PART 1 PRODUCTS

1.1 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); Web: www.raynor.com

1.2 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 ______.
   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 AV200:
      1) Material: 2 inches (51mm) 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 3-13/16 inches (97 mm). Bottom rail height 5-1/4 inches (133 mm). Top rail height 3-1/4 inches (83 mm) or 5-1/4 inches (133 mm) as determined by overall door width. 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) 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:
      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.