

# Model CL Counter Fire Doors STANDARD SPECIFICATIONS

UL File No. R2820 [FM Approved] CSFM Listing No. 3515-1587:100

## PART 1 GENERAL

## 1.01 SUMMARY

Model CL Counter Fire Doors shall be manufactured by Lawrence Roll-Up Doors, Inc.

#### 1.02 SYSTEM DESCRIPTION

- A. Doors shall be approved for use on service counters and other smaller openings up to 16'-0" wide, 10'-0" high, 120 sq. ft.
- B. Doors shall be designed for 10,000 cycles usage.
- C. Doors shall be fire rated up to 3 [4] hours on non-masonry or masonry wall construction.

#### **1.03 QUALITY ASSURANCE**

A. Doors shall be Underwriters Laboratories classified and certified for Canada [FM Approved], and listed by the California State Fire Marshal (CSFM). Doors shall be provided with a c-UL-us [FM] label or oversize door label as dictated by door size. [Air leakage rated smoke door assemblies shall be provided with a supplemental S-Label.]

#### 1.04 WARRANTY

A. Doors shall be warranted against defects in workmanship and materials for one year 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 F (2" x 9/16") flat slats, roll-formed from 22 gauge galvanized steel or stainless steel strip. Endlocks shall be riveted to ends of alternate slats. Security locks shall be riveted to ends of every 6th slat on doors over 11'-0" wide.
- B. **Bottom bar** shall be formed by one 2" x 2" x 1/8" steel or stainless steel angle attached to bottom of curtain. Provision shall be made for thermal expansion at assembly bolts.
- C. **Guides** shall be 11 gauge steel or stainless steel shapes, sized to retain curtain and support door. Guides shall be assembled with 1/4" minimum bolts no more than 12" on center and attached to wall with 3/8" minimum bolts no more than 24" on center. Provision shall be made for thermal expansion at assembly and wall bolts. Removable curtain stops shall be provided.
- D. **Barrel** shall be 4 1/2" 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" steel plates bolted to guides. 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 bearing.
- F. **Hood** shall be formed from 24 gauge galvanized steel or stainless steel sheet with top and bottom reinforcements to reduce deflection. Intermediate support shall be provided on doors over 13'-6" wide.
- G. Operation of doors shall be:
  - Push up operated with directional speed governor and single side release on doors to 12'-0" wide, 8'-0" high, 84 sq. ft.
  - "Easy-Reset" ["Auto-Reset"] [tubular (in-barrel)] awning crank with internal release and governor on larger doors, removable handle to open door and pull cable to close (optional on push-up operated doors, "Auto-Reset" and tubular optional on all doors).
  - "Easy-Reset" Model FGRL ["Auto Reset" Model FSML] inline gear drive motor operator with internal release and governor, integral lock sensor to prevent door opening with locks engaged, UL Listed, 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 1 enclosures (optional on all doors).
  - Model FTS "Auto-Reset" tubular motor operator, UL Listed, concealed inside of barrel and not requiring additional clearance in front of coil, separate wall mount control panel, with wall mount 3-button open-close-stop control station requiring constant pressure to close, NEMA 1 enclosures (optional on all doors eliminates the need for counterbalance assembly and spring tension adjustment).
     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.
     NOTE: For ease of operation, crank or motor operator is recommended on doors over 7'-0" high (or if top of opening is more than 7'-0" above the floor) and operated regularly, or when doors are operated over a deep counter or other obstruction making push-up operation difficult.
- H. Automatic closing of doors shall be thermally activated by 165 deg. F. fusible links. Average closing speed shall be approximately 9" to 12" per second, but no less than 6" nor more than 24" per second per the requirements of NFPA-80. "Easy-Reset" operators shall be designed to automatically close door without a loss of spring tension, and reset by reconnecting fusible link cable and reopening door ["Auto-Reset" operators shall be designed to automatically close door upon power loss or alarm without a loss of spring tension, and reset by restoring power or clearing alarm and reopening door].
  - NOTE: For ease of drop-test and reset, "Easy-Reset" or "Auto-Reset" crank or motor operator is recommended on all doors.
- I. **Locking** shall be by slide locks coil side on bottom bar of push-up 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 grey polyester top coat. Steel bottom bar, guides and brackets shall be shop painted with a black color rust-inhibiting primer. Stainless steel slats, bottom bar, guides and hood shall have a brushed finish.

### PART 3 EXECUTION

## 3.01 INSTALLATION

A. Doors shall be installed in accordance with Lawrence Roll-Up Doors, Inc. installation instructions and NFPA-80.

#### 3.02 FIELD QUALITY CONTROL

A. Doors shall be tested for proper operation and full closure at time of installation. A written record shall be maintained.

## 3.03 SCHEDULES

A. Doors shall be maintained, inspected and tested in accordance with NFPA-80.