

## **The Big Outdoors**

### **UP146**

HDPE Panels: Panels shall be precision cut from a single solid sheet of .50" thick UV-stabilized extruded high-density polyethylene with colors molded in. The material will have a density of 60 lbs/ft<sup>3</sup> 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.

Slats: 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/ft<sup>3</sup>.

Ramp Support: Shall be made from 1/8"x 1 1/2"x 1 1/2" black steel angle and shall be coated after fabrication with a custom formula of TGIC polyester powder coating.

Frame Support: Shall be 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing and shall be coated after fabrication with a custom formula of TGIC polyester powder coating.

Square Flat Mirror: Shall be made of 20 Ga. stainless steel.

Shape Drum: Shall be 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).

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. 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.