

MODEL BMG – Motor Operated (Gear Head)
Rolling Grille
Aluminum – Between Jamb Mount



1.0 GENERAL

1.1 Summary

- A. All Aluminum Rolling Grilles shall be as manufactured by Service Door Industries, Mississauga, Ontario, 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 grille openings but not limited to structural or miscellaneous iron work, access panels, finish painting, electrical wiring, conduit and disconnect switches.

1.2 Quality Assurance

- A. All rolling grilles shall be designed to a standard maximum of 25 cycles per day and an overall maximum of 50,000 operating cycles for the life of the grille.

2.0 PRODUCTS

2.1 Materials

- A. The grille curtain shall be Pattern 5014-M92 constructed of 5/16" diameter horizontal aluminum rods on 2" centers with 1/8" aluminum hinged vertical connecting links (5/8" deep by 3-3/4" high) 9" on center. The finish on the rods and links shall be [mill] [204-R1 clear anodized] [bronze anodized].
- B. The bottom bar shall consist of an extruded aluminum tube measuring 4" high by 1-3/4" deep and shall include the **SDI** Air Wave safety edge system. The finish on the bottom bar shall be [mill] [204-R1 clear anodized] [bronze anodized].
- C. The guides shall be constructed of a 1/4" thick continuous aluminum wall angle connected to 1-1/2" by 2-1/2" by 1/8" thick continuous extruded aluminum guide section. Continuous nylon wear strips shall be inserted on both sides of the guide to eliminate metal-to-metal contact. The aluminum wall angle and the aluminum guide shall be [mill] [204-R1 clear anodized] [bronze anodized] finish.
- D. The brackets shall be constructed of steel not less than 1/4" thick. The finish on the brackets shall be one (1) coat of aluminum prime paint.
- E. The barrel shall be steel tubing of not less than 6" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the weight of the curtain. The barrel shall be designed to limit the maximum deflection to .03" per foot of opening width. The springs shall be adjusted by means of an exterior wheel. The finish on the barrel shall be one (1) coat of bronze rust-inhibiting paint.
- F. The hood shall be fabricated from .040 aluminum sheet and shall be formed to fit the curvature of the brackets. The finish on the hood shall be [mill] [204-R1 clear anodized] [bronze anodized].

2.2 Operation

- A. The grille 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, and an electrically interlocked emergency chain operator. The motor starter shall be housed in a NEMA 1 housing and include a magnetic reversing starter size 0, a 24 volt control transformer, 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 size as required by the grille [115 volts single phase] [230 volts single phase] [230 volts three phase] [460 volts three phase]. The motor operator shall be mounted to the grille bracket as shown on drawings. All motor operators shall be U.L. listed.

2.3 Locking Mechanisms

- A. Motor operated grilles shall be secured by means of a cylinder lock in the bottom bar, electrically interlocked to prevent the motor from operating when the grille is locked.
- B. The grille 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 grille and shall automatically reverse the grille if the device detects an obstruction in the downward travel of the grille.
 - 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 grille.
 - 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** Aluminum Rolling Grilles shall be installed by an authorized **SDI** Distributor.

3.2 Warranty

- A. All **SDI** Aluminum Rolling Grilles shall be warranted for a period of twelve (12) months from the time of shipment against defects in workmanship and materials.