

SECTION 08460

HUNTER FA-8 AUTOSWING - **FULL ENERGY** – AUTOMATIC DOOR OPERATOR

1. GENERAL

1.01 Summary

- A. Work included:
 - 1. Electro-mechanical swing door operating equipment
 - 2. Controls and safety devices
 - 3. Accessories

- B. Related Work: [Insert applicable section including]
 - 1. Section 07900 – Caulking
 - 2. Section 08400 – Entrances and Storefronts
 - 3. Section 08710 – Finished Hardware
 - 4. Section 08800 – Glazing
 - 5. Section 12670 – Entrance Mats
 - 6. Section 16120 – Electrical Supply and Termination

1.02 Submittals

- A. Product Data: Provide manufacturer's product and complete installation data for all materials in this specification.

- B. Shop Drawings: Show profiles, joining methods, location of components, anchorage details, adjacent construction interfacing and dimensions as well as all necessary wiring and electrical requirements.

- C. Samples: Sized to adequately represent material

- D. Contract Closeout: Submit the Manufacturer's warranty and performance certification (if applicable)

- E. Installation Guide: Provide written installation and operating manuals and/or installation recommendations.

1.03 Quality Assurance

- A. Installation and maintenance shall be performed by an authorized dealer and in strict compliance with the manufacturer's recommendations.

- B. Conform to UL Std. 325 & ANSI-BHNA Std. A156.10 certified to Can. CSA Std. C22.2#247.

1.04 Product Handling

- A. All materials shall arrive in the manufacturers original sealed, labelled containers.

- B. Store materials in a dry, protected, well-vented area. Report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.
- C. Remove and dispose of all protective materials after installation.

1.05 Job Condition

- A. Verify that other trades are complete before installing the automatic swinging door system.
- B. Mounting surfaces shall be plumb, straight and secure; substrates shall be proper dimension and material.
- C. Refer to the construction documents, shop drawings and manufacturer's installation instructions.
- D. Coordinate installation with the glass, glazing and electrical work.
- E. Observe all appropriate OSHA safety guidelines for this work.

1.06 Warranty/Guarantee

- A. Manufacturer's Standard Warranty: Warranted materials shall be free of defect in material and workmanship for TWO years after installation

2. PRODUCTS

2.01 Manufacturer

- A. Hunter Access Technologies, Inc.
125 Kenyon Drive, Ste #3
Lakewood, NJ
08701
Fax 1-732-942-6033
Phone: 1-866-901-4284
Website www.hunteraccesstechnologies.com E-mail info@hunteraccesstechnologies.com

2.02 Automatic Swinging Door Operator

- A. Automatic Door Operator: Shall be HUNTER AUTOSWING FA-8. The system shall be an electro-mechanical system installed in a header to resist dust, dirt and corrosion. Bearings shall be fully lubricated and sealed to minimize wear and friction. Entire operator shall be removable from the header as a unit. All equipment shall operate between temperature extremes of -30 degrees F and +130 degrees F.
- B. Power Opening: Operator shall open door with a 1/5 HP motor through reduction gears splined spindle, door arm and linkage assembly. Drive train shall have positive constant engagement. Operator shall stop the door in the open position by electrically reducing the motor voltage and stalling against stop.
- C. Spring Close: Operator shall close door by spring energy. Employing the motor as a dynamic brake shall control closing speed. Closing spring shall be pre-loaded for positive closing action. "Full Energy" operator door closing time shall not be less than 4.5 seconds.
- D. Manual Operation: Operator shall function as a manual door closer in the direction of swing with or without electrical power. To facilitate easy manual operation of door and to prolong gear and motor life the operator must have a one-way clutch in the gear train.

- E. Entrapment Protection: Door forces and speeds generated during power opening and manual opening in both directions of swing and spring closing in both directions of swing shall conform to the requirements of A 156.10.

- F. Electrical Control: Electronic controllers with quick connect plugs shall incorporate the following features:
 - 1. Mode of Operation: To be “Full Energy” as defined by A 156.10.
 - 2. Respond to push plates, transmitters, motion and presence detectors, and receivers.
 - 3. Immediate reverse-on-obstruction during opening capability.
 - 4. Open, back check, and closing speed adjustment.
 - 5. Adjustable time delays.
 - 6. On/Off/Hold Open switch.

- G. Header: Shall be 4-1/2” wide by 6-1/2” high, 6063-T5 aluminum extrusions with structurally integrated end caps. Structural sections shall have a minimum wall thickness of .125”. Provide full length removable cover for access to operator and electronic control box.

- H. Aluminum Extrusion Finish: Standard anodized finish shall be Clear, Bronze or Light Bronze. Special anodized, painted and clad finishes are available upon request. Specify type and color.

- I. Linkage Assembly: Shall provide positive control of door through entire swing; Surface applied permit use on butt-hung or offset pivots. Concealed permit use on center pivot, butt-hung, and offset pivots.

- J. Controls: Push Plates, Transmitters, Safety Sensors, Card Readers, etc.

3 EXECUTION:

3.01 Inspection:

- A. The door installer shall verify that the installation area is dry, clean and free of foreign matter. Check as-built conditions and verify the manufacturer’s details for accuracy to fit the wall assembly prior to fabrication. Report in writing to the Contractor any detrimental conditions to the proper functioning of the swinging door operator. Correct prior to any installation in accordance to the manufacturer’s recommendations.

3.02 Installation of Automatic Swinging Door System

- A. Installation shall be by an installer approved and trained by the manufacturer in strict accordance with the manufacturer’s instructions and fire marshal’s listing requirements.



- B. Comply with the automatic swinging door system manufacturer's recommendations and/or installation guide when installing the automatic swinging entrance system. Set all units plumb, level and true.
- C. Provide all fasteners required for installation of the automatic swinging door system.
- D. Adjustment and Cleaning: After repeated operation of the completed installation, re-adjust door operators and controls for optimum operating condition and safety. Clean all metal surfaces promptly after installation.
- E. Explain and review the Daily Safety Check Procedure.

END SECTION 08460

1. GENERAL

1.01 SUMMARY

- A. Work included:
 - 1. Electro-mechanical swing door operating equipment
 - 2. Controls and safety devices
 - 3. Accessories

- B. Related Work: [Insert applicable section including]
 - 1. Section 07900 – Caulking
 - 2. Section 08400 – Entrances and Storefronts
 - 3. Section 08710 – Finished Hardware
 - 4. Section 08800 – Glazing
 - 5. Section 12670 – Entrance Mats
 - 6. Section 16120 – Electrical Supply and Termination

1.02 SUBMITTALS

- A. Product Data: Provide manufacturer's product and complete installation data for all materials in this specification.

- B. Shop Drawings: Show profiles, joining methods, location of components, anchorage details, adjacent construction interfacing and dimensions as well as all necessary wiring and electrical requirements.

- C. Samples: Sized to adequately represent material

- D. Contract Closeout: Submit the Manufacturer's warranty and performance certification (if applicable)

- E. Installation Guide: Provide written installation and operating manuals and/or installation recommendations.

1.03 QUALITY ASSURANCE

- A. Installation and maintenance shall be performed by an authorized dealer and in strict compliance with the manufacturers recommendations.

- B. Conform to UL Std. 325 & ANSI-BHNA Std. A156.10 certified to Can. CSA Std. C22.2#247.

1.04 PRODUCT HANDLING

- A. All materials shall arrive in the manufacturers original sealed, labelled containers.

- B. Store materials in a dry, protected, well-vented area. Report damaged material immediately to the carrier; note the damage on the carrier's freight bill of lading.

- C. Remove all protective materials after installation.

1.05 JOB CONDITION

- A. Verify that other trades are complete before installing the automatic swinging door system.

- B. Mounting surfaces shall be plumb, straight and secure; substrates shall be proper dimension and material.

- C. Refer to the construction documents, shop drawings and manufacturer's installation instructions.

- D. Coordinate installation with the glass, glazing and electrical work.

- E. Observe all appropriate OSHA safety guidelines for this work.

1.06 WARRANTY/GUARANTEE

- A. Manufacturer's Standard Warranty: Warranted materials shall be free of defect in material and workmanship for a TWO year period after installation.

2. PRODUCTS

2.01 MANUFACTURER

- A. Hunter Automatics Inc.
11 Dansk Court
Toronto, Ontario
M9W 5N6
Phone: 1-877-3HUNTER
Email: hunterauto@look.ca

2.02 AUTOMATIC SWING DOOR SYSTEM

- A. Automatic Door Operator: Shall be HUNTER FA-8. The system shall be an electro-mechanical system installed in a header to resist dust, dirt and corrosion. Bearings shall be fully lubricated and sealed to minimize wear and friction. Entire operator shall be removable from the header as a unit. All equipment shall operate between temperature extremes of -30 degrees F and +130 degrees F.
- B. Power Opening: Operator shall open door with a 1/7 HP motor through reduction gears splined spindle, door arm and linkage assembly. Drive train shall have positive constant engagement. Operator shall stop the door in the open position by electrically reducing the motor voltage and stalling against stop. Door opening speed shall not be less than 1.5 seconds from fully closed to back check (0 degrees - 75 degrees) and 1.0 - 1.5 seconds from back check to fully open (75 degrees - 90 degrees).
- C. Spring Close: Operator shall close door by spring energy. Employing the motor as a dynamic brake shall control closing speed. Closing spring shall be pre-loaded for positive closing action at low material stress level. Operator door closing speed shall be 2.5 - 4.0 seconds from fully open to latch check (90 degrees to 10 degrees) and not less than 1.5 seconds from latch to fully closed.
- D. Manual Operation: Operator shall function as a manual door closer in the direction of swing with or without electrical power. To facilitate easy manual operation of door and to prolong gear and motor life the operator must have a one-way clutch in the gear train.
- E. Entrapment Protection: Door forces and speeds generated during power opening and manual opening in both directions of swing and spring closing in both directions of swing shall conform to the requirements of A 156.10.
- F. Header: Shall be 4-1/2" wide by 6-1/2" high, 6063-T6 aluminum extrusions with structurally integrated end caps. The operator shall be sealed against dust, dirt, and corrosion within the header case. Operator and electronic control box accessible by a full length removable cover. Integral structural sections shall have a minimum wall thickness of .250". Provide a full-length removable cover for access to operator and electronic control box.
- G. Aluminum Extrusion Finish: Standard anodized finish shall be Clear, Bronze or Light Bronze. Special anodized, painted and clad finishes are available upon request. Specify type and colour.
- H. Linkage Assembly: Shall provide positive control of door through entire swing; Surface applied permit use on butt-hung or offset pivots. Concealed permit use on center pivot, butt-hung, and offset pivots.

- I. Controls: Push Plates, Transmitters, Pull Cords, Card Readers, Motion and Presence Sensors
- J. Emergency Release: For center pivot in-swing door(s), the operator shall have a built-in emergency release with a disconnect switch to prevent powered operation. No header or jamb mounted stops or cams shall be required for emergency function. For emergency use as per ANSI A156.10, no more than 50 lbs at the lock stile shall be required.

2.03 ELECTRICAL CONTROL

- A. Electronic control shall incorporate magnets and reed switches that define the position of the door. The door position data is used for electronic sensors (both activation and safety).
- B. The control does not require an initial learn cycle, at a reduced speed, when turned on.
- C. The control incorporates gentle-start and gentle-stop logic prolonging the life of the gearbox, motor, frames, hinges and pivots.
- D. A cam actuated emergency breakout switch shall be provided to disconnect power to the motor when an in-swing door is manually pushed in the emergency out direction.
- D. Fully adjustable opening speed and opening check speed. Control circuitry shall include a 0-30 second adjustable time delay.

3. EXECUTION:

3.01 INSPECTION

- A. The door installer shall verify that the installation area is dry, clean and free of foreign matter. Check as-built conditions and verify the manufacturer's details for accuracy to fit the wall assembly prior to fabrication. Report in writing to the Contractor any detrimental conditions to the proper functioning of the swinging door operator and correct prior to any installation in accordance to the manufacturer's recommendations.

3.02 INSTALLATION OF FULLY AUTOMATIC SWING DOOR SYSTEM

- A. Installation shall be by an installer approved and trained by the manufacturer in strict accordance with the manufacturer's instructions and fire marshal's listing requirements.
- B. Comply with the automatic swinging door system manufacturer's recommendations and/or installation guide when installing the automatic sliding entrance system. Set all units plumb, level and true.
- C. Provide all fasteners required for installation of the automatic swinging door system.
- D. Adjustment and Cleaning: After repeated operation of the completed installation, re-adjust door operators and controls for optimum operating condition and safety. Clean all metal surfaces promptly after installation.
- E. Explain and review the Daily Safety Check Procedure.

END SECTION 08715

Hunter Automatics adheres to continuous development. For this reason, specifications may change without notice.

SHEET	DOOR TYPE	DESCRIPTION
A1	FA-8-1-3	RIGHT HAND PUSH
A2	FA-8-1-4	LEFT HAND PUSH
A3	FA-8-1-5	PAIR DOORS PUSH
A4	FA-8-2-3	RIGHT HAND PULL
A5	FA-8-2-4	LEFT HAND PULL
A6	FA-8-2-5	PAIR DOORS PULL
A7	FA-8-CH-3	CONCEALED RIGHT HAND SINGLE DOOR CENTER PIVOT
A8	FA-8-CH-4	CONCEALED LEFT HAND SINGLE DOOR CENTER PIVOT
A9	FA-8-CH-5	CONCEALED PAIR DOORS CENTER PIVOT
A10	FA-8-CS-3	CONCEALED RIGHT HAND WITH BUTT HUNG OR OFFSET PIVOT
A11	FA-8-CS-4	CONCEALED LEFT HAND WITH BUTT HUNG OR OFFSET PIVOT
A12	FA-8-CS-5	CONCEALED PAIR DOORS WITH BUTT HUNG OR OFFSET PIVOT