



**GT SYSTEM 1175 ALL-GLASS
AUTOMATIC ENTRANCE SYSTEMS
SUGGESTED ARCHITECTURAL SPECIFICATIONS
SECTION 8**

Series 1175

ALL-GLASS 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.
 - 5. Openings: Division 08, applicable sections.
 - 6. Electrical: Division 26, applicable sections. (See note to Specifier*)

1.02 REFERENCES

- A. American Association of Automatic Door Manufacturers (AAADM) - www.aaadm.com
- B. American National Standards Institute (ANSI) - www.ansi.org
- C. Builders’ Hardware Manufacturers Association (BHMA) - www.buildershardware.com
- D. Underwriters Laboratory, Inc. (UL) - www.ul.com
- E. Canadian Standards Association (CSA) - www.csa.ca
- F. National Fire Protection Association (NFPA) - www.nfpa.org
- G. International Code Council (ICC) - www.iccsafe.org

1.03 QUALITY ASSURANCE

- A. Manufacturer’s Qualifications: Manufacturer to have at least (5) five years 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 folding door system with concrete work, electrical work, and other related work.

D. A copy of appropriate manual shall be provided to owner / contractor upon completion of installation.

1.04 WARRANTY

A. Warranty power operators, controls and labor provided by automatic sliding door equipment installer against defects in material and workmanship, at no cost to owner, for a period of one year from date of substantial completion. Provide warranty to owner after completion of installation.

1.05 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. Automatic equipment and controls shall be manufactured by:
NABCO ENTRANCES INC.
S82 W18717 Gemini Drive
Muskego, WI 53150
Phone: (877) 622-2694
Fax: (888) 679-3319

2.02 AUTOMATIC GT- SYSTEM

A. GT Model #1175 ALL-GLASS as indicated on door schedule and details.

B. Mode of operation: an electro-mechanical 24V DC "Brush-less" 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. Components:

1. ALL-GLASS doors, ALL-GLASS sidelites, operator housing and frame.
2. Rollers-support, anti-riser and guide.
3. Door carrier hanger assembly, breakaway latch, limiting arm and door lock.
4. Air infiltration and intrusion protection equipment.
5. Nabco 24V DC "Brushless" power open/close operator with microcomputer control.
6. (Optional) Access Security Equipment

1a) ALL-GLASS door panel(s) and ALL-GLASS sidelite panel(s) shall be factory supplied. ALL-GLASS panels to be attached to aluminum hanger system by a certified supplier using the specified adhesive. Sliding glass door panels shall be pinned to top aluminum rails for added strength. Sliding door assemblies with only adhesive being used shall not be acceptable. Door panel shall consist of extruded aluminum top rail 1-3/4" (44mm) by 4-3/8" (111mm) and bottom rail 1-3/4" (44mm) by 4-1/2" (114mm) with end caps. Sidelite panel shall consist of extruded aluminum top rail 1-3/4" (44mm) by 6-7/8" (175mm) and bottom rail 1-3/4" (44mm) by 4-13/16" (122mm) with end caps.

1b) Operator housing section shall be three 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.

1c) Sidelite configuration shall be fixed type.

1d) 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.

1e) Vertical jambs shall be of 1-3/4 (44mm) by 4-1/2 (114mm) extruded aluminum tubes. Optional framing available.

2a) The door assembly shall ride on two 2-3/8" (60mm) dia. steel, urethane coated support rollers incorporating lubricated sealed ball bearings rated at 250 lbs. each. 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).

2b) 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.

3a) Entrance systems shall have ALL-GLASS door panels attached to a door carrier hanger assembly by means of a cantilever pivot assembly and corrosion resistant adjustable breakaway release latch holding panel in the closed position under normal automatic operation. The cantilever 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. 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.

3b) Door assembly shall have a limiting arm to control the door as it swings in the direction of egress.

3c) (Optional) The active ALL-GLASS door will incorporate a one-point lock securing each door assembly to the threshold. The lock assembly will incorporate a key cylinder on the exterior and a thumb turn on the interior.

4a) (Optional) Weather-stripping on the lead edge of the sliding door(s) .36" thick (9mm).

4b) (Optional) Vertical weather-stripping on both the sliding door panel(s) and sidelite(s) panels.

4c) (Optional) 1 1/16" (17mm) wide nylon brush weather-stripping mounted on door bottom.

5a) Nabco Power 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 shall be a 24V DC "Brush-less" motor with sealed ball bearings. 1/10 HP motor shall operate from 115-volt supply and require less than 5 amps at full stall.

5b) Power Operator Control: Shall be a microprocessor unit. The microprocessor control shall allow the opening speed, closing speed; back check speed, latch check speed and back check and latch check positions each to be adjusted separately and independently from each other to meet specific site conditions. The doors shall be set to be held closed with the motor. 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. Settings with rotary switches are not allowed.

6a) Access Security Equipment: Shall consist of Gyro Tech 24 VDC power locking device. Lock shall be concealed in header. 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.

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.

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: 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:

1. Wall Switches
2. For others see product catalog.

PART 3- EXECUTION

3.01 INSTALLATION

A. Automatic door equipment shall be installed by 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 the 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**

Indicate under appropriate Section the following work by others:

ELECTRICAL INSTALLER shall furnish and install all conduit and electrical wiring for activating devices and door operators. A minimum of 5 amperes, 115 volts, A/C, 1-phase circuit shall be furnished for each door operator, terminate and connect to operator control panel, in operator housing.

CONCRETE INSTALLER shall prepare floor at location of automatic entrance system to be level and smooth without changes in elevation between foundation and associated walkways.

END OF SECTION

