

# **Playground General Product Specifications**

At Superior Recreational Products, we use only quality playground materials — whether purchasing a steel or recycled structure. Our playgrounds are proudly made in the USA so you can trust our playgrounds are built to last and will provide fun for years to come.



# **Steel Posts and Tubing**

We use galvanized steel for all steel posts and tubing for maximum strength and durability. Both the interior and exterior of all of our galvanized steel parts have been through the Triple Flo-Coat® process to ensure greater corrosion resistance. All galvanized steel posts and tubing are 95%-98% recyclable. Our posts are available in two different size options to meet your design and budget needs.

## **Playground Series**

# 3.5" Commercial Playground Series

- 3.5" O.D. vertical posts
- 36" deck grid and 46.5" deck grid
- 24" diameter plastic and 30" diameter plastic

# **Posts & Tubing**

#### **Vertical Posts**

- 13 gauge galvanized steel (3.5" Series)
- 11 gauge galvanized steel (5" Series)
- 11 gauge galvanized steel (shade verticals)
- 50,000 PSI yield strength (ASTM E-8)
- 55,000 PSI tensile strength (ASTM E-8)
- Interior and exterior Triple Flo-Coated corrosion protection (ASTM B-117)
- Contains a minimum of 30% recycled steel and is between 95%–98% recyclable
- Manufactured per ASTM A500

# **5" Commercial Playground Series**

- 5" O.D. vertical posts
- 48" deck grid
- 30" diameter plastic

#### **Tubing**

- Contains a minimum of 30% recycled steel and is between 95%-98% recyclable
- Interior and exterior Triple Flo-Coated corrosion protection (ASTM B-117)
- Manufactured per ASTM A500
- 50,000 PSI yield strength (ASTM E-8)
- 55,000 PSI tensile strength (ASTM E-8)

Overall Diameter	Tubing Shape	Material
1.25"	Round	14 gauge galvanized steel
1.66"	Round	13 gauge galvanized steel
1.90"	Round	11 gauge galvanized steel
2.375"	Round	3 gauge galvanized steel/9 gauge steel (bi-pod/tri-pod top bar/fitness frame)
3.5"	Round	13 gauge galvanized steel (3.5" Series)
4"	Square	11 gauge galvanized steel
5"	Round	11 gauge galvanized steel (5" Series)





## **Recycled Plastic Posts**

Our 100% recycled (excluding additives and colorants) HDPE posts are made from both pre-consumer and post-consumer plastic, like milk jugs and detergent bottles! Every pound of our recycled plastic lumber equates to 8 recycled milk containers. Neat, right? We ensure our recycled posts are reinforced for even greater strength by adding additional fiberglass elements to each post. Our posts are vandal resistant and protected from rotting, splitting, cracking or splinters for a minimum of 50 years. Additionally the posts have minimal fading and are resistant to termites, marine borers, salt spray, oil and fungus.

- 6"x6" dimensions for vertical posts
- Made of HDPE
- Molded in one piece
- UV additives to prevent deterioration from UV light
- · Made of 100% recycled material (post-industrial and post-consumer) excluding additives and colorants
- Will not rot, split, crack or splinter for a minimum of 50 years
- Resistant to termites, marine borers, salt spray, oil, and fungus



# **Textured High Density Polyethylene (HDPE) Panels**

All solid plastic panels are manufactured from high-density polyethylene. All solid plastic panels shall meet or exceed the following specifications: Density (ASTM D-1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790).

- 0.75" high density polyethylene sheeting (HDPE)
- Tested in accordance with ASTM D1928 Procedure C
- Density per ASTM D1505
- Melt Index per ASTM D1238
- Tensile Strength and Ultimate Elongation per ASTM D638 Type 4
- Brittleness temperature per ASTM D746

- Flexural modulus per ASTM D790
- Coefficient of linear thermal expansion per ASTM E831
- Textured, matte finish
- UV stabilized
- UL 94 HB fire rating
- Stain and graffiti resistant and will not delaminate, splinter, or crack





# **Rotationally-Molded Plastics**

Our rotationally-molded plastics, such as those used for slides and tubes, are made of 1/4" thick low density polyethylene (LDPE). Not only are our rotationally-molded plastics UV stabilized for reduced fading, they also contain anti-static inhibitors.

### **General Properties**

- Material: Low-Density Polyethylene (LDPE)
- Wall Thickness: 0.250" (¼")
- Tensile Strength: 2,550 PSI (ASTM D638)
- Classifications: ASTM D-1248, Type 2, Class A and Federal Specification LP-390C, Type 1, Class M, Grade 2, Category 3
- Features: UV Stabilizers and Anti-Static Inhibitors

## Meet or Exceed the Following Specifications:

- Density (ASTM D1505)
- Flexural Modulus (ASTM D790)
- Deflection Temperature Under Load (ASTM D648)
- Brittleness Temperature (ASTM D746)
- Tensile Properties (ASTM D638)
- Low Temperature Impact Test (ARM-STD)



## **Powder Coat**

Our powder coating is electrostatically applied from a custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and will be cleaned in a six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer to prevent flash rusting before coating. This coating has a super tough finish with maximum exterior durability and has superior adhesion characteristics.

#### **General Properties**

- Mil Thickness: 3.0-5.0
- Oven Cured: 375°- 425° Fahrenheit
- Oven-Bake Stability: 100% at 400° Fahrenheit
- Fadometer Test: 300 Hours with No Loss of Gloss

#### Meet or Exceed the Following Specifications:

- Film Hardness (ASTM D3363)
- Impact Test (ASTM D2794-69)
- Bend Test (ASTM D522-68)
- Adhesion (ASTM D3359, ASTM D2197)
- Stain Resistance (ASTM D1308)
- Water Resistance/Humidity (D2247-87)
- Salt Spray (ASTM B117)



# **Stainless Steel Hardware**

All nuts, bolts, and washers, with a few exceptions, are stainless steel in varying lengths. Our hardware is vandal resistant; thus, we supply a special tool with each shipment for installation.

## **General Properties**

- Material: ¾" Diameter 18-8 Stainless Steel
- Vandal Resistant: Yes
- Locking Patch: Yes, Factory Applied





## **Steel Deck Platforms, Ramps, Bridges, and Steps**

Our steel decks are formed from 12-gauge hot-rolled picked and oiled steel body — the thickest in the industry — and coated with UV stabilized PVC (plastisol) coating for a softer play surface. Our decks are perforated for great drainage, are lead-free and have formed sides that are welded with reinforcements for an even stronger deck.

### **General Properties**

- 12 gauge HRPO per ASTM A1011
- Formed sides with welded reinforcements (stairs have welded stringers)
- 0.625"x1" diameter slots after coating
- Plastisol coating with thickness of .080" to .120"
- 1.5" slots for vertical adjustability

- Deck coating meets CFR 1207.5 for slip resistance
- Tensile Strength: 2,800 psi
- Elongation: 290 %
- Tear Strength: 420 lbs/in
- Lead free per 16 CFR Part 1303



#### **Post Caps**

From easy in-field installation to a unique two-color look, our aluminum alloy post caps offer many great benefits. Our super-tough post cap design allows for less water access, making our posts more durable in the field. Once installed the post caps can't be removed, stopping unwanted vandalism.

- Aluminum alloy (ZL101) aluminum series of tertiary alloys
- Tested using GB/T 1173-1995 (equivalent to ANSI 365.0 specified in ASTM B26/
- B26M
- Less than 40ppm of lead per IEC 62321:2008 Ed. 1 and US EPA 3050B: 1996
- Powder coat finish



### **Other Materials**

## **C-Line Fittings**

- Aluminum alloy (ZL101, GB/T 1173-1995) aluminum series of tertiary alloys
- Less than 40ppm of lead per IEC 62321:2008 Ed. 1 and US EPA 3050B: 1996
- Mounts to vertical post with gasket and four 0.25"x1" self-tapping screws with patch
- Powder coat finish
- Direct bolt systems have 360° of rotational adjustability

# **Sealing Gaskets**

- Neoprene rubber
- 60 +/- 5 durometer hardness