



AlumaView® AV300

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Commercial sectional doors.

1.2 RELATED SECTIONS

- A. Section 05500 - Metal Fabrications: Miscellaneous for steel supports.
- B. Section 08710 - Door Hardware: Hardware, locks, access panels.
- C. Section 09900 - Painting: Field painting.
- D. Section 11150 - Parking Control Equipment: Parking control equipment for remote door controls.
- E. Section 16050 - Basic Electrical Materials and Methods: Electrical connections and service for powered door operators.

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM) A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. American Society for Testing and Materials (ASTM) C 518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
- C. American Society for Testing and Materials (ASTM) E 283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

1.4 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:
 - 1. Provide drawings indicating track details, head and jamb conditions, spring shafts, anchorage, accessories, finish colors, patterns and textures, operator mounts and other related information.
 - 2. Regulatory Requirements and Approvals: Provide shop drawings in compliance with local Authority having Jurisdiction (AHJ).
- D. Certifications:

1. Submit manufacturer's certificate that products meet or exceed specified requirements.
 2. Submit installer qualifications.
- E. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- F. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- 1.5 QUALITY ASSURANCE
- A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity, and trained and authorized by the door manufacturer to perform the work of this section.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Store products in manufacturer's unopened packaging until ready for installation.
- 1.7 PROJECT CONDITIONS
- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
- 1.8 WARRANTY
- A. Provide manufacturer's standard warranty against defects in material and workmanship, as further described in Part 2 of this Section.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Raynor, which is located at: 1101 East River Rd. P. O. Box 448 ; Dixon, IL 61021-0448; Toll Free Tel: 800-4-RAYNOR; Tel: 815-288-1431; Fax: 888-598-4790; Email: [request info \(thegarage@raynor.com\)](mailto:request info (thegarage@raynor.com)); Web: www.raynor.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SECTIONAL RAIL AND STYLE ALUMINUM DOORS

- A. AlumaView as manufactured by Raynor Garage Doors:
1. Doors:
 - a. Operation:
 - 1) Provide doors designed for manual operation.
 - 2) Provide doors designed for hand chain operation.
 - 3) Provide doors designed for electric motor operation.
 - b. Jamb Construction:
 - 1) Steel jambs with self-tapping fasteners.
 - 2) Wood jambs with lag screw fasteners.
 - 3) Masonry jambs with anchor bolt fasteners.
 - c. Structural Performance Requirements:

- 1) Wind Load (Model AV 300 only): Florida Building Code Product Approval #FL16225 large missile impact.
 - 2) Wind Load (Model AV 200 only): Florida Building Code Product Approval #FL15212 large missile impact.
 - 3) Wind Load (Model AV 200 only): Florida Building Code Product Approval #FL114092 non-impact.
 - 4) Wind Load: Florida Building Code Product Approval _____.
 - 5) Wind Loads: Uniform pressure of: _____ psf.
- d. International Energy Conservation Code (IECC) Requirements:
- 1) Air Infiltration: Maximum air leakage of 0.4 cfm/ft² is required. Testing shall be performed in accordance with DASMA 105 test procedure.
 - 2) Raynor AV300 and AV200 provide an air leakage rating of 0.24 cfm/ft² with optional IECC Compliance Package.
2. Sections:
- a. AlumaView AV300:
 - 1) Material: 3 inches (76 mm) thick, 6063-T6 aluminum alloy stiles and rails joined together with 5/16 inch (8 mm) diameter screws. Aluminum panels 0.050 inch (1.3 mm) thick or glazing (when specified) fill the spaces between stiles and rails. Combined dimension of two adjoining intermediate meeting rails 5 inches (127 mm). Bottom rail height 6-1/2 inches (165 mm). Top rail height 6-1/2 inches (165 mm). End stiles 3-3/8 inches (86 mm) or 6-1/2 inches (165 mm) wide as determined by overall door width. Center stiles 3-5/8 inches (92 mm) wide.
 - 2) Finish: Aluminum frame extrusions and filler panels finish coated.
 - a) Color: Clear anodized finish.
 - b) Color: Champagne anodized finish.
 - c) Color: Light Bronze anodized finish.
 - d) Color: Medium Bronze anodized finish.
 - e) Color: Dark Bronze anodized finish.
 - f) Color: Extra Dark Bronze anodized finish.
 - g) Color: Black anodized finish.
 - h) ArmorBrite Powdercoat finish.
 - 1) Color: _____.
 - b. Seals: Bottom of door to have flexible U-shaped vinyl seal retained in aluminum rail.
 - 1) Bulb-type joint seal between sections.
 - 2) Blade seal on top section to prevent airflow above header.
 - c. Trussing: Doors designed to withstand specified windload. Deflection of door in horizontal position to be maximum of 1/120th of door width.
3. Windows: Provide door sections with windows in lieu of 0.050 inch (1.3mm) aluminum filler panels. Locations to comply with door elevation drawings.
4. Impact Rated Glazing: Provide as follows.
- a. 11/32 inch (8.7mm) Clear Impact Glass
 - b. 11/32 inch (8.7mm) Tinted Bronze Impact Glass
 - c. 11/32 inch (8.7mm) Tinted Gray Impact Glass
 - d. 11/32 inch (8.7mm) Tinted Green Impact Glass
 - e. 11/32 inch (8.7mm) White Interlayer Impact Glass
5. Non-Impact Rated Glazing: Provide as follows:
- a. 1/8 inch (3.2mm) Clear Glass consisting of one pane of 1/8 inch (3.2mm) DSB non-insulated glass.
 - b. 3/16 inch (4.8mm) Clear Glass consisting of one pane of 3/16 inch (4.8mm) non-insulated glass.
 - c. 1/4 inch (6.4mm) Clear Glass consisting of one pane of 1/4 inch (6.4mm) non-insulated glass.

- d. 1/8 inch (3.2mm) Clear Tempered Glass consisting of one pane of 1/8 inch (3.2mm) non-insulated glass.
 - e. 1/4 inch (6.4mm) Clear Tempered Glass consisting of one pane of 1/4 inch (6.4mm) non-insulated glass.
 - f. 3/16 inch (4.88mm) Clear Tempered Glass consisting of one pane of 3/16 inch (4.88mm) non-insulated glass.
 - g. 1/4 inch (6.4mm) Clear Laminated Glass consisting of one pane of 1/4 inch (6.4mm) non-insulated glass.
 - h. 1/4 inch (6.4mm) Clear Wire Glass consisting of one pane of 1/4 inch (6.4mm) non-insulated glass.
 - i. 1/8 inch (3.2mm) Tinted Glass consisting of one pane of 1/8 inch (3.2mm) non-insulated glass.
 - j. 1/4 inch (6.4mm) Tinted Glass consisting of one pane of 1/4 inch (6.4mm) non-insulated glass.
 - k. 1/8 inch (3.2mm) Tinted Tempered Glass consisting of one pane of 1/8 inch (3.2mm) non-insulated glass.
 - l. 1/4 inch (6.4mm) Tinted Tempered Glass consisting of one pane of 1/4 inch (6.4mm) non-insulated glass.
 - m. 1/2 inch (12.69mm) Insulated Clear Glass consisting of two panes of 1/8 inch (3.2mm) DSB insulated glass.
 - n. 1/2 inch (12.69mm) Insulated Clear Tempered Glass consisting of two panes of 1/8 inch (3.2mm) Tempered insulated glass.
 - o. 1/2 inch (12.69mm) Insulated Low E DSB Glass consisting of two panes of 1/8 inch (3.2mm) DSB insulated glass.
 - p. 1/2 inch (12.69mm) Insulated Low E Tempered Glass consisting of two panes of 1/8 inch (3.2mm) Tempered insulated glass.
 - q. 1/8 inch (3.2mm) Clear Acrylic consisting of one pane of 1/8 inch (3.2mm) Acrylic glazing.
 - r. 1/8 inch (3.2mm) Clear Lexan consisting of one pane of 1/8 inch (3.2mm) Lexan glazing.
 - s. 1/4 inch (6.4mm) Clear Acrylic consisting of one pane of 1/4 inch (6.4mm) Acrylic glazing.
 - t. 1/4 inch (6.4mm) Clear Lexan consisting of one pane of 1/4 inch (6.4mm) Lexan glazing
6. Mounting: Sections mounted in door opening using:
- a. Between-Jamb Bracket Mounting: sections mounted between door jambs, seal against exterior perimeter seal installed along vertical and top horizontal edges of jambs.
 - b. Lap Jamb Angle Mounting: section overlap door jambs by 1 inch (25 mm) on each side of door opening.
7. Track:
- a. Material: Hot-dipped galvanized steel (ASTM A 653), fully adjustable for adequate sealing of door to jamb or weatherseal.
 - b. Configuration Type:
 - 1) Configuration Type: Normal Headroom.
 - 2) Configuration Type: Low Headroom.
 - 3) Configuration Type: Vertical Lift.
 - 4) Configuration Type: Lift-Clearance.
 - 5) Configuration Type: Incline.
 - 6) Configuration Type: Contour.
 - c. Track Size:
 - 1) Size: 2 inches (51 mm).
 - 2) Size: 3 inches (76 mm).
 - d. Mounting:
 - 1) Bracket-Mount using adjustable track brackets for use on 2-inch track with wood jambs.

- 2) Floor-to-Header Angle-Mount consisting of continuous angle extending from the floor up to the door header for use with steel, wood, or masonry jambs. Continuous angle size not less than 2-5/16 inches by 4 inches by 3/32 inch (59 by 102 by 2.5 mm) on 2-inch track and 3-1/2 inches by 5 inches by 1/8 inches (89 by 127 by 3.2 mm) on 3-inch track.
- 3) Floor-to-Shaft Angle-Mount consisting of continuous angle extending from the floor, past header, completely up to door shaft for use with steel, wood, or masonry jambs. Continuous angle size not less than 2-5/16 inches by 4 inches by 3/32 inch (59 by 102 by 2.5 mm) on 2-inch track and 3-1/2 inches by 5 inches by 1/8 inches (89 by 127 by 3.2 mm) on 3-inch track.
- e. Finish:
 - 1) Galvanized.
 - 2) White Powdercoat.
- 8. Counterbalance:
 - a. Counterbalance System: Provided with aircraft-type, galvanized steel lifting cables with minimum safety factor of 5. Torsion Springs consisting of heavy-duty oil-tempered wire torsion springs on a continuous ball-bearing cross-header shaft.
 - 1) Spring Cycle Requirements: Standard 10,000 cycles.
 - 2) Spring Cycle Requirements: High cycle: _____ cycles.
- 9. Hardware:
 - a. Hinges and Brackets: Fabricated from galvanized steel.
 - b. Track Rollers: 2 inches (50.8 mm) diameter consistent with track size, with hardened steel ball bearings.
 - c. Track Rollers: 3 inches (76.2 mm) diameter consistent with track size, with hardened steel ball bearings.
 - d. Perimeter Seal: Provide complete weather stripping system to reduce air infiltration. Weather stripping shall be replaceable.
 - 1) For bracket mounted doors provide climate seal or vinyl seal with aluminum retainer.
 - 2) For angle mounted doors provide angle clip-on seal.
 - e. Furnish door system with locks: Exterior lock with five-pin tumbler cylinder, night latch and steel bar engaging track.
 - f. Furnish door system with locks: Interior lock with dead bolt provided with hole to receive padlock provided by Owner.
- 10. AlumaView Limited Warranty: Raynor warrants the door sections against defects in material and workmanship for five years from date of delivery to the original purchaser. Window components are warranted against defects in material and workmanship for three years from date of delivery to the original purchaser. Raynor warrants all hardware and spring components against defects in material and workmanship for one year (or cycle life of the springs) from date of delivery to the original purchaser. Additional Limited Warranty requirements in accordance with manufacturer's full standard limited warranty documentation.

B. ControlHoist as manufactured by Raynor Garage Doors:

- 1. Model:
 - a. Raynor ControlHoist Optima:
 - 1) Type: Jackshaft with manual chain hoist.
 - 2) Type: Trolley.
 - 3) Motor Horsepower Rating: Continuous 1/2 HP.
 - 4) Motor Horsepower Rating: Continuous 3/4 HP.
 - 5) Motor Horsepower Rating: Continuous 1 HP.
 - 6) Motor Horsepower Rating: Continuous 1-1/2 HP.

- 7) Motor Horsepower Rating: Continuous 2 HP.
 - 8) Electrical Requirements: 115 volt single phase.
 - 9) Electrical Requirements: 230 volt single phase.
 - 10) Electrical Requirements: 208-230 volt three phase.
 - 11) Electrical Requirements: 460 volt three phase.
 - 12) Duty Cycle: 30 cycles/hour or 300 cycles/day.
 - 13) Control Wiring: Solid state circuitry with provisions for connection of safety edge to reverse, external radio control hook-up and maximum run timer. Provisions for timers to close, monitored reversing devices, mid stop and lock bar sensor capability.
 - a) Provide three button momentary contact "open-stop", constant pressure on close (can be changed to momentary to close).
 - b) Custom wiring.
- b. Raynor ControlHoist Standard:
- 1) Type: Jackshaft.
 - 2) Type: Jackshaft with manual chain hoist.
 - 3) Type: Trolley.
 - 4) Motor Horsepower Rating: Continuous 1/3 HP.
 - 5) Motor Horsepower Rating: Continuous 1/2 HP.
 - 6) Motor Horsepower Rating: Continuous 3/4 HP.
 - 7) Electrical Requirements: 115 volt single phase.
 - 8) Electrical Requirements: 230 volt single phase.
 - 9) Electrical Requirements: 208-230 volt three phase.
 - 10) Electrical Requirements: 460 volt three phase.
 - 11) Duty Cycle: 30 cycles/hour or 300 cycles/day.
 - 12) Control Wiring: Solid state circuitry with provisions for connection of safety edge to reverse, external radio control hook-up and maximum run timer. Provisions for timers to close, monitored reversing devices, mid stop and lock bar sensor capability.
 - a) Provide three button momentary contact "open-stop", constant pressure on close (can be changed to momentary to close).
 - b) Custom wiring.
- c. Raynor ControlHoist Basic:
- 1) Type: Jackshaft.
 - 2) Type: Jackshaft with manual chain hoist.
 - 3) Type: Trolley.
 - 4) Motor Horsepower Rating: Intermittent 1/2 HP.
 - 5) Electrical Requirements: 115 volt single phase.
 - 6) Duty Cycle: 10 cycles/hour.
 - 7) Control Wiring: Solid state circuitry with provisions for connection of safety edge to reverse, external radio control hook-up and maximum run timer. Provisions for timers to close, monitored reversing devices, mid stop and lock bar sensor capability.
 - a) Provide three button momentary contact "open-stop", constant pressure on close (can be changed to momentary to close).

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared. Verify that site conditions are acceptable for installation of doors, operators, controls and

accessories. Ensure that openings are square, flush and plumb.

- B. If substrate 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. General: Install door, track and operating equipment complete with all necessary accessories and hardware according to shop drawings, manufacturer's instructions.
- B. Lubricate bearings and sliding parts, and adjust doors for proper operation, balance, clearance and similar requirements.

3.4 PROTECTION

- A. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove and legally dispose of construction debris from project site.
- B. Remove temporary coverings and protection of adjacent work areas. Repair or replace installed products damaged prior to or during installation.
- C. Lubricate bearings and sliding parts, assure weather tight fit around door perimeter and adjust doors for proper operation, balance, clearance and similar requirements. Protect installed products until completion of project.
- D. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION
