SECTION 08 42 13

ALUMINUM-FRAMED ENTRANCES - GLAZED AND SOLID

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\*\* NOTE TO SPECIFIER \*\* Avanti Systems USA; Glass partitions and walls.  
This section is based on the products of Avanti Systems USA, which is located at:  
200 Pemberwick Rd.  
Greenwich, CT 06830  
Toll Free Tel: 877-282-6843  
Tel: 914-934-9093  
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Email: [request info (sales@avantisystemsusa.com)](https://arcat.com/rfi?action=email&company=Avanti%252BSystems%252BUSA&message=RE%253A%2520Spec%2520Question%2520(08420avt)%253A%2520&coid=45481&spec=08420avt&rep=&fax=914-934-5992)  
Web: <https://www.avantisystemsusa.com>   
 [ [Click Here](https://arcat.com/company/avanti-systems-usa-45481) ] for additional information.  
Avanti Systems specializes in glass partition systems for commercial interiors. That's why, when it comes to glass walls and door systems, we are a preferred architectural interior glass office wall manufacturer for architects, designers contractors and owners.  
 Exclusively Engineered and Quality Tested Systems  
 Acoustically Tested Decibel Rated Partitions  
 Warranty on All Parts and Services  
 Components are In-Stock and Ready to Ship  
 European Inspired Design is Sleek and Slimline

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Aluminum Frames entrances.
       1. Frameless. (Solare Acoustic Single Glazed) (Solare Acoustic Double Glazed)
       2. Freestanding. (Elite Free)
       3. High wall. (Elevare Mullion) (Elevare Point Support Single Glazed) (Elevare Stacking)
       4. Modular. (Transverso)
    2. Entrance door hardware.
    3. Privacy glazing.
    4. Fasteners and accessories.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 08 41 00 - Aluminum Framed Storefronts and Entrances - Glazed and Solid.
    2. Section 10 22 00 - Demountable Partitions - Glazed and Solid.
  1. REFERENCES

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

* + 1. American Architectural Manufacturers Association (AAMA):
       1. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum.
       2. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
    2. Architectural Barriers Act (ABA).
    3. American with Disabilities Act (ADA).
    4. ASTM International (ASTM):
       1. ASTM A276 - Standard Specification for Stainless Steel Bars and Shapes.
       2. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass.
       3. ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass.
       4. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
       5. ASTM E1332 - Standard Classification for Rating Outdoor-Indoor Sound Attenuation.
    5. Building Hardware Manufacturers Association (BHMA):
       1. BHMA A156.3- Exit Devices.
       2. BHMA A156.4 - Door Controls - Closers.
       3. BHMA A156.5 - Cylinders and Input Devices for Locks.
       4. BHMA A156.8 - Door Controls - Overhead Stops and Holders.
       5. BHMA A156.16- Auxiliary Hardware.
    6. Underwriters Laboratories (UL):
       1. UL 305 - Panic Hardware
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
    2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up 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: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, excessive temperature, and construction operations.
  3. 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.
  4. WARRANTY
     1. Manufacturer's standard limited warranty unless indicated otherwise.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Avanti Systems USA, which is located at:  
         200 Pemberwick Rd.  
         Greenwich, CT 06830  
         Toll Free Tel: 877-282-6843  
         Tel: 914-934-9093  
         Fax: 914-934-5992  
         Email: [request info (sales@avantisystemsusa.com)](https://arcat.com/rfi?action=email&company=Avanti%252BSystems%252BUSA&message=RE%253A%2520Spec%2520Question%2520(08420avt)%253A%2520&coid=45481&spec=08420avt&rep=&fax=914-934-5992);Web: <https://www.avantisystemsusa.com>

\*\* 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 FRAMED ENTRANCES
     1. Performance Requirements:
        1. General Performance: Comply with performance requirements specified, as determined by testing of aluminum-framed entrances representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.
        2. Retain "Noise Reduction" Paragraph below if required for Project. Avanti entrance door systems provide acoustical performance of up to 43 Db.
        3. Noise Reduction: Test according to ASTM E 90, with ratings determined by ASTM E 1332.

\*\* NOTE TO SPECIFIER \*\* Delete the following paragraphs not required, then delete the basis of design options not required.

* + 1. Frameless:
       1. Basis-of-Design: Solare acoustic, single-glazed partition system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Pivot, glass swing door.
        2. Door Type: Pivot, glass swing door pair.
        3. Door Type: Pivot, frameless glass swing door.
        4. Door Type: Hinged, glass, swing door.
        5. Door Type: Double glazed acoustic door.

Provide manufacturer's standard integral blinds.

Dropped door seal.

* + - * 1. Door Type: Standard sliding door.
        2. Door Type: Barn glass sliding door.
        3. Door Type: Premium glass sliding door.
        4. Door Type: Cloud glass sliding door.
        5. Door Type: Cloud glass sliding door at wall.
        6. Door Type: Cloud assisted glass sliding door.
        7. Door Type: Timber swing door.
        8. Door Type: Lunar smart glass swing door.
        9. Acoustical Performance: 43 Db.
        10. Acoustical Performance: \_\_\_ Db.
        11. Entrance Door Function: Free swing.
        12. Entrance Door Function: Self-closing.
        13. Door Frame: Frameless pivot door - scribe abutment.
        14. Door Frame: Single glazed door frame.
        15. Hardware:

Pivot Door: Top free swing.

Pivot Door: Bottom free swing pivot.

Pivot Door: Bottom free swing pivot option.

Pivot Door: Recessed walking beam pivot.

Panic hardware.

Panic hardware with vertical rods.

Patch Fittings: Top offset gas.

Patch Fittings: Bottom offset glass.

Patch Fittings: Bottom center hung.

Patch Fittings: Transom offset.

Patch Fittings: Transom with center pivot.

Patch Fittings: Transom with door stop.

Patch Fittings: Top center hung.

Patch Fittings: Center pivot wall mount.

Patch Fittings: Locking.

Patch Fittings: Hydraulic self-closing.

Closer: Recessed door closer.

Door Seal: Drop down.

Hinge: Free swing hinge.

Hinge: Frame to glass door hydraulic hinge.

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) locking.

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

Door Pull: Lever handle.

Door Pull: Lever latch and handle.

Lockset: Lock center mount.

Lockset: Deluxe slip-on.

Keeper: Dust proof.

Fasteners: Countersunk.

Fasteners: Flush.

* + - 1. Basis-of-Design: Solare acoustic, double-glazed partition system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Pivot, glass swing door.
        2. Door Type: Pivot, glass swing door pair.
        3. Door Type: Hinged, glass, swing door.
        4. Door Type: Double glazed acoustic door.

Provide manufacturer's standard integral blinds.

Dropped door seal.

* + - * 1. Door Type: Barn sliding glass doors.
        2. Door Type: Standard sliding glass doors.
        3. Door Type: Premium sliding glass doors.
        4. Door Type: Pocket sliding glass doors.
        5. Door Type: Timber swing doors.
        6. Door Type: Lunar smart glass Swing door.
        7. Acoustical Performance: 43 Db.
        8. Acoustical Performance: \_\_\_ Db.
        9. Entrance Door Function: Free swing.
        10. Entrance Door Function: Self-closing.
        11. Hardware:

Panic Hardware.

Panic Hardware with vertical rods.

Closer: Recessed door closer.

Door Seal: Drop down.

Hinge: Free swing hinge.

Hinge: Frame to glass door hydraulic hinge.

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) locking.

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

Door Pull: Lever handle.

Door Pull: Lever latch and handle.

Lockset: Lock center mount.

"L"-Bracket.

* + 1. Freestanding:
       1. Basis-of-Design: Elite freestanding partition system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Pivot frameless, glass swing door.
        2. Door Type: Barn sliding doors.
        3. Entrance Door Function: Free swing.
        4. Entrance Door Function: Self-closing.
        5. Hardware:

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

Patch Fittings: Top offset gas.

Patch Fittings: Bottom offset glass.

Patch Fittings: Bottom center hung.

Patch Fittings: Top center hung.

Patch Fittings: Transom offset.

Patch Fittings: Transom with center pivot.

Patch Fittings: Transom with door stop.

Closer: Recessed door closer.

Pivot Door: Bottom free swing pivot.

Pivot Door: Bottom free swing pivot option.

Fasteners: Countersunk.

Fasteners: Flush.

* + 1. High Wall:
       1. Basis-of-Design: Elevare mullion, high-wall partition system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Pivot, frameless, glass swing door (single glazed).
        2. Door Type: Hinged, glass, swing door.
        3. Door Type: Double-glazed, acoustic swing door.
        4. Acoustical Performance: 36 Db.
        5. Acoustical Performance: \_\_\_ Db.
        6. Entrance Door Function: Free swing.
        7. Entrance Door Function: Self-closing.
        8. Hardware:

Hinge: Mullion high wall system.

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

* + - 1. Basis-of-Design: Elevare point-support, single-glazed high-wall partition system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Pivot, frameless, glass swing door (single glazed).
        2. Door Type: Hinged, glass, swing door.
        3. Acoustical Performance: 43 Db.
        4. Acoustical Performance: \_\_\_ Db.
        5. Entrance Door Function: Free swing.
        6. Entrance Door Function: Self-closing.
        7. Hardware:

Hinge: Mullion high wall system.

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

* + - 1. Basis-of-Design: Elevare stacking, double-glazed high-wall system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Hinged, glass, swing door.
        2. Door Type: Double-glazed, acoustic swing door.
        3. Acoustical Performance: 36 Db.
        4. Acoustical Performance: \_\_\_ Db.
        5. Entrance Door Function: Free swing.
        6. Entrance Door Function: Self-closing.
        7. Hardware:

Hinge: Mullion high wall system.

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

* + - 1. Basis-of-Design: Elevare tension, high-wall system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Pivot, frameless, glass swing door (single glazed).
        2. Door Type: Hinged, glass, swing door.
        3. Door Type: Double-glazed, acoustic swing door.
        4. Acoustical Performance: 36 Db.
        5. Acoustical Performance: \_\_\_ Db.
        6. Entrance Door Function: Free swing.
        7. Entrance Door Function: Self-closing.
        8. Hardware:

Hinge: Mullion high wall system.

Door Pull: Ladder pull 60 inches (1524 mm) locking (IC Core Available).

Door Pull: Ladder pull 48 inches (1219 mm) non-locking.

* + 1. Modular:
       1. Basis-of-Design: Transverso Monoblock modular wall partition system as manufactured by Avanti Systems, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete door and hardware options not required.

* + - * 1. Door Type: Hinged framed glass doors.
        2. Door Type: Full height aluminum pass doors.
        3. Door Type: Glass doors with pivot.
        4. Door Type: Wood doors with pivot.
        5. Acoustical Performance: 36 Db.
        6. Acoustical Performance: \_\_\_ Db.
        7. Entrance Door Function: Free swing.
        8. Entrance Door Function: Self-closing.
        9. Door Frame:

Jamb: T-Connection at 2-Door.

Jamb: At wall.

For solid partitions.

For glazing partitions.

* 1. ENTRANCE DOOR HARDWARE

\*\* NOTE TO SPECIFIER \*\* Before retaining hardware, verify accessible entrance, means-of-egress doorway, and other requirements of authorities having jurisdiction.

* + 1. For Entrance Doors: Hardware and hardware sets complying with requirements in this Section.
       1. Hardware Schedule: See Drawings.
    2. Basis of Design: Subject to compliance with requirements, provide Avanti Systems, Inc.
       1. Hardware Type: Pivot.
       2. Hardware Type: Hinged.
       3. Provide quantity, item, size, finish, or color indicated.

\*\* NOTE TO SPECIFIER \*\* Delete entrance door hardware sets option not required.

* + - 1. Entrance Door Hardware Sets: Supply named manufacturers' products.
      2. Entrance Door Hardware Sets: Must comply with BHMA standard referenced.
      3. Sequence of Operation: Electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
      4. Opening-Force Requirements:

\*\* NOTE TO SPECIFIER \*\* Egress doors paragraph below is based on requirements of the IBC and NFPA 101 for means-of-egress doors.

* + - * 1. Egress Doors:

Release Latch: Not more than 15 lbf (67 N).

Set Door in Motion: Not more than 30 lbf (133 N).

Open Door to its Minimum Required Width: 15 lbf (67 N).

* + - * 1. Accessible Interior Doors: Per ADA-ABA Accessibility Guidelines.

To Fully Open Door: Not more than 5 lbf (22.2 N).

* + 1. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.
       1. Pivot Hinges: BHMA A156.4, Grade 1.
          1. Offset-Pivot Hinges: Provide top and bottom offset pivots at each door leaf.
       2. Free-Swing Hinge: ASTM A276/A276M, Type 304, including accessories required for complete installation.
       3. Frame to Glass Door Hydraulic Hinge: ASTM A 276/A 276M, Type 304, including accessories required for complete installation.
          1. Quantities:

For doors up to 87 inches (2210 mm) high, provide three hinges per leaf.

For doors more than 87 and up to 120 inches (2210 and up to 3048 mm) high, provide four hinges per leaf.

* + - 1. Panic Exit Devices: BHMA A156.3, Grade 1, listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305.
      2. Cylinders: BHMA A156.5, Grade 1.
         1. Keying: No master key system.
         2. Keying: Master key system.
         3. Permanently inscribe each key with a visual key control number.

Include Notation: DO NOT DUPLICATE.

Include Notation: Notation to be furnished by Owner.

* + - 1. Strikes: With black-plastic dust box for each latch or lock bolt. Fabricated for aluminum framing.
      2. Closers: BHMA A156.4, Grade 1, with accessories required for a complete installation, sized as required by door size, exposure to weather, and anticipated frequency of use; adjustable to comply with field conditions and requirements for opening force.
      3. Concealed Overhead Holders and Stops: BHMA A156.8, Grade 1.
      4. Door Stops: BHMA A156.16, Grade 1,floor, or wall mounted, as appropriate for door location indicated, with integral rubber bumper.

\*\* NOTE TO SPECIFIER \*\* For privacy glass, specify Avanti Systems' "Lunar Smart Glass" partition system. Delete article if not required.

* 1. PRIVACY GLAZING
     1. Privacy Glazing: UL approved LCD switchable privacy glass.

\*\* NOTE TO SPECIFIER \*\* Delete one of the two following paragraphs, whichever is not required. Coordinate with storefront and entrance glazing system.

* + - 1. Fully Tempered (FT) Clear Glass per ASTM C1048:
         1. Kind: FT.
         2. Condition: A (uncoated surfaces).
         3. Type: I (transparent).
         4. Class: 1 clear.
         5. Quality: q3 (glazing select).
         6. Tested for surface and edge compression per ASTM C1048.
         7. Tested for impact strength per 16 CFR 1201 for Category II materials.

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

* + - * 1. Thickness: 1/2 inch (12.7 mm).
        2. Thickness: 5/8 inch (15.8 mm).
        3. Thickness: 3/4 inch (19.0 mm).
      1. Laminated Glass per ASTM C1172: Two layers of clear glass with clear plastic interlayer.
         1. Interlayer: Polyvinyl butyral (PVB) with a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after laminating glass lites and installation.

Laminate lites in autoclave with heat plus pressure.

* + - * 1. Laminating Process: Fabricate laminated glass to produce glass free of foreign substances and air or glass pockets.
        2. Thickness: 1/2 inch (13 mm).

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

* + - 1. Color: Neutral.
      2. Color: Gray.
      3. Color: Green.
      4. Color: Bronze.
      5. Color: Blue.
      6. Color: As selected by Architect.
      7. Color: \_\_\_\_\_\_\_\_.
      8. Electrical Requirements:
         1. Power: 110 V ac; 60 Hz.

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

* + - * 1. Switches: Single.

Switch On: 0.372 W per sq. ft. (4 W per sq. m) of glazing.

Switch Off Privacy Mode: Zero W per sq. ft. (Zero W per sq. m) of glazing.

* + - * 1. Switches: Three-way.

Switch On: 0.372 W per sq. ft. (4 W per sq. m) of glazing.

Switch Off Privacy Mode: Zero W per sq. ft. (Zero W per sq. m) of glazing.

* + 1. Glazing Sealants: As recommended by manufacturer.

\*\* NOTE TO SPECIFIER \*\* Subparagraph below applies to LEED 2009 NC, CI, and CS; LEED v4; IgCC; ASHRAE 189.1; and Green Globes.

* + - 1. VOC Content: 250 g/L or less.

\*\* NOTE TO SPECIFIER \*\* Subparagraph below applies to LEED 2009 for Schools Credit IEQ 4.1, LEED v4, IgCC, ASHRAE 189.1, and Green Globes.

* + - 1. Comply with testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

\*\* NOTE TO SPECIFIER \*\* Subparagraph below applies to IgCC. Delete if not required.

* + - * 1. Formaldehyde emissions shall not exceed 9 mcg/cu. m or 7 ppb, whichever is less.

\*\* NOTE TO SPECIFIER \*\* Subparagraph below applies to Green Globes. Delete if not required.

* + - * 1. The building concentration of formaldehyde is not to exceed half of the indoor recommended exposure limit, or 33 mcg per cu m, and that of acetaldehyde must not exceed 9 mcg per cu m.
  1. FASTENERS AND ACCESSORIES
     1. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
        1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
        2. Reinforce members as required to receive fastener threads.

\*\* NOTE TO SPECIFIER \*\* Delete paragraph below if not required.

* + - 1. Exposed Fasteners: Countersunk Phillips screw heads.
         1. Finish: Match framing system.
         2. Material: 300 series stainless steel.
    1. Anchors: Three-way adjustable that accommodate fabrication and installation tolerances in material and finish compatible with adjoining materials and recommended by manufacturer.
       1. Minimum Adjustment: 1 inch (25 mm).
       2. Minimum Adjustment: \_\_\_\_\_\_\_\_.
  1. FABRICATION
     1. Form or extrude aluminum shapes before finishing.
     2. Components to have the following characteristics:
        1. Profiles: Sharp, straight, and free of defects or deformations.
        2. Joints: Accurately fitted with ends coped or mitered.
        3. Fasteners, anchors, and connection devices: Concealed from view to greatest extent possible.
     3. Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.
     4. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.
  2. ALUMINUM FINISHES

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

* + 1. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.
    2. Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils (0.04 mm). Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

\*\* NOTE TO SPECIFIER \*\* Delete color and gloss options not required.

* + - 1. Color and Gloss: RAL 9006 white aluminum.
      2. Color and Gloss: As indicated by manufacturer's designations.
      3. Color and Gloss: Match Architect's sample.
      4. Color and Gloss: As selected by Architect from manufacturer's full range.
      5. Color and Gloss: \_\_\_\_\_\_\_.

1. EXECUTION
   1. EXAMINATION
      1. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
      2. Do not begin installation until the substrates have been properly constructed and prepared.
      3. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
      2. General:
         1. Do not install damaged components.
         2. Fit joints to produce hairline joints free of burrs and distortion.
         3. Rigidly secure nonmovement joints.
         4. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration and to prevent impeding movement of moving joints.
      3. Metal Protection:
         1. Where aluminum is in contact with dissimilar metals, protect against galvanic action by painting contact surfaces with materials recommended by manufacturer for this purpose or installing nonconductive spacers.

\*\* NOTE TO SPECIFIER \*\* Coordinate first paragraph below with manufacturers' written recommendations.

* + 1. Set continuous sill members and flashing in full sealant bed, as specified.
    2. Install components plumb and true in alignment with established lines and grades.
    3. Install glazing as specified.

\*\* NOTE TO SPECIFIER \*\* Indicate entrance door hardware mounting heights on Drawings, or insert them in "Field-Installed Entrance Door Hardware" Subparagraph below.

* + - 1. Field-Installed Entrance Door Hardware: Install surface-mounted entrance door hardware according to entrance door hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.
  1. FIELD QUALITY CONTROL
     1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturers recommendations.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION