

Redispan Inc

MODULAR ACCESS SYSTEM

TECHNICAL & ARCHITECTURAL SPECIFICATIONS



Manufactured in the USA

SPECIFICATIONS

Ramps

	36" WIDE RAMPS												
	2' RAMP	3' RAMP	4' RAMP	5' RAMP	6' RAMP	7' RAMP	8' RAMP						
Made of Aluminum	✓	✓	✓	✓	✓	✓	✓						
Slip Resistant Walking Surface	✓	✓	✓	✓	✓	✓	✓						
Weight – Solid (lbs.)	16.1	22.6	29.2	35.7	42.3	48.8	55.3						
Weight – Expanded Metal (lbs.)	17	23.7	33	39.7	46.5	53.3	60.1						
Usable Dimensions	2' x 36"	3' x 36"	4' x 36"	5' x 36"	6' x 36"	7' x 36"	8' x 36"						
Weight Capacity (lbs.)	1,000	1,000	1,000	1,000	1,000	1,000	1,000						
Width to Outside of Handrail	40-3/16"	40-3/16"	40-3/16"	40-3/16"	40-3/16"	40-3/16"	40-3/16"						
Width to Outside of Support Feet	41-3/16"	41-3/16"	41-3/16"	41-3/16"	41-3/16"	41-3/16"	41-3/16"						
Side Rail Curb Height	2"	2"	2"	2"	2"	2"	2"						
Upper Handrail Height	34½"	34½"	34½"	34½"	34½"	34½"	34½"						
Lower Handrail Height ¹	24"	24"	24"	24"	24"	24"	24"						
Handrail Diameter	1½"	1½"	1½"	1½"	1½"	1½"	1½"						

Weights and dimensions are approximate and subject to change.

¹ Two-Line Handrail Only

² Platform Handrails Include 1½" x 2" Curb. ³

Platforms - Solid Surface

	4' x 4' W/4' HR	4' x 5' W/5' HR	4' x 5' W/TURN HR	5' x 4' W/4' HR	5' x 4' W/TURN HR	5' x 5' W/5' HR	5' x 6' W/6' HR	5' x 6' W/TURN HR	6' x 5' W/5' HR	6' x 5' W/TURN HR	6' x 6' W/6' HR	8' x 5' HR ³	
Made of Aluminum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Slip-resistant Surface	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Platform Weight w/o HR (lbs.)	57.2	61.8	61.8	61.3	61.3	71.9	82.6	82.6	82	82	94.2	109.8	
Platform w/Single-Line Handrail (lbs.)	69.5	80.8	79.7	78.1	79.2	90.9	103.6	102.6	101	102	115.2	141.1	
Platform w/Two-Line Handrail (lbs.) ²	73.3	85.4	83.9	81.9	83.4	95.5	109.2	107.7	105.6	107.1	120.8	149.3	
Platform w/Vertical Pickets (lbs.)	77.5	90.2	88.4	86.1	87.9	100.3	115.4	113.2	110.4	112.6	127	158.1	
Platform w/Horizontal Pickets (lbs.) ²	89.1	104.6	101.4	97.7	100.9	114.7	131.8	128.6	124.8	128.0	143.4	186.4	
Weight Capacity (lbs.)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Useable Dimensions	48" x 48"	48" x 60"	48" x 60"	60" x 48"	60" x 48"	60" x 60"	60" x 72"	60" x 72"	72" x 60"	72" x 60"	72" x 72"	96" x 60"	
Outer Dimensions	53.5"x53.5"	53.5"x65.5"	53.5"x65.5"	65.5"x53.5"	65.5"x53.5"	65.5"x65.5"	65.5"x77.5"	65.5"x77.5"	77.5"x65.5"	77.5"x65.5"	77.5"x77.5"	101.5"x65.5"	
Width to Outside of Support Feet	53.75" x 53.75"	53.75" x 65.75"	53.75" x 65.75"	65.75" x 53.75"	65.75" x 53.75"	65.75" x 65.75"	65.75" x 77.75"	65.75" x 77.75"	77.75" x 65.75"	77.75" x 65.75"	77.75" x 77.75"	101.75" x 65.75"	
Minimum Platform Height (w/o Support Tubes)	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"	3½"	
Upper Handrail Height	34½"	34½"	34½"	34½"	34½"	34½"	34½"	34½"	34½"	34½"	34½"	34½"	
Lower Handrail Height ¹	24"	24"	24"	24"	24"	24"	24"	24"	24"	24"	24"	24"	24"
Handrail Diameter	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"	1½"

Weights and dimensions are approximate and subject to change.

¹ Two-Line Handrail Only

² Platform Handrails Include 1½" x 2" Curb.

³ Includes Two 5' Handrails & One 8' Handrail

Transition Plates

	UPPER	LOWER	GROUND
Made of Aluminum	✓	✓	✓
Raised Tread Surface	✓	✓	✓
Length	3½"	6"	18"
Width	35⅝"	35⅝"	35⅝"

ARCHITECTURAL SPECS

Part 1 – General

1.1 DESCRIPTION OF PRODUCT

- a. The product described herein, manufactured by Redispan Inc. is an aluminum modular ramp consisting of ramp sections, platforms, rails, and supports that are selected to provide adequate ramping height.

1.2 QUALITY ASSURANCE

- a. 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).

1.4 SUBMITTALS

- a. Shop drawings by contractor or manufacturer's literature for approval. Drawings shall indicate layout, unit locations, unit identification, connections details, support items, and dimensions.
- b. A sample of the ramp treads showing slip resistant ramp surfaces.

1.5 DELIVERY AND HANDLING

- a. The contractor shall inspect the components upon delivery to ensure that the proper materials have been received and 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 – LIMITED LIFETIME

- a. The manufacturer shall have in writing a limited lifetime warranty against any defect in materials and workmanship.

Part 2 – Overview

2.1 OVERVIEW

- a. All Redispan Inc. ramps and accessories shall be prefabricated modular units as manufactured by Redispan Inc. These ramps shall be modular in design to allow for easy of assembly and relocation.

2.2 MATERIALS

- a. ENGINEERING
 1. Ramp sections shall be designed to exceed 2009 International Residential Code (IRC) uniform minimum distributed live load of 40 pounds per square foot (PSF) for balconies fire escapes and stairs with a safety factor of 2 and a concentrated vertical load of 500 PSF.
- b. MATERIALS
 1. Ramp sections shall be all aluminum construction from alloy 6005A.
 2. All structural fasteners which attach ramps together and handrails to ramps shall be of grade 5 strength or higher, and shall be zinc plated or zinc chromate finish.
- c. DESIGN AND FABRICATION
 1. Redispan ramp units are to be built to shape, size, and finish as indicated on approved drawings.
 2. Ramp surface is to be continuous, that is no gaps greater than ¼", and shall have an extruded slip resistant surface. Platform deck surface will be knurled to make slip resistance bi-directional.
 3. Ramps shall be constructed of either interlocking 1½" x 6" treads fastened to the side rails.
 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 with a minimum 3" extension with a preformed angle between 8° and 12° with a slip resistant surface.

6. Bottom of all ramps must accept a full-width pivoting bevel with a slip resistant surface from ramp to ground transition.
7. All fasteners shall be captured either on outside of ramp or underneath.
8. There shall be no fasteners protruding into the inner usable ramp or curb surface.

2.3 PLATFORMS

- a. ENGINEERING
 1. Platforms shall be designed to exceed 2009 International Residential Code (IRC) uniform minimum distributed live load of 40 pounds per square foot (PSF) for balconies fire escapes and stairs with a safety factor of 2 and a concentrated vertical load of 500 PSF.
- b. MATERIALS
 1. Platform sections shall be all aluminum construction from alloys 6005.
- c. DESIGN AND FABRICATION
 1. Platform units are to be built to shape, size, and finish as indicated on approved drawings.
 2. Platform surface is to be continuous, that is no gaps greater than ¼", and shall have an extruded slip resistant surface, knurled to make slip resistance bi-directional.
 3. Platforms shall be constructed of interlocking 1½" x 6" treads welded to the side rails, or 1/2"-.125"
 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 specified in sections 2.2 and 2.3.
 2. Support assemblies shall be designed to hold the support tubes and legs vertical in all locations.
 3. Support tubes and legs shall have a minimum wall thickness of .094".
- b. MATERIALS
 1. Support assemblies shall be constructed of aluminum alloys 6005A, with aluminum feet.
 2. All fasteners shall be grade 5 strength or higher with zinc plated or zinc chromate finish.
- c. DESIGN
 1. Support tubes and legs shall be adjustable for variations in height.
 2. All aluminum brackets shall be supplied for attachment of the ramps and/or platforms to the proper support tube or leg.
 3. All legs shall have a 6" x 6" (minimum) square polymer foot.

2.5 HANDRAILS

- a. MATERIALS
 1. Handrails shall be all aluminum construction from alloys 6005A.
- b. DESIGN AND FABRICATION
 1. Handrails shall be provided along both sides of ramp segments. The inside handrail on turn platforms and dogleg ramps shall always be continuous. Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions.
 2. Handrails shall be 1½" diameter.
 3. The top of the handrail gripping surface shall be mounted between 30" and 36" above the ramp surface, and the top of the intermediate rail, when present, shall be mounted between 18" and 22" above the ramp surface.
 4. All handrail tubes shall be deburred and all sharp edges removed from gripping surfaces.
 5. All handrails shall be supplied with brushed, architectural finish
 6. All platform handrails shall include a 1 ½" x 2" curb located 1 ½" to 2 ½" above the platform deck except the Vertical Picket Handrail.

PART 3 – EXECUTION

3.1 EXAMINATION

- a. Verify site conditions are conducive to proper assembly of product.

3.2 ASSEMBLY

- a. Install prefabricated aluminum ramps according to manufacturer's instructions and the approved drawings without damage to components, shape, or finish. Repair or replace any damaged components.
- b. Align and maintain uniform slope and horizontal joints as installation progresses.
- c. Fasten components in place as indicated in shop drawings or plans.
- d. Install railings and pickets according to manufacturer's instructions and as shown on approved drawings.

3.3 MAINTENANCE

- a. System must be maintained in accordance with manufacturer's instructions.

3.4 IMPORTANT NOTE

- a. Specifications are subject to change without notice.

PART 4 – COMPONENT-ILLUSTRATIVE CONFIGURATIONS

