

Appendix A

Zadie E Kuehl Memorial Park
Drawing 645-132593C

SuperMax Specifications

General System Specifications:

SuperMax features 5" O.D. uprights with a high-strength aluminum alloy clamp fastening system finished with a polyester powder-coat. All uprights shall receive factory installed aluminum post caps and will ship with labels for manufacturer identification.

All decks and components shall connect using the aluminum alloy clamping system. All climbing attachments shall include a 15" wide deck entry archway to control deck access to one child at a time and help prevent inadvertent falls.

Manufacturer shall offer the following warranties on the materials and components of its system:

- Lifetime limited warranty on support posts (uprights)
- 15-Year limited warranty on punched steel decks, pipes, rails, loops and rungs
- 15-Year limited warranty on rotationally molded polyethylene components
- Lifetime limited warranty on all hardware

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

General Specifications of Materials

Uprights, Aluminum

The posts shall be 5" outside diameter tubing with an 1/8" minimum wall thickness. The material shall be extruded from 6005-T5 seamless aluminum alloy conforming to ASTM-B-221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

Deck Components

Deck Curb

Deck Curb: Curb shall be fabricated from a punched 11 Ga. P&O steel plate, along with a 1/2" Dia. H.R. steel round rod in an all welded assembly. Assembly shall be plastisol coated after welding. See general specifications for plastisol coating requirements.

General Specifications of Materials

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

Deck Components

Return Step

Return Step

The Return Step shall be made from 12 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The Return Steps shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Support legs shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. Support Legs shall be all-welded assemblies and shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

General Specifications of Materials

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

Tensile Strength - 2,800 psi

Elongation - 290 %

Tear Strength - 420 lbs/in

Fiberglass Signage

Custom Fiberglass Arch Sign

Sign must be constructed using Modulite® as produced by Pannier Corporation, 345 Oak Road, Gibsonia, PA 15044 or an equivalent fiberglass-reinforced plastic (FRP) material. All copy and graphics must be permanently embedded in the fiberglass panel. The resulting

sign must be a solid, one-piece panel with all graphic elements inseparable from the fiberglass in which they are embedded. Sign must be manufactured of clear resin or UV stabilized, acrylic-modified polyester resin reinforced with high solubility, chopped strand fiberglass mat so that the index of refraction ensures clarity of all color, copy, and graphics. Glass fibers should not be readily discernible on the sign

face. In addition, sign must have a glass content of no less than 28% of the total sign weight. Sign must have a minimum Barcol hardness of 50, tensile strength of 12,000 psi, compressive strength of 20,000 psi, and flexural strength of 18,000 psi. Sign must be opaque or translucent with a clear or matte finish, as indicated, with a minimum embedment of all graphic elements of .03125 inches (1/32"). Arch shall be roll-formed with a 24.5" radius and of 5" outside diameter, 11 gauge (.120") galvanized round tubing or 5" outside diameter tubing, 1/8" wall thickness, extruded from 6005-T5 aluminum alloy, using the same quality materials as the platform uprights. All arches shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein

General Specifications of Materials

Uprights, Aluminum

The posts shall be 5" outside diameter tubing with an 1/8" minimum wall thickness. The material shall be extruded from 6005-T5 seamless aluminum alloy conforming to ASTM-B-221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

Shade

Hex Roof Shade

HEX ROOF FABRIC SHADE

Top Plate: The Top Plate shall be fabricated from a formed 19 1/4" dia x 1/4" H.R. steel plate. The Top Plate shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

Bottom Plate: The Bottom Plate shall be fabricated from a formed 16 1/8" dia x 1/4" H.R. steel plate. The Bottom Plate shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

Cantilevered ARM: The Cantilevered Arm Weld Assembly shall be an all welded assembly fabricated with 6" dia x 3/16" H.R. steel plate, 5" x 3/8" x 2 3/4" H.R. steel plate, 5" O.D. x .12" (11 gauge) galvanized steel tubing, and 6 15/16" x 3/8" x 7 5/16" H.R. steel plate. The Cantilevered Arm Weld Assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

Long Canopy Brace: The Long Canopy Brace Weld Assembly shall be an all welded assembly fabricated with 3 1/8" dia x 1/4" H.R. steel plate, 2 7/8" O.D. x .134" (SCH 40) wall galvanized steel tubing, and 2 1/2" x 1/4" x 2 3/4" H.R. steel plate. The Long Canopy Brace Weld Assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

Upright Extension: The Upright Extension Weld Assembly shall be an all welded assembly fabricated with 5" dia x 3/16" H.R. Steel, 4 11/16" x 3/8" x 3 1/6" H.R. Steel plate, 5" O.D. x .12" (11 gauge) galvanized steel tubing, and 2 15/16" x 3/8" x 5 7/8" H.R. steel plate. The Upright Extension Weld Assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

Inground Extension: The Inground Extension shall be fabricated with 5" O.D. x .12" (11 gauge) galvanized steel tubing.

Cable: The Cables shall be fabricated from 1/4" nominal diameter, 7 strand, 19 wires per strand (minimum), with nominal tensile strength of 9,000 lbs wire rope

Fabric Shade: The Fabric Shade shall be fabricated from high density polyethylene with ultra violet additives with a monofilament and tape construction.

Shade End Casting: The Shade End Casting shall be fabricated from 383 die cast aluminum alloy. The Shade End Casting shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

General Specifications of Materials

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Park Play Specifications

General System Specifications:

Manufacturer shall offer the following warranties on the materials and components of its system:

- Lifetime limited warranty on support posts (uprights)
- 15-Year limited warranty on punched steel decks, pipes, rails, loops and rungs
- 15-Year limited warranty on rotationally molded polyethylene components
- Lifetime limited warranty on all hardware

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

Other Swings

Reflections Selfie Swing

SWING HANGERS:

All Swing Hanger castings shall be cast of malleable iron.

SEATS:

All Rotationally Molded Products are manufactured from linear low-density polyethylene UV-stabilized color and an anti-static compound additive. The tensile strength of this material is to be 2500 PSI as defined by ASTM D638. The typical wall thickness will be .250" (1/4"). All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). 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).

OFFSET SELFIE SWING BALL JOINT ASS'Y:

All frame assemblies shall be an all weld assembly fabricated from 1.315" O.D. x .183" (10 gauge) wall black steel pipe, 1.315" O.D. x .083" (14 gauge) tot frame, 1.029" x .072" (13 gauge) wall pipe stub, 12 ga. pickled and oil hot rolled flat steel cap, .752" aluminum bronze bushing pressed in a .25" x 4.375" hot rolled steel tab. The frame ass'y shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

VERTICAL CONNECTOR WELDMENT:

Shall be fabricated from 1.315 O.D. x .083" (14 gauge) wall galvanized steel pipe, 12 gauge pickled and oil hot rolled flat steel cap, .752" aluminum bronze bushing pressed in a .25" x 4.5" hot rolled steel tab. The vertical connector weldment ass'y shall be an all-welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

D SHACKLE w/NO-SNAG PIN:

Shall be fabricated from 316 stainless steel.

SELFIE LABEL & SELFIE SWING SAEFTY LABEL:

Shall be fabricated from 4mil vinyl with poly carbonate overlay.

SELFIE SWING CHAIN:

Shall be #80 410 straight link coil galvanized chain. The chain is chemically washed and completely submerged in a special heat activated primer and allowed to dry.

POWDER COAT FINISH:

Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath system (free of iron phosphate), as a rust inhibitor, and a zirconium conversion coating to prevent flash rusting before coating. In addition, all welds shall be protectively coated with ZRP, a zinc rich primer that forms a rust-resistant barrier layer over each weld prior to application of the powder coating. The powder coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: Two coat process to achieve 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D-2247-87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Over-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

HARDWARE:

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandalresistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment.

**TweenMates Swing
SWING HANGERS:**

All Swing Hanger castings shall be cast of malleable iron.

BUDDY SEATS:

All Rotationally Molded Products are manufactured from linear low-density polyethylene UV-stabilized color and an anti-static compound additive. The tensile strength of this material is to be 2500 PSI as defined by ASTM D638. The typical wall thickness will be .250" (1/4"). All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). 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).

SELFIE SWING CHAIN:

Shall be #80 4/10 straight link coil galvanized chain. The chain is chemically washed and completely submerged in a special heatactivated primer and allowed to dry.

LARGE FRAME WELDMENT:

All frame assemblies shall be an all weld assembly fabricated from 1.315 O.D. schedule 40 pipe, 1.029" x 0.072" (13 gauge) wall pipe stub, 12 ga. pickled and oil hot rolled flat steel cap, .752" aluminum bronze bushing pressed in 9.25" x 4.375" hot rolled steel tab.. The frame ass'y shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

APPROPRIATE AGE LABEL & WARNING LABEL:

Shall be fabricated from 4mil vinyl with poly carbonate overlay.

D SHACKLE w/NO-SNAG PIN:

Shall be fabricated from 316 stainless steel.

POWDER COAT FINISH:

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a six stage Alkaline bath system (free of iron phosphate), as a rust inhibitor, and a zirconium conversion coating to prevent flash rusting before coating. In addition, all welds shall be protectively coated with ZRP, a rich primer that forms a rust-resistant barrier layer over each weld prior to application of the color powder coating. The powder coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 100% at 400 degrees Fahrenheit.

HARDWARE:

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandalresistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment.

Freestanding Other

Swizzler

SWIZZLER HOUSING WELDMENT:

The housing weldment shall be fabricated of 5" I.D. St. Galv. Pipe with 3/16" flat steel gussets, top flange, inner flange, and bottom flange. The frame assembly shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

SWIZZLER SHAFT ASSEMBLY:

The shaft assembly shall be fabricated of 1 1/8" C.R. steel round with 1/4" flat steel gusset and roto plate. The swizzler shaft assembly shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

SWIZZLER FOOTBUCK ASS'Y:

The footbuck ass'y shall be fabricated of 3/16" flat steel plate with 5" O.D. x .120 wall steel tube and 5/16" welded nut. The swizzler footbuck ass'y shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

SWIZZLER TOP CAP BEARING ASS'Y:

The top cap bearing ass'y shall be fabricated of a 3/16" flat steel top flange and 3/16" flat steel top flange stop with a 2" galv. pipe spacer. The swizzler top cap bearing ass'y shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

SWIZZLER SEAT:

Shall be rotational molded from polyethylene. The polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotational molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-155); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM-638); Flexural Modulus (ASTM- D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

Freestanding - Other

Whirl with Me w Handle

48" DIA. PLATFORM ASSEMBLY: Shall be formed of one piece 11 gauge H.R. steel with a turned under flange. Braces shall be fabricated of 1-5/16" O.D. galvanized pipe. Platform shall be an all welded construction.

HUB: Shall be fabricated of 3-1/2" O.D. pipe with 1/4" H.R. flat plate.

BASE ASSEMBLY: Legs shall be fabricated of 2-7/8" O.D. galvanized pipe. Axle shall be fabricated of 1-5/8" O.D. cold-rolled steel. Collar shall be fabricated of 2-3/4" O.D. tube. Base assembly shall be an all welded construction.

WHIRL BRAKE COVER: Shall be color-impregnated, molded polyethylene with 3/16" nominal thickness.

SHIELD MOUNTING BRACKET: Shall be fabricated of 3/16" H.R. flat steel, drilled and tapped to receive 3/8" bolts. Bracket shall have a powder coat finish.

BRAKE DRUM: Shall be fabricated of 8-1/2" O.D. pipe with 1/4" H.R. flat plate welded in place to receive hub and platform plates.

WHIRL: The Whirl shall be rotational molded from polyethylene. The polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotational molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-155); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

FINISH: Base Ass'y and Platform Ass'y shall have a powder coat finish.

HARDWARE: All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

Arch Swing Structures

Arch Swing - (3 1/2" O.D. Toprail)

Toprail is 3-1/2" O.D. 11-gauge galvanized steel tubing with a baked on polyester powder-coated finish. Arch posts are bent from 3-1/2" O.D. steel tubing with welded socket. All metal parts have a baked on polyester powder-coated paint finish.

Therapeutic Swing

One-For-All Swing Seat

All polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). The swing hanger shall consist of a top clevis, bottom clevis, and swing pendulum. The top clevis shall have a non-slip-serrated surface. The pendulum shall incorporate a factory installed bronze bushing. The pendulum shall be attached to the bottom clevis with 1/2" x 2 1/2" hex bolt, 1/2" lockwasher, and 1/2" hex nut.

Freestanding Other

Button Step

BUTTON STEP: The Button Step shall be rotational molded from polyethylene. The polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotational molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-155); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

MOUNTING POST: Shall be an all welded assembly fabricated of 2.375" O.D. galvanized steel tubing with a wall thickness of .095" and 12 gauge (.109") hot rolled flat steel that is formed. This assembly shall have a powder coat finish.

PLUG: Shall be fabricated of black butyl rubber with a durometer of 60.

HARDWARE: All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

SuperMax Specifications

General System Specifications:

SuperMax features 5" O.D. uprights with a high-strength aluminum alloy clamp fastening system finished with a polyester powder-coat. All uprights shall receive factory installed aluminum post caps and will ship with labels for manufacturer identification.

All decks and components shall connect using the aluminum alloy clamping system. All climbing attachments shall include a 15" wide deck entry archway to control deck access to one child at a time and help prevent inadvertent falls.

Manufacturer shall offer the following warranties on the materials and components of its system:

- Lifetime limited warranty on support posts (uprights)
- 15-Year limited warranty on punched steel decks, pipes, rails, loops and rungs
- 15-Year limited warranty on rotationally molded polyethylene components
- Lifetime limited warranty on all hardware

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

- Tensile Strength - 2,800 psi
- Elongation - 290 %
- Tear Strength - 420 lbs/in

Deck Components

Deck Platforms

Metal decks shall be a one-piece construction and shall be designed to maintain a full 48" on center post spacing. Metal decks shall be fabricated from 11 gauge hot rolled steel which shall be punched, formed, and reinforced with welded in place 2-1/2" x 11 ga. steel strips. Decks shall include a pattern of equally spaced slots on each side to provide a flush mounting of play events that attach to the deck, as well as the design of more than one adjacent deck at the same height. Each deck shall have welded at the corner underside a threaded 3/8" stud for attachment to the post's Deck Clamps. This fastening technique eliminates the need for hardware protruding through the deck surface, thereby eliminating the possibility of an entanglement hazard and presenting a clean and smooth deck

surface. Entire deck assembly, after fabrication, shall be dipped in a textured skid-resistant poly-vinyl-chloride (plastisol) coating to a minimum thickness of .080".

General Specifications of Materials

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

- Tensile Strength - 2,800 psi
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Deck Components

Deck Platforms

Metal decks shall be a one-piece construction and shall be designed to maintain a full 48" on center post spacing. Metal decks shall be fabricated from 11 gauge hot rolled steel which shall be punched, formed, and reinforced with welded in place 2-1/2" x 11 ga. steel strips. Decks shall include a pattern of equally spaced slots on each side to provide a flush mounting of play events that attach to the deck, as well as the design of more than one adjacent deck at the same height. Each deck shall have welded at the corner underside a threaded 3/8" stud for attachment to the post's Deck Clamps. This fastening technique eliminates the need for hardware protruding through the deck surface, thereby eliminating the possibility of an entanglement hazard and presenting a clean and smooth deck surface. Entire deck assembly, after fabrication, shall be dipped in a textured skid-resistant poly-vinyl-chloride (plastisol) coating to a minimum thickness of .080".

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

- Tensile Strength - 2,800 psi
- Elongation - 290 %
- Tear Strength - 420 lbs/in

Deck Components

Deck Platforms

Metal decks shall be a one-piece construction and shall be designed to maintain a full 48" on center post spacing. Metal decks shall be fabricated from 11 gauge hot rolled steel which shall be punched, formed, and reinforced with welded in place 2-1/2" x 11 ga. steel strips. Decks shall include a pattern of equally spaced slots on each side to provide a flush mounting of play events that attach to the deck, as well as the design of more than one adjacent deck at the same height. Each deck shall have welded at the corner underside a threaded 3/8" stud for attachment to the post's Deck Clamps. This fastening technique eliminates the need for hardware protruding through the deck surface, thereby eliminating the possibility of an entanglement hazard and presenting a clean and smooth deck surface. Entire deck assembly, after fabrication, shall be dipped in a textured skid-resistant poly-vinyl-chloride (plastisol) coating to a minimum thickness of .080".

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

- Tensile Strength - 2,800 psi
- Elongation - 290 %
- Tear Strength - 420 lbs/in

Deck Components

Kickplates

Kickplate is cut from galvaneal sheet metal with (8) 7/16" x 1" slotted holes punched to coincide with deck flange holes. Corners are rounded, edges are ground smooth, and receives a baked-on polyester powder-coated finish after fabrication.

Triangle Transfer with Handhold

Triangle Transfer with Handhold

The Triangle Transfer shall be made from 12 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The Triangle Transfer shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Handhold shall be fabricated from 1 7/8" O.D. x .12" (11 gauge) wall and 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. Support legs shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. Handhold and Support Legs shall be all-welded assemblies and shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

General Specifications of Materials

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

- Tensile Strength - 2,800 psi
- Elongation - 290 %
- Tear Strength - 420 lbs/in

Deck Components

Ramps

The Ramp Platform is fabricated from HR steel with steel flat support bars welded underneath to increase strength. Transition Plate is fabricated from 1/8" steel plate stainless steel welding and pre-punched attachment holes and receives a baked-on polyester powder-coated finish after fabrication. After welding, the entire platform is Plastisol coated, with a thickness 80 mils minimum. Guard Rails and Pipe Walls are fabricated from 1-5/16" O.D. galvanized steel tubing with 'L' fittings stainless steel welded for attachment. Each entire Guard Rail or Pipe Wall receives a baked-on polyester powder-coated finish. Support Legs are fabricated from 1-5/8" O.D. galvanized steel tubing.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

Tensile Strength - 2,800 psi

Elongation - 290 %

Tear Strength - 420 lbs/in

Deck Components

Ramps - Pipe Wall

The Ramp Platform is fabricated from pre-punched steel sheet 12-gauge thick with steel flat support bars welded underneath to increase strength. After welding, the entire platform is Plastisol coated with a minimum thickness of 80 mils. The Pipe Wall is fabricated from 1-5/16" O.D. 14-gauge galvanized steel tubing with 'L' fitting stainless steel welded for attachment. The entire Pipe Wall receives a baked on polyester powder-coated finish.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

HDPE Components

Inclined Wall Climber

Inclined Wall shall be precision cut from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play. Frame Assembly shall be an all welded assembly fabricated from 1.315" O.D. galvanized steel tubing (.083" wall thickness). This assembly shall have a powder coat finish.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

HDPE Components

Word Scramble Panel

PANEL & HANDLES

Shall be 3/4" thick 3-ply high density, UV stabilized and color impregnated polyethylene.

HARDWARE

All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. Stainless steel fasteners shall be button pin-in head, hex socket cap screws with a two-part epoxy locking patch added to the threads. The two-part locking patch shall consist of one part resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Metal Components

Straight Horizontal Ladders

Horizontal Ladders are fabricated from 2-3/8" O.D. 11-gauge galvanized tubing for the side rails welded to 1 5/16" O.D. 14-gauge galvanized rungs. Vertical Ladder is made of 1 5/16" O.D. galvanized tube with 1" O.D. galvanized tube rungs, and 3/16" thick steel tabs. All metal parts shall be coated with a custom formula TGIC polyester powder.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

HDPE Components

HDPE Panels

Panels shall be precision cut from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

Bench Seat

SEAT PANEL shall be made from 0.75" thick (solid) high density, UV-stabilized and color impregnated polyethylene.

SEAT SUPPORT BEAM is fabricated from 1-5/8" (14 gauge) galvanized tubing with 3/16" thick hot-rolled steel plates for attachment to seat. Half clamps are formed of 3/16" thick hot-rolled steel. Seat support beam is an all-welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Cable Nets

Cable Sway Link

The Cable Sway Link net shall be constructed of 16mm galvanized wire reinforced cable with a urethane coated polyester cover. The mounting bar assembly shall be fabricated from 2-3/8" outside diameter, schedule 40 (.154") galvanized round pipe with 3/16" thick stainless steel tabs. The mounting bar assembly shall be an all welded construction which bolts directly into the uprights and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication. The Rope Span Climber shall include two entry archways in accordance with the specifications herein.

Metal Components

Hand Peddler

The Hand Peddler frame shall be an all welded assembly fabricated from 1 ½" O.D. LW galvanized steel tubing and 1" O.D. LW galvanized steel tubing with 3/16" thick stainless steel tabs. The Hand Peddler frame shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. The Hand Peddler disks shall be constructed of two ¾" thick (2 color) high density, UV-stabilized and color impregnated polyethylene. The disks shall ride on three 1 ½" molded urethane skate wheels.

Metal Seat Panel

Clamps are cast from a 356 high-strength aluminum alloy. Top Bar and Seat Bars are 1 5/16" O.D. 14 gauge galvanized steel tubing. Pipe Rungs are 1.029" 15 gauge galvanized steel tubing. Seat Panel is 11 gauge sheet metal. All metal parts shall be coated with a custom formula TGIC polyester powder coating.

Primary hardware is stainless steel.

Weight: 8 Lbs / 3.6 Kg.

General Specifications of Materials

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Metal Components

Leg Lift

Leg Lift is formed from 4-1/2" x 2" x 3/16" steel welded to 1" O.D. 14-gauge galvanized tubing, polyester powder-coated after fabrication. Half Clamp is cast from a 356 high-strength aluminum alloy with a baked-on polyester powder-coated finish.

General Specifications of Materials

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

HDPE Components

HDPE Panels

Panels shall be precision cut from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

Metal Components

Pedal Pusher

Panel is cut from a solid sheet of high-density .850" thick extruded polyethylene with color molded in and UV-stabilized. Pedal Frame is fabricated from 1" O.D. galvanized tubing bent and steel welded. Entire Frame receives a baked on polyester powder-coated finish after fabrication. Pedal Bracket is fabricated from 3/16" thick Half Clamp steel welded to a 1-1/2" x 1-1/2" square tubing with Bushing Hub Inserts. Bracket receives a baked on polyester powder-coated finish after fabrication.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Metal Components

Telephone Tubes

Telephone Tube receiver assembly consists of a bent 1-5/8" O.D. galvanized steel tube welded to 3/16" thick half clamps. "Receiver" is spun from 16-gauge galvanized sheet metal, and steel welded to the end of the tube. All parts shall be coated with a custom formula TGIC polyester powder coating after fabrication. Flexible hose is heavy-duty underground utility polyethylene type.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

HDPE Components

HDPE Panels

Panels shall be precision cut from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

Metal Components

Vertical Ladder (HDPE)

Flat Bracket is made from 11-gauge galvanized steel sheet. The bracket receives a baked-on polyester powder-coated finish. The Entrance Barrier Wall is fabricated from 1-5/16" O.D. 14-gauge galvanized steel tubing steel welded to yellow-zinc coated 'L'-Fittings and 2-7/8" x 38-1/8" 7-gauge galvanized plate. The Entrance Barrier Wall receives a baked-on polyester powder-coated finish. Step Panels are cut from a sheet of high-density .850" thick extruded solid polyethylene with color molded in and UV-stabilized.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains

ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

Tensile Strength - 2,800 psi

Elongation - 290 %

Tear Strength - 420 lbs/in

Deck Components

Balcony Deck

Balcony Deck is fabricated from pre-punched 11-gauge steel sheet. Each deck uses two 11-gauge lower steel flat support-bars that are welded to the deck to increase strength. After welding, entire deck is Plastisol coated with a thickness of 80 mils minimum. Average perforation size is 1/4" diameter after coating. Balcony Pipe Wall is a steel welded assembly using 1-5/16" O.D. 14-gauge galvanized tubing. Vertical tubes are welded to curved horizontal tubes and the entire assembly is polyester powder-coated after fabrication.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Rotationally Molded Plastics

All Rotationally Molded Products are manufactured from linear low-density polyethylene UV-stabilized color and an anti-static compound additive. The tensile strength of this material is to be 2500 PSI as defined by ASTM D638. The typical wall thickness will be .250" (1/4"). All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). 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).

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

Rotomolded Components

Rattle & Ring

The Rattle & Ring shall be 2-1/2" thick color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein, with double wall construction molded to a minimum 3/16" wall thickness. All polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

HDPE Components

HDPE Panels

Panels shall be precision cut from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

General Specifications of Materials

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Rotomolded Components

Slide Transfer

Slide Transfer Platform:

Shall be fabricated from pre-punched sheet 12-gauge thick with steel flat support bars welded underneath to increase strength. After welding, the entire deck is coated using PVC, with a thickness of 50 to 80 mils on top wear surface. Average perforation size is 0.35" diameter after coating.

Upright Assembly:

Shall be 5" outside diameter tubing with an 1/8" minimum wall thickness. The material shall be extruded from 6005-T5 seamless aluminum alloy conforming to ASTM-B-221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

Deck Components

Slat Barrier

Contains alternating recycled slats. Recycled Plastic Lumber: Size 1 - All plastic lumber components are made from 98% post consumer high density polyethylene (primarily recycled milk jugs and bleach bottles). The remaining 2% is pigment and UV inhibitors.

All load bearing components are fiberglass reinforced.

Recycled Slats: Size 2: Shall be HDPE, UV-inhibited, Plastic Lumber with a density/ L.F. of 0.61. Slats shall have a nominal thickness of 1".

Brace: Shall be fabricated from 3/4" square 11 gauge steel tubing and powder coated.

General Specifications of Materials

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

Deck Components

Slat Barrier

Contains alternating recycled slats. Recycled Plastic Lumber: Size 1 - All plastic lumber components are made from 98% post consumer high density polyethylene (primarily recycled milk jugs and bleach bottles). The remaining 2% is pigment and UV inhibitors.

All load bearing components are fiberglass reinforced.

Recycled Slats: Size 2: Shall be HDPE, UV-inhibited, Plastic Lumber with a density/ L.F. of 0.61. Slats shall have a nominal thickness of 1".

Brace: Shall be fabricated from 3/4" square 11 gauge steel tubing and powder coated.

Rotomolded Components

Rain Wheel

Rain Wheel shall be 2-1/2" thick color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein, with double wall construction molded to a minimum 3/16" wall thickness. All polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

Back plate is 1/8" H.R. Steel with brass bushing. The Bracket consist of a 5" O.D. Half Clamp made of 3/16" x 3 1/2" H.R. Steel, 9 7/8" LG. and a Galvanized Steel Coupling Nut (Galvanized Steel).

General Specifications of Materials

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

HDPE Components

Tree Fort Clubhouse Climber

CABLE: Shall be 5/8" steel reinforced Polyester fiber rope with clear urethane coating.

RECYCLED PLASTIC LUMBER: All plastic lumber components are made from 98% post consumer high density polyethylene (primarily recycled milk jugs and bleach bottles). The remaining 2% is pigment and UV inhibitors.

All lead bearing components are fiberglass reinforced.

General Specifications of Materials

Entry Archway

Entry Archway shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical rungs fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing. L-Fitting is fabricated from 3/16" thick stainless steel for attachment to clamp. The Entry Archway shall be an all-welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating.

HDPE Components

HDPE Panels

Panels shall be precision cut from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

Metal Components

Tree Fort Rope Ladder

Recycled Plastic Lumber: All plastic lumber components are made from 98% post consumer high density polyethylene (primarily recycled milk jugs and bleach bottles). The remaining 2% is pigment and UV inhibitors.

All load bearing components are fiberglass reinforced.

Chain is pre-cut to specified size from 1/4" 5/O proof-coil galvanized chain. The entire chain is plastisol-coated to eliminate pinch-points.

General Specifications of Materials

Plastisol Coating

All metal deck platforms, steps, bridge planks, ramps, kickplates, and chains are plastisol-coated. Each part is chemically washed and completely submerged in a special heat-activated primer and allowed to dry. Parts are then pre-heated and immersed in liquid poly-vinyl-chloride (plastisol). The PVC coating shall have a typical thickness of .080" to .120", and a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. Standard color is brown, with optional colors available. The following characteristics apply:

Tensile Strength - 2,800 psi

Elongation - 290 %

Tear Strength - 420 lbs/in

Entry Archway

Entry Archway shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical rungs fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing. L-Fitting is fabricated from 3/16" thick stainless steel for attachment to clamp. The Entry Archway shall be an all-welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating.

SuperMax Clamp

Clamp Ring and Adapters are die cast from an A380 high-strength aluminum alloy with a baked-on polyester powder-coat finish.

Hardware

All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

Rotomolded Components

Avalanche & Landslide Slides

Footbuck:

Shall be 1 5/16" O.D. 14-gauge galvanized steel tubing and 12GA. (.109") Sheet metal P & O. All parts are all welded construction with a baked on polyester powder-coated finish after fabrication.

SLIDE SECTIONS:

All Rotationally Molded Products are manufactured from linear low-density polyethylene UV-stabilized color and an anti-static compound additive. The tensile strength of this material is to be 2500 PSI as defined by ASTM D638. The typical wall thickness will be .250" (1/4"). All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). 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).

Slide Support:

Support Plate shall be made of 12 GA. H.R. Steel, sheet sheared into 11 1/4" Wide strips. Footbuck pipe shall be made of 2" L.W. GALV. PIPE, 41 11/16" LG. All parts are all welded construction with a baked on polyester powder-coated finish after fabrication.

Hardware:

All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. Stainless steel fasteners shall be button pin-in head, hex socket cap screws with a two-part epoxy locking patch added to the threads. The two-part locking patch shall consist of one part resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

Solstice Climber Links & Attachments

SIDE ENTRY ARCHWAY shall be fabricated of 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical rungs fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing. L-Fitting is fabricated from 3/16" thick hot rolled steel for attachment to clamp. The Entrance Enclosure shall be an all-welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating.

SOLSTICE CLIMBER shall be rotationally molded from an extremely durable double-walled low-density polyethylene with (UV) light stabilizers and color molded in. This material complies with STM-D-1248, Type 2, Class A, and Federal specification LP-390C, Type

1, Class M, Grade2, Category 3, and has a minimum 1/4" wall thickness.

SUPPORTS are fabricated from .120 (11 gauge) hot-rolled flat steel, and 2-1/2"

Park Play Specifications

General System Specifications:

Manufacturer shall offer the following warranties on the materials and components of its system:

- Lifetime limited warranty on support posts (uprights)
- 15-Year limited warranty on punched steel decks, pipes, rails, loops and rungs

- 15-Year limited warranty on rotationally molded polyethylene components
- Lifetime limited warranty on all hardware

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

Alpine Climber

3 1/2" Dome Cap:

Shall be fabricated from 413 Die Cast Aluminum Alloy. The 3 1/2" Dome Cap shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with specifications outlined herein.

Tree Fin Panel:

Shall be fabricated from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs. /ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

Tall and Short Tree Assembly:

Shall be fabricated from 3/16" x 8 1/2" laser cut steel plate, 3/16" x 2" hot rolled flat steel tab, 1.029" O.D. x .072" (15 gauge) wall galvanized steel loop, and 3 1/2" O.D. x .095" (13 gauge) wall galvanized steel pipe. Tall and Short Tree Assembly shall be an all-welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with specifications outlined herein.

SuperMax Specifications

General System Specifications:

SuperMax features 5" O.D. uprights with a high-strength aluminum alloy clamp fastening system finished with a polyester powder-coat. All uprights shall receive factory installed aluminum post caps and will ship with labels for manufacturer identification.

All decks and components shall connect using the aluminum alloy clamping system. All climbing attachments shall include a 15" wide deck entry archway to control deck access to one child at a time and help prevent inadvertent falls.

Manufacturer shall offer the following warranties on the materials and components of its system:

- Lifetime limited warranty on support posts (uprights)
- 15-Year limited warranty on punched steel decks, pipes, rails, loops and rungs
- 15-Year limited warranty on rotationally molded polyethylene components
- Lifetime limited warranty on all hardware

Manufacturer shall be ISO 9001/2000 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-01.

Rotomolded Components

Avalanche & Landslide Slides

Footbuck:

Shall be 1 5/16" O.D. 14-gauge galvanized steel tubing and 12GA. (.109") Sheet metal P & O. All parts are all welded construction with a baked on polyester powder-coated finish after fabrication.

SLIDE SECTIONS:

All Rotationally Molded Products are manufactured from linear low-density polyethylene UV-stabilized color and an anti-static compound additive. The tensile strength of this material is to be 2500 PSI as defined by ASTM D638. The typical wall thickness will be .250" (1/4"). All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). 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).

Slide Support:

Support Plate shall be made of 12 GA. H.R. Steel, sheet sheared into 11 1/4" Wide strips. Footbuck pipe shall be made of 2" L.W. GALV. PIPE, 41 11/16" LG. All parts are all welded construction with a baked on polyester powder-coated finish after fabrication.

Hardware:

All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. Stainless steel fasteners shall be button pin-in head, hex socket cap screws with a two-part epoxy locking patch added to the threads. The two-part locking patch shall consist of one part resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

Metal Components

Paragon Climber

Paragon Climber Hdpe Insert:

Shall be fabricated from a single solid sheet of .750" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs. /ft³ and a tensile strength of 4400 PSI (30 Mpa) as determined per procedure C of ASTM D1928. All edges shall have radiuses and all corners rounded for safe play.

Paragon Climber Weldment:

Shall be fabricated from 3/16" x 2" hot rolled steel tab, 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel pipe, and 14 gauge galvanized pipe cap. Paragon Climber Weldment shall be an all-welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with specifications outlined herein.

Paragon Climber Footbuck:

Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel pipe. The Footbuck shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with specifications outlined herein.

General Specifications of Materials

Uprights, Steel

The posts shall be 5" outside diameter, 11 gauge (.120") galvanized round tubing, manufactured to ASTM A-500 Grade B tolerances from cold-formed steel conforming to ASTM A-569 Sheet Spec for steel coil. Minimum yield strength shall be 50,000 psi and minimum tensile strength shall be 55,000 psi. The exterior surface is hot dip galvanized, chromate conversion coated, and a clear high performance organic polymer is applied. The inside diameter has 81% minimum zinc rich primer capable of providing excellent rust protection and fabrication characteristics. All coatings are applied inside and out after welding for superior corrosion protection throughout. Exterior surface galvanizing zinc purity is 99% as per ASTM B-6 high grade and special high grade. Galvanizing coverage shall demonstrate the ability to exceed 1000 hours salt spray corrosion exposure in accordance with ASTM B-117. Internal surface zinc rich 81% minimum zinc dust content in organic resin, as per ASTM F-1234, Section 5.2.4, Type D. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

Polyester Powder-Coating Process

Powder-coat shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a four stage solvent/zirconium based bath, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794-69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Oven-bake Stability 200% at 350 degrees Fahrenheit for 10 minutes.

Hardware

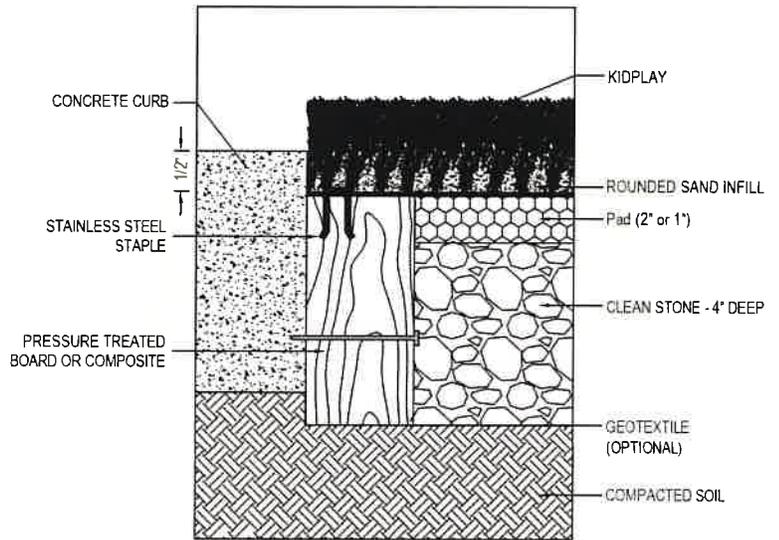
All nuts, bolts, and washers, with exceptions noted, shall be 3/8" diameter 18-8 stainless steel in varying lengths, with a vandal-resistant hex-pinned head configuration and factory-applied locking patch. When allowed a 72-hour cure time, the locking patch will prevent the bolt from loosening without at least 4 times the installation torque. Play & Park Structures will supply the special tool required to turn vandal-resistant hardware with each shipment. 1/2" diameter Ramp and Arch Bridge connecting hardware shall be Grade 5 zinc-plated, and 3/8" Clatter Bridge security bolts shall be Grade 8 hardened and zinc-plated.

KidPlay



55 oz.

PROPERTY	DESCRIPTION
Primary/Stalk Yarn Polymer	Polyethylene
PolymerSecondary/Thatch Yarn Polymer	Polypropylene
Yarn Cross Section	Polyethylene Monofilament Classic Spine/Texturized Polypropylene
Standard Colors	Field/Olive; Field
Coating Type(s)	SilverBack™ Polyurethane
Perforations	Yes
Pile Height	1 3/4"
Total Fabric Weight	84 oz/yd ²
Fabric Width	15 ft.
Infill Amount:	3 lbs./Sq. Ft.



INSTALLATION WITH CURB



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Sport Surface
 SPECIALTIES