SECTION 08360 [08 36 00]
SECTIONAL OVERHEAD DOORS
MODEL 418 INSULATED SECTIONAL STEEL DOORS

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PART 1 GENERAL

1.1 SECTION INCLUDES

A. Insulated 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. E-mail: info@overheaddoor.com.

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 INSULATED SECTIONAL OVERHEAD DOORS

A. Insulated Steel Sectional Overhead Doors: Model 418 Insulated Steel Doors by Overhead Door Corporation. Units shall have the following characteristics:
   1. Door Assembly: Insulated steel door assembly with rabbeted meeting rails to provide full-width interlocking structural rigidity.
      a. Panel Thickness: 2 inches (51 mm).
      b. Exterior Surface: Flush.
      c. Exterior Steel: 16 gauge, hot-dip galvanized.
      d. Back Cover:
         1) 26 gauge steel.
         2) Poly-Backed.
         3) High Impact Polystyrene Back cover.
      e. Center and End Stiles: 16 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: Polystyrene.
      h. Thermal Values:
         1) Polystyrene – Calculated section R-value of 7.35.
      i. Partial Glazing of Steel Panels:
         1) Insulated double strength glass, 24 inch by 7 inch (610 mm by 178 mm) window.
         2) Insulated tempered glass, 24 inch by 7 inch (610 mm by 178 mm) window.
      j. Full Glazed Aluminum Sash Panels:
         1) 1/8 inch (3 mm) Acrylic glazing.
         2) 1/4 inch (6 mm) Acrylic glazing.
         3) 1/8 inch (3 mm) Polycarbonate glazing.
         4) 1/4 inch (6 mm) Polycarbonate glazing.
         5) 1/2 inch (12.5 mm) Polycarbonate glazing.
         6) 1/8 inch (3 mm) Tempered Glass.
         7) 1/4 inch (6 mm) Tempered Glass.

8) 1/2 inch (12.5 mm) Tempered Glass.
9) 1/4 inch (6 mm) Wire Glass.
10) 1/2 inch (12.5 mm) Insulating Glass.
11) 1/8 inch (3 mm) Double strength glass.

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 _____ lb/sq ft (_____kPa).
   b. Provide to meet Florida Building Code Product Approval #FL 11734 Non-Impact.
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.
      5) Follow roof slope.
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