



ACCEPTABLE MANUFACTURER

Rolling counter fire shutters shall be FireCurtain SELECT as manufactured by Raynor of Dixon, Illinois.

OPERATION

- A. Operation Type: Rolling counter fire shutters shall be operated by (select from list below):
 - 1. Push-up: as normally-provided (not recommended for rolling counter fire shutter over 10' (3048 mm) wide and/or 7' (2134 mm) high, counter top restriction should be considered).
 - 2. Hand Crank: as normally-provided by means of a gear reduction hand crank, for rolling counter fire shutter over 10' (3048 mm) wide and/or 7' (2134 mm) high.
 - 3. Tube Motor: as optionally-provided by means of a Raynor FireEclipse [™] tube motor type electric operator. Tube motor shall be concealed inside the barrel assembly and bracket cover.

B. Mounting:

- 1. Face-Mount: as normally-provided and fastened to the face of the wall opening.
- 2. Between-Jamb Mounting: as optionally-provided and fastened between the jambs of the wall opening.
- C. Integral Frame: Rolling counter fire shutter may be provided with an integral frame, with the fire shutter factory pre-installed in a completed frame assembly (select from list below or delete this section if not applicable):
 - 1. Stainless Steel Slip-in Frame: as optionally provided, typical for use with a pre-existing finished opening in a wall.
 - 2. Stainless Steel Build-in Frame: as optionally-provided, for use with masonry block wall construction.

FIRE RATING

A. Rating: Rolling counter fire shutters shall achieve a rating of (select from list below):

- 1. 3-hour rating:
 - a. Factory Mutual (FM)
 - b. Underwriters Laboratory (UL)
 - c. Canadian Underwriters Laboratory (C-UL)
 - d. California State Fire Marshal (CSFM)
 - e. City Of New York Material and Equipment Acceptance (MEA)

B. Certifications: Rolling counter fire shutters shall be provided with (select from list below):

- 1. Factory Mutual Listing
- 2. UL Classified
- 3. C-UL Classified
- 4. CSFM Listing
- 5. MEA Listing

CURTAIN

- A. Material: The curtain shall consist of 22 gauge (.030 minimum stainless steel thickness) interlocking roll-formed stainless steel slats.
- B. Slat Type: The rolling counter fire shutter curtain shall be comprised of interlocking, flat type steel slats.
- C. Finish: The curtain shall be a #4 finish.
- D. Endlocks: Lateral movement of the slats to be contained by means of zinc-plated stamped steel endlocks fastened to the slat.
- E. Bottom Bar and Seal: Bottom bar shall be roll-formed tubular stainless steel. The bottom bar shall include ¼" (6.3 mm) thick protective strip to cushion impact of bottom bar on countertop.

GUIDES

- A. Guide Assemblies: Guides shall be provided in the same material and finished as the shutter curtain, and be fitted with removable curtain stop.
- B. Jamb Construction: Rolling counter fire shutter shall be mounted to (select from list below):
 - 1. Steel Jambs: as normally-provided, and supplied with self-tapping fastener.
 - 2. Masonry Jambs: as optionally-provided, and supplied with anchor bolt fasteners.
 - 3. Non-masonry Jambs: as optionally-provided for jambs consisting of drywall or plaster (fasteners included).





COUNTERBALANCE SYSTEM

- A. Headplates: Mounting brackets shall be made from 10 gauge galvanized steel plate and attached to the wall and guide.
- B. Barrel: The barrel shall be made from a minimum 4 ½" (114.3 mm) O.D. x .120" (3.1 mm) wall structural steel pipe. Deflection of pipe under full load shall not exceed .03" (.8 mm) per foot of span.
- C.Counterbalance
 - 1. The curtain shall be counterbalanced by means oil-tempered, helical torsion springs, grease packed and mounted
 - on a continuous steel torsion shaft.
 - 2. Tube Motor Operation (see Operation Type)

ENCLOSURES

- A. Hood: Rolling counter fire shutter shall be furnished with a square hood enclosure comprised of (select from list below):
 1. Stainless Steel Hood: as normally provided with stainless steel curtains, comprised of 24 gauge stainless steel.
- B. Headplate Cover: Rolling counter fire shutter shall be furnished with an enclosure for the headplates, consisting of 24 gauge stainless steel finish to match the curtain.

RELEASE SYSTEM

Descent Control: Rolling counter fire shutter shall be controlled by a centrifugal governor during automatic closing of the door.

- A. Release Type: Automatic closing of rolling counter fire shutters under fire conditions to be initiated by (select from list below):
 - 1. Fusible Links
 - 2. Thermal-Manual Links
 - 3. Electro-Thermal Manual Links with Junction Box
 - 4. Electro-Thermal Manual Links without Junction Box
 - 5. FireShield (optional on FireEclipse)
 - 6. Model XP
- B. Detection Type: Device used in conjunction with the release type to initiate the automatic closing of rolling counter fire shutter (select from list below or delete this section if not applicable).
 - 1. Ionization Smoke Detector
 - 2. Photoectronic with Heat Sensor Detector

HARDWARE

- A. Lock: Rolling counter fire shutter may be provided with an optional lock (select from list below or delete this section if not applicable).
 - 1. Thumb Lock: as optionally-provided with a locking bar for use with push-up and hand crank operated doors.
 - 2. Cylinder Lock: as optionally-provided and available for use with push-up and hand crank operated doors.