



GENERAL SPECIFICATIONS FOR MODULAR PLAY UNITS

STEEL TUBING: Our components are made from the following types of tubing, which are referred to in the specifications for each component by type #.

- Type 1 is 1" O.D., 14 Ga. FloCoat galvanized
- Type 2 is 1 3/8" O.D., 14 Ga. FloCoat galvanized
- Type 3 is 1 1/2" 14 Ga. Tube
- Type 4 is 1 7/8" O.D. 11 Ga. FloCoat galvanized
- Type 5 is 2 3/8" O.D. 11" Ga. FloCoat galvanized

PAINT: All out of ground steel or aluminum components have an Electrostatically applied and oven cured at 400 degrees polyester powder coating

UPRIGHT POSTS: 5" or 3.5" O.D. FloCoat galvanized, triple-coat corrosion protection 13Ga. (typical .095" wall) powdercoated, with an ASTM standard A-500 yield strength of 40,000 PSI and tensile strength of 45,000 PSI. Top Cap is powder coated cast aluminum and is attached to the post with steel rivets.

4 HOLE BRACKETS: Used for attaching components to the posts – Bracket is powder coated cast aluminum with a threaded hole that has a set screw which is used to secure the component to the bracket. The bracket fits in a rubber gasket and attaches to the post using (4) self-tapping screws with pre-applied thread lock.

4 HOLE PANEL BRACKETS: Used for attaching flat panels to the posts – Bracket is punched steel with a 1/4" thick tab welded to the face. The tab has a 1" slot that is used to attach the flat panel to the bracket by using a stainless steel button head bolt, washers and button head nut. The bracket fits in a rubber gasket and attaches to the post using (4) self-tapping screws with pre-applied thread lock.

HARDWARE: We use a combination of zinc-plated, stainless steel and aluminum hardware: button head cap screws. Hex and carriage bolts, washers, lock nuts.

STEEL DECKS: 12 Ga. HRPO punched steel with welded 12 Ga. center bracing, Thermoplastic coated. Decks attach to post with 3/8" stainless steel bolts that are inserted through the deck and into a factory installed Rivet Nut in the post.

ARCH CLIMBER: Side rails are made from Type 4 steel tube with Type 2 steel rungs MIG welded to the side rails. Rails are welded to a 2" x 2" angle at the top that bolts to the playground deck using stainless steel tamper resistant bolt sets and the climber is anchored in concrete at the bottom end. Climber includes a safety barrier that is made from Type 1 steel rungs and Type 2 steel tube frame that is welded together. Steel brackets are welded to the barrier and attach to the post with a gasket and (4) self-tapping screws at each location. All components are powder coated.

ARCH BRIDGE: 38" wide by 8' 6" long bridge made from perforated 12 GA HRPO sheet metal that is bent over and welded too 12 GA steel gussets and is coated with Thermoplastic. Bridge attaches to playground deck with stainless steel tamper resistant bolts. Safety barrier is made from rolled Type 2 steel tube and Type 1 steel rungs that are welded to the rolled frame. Barrier attaches to post with 4 hole brackets and self-tapping screws. Barrier and brackets are powder coated.

CHIN/TURN/GUARD BARS: Type #2 steel, 48" long with two clamps, powdercoated.

CHAIN NET: 3/16" x 2" flat HRPO steel connection to deck, chain is 4/0 galvanized playground chain with Type 1 steel rungs welded to chain. Climber connects to ground with type #2 steel support, z.p. "S" hooks to net. Comes with handholds/safety barrier constructed from Types 1 and 2 steel that is welded together and attaches to the post with 4 hole brackets. Chain net is Thermoplastic coated and the rest is powder coated.

CORKSCREW CLIMBER: Type #4 steel center pole welded to 24" diameter by 1 3/8" O.D. coil. Handholds/Arch Entry made from Type 1 and Type 2 tube. Bolts to deck through welded steel plates attach to post using 4 hole brackets and is anchored in the ground using concrete.

CIRCLE (HALF) CLIMBER: Side-rails are Type 4 steel rolled to form an "S" shape. Rails are welded too Type 2 steel rungs. 1/4" HRPO steel plates are welded to the end of the side rails at the top and a Rivet Nut is installed in that plate. The climber attaches to the side of the playground deck by inserting a stainless steel tamper resistant bolt through the deck and into the Rivet nut. The bottom of the climber is anchored in concrete. Climber includes a safety barrier that is made from Type 1 steel rungs and Type 2 steel tube frame that is welded together. Steel brackets are welded to the barrier and attach to the post with a gasket and (4) self-tapping screws at each location. All components are powder coated.

CIRCLE (INCLINED HALF) BRIDGE: Side-rails are Type 4 steel. Rails are welded too Type 2 steel rungs. 1/4" HRPO steel plates are welded to the end of the side rails at both ends and a Rivet Nut is installed in that plate. The climber attaches to the side of the playground deck by inserting a stainless steel tamper resistant bolt through the deck and into the Rivet nut. Climber includes a safety barrier that is made from Type 1 steel rungs and Type 2 steel tube frame that is welded together. Steel brackets are welded to the barrier and attach to the post with a gasket and (4) self-tapping screws at each location. All components are powder coated.

CATERPILLAR CLIMBER: Side-rails are Type 4 steel rolled to form a 45 degree arc. Rails are welded too Type 2 steel rungs. 1/4" HRPO steel plates are welded to the end of the side rails at the top and a Rivet Nut is installed in that plate. The climber attaches to the side of the playground deck by inserting a stainless steel tamper resistant bolt through the deck and into the Rivet nut. The bottom of the climber is anchored in concrete. Climber includes a safety barrier that is made from Type 1 steel rungs and Type 2 steel tube frame that is welded together. Steel brackets are welded to the barrier and attach to the post with a gasket and (4) self-tapping screws at each location. All components are powder coated.

CRAWL TUNNEL: 4' Plastic, linear low density. 3/8" wall tunnel has (2) rotationally molded, high density, U.V. stabilized, end panels, toggle bolt connected. Panels connect to posts with (4) type #2 pipes and (8) 4 hole brackets.

CRAWL TUNNEL (90 DEGREE): 4' Plastic, linear low density. 3/8" wall tunnel has (2) rotationally molded, high density, U.V. stabilized, end panels, toggle bolt connected. Joints are "bell-flange overlapped" and connected with low profile stainless steel hardware. Center pole support is type 4 steel. Panels connect to posts with (4) type #2 pipes and (8) 4 hole brackets. All metal components are powder coated.

FIREPOLE: Type #4 steel, bent to "L", includes Arch entry barrier constructed from Types 1 and 2 steel that is welded together and attaches to the post with 4 hole brackets and too the deck with two bolt sets. All components are powder coated.

HORIZONTAL LADDER (WAVY) :8' Long x 28" wide. Side Rails are Type 4 steel, rungs are type 2 steel spaced 15" on center. Connects to post with 4 hole brackets.

HORIZONTAL LADDER (STRAIGHT): 8' Long x 28" wide. Side Rails are Type 4 steel, rungs are type 2 steel spaced 15" on center. Connects to post with 4 hole brackets.

HORIZONTAL LADDER ("S" STYLE): 8' Long x 28" wide. Side Rails are Type 4 steel, rungs are type 2 steel spaced 15" on center. Connects to post with 4 hole brackets. Welded to "S" shape with 24" and 48" radius bends.



LOG ROLL: U.V. stabilized molded polyethylene. 48" long by 16" diameter roller connects to type #5 steel pipe, 57" long with galvanized end stubs, connects with 4 hole brackets to posts. Includes (2) handholds and (4) additional brackets for the handholds.

LOOP CLIMBER: 8' Long Side Rails are Type 4 steel, rungs are type 2 steel spaced 15" on center. Connects to post with 4 hole brackets.

PAD CLIMBER: Steel type 4 is used for the main vertical post, which is bent 90 degrees, and on the pad supports, which are welded to the main vertical post and the 12 gauge flat plates, which connect to the pads. Pads are made from 3/4" UV stabilized HDPE and connect to the plate using stainless steel tamper resistant bolts. Main vertical post connects to the Arch Entry sleeve using a bolt set. The arch entry barrier constructed from Types 1 and 2 steel that is welded together and attaches to the post with 4 hole brackets and too the deck with two bolt sets. All components are powder coated.

PANEL CLIMBER: Panel is made from 3/4" HDPE that is machined from a solid sheet using a CNC Router. Panel attaches to the post with 4 hole panel brackets.

ROTO PANEL: Rotationally molded panel, double wall panels connect to posts via 4 hole brackets and panel bracket set constructed from 12 gauge HRPO steel with type 2 steel stubs welded to it. The steel stubs attach to the 4 hole bracket and the panel bracket attaches to the panel with bolts.

ROTO PANEL BUBBLE WINDOW: Clear lexan bubble bolts to Roto Panel with stainless steel pneumatic heads. Includes panel clamps as discussed in the ROTO PANEL above.

HDPE PANEL: HDPE panels are constructed from UV stabilized single color or multi colored 3/4" High Density Poly Ethylene. HDPE Panels are bolted to 4 hole panel attachment brackets that are attached to the playground posts.

HDPE PANEL MIRROR: Mirror is from 1/8" thick polycarbonate with silver backing, with a steel back frame. See HDPE PANEL above for further details.

RING CLIMBER: Made from Type 5 steel with high tensile eyes welded to the top rail and cast aluminum rings connected to the eyes with "S" hooks. End pipes are made with type 5 steel with Type 2 steel stubs welded inside at the ends to connect climber to posts with 4 hole brackets. Rings are coated with thermoplastic and all other components are powder coated.

ROOF (PLASTIC): Double walled 5/16" wall plastic UV stabilized LLDPE. Connects to post with roof fittings made from swaged 5" OD galvanized tube with 3/8" laser cut plates welded to the tube. Fittings slide into playground post and attach to the roof with stainless steel bolts that slide through the bracket and into toggle bolts in the roof. Roof fittings are powder coated.

ROOF (STEEL): 12 GA HRPO steel. Connects to post with roof fittings made from swaged 5" OD galvanized tube with 3/8" laser cut plates welded to the tube. Fittings slide into playground post and attach to the roof with stainless steel bolts that slide through the bracket and into holes in the roof and are secured with lock nuts. Roof and roof fittings are powder coated.

SLIDE GUARD: All are made from Type 2 steel pipe and attach to post with 4 hole bracket. Some guards are simply straight pipes and some have a bent Type 2 steel handhold welded to them. All components are powder coated.

SLIDE, DOUBLE WALL STRAIGHT SLIDE: 3/8" double wall rotationally molded UV stabilized LLDPE, 17.5" wide bed with a 6" high siderail. Fits 3', 4' and 5' deck height and attaches to deck with stainless steel tamper resistant bolts inserted through the deck and into factory installed nuts. Slide legs are made from Type 1 steel with a 1/4" plate welded at the top. Plate has 1" slots and stainless steel tamper resistant bolts inserted through the bottom of the plate and into factory-installed nuts on the bottom of the slide connect the leg to the slide. Slide leg is anchored in concrete. Slide guard and brackets are included. All metal components are powder coated.

BUMP WAVE SLIDE: 3/8" double wall rotationally molded UV stabilized LLDPE with 7" high side rail and 13" wide bed. Fits 4', 5' and 6' deck height and attaches to deck with stainless steel tamper resistant bolts inserted through the deck and into factory installed nuts. Slide legs are made from Type 1 steel with a 1/4" plate welded at the top. Plate has 1" slots and stainless steel tamper resistant bolts inserted through the bottom of the plate and into factory-installed nuts on the bottom of the slide connect the leg to the slide. Slide leg is anchored in concrete. Slide guard and brackets are included. All metal components are powder coated. 6' slide has a center post that connects with bolts and factory installed nuts on the bottom of the slide.

90 DEGREE SLIDE: 3/8" double wall rotationally molded UV stabilized LLDPE with 4" side rails. Fits 3' deck height and attaches to deck with stainless steel tamper resistant bolts inserted through the deck and into factory installed nuts. Slide legs are made from Type 1 steel with a 1/4" plate welded at the top. Plate has 1" slots and stainless steel tamper resistant bolts inserted through the bottom of the plate and into factory-installed nuts on the bottom of the slide connect the leg to the slide. Slide leg is anchored in concrete. Slide guard and brackets are included. All metal components are powder coated.

TRIPLE RAIL SLIDE: 3/8" double wall rotationally molded UV stabilized LLDPE with 6" high side rails and (2) 17" wide beds. Fits 3' and 4' deck height and attaches to deck with stainless steel tamper resistant bolts inserted through the deck and into factory installed nuts. Slide legs are made from Type 1 steel with a 1/4" plate welded at the top. Plate has 1" slots and stainless steel tamper resistant bolts inserted through the bottom of the plate and into factory-installed nuts on the bottom of the slide connect the leg to the slide. Slide leg is anchored in concrete. Slide guard and brackets are included. All metal components are powder coated.

SPIRAL SLIDE TO 6' DECK: One piece rotationally molded LLDPE and UV stabilized slide with 3 1/2" O.D. center post. Post is anchored in concrete and the top of the slide connects to the spiral slide transition deck with stainless steel bolts and factory-installed nuts. Transition deck is made of 12 GA HRPO perforated steel top welded to a frame of the same material. Deck attaches to factory installed nuts in the posts with bolts. Safety barrier attaches to deck with bolts and to the playground post with 4 hole brackets. Barrier is made from Type 2 steel frame with Type 1 rungs welded to the frame. The deck is coated with Thermoplastic and all other metal components are powder coated. All bolts are stainless steel.

SPIRAL SLIDE TO 5' DECK: One piece rotationally molded LLDPE and UV stabilized slide with 3 1/2" O.D. center post. Post is anchored in concrete and the top of the slide connects to the spiral slide transition deck with stainless steel bolts and factory-installed nuts. Transition deck is made of 12 GA HRPO perforated steel top welded to a frame of the same material. Deck attaches to factory installed nuts in the posts with bolts. Safety barrier attaches to deck with bolts and to the playground post with 4 hole brackets. Barrier is made from Type 2 steel frame with Type 1 rungs welded to the frame. The deck is coated with Thermoplastic and all other metal components are powder coated. All bolts are stainless steel.

TUBE SLIDE: 3/8" wall, 24" O.D. Tube connects straight section with elbows. Panel entry connects to deck with bottom leg. Fits a 4', 5', 6' deck.

"S" TUBE SLIDE: Same as above with 30 degree elbows combined with straight sections to form "S". Has bottom and side legs and fits 4', 5', 6' deck. Panel entry fits the 30" diameter slide to deck. Has flange style joint system.

STEERWHEEL: Injection molded 12” diameter wheel countersunk wheel hub connects to wall with non-slip double plate, center ½” bolt and lock nut.

SWINGING BRIDGE: Guardrails are type #4 steel and attach to posts with 4 hole brackets. Bridge is made with 12 GA HRPO steel planks welded to 4” wide x 3/16” thick heavy-duty steel hinge with a 1/2” hinge pin. 2” x 2” x 1/4” steel angle is welded on the ends of the bridge and the ridge bolts directly to the top and side of the decks with stainless steel bolts through the welded angles. Bridge is Thermoplastic coated and the guardrails are powder coated.

STEPLADDER: Connects to 3’, 4’, 5’ deck, 7 ¼” step and 8 ½” riser made from 12 GA perforated and Thermoplastic coated HRPO steel. Stairs bolt directly to deck and Type 2 handrails bolt to stairs and arch entry. Includes Arch entry, which is made from Type 2 steel frame with Type 1 rungs welded to frame attach to post with 4 hole brackets and to the deck via 1/4” plate welded to frame with bolts. All metal components (except the stairs) are powder coated and all hardware is stainless steel and tamper resistant.

TALK PHONES: Submarine style phones constructed from 90-degree street elbows, galvanized with screens, Type 4 and Type 2 steel welded together to make the brackets. Flexible hose connects the two brackets and is black ABS water pipe. All metal components are powder coated.

TRANSFER POINT: Steps and platform are made from 12 GA perforated Thermoplastic coated HRPO steel welded to a frame made from the same material. Steps bolt to the platform and the playground deck. Handholds are made from Type 2 steel and bolt to the stairs and playground post, lower handrail with loop bolts to the platform. Unit is anchored to the ground with various support posts made from Type 2 steel with plates welded at the top for connection to the unit. All steel tube is powder coated and all hardware is stainless steel and tamper resistant.

“U” CLIMBER: Type 2 half circles (“U’s”), 16” diameter welded to vertical type 2 “L” pipe, top sleeve connects to Arch Entry which is constructed from Types 1 and 2 steel that is welded together and attaches to the post with 4 hole brackets and too the deck with two bolt sets. All components are powder coated.

U.F.O CLIMBER: Circular horizontal ladder exits from and enters same deck. Siderails and rungs are Type 4 vertical supports 10.5’ long. Climber attaches to posts with 4 hole brackets and vertical post is anchored in concrete. All components are powder coated and all hardware is stainless steel and tamper resistant.

VERTICAL CLIMBER: The vertical ladder with built in handholds/safety barrier are made from type 1 and type 2 steel and connect to post with 4 hole brackets and to the deck with bolt sets. Rungs are 12” O.C. to 3’, 4’, 5’ decks.

WALL: Rung walls are 38” tall and are constructed using Types 1 and 2 steel that is welded together and powder coated. Walls attach to the post with 4 hole brackets and to the deck using bolt sets.



TERMS:

GA: Gauge – Thickness of steel or wall thickness of pipe. The smaller the gauge the thicker the pipe (12 gauge is thicker than 20 gauge).

LLDPE: Linear Low Density Poly Ethylene

HDPE: High Density Poly Ethylene

OD: Outside Diameter

UV Stabilized: Chemical added to plastic resin that protects the color pigment from deterioration caused by ultraviolet rays.

HRPO – Hot Rolled Pickled & Oiled

Electrostatically – The process which electrically charges paint particles as a neutral component is being painted to ensure complete coverage.