

# GT1400 FOLD DOOR HURRICANE PACKAGE IMPACT RATED AUTOMATIC ENTRANCE SYSTEMS SUGGESTED ARCHITECTURAL SPECIFICATIONS SECTION 8

# **Part 1-GENERAL**

#### 1.01 DESCRIPTION

- A. Furnish and install automatic equipment as indicated on drawings and specifications.
- B. Related work specified elsewhere.

(See note to Specifier\*)

1. Electrical Supply: Section

# 1.02 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

Products specified shall be represented by a factory authorized and trained distributor. Distributor shall maintain a parts inventory and trained service personnel capable of providing service.

B. All automatic equipment to comply with ANSI A156.10.

C. Gyro Tech equipment as manufactured by NABCO ENTRANCES, INC. has been specified and shall be quoted as a base bid. Other systems can be quoted along with information specifically detailing the differences from the following specification.

### 1.03 SUBMITTALS

- A. Shop drawings showing complete elevations, details and methods of anchorage to location; installation of hardware; size, shape, joints and connections; and details of joining with other construction.
- B. Templates and diagrams and/or shop drawings 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.
- C. A copy of appropriate manual shall be provided to owner's representative upon completion of installation.

#### 1.04 WARRANTY

A. Warranty power operators, controls and labor provided by automatic folding 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.
- B. Automatic folding door systems shall be certified by the manufacturer to meet performance design criteria in accordance with the following standards:

ANSI/BHMA A156.10

NFPA 101

Underwriter's Laboratories (UL) 325

Miami-Dade County Building Code Compliance Office

Florida Building Code, 2001, 2004

# **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 FOLD DOOR SYSTEM

- A. GT model #1400 fold door as indicated on door schedule and details.
- B. Mode of operation: Gyro Tech swing operator shall open door by energizing motor and shall stop door by electrically reducing voltage and stalling motor against mechanical stop. Door shall close by means of spring energy, and closing force shall be controlled by gear system and motor being used as dynamic brake without power. Opening and closing speeds shall be adjustable. Door operation shall not require any fluids or gases under pressure to be used in opening and closing door.

#### C. Components:

- 1. Doors, operator housing and frame made from manufacturer's standard extruded aluminum reinforced as required to support imposed loads.
- Gyro Tech Swing Power Operator.
- 3. Computerized Control
- 4. Connecting Hardware
- 5. Door breakaway latch and door lock.
- 6. (Optional) Access Security Equipment
- 1a) Fold doors are available in two or four panel configurations. Door (FX) and sidelite (FS) panels shall be factory assembled with 3/8"-16 threaded tie rods spanning full length of top and bottom rails. Screw down glass stops with integral extruded vinyl standoff and screw down reinforcement angle to accommodate glass flexing. Glass stops are designed for use with 1/2" (13mm) thick impact glass as specified in the Miami-Dade Notice of Acceptance. Glass is wet glazed in place with DOW 995 adhesive or approved equal.
- **1b)** Operator housing shall be 5-1/2" (140mm) wide by 7-1/2" (191mm) high aluminum extrusion with enclosed end caps. All header sections shall have a minimum thickness of 0.167" (4mm) and shall be fabricated of 6063-T5 aluminum alloy.
- 1c) Finish: Aluminum shall have a standard finish of AA-M12-C21-A31 (204R1, clear) or AA-M12-C21-A44 (dark bronze). Special finishes available upon request.
- **1d)** Vertical jambs shall be of 2" (51mm) by 5" (127mm) extruded aluminum tubes.
- **1e)** Manufacturer's saddle thresholds as specified in the Miami-Dade Notice of Acceptance.
- 2) Nabco Power Operator is completely assembled and sealed unit which shall include helical gear-driven transmission, mechanical spring and bearings, all located in cast aluminum housing and filled with special lubricant for extreme temperature conditions. Attached to transmission system shall be a DC shunt-wound permanent magnet motor with sealed ball bearings. Motor shall operate from 115-volt supply and require less than 5 amps at full stall. Complete unit shall be resilient mounted with provisions for easy replacement without removing door from pivots or frame.
- **3)** Computerized Control shall be a universal type capable of operating swing or fold door units. Adjustable opening and closing speeds shall enable operation in accordance with ANSI 156.10. All adjustments made by an authorized NABCO Entrances distributor are via a Handy Terminal.
- **4)** Connecting Hardware: There shall be positive mechanical connections between all operating parts. Belts or other devices, which may allow the doors to get out of phase, shall not be allowed.
- 5) Finger guard protection located at leading edge of the door (FX) and the pivot stile of the sidelite (FS).
- **5a)** The FX door(s) will incorporate a two-point lock securing the lead stile to the header and to the threshold. The FS sidelite(s) will include additional two-point locking to the header and to the threshold. The FX door(s) will incorporate a key cylinder on the exterior and a thumb turn on the interior in accordance with NFPA 101. An optional Adams-Rite 4550 lever may be substituted for the interior thumb turn.
- **5b)** The door panel may be broken outward at any point during the opening or closing cycle allowing for emergency egress in compliance with NFPA 101. The door panel in the breakout mode disconnects the power to the computerized control circuit inhibiting automatic door operation. The control circuit will automatically reset when the door panel re-engages.
- 6) Access Security Equipment: Shall consist of Gyro Tech Access Control Panel with switches and LED indicators to allow user to change door operation mode, open the door or observe the status of the door.

#### 2.03 SENSOR DEVICES

- A. Acusensor or Acuvision: 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. Acumotion: 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. Acumotion 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 shall not be allowed. 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.

- Specification options for consideration:
  - Wall Switches
  - 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. Type and quantity of fasteners to secure the door package into the framed opening is per the requirements in the Miami-Dade Notice of Acceptance.

### 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 accommodate the surface as indicated on drawings.