**Division 11 – Equipment** 11 68 00 Play Equipment and Structures 11 68 13 Playground Equipment

# **American Playground | Slides**

Spiral Slides - LMA and FSS Spiral Slide - 3 Part Specifications

## PART 1 – GENERAL

## 1.1 SUMMARY

A. This section includes written specifications for the LMA and FSS Series Spiral Slides.

## **1.2 QUALITY ASSURANCE**

- A. Installer Qualifications: Installer must have concrete anchor and boring experience, carpentry and fastening experience along with previous installation and assembly of slide products.
- **B.** Manufacturer Qualifications: Qualified manufacturer to have at least 5 years of manufacturing experience in steel, aluminum, and stainless steel along with powder coating. American Playground has been manufacturing quality US built products since 1911.
- C. Sourcing: To ensure that laser cuts, finish, quality, and product aesthetic match corresponding project, procure all LMA or FSS Spiral Slides from https://www.americanplayground.net
- **D. Product Options:** Submittal sheets will illustrate call out requirements of products for procurement and will include size, finish, and other product options.

### 1.3 SUBMITTALS

- A. **Product Data:** Includes physical characteristics such as materials, specifications, and finish.
- B. Drawings: Show details including dimensions, materials, and options for each product.
- C. Samples for Verification: Finish samples of the color and material provided upon request.

## 1.4 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Upon delivery, inspect for missing parts or damage and notate on the B.O.L. Absence of notations on delivery date may result in financial loss. LMA and FSS slides must be shipped via direct or dedicated service. Cross docking is not allowed. Slide must be manually and by hand loaded and unloaded from freight equipment. DO NOT FORK this equipment.
- B. Product Handling: Handle products with sufficient care to prevent any scratches or damage to the finish.
- C. **Product Storage:** Remove plastic wrapping from slide after receipt. Protect surfaces from dust and debris until installation. Sand, dirt, and sheetrock dust may scratch powder coated surfacing. Rinse surface debris with water from surface prior to use.

## 1.5 WARRANTY

A. Warranty: SLIDE shall carry a 5-year manufacturer's limited warranty against defects in materials and workmanship.

#### PART 2 – PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

A. Manufacturer: American Playground – 11011 Clodine Road, Richmond, TX 77407 - Website: www.americanplayground.net Phone: 432-374-5991 - email: sales@americanplayground.net

#### 2.2 MATERIALS AND FINISH

#### A. Component Steel Tubing (non-Aluminum components)

All tubing used to manufacture components shall be electrical resistance welded, cold rolled, high strength steel. The exterior coating will consist of an in line hot-dipped uniform zinc galvanizing, chromate conversion and acrylic over coating. The interior coating will consist of special organic acrylic modified polyester

#### B. Hardware

All nuts, bolts, screws, inserts and lock washers used in the assembly of equipment shall be yellow dichromate plated steel, stainless steel, mechanically or powder coated. Yellow dichromate treatment includes an elector deposited 99.9% pure zinc substrate applied from specially formulated solution sealed with a yellow dichromate topcoat designed to work in conjunction with the zinc plating. Hardware shall be tamper resistant.

### C. Powder Coat

Shall be an electrostatically applied TGIC polyester powder. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 to 5.0 mil thickness and oven cured between 375 to 400 degree Fahrenheit, Pencil Hardness H (ASTM D-3363), Abrasion (ASTM1907),Impact (ASTMD-2794-69),Wedge Bend (ASTM D-522-69),Adhesion (Cross Hatch ASTM D-33549 & Knife Scratch ASTM D-2197),Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D-2242, Salt Spray ASTMB-117 & Fathometer 300 hours with no loss of gloss), Over bake Stability 100% at 400 degrees Fahrenheit

#### D. Aluminum

The chute shall be .125 thick type 1100-0 aluminum with a minimum Tensile Strength of 22,000 psi and a minimum Yield Strength of 21,000 psi. The material shall meet or exceed ASTM B209, QQA 250/2. The aluminum shall be coated with a TGIC polyester powder coating in conformance with the specifications outlined herein. Solid and continuous aluminum chute walls shall be 5052-H32 aluminum of .125" thickness, reinforced by 6061-T6 aluminum 1.05" or 1.0625" diameter safety railings. The chute sidewalls shall spiral from 9" to 16" high. The entry shall be 3003-H22 or 6061-T6 aluminum, non-slip or diamond plate .25" thick aluminum formed with a minimum 38" high safety enclosure. The support mast shall be made of 6061-T6 aluminum, 5" (LMA) or 8" (FSS) Schedule 40 tube. The exit chute shall be double wall construction.

1.Cadmium, Lead, Mercury, and Hexavalent Chromium Content in 1100-0 material shall be compliant to IEC 62321:2008, IEC 62321-4:2013, IEC62321-5:2013 by test and analysis through Inductively Coupled Argon Plasma Spectrometry, Chromium (VI) analyzed by UV-Visible Spectroscopy to Reporting Limit and Permissible Limit.

## E. Color selected by planning team from manufacturer's limited range of products.

### 2.3 SLIDE OPTIONS

### A. ELEVATION

Elevation at customer site may affect orientation options available for direction of entrance and exit

## B. ORIENTATION OF ENTRANCE AND EXIT

Orientation of slide entrance and exit may affect the elevation needed for the floor-to-floor distance

### C. DIAMETER AND PROJECTIONS

The overall dimensions of the slide are determined by proprietary design. Certain deviations may be possible for constrained or unique installation requirements. Slide radius to leading edge of entrance and transition box must be specified within a range of Minimum 2" to Maximum 18"

### D. METHOD OF ATTACHMENT

The slide shall touch landing at upper and lower elevations. The entrance and transition box may abut the fascia of the receiving deck or may overlay the upper receiving deck. Specification of design may affect the overall projection dimension of the slide toward the axial direction of the entrance. The purpose of entrance connection is for shoring or closure and not intended to be load bearing. The attachment of the column to lower elevation shall be through SURFACE MOUNTING to concrete pier or INGROUND MOUNTING with pier. Specification of the hardware for attachment shall be made by individual of competency and knowledge of receiving materials.

### E. LEADING EDGE OF BOX

The top edge of the entrance transition box includes a rod attached to the top of the aluminum side wall. This shall aid in structural integrity of the box, protect pedestrians from a sharp edge and serve as a handrail within the required barrier wall. This rod may stop at the leading edge of the box or may turn a radius corner and proceed downward to the bottom of the sidewall. Design facets at the receiving deck may include walls, railings, barriers or other architectural, cosmetic, or structural features. The box top rail and front edge may be configured to complement to attachment, shoring, closure, and overall safety at the entrance to the slide.

### F. COLORS

See COLOR SPECIFICATION OPTIONS. It is not possible to obtain this product UNCOATED.

### G. BOX TOP

The side walls of the entrance and transition box shall be a minimum of 38" high to serve as a barrier. Optionally the entrance and transition box may include a roof, lid or cover which extends from the leading edge of the box to the center support column. A top or roof to this transition must consider head height clearance of pedestrians and may not be at an elevation less than 60".

### H. DOG EARS

The forward and leading edge of the transition box side walls may include optional dog ear, wing, or return to offer closure and prevent openings of gaps between upper-level barriers and the slide at the opening.

### I. DOUBLE STACK

The LMA or FSS slide may be built as stackable to allow for multiple levels. This must be incorporated in the design phase prior to manufacturing and is not available post build or as a retrofit option.

#### J. SECTIONAL

One of the unique and proprietary features of the slide is the unitary and one-piece design. In certain installation scenarios, the slide may be created and split into smaller sections. The slide may be shipped as one or multiple units. At installation the sections are bolted together at flange points to create a single unit. This must be incorporated in the design phase prior to manufacturing and is not available as a retrofit option.

#### K. Angle Brackets

An angle bracket may be utilized to facilitate slide to upper elevation connection and shoring.

# PART 3 – EXECUTION

## 3.1 INSTALLATION

A. Installation: Install and/or assemble in accordance with manufacturer's instructions.

# 3.2 QUOTING AND ORDERING INFORMATION

A. Quoting: When quoting or ordering, specify the product name, elevations, orientation directions and applicable product options.

# 3.3 FREIGHT

A. Freight: Call 765-374-5991 or email <u>sales@americanplayground.net</u> for product and freight quotes.