SECTION 05 51 20

MODULAR ALUMINUM RAMPS

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\*\* NOTE TO SPECIFIER \*\* American Access, Inc.; modular wheelchair ramp products.  
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This section is based on the products of American Access, Inc., which is located at:3150 Stage Post Dr., Suite 101Bartlett, TN 38133Toll Free Tel: 888-790-9269 Tel: 901-584-0252Fax: 866-734-7267Email: [request info (sales@aaramps.com)](https://arcat.com/rfi?action=email&company=American%252BAccess%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(05525ame)%253A%2520&coid=50108&spec=05525ame&rep=&fax=866-734-7267)  
Web: <http://www.aaramps.com>   
 [ [Click Here](https://arcat.com/company/american-access-inc-50108) ] for additional information.  
American Access is number one among several modular ramp companies in the U.S. today. Providing you with Wheelchair Ramps, Steps, Walkways, Stadium Access and Bleacher Access. American Access is the answer to many types of barrier issues for private and public access.  
Since the company's establishment in 1997, it has served America's veterans, public schools, colleges, churches, private organizations and the general public with thousands of ramp installations across the country.  
Our modular ramp systems have the option of a powdercoat finish for an additional charge. All colors are depictions only, contact American Access for sample panels. There is a 1 year warranty on powder coating. Please contact American Access for more details.  
American Access' staff is committed to continuing to meet customer needs quickly and conveniently. Arranging the delivery and installation of the equipment needed to assist them is our job.

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Modular Aluminum Ramps.
  1. RELATED SECTIONS

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

* + 1. Section 32 14 23 - Asphalt Unit Paving.
    2. Section 05 50 00 - Metal Fabrications
    3. Section 05 51 33 - Metal Ladders.
    4. Section 05 73 13 - Glazed Decorative Metal Railings.
  1. REFERENCES

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

* + 1. ASTM B 209 - Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate.
    2. ASTM B 221 - Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire, Shapes and Tubes.
    3. ASTM B 429 - Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube; 2002.
    4. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum.
    5. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
    6. ADA - ADA Standards for Accessibility Design.
  1. DESIGN / PERFORMANCE REQUIREMENTS
     1. Design shall conform to ADA Standards for Accessibility Design and applicable local codes and standards.
     2. Design landings and ramps for a minimum uniform live load of 100 lbs/sf and a concentrated vertical load of 400 lbs distributed uniformly over an area of 1 sf.
     3. Handrails and Guardrails: Provide handrails and railings capable of withstanding the following structural loads without exceeding allowable design working stress of materials for handrails, railings, anchors and connections:
        1. Handrails and guardrails shall be designed and constructed to resist a single concentrated load of 200 lbs applied at any point and in any direction at the top of the handrail or guardrail.
        2. Handrails and guardrails shall be designed and constructed for a load of 50 lbs/lf applied horizontally at the required guardrail height and a simultaneous load of 100 lbs/lf applied vertically downward at the top of the guardrail.
     4. Corrosion Resistance: Separate incompatible materials to prevent galvanic corrosion.
  2. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     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: Drawings showing plans, elevations, sections and details of components. Show member sizes and part identification, fasteners, anchor requirements, fittings and evidence of compliance with structural performance requirements.

\*\* NOTE TO SPECIFIER \*\* Include the following paragraph when Project requires further detailed design prior to fabrication.

* + 1. Design under direct supervision of Professional Engineer experienced in design of this Work and licensed at Project location.

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

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
    3. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
    4. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic checking and adjustment of all components.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.
     2. Installer Qualifications: All products listed in this section shall be installed by a single installer with demonstrated experience in installing products of the same type and scope as specified.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Deliver materials to the job site in good condition and adequately protected against damage as handrails are a finished product.
     2. Inspect ramp and rail sections for damage before signing the receipt from the trucking company. Truck driver must note damaged goods on the bill of lading if damaged product is found
     3. Store products in manufacturer's unopened packaging until ready for installation.
  3. SEQUENCING
     1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
  4. PROJECT CONDITIONS
     1. Field Measurements: Where ramps and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication.
  5. WARRANTY
     1. Provide with manufacturer's three-year limited warranty on the modular ramp system against manufacturers defects.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: American Access, Inc., which is located at:3150 Stage Post Dr., Suite 101Bartlett, TN 38133Toll Free Tel: 888-790-9269 Tel: 901-584-0252Fax: 866-734-7267Email: [request info (sales@aaramps.com)](https://arcat.com/rfi?action=email&company=American%252BAccess%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(05525ame)%253A%2520&coid=50108&spec=05525ame&rep=&fax=866-734-7267);Web: <http://www.aaramps.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 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Edit the following General paragraphs as required and applicable to project LEED requirements. Coordinate project locations for applicable regional credits. Delete the paragraphs that are not applicable or if LEED is not applicable.

* 1. MATERIALS
     1. Extruded aluminum Bars, Rods, Wire, Shapes and Tubes shall be 6063-T6 alloy and temper with a minimum ultimate tensile strength of 22,000 psi. Comply with ASTM B 221.
     2. Sheet and Plate Aluminum: ASTM B 209; 5005 alloy.
     3. Extruded Aluminum-Alloy Structural Pipe and Tube. Comply with ASTM B 429.
     4. Mechanical Fasteners: Aluminum, stainless steel or other non-corrosive materials compatible with aluminum members, trim, hardware, anchors and other components of the modular system.
  2. MODULAR RAMP SYSTEM
     1. All components shall be universal so that system can be easily relocated and assembled into many different configurations.
     2. Ramp Sections: Ramp sections are prefabricated aluminum shapes.

\*\* NOTE TO SPECIFIER \*\* Select the ramp length and width as required for the project. Standard lengths are shown and minimum widths are 48 inches. Custom sizes are available contact the manufacturer for additional information.

* + - 1. Length:
         1. 6 foot
         2. 5 foot
         3. 4 foot
         4. 3 foot
         5. 2 foot
         6. \_\_\_
      2. Width:
         1. 48 inches
         2. \_\_ inches
      3. Height: Variable as indicated.
      4. Walking surface shall be continuous, without gaps and aluminum deck with extruded slip resistant surface.
      5. Ramp sections have a wheelchair guard 3 inches plus or minus 1 inch from decking surface.
    1. Landings: Fabricated of aluminum shapes and deck.
       1. Prefabricated in typical 63 inch by 63 inch or 63 inch by 78 inch sections. Larger sizes will be fabricated as required by local codes and for specific applications as indicated on the Drawings.
       2. Landings shall be designed for variable heights
       3. Walking surface of the landing shall be continuous, without gaps, knurled or cross-hatched, aluminum deck with extruded slip resistant surface.
    2. Legs: Fabricated of aluminum shapes and plate.
       1. Lengths as required to fit site conditions.
       2. Provide with 4 inch by 4 inch foot pads.
       3. Legs telescope into the ramps and landings and shall allow for height and slope adjustments.
       4. Design to be independent each side, perpendicular to the ground and allow for adjustment without additional foundation systems.
       5. Legs shall not protrude outside the footprint of the walking surface, eliminating tripping hazards.
    3. Handrail and Guardrail: Fabricated of aluminum tubing and fittings.
       1. Handrail shall have outside diameter of 1.5 inches.
       2. Handrail gripping surface shall be smooth and continuous throughout ramp sections, steps and landings.
       3. Guardrails shall form a protective barrier of a minimum of 42 inches high and designed such that a 4 inch sphere can not pass through any opening.
       4. Pickets, balusters will be minimum aluminum 3/4 inch by 3/4 inch, 4 inches o.c.
       5. Inside handrail to be attached to guardrail 34 inches to 38 inches above walking surface.
    4. Steps: Fabricated of aluminum shapes and deck.
       1. Step threads 12 inches deep typical
       2. Step riser heights 7 inches typical.
       3. Walking surface of the step fabricated of extruded aluminum decking with a slip resistant surface and provided with riser closures

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

* 1. FINISHES
     1. Shop finish ramp components as follows"
        1. Preparation: Brush Off Blast SSPC-SP10.
           1. Remove all oil, grease, dirt, mill scale, corrosion products, oxides or other foreign from the surface by abrasive blasting, except for very light shadows, very slight streaks or slight discolorations caused by mill scale oxides.
           2. At least 95 percent of each square inch of surface area shall be free of all visible residues, and the remainder shall be limited to the light discolorations. Final blast profile should not exceed 0.7mils.
        2. Powder Coat:
           1. Electrostatically applied Thermosetting Powder Coating, Polyester Powder Coating, meeting performance requirements of AAMA 2603.
           2. Color:

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

Low Gloss Architectural Bronze

Color: Low Gloss Black

Color: Low Gloss Sandstone

* 1. FABRICATION
     1. Fit and shop assemble components in largest practical sizes for delivery to site.
     2. Fabricate components with joints tightly fitted and secured. Furnish spigots and sleeves to accommodate site assembly and installation.
     3. Exposed Mechanical Fastenings: Screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
     4. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, and flush. Ease exposed edges to small uniform radius.
     5. Accurately form components to suit stairs and landings, to each other and to building structure as applicable.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. Verify field conditions are acceptable and are ready to receive work
      3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean 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 in accordance with manufacturer's instructions.
      2. Install components plumb and level, accurately fitted, free from distortion or defects.
      3. Conceal bolts and screws whenever possible.
      4. All legs should land on a solid surface or a concrete paver. Minimum dimensions of paver must be equal to or greater than 2 inches H by 6 inches W by 9 inches.
      5. Anchor assembly using anchors provided as specified in Section 05 50 00 - Metal Fabrications.
   4. PROTECTION
      1. Protect installed products until completion of project.
      2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION