

SECTION 08 36 13

RESIDENTIAL OVERHEAD DOORS THERMACORE 5745/5765 SERIES WIND LOAD

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** NOTE TO SPECIFIER ** Overhead Door Corporation; Residential Sectional Overhead Door products.

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

2501 S. State Hwy. 121 Suite 200

Lewisville, TX 75067

Toll Free Tel: 800-929-3667

Tel: 469-549-7100 Fax: 972-906-1499

Email: <u>info@overheaddoor.com</u>
Web: www.overheaddoor.com

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's why design and construction professionals specify Overhead Door Corporation products more often than any other brand. This section includes Overhead Door Corporation Residential Garage Doors including: insulated garage door products providing exceptional thermal efficiency and exceptional strength and durability.

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Residential Metal Overhead Doors.

1.2 RELATED SECTIONS

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

- A. Section 03 30 00 Cast-in-Place Concrete. Execution requirements for placement of anchors in concrete wall construction.
- B. Section 04 22 00.16 Surface-Bonded Concrete Unit Masonry. Execution requirements for placement of anchors in masonry wall construction.
- C. Section 05 50 00 Metal Fabrications.
- D. Section 06 10 00 Rough Carpentry.
- E. Section 07 90 00 Joint Protection.
- F. Section 08 71 53 Security Door Hardware.
- G. Section 09 90 00 Painting and Coating.
- H. Section 27 05 39 Surface Raceways for Communications Systems.
- I. Section 26 05 00 Common Work Results for Electrical.

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 108 Standard Method for Testing Sectional Garage Doors and Rolling Doors: Determination of Structural Performance Under Uniform Static Air Pressure Difference
- B. UL: Underwriters Laboratories, Inc.
- C. ULC: Underwriters Laboratories of Canada.

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	of	Ib/sq ft (_kPa).

- B. Wiring Connections: Requirements for electrical characteristics.
 - 1. 115 volts, single phase, 60 Hz.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.
- D. 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 01 30 00 Administrative Requirements.
- 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.

** NOTE TO SPECIFIER ** Delete selection samples if colors have already been selected.

- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. 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.
- D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 WARRANTY

A. Provide manufacturers product warranty as follows:

** NOTE TO SPECIFIER ** Select warrantee for the products(s) specified as required from the following paragraphs and delete the ones not required.

- Thermacore 5745 Series. Warranty: Limited lifetime against splitting and cracking, 10 year against delamination of polyurethane foam from steel face, 2 years against peeling or fading of finish on Product sections with Walnut or Golden Oak wood grain finish, and all other components for 1 year.
- 2. Thermacore 5765 Series. Warranty: Limited lifetime against splitting and cracking, 10 year against delamination of polyurethane foam from steel face, 2 years against peeling or fading of finish on Product sections with Walnut or Golden Oak wood grain finish, and all other components for 1 year.

3.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Overhead Door Corporation, which is located at: 2501 S. State Hwy. 121 Suite 200; Lewisville, TX 75067; Toll Free Tel: 800-929-3667; Tel: 469-549-7100; Fax: 972-906-1499; Email: arcat@overheaddoor.com; Web: www.overheaddoor.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.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 Product Requirements.

2.2 RESIDENTIAL METAL OVERHEAD DOORS

** NOTE TO SPECIFIER ** Thermacore(r) Series Windstorm Wind Load-Rated Insulated Steel Doors are available up to a maximum width of 20 feet and a maximum height of 14 feet and meets FL, NC, SC and TX code requirements including Miami-Dade.

- A. Insulated Steel Sectional Overhead Doors: Thermacore 5745 Series Windstorm Wind Load-Rated Insulated Steel Doors by Overhead Door Corporation.
 - 1. Door Assembly: Rigid steel fully insulated construction with a metal foam metal sandwich panel. Fabricated with EPDM seals between sections.
- ** NOTE TO SPECIFIER ** Consult with manufacturer for available configuration sizes.
 - a. Size: As indicated on the Drawings.
 - b. Panel Thickness: 1-3/8 inches (34.93 mm).
 - c. Panel Style: Tongue-and-groove panels.
- ** NOTE TO SPECIFIER ** Select panel style required from the following paragraphs and delete the ones not required.
 - 1) Classic Raised Panel (short panel), Model 901.
 - 2) Contemporary flush panel, Model 905.
 - 3) Long panel, Model 902.
 - 4) V10 panel, Model 904.
 - 5) V5 panel, Model 903.
 - d. Exterior Steel: .012 inch (.030 mm) nominal, high strength hot dipped galvanized steel with an embossed wood grain texture.
 - e. Insulation: CFC-free foamed in place polyurethane.
 - f. Thermal Values: R-value of 12.12. U-Factor of < 0.37 (exceeds 2015 IECC climate zone requirements for maximum U-Factor of Operable fenestrations, section C402.4).
 - g. Air Infiltration: < 0.40 (meet 2015 IECC Section C402.5.2 for Garage Doors).
- ** NOTE TO SPECIFIER ** Coordinate with the manufacturer for the selection of doors to meet the required criteria.
 - h. Windload Design: Provide to meet the Design/Performance requirements specified.
- ** NOTE TO SPECIFIER ** Select window options required from the following paragraphs. Delete the paragraphs not required or delete entirely if windows are not required.
 - i. Window Design:
 - 1) Window Location:
- ** NOTE TO SPECIFIER ** Select window location required from the following paragraph

and delete the one not required.

- a) Top section.
- b) Second from top section.
- ** NOTE TO SPECIFIER ** Select Decorative Window Style or the Etched Glass Style as required from the following paragraphs and delete the ones not required.
 - Decorative Window Style:
- ** NOTE TO SPECIFIER ** Select Decorative Window Style required from the following paragraphs and delete the ones not required.
 - a) Full Vision (Short panel).
 - b) Full Vision (Long panel).
 - c) Arched Stockton single design (V10 panel).
 - d) Arched Stockton double design (V10 panel).
 - e) Arched Stockton single design (Flush panel).
 - f) Arched Stockton double design (Flush panel).
 - g) Arched Stockton 4 single design (V10 panel).
 - h) Arched Stockton 4 double design (V10 panel).
 - i) Ashton 4 (V10 panel).
 - j) Cascade 1 (Short panel).
 - k) Cascade 2 (Long panel).
 - Cascade 3 (V5 panel).
 - m) Cascade 3 (Flush panel).
 - n) Cascade 4 (V10 panel).
 - o) Cathedral 1 (Short panel).
 - p) Cathedral 2 (Long panel).
 - q) Cathedral 4 (V10 panel).
 - r) Prairie 1 (Short panel).
 - s) Prairie 2 (Long panel).
 - t) Ruston 4 (V10 panel).
 - u) Sherwood 1 (Short panel).
 - v) Sherwood 2 (Long panel).
 - w) Sherwood 4 (V10 panel).
 - x) Stockbridge (V5 panel).
 - y) Stockbridge (Flush panel).
 - z) Stockbridge 4 3 lite (V10 panel).
 - aa) Stockbridge 4 4 lite (V10 panel).
 - bb) Stockford 4 (V10 panel).
 - cc) Stockton 1 (Short panel).
 - dd) Stockton 2 (Long panel).
 - ee) Stockton 3 (V5 panel).
 - ff) Stockton 3 (Flush panel).
 - gg) Stockton 4 4-lite (V10 panel).
 - hh) Stockton 4 6-lite (V10 panel).
 - ii) Stockton 4 8-lite (V10 panel).
 - jj) Stockton 4 8-lite Arch (V10 panel).
 - kk) Stockton 4 12-lite Arch (V10 panel).
 - II) Waterton 1 (Short panel).
 - mm) Waterton 2 (Long panel).
 - nn) Waterton 3 (V5 panel).
 - oo) Waterton 3 (Flush panel).
 - pp) Waterton 4 (V10 panel).
 - qq) Williamsburg 1 single or double design (Short panel).
 - rr) Williamsburg 2 single or double design (Long panel).
 - ss) Williamsburg 4 (V10 panel).
 - tt) Williamsburg 4 4 piece (V10 panel).
 - uu) Wynbridge 4 single or double design (V10 panel).

3) Glass Type:

** NOTE TO SPECIFIER ** Select glass type required from the following paragraphs and delete the ones not required.

- a) Glass: Clear.
- b) Glass: Clear Insulated.
- c) Glass: Clear Polycarbonate Impact.
- 2. Finish/Color: Two coat baked-on polyester. Color as follows:

** NOTE TO SPECIFIER ** Select color required from the following paragraphs if required and delete the ones not required.

- a. White.
- b. Brown.
- c. Almond.
- d. Taupe.
- e. Wood Grain Golden Oak Finish (V5 panel).
- f. Wood Grain Golden Oak Finish (V10 panel).
- g. Wood Grain Walnut Finish (V5 panel).
- h. Wood Grain Walnut Finish (V10 panel).
- i. Wood Grain Mission Oak Finish (V5 panel).
- j. Wood Grain Mission Oak Finish (V10 panel).
- k. Black
- 3. Hardware: Standard hinges.
- 4. Lock:
 - Interior mounted slide lock.

** NOTE TO SPECIFIER ** Include the following optional paragraph if required and delete if not required.

- b. Optional keyed lock.
- 5. Bottom fixture: DASMA 103 red-head fasteners.
- 6. Weatherstripping: Co-extruded EPDM bulb-type strip at bottom.
- 7. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.
- 8. Standard rollers.

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

- 9. Manual Operation.
- 10. Electric Openers.
- ** NOTE TO SPECIFIER ** Thermacore(r) Series premier Insulated Steel Doors are available up to a maximum width of 20 feet and a maximum height of 14 feet. Thermacore 5765 Series meets FL, NC, SC and TX code requirements including Miami-Dade.
 - B. Insulated Steel Sectional Overhead Doors: Thermacore 5765 Series Windstorm Wind Load-Rated Insulated Steel Doors by Overhead Door Corporation.
 - 1. Door Assembly: Rigid steel fully insulated construction with a metal foam metal sandwich panel. Fabricated with EPDM seals between sections.
- ** NOTE TO SPECIFIER ** Consult with manufacturer for available configuration sizes.
 - a. Size: As indicated on the Drawings.
 - b. Panel Thickness: 2 inches (51 mm) nominal.
 - c. Panel Style: Tongue-and-groove panels.

** NOTE TO SPECIFIER ** Select panel style required from the following paragraphs and delete the ones not required.

- 1) Classic Raised Panel (short panel), Model 906.
- 2) Contemporary flush panel, Model 909.
- 3) Long panel, Model 907.
- 4) V5 panel, Model 908.
- d. Exterior Steel: .012 inch (.030 mm) nominal, high strength hot dipped

- galvanized steel with an embossed wood grain texture.
- e. Insulation: CFC-free foamed in place polyurethane.
- f. Thermal Values: R-value of 16.22. U-Factor of < 0.37 (exceeds 2015 IECC climate zone requirements for maximum U-Factor of Operable fenestrations, section C402.4).</p>
- g. Air Infiltration: < 0.40 (exceeds 2015 IECC Section C402.5.2 for Garage Doors).
- ** NOTE TO SPECIFIER ** Coordinate with the manufacturer for the selection of doors to meet the required criteria.
 - h. Windload Design: Provide to meet the Design/Performance requirements specified.
- ** NOTE TO SPECIFIER ** Select window options required from the following paragraphs. Delete the paragraphs not required or delete entirely if windows are not required.
 - i. Window Design:
 - 1) Window Location:
- ** NOTE TO SPECIFIER ** Select window location required from the following paragraph and delete the one not required.
 - a) Top section.
 - b) Second from top section.
- ** NOTE TO SPECIFIER ** Select Decorative Window Style or the Etched Glass Style as required from the following paragraphs and delete the ones not required.
 - 2) Decorative Window Style:
- ** NOTE TO SPECIFIER ** Select Decorative Window Style required from the following paragraphs and delete the ones not required.
 - a) Full Vision (Short panel).
 - b) Full Vision (Long panel).
 - c) Arched Stockton single design (Flush panel).
 - d) Arched Stockton double design (Flush panel).
 - e) Arched Stockton single design (V5 panel).
 - f) Arched Stockton double design (V5 panel).
 - g) Cascade 1 (Short panel).
 - h) Cascade 2 (Long panel).
 - i) Cascade 3 (V5 panel).
 - j) Cascade 3 (Flush panel).
 - k) Cathedral 1 (Short panel).
 - I) Cathedral 2 (Long panel).
 - m) Prairie 1 (Short panel).
 - n) Prairie 2 (Long panel).
 - o) Sherwood 1 (Short panel).
 - p) Sherwood 2 (Long panel).
 - q) Stockbridge (V5 panel).
 - r) Stockbridge (Flush panel).
 - s) Stockton 1 (Short panel).
 - t) Stockton 2 (Long panel).
 - u) Stockton 3 (V5 panel).
 - v) Stockton 3 (Flush panel).
 - w) Waterton 1 (Short panel).
 - x) Waterton 2 (Long panel).
 - y) Waterton 3 (V5 panel).
 - z) Waterton 3 (Flush panel).
 - aa) Williamsburg 1 single design (Short panel).
 - bb) Williamsburg 1 double design (Short panel).
 - cc) Williamsburg 2 single design (Long panel).
 - dd) Williamsburg 2 double design (Long panel).
 - Glass Type:

** NOTE TO SPECIFIER ** Select glass type required from the following paragraphs and delete the ones not required.

- a) Glass: Clear.
- b) Glass: Clear Insulated.
- c) Glass: Clear Polycarbonate Impact.
- 2. Finish/Color: Two coat baked-on polyester. Color as follows:

** NOTE TO SPECIFIER ** Select color required from the following paragraphs if required and delete the ones not required.

- a. White.
- b. Brown.
- c. Almond.
- d. Taupe.
- e. Wood Grain Golden Oak Finish (V5 panel).
- f. Wood Grain Walnut Finish (V5 panel).
- g. Wood Grain Mission Oak Finish (V5 panel).
- h. Black
- 3. Hardware: Standard hinges.
- 4. Lock:
 - a. Interior mounted slide lock.

** NOTE TO SPECIFIER ** Include the following optional paragraph if required and delete if not required.

- b. Optional keyed lock.
- 5. Bottom fixture: DASMA 103 red-head fasteners.
- 6. Weatherstripping: Co-extruded EPDM bulb-type strip at bottom.
- 7. Track: Provide track as recommended by manufacturer to suit loading required and clearances available.
- Standard rollers.

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

- 9. Manual Operation.
- 10. Electric Openers.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until openings and substrates 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, track and openers 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 ** Include the following paragraph for power operated doors. Delete if not required.

F. Coordinate installation of electrical service with Section 16150.

3.4 CLEANING AND ADJUSTING

- A. Adjust door assembly to smooth operation and in full contact with weatherstripping.
- B. Clean doors, frames and glass.
- C. Remove temporary labels and visible markings.

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