

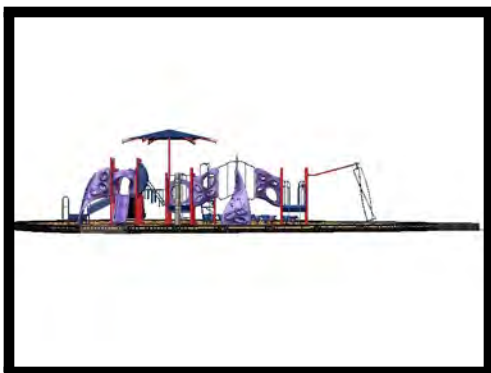
little tikes COMMERCIAL
Playgrounds Fun & Easy!

Project:
Playset #2



**5
AGES
12**

This play equipment complies with the safety performance specifications of ASTM for children 5-12 years old. Not all equipment may be appropriate for all children. Supervision is required.



ISO CERTIFIED
9001:2000

IPEMA
INTERNATIONAL PLAY EQUIPMENT
MANUFACTURERS ASSOCIATION
MEMBER

ATTACHMENT "E"

PART 1 – GENERAL

- 1.1 Description: **PLAYSET #2** Age group 5-12
- 1.2 Quality Assurance:
 - 1.2.1 Equipment and Design Qualifications:
 - 1.2.1.1 All playground equipment shall comply will all the requirements of CPSC, ASTM, ADA and will be IPEMA certified.
 - 1.2.1.2 All safety fall zones shall be determined in accordance with ASTM 1487-07 and CPSC Handbook for Public Playground Safety Publication number 325. All playground equipment designs shall be evaluated and signed off by a NPSI certified playground inspector.
- 1.3 Manufacturer Qualifications:
 - 1.3.1 The manufacturer of the playground equipment must carry a minimum of 10 million dollars of liability insurance with an AM best rating. The manufacturer of the playground equipment must have a minimum of 10 years experience in manufacturing commercial playground equipment.
- 1.4 Applicable Standards
 - 1.4.1 ASTM F1487-07
Standard consumer performance specification for playground equipment for public use.
 - 1.4.2 CPSC Handbook for Public Playground Safety, publication number 325.
 - 1.4.3 CSA Z614-07
 - 1.4.4 EN 1176-98 (if requested)
European Standard for Playground equipment
 - 1.4.5 All manufactured components must be IPEMA certified
International Playground Equipment Manufacturers Association.

PART 2 – PRODUCTS

2.1

Part Number	Description
100005100	PB DK/DK PLATE 205MM/8"
100005233	PB SPLIT DK/DK PLATE 205MM/8"
100005274	PB SQUARE DECK
100005350	PB HALF SQUARE DECK
100005640	PB TRIANGLE DECK
100010131	ACC.RAMP FOAMED F/KID TIMBER BLK
200054576	RUNG LADDER PB 36"/915 W/SAFETY LOOPS
200054614	PB PANEL SAFETY
200054618	PB SAFETY RAIL LONG W/O MT
200063639	PB TUNNEL SINGLE CRAWL ABOVE DECK
200064813	SLIDE WAVE SGL.WD. 1220MM F/PB
200072938	TOOL BOX F/PLAY BUILDERS (MM)
200092591	STEPPING STONES F/KB
200111492	LABEL, IDENTIFICATION STAMPED W/RIVETS

200200061	PB PANEL ARCH TOP "ANIMAL MATCH"
200200270	CLIMBER CURLY 915MM/36" PB (2004)
200200330	SLIDE DBL.WD.PLASTIC48"/1220MM PB (2004
200200433	TRANSFER STATION 1220 MM PB_W/SAFE.RLS.
200200531	KIT MAINTENANCE PB W/O LIST PRICE
200200638	INFINITY CLIMBER PB GROUND TO DECK
200200867	PB LEANOUT MONKEY PANEL DKMT
200201033	PB INFINITY AXIS
200201198	KB STRAIGHT BALANCE BEAM 6' W/RND LEG
200201464	VERSA-CLIMB ROCKWALL F/PB 1 SECTION
200202111	PB DECK TO DECK INCLINED CLIMBER 4'
200202440	PB VERTICAL POD CLIMBER 32"
200202613	PB POST W/CAP 2690MM (106")
200202614	PB POST W/CAP 2895MM (114")
200202615	PB POST W/CAP 3100MM (122")
200202616	PB POST W/CAP 3300MM (130")
200202617	PB POST W/CAP 3505MM (138")
200202618	PB POST W/CAP 3710MM (146")
200202619	PB POST W/CAP 3910MM (154")
200203106	PB 202 POST 3.5" F/SHADE
200203149	PB SHADE 12' UMB STD FAB
200203396	PB STANDING SPINFINITY 72" REQ
200203576	ASSY PANEL MT.PLAS.STEER.WHL.
200305596	14' MED CRATE (ASSY DOMESTIC)
200305597	14' LARGE CRATE (ASSY DOMESTIC)
787Z	RISK MANAGEMENT SIGN - ENGLISH
925603	LABEL P/C (5 TO 12 YRS) PPLT
HW7704-1	HRDW PKG F/CLAMP ELIMINATION S1/1

2.2 Manufacturer: PlayPower Operations, Monett, Missouri

2.3 General Equipment Specifications:

2.3.1 Plastic Caps shall fit snugly into 127 mm (5") and 33 mm (1.315") tube ends and shall be injection molded Low Density Polyethylene. This plastic shall be stabilized against ultraviolet (UV) degradation and shall have color molded in. All caps will be installed at the factory and 127 mm (5") caps will be secured with aluminum hammer drive pins.

2.3.2 Aluminum Caps shall fit snugly into 127 mm (5") tube ends. The Aluminum cap shall be made from SAE 413 aluminum with a minimum wall thickness of 4 mm. Prior to insertion into the post, all caps shall be painted per PPLT PAINT Specification. All caps will be installed at the factory and 127 mm (5") caps will be secured with aluminum hammer drive pins.

2.3.3 PPLT PAINT Specification: Primer shall be electrostatically applied and cured in an infrared oven. Paint shall be an electrostatically applied polyester TGIC (triglycidyl isocyanurate) powder coating which shall be

cured at temperatures between 400 and 500 degrees Fahrenheit. The thickness of the combined primer/paint shall be between 5 mils and 11 mils. The polyester powder shall comply with ASTM standards: D-2794 (Impact Resistance Test), B-117 (Salt Spray Resistance Test), G26 (Weatherability Test), and D3359B (Adhesion Crosshatching Test).

- 2.3.4 PlayPower Operations ROTO Specification: Rotationally Molded Plastic Parts shall be molded from linear low density polyethylene with ultraviolet (UV) light stabilizers, anti-static guard (for Molding purposes) and color molded in. This material shall comply with ASTM-D-790 (Flex Modulus), ASTM -D-638 (Tensile Strength), ASTM-D-648 (Heat Deflection Temperature), ARM-STD (Low Temperature Impact) and rated UL 94.
- 2.3.5 PPLT PVC Specification: Textured Poly-Vinyl-Chloride coating shall be an average of 3 mm (.125") thick. Poly-vinyl-chloride coating shall be oven cured and textured for added traction when wet or dry.
- 2.3.6 Hardware: Bolts, Nuts, Screws, Threaded Spacers, Washers and Other Hardware used in the assembly of components shall be metric stainless steel and tamper resistant. All necessary hardware shall be provided.
- 2.3.7 Deck Clamp assemblies shall consist of two steel half-clamps. Clamp profiles shall be designed to eliminate protrusions. Clamps shall be die formed from 12 gauge HRPO steel. Clamps shall have a 6 mm (.25") radius rib formed in the top and bottom of the clamp for structural integrity. The clamp attachment bracket shall be formed from 11 gauge sheet steel and shall be welded securely to the clamp half. All clamp halves shall be zinc plated, yellow dichromate coated and phosphate coated before being TGIC (triglycidyl isocyanurate) polyester powder coated. Tamper-resistant fasteners shall be used to retain clamps and shall consist of M10 six lobe socket head stainless steel cap screws and M10 slab-base Tee nuts. All clamps shall be provided with aluminum hammer drive pins to protect against slippage.
- 2.3.8 Rail Clamp assemblies shall consist of two steel half-clamps. Clamp profiles shall be designed to eliminate protrusions. Clamps shall be die formed from 12 gauge HRPO steel. Clamps shall have a minimum 6 mm (.25") radius rib formed in the top and bottom of the clamp for structural integrity. All clamp halves shall be zinc plated, yellow dichromate coated and phosphate coated before being TGIC (triglycidyl isocyanurate) polyester powder coated. Tamper-resistant fasteners shall be used to retain clamps and shall consist of M10 six lobe socket head stainless steel cap screws and M10 slab-base Tee nuts. All clamps shall be provided with aluminum hammer drive pins to protect against slippage.
- 2.3.9 Wing and Panel Clamp assemblies shall consist of two steel half-clamps. Clamp profiles shall be designed to eliminate protrusions. Clamps shall be die formed from 12 gauge HRPO steel. Clamps shall have a 6 mm (.25") radius rib formed in the top and bottom of the clamp for structural integrity.

The clamp wing bracket shall be formed from 7 gauge sheet steel and shall be welded securely to the clamp half. All clamp halves shall be zinc plated, yellow dichromate coated and phosphate coated before being TGIC (triglycidyl isocyanurate) polyester powder coated. Tamper-resistant fasteners shall be used to retain clamps and shall consist of M10 six lobe socket head stainless steel cap screws and M10 slab-base Tee nuts. All clamps shall be provided with aluminum hammer drive pins to protect against slippage.

2.3.10 All Steel Tube Components shall comply with ASTM standards: A-500, Or A-513. The steel tube components contain five layers including an inside galvanized coating, high tensile strength cold formed steel, hot dipped pure zinc meeting ASTM B-6 applied at 3.5 tenths of an ounce per square foot, and a proprietary conversion and advanced polymer coatings. The components are freed of excess weld spatter and shall be cleaned in a multiple bath system which shall include a rust-inhibitive iron phosphate wash prior to painting. Exceptions: 127 mm (5") O.D. aluminum posts.

2.3.11 Brackets shall be fabricated from punched and formed 4.5 mm pre-galvanized sheet steel.

2.3.12 Gaskets shall be rubber injection molded from ultraviolet (U.V.) protected synthetic rubber. Rubber gaskets shall provide an aesthetic seal around the wonder fastener and bracket.

2.3.13 Footing for 127 mm (5") diameter upright posts shall be 305 mm (12") diameter x 940 mm (37") depth. Galvanized steel posts shall be 127 mm (5") O.D., 11 gauge pre-galvanized round tubing. Minimum tensile strength shall be 330MPa (48,000 psi). Minimum yield point shall be 310MPa (45,000 psi). The bottom portion of all upright posts shall be crimped slightly

2.3.14 Component Specifications:

2.3.15.1 STRAIGHT BALANCE BEAM shall be fabricated from 51 x 102 mm (2" x 4") steel pipe. Balance beam ends shall have a plate welded over each end to eliminate sharp edges. Straight balance beams shall be designed to need no post for installation. All parts shall be painted per PPLT PAINT Specification.

2.3.15.2 COLORED KICK PLATE AND DECK TO DECK ACTIVITY PLATES shall be fabricated from 13 gauge (2.3 mm) pre-galvanized sheet steel for the 8", 12", and 16" models and shall have fun faces laser cut into them. The 24", 28", and 32" models shall be fabricated from 11 gauge (3.0 mm) pre-galvanized sheet steel. After fabrication, deck to deck plates shall be painted per PPLT PAINT Specification. 24", 28" and 32" plates shall have grooves cut into them with optional slider "Parachute/shapes" fabricated from CNC Routed high density polyethylene sheet.

2.3.15.3 CURLY CLIMBER shall be of a design which will not allow children to climb into the interior of the coil. Curly Climber coils shall be fabricated from 33 mm (1.315") O.D. pre-galvanized steel tubing. The center support post shall be fabricated out of 42.2 mm (1.66") O.D. pre-galvanized steel tubing. Enclosure shall be fabricated from 33 mm (1.315") O.D. and 3/4" X 1" FSO pre-galvanized steel tubing. Curly Climbers shall be an all welded construction and shall be painted per PPLT PAINT Specification.

2.3.15.4 DOUBLE WIDE SLIDES shall be rotationally molded per PPLT ROTO Specification. Plastic double wide slide sides shall be 203 mm (8") high from the slide surface and slide bedway shall be designed with a 406 mm (16") minimum width. Double wide slide shall be a one-piece design with a center divider having no seams, joints or gaps. Slide end support shall be fabricated from 38 mm (1.5") square tubing. Mid support shall be fabricated from 60.3 mm (2.37") tubing. All steel tubing shall be painted per PPLT PAINT Specification.

2.3.15.5 Identification label shall be fabricated from aluminum sheet .016" (4 mm) thick and attached with aluminum pop rivets.

2.3.15.6 KB INFINITY CLIMBER GROUND TO DECK shall be rotationally molded per PPLT ROTO Specification. Footing supports are fabricated from pre-galvanized 42.2 mm (1.660") diameter steel tubing welded with 11 gauge pre-galvanized sheet steel. The enclosure shall be fabricated from 42.2 mm (1.66") O.D. and 33.4 mm (1.315") O.D. pre-galvanized steel tubing and from 11 gauge pre-galvanized sheet steel. The supports and enclosure shall be painted per PPLT PAINT Specification.

2.3.15.7 KB/PB Infinity Axis: climbers/pads shall be molded per PPLT ROTO Specification. Footing supports, ladder, enclosures and steel wings are fabricated from pre-galvanized 42.2 mm (1.6"), 33.4 mm (1.3"), and 25.4 mm (1") diameter steel tubing welded with 11 gauge pre-galvanized sheet steel. All steel components shall be painted per PPLT PAINT Specification.

2.3.15.9 Monkey LeanOut Seat Panel For PB: shall be fabricated from pre-galvanized 33.4 mm (1.315") diameter steel tubing welded with 11 gauge pre-galvanized sheet steel assembled as a one piece weldment. The Panel shall be painted per PPLT Specification.

2.3.15.10 PB INCLINED CLIMBER AND SAGGY CLIMBERS shall be fabricated from 48.3 mm (1.90") O.D. and 33.4 mm (1.315") pre-galvanized steel tubing. The climber shall be an all welded construction. Enclosures shall be fabricated from 33 mm (1.315")

O.D. pre-galvanized steel tubing and 3 mm (11 gauge) pre-galvanized sheet steel. After fabrication all parts shall be painted per PPLT PAINT Specification.

2.3.15.11 PB VERSA-CLIMB™ shall be rotationally molded per PPLT ROTO Specification with mold-in hand grip. The rock wall shall also have bolted on hand grips that shall be molded from a plastic resin. Footing supports are fabricated from pre-galvanized 88.9 mm (3.5") diameter steel tubing welded with 11 gauge pre-galvanized sheet steel. The enclosure shall be fabricated from 42.2 mm (1.66") O.D. and 33.4 mm (1.315") O.D. pre-galvanized steel tubing and from 11 gauge pre-galvanized sheet steel. The enclosure shall be painted per PPLT PAINT Specification.

2.3.15.12 RUNG LADDER shall be designed to incorporate a one-piece, welded construction to aid installation. Rung ladder side rails shall consist of 33 mm (1.315") O.D. pre-galvanized steel tubing. Rungs shall be fabricated for 25 mm (1") O.D. pre-galvanized steel tubing. Brackets shall be fabricated from 7 gauge pre-galvanized steel. Available with hand loops or safety loops. Safety Loops shall be fabricated from 33 mm (1.315") O.D. and 3/4" X 1" FSO pre-galvanized steel tubing. Hand Hold Loops shall be fabricated from 33 mm (1.315") O.D. pre-galvanized steel tubing. After fabrication all parts shall be painted per PPLT PAINT Specification.

2.3.15.13 SAFETY PANELS shall provide a non-climbable enclosure. The panel shall be rotationally molded per PPLT ROTO Specification. Brackets for mounting panel to posts shall be fabricated from 7 gauge pre-galvanized sheet steel. Brackets for mounting panel to deck shall be fabricated from 11 gauge pre-galvanized sheet steel. After fabrication, all steel components shall be painted per PPLT PAINT Specification.

2.3.15.14 SAFETY RAIL shall be fabricated from 33 mm (1.315") O.D. and 3/4" X 1" FSO pre-galvanized tubing with 3 mm (11 gauge) pre-galvanized sheet steel. The Safety Rails provide a non-climbable enclosure and shall have no gaps greater than 76 mm (3") and less than 254 mm (10"), especially between vertical rungs and posts. Deck mounted safety rails shall have a bottom plate fabricated from 3 mm (11 gauge) pre-galvanized sheet steel. The vertical rungs of safety rails shall be flattened prior to welding to the horizontal top and bottom bar or plate, and shall be welded continuously around the entire perimeter. After fabrication, all steel components shall be painted per PPLT PAINT Specification.

2.3.15.15 Shade Builder Pyramid, Sails, Hexagon and Umbrella Integrated into the PlaygroundProduct Specifications: ALL STRUCTURES ARE DESIGNED TO MEET THE REQUIREMENTS OF ASCE 7-05 (IBC 2006, IBC 2009, CBC2010) AND ASCE 7-10 (IBC 2012). LIVE

LOAD 5 PSF-SNOW LOAD 10 PSF-DESIGN WIND SPEED 90 MPH (3-SEC GUST) EXPOSURE C (FROM ASCE 7-05)-DESIGN WIND SPEED 115 MPH RISK CATEGORY II (FROM ASCE 7-10) All tube shall conform to ASTM A500. Steel plate shall conform to ASTM A572, $F_y = 50$ KSI. All fabrication and erection of structural steel shall conform to the current edition of AISC "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings". All fabrication and erection of the light gauge pipes shall conform to AISI cold-formed steel specifications. Steel welds shall conform to AWS D.1: Electrodes, Class E70XX, Low Hydrogen. Frames are to be painted per PPLT Paint Specification. Structural Steel Columns are made of 88.9 mm (3.5") O.D. pre-galvanized tubing for PB and are made of 127 mm (5") O.D. pre-galvanized tubing for KB. Structural Steel Rafters are made of 88.9 mm (3.5") O.D. pre-galvanized tubing. Shade Panels: Fabric shade cloth has been specifically developed to produce a very strong and stable outdoor fabric for use in tension structures and shade awnings. This range offers the ultimate combination of maximum sun protection plus the strength and durability to ensure maintenance-free, long life performance. Mildew and Rot resistant, Heat and hail resistant. Maintains color in all weather conditions. High Density Polyethylene (HDPE), UV stabilized with a monofilament and lockstitch sewing construction producing a fabric that will not tear or fray if cut. Available in Standard and Fire Retardant Fabric, 6 Colors in Standard Fabric and 7 Colors in Fire Retardant Fabric. Provides shade factors up to 94% and blocks up to 95% of dangerous UV solar radiation for Standard Fabric. Provides shade factors up to 86% and blocks up to 84% of dangerous UV solar radiation for Fire Retardant Fabric. Temperature reduction of up to 30 degrees. It is recommended to remove Shade fabric prior to snowfall. Structural framing may remain in place during winter months.

- 2.3.15.16 SIGN PANEL shall provide enclosure and be non-climbable. Sign panel shall be rotationally molded per PPLT ROTO Specification. Any molded in graphics shall not be raised above the surface of the panel. Play Panels shall be fabricated from CNC Routed HDPE sheet. HDPE Panels mount inside of Rotationally molded panels.
- 2.3.15.17 SQUARE VINYL CLAD METAL DECK shall cover a minimum of 1.03 square meters (1,596 square inches) of top surface area. Metal decks shall be fabricated from punched and formed 11 gauge hot rolled sheet steel. This assembly shall be coated per PPLT PVC Specification.
- 2.3.15.18 STANDING SPINFINITY shall have a top support fabricated from 60 mm (2.375") O.D. 10 gauge & 48mm (1.875") O.D. 11 gauge pre-galvanized steel tubing. Standing frame for the spinfinity

shall be 33 mm (1.315") O.D. 11 gauge and 42 mm (1.625") O.D. 11 gauge pre-galvanized steel tubing, along with 9.5mm (.375") flat steel and shall be bolted to an aluminum machined housing containing a self aligning ball bearing. Spinfinity standing shall be 11 gauge steel coated per PPLT PVC Specification. All Steel components shall be painted per PPLT PAINT Specification.

2.3.15.19 STEEL POST shall be 89 mm (3.5") O.D., 11 gauge pre-galvanized round tubing. Minimum tensile strength shall be 380MPa (55,000 psi). Minimum yield point shall be 345MPa (50,000 psi). Plastic caps shall be positioned in the top of each post. Posts shall be painted per PPLT PAINT Specification.

2.3.15.20 STEPPING STONES shall be rotationally molded per PPLT ROTO Specification and mounted on 60 mm (2.375") O.D. pre-galvanized support posts painted per PPLT PAINT Specification after fabrication.

2.3.15.21 STRAIGHT CRAWL TUNNEL shall have an approximate internal diameter area of 762 mm (30") and three 76 mm (3") holes to allow for visibility. Tunnel and panel shall be rotationally molded per PPLT ROTO Specification.

2.3.15.22 TRANSFER STATION WITH SAFETY RAIL shall consist of two triangular decks and step assemblies for the handrails. Each triangular deck shall be fabricated from 13 gauge sheet steel, covering .37 square meters (575 square inches) and have three 25 x 152 mm (1" x 6") hand slots incorporated into the deck surface for aid in user transition. The step assemblies provide access from the transfer decks to a 915 mm (36"), 1016 mm (40"), 1220 mm (48"), 1422 mm (56"), 1625 mm (64") deck height. Each step shall have a tread depth of 406 mm (16") and a tread width of 953 mm (37.5"), with each rise 203 mm (8") or less. Each step assembly shall have an all welded construction from 13 gauge sheet steel. Each step assembly and Transfer Deck shall be coated per PPLT PVC Specification. Transfer Station handrails shall be fabricated from 33 mm (1.315") O.D. pre-galvanized, 14 gauge tubing and and 3/4" X 1" FSO pre-galvanized tubing. Safety rails shall provide an enclosure and shall have no gaps greater than 80 mm (3.15") and less than 254 mm (10"), especially between vertical rungs and posts. Transfer Station loops shall be fabricated from 42.2 mm (1.66") O.D., pre-galvanized, 13 gauge tubing. All welded handrail assemblies shall be painted per PPLT PAINT Specification.

2.3.15.23 VERTICAL POD CLIMBERS shall be fabricated from 42.2 mm (1.66") x 11 gauge pre-galvanized steel tubing. Plates shall be fabricated from 3 mm (.12") sheet steel. Pods shall be fabricated from E.P.D.M. 50 duro rubber with a steel insert molded inside. Enclosures shall be fabricated from 33 mm (1.315") O.D. pre-

galvanized steel tubing and 3 mm (11 gauge) pre-galvanized sheet steel. After fabrication all steel parts shall be painted per PPLT PAINT Specification.

2.3.15.24 VINYL CLAD HALF DECK shall cover a minimum of .52 square meters (798 square inches) of top surface area. Metal decks shall be fabricated from punched and formed 11 gauge hot rolled sheet steel. This assembly shall be coated per PPLT PVC Specification.

2.3.15.25 VINYL CLAD TRIANGLE DECK shall cover a minimum of .45 square meters (680 square inches) of top surface area. Metal decks shall be fabricated from punched and formed 11 gauge hot rolled sheet steel. This assembly shall be coated per PPLT PVC Specification.

2.3.15.26 WAVE SLIDE WITH HOOD enclosure shall be rotationally molded per PPLT ROTO Specification. Plastic slide side rails shall be a minimum of 203 mm (8") high from the slide surface and slide bedway shall be designed with a 406 mm (16") minimum width. Slide bed shall be one-piece with no seams or joints. Slide end support shall be fabricated from 38 mm (1.5") square tubing. Mid support shall be fabricated from 60.3 mm (2.37") O.D. tubing. All steel components shall be painted per PPLT PAINT Specification.

PART 3 – EXECUTION
NOT USED