

FIRESTAR™ SHUTTERS

540 & 550

WAYNE-DALTON COMMERCIAL DOOR SYSTEMS

FIRESTAR™ 540 & 550

Fire-Rated Counter Shutters

A REVOLUTIONARY COUNTER SHUTTER THAT LOOKS GREAT WHILE PROVIDING FIRE-RATED PROTECTION AND UNIQUE TESTING FEATURES

The FireStar fire-rated counter shutters meet the demands of applications that require a pleasing appearance combined with certified and labeled fire protection for your property. Our innovative and exclusive design provides lift-up operation that is extremely easy to test and does not require tools to reset the mechanism. As an added bonus, the design offers very quiet and smooth functionality.

Model 540: Galvanized Steel Model 550: Stainless Steel



COMMERCIAL DOORS & OPERATORS

- SIZES UP TO 16' WIDE AND 7' HIGH
- STEEL AND STAINLESS STEEL 2" FLAT SLATS
- UL / FM RATED
- CONFORMS TO NFPA STANDARD 80 (NATIONAL FIRE PROTECTION ASSOCIATION)
- FIRE-RATED COUNTER TOPS NOW AVAILABLE

FIRESTAR™ Fire-Rated Counter Shutters

540 & 550 SERIES

FireStar fire-rated counter shutters are a simple and innovative solution for your safety and fire protection needs. Critical elements necessary in the reliable function of fire doors are incorporated as standard features with FireStar's revolutionary design.

These shutters, which are for openings up to 112 square feet, are compact and pleasing in appearance while permitting frequent opening and closing with optimal fire protection.

FireStar counter shutters have a 3/4, 1 1/2, or 3-hour label rating for masonry or steel jambs (minimum 3/16"). Also available in 1 1/2 – hour rating for non-masonry walls with 16-gauge steel or wood studs.

Safety

The FireStar counter shutter can be drop tested easily and reset in a matter of seconds at any time; no tools or service technicians are required. This can be done in addition to the door's required annual inspection by a trained door systems technician. By self-testing throughout the year, facility personnel can be even more confident that their door will function safely in the event of fire.

Reliability

FireStar counter shutters have been tested and approved to meet the requirements of well known agencies, such as Underwriters Laboratories and Factory Mutual, and conform to NFPA Standard 80.

Approval/Standard Compliances include:

- Underwriters Laboratories (UL) 10(b) Approval
- Factory Mutual (FM) Approved Standard 4100 (1990)
- Designed to comply with governing standard for installation defined in NFPA 80 (2010)

Simplicity

By eliminating one of the fusible link cables, the door and surrounding area look cleaner and less cluttered. It also reduces the risk of cable interference with other nearby fixtures while making installation and drop testing easier.

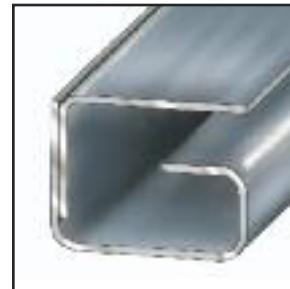


Test Device — FireStar Counter Shutters feature an easy-to-use release handle.

Slat Profiles



No. 17 — Flat-faced slat in 20 or 22-gauge steel or stainless steel
Depth of crown: 1/2", 1/4" on centers.



Guide Assembly — Sleek 2-piece guide assembly provides better aesthetic appeal and allows for easier installation.

Accessories



WayneGuard Release Systems



Smoke Detectors



Horns and Strobes

FIRESTAR™ Fire-Rated Counter Shutters

540 & 550 SERIES



Features

- Automatic closure in case of fire, but operable for daily use.
- Easy testing and auto-reset.
- Governor-controlled, safe closing operator speed (over 3' wide or 3' high).
- Trimline curtain design in galvanize (540) or stainless steel (550).
- Lift-up, Crank, and Motor (including Tube Motor) operating options.
- Sealed box-type guides, upward expandable, for snug fit against counter top.
- Mounted against face-of-wall or between-jamb's for push-up or awning crank operation.
- WayneGuard™ Fire Door release system available.
- Preassembled drop-out mechanism.
- Single fusible link cable routing.
- Available with left-hand or right-hand operation.
- Optional SmokeTite™ UL-Labeled smoke and draft control package.
- **ALSO NEW!** Optional fire-rated counter tops to complete the package.



FIRESTAR™ Fire-Rated Counter Shutters

Note to specifiers: Words in parentheses indicate frequently specified and highly recommended options.

PART I – GENERAL

1.01 Work Included

- A. The opening will be equipped with Wayne-Dalton FireStar Fire-Rated Counter Shutter

1.02 Related Work

- A. Opening preparation, miscellaneous or structural metal work, access panels, finish or field painting, field electrical wiring, wire, conduit, fuses, and disconnect switches are in the Scope of Work of other divisions or trades.

1.03 Reference Standards

- A. **ANSI/DASMA 204** – American National Standards Institute Specifications for rated fire rolling doors published by Door & Access Systems Manufacturers Association International.
- B. **ASTM A123** – Zinc [hot-dipped galvanized] coatings on iron and steel products.
- C. **ASTM A229** – Steel wire, oil-tempered for mechanical springs.
- D. **ASTM A-653-94** – Steel sheet, zinc-coated [galvanized] by the hot-dipped process, commercial quality.
- E. **UL10B** – Underwriters' Laboratories (UL) Fire Tests of Door Assemblies
- F. **NFPA 80** – National Fire Protection Agency – Fire Doors and Other Opening Protectives

1.04 Quality Assurance

- A. Rolling doors and all accessories and components required for complete and secure installations shall be manufactured as a system from one manufacturer.

1.05 Systems Description

- A. Rolling Door: Type:
FireStar Fire-Rated Counter Shutter
- B. Mounting: [steel] [masonry] [drywall over minimum 16 gauge steel studs or wood studs] jamba
- C. Operation: [manual push-up] [crank] [motor]
- D. Material: Galvanized steel with polyester finish paint

1.06 Submittals

- A. Shop Drawings: Clearly indicate the following:
 - 1. All details required for complete operation and installation.
 - 2. Hardware locations.
 - 3. Type of metal and finish for door sections.
 - 4. Finish for miscellaneous components and accessories.
- B. Product Data: Indicating manufacturer's product data, and installation instructions.

1.07 Delivery, Handling, Storage

- A. Deliver products in manufacturer's original containers, dry, undamaged, seals and labels intact.
- B. Store and protect products in accordance with manufacturer's recommendations.

1.08 Warranty

- A. Standard manufacturer's ONE YEAR warranty against defects in material and workmanship.

PART II – PRODUCTS

2.01

- A. Curtains will be comprised of #17 flat slats rolled from [20 gauge] [22 gauge] (prime painted galvanized steel) (stainless steel) per ASTM standards. Alternating slats will be fitted with endlocks to hold curtain in alignment and impede air infiltration around curtain and guides.
- B. Bottom Bar will be fitted of tubular type (primed steel) (stainless steel), fitted with slide bolt locks.

2.02 Guides

- A. Guides will have (primed rectangular steel) (stainless steel) formed shapes and will be designed for upward expansion to insure close fit on counter top or floor. (Perimeter brush seals may be installed to reduce smoke/air infiltration around door opening)

2.03 Brackets

- A. Brackets will be of 3/16" minimum thick steel plates, with permanently sealed ball bearings. Designed to enclose ends of coil and provide support for counterbalance pipe at each end.

2.04 Counterbalance

- A. Curtain to be coiled on a pipe of sufficient size to carry door load with deflection not to exceed .033" per foot of door span and to be correctly balanced by helical springs, oil tempered torsion type. Cast iron barrel plugs will be used to anchor springs to tension shaft and pipe. Counterbalance springs not provided for tube motor

2.05 Hood

- A. Hood will be minimum 24 gauge (prime-painted galvanized steel) (stainless steel), sheet metal, flanged at top for attachment to header and flanged at bottom to provide longitudinal stiffness. Hood will enclose curtain coil and counterbalance mechanism.

2.06 Finish

- A. Curtain, hood, bottom bar and guides to be (prime-painted steel) (stainless steel brushed finish). Parts not galvanized, except shaft and bearings, will be given a shop coat of paint.

2.07 Operation

- A. Doors will be operated by means of (manual push up) (awning crank) (motor operation).

2.08 Release mechanism

- A. Doors will be equipped with FireStar release mechanism, requiring only one cable to be routed to the operated side (cable not required to be routed to adjusting wheel side.) Doors will close by a thermally actuated link rated @165 degrees F, or by an optional listed releasing device, or by manually operating the release handle. All counterbalance spring tension shall be maintained when the release mechanism is activated. After closing by manual operation of release handle, the door shall be able to be reset by one person from one side of the door (re-engaging the release handle); no tools shall be required.

2.09 Governor

- A. If required by the size of the shutter, a governor will be furnished to regulate the rate of descent of the shutter in a quiet manner. It will be the engagement type which is not engaged during normal door operation, but which after cable release, will retard the speed during automatic door closure to under 2' per second and not less than 6' per second.

2.10 Locking

- A. Locking (will be slide-bolt locks)(will be by cylinder lock).

2.11 Label

- A. All shutters, when opening size permits, to bear the required (3/4) (1 1/2) (3-hour label of the Underwriters' Laboratories or Factory Mutual. FM label is available for the 3-hour fire shutter only. Fire shutters will be manufactured in strict accordance with the requirements of Underwriters' Laboratories-listed procedures or Factory Mutual-approval procedures, standard 4100 (1990), and will bear their label. Optional SmokeTite™ UL'S' label is available. This leakage rated assembly meets the requirements of NFPA 105, to control the spread of smoke and draft.

PART III – EXECUTION

3.01 Installation

- A. General:
 - 1. Install the rolling fire shutter in accordance with Wayne-Dalton instructions and standards and in accordance with the standards of the National Fire Protection Association Standard #80 (NFPA 80). Installation and maintenance will only be by a trained door systems technician.
 - 2. Verify that existing conditions are ready to receive rolling shutter work.
 - 3. Beginning of rolling shutter work means acceptance of existing conditions.
- B. Fit, align and adjust rolling shutter assemblies level and plumb for smooth operation.
- C. Upon completion of final installation, lubricate, test and adjust shutter to operate easily, free from warp, twist or distortion and fitting for entire perimeter.

Note: Architect may consider providing a schedule when more than one rolling shutter or opening type is required.

3.02 Testing

- A. Rolling steel fire shutters will be drop-tested in accordance with NFPA 80 and witnessed, attesting to their successful operation at the time of installation.

3.03 Maintenance

- A. Per NFPA 80, paragraph 15-2.4.3: All horizontal or vertical sliding and rolling fire shutters shall be inspected and tested annually to check for proper operation and full closure. Resetting of the release mechanism shall be done in accordance with the manufacturer's instructions. A written record shall be maintained by the building owner and made available to the authority having jurisdiction.

Specifications and technical information also available at Sweets.com®.

Distributed By:



COMMERCIAL DOORS & OPERATORS

For technical information, visit:

www.Wayne-Dalton.com/commercial

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Mt. Hope, OH • Dalton, OH • Trail, OH • Pensacola, FL • Portland, OR

Printed in U.S.A.
Item #XXXXXX Revised 04.10