



SECTION 08 42 43  
ICU MANUAL SLIDING AND SWINGING DOORS

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**\*\* NOTE TO SPECIFIER \*\* Tormax Technologies, Inc.; ICU Manual Sliding and Swinging Door products.**

This section is based on the products of Tormax Technologies, Inc., which is located at:  
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[\[Click Here\]](#) for additional information.

Welcome to one of the world's leading door system suppliers. As you read this, somewhere in the world a TORMAX automatic door system is being installed. Since 1951 the TORMAX name has stood for safety, reliability and superior functionality. Discover the beautiful and high tech door world of TORMAX found where ever people move. Owning a TORMAX door means owning the best.

Since it's founding in Switzerland by the Landert Motoren Group, TORMAX has set the global standard for entrance system automation. TORMAX Technologies, Inc., headquartered with manufacturing in San Antonio, Texas, founded in 1997, is the TORMAX supplier for North America. We provide high quality, quick response, technically supported solutions for Swing Doors, Sliding Doors, Folding Doors, Doors for Extreme Conditions, Escape Route & Fire Doors, Industrial Doors, Semi-Circular Doors, Revolving Doors, Manual Doors-ICU, Controls, Accessories, and Door Management Systems.

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

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

- A. ICU Manual Sliding Doors
- B. ICU Manual Swing Doors

### 1.2 RELATED SECTIONS

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

- A. Section 07 90 00 - Joint Protection
- B. Section 08 41 00 - Entrances and Storefronts.
- C. Section 08 71 53 - Security Door Hardware.

- D. Section 08 83 13 - Mirrored Glass Glazing.
- E. Section 26 05 19 - Low-Voltage Electrical Power Conductors and Cables.

### 1.3 REFERENCES

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

- A. ANSI/UL 325 - Door, Drapery, Gate, Louver, and Window Operators and Systems - (UL) listed.
- B. ANSI Z97.1 Safety Glazing Material Used in Buildings - Methods of Test.
- C. ASTM B 221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Shapes and Tubes.
- D. NFPA 101 Life Safety Code
- E. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives.
- F. UL 1784 - Air Leakage Tests for Door Assemblies
- G. Aluminum Association Standard AA DAF-45 - Designation System for Aluminum Finishes.

### 1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. ICU manual sliding door system components shall operate between minus 30 degrees F and plus 130 degrees F in all climatic conditions.

**\*\* NOTE TO SPECIFIER \*\* Include the following paragraph if Smoke Rated doors are specified. Delete if not applicable.**

- B. Smoke rated ICU door assemblies shall comply with UL 1784 and NFPA 105.

### 1.5 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
  - 4. Operation and maintenance data.
- C. Shop Drawings: Show profiles, joining method, location of components, anchorage details, adjacent construction interface, and dimensions as well as all necessary wiring and electrical requirements.

**\*\* NOTE TO SPECIFIER \*\* Delete the following paragraphs if LEED is not applicable.**

- D. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
  - 1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
  - 2. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.

**\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.**

- E. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

- F. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- H. Contract Closeout: Submit
  1. As-Built Record Documents showing actual installation conditions and wiring.
  2. Manufacturer's Warranty.
  3. Parts lists and maintenance instructions including data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer to have minimum five years documented experience in the fabrication of automatic doors of the type required for this project and be capable of providing field service representation during installation.
- B. Installer Qualifications: Installer to be AAADM certified in the work of this section and who has specialized in the installation of work similar to that required for this project.

**\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.**

- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  1. Finish areas designated by Architect.
  2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
  3. Refinish mock-up area as required to produce acceptable work.
  4. Accepted mock-up may become part of the Work.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Package hardware items individually with necessary fasteners and installation templates when necessary; label and identify each package with door opening code to match door schedule.
- B. Store products in manufacturer's unopened packaging until ready for installation.
- C. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- D. Store materials in a dry, warm, ventilated weather tight location.

#### 1.8 SEQUENCING

- A. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
- B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

#### 1.9 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits

recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

#### 1.10 MAINTENANCE MATERIALS

- A. Provide special wrenches and tools applicable to each different or special hardware component.

#### 1.11 COORDINATION

- A. Coordinate work with other directly affected components involving manufacture or fabrication of reinforcement for door hardware and recessed items.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Tormax Technologies, Inc., which is located at: 12859 Wetmore Rd. ; San Antonio, TX 78247; Toll Free Tel: 888-685-3707; Tel: 210-494-3551; Fax: 210-494-5930; Email:[requestinfo@tormaxusa.com](mailto:requestinfo@tormaxusa.com); Web:[www.tormaxusa.com](http://www.tormaxusa.com)

**\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.**

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

**\*\* NOTE TO SPECIFIER \*\* Select one of the following ICU manual sliding door systems and delete the ones not required. TORMAX ICU sliding doors are available in narrow stile and medium stile frames in 2-panel, 3-panel, and 4-panel configurations. Doors are provided unglazed, coordinate with Section 08 83 13 - Mirrored Glass Glazing to specify proper glazing.**

#### 2.2 INTENSIVE CARE UNIT MANUAL SLIDING DOORS:

- A. Tormax Series 9600 ICU Manual Sliding Door System With Guide Track: System consists of sliding aluminum door(s), sidelight(s), frames and header. All components factory assembled, adjusted and tested.

- 1. Sliding Aluminum Doors: Provide door(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. Door(s) are supported from hanger assembly by means of a factory-adjusted cantilever support and pivot assembly. All door panels shall have intermediate rails. Size doors and fixed sidelights to prevent pinch points at meeting stiles.

- a. Door Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.

- b. Door Configuration:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) 2-panel
- 2) 3-panel
- 3) 4-panel

- c. Operation:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) Threshold floor track permits sliding door(s) and sidelight(s) to breakout at any point providing access to double the normal entrance opening.
- 2) Bottom door guide rail permits only the sliding door(s) to breakout at any point
- d. Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
- 2) 5/8 inch (16 mm)
- 3) 1 inch (25 mm).
- e. Hardware:
  - 1) Door Pulls: Provide as required.

**\*\* NOTE TO SPECIFIER \*\* Select the following optional paragraph if required and delete if not required.**

- 2) Positive Latch: Provide door(s) with a lock that will latch the sliding panel in place when closed. Provide with a lever handle on each side of the sliding panel to unlock the door that when lever handle is fully activated, breakaway release of the sliding panel can be achieved.
2. Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. Frame shall be 4-1/2 inches (114 mm) deep by 1-3/4 inches wide (44 mm) section.
3. Aluminum Sidelights: Provide sidelight panel(s) with corner block construction to dimension heights and widths and with corresponding glazing as indicated on the Drawings. All panels shall have intermediate rails.
  - a. Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.
- b. Glazing Thickness: Sidelights are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
- 2) 5/8 inch (16 mm)
- 3) 1 inch (25 mm).
4. Header Case: Aluminum extruded 4-1/2 inches wide by 2-3/16 inches high (114 mm wide by 56 mm high). Header shall encompass an integral door track and cover and have a continuous self-locking hinge that opens approximately flush with the top of the header.
5. Door Hanger Wheels: Each sliding panel suspended and held on the overhead track by two tandem trolley head assemblies, each consisting of two 1-3/8 inch (35 mm) diameter nylon wheels. Door height has an adjustment of plus or minus 1/8 inch (3 mm) and is fully accessible with the hinge cover in the "open" position.
6. Electrostatic Grounding: Provide all doors with electrostatic grounding.
7. Accessories: Provide vinyl weather-stripping on the lead stile of the sliding door(s) between the panels and between the stile and jamb.

B. Tormax Series 9600TL ICU Trackless Manual Sliding Door System: System consists of sliding aluminum door(s), sidelight(s), frame and header. All components factory assembled, adjusted and tested.

1. Sliding Aluminum Doors: Provide door(s) with corner block construction to dimension

heights and widths with corresponding glazing as indicated on the Drawings. Doors are held on the track by 13/16 inch (21 mm) diameter anti-riser wheels and supported by a factory adjusted cantilever support and pivot assembly. All door panels shall have intermediate rails. Size doors and sidelights to prevent pinch points at meeting stiles.

a. Door Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.

b. Door Configuration:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) 2-panel
  - 2) 3-panel
  - 3) 4-panel
- c. Operation: Doors must be slid to the full open position; both the sliding doors and swing out sidelights shall break out together as a pivoting unit providing more than double the normal entrance opening. Flush bolts and transfer floor pivots are not an acceptable means of controlling door movement and breakout. Slide door roller guide support provides sag-free construction and support for panels in the event of breakout and prevents doors from derailing. Tracking guides shall maintain spacing between panels during operation and breakout. Sliding panel restrictor will prevent accidental breakout prior to full open position.
- d. Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
  - 2) 5/8 inch (16 mm)
  - 3) 1 inch (25 mm).
- e. Hardware:
- 1) Door Pulls: Provide as required.

**\*\* NOTE TO SPECIFIER \*\* Select the following optional paragraph if required and delete if not required.**

- 2) Positive Latch: Provide door(s) with a lock that will latch the sliding panel in place when closed. Provide with a lever handle on each side of the sliding panel to unlock the door that when lever handle is fully activated, breakaway release of the slide and swing out panel can be achieved in the full open position.
2. Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. Frame shall be 4-1/2 inches (114 mm) deep by 1-3/4 inches wide (44 mm) section.
  3. Aluminum Sidelights: Provide swing out sidelight(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. All panels shall have intermediate rails.
- a. Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) Narrow stile with intermediate rail.
  - 2) Medium stile with intermediate rail.
- b. Glazing Thickness: Sidelights are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass

thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
  - 2) 5/8 inch (16 mm)
  - 3) 1 inch (25 mm).
4. Header Case: Aluminum extruded 4-1/2 inches wide by 2-3/16 inches high (114 mm wide by 56 mm high). Header shall encompass an integral door track and cover and have a continuous self-locking hinge that opens approximately flush with the top of the header.
  5. Door Hanger Wheels: Each sliding panel suspended and held on the overhead track by two tandem trolley head assemblies, each consisting of two 1-3/8 inch (35 mm) diameter nylon wheels. Door height has an adjustment of plus or minus 1/8 inch (3 mm) and is fully accessible with the hinge cover in the "open" position.
  6. Electrostatic Grounding: Provide all doors with electrostatic grounding.
  7. Accessories: Provide vinyl weather-stripping on the lead stile of the sliding door(s) between the panels and between the stile and jamb.
- C. Tormax Series 9600TL SR ICU Trackless Smoke Rated Manual Sliding Door System: System consists of sliding aluminum door(s), sidelight(s), frame, header and smoke and draft control accessories. All components factory assembled, adjusted and tested. System shall be rated as a barrier for passage of smoke.
1. Sliding Aluminum Doors: Provide door(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. Doors are held on the track by 13/16 inch (21 mm) diameter anti-riser wheels and supported by a factory adjusted cantilever support and pivot assembly. All door panels shall have intermediate rails. Size doors and sidelights to prevent pinch points at meeting stiles.

a. Door Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.

b. Door Configuration:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) 2-panel
  - 2) 3-panel
  - 3) 4-panel
- c. Operation: Doors must be slid to the full open position; both the sliding doors and swing out sidelights shall break out together as a pivoting unit providing more than double the normal entrance opening. Flush bolts and transfer floor pivots are not an acceptable means of controlling door movement and breakout. Slide door roller guide support provides sag-free construction and support for panels in the event of breakout and prevents doors from derailing. Tracking guides shall maintain spacing between panels during operation and breakout. Sliding panel restrictor will prevent accidental breakout prior to full open position.
  - d. Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
- 2) 5/8 inch (16 mm)



- 3) 1 inch (25 mm).
- e. Hardware:
  - 1) Door Pulls: Provide as required.
  - 2) Positive Latch: Provide door(s) with a lock that will latch the sliding panel in place when closed. Provide with a lever handle on each side of the sliding panel to unlock the door that when lever handle is fully activated, breakaway release of the slide and swing out panel can be achieved in the full open position.
2. Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. Frame shall be 4-1/2 inches (114 mm) deep by 1-3/4 inches wide (44 mm) section.
3. Aluminum Sidelights: Provide swing out sidelight(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. All panels shall have intermediate rails.
  - a. Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.
- b. Glazing Thickness: Sidelights are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
- 2) 5/8 inch (16 mm)
- 3) 1 inch (25 mm).
4. Header Case: Aluminum extruded 4-1/2 inches wide by 2-3/16 inches high (114 mm wide by 56 mm high). Header shall encompass an integral door track and cover and have a continuous self-locking hinge that opens approximately flush with the top of the header.
5. Door Hanger Wheels: Each sliding panel suspended and held on the overhead track by two tandem trolley head assemblies, each consisting of two 1-3/8 inch (35 mm) diameter nylon wheels. Door height has an adjustment of plus or minus 1/8 inch and fully accessible with the hinge cover in the "open" position.
6. Electrostatic Grounding: Provide all doors with electrostatic grounding.
7. Smoke and Draft Control Accessories:
  - a. Provide smoke rated silicone seals horizontally between each panel and the header, and vertically between the slide and swing out sidelights, at meeting stiles and between the stile and jamb.

**\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs if required for the project and delete if not required.**

- b. Provide bottom rail seal where positive pressure is used to control the movement of smoke.
- D. Tormax Series TX9620 ICU Telescoping Manual Sliding Door System With Guide Track: System consists of two sliding aluminum door(s), sidelight, frame and header. All components factory assembled, adjusted and tested.
1. Sliding Aluminum Doors: Provide door(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. Lead sliding door supported from a hanger assembly by a factory-adjusted cantilever support and pivot assembly; secondary sliding door shall be supported from a hanger assembly. All sliding door panels shall have intermediate rails. Size doors and sidelight sized to prevent pinch points at meeting stiles.
    - a. Door Type:



**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.
- b. Door Configuration:
  - 1) 3-panel
- c. Operation: System utilizes a bottom door rail to guide the sliding door panels. The lead sliding panel shall breakout for emergency egress in any position of door travel.
- d. Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
- 2) 5/8 inch (16 mm)
- 3) 1 inch (25 mm).
- e. Hardware:
  - 1) Door Pulls: Provide as required.

**\*\* NOTE TO SPECIFIER \*\* Select the following optional paragraph if required and delete if not required.**

- 2) Positive Latch: Provide door with a lock that will latch the sliding panel in place when closed. Provide with a lever handle on each side of the sliding panel to unlock the door that when lever handle is fully activated, breakaway release of the sliding panel can be achieved.
2. Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. Frame shall be 7 inches (178 mm) deep by 1-3/4 inches wide (44 mm) section.
3. Aluminum Sidelights: Provide sidelight(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. All panels shall have intermediate rails.
  - a. Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) Narrow stile with intermediate rail.
- 2) Medium stile with intermediate rail.
- b. Glazing Thickness: Sidelights are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
- 2) 5/8 inch (16 mm)
- 3) 1 inch (25 mm).
4. Header Case: Extruded aluminum 7 inches wide by 2-3/16 inches high (178 mm wide by 56 mm high). Header shall encompass an integral door track and cover with a continuous self-locking hinge that opens approximately flush with the top of the header.
5. Door Hanger Wheels: Each sliding panel suspended and held on the overhead track by two tandem trolley head assemblies, each consisting of two 1-3/8 inch (35 mm) diameter nylon wheels. Door height has an adjustment of plus or minus 1/8 inch (3 mm) and is fully accessible with the hinge cover in the "open" position.
6. Electrostatic Grounding: Provide all doors with electrostatic grounding.
7. Accessories:
  - a. Lead stile of the sliding door and the area between the panels sealed with vinyl

weather-stripping.

- 1) Tormax Series 9630TL ICU Telescoping Trackless Manual Sliding Door System: System consists of sliding aluminum door(s), sidelight, frame and header. All components factory assembled, adjusted and tested.
  - a) Sliding Aluminum Doors: Provide door(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. Lead and secondary sliding door panels supported from a hanger assembly by means of a factory-adjusted cantilever support and pivot assembly. Size doors and sidelight to prevent pinch points at meeting stiles. All door panels shall have intermediate rails.
    - 1) Door Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 2) Narrow stile with intermediate rail.
- 3) Medium stile with intermediate rail.
  - 1) Door Configuration:
- 4) 3-panel
  - 1) Operation: Sliding door(s) and sidelight shall breakout together as a pivoting unit providing access to 90 percent of the normal entrance opening. Sliding door(s) shall be opened to the full open position, and only then shall all panels breakout for emergency egress. Slide door roller guide support shall prevent panels from sagging, keeps both panels parallel to one another in a breakout condition and prevent doors from derailing. Tracking guides maintain spacing between panels during operation and breakout. Tracking guides eliminates the need for flush bolts and floor mounted transfer pivots. Tracking guide liner provides for smooth and silent operation. Sliding panel restrictor prevents accidental breakout prior to full open position.
    - 2) Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 5) 1/4 inch (6 mm)
- 6) 5/8 inch (16 mm)
- 7) 1 inch (25 mm).
  - 1) Hardware:
- 8) Door Pulls: Provide as required.

**\*\* NOTE TO SPECIFIER \*\* Select the following optional paragraph if required and delete if not required.**

- 9) Positive Latch: Provide door with a lock that will latch the lead sliding panel in place when closed. Provide with a lever handle on each side of the sliding panel to unlock the door that when lever handle is fully activated, breakaway release of the sliding and swing out panel can be achieved in the full open position.
  - a) Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. The frame shall be standard 7 inches deep x 1-3/4 inches wide (178 mm wide x 44 mm deep) section.
  - b) Aluminum Sidelight: Provide swing out sidelight with corner block construction to dimension heights and widths with corresponding glazing indicated on the Drawings. Sidelight panel shall have

intermediate rail.

1) Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 10) Narrow stile with intermediate rail.
- 11) Medium stile with intermediate rail.
  - 1) Glazing Thickness: Sidelights are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 12) 1/4 inch (6 mm)
- 13) 5/8 inch (16 mm)
- 14) 1 inch (25 mm).
  - a) Header Case: Extruded aluminum 7 inches wide by 2-3/16 inches high (178 mm wide by 56 mm high). Header shall encompass an integral door track and cover with a continuous self-locking hinge that opens approximately flush with the top of the header.
  - b) Door Hanger Wheels: Each sliding panel suspended from an overhead track by two tandem trolley head assemblies, each consisting of two 1-3/8 inch (35 mm) diameter nylon wheels. Door height has an adjustment of plus or minus 1/8 inch (3 mm) and is fully accessible with the hinge cover in the "open" position. Door height adjustments shall be fully accessible with the hinge cover in the "open" position.
  - c) Electrostatic Grounding: Provide all doors with electrostatic grounding.
  - d) Accessories:
    - 1) Lead stile of the sliding door, between the stile and jamb and the area between the panels sealed with vinyl weather-stripping.
- 15) Tormax Series 9630TLRS ICU Telescoping Trackless Smoke Rated Manual Sliding Door System: System consists of sliding aluminum door(s), sidelight, frame, header and smoke and draft control accessories. All components factory assembled, adjusted and tested. Systems shall be rated as a barrier for passage of smoke.
  - a) Sliding Aluminum Doors: Provide door(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. Lead and secondary sliding door panels shall be supported from a hanger assembly by means of a factory-adjusted cantilever support and pivot assembly. All door panels shall have intermediate rails. Size door(s) and sidelight to prevent pinch points at meeting stiles.
    - 1) Door Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 16) Narrow stile with intermediate rail.
- 17) Medium stile with intermediate rail.
  - 1) Door Configuration:
- 18) 3-panel
  - 1) Operation: Sliding door(s) and sidelight shall breakout together as a pivoting unit with access to 90 percent of the normal entrance opening. Sliding door(s) shall be opened to the full open position, and only then shall all panels breakout for emergency egress. Slide door roller guide

support shall prevent panels from sagging, keep both panels parallel to one another in a breakout condition and prevent doors from derailing. Tracking guides maintain spacing between panels during operation and breakout and eliminate the need for flush bolts and floor mounted transfer pivots. Guide liner provides for smooth and silent operation. Sliding panel restrictor prevents accidental breakout prior to full open position.

- 2) Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 19) 1/4 inch (6 mm)
- 20) 5/8 inch (16 mm)
- 21) 1 inch (25 mm).
  - 1) Hardware:
- 22) Door Pulls: Provide as required.
- 23) Positive Latch: Provide door with latching mechanism to latch the sliding panel in the full closed position. Provide with lever handles to unlatch the sliding door. Breakaway release of the sliding and swing out panels is achieved in the full open position
  - 1) Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. Frame shall be standard 7 inches deep by 1-3/4 inches wide (178 mm wide by 44 mm deep) section.
  - b) Aluminum Sidelights: Provide swing out sidelight(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings. All panels shall have intermediate rails.
    - 1) Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 24) Narrow stile with intermediate rail.
- 25) Medium stile with intermediate rail.
  - 1) Glazing Thickness: Sidelights are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 26) 1/4 inch (6 mm)
- 27) 5/8 inch (16 mm)
- 28) 1 inch (25 mm).
  - a) Header Case: Extruded aluminum 7 inches wide by 2-3/16 inches high (178 mm wide by 56 mm high). Header shall encompass an integral door track and cover with a continuous self-locking hinge that opens approximately flush with the top of the header
  - b) Door Hanger Wheels: Each sliding panel suspended and held on the overhead track by two tandem trolley head assemblies, each consisting of two 1-3/8 inch (35 mm) diameter nylon wheels. Door height has an adjustment of plus or minus 1/8 inch (3 mm) and is fully accessible with the hinge cover in the "open" position.
  - c) Electrostatic Grounding: Provide all doors with electrostatic grounding.
  - d) Smoke and Draft Control Accessories: Provide with smoke rated

silicone seals horizontally between each panel and the header, vertically between slide and swing out sidelights and between the stile and jamb.

**\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs as required for the project and delete if not required.**

- e) Bottom Rail Seal: Provide with bottom rail seal where positive pressure is used to control the movement of smoke.

**\*\* NOTE TO SPECIFIER \*\* Select one of the following ICU manual swing door systems and delete the ones not required. TORMAX ICU swing doors are available in narrow stile and medium stile frames in 1-panel and 2-panel configurations. Doors are provided unglazed, coordinate with Section 08 83 13 - Mirrored Glass Glazing to specify proper glazing.**

### 2.3 INTENSIVE CARE UNIT MANUAL SWING DOORS:

A. Tormax Series 9600TL ICU Trackless Manual Swing Door System: System consists of aluminum door(s), frames and header. All components factory assembled, adjusted and tested.

- 1. Swinging Aluminum Doors: Provide door(s) with corner block construction to dimension heights and widths with corresponding glazing as indicated on the Drawings.

a. Door Type:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) Narrow stile with intermediate rail.
  - 2) Medium stile with intermediate rail.
- b. Door Configuration:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required and delete the one not required.**

- 1) 1-panel
  - 2) 2-panel
- c. Glazing Thickness: Doors are field glazed as specified in Section 08 83 13 - Mirrored Glass Glazing. Provide with security glass stops for the following glass thickness:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the one not required.**

- 1) 1/4 inch (6 mm)
  - 2) 5/8 inch (16 mm)
  - 3) 1 inch (25 mm).
- d. Hardware:
- 1) Door Pulls: Provide as required.
  - 2) Pivot Hinges: Provide with top and bottom pivots.
  - 3) Ball Detent Assembly: Provide to hold the door in the closed position.
  - 4) Flush Bolts: Provide on two panel configurations to engage inactive panel to header.
- 2. Aluminum Frame and Extrusions: Provide with minimum .125 inch (3 mm) wall thickness in integral structural sections. Frame shall be 4-1/2 inches (114 mm) deep by 1-3/4 inches wide (44 mm) section.
  - 3. Header Case: Aluminum extruded 4-1/2 inches wide by 2-3/16 inches high (114 mm wide by 56 mm high). Header shall encompass an integral door track and cover and have a continuous self-locking hinge that opens approximately flush with the top of the header.
  - 4. Electrostatic Grounding: Provide all doors with electrostatic grounding.
  - 5. Accessories: Provide lead and pivot stile with vinyl weather-stripping.

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs as required for the project and delete the finishes not required.**

## 2.4 FACTORY FINISH

- 1) Provide aluminum finishes in accordance with Aluminum Association Standard AA DAF-45.

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs as required for the project and delete the ones not required. Contact the manufacturer for availability of custom finishes and insert finish type and color required.**

- a) AA-M12-C22-A31 Clear Anodized.
  - b) AA-M12-C22-A44 Dark Bronze Special anodized.
  - c) AA-M12-C22-A44 Black Special anodized.
  - d) Custom Anodized Color: \_\_\_\_\_.
- 2) Painted Aluminum Surfaces: As fabricated mechanical finish, chemically cleaned, and prepared for applied coating; with organic coating.

**\*\* NOTE TO SPECIFIER \*\* Select one of the following 2 paragraphs for the coating finish required and delete the finish not required.**

- a) Organic Coating:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for the organic finish required and delete the one not required.**

- 1) Manufacturer's standard power coat finish.
  - 2) Thermosetting modified acrylic enamel.
- b) High Performance Organic Coating:
    - 1) Fluoropolymer coating system with minimum 70 percent polyvinylidene fluoride resin.
  - c) Color:

**\*\* NOTE TO SPECIFIER \*\* Select one of the following color paragraphs and delete those not required.**

- 1) As selected from manufacturer's standard range.
- 2) Custom color as selected by the Architect.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- 1) Do not begin installation until substrates have been properly prepared.
- 2) Check as-built conditions and verify the manufacturer's details for accuracy to fit the wall assembly prior to fabrication.
- 3) If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 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.

### 3.3 INSTALLATION

- 1) Install in accordance with manufacturer's instructions.
- 2) Installation shall be by an installer AAADM certified and trained by the manufacturer in strict accordance with the manufacturer's instructions and local code.
- 3) Comply with the ICU manual sliding door package manufacturer's recommendations and/or installation guide when installing the door system. Set all units plumb, level and true.
- 4) Provide all fasteners required.
- 5) Adjustment and Cleaning: After repeated operation of the doors, re-adjust for optimum operating condition and safety. Clean all metal surfaces promptly after installation.

- 6) Explain and review the Daily Safety Check Procedure.

#### 3.4 FIELD QUALITY CONTROL

- 1) Manufacturers representative to verify that installation of doors and controls are in conformance to the manufacturer's recommendations.

#### 3.5 PROTECTION

- 1) Protect installed products until completion of project.
- 2) Touch-up, repair or replace damaged products before Substantial Completion.

#### 3.6 SCHEDULES

**\*\* NOTE TO SPECIFIER \*\* Retain Paragraph below if required to suit project requirements. Identify products by name on the Drawings or use this paragraph to define the location of each type of material to be used. The following are some examples of schedule references. Edit as required to suit project or delete and identify products on the Drawings.**

- 1) :
- 2) :

END OF SECTION