NABCO GT20 Swing Operator - Low Energy
Automatic Entrance System
Suggested Architectural Specifications
Section 8

NABCO Model GT20
Heavy Duty- Low Energy – Swing Door Operator
Surface Applied - Non-Handed

Division 08 – Openings
Section 08 71 13 -AUTOMATIC DOOR OPERATORS

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. This section includes the following types of automatic door operators:
   a. Low-energy door operators for swinging doors.

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. Canadian Standards Association (CSA) – www.csa.ca
E. Underwriters Laboratory, Inc. (UL) – www.ul.com
F. Standards Council of Canada (ULC) – www.canada.ul.com

1.03 QUALITY ASSURANCE
A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 10 years of documented experience in manufacturing of doors and equipment of like that indicated for this Project and that have a proven record of successful in-service performance.
B. A manufacturer with company certificate issued by AAADM.
C. Installer Qualifications: Installers with a minimum 5 years documented experience installing and maintenance of units similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
D. Certified Inspector Qualifications: Certified by AAADM.
E. Source Limitations for Automatic Operators: Obtain each type of door operator and sensor components specified in this Section from a single source, same manufacturer unless otherwise indicated.
F. Certifications: Operators shall be certified by the manufacturer to meet performance design criteria in accordance with the following standards.
   a. ANSI/BHMA A156.19 American National Standard for Power Assist and Low Energy Operated Doors.
   b. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems.
G. Emergency Exit door requirements: Comply with requirements of authorities having jurisdiction for automatic entrance doors serving as a required means of egress.

1.04 SUBMITTALS
A. Comply with Division 01 - Submittal Procedures.
B. Product Data: Manufacturer's product sheets including installation details, material descriptions, dimensions of individual components and extrusions, fabrication, operational descriptions and finishes.
C. Shop Drawings: Submit manufacturer's shop drawings, including complete elevations, sections and details, indicating dimensions, materials, operator, motion/presence sensor control device, anchors, hardware, finish, options and accessories.
   a. Indicate required clearances, and location and size of each field connection.
   b. Indicate locations and elevations of entrances showing knowing act switch and safety devices (if required).
   c. Wiring Diagrams: For power, signal, and knowing act / safety device wiring.

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.

NABCO Entrances Inc.
S82W18717 Gemini Dr. Muskego, WI 53150
Phone 877.622.2694 | **Fax** 888.679.3319 | Email info@nabcoentrances.com

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.
S82 W18717 Gemini Drive
Muskego, WI 53150
Phone: (877) 622-2694
Fax: (888) 679-3319
Email: info@nabcoentrances.com
Website: NABCOEntrances.com

2.02 AUTOMATIC SWING DOOR OPERATOR

A. Model: Swing Door System as indicated on door schedule and details.
   a. NABCO GT20
B. Mode of Operation:
   a. Automatic Operator: DC brush motor, non-handed operator, operating voltage of 110-120VAC 50/60Hz. Operator shall be adjustable to compensate for different manual push forces as required.
   b. Automatic operator shall be capable of operating and controlling up to a 550-pound (249.5kg) door, 48 inches (1219mm) in width.
   c. Operator can be field adjusted to comply with ANSI/BHMA A156.19 American National Standard for Power Assist and Low Energy Operated Doors. To comply with ANSI/BHMA A156.19 a knowing-act activation device is required.
   d. Opening Cycle: The adjustable speed operator mechanically powers the drive shaft, and the torque controls maintain constant speed throughout the opening cycle regardless of stack pressures or wind speed. Operator shall allow manual door operation with operational forces as indicated to fully open the door applied at 1" (25 mm) from the latch edge of the door.
   e. Hold Open: The operator shall stop and hold the door open at the selected door opening angle for an adjustable period of time (0 seconds to 60 seconds).
   f. Wind Force Dampening: The control shall determine the difference between a hard stop such as hitting solid objects vs soft changes of force such as wind and stack pressure. This function is achieved during the opening or closing cycle.
   g. Stack Pressure Compensation: The control shall determine the difference between a hard stop such as hitting solid objects vs soft changes of force such as wind and stack pressure. This function is achieved during the opening or closing cycle.
   h. Obstruction Control: The operator will stop and reverse the door movement. This function is achieved during the opening or closing cycle.
   i. Electric Lock Management: Internal module for electrified locking integration.
   j. Electric Lock Output: 24 VDC (±10%) 2A, or dry contact. Lock monitoring prevents operator(s) from opening door(s) until release of electrified lock. Operator pulls door closed before opening, automatically unjamming electric latch hardware. Sequenced operation between operators for pairs of doors allowing lock release and astragal coordination.
   k. Programmable Force and Time: Force and time are programmable to ensure door is latched.
   l. Programmable Emergency Input: When input receives a signal, the door can be programmed to close under spring power, or stop, or open, or close slowly under motor power.
C. Types / Configurations
   a. GT20 Surface Applied Swing Door Operator
D. Product Components
   a. Operator Housing
      i. Surface Mounted Operator:
      ii. Side access surface applied operator is contained in a 4-¾" (120mm) deep x 3-¾" (95mm) high aluminum housing with a removable cover.

iii. Surface mounted housing available with continuous header to full door width.

b. NABCO GT20 Operator

c. Microprocessor Controls:

i. Electronic Controls: Solid state integrated circuit controls the operation and switching of the swing power operator. The electronic control provides low voltage power supply for all means of actuation. The controls include time delay (1 to 60 seconds) for normal cycle. Secondary programmable activation input with 0-180 seconds of time delay.

E. Product Components:

a. Control Switch: Automatic door operators shall be equipped with the following type of function switch: On, off, hold-open, night mode and exit.

b. Operator Interface: Safety sensor inputs for all types of safety sensors with programmable and adjustable lock-out functions.

c. An optional plug-in relay board shall be available to provide various door position status signals to access control or building management systems.

2.03 Activation Devices

A. General: Provide activation devices in accordance with ANSI/BHMA A156.10 standard for condition of exposure and for long-term, maintenance-free operation under normal traffic load for type of occupancy indicated. Coordinate activation devices with door operation and door operator mechanisms.

B. Knowing Act Activation Devices

a. Wall Switches: 6". 4 ½" diameter stainless steel surface or flush mounted, engraved or plain, as provided by NABCO Entrances, Inc.

b. Optional activators are available.

c. Secondary activation is required by ANSI/BHMA A156.10

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

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