











A PLAYCORE Company

8/3/2017

GT Events Specifications

General System Specifications:

The uprights shall be factory drilled to ensure accurate placement of components and ease of installation. Field drilling and measuring are not required. GT Events are direct bolt products NOT a clamp system. All uprights shall receive factory installed aluminum post caps and shall be shipped with a factory applied label indicating proper surfacing level.

All decks and components shall connect to support posts by means of a through-bolt connection for strong, durable connections. Deck/Collar attachments shall not be acceptable.

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 ROTOMOLDED POLYETHYLENE COMPONENTS
- LIFETIME LIMITED WARRANTY ON POWERLOCK AND HARDWARE

Manufacturer shall be ISO 9001/2008 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-07ae1.

Motion

KIDNETIX TWIRL

BACKREST ASSEMBLY: Shall be constructed of formed 2-3/8" O.D. x .095" (13 gauge) wall, 1-5/16" O.D. x .083" (14 gauge) wall, 1-1/16" O.D., 15 gauge (.072") wall galvanized steel tubing. The Backrest 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.

NET SPINNER: Shall be constructed of 5" O.D. x .120" (11 gauge) wall galvanized round tubing, 1/8" and 3/16" thick H.R. steel. The Net Spinner 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.

BEARING ASSEMBLY: Shall be a welded assembly fabricated from a machined 5.500" O.D. x .500" wall D.O.M. MEC. tube, and 1/4" thick H.R. steel plate. Two bearings shall be press fit into the weld assembly after fabrication.

FOOTBUCK: Shall be a welded assembly fabricated from 5" O.D. x .120" (11 gauge) wall galvanized round tubing, 1/4" thick H.R. steel, and a shaft machined from 2 3/4" O.D. C.R. black steel. The Footbuck 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.

CABLES and NET: The Cables and Net shall be 18MM dia. polyamide (nylon) rope cable with UV protection: 6 strands each containing 19 steel reinforcing (0.6mm) strands within a polyamide sleeve wrapped around a reinforcing steel core; each end having a stainless steel connector.

HARDWARE:

All nuts, bolts, screws, inserts, and lockwashers 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.



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PowerScape Plus 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.

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 six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer 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: 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 100% at 400 degrees Fahrenheit.

GT Nets

KIDNETIX ROPES COURSE

KIDNETIX ROPES COURSE NETS: The KidNetix Ropes Course Nets shall be 18MM dia. polyimide (nylon) rope cable with UV protection: 6 strands each containing 19 steel reinforcing (0.6mm) strands within a polyamide sleeve wrapped around a reinforcing steel core; each end having a stainless steel connector.

MOUNTING TAB: The net mounting tabs shall be fabricated from 3/16" hot rolled steel, formed to match and bolted directly to 5" O.D. uprights with 3/8" stainless steel hardware. The tabs shall be coated with a custom formula of TGIC polyester powder coating.

POWERSCAPE STEEL UPRIGHTS: Shall be 5" outside diameter, 11 gauge (.120") galvanized round tubing, manufactured to ASTM A-500 Section 10 tolerances from cold-formed steel conforming to ASTM A-569. 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. All upright post shall have a finished surface line mark, to indicate proper burial depth. All upright posts shall be coated with a custom formula of TGIC polyester powder coating.

CROSSBAR: The Crossbar weld assembly shall be constructed of 2.375" galvanized pipe, welded to 3/16" stainless steel tabs. The Crossbar shall be coated with a custom formula of TGIC polyester powder coating.

Where applicable (I.E. Clifhanger bridge, pod)

POD SURFACE: The pod surface shall be made from 3/4" thick (solid) high density, UV-stabilized, laminated and color impregnated polyethylene.

APOLLO

SUPPORT POSTS: This will be 2 1/4" OD galvanized tubing finished with polyester coating.

CLIMBING NETS: This will be 20mm diameter polyimide (nylon) rope cable with UV protection: 6 strands each containing 24 steel reinforcing strands within a polyamide sleeve wrapped around a solid polyamide core; each end of the cable having a junction loop attached onto the cable with a finished aluminum sleeve and lined with a stainless steel wear bar. Edge ropes will contain a solid core of wound steel cables in place of the polyamide core.

BALL KNOTS: This will be a one-piece compressed aluminum ball, hand finished.



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BASIC FASTENERS: All fasteners for component attachments are stainless steel.

TURNBUCKLES: These will be steel alloy with a minimum tensile strength of 58,000 PSI.

IONiX Specifications

General System Specifications:

IONiX® features 3 1/2" O.D. uprights with a positive bolt-through fastening system utilizing stainless steel tabs. Field drilling and measuring are not required. IONiX is a direct bolt system NOT a clamp system. All uprights shall receive factory installed labels indicating proper surfacing level.

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 PIPES, RUNGS, RAILS AND LOOPS
- 15 YEAR LIMITED WARRANTY ON ROTATIONALLY MOLDED PRODUCTS
- LIFETIME LIMITED WARRANTY ON HARDWARE

Manufacturer shall be ISO 9001:2008 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-11.

General Specifications of Materials

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 350 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 100% at 350 degrees Fahrenheit for 10 minutes.

HARDWARE

All nuts, bolts, screws, inserts, and lockwashers 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. PowerScope Plus 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.



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ROTATIONALLY MOLDED PRODUCTS

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).

HEX TOPPER

HEX TOPPER

Shall be color impregnated linear low-density polyethylene and shall conform to the rotationally molded specifications outlined herein with single wall construction molded to a minimum .25" wall thickness.

Signature Components

HELIX TOWER W/ SHADOW CANOPY

HELIX TOWER w/SHADOW PLAY SPECIFICATIONS:

The roof weld assembly shall be an all welded assembly manufactured with 1.315" O.D. x 14 gauge (.083") wall galvanized steel tubing and 3/16" thick steel tab. The assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication. The upright and roof extension weld assembly shall be an all weld assembly manufactured with 3.5" O.D. X 0.95" wall galvanized steel tubing and 2.375" O.D. x .095" wall galvanized steel tubing. The assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication. The rung weld assemblies shall be an all welded assembly manufactured with 1.315" O.D. x 14 gauge (.083") wall galvanized steel tubing and 3/16" thick steel tab. The assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication. The transparent acrylic panels shall be Transparent Acrylic Panels shall be manufactured from 1/4" thick "ACRYCAST CELL CAST ACRYLIC SHEET" produced to precise specifications. The support post extensions shall be manufactured from 3.5" O.D. X 0.95" wall galvanized steel tubing.

Freestanding

HEX POD STEP

HEX POD

The Hex Pod Pipe Support shall be fabricated from 3.5" outside diameter, 13 gauge (.095") galvanized round tubing with a mounting plate made from 3/16" thick hot rolled steel. The Hex Pod Pipe Support shall be a welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication. The rotomolded step shall be color impregnated linear low-density polyethylene and shall conform to the rotationally molded specifications outlined herein with double wall construction molded to a minimum .25" wall thickness. The Hex Pod surface shall be 3/4" thick (solid) high density, UV-stabilized, laminated and color impregnated polyethylene.

TRINET (MEDIUM)

The Upright Supports shall be constructed of 3.5" O.D. X 0.095" galvanized pipe. The upright with socket weld assembly shall be constructed from 3.5" O.D. X 0.095" thick galvanized pipe and 2.375" O.D. X 0.095 galvanized pipe. The net connector weld assembly shall be constructed from 3.5" O.D. X 0.095" thick galvanized pipe and 1" X 1/4" X 1/4" thick H.R. Steel tabs. The left and right weld rail weld assembly shall be constructed from 2.375" O.D. X 0.095" thick galvanized pipe and 1" X 1/4" X 1/4" thick H.R. Steel tabs. Climber assembly shall be constructed of 1.66" O.D. 0.83" thick galvanized pipes. The Top Assembly shall be constructed of 3 1/2" O.D. X 0.095 galvanized pipes and 2.375" O.D. X 0.95 pipe and 1" X 1/4" X 1/4" thick H.R. Steel tabs. All Aluminum casting shall be manufactured with die casting A356 alloy. All the assemblies shall be welded constructions and coated with a custom formula of TGIC polyester powder coating after fabrication. The HDPE pieces shall be made from 3/4" thick (solid) high density, UV-stabilized and color impregnated polyethylene. The cable shall be 18mm diameter UV protected Polyamide Nylon rope with breaking load greater than or equal to 79.82KN. 6 strands each containing 19 steel reinforcement (0.6mm strands within a Polyamide sleeve wrapped around a reinforced steel core containing 6 strands each containing 19 steel reinforces 0.4mm steel strands.)



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PowerScape Specifications

General System Specifications:

PowerScape® features 5" O.D. uprights with a positive bolt-through TRU-LOC fastening system. The uprights shall be factory drilled to ensure accurate placement of components and ease of installation. Field drilling and measuring are not required. PowerScape® is a direct bolt system NOT a clamp system. All uprights shall receive factory installed aluminum post caps and shall be shipped with a factory applied label indicating proper surfacing level.

All decks and components shall connect to support posts by means of a through-bolt connection for strong, durable connections. Deck/Collar attachments shall not be acceptable. All climbing attachments shall include a 15" wide deck entryway or archway to control deck access to one child at a time and help prevent inadvertent falls.

All decks and components shall connect to support posts by means of a through-bolt connection for strong, durable connections. Deck/Collar attachments shall not be acceptable. 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 ROTOMOLDED POLYETHYLENE COMPONENTS
- LIFETIME LIMITED WARRANTY ON TRU-LOCKS AND HARDWARE

Manufacturer shall be ISO 9001/2008 certified

Manufacturer shall show IPEMA certification of compliance for each component that the product conforms with the requirements of ASTM F1487-11.

General Specifications of Materials

HARDWARE

All nuts, bolts, screws, inserts, and lockwashers 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. PowerScape Plus 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.

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 350 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



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& 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 100% at 350 degrees Fahrenheit for 10 minutes.

Uprights & Upright Accessories:

TRU-LOC CONNECTION

The Tru-Loc shall incorporate an aluminum casting in a distinctive purpose mounting system that allows a rung panel to mount to the upright. The Tru-Loc connector will have a matching counterpart for flat panel connections. Each is bolted directly into the upright post through a factory located and installed connection and designed to eliminate protrusions. Each shall be die cast of 380 aluminum alloy, to resist corrosion. Minimum tensile strength shall be 45,000 psi, minimum yield strength shall be 22,000 psi. All connectors shall be coated with a custom formula of TGIC polyester powder coating, in conformance with the specifications outlined herein.

UPRIGHTS, STEEL

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 have a finished grade line marking to indicate the correct playground safety surface level. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

UPRIGHT CAPS

The standard upright cap shall be an aluminum cap, cast from a 383 alloy, powder coated to match the upright. Every upright cap shall receive a primer coat for maximum protection. All upright caps are permanently installed at the factory using aluminum self-sealing rivets.