Upside Innovations, LLC
5470 Spellmire Dr.
West Chester, OH 45246
p: 513.889.2492 f: 513.672.2124

PREFABRICATED ALUMINUM OSHA STEP SPECIFICATIONS

PART 1 – GENERAL

1.1 References

1.1.1 OSHA Safety and Health Regulations for Fixed Industrial Stairs 29 CFR Part 1910.25

1.1.2 OSHA Safety and Health Regulations for Construction – Stairways 29 CFR Part 1926.1052

1.2 Submittals

1.2.1 Shop Drawings are available upon request.

1.3 Quality Assurance

1.3.1 Acceptable manufacturer: Upside Innovations, LLC, 5470 Spellmire Dr., West Chester, OH 45246. Phone: (513) 889-2492; Fax: (513) 672-2124 or a contract manufacturer as approved by the Upside Innovations, LLC, Supplier Quality Review process.

1.3.2 Aluminum welding will be in accordance with ANSI / AWS D1.2/D1.2M: 2008. Welding must be performed solely with Pulsed Gas Metal Arc Welding (Pulse-MIG) processes or Gas Tungsten Arc Welding (TIG) processes by experienced operators.

1.3.3 All exposed surfaces must be free of sharp or jagged surfaces.

1.3.4 Warranty: Upside Innovations LLC is proud to warrant its products to be free from defects in material and workmanship in the course of manufacturing for a period of one year beginning on the date the products are delivered and accepted. This warranty excludes any defects resulting from abnormal use in installation, service, accidental or intentional damage or any occurrences beyond the manufacturer's control.

1.4 Materials

1.4.1 All Platforms, Steps, Legs, and Guardrails are constructed of mill finish aluminum extrusions and mill finish aluminum sheet. Extrusions are either 6061-T6, 6063-T52, or 6005-T5 aluminum alloy and all aluminum sheet is 5052-H32.

1.4.2 All mechanical fasteners are 18-8 Stainless Steel.

1.5 Engineering

1.5.1 OSHA Steps are designed to be a free-standing structure. Fastening the platform to the building or modular building with lag screws is recommended.

PART 2 – PRODUCT COMPONENTS

2.1 Platforms

2.1.1 Walking surfaces are designed to carry a uniform live load of 100 pounds per square foot and a concentrated vertical load of 300 pounds in an area of one square foot.

2.1.2 Walking surfaces are designed to have a coefficient of friction no less than 0.50 in all directions of travel.

2.1.3 Walking surfaces are designed and constructed to be continuous, without gaps and must be made using 1-1/2" x 9-1/2" extruded decking. The outside legs of each piece of extrusion must be touching the adjacent piece in order to create a hard stop for structural support.

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2.1.4 All platforms are designed to be a minimum of 30” in depth in the direction of travel and at least as wide as the stairs.

2.2 Platform Legs

2.2.1 All legs are designed to support the platform. (See section 2.1)
2.2.2 Platform legs are adjustable so that a compliant installation can be made with the minimum number of parts.
2.2.3 All legs include a 4” x 4” x 0.250” welded foot pad.
2.2.4 Platform legs must be designed using a minimum of 1.75” x 1.75” x 0.093” aluminum square tube that connects to the platform frame. The legs must be bolted wall to wall with one 18-8 stainless steel bolt. The telescoping feature allows leg adjustment in order to meet elevation changes

2.3 Platform Rails

2.3.1 All platform rails are designed to withstand a concentrated load of 200 pounds applied in any direction on the top of the rail.
2.3.2 Platform rails are provided on the open sides of the platform.
2.3.3 Platform rails are designed to be 42” high measured vertically from the platform surface to the top of the rail.
2.3.4 All platform rails are to be constructed at minimum with 1-1/2” x 1-1/2” x .060” aluminum square tube.

2.4 Steps

2.4.1 Step treads and framing are designed to carry a uniform live load of 100 pounds per square foot and a concentrated vertical load of 300 pounds in an area of one square foot.
2.4.2 Walking surfaces are designed to have a coefficient of friction no less than 0.50 in the normal direction of travel.
2.4.3 Steps are designed to allow a minimum clearance of 36” between the hand rail and the wall of the building or between two hand rails.
2.4.4 All step treads are designed to have a uniform depth of 9-1/2” minimum per step.
2.4.5 The step rise/run combination will only allow an angle between 30 and 50 degrees from horizontal.

2.5 Step Rails

2.5.1 All step rails are designed to withstand a concentrated load of 200 pounds applied in any direction on the top of the rail.
2.5.2 Step rails are provided on the open side of the step treads.
2.5.3 Step rails are designed to be 36” high measured vertically from the top of the step nosing to the top of the rail.
2.5.4 Dual Step rail frames are to be constructed at minimum with 1-1/2” x 1-1/2” x .060” aluminum square tube. Omni Step rail frames are to be constructed at minimum with 1-1/2” x 1-1/2” x .093” aluminum square tube.