

## SECTION 08330 OVERHEAD COILING GRILLES AND DOORS

### FIRE RATED SHUTTERS ASH800 SERIES AUTO RESET ELECTRIC

#### MOTOR OPERATION

##### THREE PART SHORT FORM SPECIFICATIONS (CSI)

###### Part 1 – General

- 1.01 A. Summary: Supply rolling shutters manufactured by Amstel Manufacturing, [www.amstel-doors.com](http://www.amstel-doors.com)  
Tel: 1-800-663-6206
- B. All Rolling Counter Fire Doors shall be Series FD10 as manufactured by Amstel Manufacturing, Richmond Hill, On. Furnished materials shall include all curtains, bottom bars, guides, brackets, hoods, operating mechanisms and any special features.
- C. Work not to be included by Amstel Manufacturing includes design of, material for, and preparation of door openings but not limited to structural or miscellaneous iron work, metal or wood trim, access panels, finish painting, electrical wiring, conduit and disconnect switches.
- 1.02 A. Quality Assurance: All rolling counter fire doors shall be constructed in accordance with testing agency requirements and shall bear a [3 hour] [1-1/2 hour] [3/4 hour] rating label.

###### Part 2 – Products

- 2.01 Model: Fire Rated Shutter ASH800-M as manufactured by Amstel Manufacturing.
- 2.02 The door curtain shall be constructed of interconnected strip steel slats conforming to ASTM-526. The curtain shall be constructed of 22 gauge No. 10 (1-1/4" high by 3/8" deep) slats as designated by Amstel Manufacturing.

<b>Bracket Size: P</b>	<b>Maximum height to bracket:</b>	<b>Clear Height of Opening: H</b>
10" x 10"	60"	56-1/2"
11" x 11"	96"	92-1/2"
12" x 12"	128-1/2"	125"

- 2.03 The bottom bar shall be constructed of tubular steel measuring 2" high by 1-1/4" deep and shall include the Amstel Featheredge safety edge system. The bottom bar shall receive one (1) coat of bronze rust-inhibiting prime paint.
- 2.04 The finish on the door curtain shall be Amstel FinalCote consisting of the following:
- A. Hot dipped galvanized G-90 coating consistent with ASTM A-525
  - B. Bonderized coating for prime coat adhesion
  - C. Corrosion inhibiting primer - .2 mils per side
  - D. Thermo-setting tan polyester top coat with a minimum thickness of .6 mils each side
- 2.05 The guides shall be constructed of box sections of steel. The finish on the guides shall be one (1) coat of bronze rust-inhibiting prime paint.
- 2.06 The brackets shall be constructed of 11 gauge steel plate and shall receive one (1) coat of bronze rust-inhibiting prime paint.
- 2.07 The barrel shall be steel tubing of not less than 4" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the weight of the curtain and shall have both a main and an

auxiliary spring. The barrel shall be designed to limit maximum deflection to .03" per foot of opening width. The barrel shall receive one (1) coat of bronze rust-inhibiting prime paint.

2.08 The hood shall be fabricated from 24 gauge galvanized steel and shall be formed to fit the square brackets. The finish on the hood shall be the Amstel Manufacturing Inc same finish as indicated in the curtain section.

2.09 Operation:

- A. All motor operated counter fire doors shall have model FDO-A10 motor operator which shall become operational upon the activation of a fire alarm or smoke detection system or interruption of power to the motor operator. The door shall have a closing speed of not less than six (6) inches per second and not more than twenty-four (24) inches per second as outlined in NFPA Bulletin 80. Once the door has closed, it can be reset by resuming power to the motor operator, clearing the alarm system and pushing the up control station. Mechanical resetting shall never be required.
- B. The door shall be operated at a speed of 2/3 foot per second by an open drip-proof electric motor with gear reducer in oil bath. The motor operator shall include a geared limit switch. The motor starter shall be housed in a NEMA 1 housing and include a 24 volt control power supply, a solid state controller, and complete terminal strip to facilitate field wiring. The motor operator shall be activated by [a 3 button push-button station] [other controls as selected] in a NEMA 1 enclosure. The motor shall be (115 volts single phase) (460 volts three phase). The motor operator shall be mounted to the door bracket as shown on drawings. All motor operators and controls shall be listed for use with fire doors.
- C. The fire door shall include the Featheredge rolling door safety edge system as manufactured by Amstel Manufacturing and shall include the following features.
  1. The Featheredge shall be installed on the bottom bar of the door and shall automatically reverse the door if the device detects an obstruction in the downward travel of the door.
  2. The Featheredge shall consist of a rubber boot attached below the bottom bar with an electrical switch secured to the back of the bottom bar. The Featheredge shall operate with air wave technology and shall not rely on pneumatic pressure or electrical strip contacts to operate properly. The Featheredge shall create an air wave that shall be detected and reverse the direction of the rolling door.
  3. The operation of the Featheredge shall not be subject to interferences by temperature, barometric pressure, water infiltration, or cuts in the rubber boot.
  4. The Featheredge shall be connected to the motor with a coil cord.
- D. Fire doors shall be controlled by Amstel Model FDO-A10 motor operator with Test-A-Fire Logic. This motor operator shall allow for the testing of fire doors without ever mechanically resetting the release mechanism. The motor and controls shall be approved for use with fire doors. The control panel shall be wired directly into the building's fire alarm or smoke detector system dry contacts.
  1. Upon activation of the alarm system, the motor operator shall power close the door. If there is an obstruction in the opening, the door shall automatically open and close again. The Featheredge shall continue to cycle the door up and down until the obstruction is removed and the door can fully close or the door has cycled 3 times, in which case the door shall stop on the obstruction. If at any time the obstruction is removed, with the continuation of the alarm signal, the door will continue to a fully closed position. To reset the door, push the up control station. The door shall return to the fully open position.
  2. If power to the motor operator is interrupted, the automatic closing device shall close the door. The motor operator shall not be mechanically disconnected from the door.
  3. To reset the fire door, resume power to the motor operator, clear the alarm system and push the up control station. The fire door shall never need to be mechanically reset and testing can be performed by any individual by activating the alarm system or by interrupting power to the motor operator.

- E. Optional: The rolling counter fire door shall include the Firestop Fire Rated Countertop as manufactured by Amstel Manufacturing and shall include the following:
1. The Firestop countertop shall be a uniform 1-5/8" thick throughout and shall be labeled for 1-1/2 hour on interior openings.
  2. The top and edge surfaces shall be [Formica] [Nevamar] [Wilsonart] plastic laminate as selected.
  3. Any notching of the countertop shall be performed by the installing distributor.

### Part 3 – Execution

- 3.0 Preparation and Examination: Site preparations are to be detailed by approved shop drawings. Verify opening dimensions by actual site measurements. Contractor shall make structural or other preparation of the opening to receive guides and grille, provide finish or trim to the opening.
- 3.1 Installation: All Amstel Manufacturing Inc Rolling Counter Fire Doors shall be installed in accordance with NFPA Bulletin 80 by an authorized Amstel Manufacturing Inc Distributor.
- 3.2 Maintenance: The guides should be kept clean of dirt, particularly in the area of the bottom of the guide pocket where dust and dirt can accumulate. On both anodized aluminum and stainless steel curtains, the curtains should be cleaned at least once a year with a damp rag and a non-abrasive cleaner. For cleaning of finished steel curtains consult finish manufacturer for recommendations. It is recommended that the grille curtain balance should be checked on a yearly basis and the tension adjusted if necessary. For motorized or crank operated grilles the chain should be lubricated four times a year.
- 3.01 Warranty: All Amstel Manufacturing Inc Rolling Counter Fire Doors shall be warranted for a period of twelve (24) months from the time of shipment against defects in workmanship and materials.

### ***SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE***