

MODEL BMCF Motor Operated (Gear Head) Fire Shutter – Prime Finish – Between Jamb Mount

1.0 GENERAL

1.1 Summary

- A. All Rolling Counter Fire Doors shall be as manufactured by Amazing Roller Shutters, Canada. Furnished materials shall include all curtains, bottom bars, guides, brackets, hoods, operating mechanisms and any special features.
 - B. Work not to be included by **SDI** 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.
- 1.2 Quality Assurance A. All rolling counter fire doors shall be constructed in accordance with testing agency requirements and shall bear a [1-1/2 hour] [3/4 hour] rating label.

2.0 PRODUCTS

2.1 Materials

- A. The door curtain shall be constructed of interconnected strip steel slats conforming to ASTM-526. The curtain shall be constructed of 22 gauge (1-1/4" high by 3/8" deep) slats as designated by **SDI**.
- B. The finish on the door curtain shall be prime finish:
 1. Corrosion inhibiting primer - .2 mils per side
- C. The bottom bar shall be constructed of tubular steel measuring 2" high by 1-1/4" deep. The bottom bar shall receive one (1) coat of rust-inhibiting prime paint.
- D. The guides shall be constructed of box sections of steel. The finish on the guides shall be one (1) coat of rust-inhibiting prime paint.
- E. The brackets shall be constructed of 11 gauge steel plate and shall receive one (1) coat of rust-inhibiting prime paint.
- F. 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 rust-inhibiting prime paint.
- G. 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 prime finish as indicated in the curtain section.

- 2.2 Operation A. All motor operated counter fire doors shall have an automatic closing device and governor to control the downward speed of the door which shall become operational upon the fusing of a 160 degree fusible link. The door shall have an average closing speed of not less than six (6) inches per second and not more than twenty-four (24) inches per second as indicated in NFPA Bulletin 80. Once the door has closed, it should be able to be reset by one person on one side of the door only.
- B. The rolling counter fire doors shall be operated at a speed of 1/2 foot per second by a totally enclosed electric motor with gear reducer. The motor operator shall include a geared limit switch and emergency push-up operation. The motor operator shall be 115 volts single phase. The motor starter shall be housed in a NEMA 1 housing and include a 24 volt control transformer, 24 volt relays and complete terminal strip to facilitate field wiring. The motor operator shall be activated by a three position keyed selector switch in a NEMA 1 enclosure. All motor operators shall be U.L. listed.
 - C. The service door shall include the "Air Wave Technology" rolling door safety edge system as manufactured by **SDI** and shall include the following features:
 1. The safety edge 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 safety edge shall consist of a rubber boot attached below the bottom bar with an electrical switch secured to the back of the bottom bar. The Safety edge shall operate with air wave technology and shall not rely on pneumatic pressure or electrical strip contacts to operate properly. The Safety edge shall create an air wave that shall be detected and reverse the direction of the rolling door.
 3. The operation of the safety edge shall not be subject to interferences by temperature, barometric pressure, water infiltration, or cuts in the rubber boot.

3.0 EXECUTION

3.1 Installation

- A. All **SDI** Rolling Counter Fire Doors shall be installed in accordance with NFPA Bulletin 80 by an authorized **SDI** Distributor.
- 3.2 Warranty A. All **SDI** Rolling Counter Fire Doors shall be warranted for a period of twelve (12) months from the time of shipment against defects in workmanship and materials.