

SECTION 08460
HUNTER DS-18 AUTOMATIC SLIDING DOOR FOR CLEAN ROOM APPLICATIONS

1. GENERAL

1.01 Summary

- A. Work included: Furnishing and installing factory fabricated and finished Automatic sliding door system.
- 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 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 ANSI A 156.10 and be CUL/USA Listed

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. Reports damaged material immediately to the delivering carrier and note such 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 sliding 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 one year after installation

2. PRODUCTS

2.01 Manufacturer

- A. Hunter Automatics Inc.
50 Vinyl Court
Woodbridge, Ontario
L4L 4A3
Phone: 1-877-3HUNTER

2.02 Automatic Sliding Door System

- A. Automatic Sliding Door System: Shall be HUNTER Series DS-18. The system shall consist of sliding aluminum door(s) and sidelight(s) (unglazed), header, jambs, HUNTER digital slide system, guide threshold, actuating and safety controls. The system shall be completely engineered, manufactured and assembled by HUNTER. All components shall be factory assembled in the header and tested. Field wiring consists of connection to job-site power and actuators.
- B. Sliding Aluminum Doors: Provide narrow stile through bolted units to dimension heights and widths with corresponding glazing as shown on order confirmation. Glass thickness may be 1/4" (6mm) or 5/8" (16mm). *All Horizontal glass stops to be bevelled 45°.* *All weather stripping shall be neoprene bulb rubber.* The door shall have an intermediate rail(s). The bi-part sliding door system shall include a two-point MS deadlock securing the lead edges of the door stiles together and to the active door carrier assembly or for single slide a one point MS deadlock securing the latch stile to the vertical lock jamb. Each door panel shall include interlocking that securely latches the swing out panel(s) to the sliding panel(s) in the fully closed position. The active sliding door shall be provided with a key cylinder on the exterior and a thumbturn on the interior.
- C. Door Operation: Shall be single slide or bi-part slide, one-way or two-way traffic. Sliding panel(s) and Sidelight panel(s) (if required) shall allow "breakout" to the full open position to provide instant egress at any point in the door's movement. Door(s) and sidelight(s) shall be sized to prevent pinch point at meeting stiles.
- D. Aluminum Frame & Extrusions: Shall be a minimum .125" (3mm) in integral structural sections. The frame shall be 4 1/2" (114mm) deep x 1 3/4" wide (44mm) section. *All Horizontal glass stops to be bevelled 45°.* The bi-part transom package shall contain one vertical transom tube, specify if desired. Transoms are available for 1/4" (6mm) or 1" (24mm) glazing.
- E. 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.

- F. Aluminum Sidelight(s): Provide narrow stile through bolted sidelight panel(s) to dimension heights and widths as shown on order confirmation with corresponding glazing. Glass stops to accommodate ¼” (6mm) or 5/8” (16mm) glass. *All Horizontal glass stops to be bevelled 45°.* All weather stripping shall be neoprene bulb rubber. The door shall have intermediate rail(s). Each door panel shall include interlocking that securely latches the fully closed position. The sidelight(s) shall swing and allow instant egress at any point in the doors movement.
- G. Header Case: Shall be 4 ½” wide x 7 ½” high (108 mm x 180mm) extruded aluminum. The header shall be capable of supporting a single door leaf of 250 pounds or bi-parting door leaf of 250 pounds each over a span of 18’ with minimal deflection. It shall contain the HUNTER digital slide system and door mounting components. The header cover shall have a continuous hinge and open flush with the top of the header. Header Case and Cover shall be fitted with neoprene rubber bulb weather stripping.
- H. Door Hanger Wheels: Shall be 2 ½” (64mm) diameter urethane wheels with precision lifetime lubricated ball bearing centres. The sliding door(s) shall be held on the track by 4 Derlin anti riser blocks. The roller track shall be field replaceable. Doors can be adjusted down up to ½”.
- I. Guide Threshold Track: Aluminum threshold track shall be required to guide the slide panel(s) from close to open and open to close. The guide threshold track is available in the following profiles, recessed, surface double bevel and surface combination bevel/square; options are field adjustable by snap-off bevelled edge. Surface applied track can either be full length or only below sidelight(s), leaving a clear floor in entrance.
- J. Hunter Digital Slide System: The drive system shall consist of a electromechanical 1/5 hp brush less molded DC motor enclosed hypoid gear system that offers higher speed range and faster acceleration with maximum opening speed of 750 mm/sec. Provide 120 VAC, 5 amps single-phase power supply minimum to electrical door operator.
- K. DS-18 Ferrite Chip Control Unit: The DS-18 control system shall monitor doorway holding beams, door position, electric lock position, activators, motor temperature, and condition of power. The microprocessor control shall perform on a continuous basis a self-diagnostic system check and shall display faults by flashing LED’s and/or buzzer noise on the control panel. Torque shall be factory set as prescribed by ANSI A156.10. In the event of power failure active doors maybe opened manually.
- L. Doorway Holding Beams: Doorway holding beams shall be the factory installed at 24” (610 mm) and 48” (1219 mm) from finished floor. The beam when interrupted shall inhibit an open door from closing.
- M. Motion Sensor: Actuation shall include a motion detector mounted on each side of the door detection of traffic in each direction.
- N. Reverse on Obstruction with Safety Search Circuitry: The door(s) shall recycle open if an object is encountered during the closing cycle. The circuitry shall time-out for 5 seconds then search for that object at 50% speed on the next closing cycle. If the obstruction is encountered again the door(s) will recycle open. The door(s) shall keep timing-out and recycling at 50% speed until obstruction is cleared. If an object is encountered while opening, the door(s) will stop, reverse direction one inch, time-out for 5 seconds and close at 50% speed. The next opening the circuitry shall search for that object at 50% speed. If the obstruction is encountered again the door(s) shall stop reverse direction one inch, time out and close. The door(s) shall continue recycling at 50% until the object is cleared.

- O. Door Motion Adjustments: The DS-18 control digital interface provides the means to make the following door adjustments; open high speed, open low speed, open braking force, close high speed, close low speed, close braking force, opening time.
- P. Accessories: The DS-18 automatic sliding door package shall have the following accessories to reduce energy loss: *Nylon sweep(s) on the bottom of the sliding door(s), double neoprene rubber bulb weather stripping for the sliding door lead edges, single neoprene rubber bulb weather stripping between the carrier and the header on the lead stile(s) of sidelight(s) and the pivot stile(s) of the sliding door(s).*

2.03 OPERATING CONDITIONS

- A. Climate Conditions: All automatic sliding door system components shall operate between -70F (-20C) and +130F (50C) in all climate conditions.

3 EXECUTION:

3.01 Inspection:

- A. Verify that the automatic sliding door system installation will not disrupt other trades. 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 automatic sliding entrance system 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 automatic sliding entrance system. Installation shall proceed once the unsatisfactory conditions have been corrected in accordance to the manufacturer's recommendations.

3.02 Installation of Automatic Sliding 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 sliding 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 sliding 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