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ARMADA SYSTEM

CSI MASTERFORMAT 95, SECTION 05525: MODULAR ALUMINUM RAMPS

**PART 1 General**

**1.1 Description of Product**

- A. The product described herein is the ARMADA SYSTEM manufactured by AlumiRamp, Inc., Quincy, Michigan. It is a modular aluminum ramp system consisting of ramp sections, platforms, rails and supports that are selected to provide adequate ramping height to suit the ADA Codes.

**1.2 Quality Assurance**

- A. Manufacturer shall have a documented history of compliance with ANSI and/or ADA codes for ramping and rails Section 4.8.
- B. The ramp may be subject to State, Local and City approval prior to installation and subject to inspection after installation.

**1.3 Reference Codes**

- A. Americans with Disabilities Act Handbook Published by the Equal Employment Opportunity Commission and the U.S. Department of Justice.  
Publication EEOC-BK-19
- B. American National Standard for Accessible and Usable Buildings and Facilities Published by American National Standards Institute  
Publication A117.1-1998

**1.4 Submittals**

- A. Shop drawings by contractor or manufacturer's literature for approval. Drawings shall indicate layout, unit locations, unit identification, connection details, support items and dimensions.
- B. A sample of the ramp tread showing knurled bi-directional slip resistant ramp surface.

**1.5 Delivery and Handling**

- A. The contractor shall inspect the units and components upon delivery to assure that the proper materials have been received and that the units are not damaged or defective. Damaged or defective materials shall be removed from the site.

**1.6 Field Measurements**

- A. Verify that field measurements are as indicated on the placement of plans.

**1.7 Warranty**

- A. The manufacturer shall have in writing a warranty against any defect in materials and workmanship for a minimum of 5 years.

**PART 2 Products**

**2.1 Overview**

- A. All aluminum platforms, ramps and accessories shall be prefabricated modular units as manufactured by AlumiRamp, Inc., Quincy, Michigan. These ramps shall be universal in design to allow for relocation and adjustment.

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#### 2.2 Ramp Sections

- A. Engineering.
  1. Ramp sections shall be designed for a minimum uniform live load of 100 lbs. per square foot and a concentrated vertical load of 300 lbs. per square foot.
- B. Materials
  1. Ramp sections shall be welded all aluminum construction, alloy 6061-T6 or 6005-T5, with a satin anodized finish, 20 minute velo.
  2. All fasteners shall be stainless steel (18-8 Series).
- C. Design and Fabrication.
  1. Modular ramp units are to be built to shape, size and finish as indicated on approved drawings.
  2. Ramp surface is to be continuous, without gaps, and shall have an extruded skid resistant surface, knurled to make skid resistance bi-directional.
  3. Ramps shall be constructed of interlocking 1" x 6" treads welded to the side support stringers.
  4. All ramp sections shall have a 2" minimum curb height.
  5. Top of all ramps must accept a full width pivoting top adapter plate.

#### 2.3 Platforms

- A. Engineering
  1. Platforms shall be designed for a minimum uniform live load of 100 lbs. per square foot and a concentrated vertical load of 300 lbs. per square foot.
- B. Materials
  1. Platforms shall be welded all aluminum construction, alloy 6061-T6 or 6005-T5, with a satin anodized finish, 20 minute velo.
  2. All fasteners shall be stainless steel (18-8 Series).
- C. Design and Fabrication.
  1. Platforms are to be built to shape, size and finish as indicated on approved drawings.
  2. Platform surface is to be continuous, without gaps, and shall have an extruded skid resistant surface, knurled to make skid resistance bi-directional.
  3. Platforms shall be constructed of interlocking 1" x 6" treads welded to the side support stringers.
  4. Platforms shall be designed for variable height adjustment.

#### 2.4 Support Leg Assemblies

- A. Engineering
  1. All support assemblies shall be designed to support the ramp and platform sections (Uniform live load 2.2, 2.3)
- B. Materials
  1. Support assemblies shall be all aluminum construction.
  2. All fasteners shall be stainless steel (18-8 Series).

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C. Design

1. The legs of the support assemblies shall be adjustable for variable height and slope. The legs should be designed to swivel as to always be perpendicular to the ground and the load should remain vertical regardless of the slope.
2. All aluminum brackets shall be supplied for attachment of the ramps and/or platforms to the proper support assembly.
3. All legs shall have a minimum 6" x 10" foot pad.
4. Foot pads are designed to sit directly on stable compacted ground. Pads are pre-drilled in case it is desired to lag to a concrete pad for special applications.

**2.5 Handrails**

A. Engineering

1. Standard two line horizontal rails designed to meet or exceed ADA codes section 4.8.

B. Materials

1. Handrails shall be all aluminum construction alloy 6061-T6 or 6005-T5, with a satin anodized finish, 20 minute velo.
2. Fasteners shall be stainless steel (18-8 Series).

C. Design and Fabrication

1. Handrails shall be provided along both sides of ramp segments. The inside handrail on switchbacks and dogleg ramps shall be continuous.
2. Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.
3. The diameter of width of the gripping surface of a handrail shall be 1-1/2".
4. The top of the handrail gripping surface shall be mounted between 30" and 34" above the ramp surface and the top of the intermediate rail shall be mounted between 18" and 22" above the ramp surface.
5. All handrail tubes shall be deburred and all sharp edges removed from all gripping surfaces.

**PART 3 Execution**

**3.1 Examination**

- A. Verify site conditions are ready to receive work of this section.

**3.2 Erection**

- A. Install prefabricated aluminum ramp system according to manufacturers instructions and the approved drawings without damage to shape or finish. Repair or replace any damaged units.
- B. Align and maintain uniform slope and horizontal joints as installation progresses.

**3.3 Maintenance**

- A. Ramp system must be maintained in accordance with AlumiRamp instructions.

**3.4 Notes**

- A. Specifications are subject to change without notice.
- B. Revised and printed 07/06