as selected by the Architect.
 - c. Simulated Divided Lites: Sculpted profile as selected.
 5. Hardware:
 - a. Standard man door handle hardware with interior thumb turn.
 - b. Standard man door handle hardware with interior thumb turn and exterior lock system.
 - 1) Man Door Handle Finish:
 - a) Gray Brown.
 - b) Silver.
 - c) Traffic White.

- c. Trailing Panel Handle
 - 1) Man Door Handle Finish:
 - a) Brushed Aluminum.
 - b) Dark Bronze.
 - d. Handle height centered at 36 inches (914 mm) from bottom of panel.
 - e. Hinges: Anodized aluminum.
 - 1) Brushed Aluminum.
 - 2) Dark Bronze.
 - f. Overhead Rolling Pivoting Hardware: Manufacturer's standard overhead rolling pivoting hardware.
 - 1) Nylon polyamide plastic wheels.
 - 2) Stainless steel wheels.
6. Exterior finish:
- a. Clear treated wood, no prime.
 - b. Primed.
 - c. Prefinished with low gloss, two-component acrylic polyurethane:
 - 1) Standard color as selected by the Architect.
 - 2) Custom color as selected by the Architect.
7. Interior finish:
- a. Clear treated wood, no prime.
 - b. Primed.
 - c. Prefinished with low gloss, two-component acrylic polyurethane:
 - 1) Standard color as selected by the Architect.
 - 2) Custom color as selected by the Architect.
- C. Multi Slide Doors: Hawaiian Effect HFX Multi Slide All-Wood Sliding Door W5700 allow the panels to stack and glide quietly along their tracks and disappear completely into the jamb pocket. Provide to fit the openings and configurations indicated on the Drawings. Provide complete with head, sill and jambs, weatherstripping, operating hardware and specified accessories:
- 1. Configuration: Provide to fit the openings and configurations indicated on the Drawings.
 - 2. Frame and Panels: Complete sliding door system including head, side jambs, thresholds and panels to sizes indicated on the Drawings.
 - a. Panel: Stile and rail panels with standard one lite.
 - 1) Stile and Rail:
 - a) Top rail and stile, 2-1/4 inches thick by 5 inches high.
 - b) Bottom Rail: 2-1/4 inches by 6-1/4 inches high.
 - 2) Exterior /Interior: Wood.
 - a) Pine.
 - b) Vertical Grain Douglas Fir.
 - c) African Mahogany.
 - d) Custom Species.
 - b. Frame: Extruded aluminum.
 - c. Sill Tracks:
 - 1) Standard Stainless Steel Flush Track. Not recommended for wood floors.
 - 2) Wood Track.
 - 3) Flush Drain Track.
 - 4) Performance Flush Track, flush track installed with interior step.
 - 5) Low Stainless Steel Flush Track, for special floor conditions.
 - d. Weatherstripping: Head, sill and jamb gaskets that seals the door at the closed position.
 - 1) Weather seal inserted in frame to provide seal at top and between door panels.
 - 2) A bottom gasket that seals each panel with the surface of the floor.
 - 3. Glass: Provide manufacturer's standard glass with dry glazing, Comply with safety

glazing requirements of ANSI Z97.1 and CPSC 16CFR 1201

- a. Insulated clear tempered glass dual glazed low-E glass, argon filled with a 3/4 inch overall thickness.
 - b. _____ glass as selected by the Architect.
 - c. Simulated Divided Lites: Sculpted profile as selected.
4. Hardware and Handles:
- a. Standard Recessed Pull.
 - 1) Bright brass, clear coat, US3.
 - 2) Satin brass, clear coated, US4.
 - 3) Bright bronze, clear coated, US9.
 - 4) Satin bronze, clear coated, US10.
 - 5) Satin oxidized bronze, oil rubbed, US10B.
 - 6) Bright chrome plated, US26.
 - 7) Satin chrome plated, US26D.
 - b. Standard Edge Pull.
 - 1) Satin Nickel.
 - 2) Oil Rubbed Bronze.
 - c. Provide panel pull height centered at 36 inches (914 mm) from bottom of panel.
5. Rolling Hardware: Manufacturer's standard rolling hardware integrated with engineered track, side jambs and threshold track system.
- a. Rolling Hardware:
 - 1) Nylon polyamide plastic wheels.
 - 2) Stainless steel wheels.
6. Exterior aluminum finish:
- a. Fluoropolymer-modified acrylic topcoat over fluoropolymer primer meets AAMA 2605 requirements.
 - b. Colors:
 - 1) Standard color as selected by the Architect.
 - 2) Custom color as selected by the Architect.
 - c. Anodized Clad Exterior anodized aluminum finish: Electrolytic two-step coloring method meets or exceeds AAMA 611 Class I requirements. Finishes:
 - 1) Light bronze.
 - 2) Medium bronze.
 - 3) Dark bronze.
 - 4) Extra dark bronze.
 - 5) Black.
7. Interior finish:
- a. Clear treated wood, no prime.
 - b. Primed.
 - c. Prefinished with low gloss, two-component acrylic polyurethane:
8. Screen and Blind: Provide horizontal, retractable non-pleated insect and solar control screen and blind system with fingertip operation, load balancing and tensioning adjustment.
- a. Screen Mechanism:
 - 1) Stand alone type.
 - 2) Concealed within frame and integrated with door system.
 - b. Operation:
 - 1) Single function for blinds up to 12 feet (3.65 m).wide and 10 feet (3.04 m) tall.
 - 2) Double function for blinds up to 24 feet (7.31 m) wide and 10 feet (3.04 m) tall.
 - 3) Multi-function screen and blind system up to 24 feet (7.31 m) wide and 7 feet 6 inches (2.29 m) tall.
 - c. Screen Mesh: Fiberglass/PVC mesh as selected from manufacturer's available selection for:
 - 1) Insect protection.

- 2) Control heat gain or loss.
 - 3) UV protection.
 - 4) Projector screen.
- d. Finish:
- 1) Anodized finish in manufacturer's standard color
 - 2) Anodized finish in custom color.
 - 3) Wood veneer from manufacturer's standard selections.
- D. Multi Slide and Seal Doors: Slide and Seal AW6700 doors automatically seal when it reaches the closed position. Provide to fit the openings and configurations indicated on the Drawings. Provide complete with head, sill and jambs, weatherstripping, operating hardware and specified accessories:
1. Slide and Seal AW6700 with Flush Drain Track option meets/exceeds AAMA LC-PG30-SGD Product Class.
 2. Configuration:
 - a. Non-Pocket Configurations: Complete sliding door system including head, side jambs, thresholds and sliding panels to the following sizes indicated on the Drawings.
 - 1) Fixed - One Side: OX, 7-9/16 inch frame depth.
 - 2) Fixed - One Side: O2X, 11 inch frame depth.
 - 3) Fixed - One Side: O3X, 14-7/16 inch frame depth.
 - 4) Fixed - One Side: O4X, 17-7/8 inch frame depth.
 - 5) Fixed - One Side: O5X, 21-5/16 inch frame depth.
 - 6) Fixed - Split Panels: O2XO, 7-9/16 inch frame depth.
 - 7) Fixed - Split Panels: O4XO, 11 inch frame depth.
 - 8) Fixed - Split Panels: O6XO, 14-7/16 inch frame depth.
 - 9) Fixed - Split Panels: O8XO, 17-7/8 inch frame depth.
 - 10) Fixed - Split Panels: O10XO, 21-5/16 inch frame depth.
 - 11) Center Fixed: XOX, 7-9/16 inch frame depth.
 - 12) Center Fixed: 2XO2X, 11 inch frame depth.
 - 13) Center Fixed: 3XO3X, 14-7/16 inch frame depth.
 - 14) Center Fixed: 4XO4X, 17-7/8 inch frame depth.
 - 15) Center Fixed: 5XO5X, 21-5/16 inch frame depth.
 - b. Pocket Configurations: Complete sliding door system including head, side jambs, thresholds and sliding panels to the following sizes indicated on the Drawings.
 - 1) Pocketing - One Side: PX, 4-1/8 inch frame depth, 5-1/16 inch pocket interior dimension.
 - 2) Pocketing - One Side: P2X, 7-9/16 inch frame depth, 8-1/2 inch pocket interior dimension.
 - 3) Pocketing - One Side: P3X, 11 frame inch depth, 11-15/16 inch pocket interior dimension.
 - 4) Pocketing - One Side: P4X, 14-7/16 inch frame depth, 15-3/8 inch pocket interior dimension.
 - 5) Pocketing - One Side: P5X, 17-7/8 inch frame depth, 18-13/16 inch pocket interior dimension.
 - 6) Pocketing - Split Panels: P2XP, 4-1/8 inch frame depth, 5-1/16 inch pocket interior dimension.
 - 7) Pocketing - Split Panels: P4XP, 7-9/16 inch frame depth, 8-1/2 inch pocket interior dimension.
 - 8) Pocketing - Split Panels: P6XP, 11 inch frame depth, 11-15/16 inch pocket interior dimension.
 - 9) Pocketing - Split Panels: P8XP, 14-7/16 inch frame depth, 15-3/8 inch pocket interior dimension.
 - 10) Pocketing - Split Panels: P10XP, 17-7/8 inch frame depth, 18-13/16 inch pocket interior dimension.

3. Frame and Panels: Complete sliding door system including head, side jambs, thresholds and panels to sizes indicated on the Drawings.
 - a. Panel: Stile and rail panels with standard one lite.
 - 1) Stile and Rail:
 - a) Thickness: 2-3/4 inches (70 mm).
 - b) Width: 3-3/4 inches.
 - 2) Exterior: Aluminum clad wood.
 - 3) Interior: Aluminum clad wood.
 - 4) Interior: Wood.
 - a) Pine.
 - b) Vertical Grain Douglas Fir.
 - c) African Mahogany.
 - d) Custom Species.
 - b. Frame: Extruded aluminum.
 - c. Sill Tracks:
 - 1) Standard Stainless Steel Flush Track with 3/16 inch projection above finish floor; not recommended for wood floors.
 - 2) Flush Drain Track, standard flush track with adjustable-height stainless steel and interior drain.
 - 3) Low Stainless Steel Flush Track for special floor conditions.
 - d. Weatherstripping: Slide & Seal System with gasket and seal that automatically seals the door at the closed position.
 - 1) Weather seal inserted in frame to provide seal at top and between door panels.
 - 2) An independently-operating bottom gasket automatically drops and seals each panel with the surface of the floor, while a mechanism in the head track tilts the panels slightly outward, creating a weather-resistant enclosure around the perimeter.
4. Glass: Provide manufacturer's standard glass with dry glazing, Comply with safety glazing requirements of ANSI Z97.1 and CPSC 16CFR 1201
 - a. Insulated clear tempered glass dual glazed low-E glass, argon filled with a 1-1/4 inch overall thickness.
 - b. _____ glass as selected by the Architect.
 - c. Simulated Divided Lites: Sculpted profile as selected.
5. Locking Hardware and Handles: Manufacturer's standard one piece H7100 handle hardware with exterior flush pull and interior thumb turn.
 - a. Provide with exterior lock system that secures sliding panels with locking hardware located on the primary sliding panel.
 - b. Handle Finish:
 - 1) Brushed Satin Nickel.
 - 2) Brushed Satin Oil Rubbed Bronze.
 - c. Provide panel handle height centered at 36 inches (914 mm) from bottom of panel.
6. Rolling Hardware: Manufacturer's standard rolling hardware integrated with engineered track, side jambs and threshold track system.
 - a. Rolling Hardware:
 - 1) Nylon polyamide plastic wheels.
 - 2) Stainless steel wheels.
7. Automation System:
 - a. Belt System: Black rubber-coated steel. Low 3/8 inch profile, Custom saddle with turnbuckle.
 - b. Flush bolt: Attaches to rear edge of the lead panel, that permits disengagement for emergency egress.
 - c. In-Line Motor: Custom motor designed to fit in narrow spaces.
 - 1) Current draw less than 1.5 Amps
 - 2) UL, CE and CSA Approved.

- 3) Power 120V/AC
- d. Control Box: 12 inches W by 16 inches H by 4 inches D.
- e. Color Touch Screen: 3.5 inch.
- f. Motion Detector: Recessed ceiling-mount for low profile operation that will stop door if motion is detected while closing.
- g. Safety Beam: Recessed wall-mount for low profile operation
 - 1) Safe laser beam covers entire span of visible opening
 - 2) Installed at a low height to prevent injury to children or pets
 - 3) Safety feature will stop door if beam is broken while closing.
- h. Wiring Harness: Plug and Play for quick installation.
 - 1) Shielded and cut/abrasion-resistant cabling with molded mating connectors.
 - 2) UL Approved and tested.
- i. Remote Control: IR Remote Control Key Fob. Open or close the door from up to 300 feet away. Code bump prevention technology prevents copying of remote from intruders
- j. Exterior Keypad:
 - 1) Easy access from the exterior without requiring a key or remote. Only supports Open operation. Can program multiple codes.
 - 2) Size: 2-3/4 inches W by 4-1/2 inches H.
- k. Home automation system tie-in (Crestron/Smarthome/etc)
- 8. Exterior aluminum finish:
 - a. Fluoropolymer-modified acrylic topcoat over fluoropolymer primer meets AAMA 2605 requirements.
 - b. Colors:
 - 1) Standard color as selected by the Architect.
 - 2) Custom color as selected by the Architect.
 - c. Anodized Clad Exterior anodized aluminum finish: Electrolytic two-step coloring method meets or exceeds AAMA 611 Class I requirements. Finishes:
 - 1) Light bronze.
 - 2) Medium bronze.
 - 3) Dark bronze.
 - 4) Extra dark bronze.
 - 5) Black.
- 9. Interior finish:
 - a. Clear treated wood, no prime.
 - b. Primed.
 - c. Prefinished with low gloss, two-component acrylic polyurethane:
- 10. Screen and Blind: Provide horizontal, retractable non-pleated insect and solar control screen and blind system with fingertip operation, load balancing and tensioning adjustment.
 - a. Screen Mechanism:
 - 1) Stand alone type.
 - 2) Concealed within frame and integrated with door system.
 - b. Operation:
 - 1) Single function for blinds up to 12 feet (3.65 m).wide and 10 feet (3.04 m) tall.
 - 2) Double function for blinds up to 24 feet (7.31 m) wide and 10 feet (3.04 m) tall.
 - 3) Multi-function screen and blind system up to 24 feet (7.31 m) wide and 7 feet 6 inches (2.29 m) tall.
 - c. Screen Mesh: Fiberglass/PVC mesh as selected from manufacturer's available selection for:
 - 1) Insect protection.
 - 2) Control heat gain or loss.
 - 3) UV protection.

- 4) Projector screen.
 - d. Finish:
 - 1) Anodized finish in manufacturer's standard color
 - 2) Anodized finish in custom color.
 - 3) Wood veneer from manufacturer's standard selections.
- E. Sliding View Wall Doors: Sliding view wall Lift and Slide WA6800 doors automatically seal when it reaches the closed position. Provide to fit the openings and configurations indicated on the Drawings. Provide complete with head, sill and jambs, weatherstripping, operating hardware and specified accessories:
1. Configuration:
 - a. Non-Pocket Configurations: Complete sliding door system including head, side jambs, thresholds and sliding panels to the following sizes indicated on the Drawings.
 - 1) Fixed - One Side: OX, 8-1/2 inch frame depth.
 - 2) Fixed - One Side: O2X, 12-1/8 inch frame depth.
 - 3) Fixed - One Side: O3X, 15-3/4 inch frame depth.
 - 4) Fixed - One Side: O4X, 19-3/8 inch frame depth.
 - 5) Fixed - One Side: O5X, 23 inch frame depth.
 - 6) Fixed - One Side: O6X, 26-5/8 inch frame depth.
 - 7) Fixed - One Side: O7X, 30-1/4 inch frame depth.
 - 8) Fixed - One Side: O8X, 33-7/8 inch frame depth.
 - 9) Fixed - One Side: O9X, 37-1/2 inch frame depth.
 - 10) Fixed - One Side: O10X, 41-1/8 inch frame depth.
 - 11) Fixed - One Side: O11X, 44-3/4 inch frame depth.
 - 12) Fixed - Split Panels: O2XO, 8-1/2 inch frame depth.
 - 13) Fixed - Split Panels: O4XO, 12-1/8 inch frame depth.
 - 14) Fixed - Split Panels: O6XO, 15-3/4 inch frame depth.
 - 15) Fixed - Split Panels: O8XO, 19-3/8 inch frame depth.
 - 16) Fixed - Split Panels: O10XO, 23 inch frame depth.
 - 17) Fixed - Split Panels: O12XO, 26-5/8 inch frame depth.
 - 18) Fixed - Split Panels: O14XO, 30-1/4 inch frame depth.
 - 19) Fixed - Split Panels: O16XO, 33-7/8 inch frame depth.
 - 20) Fixed - Split Panels: O18XO, 37-1/2 inch frame depth.
 - 21) Fixed - Split Panels: O20XO, 41-1/8 inch frame depth.
 - 22) Fixed - Split Panels: O22XO, 44-3/4 inch frame depth.
 - 23) Center Fixed: XOX, 8-1/2 inch frame depth.
 - 24) Center Fixed: 2XO2X, 12-1/8 inch frame depth.
 - 25) Center Fixed: 3XO3X, 15-3/4 inch frame depth.
 - 26) Center Fixed: 4XO4X, 19-3/8 inch frame depth.
 - 27) Center Fixed: 5XO5X, 23 inch frame depth.
 - 28) Center Fixed: 6XO6X, 26-5/8-1/4 inch frame depth.
 - 29) Center Fixed: 7XO7X, 30-1/4 inch frame depth.
 - 30) Center Fixed: 8XO8X, 33-7/8 inch frame depth.
 - 31) Center Fixed: 9XO9X, 37-1/2 inch frame depth.
 - 32) Center Fixed: 10XO10X, 41-1/8 inch frame depth.
 - 33) Center Fixed: 11XO11X, 44-3/4 inch frame depth.
 - b. Pocket Configurations: Complete sliding door system including head, side jambs, thresholds and sliding panels to the following sizes indicated on the Drawings.
 - 1) Pocketing - One Side: PX, 4-7/8 inch frame depth.
 - 2) Pocketing - One Side: P2X, 8-1/2 inch frame depth.
 - 3) Pocketing - One Side: P3X, 12-1/8 frame inch depth.
 - 4) Pocketing - One Side: P4X, 15-3/4 inch frame depth.
 - 5) Pocketing - One Side: P5X, 19-3/8 inch frame depth.
 - 6) Pocketing - One Side: P6X, 23 inch frame depth.

- 7) Pocketing - One Side: P7X, 26-5/8 inch frame depth.
 - 8) Pocketing - One Side: P8X, 30-1/4 inch frame depth.
 - 9) Pocketing - One Side: P9X, 33-7/8 inch frame depth.
 - 10) Pocketing - One Side: P10X, 37-1/2 inch frame depth.
 - 11) Pocketing - One Side: P11X, 41-1/8 inch frame depth.
 - 12) Pocketing - One Side: P12X, 44-3/4 inch frame depth.
 - 13) Pocketing - Split Panels: P2XP, 4-7/8 inch frame depth.
 - 14) Pocketing - Split Panels: P4XP, 7-1/2 inch frame depth.
 - 15) Pocketing - Split Panels: P6XP, 12-1/8 inch frame depth.
 - 16) Pocketing - Split Panels: P8XP, 15-3/4 inch frame depth.
 - 17) Pocketing - Split Panels: P10XP, 19-3/8 inch frame depth.
 - 18) Pocketing - Split Panels: P12XP, 23 inch frame depth.
 - 19) Pocketing - Split Panels: P14XP, 26-5/8 inch frame depth.
 - 20) Pocketing - Split Panels: P16XP, 30-1/4 inch frame depth.
 - 21) Pocketing - Split Panels: P18XP, 33-7/8 inch frame depth.
 - 22) Pocketing - Split Panels: P20XP, 37-1/2 inch frame depth.
 - 23) Pocketing - Split Panels: P22XP, 41-1/8 inch frame depth.
 - 24) Pocketing - Split Panels: P24XP, 44-3/4 inch frame depth.
2. Frame and Panels: Complete sliding wall door system including head, side jambs, thresholds and panels to sizes indicated on the Drawings.
 - a. Panel: Stile and rail panels with standard one lite.
 - 1) Stile and Rail:
 - a) Top Rail: 3-5/8 inches.
 - b) Bottom Rail: 6-3/4 inches.
 - 2) Exterior: Aluminum clad wood.
 - 3) Interior: Aluminum clad wood.
 - 4) Interior: Wood.
 - a) Pine.
 - b) Vertical Grain Douglas Fir.
 - c) African Mahogany.
 - d) Custom Species.
 - b. Frame: Extruded aluminum.
 - c. Sill Tracks:
 - 1) Standard Stainless Steel Flush Track; not recommended for wood floors.
 - 2) Raised Wood Track.
 - 3) Low Stainless Steel Flush Track for special floor conditions.
 3. Glass: Provide manufacturer's standard glass with dry glazing, Comply with safety glazing requirements of ANSI Z97.1 and CPSC 16CFR 1201
 - a. Insulated clear tempered glass dual glazed with a 1 inch overall thickness.
 - b. _____ glass as selected by the Architect.
 - c. Simulated Divided Lites: Sculpted profile as selected.
 4. Hardware and Handles:
 - a. Standard Handle with Recessed Pull:
 - 1) Anodized White.
 - 2) Anodized Dark Bronze.
 - 3) Anodized Silver.
 - b. LS 100 Handle with Recessed Pull:
 - 1) Satin Nickel.
 - 2) Polished Brass.
 - 3) Oil Rubbed Bronze.
 - 4) Painted Dark Bronze.
 - c. LS 300 Handle with Recessed Pull:
 - 1) Satin Nickel.
 - 2) Polished Brass.
 - 3) Oil Rubbed Bronze.
 - 4) Painted Dark Bronze.

- d. Athinai Handle with Recessed Pull:
 - 1) Satin Nickel.
 - 2) Polished Brass.
 - 3) Oil Rubbed Bronze.
 - e. Provide with optional key cylinder.
 - f. Provide panel handle height centered at 36 inches (914 mm) from bottom of panel.
5. Rolling Hardware: Manufacturer's standard rolling hardware integrated with engineered track, side jambs and threshold track system.
- a. Rolling Hardware:
 - 1) Nylon polyamide plastic wheels.
 - 2) Stainless steel wheels.
6. Exterior aluminum finish:
- a. Fluoropolymer-modified acrylic topcoat over fluoropolymer primer meets AAMA 2605 requirements.
 - b. Colors:
 - 1) Standard color as selected by the Architect.
 - 2) Custom color as selected by the Architect.
 - c. Anodized Clad Exterior anodized aluminum finish: Electrolytic two-step coloring method meets or exceeds AAMA 611 Class I requirements. Finishes:
 - 1) Light bronze.
 - 2) Medium bronze.
 - 3) Dark bronze.
 - 4) Extra dark bronze.
 - 5) Black.
7. Interior finish:
- a. Clear treated wood, no prime.
 - b. Primed.
 - c. Prefinished with low gloss, two-component acrylic polyurethane:

2.3 FABRICATION

- A. Sizes and Configurations: Fabricate to sizes and configurations indicated on the Drawings. Verify opening sizes by field measurement prior to completing fabrication.
- B. Verify sliding direction for opening units.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify openings are ready to receive work and dimensions and clearances are as indicated on the approved shop drawings.
- C. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install system in accordance with approved shop drawings and manufacturer's instructions.
- C. Install components level, plumb and true to line with uniform joints. Do not use defective parts that are warped, twisted, bowed, dented or abraded.
- D. Separate dissimilar materials using nonconductive tape, paint, or other material not visible in finished work.
- E. Provide attachments and shims to permanently fasten system to building structure.
- F. Maintain dimensional tolerances and alignment with adjacent Work.
- G. Anchor securely in place, allowing for required movement, including expansion and contraction.
- H. Install glazing and sealants in accordance with manufacturer's instructions without exception, including surface preparations.
- I. Set sill members in bed of sealant. Set other members with internal sealants to provide weathertight construction.
- J. Install flashings, closures, corners, and other accessories as required or detailed.
- K. Clean surfaces and install sealant in accordance with sealant manufacturer's instructions and structure manufacturer's guidelines.

3.4 ADJUSTING AND CLEANING

- A. Adjust hinge sets, locksets, and other hardware for proper operation. Lubricate using a suitable lubricant compatible with door and frame coatings.
- B. Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions before owner's acceptance.
- C. Clean and maintain aluminum surfaces in accordance with AAMA 610.1.
- D. Remove from project site and legally dispose of construction debris associated with this work.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 SCHEDULES

- A. :
- B. :

END OF SECTION