Model CL Counter Fire Doors
STANDARD SPECIFICATIONS

UL File No. R2820
CSFM Listing No. 3515-1587:100

PART 1 GENERAL

1.01 SUMMARY

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

1.02 SYSTEM DESCRIPTION

A. Doors shall be designed for 10,000 cycles usage.
B. Doors shall be for use on openings up to 16'-0" wide, 10'-0" high, 120 sq. ft.
C. Doors shall be fire rated up to 3 hours for installation on walls of masonry or non-masonry construction.

1.03 QUALITY ASSURANCE

A. Doors shall be Underwriters Laboratories classified (UL), Underwriters Laboratories certified for Canada (c-UL) and listed by the California State Fire Marshal (CSFM). Doors to 12'-0" wide, 10'-0" high shall be provided with a UL/c-UL label. Larger doors shall be provided with a UL/c-UL oversize door 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 formed 12 gauge minimum 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" 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 1/8" minimum 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 as follows:
PUSH-UP operated on doors to 12'-0" wide, 8'-0" high, 84 sq. ft.
"EASY-RESET" CRANK operated (on larger doors) with removable handle to open door and pull cable to close door [option on push-up operated doors].
"EASY-RESET" 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 drop-testing and resetting, "Easy-Reset" crank or motor operator is recommended. 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. A governor shall be provided to control the rate of descent. 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. All doors shall be easily reset with a single-side release. *"Easy-Reset"* crank and motor operators shall include an internal release and governor, designed for automatic closing without a loss of spring tension, and reset by reconnecting fusible link cable and reopening door.
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 polyester top coat (tan color opposite coil side with off-white color coil side (colors may be reversed), or grey color both sides). 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.

Model CL Counter Fire Doors
AVAILABLE OPTIONS

Classification
FM Approved (includes flame baffle inside hood)
UL or FM S-label for air leakage rated smoke doors (includes UL listed brush guide and header seals and field installed UL recognized heat resistant caulking)

Rating
4-hour fire rating

Mounting
Between-jamb mounting (includes filler tubes or formed shapes)
Under lintel mounting (includes fascia)
Tube mounting system (face of wall, between-jamb, or guides and brackets directly attached, to independent support tubes either in front of, or concealed inside of, rated wall construction – *tubes must be provided by Lawrence Doors – consult factory for details*)

Curtain
Heavier than standard gauge Type F galvanized steel slats (20 gauge maximum)
Vision lites of single or multiple (16 maximum) 4" x 1" cut-outs spaced at least 2 1/2" apart, covered with UL classified glazing material

Bottom Bar
Vinyl bottom seal to reduce smoke and air infiltration
Sensing edge to reverse closing of a motor operated door upon contact with an obstruction
Tubular shape bottom bar with cylinder locks

Guides
UL Listed brush seals to reduce smoke and air infiltration

Hood & Covers
UL Listed brush header seal (field installed) to reduce smoke and air infiltration between wall and curtain
Flame baffle inside hood, activated by fusible link, to close area between hood and curtain when door is closed
Fascia to close area behind brackets when no wall or fire barrier is present
End caps to enclose operating or tension brackets (recommended when bottom of coil is less than 8 feet above the floor and required to protect mechanisms on doors mounted to the exterior of a building)
Motor cover (recommended on motor operators less than 8 feet above the floor or on the exterior of a building)

Locking
Mortise cylinder or thumb turn activated double-throw bolt (in tubular bottom bar)
Master keying or special brands of cylinders or cores

Operation
Keyed handle release to close and test crank operated doors and prevent unauthorized use (requires field installed conduit from enclosure to operator mounting bracket to conceal pull cable)
"Auto-Reset" crank operators, designed for detector/alarm activated and failsafe closing upon a loss of power through the operator's internal release and governor – to reset, clear alarm/restore power and open door
"Auto-Reset" motor operator, designed for detector/alarm activated motor controlled closing if power is present, or failsafe closing upon a loss of power through the operator's internal release and governor – will stop upon sensing an obstruction while closing and continue closed when the obstruction is removed if power is present and sensing edge is functioning, or will close through the internal release and governor – to reset, clear alarm/restore power and activate open control (requires door be provided with a monitored sensing device)
NOTE: "Auto-Reset" crank operators require connection to a 115VAC power source
R-BBU battery backup to prevent automatic closing of *"Auto-Reset"* motor operators upon a loss of power for up to 10 hours

Finishes
Galvanized steel bottom bar, guides and brackets
Powder coated slats, bottom bar, guides and hood

Closing Systems
AR-D alarm release for time delayed automatic closing upon detector/alarm activation and failsafe closing upon a loss of power (115~230VAC, 24VAC/DC)
AR-D2 alarm release with battery backup for time delayed automatic closing upon detector/alarm activation, prevents automatic closing upon a loss of power for up to 72 hours (115~230VAC, 24VAC/DC)
NOTE: (alarm release not required with "Auto-Reset" operators)
Audible, visible and voice warnings prior to automatic closing
Photo-electronic smoke, ionization and heat detectors

Fire Rated Counter Tops
Stainless steel sill in "T", "H", or rectangular shapes, 1 5/8" thick (14 gauge) – listed for installation in walls of non-masonry construction rated up to 1 1/2 hours or masonry construction rated up to 3 hours