

SECTION 08360 [08 36 13]

SECTIONAL OVERHEAD DOORS

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** NOTE TO SPECIFIER ** Wayne Dalton; Commercial Sectional Overhead Door products.

This section is based on the products of Wayne Dalton, which is located at:

2501 S. State Highway 121 Business, Suite 200

Lewisville, TX 75067 Phone: (800) 827-3667

Web Site: www.wayne-dalton.com. [click Here] for additional information.

Since its inception in 1954, Wayne Dalton has become known as a company with innovative ideas, which far exceed industry standards. Often, Wayne Dalton is the only source for the latest garage door and garage door opener features. Because the company has always maintained a staunch commitment to developing innovative new products, Wayne Dalton is now a world leader in the garage door and garage door opener industry.

Wayne Dalton Rolling Doors have a long history of excellence in the design and construction of doors that have met and often exceeded the needs and expectations of even the most critical projects.

With numerous innovations created and experience acquired over the years, Wayne Dalton continues to lead all other manufacturers with both standard and custom-made doors from a variety of materials and colors to meet almost any need.

So whether it's enormous Titan rolling doors, protective FireStar rolling steel fire doors, ventilated Secur-Vent doors, or secure Accordion-Folding Grilles, you can feel confident that with Wayne Dalton's many years of knowledge and experience, you will get the best possible solution for your building application needs.

PART 1 GENERAL

1.1 SECTION INCLUDES

- ** NOTE TO SPECIFIER ** Delete items below not required for project.
 - A. Insulated Sectional Overhead Doors.
 - B. Steel Sectional Overhead Doors.
 - C. Glazed Aluminum Sectional Overhead Doors.

- D. Electric Operators and Controls.
- E. Operating Hardware, tracks, and support.

1.2 RELATED SECTIONS

- ** NOTE TO SPECIFIER ** Delete any sections below not relevant to this project; add others as required.
 - A. Section 03300 Cast-In-Place Concrete: Prepared opening in concrete. Execution requirements for placement of anchors in concrete wall construction.
 - B. Section 04810 Unit Masonry Assemblies: Prepared opening in masonry. Execution requirements for placement of anchors in masonry wall construction.
 - C. Section 05500 Metal Fabrications: Steel frame and supports.
 - D. Section 06114 Wood Blocking and Curbing: Rough wood framing and blocking for door opening.
 - E. Section 07900 Joint Sealers: Perimeter sealant and backup materials.
 - F. Section 08710 Door Hardware: Cylinder locks.
 - G. Section 09900 Paints and Coatings: Field painting.
 - H. Section 11150 Parking Control Equipment: Remote door control.
 - Section 16130 Raceway and Boxes: Empty conduit from control station to door operator.
 - J. Section 16150 Wiring Connections: Electrical service to door operator.

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. ANSI/DASMA 102 American National Standard Specifications for Sectional Overhead Type Doors.
 - B. ASTM A 123 Zinc hot-dipped galvanized coatings on iron and steel products.
 - C. ASTM A 216 Specifications for sectional overhead type doors.
 - D. ASTM A 229 Steel wire, oil-tempered for mechanical springs.
 - E. ASTM A 653 Steel sheet, zinc-coated galvanized by the hot-dipped process, commercial quality.
 - F. ASTM D 1929 Ignition temperature test to determine flash and ignition temperature of foamed plastics.
 - G. ASTM E 84 Tunnel test for flame spread and smoke developed index.

- H. ASTM E 330 Structural performance of exterior windows, curtain walls, and doors by uniform static air pressure difference.
- I. ASTM E 413 Classification for Rating Sound Insulation
- J. ASTM E 1332 Standard Classification for Rating Outdoor-Indoor Sound Attenuation.
- K. ASTM E 283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

1.4 DESIGN / PERFORMANCE REQUIREMENTS

** NOTE TO SPECIFIER ** Use the applicable building code to determine the actual loading required and edit the following paragraph accordingly. Coordinate with the manufacturer for the selection of doors to meet the required criteria.

A.	Wind Loads: Design and size components to withstand loads caused by pressure
	and suction of wind acting normal to plane of wall as calculated in accordance with
	applicable code.

1.	Design pressure of	lb/sq ft (kPa).
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** NOTE TO SPECIFIER ** Edit the following paragraph for power operators as required. Delete if not required.

- B. 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.
- C. 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.
 - 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

- 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

- ** NOTE TO SPECIFIER ** Warranty paragraph for Series 2411, 2415, 220, 216, C2400, C-24, C-20, 451, 452 and K-AL commercial sectional doors is 1 Year and covered under General Conditions of Contract.
- ** NOTE TO SPECIFIER ** Include the following warranty paragraph for Thermospan® Series 200-20, 200, 150, and ThermoMark® Series 530, 5155, 5200 and, 5255 sectional doors. Delete if not applicable.
 - A. Warranty: Manufacturer's limited door and operators System warranty for 10 years against cracking, splitting or deterioration of steel skin due to rust.
- ** NOTE TO SPECIFIER ** Include the following warranty paragraph for Thermospan® Series 125 sectional doors. Delete if not applicable.
 - B. Warranty: Manufacturer's limited door and operators System warranty for 8 years against cracking, splitting or deterioration due to rust-through.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Wayne Dalton; 2501 S. State Highway 121 Business, Suite 200, Lewisville, TX 75067. ASD. Phone: (800) 827-3667; Web Site: www.wayne-dalton.com. Email: info@wayne-dalton.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.

- Requests for substitutions will be considered in accordance with provisions of Section 01600.
- ** NOTE TO SPECIFIER ** Edit the following paragraphs as required and applicable to project requirements. Delete the paragraphs that are not applicable.

2.2 GLAZED ALUMINUM SECTIONAL OVERHEAD DOORS

- ** NOTE TO SPECIFIER ** Wayne Dalton 451 Series Steel Doors are available up to a maximum width of 16 feet 2 inches and a maximum height of 11 feet 1 inch. Edit as required to suit project requirements.
 - A. Glazed Sectional Overhead Doors: Wayne Dalton 464 Series Aluminum Doors. Units shall have the following characteristics:
 - 1. Door Assembly: Stile and rail assembly of aluminum alloy 6063-T6, 1-3/8 inch thick stiles and rails, 1/4" tempered glass secured with industrial high bond tape
 - a. Rails: Top and bottom rails with 3-1/2 inches wide, lower intermediate rail 1-3/8 inches, upper rail 1-5/8 inches, minimum wall thickness 0.062 inch, bottom and lower intermediate rails with glass ledge
 - b. Stiles: Top, bottom, and end stiles are 3-1/2 inches wide, center stile 3 inches wide, minimum wall thickness 0.062 inch.
 - c. Springs:
- ** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required. 10,000 cycles are standard.
 - 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.
 - d. Glazing:
- ** NOTE TO SPECIFIER ** Select one of the following glazing paragraphs and delete those not required.
 - 1) 1/4 inch (6 mm) White Opaque Tempered glass
 - 2) 1/4 inch (6 mm) Black Opaque Tempered glass
 - 3) 1/4 inch (6 mm) Mirrored Gray Tempered glass
 - 4) 1/4 inch (6 mm) Mirrored Bronze Tempered glass
 - 5) 1/4 inch (6 mm) Translucent Black Tempered glass
- ** NOTE TO SPECIFIER ** Select one of the following finish paragraphs and delete those not required.
 - 2. Finish and Color:
 - a. Anodized Finish: Black anodized
 - b. Anodized Finish: Bronze anodized
 - c. Powder Coating Finish: White powder coat
 - d. Powder Coating Finish: Black powder coat
 - e. Powder Coating Finish: Bronze powder coat
- ** NOTE TO SPECIFIER ** The following paragraph is optional. Contact the manufacturer for additional information regarding the options available. Include the Design/Performance Requirements in Part 1 of this specification.
 - 3. Hardware: Black and white powder coated steel hinges and fixtures. Ball bearing rollers with hardened steel races.
 - 4. Lock:
- ** NOTE TO SPECIFIER ** Select one of the following paragraphs and delete the ones not required. Interior mounted slide lock is standard.
 - a. Interior mounted slide lock.
 - b. Interior mounted slide lock with interlock switch for automatic operator.

- 5. Weatherstripping:
- ** NOTE TO SPECIFIER ** Select the seals required from the following paragraphs and delete those not required. Bottom seal is standard, jamb seals and head seals are optional.
 - a. Flexible bulb-type strip at bottom section.
 - b. Flexible Jamb seals.
 - c. Flexible Header seal.
 - 6. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.
- ** NOTE TO SPECIFIER ** Edit the following track size and type paragraphs as required and delete the ones not required.
 - 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.
- ** NOTE TO SPECIFIER ** Select one of the following paragraphs as required and delete the one not required. Horizontal track applies to standard lift, high lift, low headroom and follow-the-roof designs only.
 - c. Horizontal track shall be reinforced with continuous angle of adequate length and gauge to minimize deflection.
 - d. Vertical track shall be graduated to provide wedge type weathertight closing with continuous angle mounting for steel or wood jambs, and shall be fully adjustable to seal door at jambs.
- ** NOTE TO SPECIFIER ** Select one of the following Operation paragraphs and delete the ones not required. Manual pull rope is standard.
 - 7. Manual Operation: Pull rope.
 - 8. Manual Operation: Chain hoist.
 - 9. Electric Motor Operation: Provide UL listed electric operator, equal to Genie Commercial Operators, 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.
- ** NOTE TO SPECIFIER ** Select one of the following Duty Type and Model paragraphs and delete those not required.
 - a. Medium Duty
 - 1) Model MH hoist
 - 2) Model MT trolley
 - 3) Model MJ jackshaft
 - b. Standard Duty
 - 1) Model H hoist
 - 2) Model T trolley
 - 3) Model J jackshaft
 - c. Heavy Duty
 - 1) Model GH hoist
 - 2) Model GT trollev
 - d. Entrapment Protection: Required for momentary contact, includes radio control operation.
- ** NOTE TO SPECIFIER ** Select one of the following protection paragraphs and delete those not required.
 - 1) Pneumatic sensing edge up to 18 feet (5.5 m) wide. Constant contact only complying with UL 325/2010.

- Electric sensing edge monitored to meet UL 325/2010 equal to Miller Edge.
- 3) Photoelectric sensors monitored to meet UL 325/2010.
- . Operator Controls:
- ** NOTE TO SPECIFIER ** Select one of the following control paragraphs and delete those not required.
 - 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.
- ** NOTE TO SPECIFIER ** Select one of the following mounting paragraphs and delete the one not required.
 - 4) Flush mounting.
 - 5) Surface mounting.
- ** NOTE TO SPECIFIER ** Select one of the following mounting location paragraphs and delete those not required.
 - 6) Interior location.
 - 7) Exterior location.
 - 8) Both interior and exterior location.
- ** NOTE TO SPECIFIER ** Select special operation features from the following paragraphs and delete those not required. Delete entirely if not required.
 - f. 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 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.
- 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.

** NOTE TO SPECIFIER ** Select one of the following paragraph for power operated doors. Delete if not required.

- F. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.
- G. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

3.4 ADJUSTING

- A. Test 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 doors, frames and glass 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. Do not permit construction traffic through overhead door openings after adjustment and cleaning.
- B. Protect installed products until completion of project.

END OF SECTION