

PART 1 GENERAL**1.01 SUMMARY**

A. Model HV Ventilated Doors shall be manufactured by Lawrence Roll-Up Doors, Inc.

1.02 SYSTEM DESCRIPTION

- A. Doors shall be designed for 50,000 cycles usage.
- B. Doors shall be designed to withstand a 20 PSF windload.
- C. Doors shall be for use on openings up to 30'-0" wide, 16'-0" high.

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 Type T (2 5/8" x 3/4") flat slats, roll-formed from 20 gauge galvanized steel strip. Slats shall be perforated with 1/8" diameter holes on 3/16" staggered centers providing 28% open area. Endlocks shall be riveted to ends of alternate slats. Windlocks shall be riveted to ends of alternate slats when required to meet windload. Ends of slats shall be reinforced with a steel back plate to retain endlock and windlock rivets.
- B. **Bottom bar** shall be formed by two 2" x 2" x 1/8" minimum 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 3/16" steel channels sized to retain curtain. Channels shall be bolted to 3/16" minimum structural steel wall angles, sized to support door. When windlocks are provided on curtain, channels shall be formed with windlock retainers. 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.
- D. **Barrel** shall be 6 5/8" minimum diameter 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 steel shaft. Precision ground grease packed sealed bearings shall be used to support each end of counterbalance assembly. Spring tension shall be adjustable by adjusting wheel outside bracket.
- E. **Brackets** shall be 3/16" minimum 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 precision ground grease packed sealed bearing.
- F. **Hood** shall be formed from 24 gauge minimum galvanized steel sheet with top and bottom reinforcements to reduce deflection. Intermediate support(s) shall be provided when necessary.
- G. **Operation** of doors shall be as follows:
 - PUSH-UP operated on doors to 8'-0" wide, 8'-0" high.
 - CHAIN HOIST operated with cast iron reduction gears on larger doors [option on push-up operated doors].
 - AWNING CRANK operated with removable handle on doors to 14'-0" wide, 10'-0" high, 120 sq. ft. [option on all doors].
 - MOTOR operated with UL Listed inline gear drive assembly, mounted horizontally in front of and parallel to door coil, and not requiring additional clearance above top of coil [option on all doors].

NOTE: For ease of operation, motor operator is recommended on doors over 24'-0" wide, 16'-0" high, 350 sq. ft.
- H. **Locking** shall be by slide locks coil side on bottom bar of push-up, chain hoist and awning crank operated doors.

NOTE: Motor operators provide self-locking gear reduction – if slide locks are required on motor operated doors, a motor operator with internal lock sensor, or guide mounted electrical interlocks, are required to prevent opening door with locks engaged.

2.02 FINISHES

- A. Galvanized steel slats and hood shall have a baked-on primer and polyester top coat, tan color opposite coil side with off-white color coil side. Steel bottom bar, guides and brackets shall be shop painted with a black color rust-inhibiting primer.

PART 3 EXECUTION**3.01 INSTALLATION**

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

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| Usage | Designs for 100,000 cycles usage |
| Windload | Designs to withstand specified windloads exceeding 20 PSF |
| Mounting | Between-jamb mounting (includes filler angles) Under lintel mounting (includes fascia) Guides and brackets attached directly to steel tube supports (in lieu of wall angles) <i>NOTE: Tube supports are not to be considered structural building components</i> |
| Curtain | Fenestrated slats with multiple 4" x 1 1/2" cut-outs spaced 2" apart, open for ventilation, in lieu of ventilated slats (available with Type T slats) Malleable iron endlocks Stainless steel slats (<i>Limited availability – consult factory</i>) Aluminum slats (<i>Limited availability – consult factory</i>) Wicket door, 3'-0" x 7'-0" door with standard Grade 2 lever lockset and steel frame, for pedestrian access through the curtain (available with a variety of other lockset and deadbolt types) |
| Bottom Bar | Sensing edge to reverse closing of a motor operated door upon contact with an obstruction Sloping or irregular shaped bottom bar for non-level sill (24" maximum slope) Stainless steel or aluminum angles |
| Guides | Vinyl guide weatherstrip Brush guide weatherstrip Stainless steel or aluminum channel or angle guides |
| Barrel | Internal tension wheel (inside the bracket) on doors to 10'-0" wide, 8'-0" high |
| Hood & Covers | Heavier than standard gauge hood (20 gauge maximum) Vinyl baffle inside hood to reduce air flow between the hood and curtain when door is closed Brush header seal (field installed) Fascia to close area behind brackets when no wall is present End caps to enclose operating or tension brackets (recommended on doors mounted to the exterior of a building or when operating device is less than 8 feet above the floor) Motor cover (recommended on motor operators less than 8 feet above the floor or on the exterior of a building) Stainless steel or aluminum hood, fascia, end caps and motor cover |
| Operation | Through-wall operations (operable from opposite side of wall to which door is mounted) |
| Locking | Guide mounted pin lock with American 2000 lock Mortise cylinder or thumb turn activated double throw bolt (in tubular aluminum bottom bar) Master keying or special brand cylinders |
| Finishes | Galvanized steel bottom bar, guides and brackets Brushed finish stainless steel slats, bottom bar, guides and hood Clear or bronze anodized aluminum slats, bottom bar, guides and hood Powder coated slats, bottom bar, guides and hood |