

PART 1 GENERAL**1.01 SUMMARY**

- A. Gateway Doors shall be manufactured by Lawrence Roll-Up Doors, Inc.

1.02 SYSTEM DESCRIPTION

- A. Doors shall be designed for 10,000 [20,000] [50,000] [100,000] cycles usage.
- B. Doors shall be designed to automatically open upon a loss of power, or upon activation by alarm [lighted exit button] to provide controlled egress [secure emergency responder access] through the opening in an emergency.
- C. Doors shall be for use on openings up to 20'-0" wide, 16'-0" high, 300 sq. ft. (260 sq. ft. in high cycle applications) for typical mall, storefront, other retail and commercial, or parking garage applications. Consult factory for availability of larger size doors.

1.03 WARRANTY

- A. Doors shall be warranted against defects in workmanship and materials for one year [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 slats, roll-formed from 24 [22] [20] gauge galvanized steel [18 [16] gauge aluminum] [20 gauge stainless steel] strip. [Galvanized steel 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.
- B. **Bottom bar** shall be formed by two 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 steel channels sized to retain curtain. Channels shall be bolted to 3/16" minimum structural steel wall angles [tube supports], sized to support door. 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 weather seals shall be provided.]
- D. **Barrel** shall be 4 1/2" 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. 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 [tube supports]. Plates shall be sized to support curtain and barrel and provided with 1/8" flanges for hood attachment (when hood is provided). Bracket on operator side shall be fitted with a grease packed sealed bearing.
- F. **Hood** shall be formed from 24 gauge minimum galvanized steel [stainless steel] [aluminum] sheet with top and bottom reinforcements to reduce deflection. Intermediate support(s) shall be provided when necessary. [Vinyl weather baffle shall be provided.]
- G. **Operation** of doors shall be by a Model EGH inline gear drive motor operator, UL Listed, 3/4 HP minimum, TENV motor, auxiliary chain hoist, internal speed governor, solenoid actuated brake, adjustable limit switches, delay on reverse*, non-resettable cycle counter, adjustable reclose timer*, 3-button open-close-stop wall mount control station, NEMA 1 enclosures. Motor operator shall be mounted horizontally in front of and parallel to the door coil and shall not require additional clearance above the top of the coil. Operator shall automatically open door in an emergency to a minimum height of 80 inches with either a "Fail-Safe" or "Fail-Secure" function. After power is restored, and alarm is cleared, motor operator shall be ready to operate normally. (Choose either 1, 2, 1 and 3, or 2 and 3 from the following):
1. Standard "Fail-Safe" function shall allow door to open automatically after an approximate 10 second delay upon a loss of power or upon alarm activation [or without delay upon activation of lighted wall mount exit button if power is present].
 2. Optional "Fail-Secure" function shall allow door to remain in the closed position upon a loss of power though an integrated battery back-up system for approximately 10 hours [30 hours]. Door shall open upon activation of a lighted wall mount exit button, upon alarm activation, or upon activation of a secure control device on entry side of door accessible to emergency responders. Prior to a complete loss of battery power, door will open automatically.
 3. Optional "Auto-Reclose" function* shall close door automatically after time delay when power is restored and alarm is cleared when a monitored A2530L-M sensing edge [FRPE reflective photo eye] [FOPE optical photo eye] is provided and functioning to reverse door when closing if an obstruction in the opening is detected.

*A monitored sensing edge [photo eyes] is required to reverse door when closing if an obstruction in the opening is detected.

- H. **Locking** shall be provided by gear reduction of motor operator.

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, or grey color both sides (except perforated slats)). 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.
- B. Periodic inspection, testing & maintenance shall be performed as required by local codes for a life-safety product.