



**NABCO ICU Automatic Sliding Door
Trackless
Suggested Architectural Specifications
Section 8**

**NABCO ICU Series (2400)
Automatic ICU / CCU Sliding Door
Trackless - Full Breakaway**

**Division 08 - Openings
Section 08 42 43 - INTENSIVE CARE UNIT / CRITICAL CARE UNIT ENTRANCES**

Note to Specifier: Articles and paragraphs below may be edited or modified to suit specific project requirements.

Add section numbers and titles per CSI "MasterFormat" and specifier's standard practice. Contact manufacturer's representative to discuss specification modifications, performance requirements, accessories and/or related equipment that may be applicable to this project.

Part 1 - GENERAL

1.01 DESCRIPTION

- A. Furnish and install automatic slide door equipment as indicated on drawings and specifications.
- B. Related work specified elsewhere.
 - 1. Concrete: Division 03, applicable sections.
 - 2. Masonry: Division 04, applicable sections.
 - 3. Thermal and Moisture Protection: Division 07, applicable sections.
 - 4. Openings: Division 08, applicable sections.
 - 5. Electrical Grounding 16, applicable sections.

1.02 REFERENCES

- A. American Architectural Manufacturers Association (AAMA) - www.aamanet.org
- B. American National Standards Institute (ANSI) - www.ansi.org
- C. Builders' Hardware Manufacturers Association (BHMA) - www.buildershardware.com
- D. National Fire Protection Association (NFPA) - www.nfpa.org
- E. International Code Council (ICC) - www.iccsafe.org or Applicable State and Local Codes

1.03 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer to have at least (5) five years of experience in the fabrication of automatic and manual entrance systems.
- B. Installer's Qualifications: Products specified shall be represented by a factory authorized and trained distributor. Distributor shall be AAADM Certified, maintain a parts inventory and have trained service personnel with experience installing and maintaining units indicated for this project.
- C. Certifications: Smoke rated ICU/CCU doors are to be certified by Underwriters Laboratories Inc. to UL1784 - Air Leakage Test of Door Assemblies and NFPA 105.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's product and complete installation data for all materials covered in this section.
- B. Shop Drawings: Submit complete elevations, details and methods of anchorage to location; installation of hardware; size, shape, joints and connections; and details of joining with other construction.
- C. Templates and Diagrams: As needed shall be furnished to fabricators and installers of related work for coordination of door system installation with concrete work, masonry, and other related work.
- D. A copy of appropriate manual shall be provided to owner / contractor upon completion of installation.
- E. Certified test reports from UL shall be submitted, indicating doors are certified to UL1784 - Air Leakage Test of Door Assemblies and NFPA 105.

1.05 SUBSTITUTIONS

- A. Equipment as manufactured by NABCO Entrances, Inc. has been specified and shall be quoted as the base bid. Proposals for substitution products may be submitted by the bidding contractors a minimum of 10 days prior to bid due date. The proposed substitution shall meet the quality and performance standards described in this specification.



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1.06 JOB SITE CONDITIONS

- A. Site Survey: Verify site conditions including, but not limited to the following; opening sizes, floor conditions, plumb and level mounting surfaces (substrates shall be of proper dimension and material).
- B. Coordinate installation with glass, glazing, hardware and other trades to avoid construction delays.

1.07 WARRANTY

- A. Warranted materials shall be free of defects in material and workmanship for a period of one year from date of substantial completion. During the warranty period the Owner shall request NABCO factory-trained technicians to perform service. Warranty repairs are provided during normal business hours. Owner to receive warranty after completion of installation.

PART 2-PRODUCTS

2.01 APPROVED MANUFACTURER

- A. All door equipment shall be manufactured by:
NABCO Entrances Inc.
582 W18717 Gemini Drive
Muskego, WI 53150
Phone: (877) 622-2694
Fax: (888) 679-3319
Email: info@nabcoentrances.com

2.02 MANUAL SLIDING DOOR SYSTEMS

NABCO ICU Automatic Sliding Door System

- A. Mode of operation: The NABCO ICU Automatic Sliding Door System (24000 provides the unique feature of room access without a floor track. Smooth entry and exit is provided for patient and also for delicate medical equipment. This feature also precludes the chance of contaminant build up. Under normal operating conditions, medical personnel have access by way of the sliding door. When patient and/or medical equipment access is required, the sliding door is moved to the full open position. Door(s) and swing panel(s) become a pivoting unit capable of swinging 90 degrees giving access to approximately 95% of the framed opening. Reset procedures occur in reverse order.
- B. Types / Configurations:
 - a. Single
- C. Product Components:
 - 1. Aluminum doors, swing panels and frame assembly.
 - 2. Rollers - Support and Guide
 - 3. Door carrier hanger assembly, swing panel pivots, breakaway latches, limiting arms, pull handles, static arrester and weathering seal.

1a) Door panel(s) and Swing panel(s) shall be factory assembled with 3/8-16 threaded tie rods spanning full length of top and bottom rails. Snap in glass stop with integral extruded vinyl standoff to accommodate glass flexing. A horizontal muntin bar to provide glass protection. Configurations shall include 2 panel (single) version.

1b) Vertical Jambs shall be 1-3/4"x 4-1/2" (44mm x 114mm) and Horizontal Header shall be 5" by 8" (127mm x 203mm) aluminum extrusions. The header includes a door track and anti-riser guide.

1c) All extruded aluminum sections shall be 6063-T5 or equivalent.

1d) Finish: Aluminum shall have a standard finish of AA-M12-C22-A31 (204R1). Paint and other anodized finishes available upon request.

2) Sliding door shall ride on two steel, urethane coated support rollers incorporating lubricated sealed ball bearings. Each roller assembly shall have $\pm 9/64"$ (4mm) of vertical adjustment. Each swing panel shall include one bottom guide assembly. Guide blocks shall be attached to the swing panel with a 3/16" (5mm) thick formed guide bracket. All steel brackets and fittings shall be plated for corrosion resistance.

3a) Entrance systems shall have door panels attached to a door carrier hanger assembly by means of an adjustable support rod pivot assembly and corrosion resistant adjustable breakaway release latch holding the door panel in the closed position



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under normal manual operation. Breakaway pressure shall be field adjustable (5-50 lbs.) to meet local building code requirements but will be factory set at 50 lbs. maximum. The support rod pivot assembly allows the door to swing freely in panic mode without sagging. The system shall have breakaway swing panels held in place by means of a top pivot and floor pivot plate secured to the floor.

3c) A limiting arm to control the panels as they swing in the direction of egress.

3d) 9/16" wide vinyl fin positioned between the door(s) and lead stile(s) of the swing panel(s).

3e) Locking Hardware

- a. Door(s) and swing panel(s) to break out without requiring secondary action. (Flush bolt not allowed)
- b. Positive latch is available as an option.

4. Nabco power open/close operator with microcomputer control.

- a. Nabco High Voltage Brushless Motor/Operator: Completely assembled and sealed unit which shall include gear-driven transmission, and bearings, all located in cast aluminum housing and filled with special lubricant for extreme temperature conditions. Attached to transmission system with sealed ball bearings shall be a 1/4 peak HP high voltage brushless motor for maintenance free, high torque performance. Drives that utilize motors with brushes will not be approved. Motor shall operate from 115-volt supply and require less than 5 amps at full stall.
- b. Nabco Opus Controller: Controller shall be equipped with multiple programmable inputs and outputs to enable custom door performance to meet specific jobsite requirements. Controller be microprocessor based with LCD on board programming display and rotary dial. LCD display to indicate current operational status of inputs and outputs and history data in real time. To facilitate remote control and ease of programming controller shall also be Bluetooth compatible. The microprocessor control shall allow the opening speed, closing speed; back check speed, latch check speed and back check and latch check positions to be adjusted separately and independently from each other to meet specific door widths and site conditions. The control system shall also be capable of providing transistor output signals at the door closed or door open positions to facilitate interaction with security and access control systems. A single input shall be available to initiate an emergency close and lock whereby the door immediately closes upon that circuit activation. Normally open or normally closed activation and safety signal inputs shall be available and able to be switched programmatically. Non-critical error resetting to be accomplished via cycling of On/Off Mode Switch. The processor shall be capable of providing information on the number of operations and error codes for maintenance purposes. Adjustable opening and closing speeds shall be set in accordance with ANSI 156.10. All adjustments shall be specific and reproducible.

PART 3-EXECUTION

3.01 INSTALLATION

- A. Door equipment shall be installed by manufacturer-approved, factory-trained installers in compliance with manufacturer's recommendations and approved shop drawings.

3.02 CLEANING AND PROTECTION

- A. After installation, clean framing members as recommended by manufacturer. Aluminum surfaces in contact with masonry, concrete, or steel shall be protected from contact by use of neoprene gaskets where indicated or a coat of bituminous paint to prevent galvanic or corrosive action. Advise general contractor to protect unit from damage during subsequent construction activities.

***COVER NOTE TO SPECIFICATION WRITER**

- A. Preparation of a plumb and square opening to receive sliding door equipment with adequate support.
- B. Glass and glazing shall be described in glazing section of the specifications, door to be glazed square.
- C. CONCRETE INSTALLER shall prepare floor at location of entrance system to be level and smooth without changes in elevation between foundation and associated walkways.

END OF SECTION