



**NABCO STORM Series
Hurricane Rated Sliding Door
Automatic Entrance System
Suggested Architectural Specifications
Section 8**

**NABCO STORM Series Hurricane Rated Sliding Door
ALUMINUM AUTOMATIC SLIDING ENTRANCE SYSTEM**

**Division 08 - Openings
Section 08 42 29.23 SLIDING AUTOMATIC 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
- F. Underwriter's Laboratories (UL) 325
- G. Miami-Dade County Building Code Compliance Office
- H. Florida Building Code, 7th edition (2020)

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. All automatic equipment to comply with UL325 (USA and Canada).
- D. All automatic equipment to comply with ANSI A156.10.

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.

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.

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).



**NABCO STORM Series
Hurricane Rated Sliding Door
Automatic Entrance System
Suggested Architectural Specifications
Section 8**

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.

1.08 COMPLIANCE

A. A completed American Association of Automatic Door Manufacturer (AAADM) compliance form shall be submitted as proof of compliance with ANSI A156.10 Standard for power operated pedestrian doors. Door(s) shall be inspected, and form shall be signed by an AAADM certified inspector prior to placing door(s) in operation.

PART 2-PRODUCTS

2.01 APPROVED MANUFACTURER

A. All door equipment shall be manufactured by:
NABCO Entrances Inc.
S82 W18717 Gemini Drive
Muskego, WI 53150
Phone: (877) 622-2694
Fax: (888) 679-3319
Email: info@NABCOentrances.com

2.02 AUTOMATIC SLIDING DOOR SYSTEM

A. Model: NABCO Storm Series Sliding Door System (FKA GT1175 Hurricane Series)
B. Mode of operation:
a. An electro-mechanical operator with a microcomputer control system shall drive sliding door. The door will be pulled from closed to open and open to close position stopping the door in both directions by electrically reducing the voltage, stalling door against mechanical stop. Opening, closing speeds and hold open time shall be adjustable. A reinforced timing belt shall be used to convert rotating motion from the operator sprocket into horizontal motion of the door.

C. Types / Configurations:

- | | |
|---|--|
| a. NABCO STORM D Single (H60 Rated)
a. Level D Impact Rated
1. Full-open
2. Fixed-sidelite | b. Non-Impact Rated
1. Full-open
2. Fixed-sidelite |
| b. NABCO STORM D Bi-part (H60)
a. Level D Impact Rated
1. Full-open
2. Fixed-sidelite | b. Non-Impact Rated
1. Full-open
2. Fixed-sidelite |
| c. NABCO STORM D Single (H105 Rated)
a. Level D Impact Rated
1. Full-open
2. Fixed-sidelite
b. Level E Impact Rated, Full-open | c. Non-Impact Rated
1. Full-open
2. Fixed-sidelite |
| d. NABCO STORM D Bi-part (H105 Rated)
a. Level D Impact Rated
1. Full-open
2. Fixed-sidelite
b. Level E Impact Rated, Full-open | c. Non-Impact Rated
1. Full-open
2. Fixed-sidelite |
| e. NABCO STORM E Single (H105 Rated)
a. Level E Impact Rated
1. Full-open | |
| f. NABCO STORM E Bi-part (H105 Rated)
a. Level E Impact Rated
1. Full-open | |



**NABCO STORM Series
Hurricane Rated Sliding Door
Automatic Entrance System
Suggested Architectural Specifications
Section 8**

- D. Product Components:
- a. Aluminum doors, sidelites, operator housing and frame.
 - i. Door panel(s) and sidelite(s) panel shall be factory assembled with 3/8"-16 threaded tie rods spanning full length of top and bottom rails.
 - 1) For H60 Models: Snap-in glass stop with integral extruded vinyl standoff for holding position while the wet glazing dries. Glass stops are designed for use with 1/2" (13mm) thick impact glass as specified in the Florida Product Approval. Glass is wet glazed in place with DOW 995 adhesive. An optional horizontal muntin bar to provide glass protection.
 - 2) For H105 Models: 7/16" impact glass per NOA or/and FL# OR 1/4" non-impact glass
 - 3) For Level E Models: 9/16" impact glass per FL#
 - 4) All H105. Dry glazed
 - ii. Operator housing section shall be two-piece construction 6-1/2" (165mm) by 7-1/2" (191mm) extrusion with end caps. All header sections shall have a minimum thickness of 0.140" (4mm) and shall be fabricated of 6063-T5 aluminum alloy.
 - iii. Finish: Aluminum shall have a standard finish of AA-M12-C22-A31 (204R1, clear) or AA-M12-C22-A44 (dark bronze). Black and special finishes available upon request.
 - iv. Vertical jambs shall be of 1-3/4" (44mm) by 4-1/2" (114mm) extruded aluminum tubes.
 - 5) Rollers-support, anti-riser and guide.
 - v. Manufacturer's saddle thresholds as specified in the Miami-Dade Notice of Acceptance. Not all have an NOA. "As specified in installation instructions in products prospective NOA or FL#".
 - vi. The door assembly shall ride on two steel, urethane coated support rollers incorporating lubricated sealed ball bearings. The door shall be held on the track by means of two 2-1/2" (64mm) anti-riser rollers. Lateral adjustment of the door assembly shall provide positive sealing at door edges. Door height shall be adjustable by 9/32" (7mm).
 - vii. Fixed Sidelite Units - Each door shall include one guide assembly incorporating double rollers with sleeve bushings. Guide assembly shall be attached to the door with 10 gage (3mm) thick-formed guide bracket. All steel brackets and fittings shall be plated for corrosion resistance.
 - viii. Full Open Units - Each door shall include one guide assembly incorporating one roller and guide piston riding in a surface or recessed floor track assembly.
 - 6) Door carrier hanger assembly, breakaway latch, limiting arm and door lock.
 - ix. 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 panel in the closed position under normal automatic operation. The support rod pivot assembly allows the door panel to be broken outward at any point in the door's opening or closing cycle allowing for safe emergency egress in compliance with NFPA 101 and ANSI A156.10. The door panel in the breakout mode disconnects the power to the control circuit inhibiting automatic door operation. The control circuit shall be resettable by re-engaging the door panel with the door carrier hanger assembly. Breakaway pressure shall be field adjustable from 5 to 50 lbs. (22N to 222N) to meet local building code requirements but will be factory set at 50 lbs. (222N) maximum.
 - x. Door assembly shall have a limiting arm to control the door as it swings in the direction of egress.
 - xi. The active door will incorporate a two-point lock securing the lead stiles and door carrier hanger assembly. In the case of a single slider, the door is secured at the jamb and door carrier hanger assembly. The lock assembly will incorporate a key cylinder on the exterior and a thumb turn on the interior in accordance with NFPA 101. Optional three point locking available.
 - xii. Doors are standard with a 2-point in the lead stile engaging the carrier and threshold. Bi-part and single
 - xiii. Optional is: 3-point, engages the same as a 2-point plus a hook stile to stile on a bi-part or a hook to jamb on a single. Or on full open only, a panic device.
 - 7) Air infiltration and intrusion protection equipment.
 - xiv. Double pile weather-stripping on the lead edge of the sliding door(s) .36" thick (9mm) including the area of the lock.
 - xv. 11/16" (17mm) wide nylon brush weather-stripping on the vertical stile of both the sliding door panel(s) and sidelite(s) panels
 - xvi. 11/16" (17mm) wide nylon brush weather-stripping mounted on door bottom.
 - 8) NABCO power open/close operator with microcomputer control.
 - xvii. NABCO VS-150 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.



**NABCO STORM Series
Hurricane Rated Sliding Door
Automatic Entrance System
Suggested Architectural Specifications
Section 8**

- xviii. 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.
- 9) Access Security Equipment (Optional)
 - xix. Access Security Equipment: Shall consist of Gyro Tech 24 VDC power locking device. Lock shall be concealed in header. Sliding door shall be capable of being fitted with optional panic hardware equipment complete with concealed vertical rods. To facilitate smooth door operation lock release and engagement shall be governed by microprocessor control.

2.03 SENSOR DEVICES

- A. Acusensor: Manufactured by NABCO ENTRANCES, INC.
 - a. Sensors for door activation and threshold sensing shall provide a rectangular shaped pattern with a sensing area next to the door system. To provide optimum coverage to meet specific site conditions the sensing pattern shall be adjustable both in width and depth of coverage while remaining at a full power setting. Units shall be supplied and installed on both sides of the operator housing to activate doors for single or two-way traffic. Units shall be sealed for protection against dust and moisture. An optional rain cover shall be available for sensors directly exposed to the elements.
- B. Acuzone: Sold by NABCO ENTRANCES, INC.
 - a. Sensors for door activation and threshold sensing shall provide a rectangular shaped pattern with a sensing area next to the door system. To provide optimum coverage to meet specific site conditions the sensing pattern shall be adjustable both in width and depth of coverage while remaining at a full power setting. Acuzone uses two technologies for activation and presence sensing. The activation is achieved by Doppler microwave for long range sensing. Presence sensing is achieved by active-infrared. Unit shall have separate outputs for microwave and infrared signals. Sensors combining both microwave and infrared signals on one output only shall not be allowed. The Acuzone can also look back through the threshold to provide additional safety coverage when the door is open. Units shall be supplied and installed on one or both sides of the operator housing to activate doors for single or two-way traffic. Units shall be sealed for protection against dust and moisture. An optional rain cover shall be available for sensors directly exposed to the elements.
- C. Redundant safety:
 - a. In addition to the presence sensors on both sides of the header, unit shall include minimum one set of infrared safety beams across the walk-through opening to prevent the door from closing if there are any obstructions. This is for redundant threshold protection.
- D. Specification options for consideration:
 - a. Wall Switches
 - b. For others see product catalog.

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. Type and quantity of fasteners to secure the door package into the framed opening is per the requirements. "As specified in installation instructions in products prospective NOA or FL#".

3.02 CLEANING AND PROTECTION

Revised: 1/4/2022



**NABCO STORM Series
Hurricane Rated Sliding Door
Automatic Entrance System
Suggested Architectural Specifications
Section 8**

- 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