



Thermal-Guard Specifications

1. General

1.1.Summary

- A. Service doors 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. **Windload:** Service doors are designed to withstand a 20 PSF windload.¹
- B. **Usage:** Service doors are designed to operate a minimum of 20,000 cycles.²

2. Products

2.1.Materials

- A. **Manufacturer:** R&S Manufacturing, model I ____
- B. **Mounting:** Interior or exterior face of wall or between-jamb
- C. **Operation:** Chain hoist is standard; push-up (small sizes), awning crank, crank box, or motor operation are optional.
- D. **Curtain:** Interlocking type 25 slats are roll formed from galvanized steel coil. Gauge of slats is as required to meet windload. Polyurethane foam, ¾" thick, is laid in place and concealed by a 24 gauge back slat. Endlocks are riveted to slats to maintain curtain alignment. Windlocks are riveted to slats when required to meet windload. Bottom of curtain is reinforced by an extruded aluminum or double steel angle footpiece with astragal.
- E. **Guides:** Steel channels or structural steel angles form curtain guides and are bolted to structural steel wall angles. Sizes of guides are as required to retain curtain under windload. Windlock bars are provided when windlocks are required to meet windload. Vinyl guide weatherstripping against the flat side of the slats is standard.
- 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.

¹ Standard design will allow the rolling door to be operable after having been subjugated to a uniform constant load of 20 PSF. Curtain slat deformation may occur and there is no guarantee of operability while under load unless such a requirement is stated by the specifier. Windload forces acting on the rolling door slats may cause severe loading at the jams. The building door jamb construction (walls, steel structure, etc.) Must be designed to withstand the anticipated loads.

² 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.



- H. **Hood:** Formed from minimum 24 gauge galvanized steel sheet, reinforced with top and bottom flanges to limit deflection. Internal vinyl hood baffle is standard. Intermediate support is provided when required.
- I. **Locking:** Chain lock with chain operation and slide bolt locks with push up or crank operation.

2.2.Finish

- A. Slats and hoods are pre-finished with a baked on grey or tan polyester primer before forming. Steel footpiece, guides and brackets receive one coat of rust inhibiting black primer.

3. Execution

3.1.Installation

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

Thermal-Guard Options

Increased Wind Load Capacity: Curtain designs to withstand wind loads exceeding 20 PSF

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

Vision Lites: Single or multiple 3-1/2" wide cut-outs, covered with acrylic

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

Cylinder Locks: Lock cylinders mounted on footpiece provide key locking of footpiece mounted slide bolts

Pass Door: 3'-0" X 7'-0" hollow metal door in a steel frame for access through the curtain when closed; Frame is hinged to guide and swings clear to allow use of entire door opening when curtain is raised; custom sizes, windows, and special hardware available

Galvanized Finish: Hot dipped zinc coating on footpiece, guides, and brackets

Powder Coat Finish: Powder coating available on all exposed surfaces