

**The Genuine. The Original.**



SECTION 08333

SECURITY GRILLES

UPWARD COILING MODEL 671

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**\*\* NOTE TO SPECIFIER \*\* Overhead Door Corporation; operating security grille and closure products.**

**This section is based on the products of Overhead Door Corporation, which is located at:  
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Suite 200  
Lewisville, TX 75067  
Toll Free: (800) 275-3290  
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e-mail: [info@overheaddoor.com](mailto:info@overheaddoor.com)**

**Overhead Door Corporation pioneered the upward-acting door industry, inventing the first upward-acting door in 1921 and the first electric door opener in 1926. Today, we continue to be the industry leader through the strength of our product innovation, superior craftsmanship and outstanding customer support, underscoring a legacy of quality, expertise and integrity. That's why design and construction professionals specify Overhead Door Corporation products more often than any other brand.**

**This specification includes side folding and upward coiling security grille closures of aluminum, galvanized steel and stainless steel.**

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

**\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.**

- A. Rolling Security Grilles, manually operated.
- B. Rolling Security, power operated.

### 1.2 RELATED SECTIONS

**\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.**

- A. Section 05500 - Metal Fabrications: Support framing and framed opening.
- B. Section 06200 - Finish Carpentry: Wood jamb and head trim.

- C. Section 08332 - Rolling Counter Doors.
- D. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.
- E. Section 16130 - Raceway and Boxes: Conduit from electric circuit to grille operator and from grille operator to control station.
- F. Section 16150 - Wiring Connections: Power to disconnect.

### 1.3 REFERENCES

**\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.**

- A. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated/Galvanized or Zinc-Iron Alloy-Coated/Galvannealed by the Hot-Dip Process.
- B. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- C. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- D. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- E. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes - Metric.
- F. NEMA 250 - Enclosures for Electrical Equipment -1000 Volts Maximum.
- G. NEMA ICS 2 - Industrial Control and Systems: Controllers, Contactors, and Overload Relays, Rated Not More Than 2000 Volts AC or 750 Volts DC.
- H. NEMA MG 1 - Motors and Generators.

### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings: Include detailed plans, elevations, details of framing members, required clearances, anchors, and accessories. Include relationship with adjacent materials.

**\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.**

- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

## 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.

**\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.**

- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Install in areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship and installation is approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- C. Store materials in a dry, warm, ventilated weathertight location.

## 1.7 COORDINATION

- A. Coordinate Work with other operations and installation of adjacent finish materials to avoid damage to installed materials.

## 1.8 WARRANTY

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Overhead Door Corporation, 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: [www.overheaddoor.com](http://www.overheaddoor.com). E-mail: info@overheaddoor.com.

**\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.**

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

### 2.2 ROLLING SECURITY GRILLES

**\*\* NOTE TO SPECIFIER \*\* Model 671 specified in the following two paragraphs are available with Manual or Automatic emergency release devices for power operated doors. Select the paragraph for the release device required and delete the one not required.**

A. Rolling Metal Security Grilles: Overhead Door Corporation Model 671 with an option for Manual Emergency Release for power operated doors.

1. Curtain: Horizontal 5/16 inch (7.8 mm) diameter rods with network of vertically interlocking links to form a pattern. Bottom bar extruded aluminum tubular shape.

a. Material:

**\*\* NOTE TO SPECIFIER \*\* Select the material required from the following paragraphs and delete the paragraph not required.**

- 1) Galvanized Steel.
- 2) Stainless Steel.

b. Vertical Rod Spacing:

**\*\* NOTE TO SPECIFIER \*\* Select the spacing required from the following paragraphs and delete the paragraph not required.**

- 1) 2 inches (51 mm) on center, available in straight lattice or brick patterns.
- 2) 1-1/2 inches (38 mm) on center, only available with straight lattice pattern.
- 3) 3 inches (76 mm) on center; only available with Infill Panels.

c. Pattern:

**\*\* NOTE TO SPECIFIER \*\* Select the pattern required from the following paragraphs and delete the paragraphs not required.**

- 1) Straight lattice; horizontal spacing 3 inches (76 mm) on center.
- 2) Straight lattice; horizontal spacing 6 inches (152 mm) on center.
- 3) Straight lattice; horizontal spacing 9 inches (228 mm) on center.
- 4) Brick pattern; horizontal spacing 9 inches (228 mm) on center.
- 5) Infill Panels: Lexan panel in straight lattice pattern 12 inches on center.

2. Finish:

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs and delete the paragraph not required. Galvanized Steel finish is standard.**

- a. Stainless Steel: No. #4 finish.
- b. Stainless Steel: No. #2B finish.
- c. Galvanized Steel: Rust inhibitive primer.
- d. Steel with PowderGuard Premium powder coat, color as selected by Architect.
- e. Prime all non-galvanized, exposed ferrous surfaces with black powder coat finish.

3. Bottom Bar:

- a. Double angle steel bottom bar.
  - 1) Finish: PowderGuard Premium powder coat, black.
  - 2) Finish: PowderGuard Premium powder coat color as selected by the Architect.
  - 3) Finish: PowderGuard Zinc base coat, gray.
  - 4) Premium powder coat color as selected by the Architect
- b. Double angle stainless steel bottom bar.
  - 1) Stainless Steel: No. #4 finish.
  - 2) Stainless Steel: No. #2B finish.

4. Guides:

- a. Extruded aluminum shapes with retainer grooves and continuous silicone treated wool-pile strips or PVC inserts to reduce noise and assist operation.

**\*\* NOTE TO SPECIFIER \*\* Select the guides mounting required from the following paragraphs and delete the paragraph not required.**

- b. Guides face mounted on adjacent construction.
- c. Guides free standing with tubular steel support frames supplied with grilles.
- d. Finish:

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs and delete the paragraph not required. Aluminum Mill Finish is standard.**

- 1) Mill Finish.
  - 2) Clear anodized.
  - 3) Bronze anodized.
  - 4) Black anodized.
  - 5) PowderGuard Premium powder coat, color as selected by Architect.
5. Brackets: Minimum 3/16 inch (4.8 mm) steel to support barrel, counterbalance and hood as applicable.
- a. Finish:

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs and delete the paragraph not required. Black powder coat is standard.**

- 1) PowderGuard Premium powder coat, black.
  - 2) PowderGuard Premium powder coat, color as selected by Architect.
  - 3) PowderGuard Zinc base coat, gray.
  - 4) PowderGuard Zinc base coat with PowderGuard Premium powder coat, color as selected by the Architect.
  - 5) Galvanized, hot dipped.
6. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with maximum deflection of 0.03 inches per foot of span. Counterbalance adjustable by means of an adjusting tension wheel.

**\*\* NOTE TO SPECIFIER \*\* Select the hood type required from the following paragraphs and delete the paragraphs not required. Delete if not required for installation above ceiling.**

7. Hood:
- a. Galvanized steel, 24 gauge (6 mm).
  - b. Primed steel, 24 gauge (6 mm).
  - c. Steel: PowderGuard Premium powder coat color as selected by the Architect.
  - d. Stainless Steel: No. #4 finish.
  - e. Stainless Steel: No. #2B finish.

**\*\* NOTE TO SPECIFIER \*\* Select manual or electric operation as required from the following paragraphs and delete the paragraphs not required.**

8. Manual Operation:

**\*\* NOTE TO SPECIFIER \*\* Select the manual operation required from the following paragraphs and delete the paragraphs not required.**

- a. Push up.
  - b. Chain hoist.
  - c. Crank.
9. Electric Motor Operation: Provide UL listed electric operator, size as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.

**\*\* NOTE TO SPECIFIER \*\* Select the edge protection required from the following paragraphs and delete the paragraph not required.**

- a. Sensing Edge Protection:
  - 1) Pneumatic sensing edge.
  - 2) Electric sensing edge.
- b. Operator Controls: Control stations with open, close, and stop functions.

**\*\* NOTE TO SPECIFIER \*\* Select the operation required from the following paragraphs and delete the paragraphs not required.**

- 1) Push-button operation.
- 2) Key operation.
- 3) Push-button and key operation.

**\*\* NOTE TO SPECIFIER \*\* Select the control mounting type required from the following paragraphs and delete the paragraph not required.**

- 4) Surface mounting.
- 5) Flush mounting.

**\*\* NOTE TO SPECIFIER \*\* Select the location required from the following paragraphs and delete the paragraphs not required.**

- 6) For interior location.
- 7) For exterior location.
- 8) For both interior and exterior location.

**\*\* NOTE TO SPECIFIER \*\* Electric operated doors are available with Electric Motor Operation or Electric Motor with Manual Egress lever. Select the emergency egress device from the following paragraph and delete if not required.**

- c. Emergency Egress: Provide code compliant emergency egress system that automatically unlocks and manually releases grille part way to permit passage, even if power is not available.

**\*\* NOTE TO SPECIFIER \*\* Select the special operation type required from the following paragraphs and delete the paragraphs not required. Delete entirely if special operation is not required. Note that only Photocell Operation and Radio Control Operation are available with Emergency Egress (EEG) option above.**

- d. Special Operation:
  - 1) Photocell operation.
  - 2) Radio control operation.
  - 3) Vehicle detector operation.
  - 4) Card reader control.
  - 5) Door timer operation.
  - 6) Commercial light package.
  - 7) Explosion and dust ignition proof control wiring.

10. Locking:

**\*\* NOTE TO SPECIFIER \*\* Select the locking type required from the following paragraphs and delete the paragraphs not required.**

- a. Cremone lock.
- b. Chain keeper locks for chain hoist operation.
- c. Cylinder lock for electric operation with interlock switch.
- d. Thumb turns.

B. Rolling Metal Security Grilles: Overhead Door Corporation Model 671 with an Automatic Release for power operated doors.

1. Curtain: Horizontal 5/16 inch (7.8 mm) diameter rods with network of vertically interlocking links to form a pattern. Bottom bar extruded aluminum tubular shape.

a. Material:

**\*\* NOTE TO SPECIFIER \*\* Select the material required from the following paragraphs and delete the paragraph not required.**

- 1) Galvanized Steel.
- 2) Stainless Steel.

b. Vertical Rod Spacing:

**\*\* NOTE TO SPECIFIER \*\* Select the spacing required from the following paragraphs and delete the paragraph not required.**

- 1) 2 inches (51 mm) on center.
- c. Pattern:

**\*\* NOTE TO SPECIFIER \*\* Select the pattern required from the following paragraphs and delete the paragraphs not required.**

- 1) Straight lattice; horizontal spacing 3 inches (76 mm) on center.
- 2) Straight lattice; horizontal spacing 6 inches (152 mm) on center.
- 3) Straight lattice; horizontal spacing 9 inches (228 mm) on center.

2. Finish:

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following two paragraphs and delete the paragraph not required.**

- a. Stainless Steel: No. #4 finish.
  - b. Stainless Steel: No. #2B finish.
  - c. Galvanized Steel: Rust inhibitive primer.
  - d. Steel with PowderGuard Premium powder coat, color as selected by Architect.
  - e. Prime all non-galvanized, exposed ferrous surfaces with PowderGuard Premium powder coat, black.
3. Bottom Bar:
- a. Double angle steel bottom bar.
    - 1) Finish: PowderGuard Premium powder coat, black.
    - 2) Finish: PowderGuard Premium powder coat color as selected by the Architect.
    - 3) Finish: PowderGuard Zinc base coat, gray.
    - 4) Premium powder coat color as selected by the Architect
  - b. Double angle stainless steel bottom bar.
    - 1) Stainless Steel: No. #4 finish.
    - 2) Stainless Steel: No. #2B finish
4. Guides:
- a. Extruded aluminum shapes with retainer grooves and continuous silicone treated wool-pile strips or PVC inserts to reduce noise and assist operation.

**\*\* NOTE TO SPECIFIER \*\* Select the guides mounting required from the following paragraphs and delete the paragraph not required.**

- b. Guides face mounted on adjacent construction.
- c. Guides free standing with tubular steel support frames supplied with grilles.
- d. Finish:

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs and delete the paragraph not required. Mill Finish is standard.**

- 1) Mill Finish.
  - 2) Clear anodized.
  - 3) Bronze anodized.
  - 4) Black anodized.
  - 5) PowderGuard Premium powder coat, color as selected by Architect.
5. Brackets: Minimum 3/16 inch (4.8 mm) steel to support barrel, counterbalance and hood as applicable.
- a. Finish:

**\*\* NOTE TO SPECIFIER \*\* Select the finish required from the following paragraphs and delete the paragraph not required. Black powder coat is standard.**

- 1) PowderGuard Premium powder coat, black.
- 2) PowderGuard Premium powder coat, color as selected by Architect.
- 3) PowderGuard Zinc base coat, gray.
- 4) PowderGuard Zinc base coat with PowderGuard Premium powder coat, color as selected by the Architect.
- 5) Galvanized, hot dipped.

6. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with maximum deflection of 0.03 inches per foot of span. Counterbalance adjustable by means of an adjusting tension wheel.

**\*\* NOTE TO SPECIFIER \*\* Select the hood type required from the following paragraphs and delete the paragraphs not required. Delete if not required for installation above ceiling.**

7. Hood:
  - a. Galvanized steel, 24 gauge (6 mm).
  - b. Primed steel, 24 gauge (6 mm).
  - c. Steel: PowderGuard Premium powder coat color as selected by the Architect.
  - d. Stainless Steel: No. #4 finish.
  - e. Stainless Steel: No. #2B finish.
8. Electric Motor with Emergency Egress: Provide code compliant emergency egress operator system with self-locking mechanism that automatically unlocks, automatically releases, and opens grille fully to permit passage if power is not available. Provide UL listed electric operator, size as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.

**\*\* NOTE TO SPECIFIER \*\* Consult manufacturer's Operator Selection Charts for door models, weights and sizes suitable for rated horsepower specified. Select ratings required and delete those not required.**

- a. 1/2 horsepower single phase.
    - 1) 115 V
    - 2) 230 V
  - b. 1 horsepower three phase.
    - 1) 230 V.
    - 2) 460 V.
9. Mounting:
    - a. Front of hood.
    - b. Mounting Left Hand or Right Hand.
  10. Release: Push/Pull Emergency Release Button.
    - a. Surface mount.
    - b. Flush mount.

**\*\* NOTE TO SPECIFIER \*\* Overhead Door Corporation recommends the installation of an external reversing device for all electrically operated commercial doors. If a sensing edge or some other reversing device is not installed, a constant contact control switch must be used to close the door. We recommend a Fail Safe electric sensing edge that will not allow the door to close if the sensing edge is damaged or not working properly.**

11. Entrapment Protection:
  - a. 2 wire electric sensing edge.
  - b. Photo cell operation.
12. Control accessories: Control Panel is to be supplied at same voltage as operator selected.
13. Locking: Model 670 egress grille self-locking mechanism to prevent forced opening of a closed grille that does not interfere with normal electric operation but fail safe for emergency operation.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify opening sizes, tolerances and conditions are acceptable.
- B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.



- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

**\*\* NOTE TO SPECIFIER \*\* Select the following paragraph for electric operation of grilles and delete if not required.**

- E. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.
- F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- G. Install perimeter trim and closures.

### 3.4 ADJUSTING

- A. Test security grilles for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Adjust hardware and operating assemblies for smooth and noiseless operation.

### 3.5 CLEANING

- A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
- B. Remove labels and visible markings.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

### 3.6 PROTECTION

- A. Protect installed products until completion of project.

END OF SECTION