

Model HI^c Insulated Doors CUSTOM SPECIFICATIONS

Corrosion Resistant Construction

PART 1 GENERAL

1.01 SUMMARY

A. Model HI^c Insulated Doors shall be manufactured by Lawrence Roll-Up Doors, Inc.

1.02 SYSTEM DESCRIPTION

- A. Doors shall be for use on openings to 20'-0" wide, 16'-0" high. Consult factory for availability of larger sizes.
- B. Doors shall be intended for use in applications requiring resistance to corrosion.
- C. Doors shall be designed for 20,000 [50,000] [100,000] cycles usage.
- D. Doors shall be designed to withstand a 20 PSF windload.
- E. Doors shall provide a thermal resistance of R5.

1.03 WARRANTY

A. Doors shall be warranted against defects in workmanship and materials for two years from date of shipment, provided designed cycle life is not exceeded. Factory finishes are excluded from warranty.

PART 2 PRODUCTS

2.01 MATERIALS

- A. **Curtain** shall be assembled from interlocking flat slats, roll-formed from T-304 stainless steel strip. Slats shall be Type 3i (2 1/2" x 13/16"), 22 [20] gauge on doors to 16'-0" wide, 20 gauge on doors over 16'-0" wide. Slats shall be insulated with expanded polystyrene (EPS) foam and covered with backslats roll-formed from 24 gauge stainless steel strip, pressure-fit and bonded to the slats. Galvanized malleable iron endlocks shall be attached to ends of alternate slats with stainless steel rivets. Galvanized malleable iron windlocks shall be attached to ends of slats with stainless steel rivets when required to meet design windload.
- B. **Bottom bar** shall be formed by two 2" x 2" x 1/8" minimum T-304 stainless steel angles bolted together and attached to bottom of curtain. Vinyl weatherstrip shall be provided on bottom of bottom bar.
- C. **Guides** shall be formed T-304 stainless steel U-channels sized to retain curtain, bolted to 3/16" minimum T-304 stainless steel wall angles, sized to support door. When windlocks are provided on curtain, U-channels shall have wind bars. Guides shall be assembled and attached to wall with 3/8" minimum bolts no more than 24" on center. Removable curtain stops shall be provided. Vinyl weatherstrip shall be attached to guides.
- D. **Barrel** shall be 6 5/8" minimum diameter galvanized steel pipe, sized to contain counterbalance assembly and support curtain with a maximum deflection of 0.03" per ft. of width. Counterbalance assembly shall consist of torsion spring(s) and fittings mounted to a continuous cold finished galvanized steel shaft. Grease packed sealed stainless steel bearings shall be used to support each end of counterbalance assembly. Spring tension shall be adjustable by galvanized cast iron adjusting wheel outside bracket.
- E. **Brackets** shall be 3/16" minimum T-304 stainless steel plates bolted to wall angles. Plates shall be sized to support curtain and barrel and provided with 1/8" flanges for hood attachment. Bracket on operator side shall be fitted with a grease packed sealed stainless steel bearing.
- F. Hood shall be formed from 24 gauge minimum T-304 stainless steel sheet with top and bottom reinforcements to reduce deflection. Intermediate support(s) shall be provided when necessary. Vinyl baffle shall be attached to inside of hood.
- G. **End caps** [optional] shall be formed from 24 gauge minimum T-304 stainless steel sheet and provided to conceal drive and tension side mechanisms.
- H. **Assembly bolts** shall be dacromet coated steel or stainless steel. <u>NOTE</u>: Mounting bolts are not provided, but are recommended to be stainless steel.
- I. Operation of doors shall be:
 - Chain hoist with galvanized cast iron reduction gears.
 - Model SGHNX inline gear drive motor operator, UL Listed, 1/2 HP minimum, mounted horizontally in front of and
 parallel to door coil and not requiring additional clearance above top of coil, with wall mount 3-button open-close-stop
 control station requiring constant pressure to close, NEMA 4X rated (optional on all doors).
 NOTE: When momentary pressure close is required, or control is not within line of sight of the door, a monitored sensing edge on the
 bottom bar, or monitored reflective sensor on the guide, is required to reverse the door upon sensing an obstruction in the opening.

2.02 FINISHES

A. T-304 stainless steel slats and hood [end caps] shall have a brush finish. Stainless steel bottom bar, guides and brackets shall be mill finish. Galvanized steel components shall be bare. [Slats, bottom bar, guides, brackets and hood [end caps] shall have a TGIC polyester powder coat finish.]

PART 3 EXECUTION 3.01 INSTALLATION

A. Doors shall be installed in accordance with Lawrence Roll-Up Doors, Inc. installation instructions.