SECTION 08 42 43

INTENSIVE CARE UNIT / CRITICAL CARE UNIT (ICU/CCU) ENTRANCES

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

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\*\* NOTE TO SPECIFIER \*\* ASSA ABLOY Entrance Systems; intensive care unit/ critical care unit (ICU/CCU) entrances.  
This section is based on the products of ASSA ABLOY Entrance Systems, which is located at:1900 Airport Rd.Monroe, NC 28110Toll Free Tel: 877-SPEC-123 Fax: 704-290-5555Email: [request info (specdesk@besam-usa.com)](https://arcat.com/rfi?action=email&company=ASSA%252BABLOY%252BEntrance%252BSystems&message=RE%253A%2520Spec%2520Question%2520(08340bes)%253A%2520&coid=30906&spec=08340bes&rep=&fax=704-290-5555)  
Web: <https://www.assaabloyentrance.com/us/en/solutions/products/automatic-doors>   
 [ [Click Here](https://arcat.com/company/assa-abloy-entrance-systems-30906) ] for additional information.  
ASSA ABLOY Entrance Systems is the world's most comprehensive supplier of entrance automation solutions. We take an integrative approach to the flow of people and goods, creating solutions with the best possible balance of cost, quality and lifetime performance. At our disposal is a strong portfolio of well-established brands that have been the market leaders in their fields for decades to form a complete offering for the front, back and interior of your building.  
For pedestrian door solutions, look to ASSA ABLOY Entrance Systems for a complete line of automatic sliding, swing, revolving, and manual ICU/CCU doors. Our products combine safety and security with comfort and convenience, making them a top choice for some of the most prestigious organizations in the retail, healthcare, hospitality, and transportation industries.

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Intensive care unit/ critical care unit (ICU/CCU) entrance doors of the following types:
       1. Swing/ bi-fold ICU/CCU entrances.
       2. Manually operated sliding ICU/CCU entrances.
          1. Smoke rated.
          2. Non-smoke rated.
       3. Manually operated swing ICU/CCU entrances.
          1. Smoke rated.
          2. Non-smoke rated.
       4. Power operated swing ICU/CCU entrances.
       5. Power operated sliding ICU/CCU entrances.
          1. Smoke rated.
          2. Non-smoke rated.
  1. RELATED SECTIONS

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

* + 1. Section 07 90 00 - Joint Protection.
    2. Section 08 42 29 - Automatic Entrances.
    3. Section 08 42 29.33 - Swinging Automatic Entrances.
    4. Section 08 83 13 - Mirrored Glass Glazing.

\*\* NOTE TO SPECIFIER \*\* Delete if magnetic hold-open devices or power operated entrances are not required.

* + 1. Divisions 16 - Electrical.
  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. American National Standards Institute (ANSI):
       1. ANSI/BHMA A156.10 - American National Standard for Power Operated Pedestrian Doors.
       2. ANSI/BHMA A156.19 - Standards for Power Assist and Low Energy Power Operated Doors.
       3. ANSI/BHMA A156.38 - American National Standard for Low Energy Power Operated Sliding and Folding Doors.
       4. ANSI Z97.1 - Standards for Safety Glazing Material Used in Buildings.
    3. National Association of Architectural Metal Manufacturers (NAAMM):
       1. Metal Finishes Manual for Architectural Metal Products.
    4. National Fire Protection Association (NFPA):
       1. NFPA 105 - Installation of Smoke Door Assemblies.
    5. Underwriters Laboratories (UL):
       1. UL 1784 - Air Leakage Tests of Door Assemblies.
  1. DEFINITIONS

\*\* NOTE TO SPECIFIER \*\* Delete terms not referenced in this section.

* + 1. Activation Device: Device that, when actuated, sends an electrical signal to the door operator to activate the operation of the door.
    2. Knowing Act: Consciously initiating the opening of a power operated door using acceptable methods including wall mounted switches such as push plates and controlled access devices such as keypads, card readers and key switches.
    3. Safety Device: A device that detects the presence of an object or person within a zone where contact could occur and provides a signal to stop the movement of the door.
  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 selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.
    3. 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 ten years documented experience.
        1. Manufacturer to have a company certificate issued by AAADM.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and trained by Manufacturer.
     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 on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project. Delete if not required.

* + 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.
     2. Field Measurements: Verify actual dimensions of openings to receive ICU/CCU entrances by field measurements before fabrication and indicate on shop drawings.
  4. WARRANTY
     1. Manufacturer's Warranty: Provide manufacturer's standard limited warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: ASSA ABLOY Entrance Systems, which is located at:1900 Airport Rd.Monroe, NC 28110Toll Free Tel: 877-SPEC-123 Fax: 704-290-5555Email: [request info (specdesk@besam-usa.com)](https://arcat.com/rfi?action=email&company=ASSA%252BABLOY%252BEntrance%252BSystems&message=RE%253A%2520Spec%2520Question%2520(08340bes)%253A%2520&coid=30906&spec=08340bes&rep=&fax=704-290-5555);Web: <https://www.assaabloyentrance.com/us/en/solutions/products/automatic-doors>

\*\* 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. PERFORMANCE REQUIREMENTS

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

* + 1. MicroShield antimicrobial silver-based ion finish on all exposed surfaces including door pulls, door extrusions, rails and header to comply with the manufacturer's specified requirements.
       1. Antimicrobial finish must permanently suppress the growth of bacteria, algae, fungus, mold and mildew.

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

* 1. SWING / BI-FOLD ICU/CCU ENTRANCE

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Fold Door Package, ICU/CCU 3 panel, non-latching folding/swing door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated, non-latching.
       2. Door Configuration: Double-acting swing door and a 2 panel bi-fold door combination.
          1. Swing Door: Non-latching, double-acting door with door closer.
          2. Bi-Fold Door: Non-latching, 2 panel, bi-fold door.
       3. Breakaway Capability: Bi-fold door to have break-out from any position.
       4. Mounting: Overhead header installed between jambs.
       5. Trackless Design: Floor mounted guide track not allowed.
       6. Hardware:
          1. Double-Acting Swing Door:

Top and bottom pivots.

Double acting door closer.

\*\* NOTE TO SPECIFIER \*\* Delete below if hold open is not required.

Door closer shall have a 90 degree hold open feature (hold open in both directions).

Manufacturer's surface-mounted, vertical C-shaped pull handles on both sides of door.

* + - * 1. Two Panel Bi-Fold Door:

Top and bottom pivot.

One rubber (Hytrel) roller wheel on the slave leaf.

Manufacturer's surface-mounted, vertical C-shaped pull handle on pull side of door.

Manufacturer's surface-mounted, horizontal push bar on push side of door.

Full height finger guard between folding door panels.

* + - * 1. Floor Mounted Guide Track/Threshold:

Trackless Design: Floor mounted guide track and threshold not allowed.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Fold Door Package, ICU/CCU 3 panel, latching folding/swing door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated, latching.

\*\* NOTE TO SPECIFIER \*\* Smoke seals are optional. Delete if not required.

* + - 1. Smoke Seals: Smoke gasketing that meets the infiltration requirements of UL1784.
      2. Door Configuration: Directional swing door and a 2 panel bi-fold door combination.
         1. Swing Door: Latching, directional swing door with door closer.
         2. Bi-Fold Door: Latching, 2 panel, bi-fold door.
      3. Breakaway Capability: Bi-fold door to have break-out from any position.
      4. Mounting: Overhead header installed between jambs.
      5. Trackless Design: Floor mounted guide track not allowed.
      6. Hardware:
         1. Directional Swing Door:

Top and bottom pivots.

Door closer.

\*\* NOTE TO SPECIFIER \*\* Delete below if hold open is not required.

Door closer shall have a 90 degree hold open feature.

Latching Hardware: Concealed top and bottom vertical rods. Bottom rod to serve as a counterbalance mechanism, factory adjusted so that it does not extend below the bottom of the rail.

Push Side: Push paddle.

Pull Side: Curved lever handle.

* + - * 1. Two Panel Bi-Fold Door:

Top and bottom pivot.

One rubber (Hytrel) roller wheel on the slave leaf.

Manufacturer's surface-mounted, vertical C-shaped pull handle on pull side of door.

Manufacturer's surface-mounted, horizontal push bar on push side of door.

Full height finger guard between folding door panels.

* + - * 1. Floor Mounted Guide Track/Threshold:

Trackless Design: Floor mounted guide track and threshold not allowed.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Fold Door Package, ICU/CCU 2 panel, folding door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: 2 panel bi-fold door.
       3. Breakaway Capability: Bi-fold door to have break-out from any position.
       4. Mounting: Overhead header installed between jambs.
       5. Trackless Design: Floor mounted guide track not allowed.
       6. Hardware:
          1. Top and bottom pivot.
          2. One rubber (Hytrel) roller wheel on the slave leaf.
          3. Manufacturer's surface-mounted, vertical C-shaped pull handle on pull side of door.
          4. Manufacturer's surface-mounted, horizontal push bar on push side of door.
          5. Full height finger guard between folding door panels.
          6. Floor Mounted Guide Track/Threshold:

Trackless Design: Floor mounted guide track and threshold not allowed.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Fold Door Package, ICU/CCU 4 panel, folding door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Two, 2 panel bi-fold door.
       3. Breakaway Capability: Bi-fold door to have break-out from any position.
       4. Mounting: Overhead header installed between jambs.
       5. Trackless Design: Floor mounted guide track not allowed.
       6. Hardware:
          1. Top and bottom pivots.
          2. One rubber (Hytrel) roller wheel on the slave leaves.
          3. Manufacturer's surface-mounted, vertical C-shaped pull handles on pull side of doors.
          4. Manufacturer's surface-mounted, horizontal push bars on push side of doors.
          5. Full height finger guard between folding door panels.
          6. Floor Mounted Guide Track/Threshold:

Trackless Design: Floor mounted guide track and threshold not allowed.

* + 1. Stile and Rail Swing and Folding Panels:
       1. Material: Extruded Aluminum, Alloy 6063-T5 or 6063-T6.
       2. Door panels shall have a minimum 0.125 inch (3 mm) structural wall thickness including adjoining perimeter frames where applicable.
          1. Aluminum extrusions shall allow for a factory installed, slide-in type gasket.
       3. Door Construction shall be by means of an integrated corner clip with 3/8 inch (9.5 mm) diameter all-thread through bolt from each stile.
          1. Face of door stiles shall be flush with adjacent rails and muntin.
       4. Glass stops shall be 0.062 inch (1.6 mm) wall thickness and shall provide security function as a standard by means of a fixed non-removable exterior section with glazing to be performed from the interior only.

\*\* NOTE TO SPECIFIER \*\* Beveled glass stops available only with 1/4 inch glazing. Delete if not required.

* + - * 1. Beveled glass stops.
      1. Vertical Stiles: Narrow stile, 2-1/8 inches (54 mm).
      2. Top Rail: 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select bottom rail size required. Delete options not required.

* + - 1. Bottom Rails: 4 inches (102 mm).
      2. Bottom Rails: 7 inches (178 mm).
      3. Bottom Rails: 10 inches (254 mm).

\*\* NOTE TO SPECIFIER \*\* Intermediate muntin is required with integral blinds, but optional with other systems. Delete options not required.

* + - 1. Intermediate Muntin: 1-3/4 inches (45 mm).
      2. Intermediate Muntin: 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Choose one of two gasketing options below. Retain "Gasketing" if entrances do not need to restrict smoke infiltration. Retain "Smoke Gasketing" if entrances need to restrict smoke infiltration. Delete options not required.

* + - 1. Gasketing: Slide-in type, replaceable pile mohair seals.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket.
      2. Smoke Gasketing: Slide-in type, replaceable, smoke type gasket that is capable of withstanding 400 degrees F (204 degrees C) for a minimum of 30 minutes.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket that is capable of withstanding exposure to 400 degrees F (204 degrees C) for a minimum of 30 minutes.
      3. Glass: Glazing for Sliding/Swing/Fold Panels and Sidelite Panels shall comply with ANSI Z97.1, thickness as indicated.

\*\* NOTE TO SPECIFIER \*\* Select glazing types required. If multiple types are required, add "Locations" to each. Delete options not required.

* + - * 1. Glazing: 1/4 inch (6 mm) tempered glass, unless otherwise specified.
        2. Glazing: 5/8 inch (16 mm) insulated glass.
        3. Glazing: 1 inch (25 mm) insulated glass.
        4. Glazing: 1-1/4 inch (31 mm) insulated glass.
        5. Glazing: Furnished by others.

\*\* NOTE TO SPECIFIER \*\* Consider a lower panel with opaque glazing when specifying integral blinds. Delete if not required.

* + - * 1. Lower Lite Glazing Panels: 1 inch (25 mm) overall thickness frosted insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

Frosted Glazing: Opaque, acid etched on No. 2 or No. 3 surface.

\*\* NOTE TO SPECIFIER \*\* Consult manufacturer for integral blind information. Delete if not required.

* + - * 1. Glazing Panels with Integral Blinds: 1-1/4 inch (31 mm) overall thickness insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

Location: Upper lite only.

Locations: Upper and lower lite.

Integral Blinds: Glass to have blinds installed between glass lites.

Blinds to be mechanically gear-driven tilt micro-blind installed in the sealed insulating glass unit. Internally mounted control assembly that is coupled to the external operator controls the tilting of blind slats.

Tilt Operator: Thumb wheel, dual control.

* + - * 1. Installation: Dry glazing; wet glazing not allowed.

See manufacturer's instructions and Division 8 Section "Glazing" for requirements.

* + 1. Framing Members: Provide ICU/CCU entrances as complete assemblies. Manufacturer's standard extruded aluminum framing reinforced as required to support loads.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

* + - 1. Vertical Jambs: 1-3/4 inches (44.5 mm) by 4-1/2 inches (114 mm).
      2. Vertical Jambs: 1 inch (25 mm) by 4-1/2 inches (114 mm).
    1. Header: Extruded aluminum header with track surface mounted under header, extending full width of entrance unit.
       1. Header Capacity: Capable of supporting up to 115 pounds (52 kg) weight of swing door and up to 170 pounds (77 kg) weight of folding doors.
       2. Size: 4-1/2 inches (114 mm) wide by 1-3/4 inches (44.5 mm) high.

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

* 1. MANUALLY OPERATED SLIDING ICU/CCU ENTRANCES

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Sliding Door Package, single slide, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Single slide, two equal panel unit with one operable leaf and one sidelite.

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

* + - 1. Smoke Rated: Certified to UL 1784.

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

* + - 1. Minimum Clear Door Opening Width: 41-1/2 inches (1054 mm) for 8 ft (2438 mm) unit width.
      2. Minimum Clear Door Opening Width: 44-1/2 inches (1130 mm) for 8.5 ft (2591 mm) unit width.
      3. Breakaway Capability: Sliding leaf and sidelite.
      4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Sliding Door Package, single slide, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Single slide, two equal panel unit with one operable leaf and one fixed sidelite.

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

* + - 1. Smoke Rated: Certified to UL 1784.

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

* + - 1. Minimum Clear Door Opening Width: 41-1/2 inches (1054 mm) for 8 ft (2438 mm) unit width.
      2. Minimum Clear Door Opening Width: 44-1/2 inches (1130 mm) for 8.5 ft (2591 mm) unit width.
      3. Breakaway Capability: Sliding leaf only.
      4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Sliding Door Package, single slide, surface mounted, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Single slide unit without sidelite.

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

* + - 1. Smoke Rated: Certified to UL 1784.

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

* + - 1. Minimum Clear Door Opening Width: 41-1/2 inches (1054 mm) for 8 ft (2438 mm) unit width.
      2. Minimum Clear Door Opening Width: 44-1/2 inches (1130 mm) for 8.5 ft (2591 mm) unit width.
      3. Breakaway Capability: Sliding leaf.
      4. Mounting: Surface mounted header installed on face of wall.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Sliding Door Package, bi-parting, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Bi-parting, four equal panel unit with two operable leaves and two sidelites.

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

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Sliding leaves and sidelites.
      3. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Sliding Door Package, bi-parting, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Bi-parting, four equal panel unit with two operable leaves and two fixed sidelites.

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

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Sliding leaves only.
      3. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Sliding Door Package, bi-parting, surface mounted, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Bi-parting, two equal panel unit with two operable leaves and no sidelites.

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

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Sliding leaves.
      3. Mounting: Surface mounted header installed on face of wall.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Telescopic Sliding Door Package, telescopic single slide, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Single slide, three equal panel unit with two operable leaves and one sidelite.

\*\* NOTE TO SPECIFIER \*\* Keep for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Sliding leaves and sidelite.
      3. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Telescopic Sliding Door Package, telescopic single slide, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Single slide, three equal panel unit with two operable leaves and one sidelite.

\*\* NOTE TO SPECIFIER \*\* Keep for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Leading sliding leaf only.
      3. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Telescopic Sliding Door Package, telescopic bi-parting, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Bi-parting, six equal panel unit with four operable leaves and two sidelites.

\*\* NOTE TO SPECIFIER \*\* Keep for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Sliding leaves and sidelites.
      3. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Telescopic Sliding Door Package, telescopic bi-parting, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated.
       2. Door Configuration: Bi-parting, six equal panel unit with four operable leaves and two fixed sidelites.

\*\* NOTE TO SPECIFIER \*\* Keep for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Breakaway Capability: Leading sliding leaves only.
      3. Mounting: Overhead header installed between jambs.
    1. Stile and Rail Sliding Panels and Sidelites:
       1. Material: Extruded Aluminum, Alloy 6063-T5 or 6063-T6.
       2. Door panels shall have a minimum 0.125 inch (3 mm) structural wall thickness including adjoining perimeter frames where applicable.
          1. Aluminum extrusions shall allow for a factory installed, slide-in type gasket.
       3. Door Construction shall be by means of an integrated corner clip with 3/8 inch (9.5 mm) diameter all-thread through bolt from each stile.
          1. Face of door stiles shall be flush with adjacent rails and muntin.
       4. Glass stops shall be 0.062 inch (1.6 mm) wall thickness and shall provide security function as a standard by means of a fixed non-removable exterior section with glazing to be performed from the interior only.

\*\* NOTE TO SPECIFIER \*\* Beveled glass stops available only with 1/4 inch glazing. Delete if not required.

* + - * 1. Beveled glass stops.

\*\* NOTE TO SPECIFIER \*\* Select vertical stile size required. Delete option not required.

* + - 1. Vertical Stiles: Narrow stile, 2-1/8 inches (54 mm).
      2. Vertical Stiles: Medium stile, 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select bottom rail size required. Delete options not required.

* + - 1. Bottom Rails: 4 inches (102 mm).
      2. Bottom Rails: 7 inches (178 mm).
      3. Bottom Rails: 10 inches (254 mm).

\*\* NOTE TO SPECIFIER \*\* Intermediate muntin is required with integral blinds, but optional with other systems. Delete options not required.

* + - 1. Intermediate Muntin: 1-3/4 inches (45 mm).
      2. Intermediate Muntin: 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select first gasketing option for non-smoke rated entrances and second option for smoke rated entrances. Delete option not required.

* + - 1. Gasketing: Slide-in type, replaceable pile mohair seals.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket.
      2. Smoke Gasketing: Slide-in type, replaceable, smoke type gasket that is capable of withstanding 400 degrees F (204 degrees C) for a minimum of 30 minutes.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket that is capable of withstanding exposure to 400 degrees F (204 degrees C) for a minimum of 30 minutes.
      3. Glass: Glazing shall comply with ANSI Z97.1, thickness as indicated.

\*\* NOTE TO SPECIFIER \*\* Select glazing types required. If multiple types are required, add "Locations" to each. Delete options not required.

* + - * 1. Glazing: 1/4 inch (6 mm) tempered glass, unless otherwise specified.
        2. Glazing: 5/8 inch (16 mm) insulated glass.
        3. Glazing: 1 inch (25 mm) insulated glass.
        4. Glazing: 1-1/4 inch (31 mm) insulated glass.
        5. Glazing: Furnished by others.

\*\* NOTE TO SPECIFIER \*\* Privacy glazing is optional and requires electrified power transfer option. Consult Manufacturer for additional information. Delete if not required.

* + - * 1. Privacy Glazing Sliding Panels and Sidelite Panels: ASSA ABLOY InteGlass Switchable Privacy Glass:

Thickness: 7/16 inch (11 mm) overall thickness, laminated switchable privacy glass consisting of an electrified privacy film interlayer laminated between two pieces of clear 3/16 inch (5 mm) tempered glass panes.

Electrified glass panels supplied with the required bus bar, conductors, and nipple.

Films and interlayers to be hermetically sealed around all edges, protected from moisture.

Components/electrical connectors to be concealed and isolated from user.

Operation: Power "on" glass in clear state, power "off" glass in opaque state. No electricity is consumed in the when glass is opaque.

Electrical:

Operating Voltage: 110 to 120 VAC / 50 to 60 Hz.

Operating Current: .012 Amps (12 mA/sq ft).

Power Consumption: less than 1 watt/sq ft of privacy glass.

Surge protection module.

Electrical Devices and Connections: Wall switches, wiring, electrical splice box, connectors, conduit by Division 26 and 28 Sections.

\*\* NOTE TO SPECIFIER \*\* Consider a lower panel with opaque glazing when specifying integral blinds. Delete if not required.

* + - * 1. Lower Lite Glazing Panels: 1 inch (25 mm) overall thickness frosted insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

Frosted Glazing: Opaque, acid etched on No. 2 or No. 3 surface.

\*\* NOTE TO SPECIFIER \*\* Consult manufacturer for integral blind information. Delete if not required.

* + - * 1. Glazing Panels with Integral Blinds: 1-1/4 inch (31 mm) overall thickness insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

Location: Upper lite only.

Locations: Upper and lower lite.

Integral Blinds: Glass to have blinds installed between glass lites.

Blinds to be mechanically gear-driven tilt micro-blind installed in the sealed insulating glass unit. Internally mounted control assembly that is coupled to the external operator controls the tilting of blind slats.

Tilt Operator: Thumb wheel, dual control.

* + - * 1. Installation: Dry glazing; wet glazing not allowed.

See manufacturer's instructions and Division 8 Section "Glazing" for requirements.

* + 1. Sliding Panel Door Carriers: Manufacturer's standard carrier assembly that allows vertical adjustment:
       1. Roller Wheels: Two heavy duty Delrin roller wheels per wheel assembly, for a total of four roller wheels, 1-7/16 inch (36.5 mm) diameter, per active door leaf for operation over a replaceable aluminum track. Single journal with sealed oil impregnated bearings.
       2. Two heavy duty self-aligning anti-risers per leaf.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide telescopic or bi-parting telescopic ICU/CCU entrances. Delete if not required.

* + 1. Timing Transmission: Manufacturer's standard assembly that provides for a smooth operation.
       1. Timing transmission shall sequence the opening of the first and second leaves to provide a simultaneous opening of both leaves with a smooth operation; eliminating the "grabbing" that typically occurs with telescopic doors.
    2. Framing Members: Provide ICU/CCU entrances as complete assemblies. Manufacturer's standard extruded aluminum framing reinforced as required to support loads.

\*\* NOTE TO SPECIFIER \*\* Select first or second option below for single slide or bi-parting ICU/CCU entrances. Select third or fourth option for single telescopic or bi-parting telescopic ICU/CCU entrances. Delete options not required.

* + - 1. Vertical Jambs: 1-3/4 inches (44.5 mm) by 4-1/2 inches (114 mm).
      2. Vertical Jambs: 1 inch (25 mm) by 4-1/2 inches (114 mm).
      3. Vertical Jambs: 1-3/4 inches (44.5 mm) by 6 inches (152 mm).
      4. Vertical Jambs: 1 inch (25 mm) by 6 inches (152 mm).
    1. Header: Extruded aluminum header with a replaceable aluminum track, mounted between the jambs and extending full width of entrance. Header to conceal door operators, carrier assemblies, and roller track; complete with hinged access panel for service and adjustment.

\*\* NOTE TO SPECIFIER \*\* Headers to be anchored to overhead framing. Framing needs to be capable of supporting no less thanlbs. for single slide, 880 lbs. for bi-part or single slide telescopic. This provides a safety factor of double the weight of the door panel.

* + - 1. Header Capacity: Capable of supporting active breakout leaves up to maximum of 220 lb (100 kg) per leaf.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide or bi-parting ICU/CCU entrances. Delete if not required.

* + - 1. Header Size: 4-1/2 inches (114 mm) wide by 4-1/2 inches (114 mm) high.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide telescopic or bi-parting telescopic ICU/CCU entrances. Delete if not required.

* + - 1. Header Size: 6 inches (152 mm) wide by 4-1/2 inches (114 mm) high.
      2. Gasketing: Slide-in type, replaceable pile mohair seals.

\*\* NOTE TO SPECIFIER \*\* Select option above for non-rated ICU/CCU entrances or select option below for smoke rated ICU/CCU entrances. Delete option not required.

* + - 1. Smoke Gasketing: Slide-in type, replaceable, smoke type gasket that is capable of withstanding 400 degrees F (204 degrees C) for a minimum of 30 minutes.
      2. Header Access: Continuous hinge at top of header allows cover to swing and allow complete access to operator and internal electronic and mechanical assemblies.

\*\* NOTE TO SPECIFIER \*\* Entrance needs to be connected to the building ground for the following option - work by others. Delete if not required.

* + 1. Anti-Static Grounding: Fabricate ICU/CCU entrances to be internally grounded to reduce static shock.

\*\* NOTE TO SPECIFIER \*\* Electrified power transfer is required for privacy glass option. Delete if not required.

* + 1. Electrified Power Transfer: Concealed power transfer from header to both sliding and sidelite panels. Power transfer to allow continuous power to sliding panels at all positions during the sliding and breakout operations.
       1. The power transfer system shall be rated at 5 amps (600 watts) at 120 VAC maximum.
       2. Cable shall be 18 AWG stranded RoHS compliant UL listed 600 V cable with a temperature range of minus 58 to 194 degrees F (minus 50 to 90 degrees C) , with a dynamic bend radius of 6X cable diameter and have a pull tension of 51 lbs. (23 kg) maximum. Cable shall be able to withstand 8 M cycles at rated dynamic bend radius.
    2. Hardware: Provide manufacturer's standard hardware as required for operation indicated.
       1. Breakaway arms and bottom pivot assembly shall allow panels to breakout to 90 degrees. Force to breakout sliding panel adjustable to maximum 50 lbf (222 N).
       2. Nurse Assist magnetic catches to retain breakout door and sidelite panels in the closed position.

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

* + - 1. Gas regulated damper to control movement of breakout panels.

\*\* NOTE TO SPECIFIER \*\* Centering wheel is available as an option for smoke rated entrances. Delete if not required.

* + - 1. Centering wheel to plumb the sliding panel in areas subject to moderate static pressure.

\*\* NOTE TO SPECIFIER \*\* Latching hardware is standard for smoke rated entrances and optional for non-smoke rated entrances. Delete if not required.

* + - 1. Latching hardware shall be provided as indicated.
         1. Positive Latch: Mortise type self-latching hookbolt, BHMA A156.5, Grade 1, with lever handles on each side.

Lever Style: End of lever to have a return towards door face.

\*\* NOTE TO SPECIFIER \*\* Automatic releasing/latching is required with the full breakout trackless option. Delete if only the fixed sidelite is required or if full breakout with guide track is required.

* + - * 1. Automatic releasing/latching, concealed magnetic bolt shall allow breakout of sidelite panels when sliding panel in full open position.

\*\* NOTE TO SPECIFIER \*\* Recessed pull/C-shaped pull are provided standard on sliding ICU/CCU doors, not available with positive latching door hardware. Pulls are not an option for smoke rated entrances. Delete if not required.

* + - 1. Door pulls shall be provided as indicated.

\*\* NOTE TO SPECIFIER \*\* Recessed pull on breakout side is standard. C-shaped pull on both sides of door system is optional. Delete option not required.

* + - * 1. Manufacturer's recessed pull installed on breakout side and surface-mounted, 10 inches (254 mm) C-shaped door pull installed on non-breakout side of active door leaves. Door pull mounting shall not decrease clear opening width.
        2. Manufacturer's surface-mounted, 10 inches (254 mm) C-shaped door pull installed on both sides of active door leaves. Door pull mounting shall not decrease clear opening width.

\*\* NOTE TO SPECIFIER \*\* Self-closing device is optional. Delete if not required.

* + - 1. Self-closing device shall be provided where indicated.

\*\* NOTE TO SPECIFIER \*\* Select non-electrified or magnetic hold-open device. Delete option not required.

* + - * 1. A non-electrified, adjustable speed, rack and pinion mechanism, which will close door to a positive latched position.
        2. Magnetic hold-open devices tied into the building fire alarm/sprinkler system, which will upon receiving a signal, release the self closing sliding door leaf.

Magnetic device to accept 12-24 Vdc with no more current draw than 120 mA with a hold force not to exceed 30 lbf (133.4 N) for manual door release.

* + - 1. Guide Track/Threshold: Manufacturer's threshold as indicated.

\*\* NOTE TO SPECIFIER \*\* First option below is standard. Second option is available for full breakout entrance. Third option is standard for fixed sidelite models. Fourth options is standard for surface mount models. Delete options not required.

* + - * 1. Full Breakout Trackless Design: Floor mounted guide track and threshold not allowed.

Breakout from a full open position only.

* + - * 1. Full Breakout Entrance Guide Track: Floor mounted aluminum guide tracks adjacent to the sidelite portion of the sliding ICU/CCU entrance

\*\* NOTE TO SPECIFIER \*\* Select surface or recessed track. Delete option not required.

Surface mounted track.

Recessed mounted track.

Guide track shall allow breakout from any position except when door is latched.

* + - * 1. Fixed Sidelite Entrance Guide Track: Aluminum guide track integrated in the bottom of the sidelite portion of the sliding ICU/CCU entrance.

Guide shall allow breakout from any position except when door is latched.

\*\* NOTE TO SPECIFIER \*\* The following is not available for telescopic entrances.

* + - * 1. Surface Mounted Entrance Guide Track: Aluminum fixed sidelite guide track mounted along the face of the wall. The track shall not extend past the jamb into the door opening.

Guide track shall allow breakout from any position except when door is latched.

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

* 1. MANUALLY OPERATED SWING ICU/CCU ENTRANCES

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Swing Door Package, swing ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated, self-latching.
       2. Door Configuration:

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

* + - * 1. Unequal Pair of Swing Doors: One active leaf (primary panel) and one inactive leaf (secondary panel).
        2. Pair of Swing Doors: Two active leaves (both primary panels).
        3. Single Swing Door: One active leaf (primary panel).
      1. Minimum Clear Door Opening Width: As indicated on drawings.
      2. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 ICU/CCU Smoke Labeled, Swing Door Package, swing ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Manually operated, self-latching.
       2. Smoke Rated: "S" Label, Certified to UL 1784.
       3. Door Configuration:

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

* + - * 1. Unequal Pair of Swing Doors: One active leaf (primary panel) and one inactive leaf (secondary panel).
        2. Pair of Swing Doors: Two active leaves (both primary panels).
        3. Single Swing Door: One active leaf (primary panel).
      1. Minimum Clear Door Opening Width: As indicated on drawings.
      2. Mounting: Overhead header installed between jambs.
    1. Stile and Rail Swing Panels and Sidelites:
       1. Material: Extruded Aluminum, Alloy 6063-T5 or 6063-T6.
       2. Door panels shall have a minimum 0.125 inch (3 mm) structural wall thickness including adjoining perimeter frames where applicable.
          1. Aluminum extrusions shall allow for a factory installed, slide-in type gasket.
       3. Door Construction shall be by means of an integrated corner clip with 3/8 inch (9.5 mm) diameter all-thread through bolt from each stile.
          1. Face of door stiles shall be flush with adjacent rails and muntin.
       4. Glass stops shall be 0.062 inch (1.6 mm) wall thickness and shall provide security function as a standard by means of a fixed non-removable exterior section with glazing to be performed from the interior only.

\*\* NOTE TO SPECIFIER \*\* Beveled glass stops available only with 1/4 inch glazing. Delete if not required.

* + - * 1. Beveled glass stops.

\*\* NOTE TO SPECIFIER \*\* Select vertical stile size required. Delete option not required.

* + - 1. Vertical Stiles: Narrow stile, 2-1/8 inches (54 mm).
      2. Vertical Stiles: Medium stile, 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select bottom rail size required. Delete options not required.

* + - 1. Bottom Rails: 4 inches (102 mm).
      2. Bottom Rails: 7 inches (178 mm).
      3. Bottom Rails: 10 inches (254 mm).

\*\* NOTE TO SPECIFIER \*\* Intermediate muntin is required with integral blinds, but optional with other systems. Delete options not required.

* + - 1. Intermediate Muntin: 1-3/4 inches (45 mm).
      2. Intermediate Muntin: 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select first gasketing option for non-smoke rated entrances and second option for smoke rated entrances. Delete option not required.

* + - 1. Gasketing: Slide-in type, replaceable pile mohair seals.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket.
      2. Smoke Gasketing: Slide-in type, replaceable, smoke type gasket that is capable of withstanding 400 degrees F (204 degrees C) for a minimum of 30 minutes.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket that is capable of withstanding exposure to 400 degrees F (204 degrees C) for a minimum of 30 minutes.
      3. Glass: Glazing shall comply with ANSI Z97.1, thickness as indicated.

\*\* NOTE TO SPECIFIER \*\* Select glazing types required. If multiple types are required, add "Locations" to each. Delete options not required.

* + - * 1. Glazing: 1/4 inch (6 mm) tempered glass, unless otherwise specified.
        2. Glazing: 5/8 inch (16 mm) insulated glass.
        3. Glazing: 1 inch (25 mm) insulated glass.
        4. Glazing: 1-1/4 inch (31 mm) insulated glass.
        5. Glazing: Furnished by others.

\*\* NOTE TO SPECIFIER \*\* Consider a lower panel with opaque glazing when specifying integral blinds. Delete if not required.

* + - * 1. Lower Lite Glazing Panels: 1 inch (25 mm) overall thickness frosted insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

Frosted Glazing: Opaque, acid etched on No. 2 or No. 3 surface.

\*\* NOTE TO SPECIFIER \*\* Consult manufacturer for integral blind information. Delete if not required.

* + - * 1. Glazing Panels with Integral Blinds: 1-1/4 inch (31 mm) overall thickness insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

Location: Upper lite only.

Locations: Upper and lower lite.

Integral Blinds: Glass to have blinds installed between glass lites.

Blinds to be mechanically gear-driven tilt micro-blind installed in the sealed insulating glass unit. Internally mounted control assembly that is coupled to the external operator controls the tilting of blind slats.

Tilt Operator: Thumb wheel, dual control.

* + - * 1. Installation: Dry glazing; wet glazing not allowed.

See manufacturer's instructions and Division 8 Section "Glazing" for requirements.

* + 1. Framing Members: Provide ICU/CCU entrances as complete assemblies. Manufacturer's standard extruded aluminum framing reinforced as required to support loads.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

* + - 1. Vertical Jambs: 1-3/4 inches (44.5 mm) by 4-1/2 inches (114 mm).
      2. Vertical Jambs: 1 inch (25 mm) by 4-1/2 inches (114 mm).
    1. Header: Extruded aluminum header shall have a minimum .109 inch (3 mm) structural wall thickness and shall extend the full width of entrance.

\*\* NOTE TO SPECIFIER \*\* Select size required. Delete size not required.

* + - 1. Size: 4-1/2 inches (114 mm) wide by 4-1/2 inches (114 mm) high.
      2. Size: 4-1/2 inches (114 mm) wide by 1-3/4 inches (44.5 mm) high.

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

* + 1. Smoke rated ICU/CCU doors are to be certified to UL 1784 - Air Leakage Tests of Door Assemblies.
    2. Hardware: Provide manufacturer's standard hardware as required for operation indicated.
       1. Hinges: Half mortise, gear type, continuous hinge; allows 180 degree swing.

\*\* NOTE TO SPECIFIER \*\* Overhead stop is optional. Delete if not required.

* + - 1. Overhead door stops to limit the active doors from swinging past 90 degrees.

\*\* NOTE TO SPECIFIER \*\* Door pulls for non-smoke rated doors only. Delete if not required.

* + - 1. Door Pulls: Manufacturer's surface-mounted, 10 inches (254 mm) C-shaped, door pull installed on both sides of active door leaves.
      2. Latching hardware shall be provided as indicated.

\*\* NOTE TO SPECIFIER \*\* First active door leaves option for non-smoke rated doors only. Second option for smoke rated doors. Delete option not required.

* + - * 1. Active Door Leaves: Roller latch mounted in the top door rail.
        2. Active Door Leaves: Concealed top and bottom vertical rods. Bottom rod to serve as a counter balance mechanism, factory adjusted so that it does not extend below the bottom of the rail:

Push Side: Push paddle.

Pull Side: Curved lever handle.

* + - * 1. Inactive Leaf: Manual operated flush bolt.

\*\* NOTE TO SPECIFIER \*\* Self-closing device is optional. Delete if not required.

* + - 1. Self-closing device shall be provided as indicated.

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

* + - * 1. An adjustable speed, surface mounted, rack and pinion door closer, which will close door to a positive latched position.

Door closers are to have non-hold open type arm.

Door closers are to have hold open type arm.

Self-closing devices required on active door leaves only.

* + - * 1. Magnetic hold-open devices tied into the building fire alarm/sprinkler system, which will upon receiving a signal, release the self-closing swing door leaf.

Magnetic device to accept 12 to 24 Vdc with no more current draw than 120 mA with a hold force not to exceed 20 lbf (89 N) for manual door release.

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

* 1. POWER OPERATED SWING ICU/CCU ENTRANCES
     1. Performance Requirements.
        1. Compliant with ANSI/BHMA A156.19 Standards for Power Assist and Low Energy Power Operated Doors.
        2. Opening Force Requirements: Doors shall open with a manual force, not to exceed 30 lbf (133 N) to set the door in motion and 15 lbf (67 N)to fully open the door applied at 1 inch (25 mm) from the latch edge of the door. The force required to prevent a stopped door from opening or closing shall not exceed 15 lbf (67 N) measured 1 inch (25 mm) from the latch edge of the door at any point during opening or closing.
        3. Closing Time:
           1. Doors shall be field adjustable to close from 90 degrees to 10 degrees in 3 seconds or longer as applicable per ANSI/BHMA A156.19 standards.
           2. Doors shall be field adjusted to close from 10 degrees to fully closed in not less than 1.5 seconds.
     2. Basis of Design: VersaMax 2.0 ICU/CCU Swing Door Package, swing ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
        1. Operation: Power operated, self-latching.
        2. Door Configuration:

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

* + - * 1. Unequal Pair of Swing Doors: One active leaf (primary panel) and one inactive leaf (secondary panel).
        2. Pair of Swing Doors: Two active leaves (both primary panels).
        3. Single Swing Door: One active leaf (primary panel).
      1. Mounting: Overhead header installed between jambs.
    1. Stile and Rail Swing Panels and Sidelites:
       1. Material: Extruded Aluminum, Alloy 6063-T5 or 6063-T6.
       2. Door panels shall have a minimum 0.125 inch (3 mm) structural wall thickness including adjoining perimeter frames where applicable.
          1. Aluminum extrusions shall allow for a factory installed, slide-in type gasket.
       3. Door Construction shall be by means of an integrated corner clip with 3/8 inch (9.5 mm) diameter all-thread through bolt from each stile.
          1. Face of door stiles shall be flush with adjacent rails and muntin.
       4. Glass stops shall be 0.062 inch (1.6 mm) wall thickness and shall provide security function as a standard by means of a fixed non-removable exterior section with glazing to be performed from the interior only.

\*\* NOTE TO SPECIFIER \*\* Beveled glass stops available only with 1/4 inch glazing. Delete if not required.

* + - * 1. Beveled glass stops.

\*\* NOTE TO SPECIFIER \*\* Select vertical stile size required. Delete option not required.

* + - 1. Vertical Stiles: Narrow stile, 2-1/8 inches (54 mm).
      2. Vertical Stiles: Medium stile, 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select bottom rail size required. Delete options not required.

* + - 1. Bottom Rails: 4 inches (102 mm).
      2. Bottom Rails: 7 inches (178 mm).
      3. Bottom Rails: 10 inches (254 mm).

\*\* NOTE TO SPECIFIER \*\* Intermediate muntin is required with integral blinds, but optional with other systems. Delete options not required.

* + - 1. Intermediate Muntin: 1-3/4 inches (45 mm).
      2. Intermediate Muntin: 4 inches (102 mm).
      3. Gasketing: Slide-in type, replaceable pile mohair seals.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket.
      4. Glass: Glazing shall comply with ANSI Z97.1, thickness as indicated.

\*\* NOTE TO SPECIFIER \*\* Select glazing types required. If multiple types are required, add "Locations" to each. Delete options not required.

* + - * 1. Glazing: 1/4 inch (6 mm) tempered glass, unless otherwise specified.
        2. Glazing: 5/8 inch (16 mm) insulated glass.
        3. Glazing: 1 inch (25 mm) insulated glass.
        4. Glazing: 1-1/4 inch (31 mm) insulated glass.
        5. Glazing: Furnished by others.

\*\* NOTE TO SPECIFIER \*\* Consider a lower panel with opaque glazing when specifying integral blinds. Delete if not required.

* + - * 1. Lower Lite Glazing Panels: 1 inch (25 mm) overall thickness frosted insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

Frosted Glazing: Opaque, acid etched on No. 2 or No. 3 surface.

\*\* NOTE TO SPECIFIER \*\* Consult manufacturer for integral blind information. Delete if not required.

* + - * 1. Glazing Panels with Integral Blinds: 1-1/4 inch (31 mm) overall thickness insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

Location: Upper lite only.

Locations: Upper and lower lite.

Integral Blinds: Glass to have blinds installed between glass lites.

Blinds to be mechanically gear-driven tilt micro-blind installed in the sealed insulating glass unit. Internally mounted control assembly that is coupled to the external operator controls the tilting of blind slats.

Tilt Operator: Thumb wheel, dual control.

* + - * 1. Installation: Dry glazing; wet glazing not allowed.

See manufacturer's instructions and Division 8 Section "Glazing" for requirements.

* + 1. Framing Members: Provide ICU/CCU entrances as complete assemblies. Manufacturer's standard extruded aluminum framing reinforced as required to support loads.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

* + - 1. Vertical Jambs: 1-3/4 inches (44.5 mm) by 4-1/2 inches (114 mm).
      2. Vertical Jambs: 1 inch (25 mm) by 4-1/2 inches (114 mm).
    1. Header: Extruded aluminum header shall have a minimum .109 inch (3 mm) structural wall thickness and shall extend the full width of entrance.

\*\* NOTE TO SPECIFIER \*\* Select size required. Delete size not required.

* + - 1. Size: 4-1/2 inches (114 mm) wide by 4-1/2 inches (114 mm) high.
      2. Size: 4-1/2 inches (114 mm) wide by 1-3/4 inches (44.5 mm) high.
    1. Hardware: Provide manufacturer's standard hardware as required for operation indicated.
       1. Hinges: Half mortise, gear type, continuous hinge; allows 180 degree swing.
       2. Door Pulls: Manufacturer's surface-mounted, 10 inches (254 mm) C-shaped, door pull installed on both sides of active door leaves.
       3. Latching hardware shall be provided as indicated.
          1. Active Door Leaves: Roller latch mounted in the top door rail.
          2. Inactive Leaf: Manual operated flush bolt.
    2. Low Energy Door Operator:
       1. Basis of Design: ASSA ABLOY SW100 low energy automatic door operator.
       2. Reference Standard: ANSI/BHMA A156.19.
       3. Configuration: Operator to control single swinging doors and pairs of swinging doors as indicated on the drawings and specified below:
          1. Pairs of Doors: Simultaneous swing (both leaves active).
       4. Automatic Door Operator: Electro-mechanical, non-handed operator, powered by 24 volt, 1/8 hp motor. Spring shall be adjustable to compensate for different manual push forces required on varying door widths.
          1. Automatic operator shall be capable of operating and controlling up to a 200 pound (91 kg) door, 48 inches (1219 mm) in width.
          2. Surface Mounted Operator:

Side Access Operator Housing: Operator is contained in 5-1/8 inches (130 mm) deep x 4-5/16 inches (110 mm) high extruded aluminum housing with a removable cover.

Surface Mounted Housing: Continuous for full width of door.

Connecting Hardware: Surface mounted operators to have a steel arm from the operator, mounted to the top face of the swing door.

UL Listed R-9469 Fire Door Operator with Automatic Closer (surface mounted operator).

* + - * 1. Operator Temperature Range: Capable of operating within temperature ranges of minus 20 and 160 degrees F (minus 29 and 71 degrees C).
        2. Electrical Characteristics: Nominal current draw 75 watts (.625 amps at 120 VAC), built-in thermal overload protection.

\*\* NOTE TO SPECIFIER \*\* Battery convenience mode is optional. Delete if not required.

* + - * 1. Battery Convenience Mode: Operator to maintain continuous operation by battery power during power failure. Battery is continuously monitored and provides a warning signal if the battery is not working properly.
      1. Door Operation:
         1. Opening Cycle: The adjustable speed operator shall control the door opening to the back check position, where the opening speed is reduced.

Manual door operation with operational forces of 15 lbf (67 N) maximum to fully open the door applied at 1 inch (25 mm) from the latch edge of the door.

* + - * 1. Hold Open: The operator shall stop and hold the door open at the selected door opening angle for an adjustable period of time (1.5 to 30 seconds).
        2. Closing Cycle: Power closing shall be provided by means of clock spring and motor. The door will slow to low speed at latch check before it reaches the fully closed position.
        3. Electronic Dampening: Operator to include standard electric dampening system which automatically counteracts additional forces applied to the door during the opening or closing cycle by reducing door speed.
        4. Stack Pressure Compensation: Electronic control allows for increases of forces to overcome minor stack pressures while compensating to lower manual push forces when the door is used in manual mode in order to comply with ANSI/BHMA A156.19.
        5. Obstruction Control: The operator will stop and reverse the door movement.
        6. Astragal Coordinator: Sequenced electronic operation between operators for pairs of doors allowing astragal coordination.
        7. Lock Retry Circuit: If attempt to fully close the door is unsuccessful, the operator will automatically reverse open 10 degrees and reclose in an attempt to successfully close the door.
        8. Electronic Controls: Microprocessor controlled unit shall control the operation and switching of the swing power operator. The microprocessor unit provides low voltage power supply for all means of actuation. The controls include time delay (1.5 to 30 seconds) for normal cycle.
        9. Control Switch: Automatic door operators shall be equipped with the following type of multi-position function switch:

\*\* NOTE TO SPECIFIER \*\* Select control switch option required. Delete option not required.

3 position rocker switch mounted on end cap (On-Off-Hold).

2 position rocker switch mounted on end cap (On-Off).

\*\* NOTE TO SPECIFIER \*\* Operator interface below is optional. Delete if not required.

* + - 1. Operator Interface:
         1. Safety Sensor Integration for overhead presence safety device and door mounted reactivation safety sensors.
    1. Activation and Safety Control Devices: Provide activation and safety devices in accordance with ANSI/BHMA standards, for condition of exposure and for long-term, maintenance-free operation under normal traffic load for type of occupancy indicated. Coordinate activation and safety devices with door operation and door operator mechanisms.

\*\* NOTE TO SPECIFIER \*\* Select the type of activation and safety devices required. Delete option not required.

* + - 1. Knowing Act Activation Device:
         1. Push Plate: Hard wired, 4-1/2 inch (114 mm) square stainless steel push plate switches engraved with "Push to Open" with a blue handicap logo.
         2. Push Plate: Hard wired, 6 inch (152 mm) round stainless steel push plate switches engraved with "Push to Open" with a blue handicap logo.
         3. Push Plate: Jamb mounted, hard wired, 1-1/2 x 4-3/4 inch (38 x 121 mm), stainless steel push plate switches engraved with "Push to Open" with a blue handicap logo.
         4. Push Plate: Radio controlled, wireless, 4-1/2 inch (114 mm) square stainless steel push plate switches engraved with "Push to Open" with a blue handicap logo.
         5. Push Plate: Radio controlled, wireless, 6 inch (152 mm) round stainless steel push plate switches engraved with "Push to Open" with a blue handicap logo.
         6. Sensor Plate: Touchless, 2-3/4 x 4-1/2 inch (79 x 114 mm) activation senor plates, black polycarbonate with white letters. Microwave technology has an adjustable range of 2 to 24 inches (51 x 610 mm).
         7. Sensor Plate: Touchless, 4-1/2 inch (114 mm) square activation senor plates, black polycarbonate with white letters. Microwave technology has an adjustable range of 2 to 24 inches (51 x 610 mm).
      2. Manual Operation:
         1. Operator shall provide power assist function to the doors to provide ease of manual operational forces. Manual push force to 15 lbf (67 N) maximum.
         2. Operator shall be programmable to provide a "push and go" feature allowing door to open automatically if pulled or pushed open manually.
      3. Safety Devices:
         1. Door Mounted Presence Sensor (DMPS): Shall be the ASSA ABLOY door mounted infrared presence safety device (mounted at top of each door); adjustable to provide detection field sizes and functions required by ANSI/BHMA A156.10.

Unit to provide detection during the travel of the door.

Upon detection the sensor shall provide a signal to stop or reverse the door action.

* + - * 1. Door Mounted Safety Sensor Devices: Safety sensor devices shall be door mounted as specified.

The door mounted safety sensor devices shall be mounted on both the swing (pull) side and the approach (push) side of the door (2 safety sensors per leaf), providing detection on sides of the door.

The door mounted safety sensor devices shall be mounted on the swing (pull) side of the door (1 safety sensor per leaf), providing detection on one side of the door only.

The door mounted safety sensor devices shall be mounted on the approach (push) side of the door (1 safety sensor per leaf), providing detection on one side of the door only.

Power transfer from the door mounted safety sensor to operator shall be through an exposed door cord.

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

* 1. POWER OPERATED, SLIDING ICU/CCU ENTRANCES
     1. Performance Requirements
        1. Compliant with ANSI/BHMA A156.38.
        2. Entrapment Force Requirements:
           1. Power Operated Sliding Doors: Not more than 15 lbf (67 N) required to prevent a stopped door from opening or closing.
           2. Opening Time - Doors shall be adjusted to open at a speed of 12 inches per sec (305 mm per sec) maximum, from fully closed to fully open.
           3. Closing Speed - Doors shall be adjusted to close at a speed of 6 inches per sec (152 mm per sec) maximum per leaf, from fully open to latch check.
        3. Smoke rated ICU/CCU doors are to be certified by Underwriters Laboratories Inc. to UL 1784 - Air Leakage Test of Door Assemblies.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Sliding Door Package, single slide, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration: Single slide, two equal panel unit with one operable leaf and one sidelite.

\*\* NOTE TO SPECIFIER \*\* Retain for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.

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

* + - 1. Minimum Clear Door Opening Width: 41-1/2 inches (1054 mm) for 8 ft (2438 mm) unit width.
      2. Minimum Clear Door Opening Width: 44-1/2 inches (1130 mm) for 8.5 ft (2591 mm) unit width.
      3. Breakaway Capability: Sliding leaf and sidelite.
      4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Sliding Door Package, single slide, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration: Single slide, two equal panel unit with one operable leaf and one fixed sidelite.

\*\* NOTE TO SPECIFIER \*\* Retain for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.

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

* + - 1. Minimum Clear Door Opening Width: 41-1/2 inches (1054 mm) for 8 ft (2438 mm) unit width.
      2. Minimum Clear Door Opening Width: 44-1/2 inches (1130 mm) for 8.5 ft (2591 mm) unit width.
      3. Breakaway Capability: Sliding leaf only.
      4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Sliding Door Package, single slide, surface mounted, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration: Single slide unit without sidelite.

\*\* NOTE TO SPECIFIER \*\* Retain for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.

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

* + - 1. Minimum Clear Door Opening Width: 41-1/2 inches (1054 mm) for 8 ft (2438 mm) unit width.
      2. Minimum Clear Door Opening Width: 44-1/2 inches (1130 mm) for 8.5 ft (2591 mm) unit width.
      3. Breakaway Capability: Sliding leaf.
      4. Mounting: Surface mounted header installed on face of wall.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Sliding Door Package, bi-parting, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration: Bi-parting, four equal panel unit with two operable leaves and two sidelites.
       3. Breakaway Capability: Sliding leaves and sidelites.
       4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Sliding Door Package, bi-parting, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration Bi-parting, four equal panel unit with two operable leaves and two fixed sidelites.
       3. Breakaway Capability: Leading sliding leaves only.
       4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Sliding Door Package, bi-parting, surface mounted, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration Bi-parting, two equal panel unit with two operable leaves and no sidelites.
       3. Breakaway Capability: Sliding leaves only.
       4. Mounting: Surface mounted header installed on face of wall.
    2. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Telescopic Sliding Door Package, telescopic, single slide, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".

\*\* NOTE TO SPECIFIER \*\* Retain for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Door Configuration: Single slide, three equal panel unit with two operable leaves and one sidelite.
      3. Breakaway Capability: Sliding leaves and sidelite.
      4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Telescopic Sliding Door Package, telescopic, single slide, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".

\*\* NOTE TO SPECIFIER \*\* Retain for smoke rated entrance. Delete if not required.

* + - 1. Smoke Rated: Certified to UL 1784.
      2. Door Configuration: Single slide, three equal panel unit with two operable leaves and one fixed sidelite.
      3. Breakaway Capability: Leading sliding leaf only.
      4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Telescopic Sliding Door Package, telescopic, bi-parting, full breakout, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration: Bi-parting, six equal panel unit with four operable leaves and two sidelites.
       3. Breakaway Capability: Sliding leaves and sidelites.
       4. Mounting: Overhead header installed between jambs.

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

* + 1. Basis of Design: VersaMax 2.0 Touchless ICU/CCU Telescopic Sliding Door Package, telescopic, bi-parting, fixed sidelite, ICU/CCU door system; as manufactured by Besam ASSA ABLOY.
       1. Operation: Power operated open and close cycle; opening cycle activated by "knowing act activation".
       2. Door Configuration Bi-parting, six equal panel unit with four operable leaves and two fixed sidelites.
       3. Breakaway Capability: Leading sliding leaves only.
       4. Mounting: Overhead header installed between jambs.
    2. Stile and Rail Sliding Panels and Sidelites:
       1. Material: Extruded Aluminum, Alloy 6063-T5 or 6063-T6.
       2. Door panels shall have a minimum 0.125 inch (3 mm) structural wall thickness including adjoining perimeter frames where applicable.
          1. Aluminum extrusions shall allow for a factory installed, slide-in type gasket.
       3. Door Construction shall be by means of an integrated corner clip with 3/8 inch (9.5 mm) diameter all-thread through bolt from each stile.
          1. Face of door stiles shall be flush with adjacent rails and muntin.
       4. Glass stops shall be 0.062 inch (1.6 mm) wall thickness and shall provide security function as a standard by means of a fixed non-removable exterior section with glazing to be performed from the interior only.

\*\* NOTE TO SPECIFIER \*\* Beveled glass stops available only with 1/4 inch glazing. Delete if not required.

* + - * 1. Beveled glass stops.

\*\* NOTE TO SPECIFIER \*\* Select vertical stile size required. Delete option not required.

* + - 1. Vertical Stiles: Narrow stile, 2-1/8 inches (54 mm).
      2. Vertical Stiles: Medium stile, 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select bottom rail size required. Delete options not required.

* + - 1. Bottom Rails: 4 inches (102 mm).
      2. Bottom Rails: 7 inches (178 mm).
      3. Bottom Rails: 10 inches (254 mm).

\*\* NOTE TO SPECIFIER \*\* Intermediate muntin is required with integral blinds, but optional with other systems. Delete options not required.

* + - 1. Intermediate Muntin: 1-3/4 inches (45 mm).
      2. Intermediate Muntin: 4 inches (102 mm).

\*\* NOTE TO SPECIFIER \*\* Select first gasketing option for non-smoke rated entrances and second option for smoke rated entrances. Delete option not required.

* + - 1. Gasketing: Slide-in type, replaceable pile mohair seals.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket.
      2. Smoke Gasketing: Slide-in type, replaceable, smoke type gasket that is capable of withstanding 400 degrees F (204 degrees C) for a minimum of 30 minutes.
         1. Bottom rails shall be provided with a concealed adjustable sweep gasket that is capable of withstanding exposure to 400 degrees F (204 degrees C) for a minimum of 30 minutes.
      3. Glass: Glazing shall comply with ANSI Z97.1, thickness as indicated.

\*\* NOTE TO SPECIFIER \*\* Select glazing types required. If multiple types are required, add "Locations" to each. Delete options not required.

* + - * 1. Glazing: 1/4 inch (6 mm) tempered glass, unless otherwise specified.
        2. Glazing: 5/8 inch (16 mm) insulated glass.
        3. Glazing: 1 inch (25 mm) insulated glass.
        4. Glazing: 1-1/4 inch (31 mm) insulated glass.
        5. Glazing: Furnished by others.

\*\* NOTE TO SPECIFIER \*\* Privacy glazing is optional and requires electrified power transfer option. Consult Manufacturer for additional information. Delete if not required.

* + - * 1. Privacy Glazing Sliding Panels and Sidelite Panels: ASSA ABLOY InteGlass Switchable Privacy Glass:

Thickness: 7/16 inch (11 mm) overall thickness, laminated switchable privacy glass consisting of an electrified privacy film interlayer laminated between two pieces of clear 3/16 inch (5 mm) tempered glass panes.

Electrified glass panels supplied with the required bus bar, conductors, and nipple.

Films and interlayers to be hermetically sealed around all edges, protected from moisture.

Components/electrical connectors to be concealed and isolated from user.

Operation: Power "on" glass in clear state, power "off" glass in opaque state. No electricity is consumed in the when glass is opaque.

Electrical:

Operating Voltage: 110 - 120 VAC / 50 - 60 Hz.

Operating Current: .012 Amps (12 mA/sq ft).

Power Consumption: less than 1 watt/sq ft of privacy glass.

Surge protection module.

Electrical Devices and Connections: Wall switches, wiring, electrical splice box, connectors, conduit by Division 26 and 28 Sections.

\*\* NOTE TO SPECIFIER \*\* Consider a lower panel with opaque glazing when specifying integral blinds. Delete if not required.

* + - * 1. Lower Lite Glazing Panels: 1 inch (25 mm) overall thickness frosted insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

Frosted Glazing: Opaque, acid etched on No. 2 or No. 3 surface.

\*\* NOTE TO SPECIFIER \*\* Consult manufacturer for integral blind information. Delete if not required.

* + - * 1. Glazing Panels with Integral Blinds: 1-1/4 inch (31 mm) overall thickness insulating glass unit consisting of an interior and exterior glass lite; both lites to be 1/4 inch (6 mm) tempered glass.

\*\* NOTE TO SPECIFIER \*\* Select location option required. Delete option not required.

Location: Upper lite only.

Locations: Upper and lower lite.

Integral Blinds: Glass to have blinds installed between glass lites.

Blinds to be mechanically gear-driven tilt micro-blind installed in the sealed insulating glass unit. Internally mounted control assembly that is coupled to the external operator controls the tilting of blind slats.

Tilt Operator: Thumb wheel, dual control.

* + - * 1. Installation: Dry glazing; wet glazing not allowed.

See manufacturer's instructions and Division 8 Section "Glazing" for requirements.

* + 1. Sliding Panel Door Carriers: Manufacturer's standard carrier assembly that allows vertical adjustment:
       1. Roller Wheels: Two heavy duty Delrin roller wheels per wheel assembly, for a total of four roller wheels, 1-7/16 inch (36.5 mm) diameter, per active door leaf for operation over a replaceable aluminum track. Single journal with sealed oil impregnated bearings.
       2. Two heavy duty self-aligning anti-risers per leaf.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide telescopic or bi-parting telescopic ICU/CCU entrances. Delete if not required.

* + 1. Timing Transmission: Manufacturer's standard assembly that provides for a smooth operation.
       1. Timing transmission shall sequence the opening of the first and second leaves to provide a simultaneous opening of both leaves with a smooth operation; eliminating the "grabbing" that typically occurs with telescopic doors.
    2. Framing Members: Provide ICU/CCU entrances as complete assemblies. Manufacturer's standard extruded aluminum framing reinforced as required to support loads.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide or bi-parting ICU/CCU entrances. Delete if not required.

* + - 1. Vertical Jambs: 1-3/4 inches (44.5 mm) by 4-1/2 inches (114 mm).

\*\* NOTE TO SPECIFIER \*\* Select below for single slide telescopic or bi-parting telescopic ICU/CCU entrances. Delete if not required.

* + - 1. Vertical Jambs: 1-3/4 inches (44.5 mm) by 6 inches (152 mm).
    1. Header: Extruded aluminum header with a replaceable aluminum track, mounted between the jambs and extending full width of entrance. Header to conceal door operators, carrier assemblies, and roller track; complete with hinged access panel for service and adjustment.

\*\* NOTE TO SPECIFIER \*\* Headers to be anchored to overhead framing. Framing needs to be capable of supporting no less thanlbs. for single slide, 880 lbs. for bi-part or single slide telescopic. This provides a safety factor of double the weight of the door panel.

* + - 1. Header Capacity: Capable of supporting active breakout leaves up to maximum of 220 lbs (100 kg) per leaf.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide or bi-parting ICU/CCU entrances. Delete if not required.

* + - 1. Header Size: 8-9/16 inches (218.0 mm) wide by 4-1/2 inches (114 mm) high.

\*\* NOTE TO SPECIFIER \*\* Select below for single slide telescopic or bi-parting telescopic ICU/CCU entrances. Delete if not required.

* + - 1. Header Size: 10-11/16 inches (271 mm) wide by 4-1/2 inches (114 mm) high.
      2. Gasketing: Slide-in type, replaceable pile mohair seals.

\*\* NOTE TO SPECIFIER \*\* Select option above for non-rated ICU/CCU entrances or select option below for smoke rated ICU/CCU entrances. Delete option not required.

* + - 1. Smoke Gasketing: Slide-in type, replaceable, smoke type gasket that is capable of withstanding 400 degrees F (204 degrees C) for a minimum of 30 minutes.
      2. Header Access: Continuous hinge at top of header allows cover to swing and allow complete access to operator and internal electronic and mechanical assemblies.

\*\* NOTE TO SPECIFIER \*\* Entrance needs to be connected to the building ground for the following option - work by others. Delete if not required.

* + 1. Anti-Static Grounding: Fabricate ICU/CCU entrances to be internally grounded to reduce static shock.

\*\* NOTE TO SPECIFIER \*\* Electrified power transfer is required for privacy glass option. Delete if not required.

* + 1. Electrified Power Transfer: Concealed power transfer from header to both sliding and sidelite panels. Power transfer to allow continuous power to sliding panels at all positions during the sliding and breakout operations.
       1. The power transfer system shall be rated at 5 amps (600 watts) at 120 VAC maximum.
       2. Cable shall be 18 AWG stranded RoHS compliant UL listed 600 V cable with a temperature range of minus 58 to 194 degrees F (minus 50 to 90 degrees C), with a dynamic bend radius of 6X cable diameter and have a pull tension of 51 lbs. (23 kg) maximum. Cable shall be able to withstand 8 M cycles at rated dynamic bend radius.
    2. Hardware: Provide manufacturer's standard hardware as required for operation indicated.
       1. Breakaway arms and bottom pivot assembly shall allow panels to breakout to 90 degrees. Force to breakout sliding panel adjustable to maximum 50 lbf (222 N).
       2. Nurse Assist magnetic catches to retain breakout door and sidelite panels in the closed position.

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

* + - 1. Gas regulated damper to control movement of breakout panels.

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

* + - 1. Centering wheel to plumb the sliding panel in areas subject to moderate static pressure.

\*\* NOTE TO SPECIFIER \*\* Latching hardware is standard for smoke rated entrances and optional for non-smoke rated entrances. Delete if not required.

* + - 1. Latching hardware shall be provided as indicated.
         1. Positive Latch: Mortise type self-latching hookbolt, BHMA A156.5, Grade 1, with lever handles on each side.

Lever Style: End of lever to have a return towards door face.

\*\* NOTE TO SPECIFIER \*\* Automatic releasing/latching is required with the full breakout trackless option. Delete if only the fixed sidelite is required or if full breakout with guide track is required.

* + - * 1. Automatic releasing/latching, concealed magnetic bolt shall allow breakout of sidelite panels when sliding panel in full open position.

\*\* NOTE TO SPECIFIER \*\* Recessed pull/C-shaped pull are provided standard on sliding ICU/CCU doors, not available with positive latching door hardware. Pulls are not an option for smoke rated entrances. Delete if not required.

* + - 1. Door pulls shall be provided as indicated.

\*\* NOTE TO SPECIFIER \*\* Recessed pull on breakout side is standard. C-shaped pull on both sides of door system is optional. Delete option not required.

* + - * 1. Manufacturer's recessed pull installed on breakout side and surface-mounted, 10 inches (254 mm) C-shaped door pull installed on non-breakout side of active door leaves. Door pull mounting shall not decrease clear opening width.
        2. Manufacturer's surface-mounted, 10 inches (254 mm) C-shaped door pull installed on both sides of active door leaves. Door pull mounting shall not decrease clear opening width.
      1. Guide Track/Threshold: Manufacturer's threshold as indicated.

\*\* NOTE TO SPECIFIER \*\* First option below is standard. Second option is available for full breakout entrance. Third option is standard for fixed sidelite models. Fourth option is standard for surface mounted models. Delete options not required.

* + - * 1. Full Breakout Trackless Design: Floor mounted guide track and threshold not allowed.

Breakout from a full open position only.

* + - * 1. Full Breakout Entrance Guide Track: Floor mounted aluminum guide tracks adjacent to the sidelite portion of the sliding ICU/CCU entrance

\*\* NOTE TO SPECIFIER \*\* Select surface or recessed track. Delete option not required.

Surface mounted track.

Recessed mounted track.

Guide track shall allow breakout from any position except when door is latched.

* + - * 1. Fixed Sidelite Entrance Guide Track: Aluminum guide track integrated in the bottom of the sidelite portion of the sliding ICU/CCU entrance.

Guide shall allow breakout from any position except when door is latched.

\*\* NOTE TO SPECIFIER \*\* The following is not available for telescopic entrances.

* + - * 1. Surface Mounted Entrance Guide Track: Aluminum fixed sidelite guide track mounted along the face of the wall. The track shall not extend past the jamb into the door opening.

Guide shall allow breakout from any position except when door is latched.

* + 1. Door Operator and Controller: Shall be an electro-mechanical controlled unit utilizing a high-efficiency, energy efficient, DC motor requiring a maximum of 3 amp current draw. System has capability to operate at full performance well beyond brown out and high voltage line conditions (85 to 265 V) sensing changes and adjusting automatically. Operator shall allow an adjustable hold open time of 0 to 60 seconds.
       1. Power Supply: 120 VAC, 50/60 Hz, 15/20 amp minimum incoming power.

\*\* NOTE TO SPECIFIER \*\* Convenience battery is optional. Delete if not required.

* + - 1. Convenience Battery: Shall be concealed in header and capable of full operation with blackout conditions, including sensor capabilities for minimum of 100 cycles.
    1. Microprocessor Control Box:
       1. Factory-adjusted configuration, with pre-set opening and closing speeds.
       2. Mode Selector Control: Multi-position mode selector control shall allow selection of the indicated functions to be engaged when switch is turned to the appropriate setting.

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

* + - * 1. Selector: Rotary knob.
        2. Selector: Keyed cylinder.
        3. Mode Selector Control Mounting: Control shall be jamb mounted.
        4. Mode selector control to allow the following functions:

Off.

On.

Hold Open: Doors activated and held in the full open position.

* + 1. Activation and Safety Control Devices: Provide activation and safety devices in accordance with ANSI/BHMA standards, for condition of exposure and for long-term, maintenance-free operation under normal traffic load for type of occupancy indicated. Coordinate activation and safety devices with door operation and door operator mechanisms.

\*\* NOTE TO SPECIFIER \*\* Select the type of activation and safety devices required. Delete option not required.

* + - 1. Knowing Act Activation Device:
         1. Sensor Plate: Touchless, jamb mounted, activation senor plates, black polycarbonate with white letters. Microwave technology has an adjustable range of 2 to 24 inches (51 to 610 mm).
         2. Sensor Plate: Touchless, 4-1/2 inch (114 mm) square wall mounted, activation senor plates, black polycarbonate with white letters. Microwave technology has an adjustable range of 2 to 24 inches (51 to 610 mm).
      2. Card Reader / Keypad Activation:
         1. Access control systems including card readers and/or keypads, shall be provided by others. See Division 28 Section "Electronic Safety and Security".
         2. Latching Hardware: Provide latching hardware for connection to an access control system as indicated.

Positive Latch: Mortise type self-latching hookbolt, BHMA A156.5, Grade 1.

No lever handles are to be provided,

Electrified strike to automatically release the positive latch upon activation from access control system and allow the sliding function of the door panels.

Fail safe operation: Electrified strike shall unlock the sliding function of the door panels upon loss of power or upon receiving a signal from the smoke detection system and/or fire detection system.

Electrified strike to be provided with the required power supply and sequencing relays for a complete operable system.

* + - 1. Remote Activation: VersaMax Management System: Remote activation system allowing remote activation by patient, nurse, smoke/fire detection system, and/or security system.
      2. Safety Presence Sensors:
         1. Header Mounted Safety Sensor: Shall be the ASSA ABLOY OA Presence Safety Sensor utilizing active infrared reflection technology to detect presence from a single housing mounted on each side of the header.
         2. Photoelectric Safety Beams: Shall be two transmitter/receiver assemblies with infrared photoelectric beams on each side of the frame, to stop the door movement when the beam is broken. Beams shall not be active when doors are fully closed.
         3. Breakout Beam: Shall be a transmitter/receiver assembly with an infrared photoelectric beam, to stop the sliding door movement when the door is in the breakout position and breaks the photoelectric beam.

Presence detecting sensors to be field installed and adjusted.

* 1. ALUMINUM FINISH
     1. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

\*\* NOTE TO SPECIFIER \*\* Delete finish types and finish options required.

* + 1. Anodized Finish:
       1. AAMA 611, Clear, AA- M12C22A41, Class I, 0.018 mm.
       2. AAMA 611, Dark Bronze, AA-M12C22A44, Class I, 0.018 mm.
       3. AAMA 611, Color anodized, \_\_\_\_\_ .
       4. AAMA 611, Color anodized, color as indicated on Drawings.
       5. AAMA 611, Color anodized, color to be selected by Architect.
    2. Painted Finish:
       1. Powder coat painted, \_\_\_\_\_ color.
       2. Powder coat painted, color as indicated on Drawings.
       3. Powder coat painted, color to be selected by Architect.
       4. Kynar finish, 2 coat, \_\_\_\_\_ color.
       5. Kynar finish, 2 coat, color as indicated on Drawings.
       6. Kynar finish, 2 coat, color to be selected by Architect.
       7. Kynar finish, 3 coat, \_\_\_\_\_ color.
       8. Kynar finish, 3 coat, color as indicated on Drawings.
       9. Kynar finish, 3 coat, color to be selected by Architect.
    3. Finish:
       1. \_\_\_\_\_.
       2. As indicated on Drawings.
       3. To be selected by Architect.

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

* + 1. MicroShield antimicrobial silver-based ion, baked-on enamel finish on all exposed surfaces including door pulls, door extrusions, rails and header.
       1. Antimicrobial finish must permanently suppress the growth of bacteria, algae, fungus, mold and mildew by the controlled release of silver ions that attack microbes and inhibit the growth on the treated surfaces.
       2. Coating to be EPA registered resulting in a safe and non-toxic finish; chlorinated or synthetic chemical finishes will not be accepted.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly constructed and prepared.
      2. 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. Install plumb and true in alignment with established lines and grades without warp or rack of framing members and doors. Anchor securely in place.
         1. Install surface mounted hardware using concealed fasteners to greatest extent possible.
         2. Set headers, carrier assemblies, tracks, operating brackets and guides level and true to location with anchorage for permanent support.
         3. Where aluminum will contact dissimilar metals, concrete, or masonry, protect against galvanic action and corrosion.

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

* + - 1. Where smoke control entrances are installed in smoke barriers or partitions, set framing members and header in a bed of sealant to comply with NFPA 105.

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

* + 1. Magnetic Hold-Open Devices: Connect magnetic hold-open devices to the building fire alarm/sprinkler system as specified in Division 26 and Division 28 Sections.
       1. Holding force not to exceed 30 lbf. (133.4 N) for manual door release.

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

* + 1. Door Operators: Connect door operators to electrical power distribution system as specified in Division 26 Sections.

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

* + 1. Switchable Privacy Glass: Connect switchable privacy glass to electrical power distribution system as specified in Division 26 Sections.
    2. Glazing: Glaze intensive care unit/critical care unit (ICU/CCU) entrance door panels in accordance with the Glass Association of North America (GANA) Glazing Manual, published recommendations of glass product manufacturer, and published instructions of ICU/CCU entrance manufacturer.
    3. Sealants: Comply with requirements specified in division 7 Section "Joint Sealants" to provide a weather tight installation.
       1. Set thresholds and framing members in full bed of sealant.
       2. Seal perimeter of framing members with sealant.

\*\* NOTE TO SPECIFIER \*\* Delete signage option if not required.

* + 1. Signage: Apply signage on both sides of each door and sidelite as required by ANSI/BHMA A156.19 and manufacturers installation instructions.
    2. Signage: Apply signage on both sides of each door and sidelite as required by ANSI/BHMA A156.38 and manufacturers installation instructions.
  1. ADJUSTING
     1. Adjust alignment of entrances and hardware for smooth, safe operation with minimum air infiltration.

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

* + 1. Adjust door operators and controls for smooth operation and in compliance with ANSI/BHMA A156.19.
    2. Verify installation and alignment of all entrance gasketing as required for minimum air infiltration and compliance with specified standards.
  1. FIELD QUALITY CONTROL
     1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Delete door certification option not required.

* + 1. Door Certification: Before placing doors into operation, AAADM certified technician shall inspect and approve doors for compliance with ANSI/BHMA A156.19. Certified technician shall be approved by manufacturer.
    2. Door Certification: Before placing doors into operation, AAADM certified technician shall inspect and approve doors for compliance with ANSI/BHMA A156.38. Certified technician shall be approved by manufacturer.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturer's recommendations.
     2. Touch-up, repair or replace damaged products before Substantial Completion.
  2. DEMONSTRATION
     1. Engage a factory-authorized representative to train Owner's maintenance personnel to adjust, operate, and maintain safe operation of the door.

END OF SECTION