SECTION 08360 [08 36 00]

SECTIONAL OVERHEAD DOORS

MODEL 515 INSULATED SECTIONAL STEEL DOORS

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\*\* NOTE TO SPECIFIER \*\* Overhead Door Corporation; Commercial Sectional Overhead Door products.

This section is based on the products of Overhead Door™ Brand, which is located at:

 2501 S. State Hwy. 121

 Suite 200

 Lewisville, TX 75067

 Toll Free: (800) 275-3290

 Phone: (469) 549-7100

 Fax: (972) -906-1499

 Web Site: www.overheaddoor.com

 E-mail: info@overheaddoor.com

 [click Here] for additional information.

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 is why design and construction professionals specify Overhead Door Corporation products more often than any other brand.

1. GENERAL
	1. SECTION INCLUDES

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

* + 1. Insulated Sectional Overhead Doors.
		2. Electric Operators and Controls.
		3. Operating Hardware, tracks, and support.
	1. RELATED SECTIONS

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

* + 1. Section 03300 - Cast-In-Place Concrete.
		2. Section 04810 – Concrete Unit Masonry.
		3. Section 05500 - Metal Fabrications.
		4. Section 06114 – Wood Framing.
		5. Section 07900 - Joint Sealants.
		6. Section 08710 - Door Hardware.
		7. Section 09900 - Paints and Coatings.
		8. Section 11150 - Parking Control Equipment.
		9. Section 16130 - Raceway and Boxes.
		10. Section 16150 - Common Work Results for Electrical.
	1. REFERENCES

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

* + 1. ANSI/DASMA 102 - American National Standard Specifications for Sectional Overhead Type Doors.
	1. DESIGN / PERFORMANCE REQUIREMENTS

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraph for power operators as required. Delete those not required.

* + 1. 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.
		2. 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. SUBMITTALS
		1. Submit under provisions of Section 01300.
		2. 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.
		3. Shop Drawings: Indicate plans and elevations including opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
		4. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
		5. Operation and Maintenance Data.
	2. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.
		2. Installer Qualifications: Authorized representative of the manufacturer with minimum five years documented experience.
		3. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.
	3. DELIVERY, STORAGE, AND HANDLING
		1. Store products in manufacturer's unopened labeled packaging until ready for installation.
		2. Protect materials from exposure to moisture until ready for installation.
		3. Store materials in a dry, ventilated weathertight location.
	4. PROJECT CONDITIONS
		1. 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.
	5. WARRANTY

\*\* NOTE TO SPECIFIER \*\* Include the following warranty paragraph for Thermacore® Model 515 commercial sectional doors. Delete if not applicable.

* + 1. Warranty: Manufacturer’s limited door warranty for 10 year against delamination of polyurethane foam from steel face and all other components for 1 year.
1. PRODUCTS
	1. MANUFACTURERS
		1. 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.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01600.
	1. INSULATED SECTIONAL OVERHEAD DOORS

\*\* NOTE TO SPECIFIER \*\* Overhead Door Corporation Model 515 Insulated Steel Doors are available up to a maximum width of 22 feet 2 inches and a maximum height of 20 feet 1 inch. Edit as required to suit project requirements.

* + 1. Insulated Steel Sectional Overhead Doors: Model 515 Thermacore Wind Load Insulated Steel Doors by Overhead Door Corporation. Units shall have the following characteristics:
			1. Door Assembly: Metal/foam/metal sandwich panel construction, with hot melt thermal break.
				1. Panel Thickness: 1-3/8 inches (34.92 mm).
				2. Exterior Surface:

\*\* NOTE TO SPECIFIER \*\* Select one of the following exterior surface paragraphs and delete those not required.

Microgroove, textured.

Flush with non-repeating wood grain texture.

Raised panel with non-repeating wood grain texture.

* + - * 1. Exterior Steel: .015 inch (0.38 mm), hot-dipped galvanized.
				2. Ends: Hot-dipped galvanized steel, full height with end caps.

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs and delete the ones not required. Delete entirely if gauge is to be determined by PERFORMANCE REQUIREMENTS.

18 gauge.

16 gauge.

* + - * 1. Spring Counterbalance: Sized to weight of the door, with a helically wound, oil tempered torsion spring mounted on a steel shaft; cable drum of die cast aluminum with high strength galvanized aircraft cable. Sized with a minimum 5 to 1 safety factor.

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs and delete the ones not required. 10,000 cycles are standard.

High cycle spring: 25,000 cycles.

High cycle spring: 50,000 cycles.

High cycle spring: 100,000 cycles.

* + - * 1. Thermal Values: Tested installed assembly U-factor of 0.15 Btu/hr/SF degrees F; calculated section R-value of 12.12.
				2. Air Infiltration: 0.23 cfm at 15 mph.
				3. Sound transmission class 20 when tested in accordance with ASTM E 413.
				4. Outdoor-indoor transmission class 20 when tested in accordance with ASTM E 1332.
				5. Insulation: CFC-free and HCFC-free polyurethane, fully encapsulated.

Insulated sections tested in accordance with ASTM E 84 and achieve a Flame spread Index of 10 or less, and a Smoke Developed Index of 210 or less.

Insulation material tested in accordance with ASTM D 1929 and achieve a minimum Flash Ignition temperature of 734 degrees F, and a minimum Self Ignition temperature of 950 degrees F.

Insulated sections shall meet all requirements of the UBC 17-5 corner burn.

\*\* NOTE TO SPECIFIER \*\* Select Thermolite glazing for flush doors or colonial style SSB for raised panel or flush glazing from the following glazing paragraphs and edit to select glazing required. Delete those not required or delete entirely if glazing is not required. Contact the manufacturer if additional requirements are required.

* + - * 1. Partial Glazing of Steel Panels:

Thermolite double insulated SSB set in 2-piece high-impact polymer frame.

Tempered Thermolite.

StyleLine Lite Colonial SSB.

* + - * 1. Single Panel Lite:

1/4 inch (6 mm) Tempered glass.

1/4 inch (6 mm) Acrylic (Plexiglass) glazing.

1/4 inch (6 mm) Polycarbonate (Lexan) glazing.

1/4 inch (6 mm) Polished wire glass.

* + - * 1. Colonial Style SSB with High Impact Polymer Frame:
			1. Finish and Color:

\*\* NOTE TO SPECIFIER \*\* Select one of the following finish paragraphs and delete the one not required.

* + - * 1. Two coat baked-on polyester:

Interior color, white.

\*\* NOTE TO SPECIFIER \*\* Select one of the following exterior color paragraphs and delete the ones not required.

Exterior color, white.

Exterior color, taupe.

Exterior color, almond.

Exterior color, brown.

Exterior color, black.

* + - * 1. Exterior Bi-Directional Woodgrain Pattern:

\*\* NOTE TO SPECIFIER \*\* Select one of the following exterior color paragraphs and delete the ones not required.

Exterior color, Oak.

Exterior color, Dark brown.

\*\* NOTE TO SPECIFIER \*\* Edit the following paragraphs using the applicable building code to determine the actual loading required. Coordinate with the manufacturer for the selection of doors to meet the required criteria.

* + - 1. Wind Load Design: Design as calculated in accordance with applicable code as follows:

\*\* NOTE TO SPECIFIER \*\* Include one of the following paragraphs for doors meeting the Florida Building Code or Texas Department of Insurance requirements for Large Missile-Impact and Non-Impact doors up to 22 feet 2 inches wide high depending on the wind pressure design requirement specified.

* + - * 1. Provide to meet Florida Building Code Product Approval #FL 16798 Large Missile-Impact.
				2. Provide to meet Florida Building Code Product Approval #FL 16798 Non-Impact.
				3. Provide to meet Texas Department of Insurance Product Evaluation TDI GDR-98 Large Missile-Impact.
				4. Provide to meet Texas Department of Insurance Product Evaluation TDI GDR-98 Non-Impact.

\*\* NOTE TO SPECIFIER \*\* Include one of the following paragraphs for doors meeting the Miami-Dade Code requirements NOA 11-0912.06 Large Missile-Impact for doors up to 9 feet 2 inches wide depending on the wind pressure design requirement specified.

* + - * 1. Provide to meet Miami-Dade NOA 14-0204.08 Large Missile-Impact.
				2. Provide to meet Miami-Dade NOA 14-0204.07 Large Missile-Impact.
			1. Hardware: Galvanized steel hinges and fixtures. Ball bearing rollers with hardened steel races.
			2. Lock:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs and delete the ones not required. Interior mounted slide lock is standard.

* + - * 1. Interior mounted slide lock.
				2. Interior mounted slide lock with interlock switch for automatic operator.
				3. Keyed lock.
				4. Keyed lock with interlock switch for automatic operator.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraph for use with knock-out lower door sections only and delete the ones above.

* + - * 1. Locking mechanism designed to maintain security for exterior while permitting break out when impacted from the inside.
			1. 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.

* + - * 1. Flexible bulb-type strip at bottom section.
				2. Flexible Jamb seals.
				3. Flexible Header seal.
			1. 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.

* + - * 1. Size:

2 inch (51 mm).

3 inch (76 mm).

* + - * 1. Type:

Standard lift.

Vertical lift.

High lift.

Low headroom.

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.

* + - * 1. Horizontal track shall be reinforced with continuous angle of adequate length and gauge to minimize deflection.
				2. 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. Manufacturer does not recommend chain hoists or jack shaft operators on the following track applications: 15 inch radius standard lift with roof pitch less than 2:12; Hi-Lift less than 24 inch; Low headroom track. Special chain hoist assemblies (using a trolley rail) are available for the above track systems. Special chain hoist assemblies using a trolley rail are available for track systems. Consult manufacturer for additional information.

* + - 1. Manual Operation: Push-up.
			2. Manual Operation: Chain hoist.
			3. 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.

* + - * 1. Medium Duty

Model MH – hoist

Model MT – trolley

Model MJ - jackshaft

* + - * 1. Standard Duty

Model H – hoist

Model T – trolley

Model J – jackshaft

* + - * 1. Heavy Duty

Model GH – hoist

Model GT - trolley

* + - * 1. 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.

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.

Photoelectric sensors monitored to meet UL 325/2010.

* + - * 1. 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.

Key operated control stations with open, close, and stop buttons.

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.

Flush mounting.

Surface mounting.

\*\* NOTE TO SPECIFIER \*\* Select one of the following mounting location paragraphs and delete those not required.

Interior location.

Exterior location.

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.

* + - * 1. Special Operation:

Pull switch.

Vehicle detector operation.

Radio control operation.

Card reader control.

Photocell operation.

Door timer operation.

Commercial light package.

Explosion and dust ignition proof control wiring.

1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until openings have been properly prepared.
		2. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.
		3. Verify electric power is available and of correct characteristics.
		4. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. Clean adjacent surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	3. INSTALLATION
		1. Install overhead doors and track in accordance with approved shop drawings and the manufacturer's printed instructions.
		2. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.
		3. Anchor assembly to wall construction and building framing without distortion or stress.
		4. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
		5. Fit and align door assembly including hardware.

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

* + 1. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.
	1. CLEANING AND ADJUSTING
		1. Adjust door assembly to smooth operation and in full contact with weatherstripping.
		2. Clean doors, frames, glass, and polycarbonate according to manufacturer’s instructions.
		3. Remove temporary labels and visible markings. Do not remove polycarbonate care and maintenance label required to maintain warranty.
	2. PROTECTION
		1. Do not permit construction traffic through overhead door openings after adjustment and cleaning.
		2. Protect installed products until completion of project.
		3. Touch-up, damaged coatings and finishes and repair minor damage before Substantial Completion.

END OF SECTION