

**The Genuine. The Original.**



SECTION 08360 [08 36 00]  
MODEL 423 SECTIONAL OVERHEAD DOORS

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**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Steel Sectional Overhead Doors.
- B. Electric Operators and Controls.
- C. Operating Hardware, tracks, and support.

**1.2 RELATED SECTIONS**

- A. Section 03300 - Cast-In-Place Concrete.
- B. Section 04810 – Concrete Unit Masonry.
- C. Section 05500 - Metal Fabrications.
- D. Section 06114 – Wood Framing.
- E. Section 07900 - Joint Sealants.
- F. Section 08710 - Door Hardware.
- G. Section 09900 - Paints and Coatings.
- H. Section 11150 - Parking Control Equipment.
- I. Section 16130 - Raceway and Boxes.
- J. Section 16150 - Common Work Results for Electrical.

**1.3 REFERENCES**

- A. ANSI/DASMA 102 - American National Standard Specifications for Sectional Overhead Type Doors.

**1.4 DESIGN / PERFORMANCE REQUIREMENTS**

- A. Wiring Connections: Requirements for electrical characteristics.
  - 1. 115 volts, single phase, 60 Hz.
  - 2. 230 volts, single phase, 60 Hz.
  - 3. 230 volts, three phase, 60 Hz.
  - 4. 460 volts, three phase, 60 Hz.
- B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

#### 1.5 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: Indicate plans and elevations including opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
- D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- E. Operation and Maintenance Data.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.
- B. Installer Qualifications: Authorized representative of the manufacturer with minimum five years documented experience.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened labeled packaging until ready for installation.
- B. Protect materials from exposure to moisture until ready for installation.
- C. Store materials in a dry, ventilated weathertight location.

#### 1.8 PROJECT CONDITIONS

- A. Pre-Installation Conference: Convene a pre-installation conference just prior to commencement of field operations, to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.

#### 1.9 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](mailto:info@overheaddoor.com).
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

### 2.2 STEEL SECTIONAL OVERHEAD DOORS

- A. Insulated Steel Sectional Overhead Doors: Model 423 Insulated Steel Doors by Overhead Door Corporation. Units shall have the following characteristics:
  - 1. Door Assembly: Insulated steel door assembly of roll formed steel type with tongue and groove meeting rails and box shaped 20 gauge stile construction.
    - a. Panel Thickness: 2 inches (51 mm).
    - b. Exterior Surface: Ribbed.
    - c. Exterior Steel: 20 gauge, galvanized steel
    - d. Back Cover:
      - 1) .022 inch minimum embossed pre-painted white steel.
      - 2) Insulation covered with vinyl.
    - e. Center and End Stiles: 20 gauge steel.
    - f. Spring Counterbalance: Sized to weight of the door, with a helically wound, oil tempered torsion spring mounted on a steel shaft; cable drum of diecast aluminum with high strength galvanized aircraft cable. Sized with a minimum 7 to 1 safety factor.
      - 1) Standard cycle spring: 10,000 cycles.
      - 2) High cycle spring: 25,000 cycles.
      - 3) High cycle spring: 50,000 cycles.
      - 4) High cycle spring: 75,000 cycles.
      - 5) High cycle spring: 100,000 cycles.
    - g. Insulation: 1-5/8 inch expanded polystyrene.
    - h. Thermal Values:
      - 1) Polystyrene - R-value of 7.64;
    - i. Partial Glazing of Steel Panels:
      - 1) Impact Rated: 1/4 inch (6 mm) Polycarbonate glazing.
  - 2. Finish and Color: Two coat baked-on polyester with white exterior and white interior color.
  - 3. Wind Load Design: Design as calculated in accordance with applicable code as follows:
    - a. Design pressure of plus 11.4 minus 12.7 psf at 9 feet 4 inches wide to 31.6/ minus 35.4 psf at 24 feet 2 inches wide.
    - b. Provide to meet FBC, TDI and Miami-Dade Specifications. Large Missile-Impact – Garage Doors up to 24 feet 2 inches wide
  - 4. Hardware: Galvanized steel hinges and fixtures. Ball bearing rollers with hardened steel races.
  - 5. Lock:
    - a. Interior mounted slide lock.
    - b. Interior mounted slide lock with interlock switch for automatic operator.

- c. Keyed lock.
  - d. Keyed lock with interlock switch for automatic operator.
  - e. Locking mechanism designed to maintain security for exterior while permitting break out when impacted from the inside.
6. Weatherstripping:
- a. Flexible bulb-type strip at bottom section.
  - b. Flexible Jamb seals.
  - c. Flexible Header seal.
7. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.
- a. Size:
    - 1) 2 inch (51 mm).
    - 2) 3 inch (76 mm).
  - b. Type:
    - 1) Standard lift.
    - 2) Vertical lift.
    - 3) High lift.
    - 4) Low headroom.
8. Manual Operation: Pull rope.
9. Manual Operation: Chain hoist.
10. Electric Motor Operation: Provide UL listed electric operator, size and type as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second. Operator shall meet UL325/2010 requirements for continuous monitoring of safety devices.
- a. Entrapment Protection: Required for momentary contact, includes radio control operation.
    - 1) Pneumatic sensing edge up to 18 feet (5.5 m) wide. Constant contact only complying with UL 325/2010.
    - 2) Electric sensing edge monitored to meet UL 325/2010.
    - 3) Photoelectric sensors monitored to meet UL 325/2010.
  - b. Operator Controls:
    - 1) Push-button operated control stations with open, close, and stop buttons.
    - 2) Key operated control stations with open, close, and stop buttons.
    - 3) Push-button and key operated control stations with open, close, and stop buttons.
    - 4) Flush mounting.
    - 5) Surface mounting.
    - 6) Interior location.
    - 7) Exterior location.
    - 8) Both interior and exterior location.
  - c. Special Operation:
    - 1) Pull switch.
    - 2) Vehicle detector operation.
    - 3) Radio control operation.
    - 4) Card reader control.
    - 5) Photocell operation.
    - 6) Door timer operation.
    - 7) Commercial light package.
    - 8) Explosion and dust ignition proof control wiring.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until openings have been properly prepared.
- B. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.
- C. Verify electric power is available and of correct characteristics.
- D. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean adjacent 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 overhead doors and track in accordance with approved shop drawings and the manufacturer's printed instructions.
- B. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.
- C. Anchor assembly to wall construction and building framing without distortion or stress.
- D. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- E. Fit and align door assembly including hardware.
- F. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.

### 3.4 CLEANING AND ADJUSTING

- A. Adjust door assembly to smooth operation and in full contact with weatherstripping.
- B. Clean doors, frames, glass, and polycarbonate according to manufacturer's instructions.
- C. Remove temporary labels and visible markings. Do not remove polycarbonate care and maintenance label required to maintain warranty.

### 3.5 PROTECTION

- A. Do not permit construction traffic through overhead door openings after adjustment and cleaning.
- B. Protect installed products until completion of project.
- C. Touch-up, damaged coatings and finishes and repair minor damage before Substantial Completion.

END OF SECTION