



Aluminum Grille Door Specifications

1. General

1.1. Summary

- A. Aluminum grilles excluding design, construction and preparation of openings; finish or field painting; access panels; electrical wiring, conduit, wire, fuses and disconnect switches

1.2. Performance

- A. **Usage:** Aluminum grilles are designed to operate a minimum of 20,000 cycles¹

2. Products

2.1. Materials

- A. **Manufacturer:** R&S Manufacturing Model G ____
- B. **Mounting:** Face of wall or between-jamb
- C. **Operation:** Push-up to 14' wide and 9' high, and chain hoist on larger sizes is standard. Awning crank, crank box, or motor operation are optional.
- D. **Curtain:** Alternating steel and aluminum rods spaced 1-1/2" apart horizontally, with aluminum tubes over steel rods spacing vertical aluminum links 9" apart. Bottom of curtain is reinforced by an extruded aluminum tubular footpiece.
- E. **Guides:** Extruded aluminum guides are bolted to structural steel wall angles. Guides are fitted with nylon pile wearstrips.
- F. **Brackets:** Steel plate brackets are bolted to wall angles to support curtain and barrel, and provide mounting for hood.
- G. **Barrel:** Minimum 6" diameter steel pipe houses torsion spring assembly and supports curtain with a maximum deflection of .03 inch per foot of width. Torsion springs are mounted on a continuous cold rolled steel shaft, adjustable by a torsion wheel outside one bracket.
- H. **Locking:** Slidebolt locks with push up or crank operation and chain lock with chain operation.

2.2. Finish

- A. Aluminum curtain, footpiece, and guides are mill finish. Steel brackets receive one coat of rust inhibiting black primer.

¹ Frequency requirements must specify for the door operator and all components a fixed number of cycles for an express period of time and include a sealed counter device. A cycle is defined as an action on the door from fully closed, to the fully opened, and returned to the fully closed position.



3. Execution

3.1. Installation

- A. Counter doors are to be installed by an R&S authorized representative in accordance with R&S installation instructions.

Aluminum Grille Door Options

High Cycle Construction: Designs to provide up to 150,000 operating cycles or maximum possible in design.

Sloped Footpiece: A custom footpiece to match sloping or irregular sill conditions

Cylinder Locks: Lock cylinder mounted in tubular aluminum footpiece activate lock bolts into each guide

Inside Tension: Tension wheel that is on the inside of the bracket and covered by the hood

Tubular Motor Operator: Completely contained within the barrel for doors in limited usage applications

Finish: Mill finish may be upgraded to Clear or dark bronze anodized

Support Tubes: Square steel tubes attach to floor and structure above to provide mounting for grille

Emergency Egress System: Recessed pull handle in a flush mount enclosure mechanically disconnects motor operator to provide partial opening of grille for emergency exit

Hood: Formed from galvanized steel or aluminum sheet

Fixed Grille Panel: Grille Curtain in a supporting frame