



**SECTION 083326  
UPWARD COILING GRILLES  
MODEL 600**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Overhead coiling metal grilles.

**1.02 RELATED REQUIREMENTS**

- A. Section << **055000 - Metal Fabrications**>>: << **Support framing; Framed opening; or \_\_\_\_\_**>>.
- B. Section << **062000 - Finish Carpentry**>>: Wood casings and moldings.
- C. Section << **083323 - Overhead Coiling Doors**>>.
- D. Section << **087100 - Door Hardware**>>: Cylinder cores and keys.
- E. Section << **260533.13 - Conduit for Electrical Systems**>>: Conduit from electric circuit to operator and from operator to control station.
- F. Section << **260583 - Wiring Connections**>>: Power to disconnect.

**1.03 REFERENCE STANDARDS**

- A. ITS (DIR) - Directory of Listed Products; Current Edition.
- B. UL 508A - Industrial Control Panels; Current Edition, Including All Revisions.
- C. UL (DIR) - Online Certifications Directory; Current Edition.

**1.04 SUBMITTALS**

- A. Product Data: Provide details of general construction component connections<< **and electrical equipment; \_\_\_\_\_; or None - N/A**>>.
1. Provide documentation showing electrical components are listed and classified for purpose specified by <<ITS (DIR)>>, <<UL (DIR)>>, or testing firm acceptable to authorities having jurisdiction.
- B. Shop Drawings: Indicate dimensioning, anchorage methods, hardware locations, and installation details.
- C. Manufacturer's Instructions: Indicate installation sequences and procedures, as well as adjustment and alignment procedures.
- D. Manufacturer's qualification statement.
- E. Installer's qualification statement.
- F. Operation and Maintenance Data: Indicate << **lubrication requirements and frequency; periodic adjustments required; and \_\_\_\_\_**>>.
- G. Specimen warranty.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum << **3 years; or \_\_\_\_\_**>> of<< **documented; \_\_\_\_\_; or None - N/A**>> experience.
- B. Installer Qualifications: Company specializing in performing work of type specified and with minimum << **3 years; or \_\_\_\_\_**>> of<< **documented; \_\_\_\_\_; or None - N/A**>> experience<< **and approved by manufacturer; or None - N/A**>>.

**1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Store products in manufacturer's unopened packaging until ready for installation.

- B. Protect materials from exposure to moisture.
- C. Store materials in dry, warm, ventilated, weathertight location.

### 1.07 WARRANTY

- 1. Manufacturer Door-Only Warranty: Provide manufacturer warranty for door assembly for duration indicated under individual doors.

## PART 2 PRODUCTS

### 2.01 MANUFACTURER

- A. Wayne Dalton; www.wayne-dalton.com; 1 (800) 827-3667.
- B. Substitutions: Not permitted.

### 2.02 UPWARD COILING GRILLES

- A. Wayne Dalton; Security Grille Model 600.
  - 1. Grille: Horizontal bar curtain, coiling on overhead counterbalanced shaft.
  
  - 2. Width: << \_\_\_\_\_ feet ( \_\_\_\_\_ mm)>>.
  
  - 3. Height: << \_\_\_\_\_ feet ( \_\_\_\_\_ mm)>>.
  - 4. Mounting: << **Between jamb; Surface-mounted on side indicated on drawings;**  
**or \_\_\_\_\_>>.**
  - 5. Opening Speed: Door to operate at variable speed of << **6 to 12 inches (152 to 305 mm)**>> per second.
  - 6. Closing Speed: Door to operate at variable speed << **6 to 12 inches (152 to 305 mm)**>> per second.
  - 7. Operation Cycles: Capable of operating for 20,000 cycles, minimum. One operation cycle is complete when grille is opened from closed position to fully open position and returned to closed position.
  - 8. Available Warranty:
    - a. Door-Only Warranty: One year.
  - 9. Grille Material: << **Steel; Stainless steel; or Aluminum**>>.
    - a. Pattern: << **Brick; Straight lattice; Straight lattice with polycarbonate inserts;**  
**or \_\_\_\_\_>>.**
  
    - b. Steel Finish: << **Galvanized and primer painted; Powder coat; color: \_\_\_\_\_;**  
**or \_\_\_\_\_>>.**
  
    - c. Aluminum Finish: << **Mill finish; Clear, anodized; Bronze, anodized; Powder coat; color: \_\_\_\_\_; or \_\_\_\_\_>>.**
    - d. Stainless Steel Finish: No.4 finish.

- e. Vertical Spacing Between Rods: << **1-1/2 inches (38 mm); 2 inches (51 mm); 3 inches (76 mm); or \_\_\_\_\_ inches (\_\_\_\_\_ mm)>> on center.**
  
- f. Grille Pattern: << **G-6 straight pattern; 9-inch (229 mm) spacing; G-6 straight pattern; 9-inch (229 mm) spacing with acrylic lites and aluminum curtain; G-6 modified straight pattern; 6-inch (152 mm) spacing; G-8 straight pattern; 4-inch (102 mm) spacing; G-3 straight pattern; 3-inch (76 mm) spacing; G-7 straight pattern; 2-inch (51 mm) spacing; G-1 brick pattern; 9-inch (229 mm) spacing; 4.5 inch (114 mm) staggered; G-1 modified brick pattern; 9-inch (229 mm) spacing; 3.125 inch (79 mm) staggered; or Centerlock security pattern>>.**
  
- 10. Bottom Bar: << **Galvanized steel; 6063-T6 aluminum; 304 stainless steel; or \_\_\_\_\_>> with nylon end caps and vinyl astragals.**
  - a. Steel Profile: << **Extruded T; Extruded tube; Single angle; Double angle; Sloping; Curb cutout; or \_\_\_\_\_>>.**
  - b. Aluminum Profile: << **Extruded T; Extruded tube; Single angle; Double angle; Sloping; Curb cutout; or \_\_\_\_\_>>.**
  - c. Stainless Steel Profile: << **Extruded T; Extruded tube; Single angle; Double angle; Sloping; Curb cutout; or \_\_\_\_\_>>.**
  
  - d. Steel Finish: << **Hot-dip galvanized; Powder coat to match black anodized; Powder coat to match bronze anodized; Powder coat to match clear anodized; or Powder coat; color: \_\_\_\_\_>>.**
  - e. Aluminum Finish: << **Black, anodized; Bronze, anodized; Clear, anodized; Mill finish; or Powder coat; color: \_\_\_\_\_>>.**
  - f. Stainless Steel Finish: << **No.2B mill; No.4 satin; or \_\_\_\_\_>>.**
  
- 11. Locking Options to Include: << **Best cylinder.; Best cylinder with thumb turn.; Cylinder.; Cylinder with thumb turn.; Slide lock.; EZ-LOK with emergency egress.; \_\_\_\_\_; or None - N/A>>**
  - a. Lock Locations: << **Both jambs; Center; Left only; Right only; or \_\_\_\_\_>>.**
  - b. Lock Access: << **Both sides; Coil side; Opposite coil side; or \_\_\_\_\_>>.**
- 12. Seals:
  - a. Bottom Seal Astragal: << **Not required; Required; or \_\_\_\_\_>>.**
- 13. Side Guides, Channels: Constructed with members fully bolted together.

- a. Material: << **Steel; Aluminum; 304 stainless steel; or \_\_\_\_\_**>>.
  - b. Steel Finish: << **Black, anodized; Bronze, anodized; Clear, anodized; Hot-dip galvanized; Mill finish; No.2B mill; No.4 satin; Powder coat to match black anodized; Powder coat to match bronze anodized; Powder coat to match clear anodized; Powder coat; color: \_\_\_\_\_; or \_\_\_\_\_**>>.
  - c. Aluminum Finish: << **Black, anodized; Bronze, anodized; Clear, anodized; Mill finish; or Powder coat; color: \_\_\_\_\_**>>.
  - d. Stainless Steel Finish: << **No.2B mill; No.4 satin; or \_\_\_\_\_**>>.
14. Brackets: << **Stainless steel; Steel; or \_\_\_\_\_**>> to support counterbalance and curtain. Include sealed ball bearings to support counterbalance assembly and brackets to form enclosures and support of hood.
- a. Thickness: << **1/16 inch (1.5 mm)**>> minimum.
  - b. Steel Finish: << **Hot-dip galvanized; Powder coat; color: \_\_\_\_\_; or \_\_\_\_\_**>>.
  - c. Stainless Steel Finish: << **No.2B mill; No.4 satin; or \_\_\_\_\_**>>.
15. Counterbalance: Helical-torsion-spring type, housed in steel tube or pipe barrel and supporting curtain with deflection limited to << **0.03 inch per foot (2.5 mm per m)**>> of span. Adjustable spring tension required.
16. Hood: << **Aluminum; Steel; 304 stainless steel; Not required; or \_\_\_\_\_**>>.
- a. Provide intermediate hood supports over << **16 feet (4.9 meters)**>> opening width.
  - b. Finish: << **Black, anodized; Bronze, anodized; Clear, anodized; Galvanized, G90 (Z275); Match curtain; Mill finish; No.4 satin; Powder coat to match clear anodized; Powder coat to match bronze anodized; Powder coat to match black anodized; Powder coat; color: \_\_\_\_\_; or \_\_\_\_\_**>>.
17. Manual Operation: << **Chain hoist; Awning crank; Wall crank; Push-up; or \_\_\_\_\_**>>.
18. Motor Operation: << **Not required; Provide manufacturer's recommended electric operator; or \_\_\_\_\_**>>.
- a. Operator: << **UL-listed; and \_\_\_\_\_**>>.
  - b. Size: As recommended by manufacturer to move door at opening and closing speeds indicated above.
  - c. Manual Override: << **Hoist; Hoist and jackshaft release; Jackshaft release; or \_\_\_\_\_**>>.
  - d. Timer to Close: << **Automatic closing, controlled by adjustable, hold-open time delay; Not required; or \_\_\_\_\_**>>.
  - e. Operation Supply Voltage: << **220V, 1-phase, 50Hz; 220V, 3-phase, 50Hz; 400V, 3-phase, 50Hz; 115/208/230V, 1-phase, 60Hz; 208/230/460V, 3-phase, 60Hz; 575V, 3-phase, 60Hz; or \_\_\_\_\_**>>.

- f. Signaling Device: << **Horn and strobe combination**; **Traffic warning light**; or \_\_\_\_>>.
- g. Actuation Device: Provide << **push button**; **key switch**; **pull cord**; **loop detector**; **motion detector**; **treadle switch**; **radio control**; and \_\_\_\_>>.
- h. Motor Mounting: << **Bench mount**; **Front of hood**; **Through wall**; **Top of hood**; **Wall-mounted**; or \_\_\_\_>>, << **right-hand side**; **left-hand side**; or \_\_\_\_>>.
- i. Obstruction Safety Detection:
  - 1) Constant Contact Button: << **No entrapment**; **Not required**; **Required**; or \_\_\_\_>>.
  - 2) Photo Eyes: << **NEMA 4X**; **Reflective.**; **Standard.**; \_\_\_\_.; or **None - N/A**>>
  - 3) Light Curtain: << **3 feet (0.9 m)**; **6 feet (1.8 m)**; or \_\_\_\_ feet (\_\_\_\_ m)>>.
  - 4) Sensing Edge: << **Two-wire reversing**; **Wireless reversing**; or \_\_\_\_>>.
- j. Emergency Egress: 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 unavailable.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify adjacent construction is suitable for grille installation.
- B. Verify electrical services are installed and accessible.
- C. Verify grille opening is plumb, header is level, and dimensions are correct.
- D. Notify <<**Architect**>> of unacceptable conditions or varying dimensions.
- E. Commencing installation indicates acceptance of substrate and grille opening conditions.

### **3.02 INSTALLATION**

- A. Install grille unit assembly in accordance with manufacturer's instructions.
- B. Securely fasten assembly to wall construction using anchorage devices and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure.<< **Secure guides to structural members only**; \_\_\_\_.; or **None - N/A**>>
- D. Fit and align assembly including hardware, level and plumb to provide smooth operation.
- E. See Section << **260583**>> to coordinate installation of electrical service.
- F. Complete wiring from disconnect to unit components.
- G. Install enclosure and perimeter trim.

### **3.03 TOLERANCES**

- A. Maintain dimensional tolerances and alignment with adjacent work.
- B. Maximum Variation from Plumb: << **1/16 inch (1.5 mm)**; or \_\_\_\_ inch (\_\_\_\_ mm)>>.
- C. Maximum Variation from Level: << **1/16 inch (1.5 mm)**; or \_\_\_\_ inch (\_\_\_\_ mm)>>.
- D. Longitudinal or Diagonal Warp: Plus or minus << **1/8 inch per 10 feet (3 mm per 3 m)**; or \_\_\_\_ inch per 10 feet (\_\_\_\_ mm per 3 m)>> straight edge.

### **3.04 ADJUSTING**

- A. Adjust grille, hardware, and operating assemblies for smooth and noiseless operation.

### **3.05 CLEANING**

- A. See Section << 017000 - Execution and Closeout Requirements>> for additional requirements.
- B. Clean grille and components.
- C. Remove labels and visible markings.

**END OF SECTION**