



ADDENDUM NO. 1

Dated: December 7, 2018

TO THE CONTRACT DOCUMENTS FOR THE

**NW NEIGHBORHOOD PARK
PROJECT NO. 2015-11**

NOTICE TO ALL PLANHOLDERS:

You are hereby notified of the following clarifications, additions, and/or revisions to the contract documents for the above referenced project:

BIDDING REQUIREMENTS

1. **Pre-Bid Meeting Question / Comment Responses:**

- a. **Q/C:** Just the provider for the Forever Lawn is listed in the specifications. No installer is listed?
R: Correct. See Synthetic Grass Playground Surfacing Section 321814-2; 1.4 Quality Assurance for Installer Qualifications.
- b. **Q/C:** There are no details for playground installation.
R: Manufacturer installation cut sheets have been included as part of this Addendum.
- c. **Q/C:** Schedule Discussion
R: The City has received a two-year extension for the funding deadlines. The preference is to have the construction completed by November 30, 2019. However, the City is willing to negotiate an alternative construction timeline in order to better accommodate the contractor and more favorable bids.
- d. **Q/C:** Are there liquidated damages included in the contract?
R: Yes, the City contract includes liquidated damages. The construction timeline will be determined during the contract negotiation process.

- e. **Q/C:** Will survey be required?
R: The contractor will be responsible for providing construction survey work to complete the project. There is a bid item in the bid tab for Construction Survey Work. Barker Surveying provided the topographic survey from which the construction drawings were developed. Their contact information is included on the covers sheet of the Bid Set if you choose to use them.

- f. **Q/C:** What is a 2-3 man boulder?
R: These are approximate 2'-3' diameter boulders that will be used in key locations to deter vehicular access into the park. WSDOT uses the following to describe them:

Rock Size	Rock Weight	Avg. Dimensions
Two Man	200 - 700lbs	18" - 28"
Three Man	700 - 2,000lbs	28" - 36"

- g. **Q/C:** Who obtains the permits and pays for them?
R: Contractor is responsible for obtaining and paying for Trade Permits. Owner will pay for other permits unless otherwise noted in the specifications or bid documents.

- h. **Q/C:** Playground Installer Qualifications
R: See Site Furnishings Section 02870-1; 1.2 Quality Assurance:

D. Installer Qualifications: An experienced installer who has specialized in installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer of playground equipment as indicated on the Drawings.

and

E. Playground equipment is to be installed by an experience playground installer with at least 5 years experience with similar applications. Contractor to submit certification and proof of installation experience to Owner's Representative for approval prior to installation. 'Landscape Structures' contact is Ross Recreation.: 707-538-3800.

- i. **Q/C:** Does the landscape installer need to be certified?
R: See Lawns and Grasses Section 02920-2; 1.4 Quality Assurance and Exterior Plants Section 02930-1; 1.3 Quality Assurance for installer qualifications. See Irrigation Systems Section 02810-2; 1.5 Quality Assurance for irrigation installer qualifications.
- j. **Q/C:** There was a comment that the slab for the Portland Loo is typically 18" thick.
R: We contacted the manufacturer for clarification and were told that the 18" thick slab is designed to address all soil types. Based on the conversation with the manufacturer, the City would like to proceed with the slab as currently designed at an 8" thickness.

- k. **Q/C:** There was a question as to whether or not the strip and haul of organics and topsoil could be replaced with farming the soil.
 R: Based on discussion with the client following the Pre-bid meeting it was decided for bidding purposes to keep the stripping and hauling requirements as currently shown in the Bid documents.

REVISIONS AND ADDITIONS TO THE SPECIFICATIONS AND CONSTRUCTION DRAWINGS

1. Site Furnishings Section 02870:
 - a. See attached "Exhibit A" manufacturer's product installation data for playground equipment.
2. Mandatory Pre-Bid Sign-in Sheet
 - a. See attached "Exhibit B" sign-in sheet identifying the attendees of the mandatory pre-bid meeting.

The Contractor shall prepare the Proposal in full consideration of the information contained in this Addendum No. 1 as well as the original contract documents.

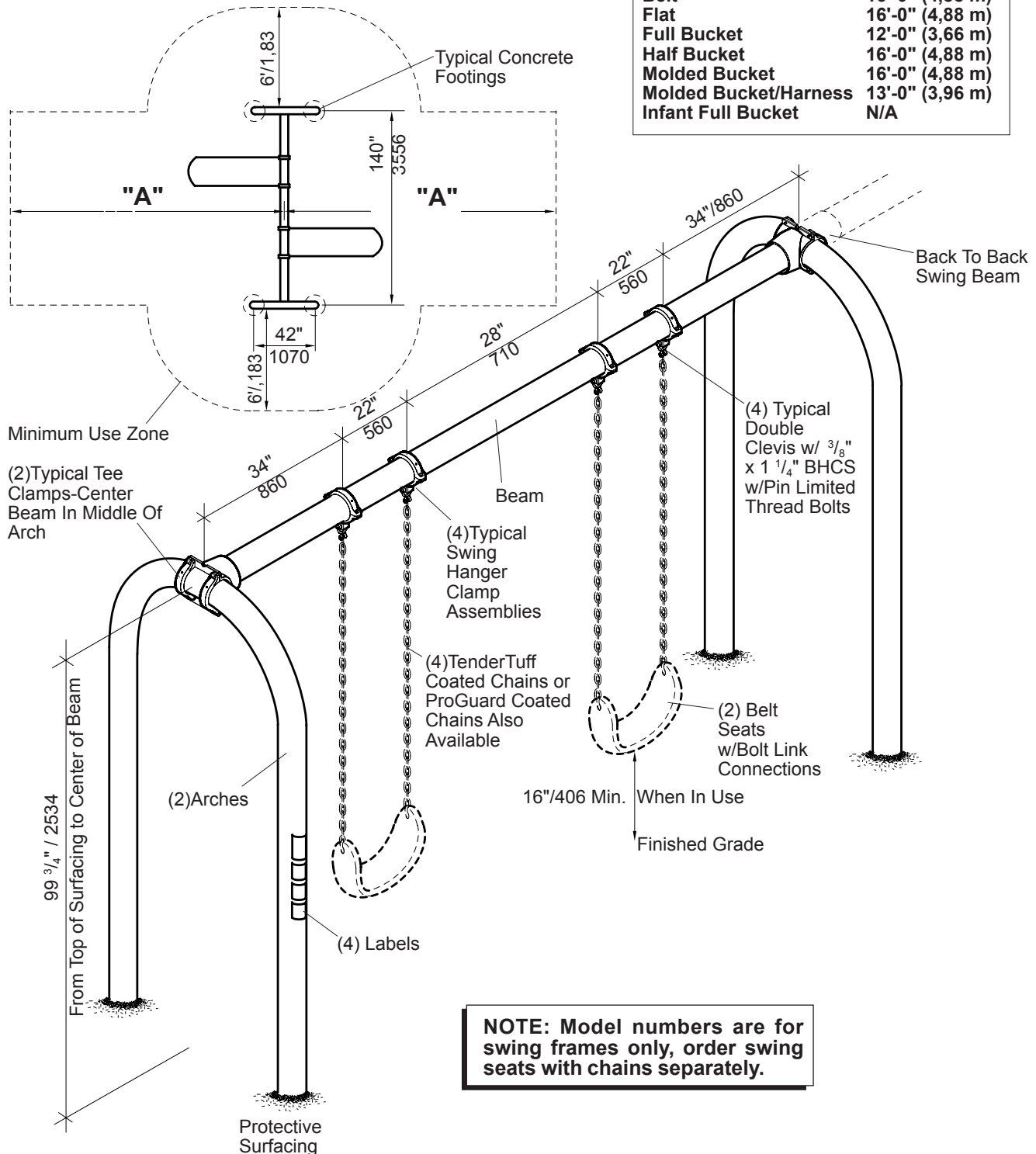
All bidders shall acknowledge receipt and acceptance of Addendum No.1 in the space provided in the contract proposal. Proposals submitted without the Addendum No. 1 acknowledgement shall be considered informal.

City of McMinnville

Rich Spofford
Engineering Services Manager

Exhibit A: Manufacturer's product installation data for playground equipment.

PLAN VIEW/FOOTING LAYOUT



NOTE: Model numbers are for swing frames only, order swing seats with chains separately.

Model #221293 Additional Bay

Swings

221292/221293 Arch Swing Frame

Sheet 1 of 2

Parts List

Part#	Description	Qty.	2 Pl	Add. Bay
126749	Swing Arch, Specify Color.....	2	1	
100610	1/4" x 5/8" Drive Rivet, AL/SST.....	8	6	
105327	5" Half Clamp, Specify Color.....	8	4*	
216492	140" Swing Beam, Specify Color.....	1	1	
121291	Swing Hanger Clamp Assy. Specify Color	4	4	
121289	Swing Hanger Clamp, Specify Color.....	4	4	
127068	7/16" x 2 7/16" BHCS w/Pin Ltd. Thread, SST.....	4	4	
138917	Swing Hanger Double Clevis.....	4	4	
100667	Oilite Bushing.....	4	4	
243802	Hdw Pkg 5iOD Swing Beam.	1	1	
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8	8	
234397	BHCS 6LP LTHD 7/16 x 1 11/16i, SST.....	8	8	
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST.....	4	4	
100351	3/8" Tee Nut, SST.....	8	8	
156846	Play Safe Label, 2-12 Yrs.....	1	1	
234937	7/16" D Cut Washer, SST.....	16	16	
182213	Hot Surface Warning Label.....	1	1	
182212	Entanglement Warning Label.....	1	1	
115176	Hard Surface Warning Label.....	1	1	
100330	7/16" Nylok Hex Nut.....	8	8	

* = 5" Half Clamps From 2 PL. End Of Beam Need To Be Used.

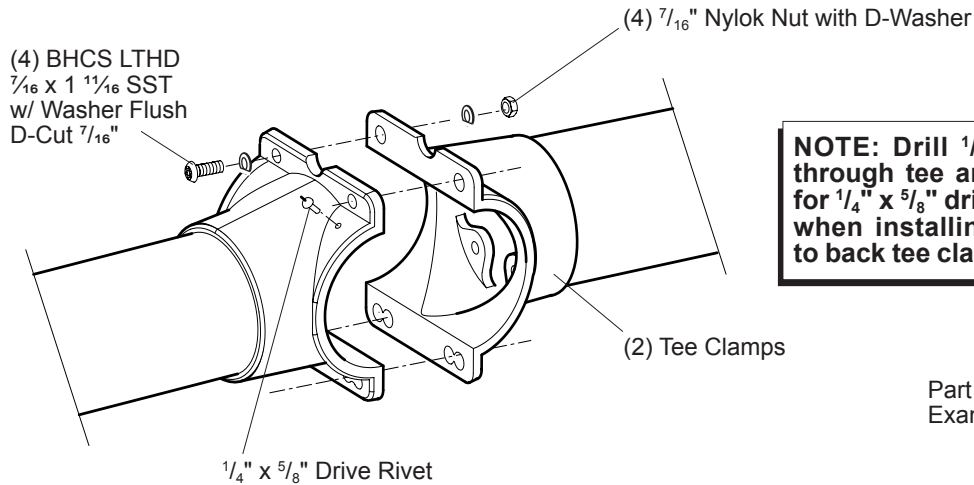
Specifications

Arch Posts:	See PlayBooster® (PB) General Specifications.
Swing Beam:	Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" wall. Finish: ProShield®, color specified.
Clamp:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 8 man hours Additional Bay 4 man hours
Concrete Req.:	Approx. 7.5 cu. ft. Additional Bay 3.75 cu. ft.
Area Req.:	24'-2 3/4" x 32' (7,39 m x 9,75 m) Additional Bay 11'-8" x 32' (3,55 m x 9,75 m)
Weight:	204 lbs. Additional Bay 124 lbs.
Fall Height:	96" (2,43 m)

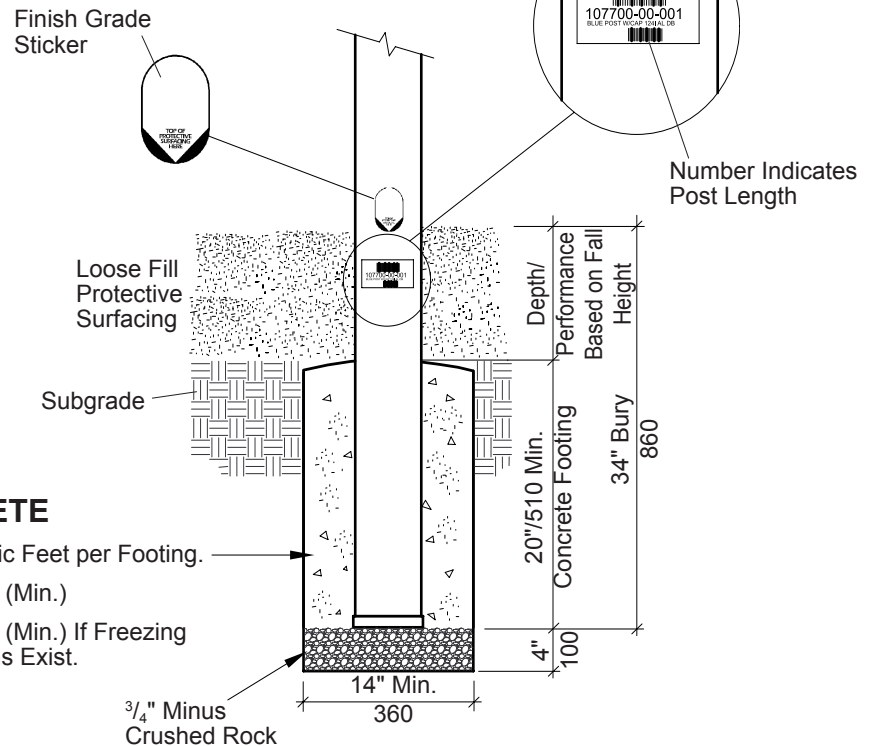
Installation Instructions

- 1) Dig footings, spaced as shown. Refer to the Concrete Footing Detail.
- 2) Set arches in footing holes and attach swing beam to center of arches using 5" half clamps with 7/16" BHCS w/Pin, 7/16" D-Cut Washers, and 7/16" Nylok nuts. Refer to the Tee Clamp Position Detail. Center of beam should be 99 3/4" above finished grade. When installing back to back swing beams refer to the Back To Back Tee Clamps Detail.
- 3) Level beam and plumb arches and temporarily prop in position. Pour concrete footings and let cure for 72 hours before proceeding.
- 4) Locate, mark and attach swing hanger clamps to beam in locations shown. Refer to the Typical Swing Hanger Clamp Spec Sheet.
- 5) **NOTE:** Refer to specific swing seat installation document for attaching chains and seats.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Back To Back Tee Clamps Detail.
- 7) Apply Play Safe and Warning Labels, as shown.
- 8) Install protective surfacing before users are allowed to play on the swing.

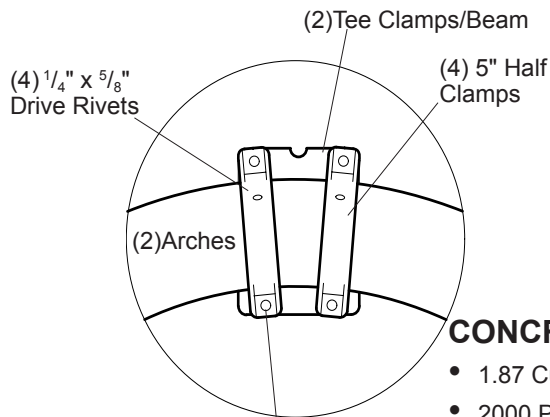
**DETAIL
BACK TO BACK
TEE CLAMPS**



**DETAIL
CONCRETE FOOTING**



**DETAIL
TEE CLAMP POSITION**

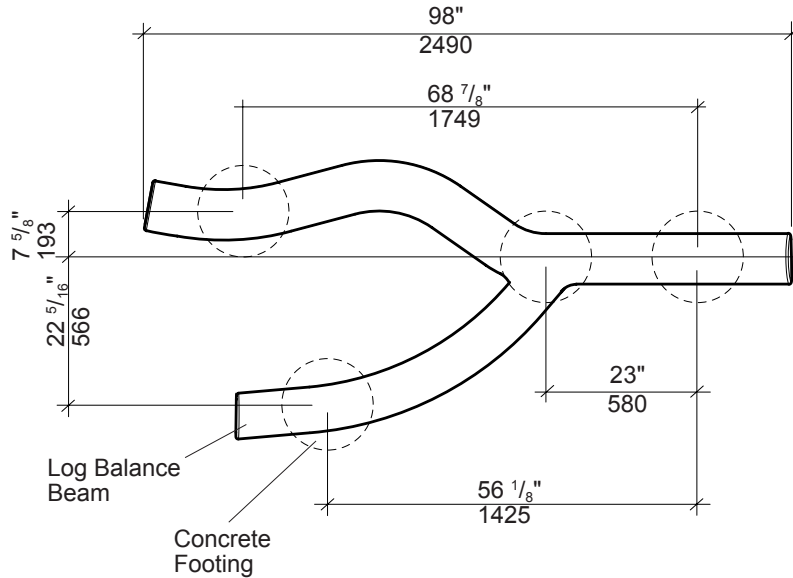


NOTE: Use inside holes for (4) $\frac{7}{16}$ BHCS w/Pin limited thread w/D-Washer $\frac{7}{16}$ Nylok Nut w/D-Washer

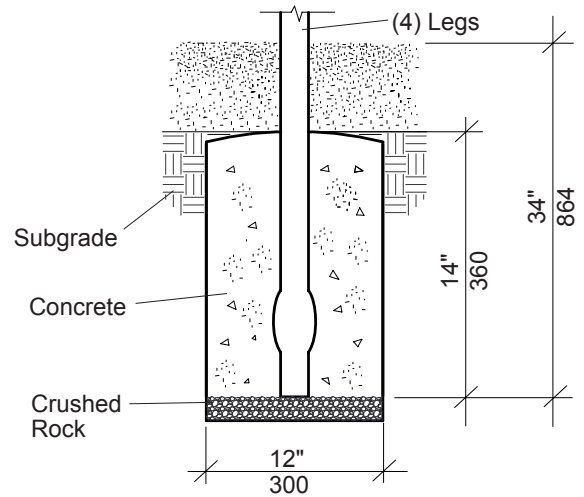
CONCRETE

- 1.87 Cubic Feet per Footing.
- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist.

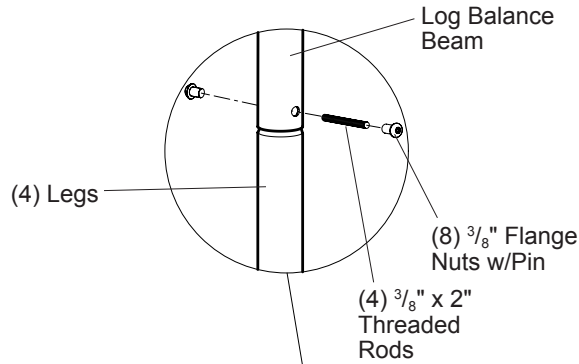
PLAN VIEW/FOOTING LAYOUT



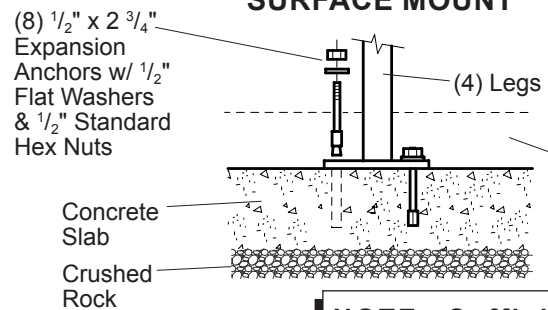
DETAIL DIRECT BURY



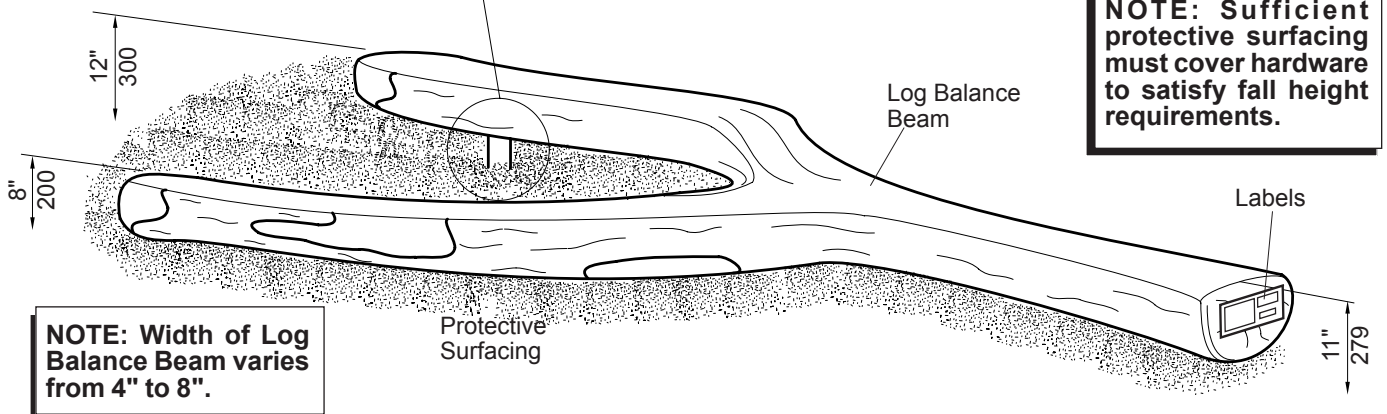
DETAIL LEG ATTACHMENT



DETAIL SURFACE MOUNT



NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.



NOTE: Width of Log Balance Beam varies from 4" to 8".

Play Naturally™

Sports & Fitness

173596 Log Balance Beam

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Document #23921100



Sports & Fitness 173596 Log Balance Beam

Parts List

Part#	Description	Qty.
175712	Log Balance Beam	1
175706	Leg, SM, Brown	4
175707	Leg, DB, Brown	4
175717	Log Balance Beam Hardware Package	1
100353	3/8" Flange Nut w/Pin, SST	8
116942	3/8" x 2" Threaded Rod, SST	4
111392	2-Hole (SM) Hardware Package	4
100266	1/2" x 2 3/4" Expansion Anchor	8
100322	1/2" Standard Hex Nut, SST	8
100363	1/2" Flat Washer, SST	8
224345	Warning Label Package 2-12	1
183064	Label Warning	1
200331	Label 2-5 Yrs	1
200332	Label 2-12 Yrs	1
200333	Label 5-12 Yrs	1

DB = Direct Bury
SM = Surface Mount

Specifications

Log Balance Beam

Assembly: Weldment comprised of 1.900" O.D. RS20 (.090"-.100" wall) galvanized steel tubing and 2.375" O.D. RS20 (.095"-.105" wall) galvanized steel tubing. Finish: ProShield, brown in color. (Log-fully assembled) Glass reinforced wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.

Leg: Fabricated from 2.375" O.D. RS20 (.095"-.105" wall) galvanized steel tubing. Finish: ProShield, brown in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 2 man hours

Concrete: Approx. 3.66 cu. ft.

Weight: 430 lbs. (DB) 410 lbs. (SM)

Min. Use Zone: 6' (1830 mm)

Actual Size: Log measures 98" long x 42" wide
(2490 mm x 1070 mm wide)

Fall Height: 12" (200 mm)

Installation Instructions

1) **(Direct Bury)** - Dig footing holes, spaced as shown. Attach legs to log balance beam, using 3/8" x 2" threaded rods and 3/8" flange nuts with pin. Place log balance beam in footing holes and temporarily brace in plumb and level position. Pour concrete footings and let cure for a minimum of 72 hours before users are allowed to play on the structure.

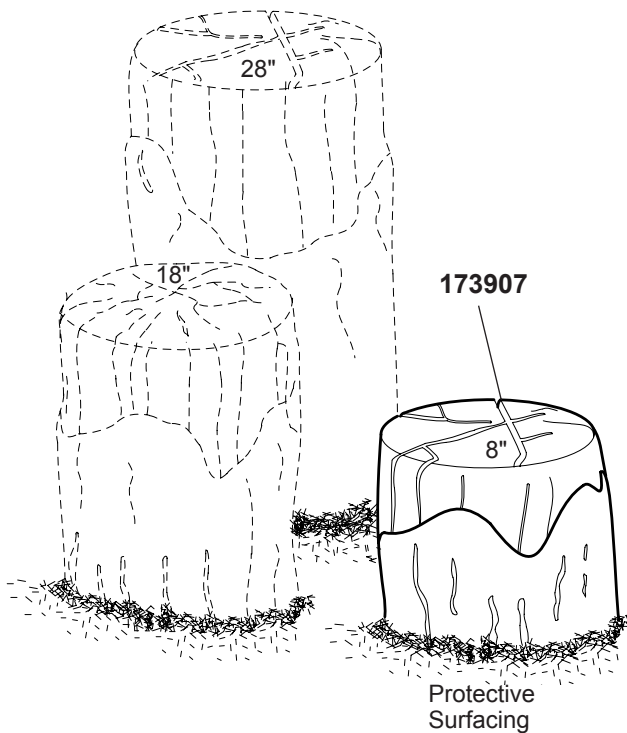
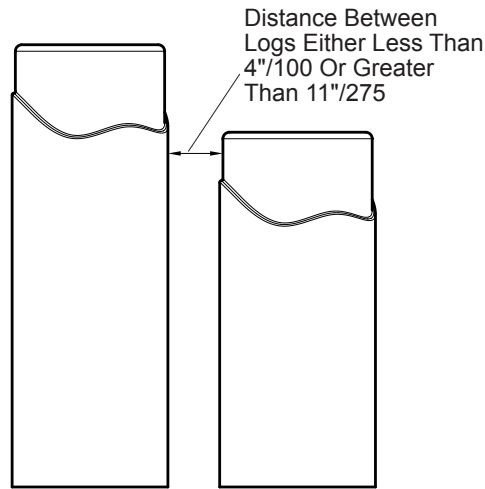
(Surface Mount) - Attach legs to log balance beam, using 3/8" x 2" threaded rods and 3/8" flange nuts with pin. Set log balance beam in proper position and mark anchor bolt locations on concrete slab through holes in anchor plates. Move log balance beam aside and drill 1/2" x 3" deep holes in marked locations on concrete slab using 1/2" masonry bit and hammer drill. Reposition log balance beam over drilled holes and tap expansion anchors into holes. Fasten using and 1/2" standard hex nuts with 1/2" flat washers.

2) Apply the warning label and age label for the intended age range.

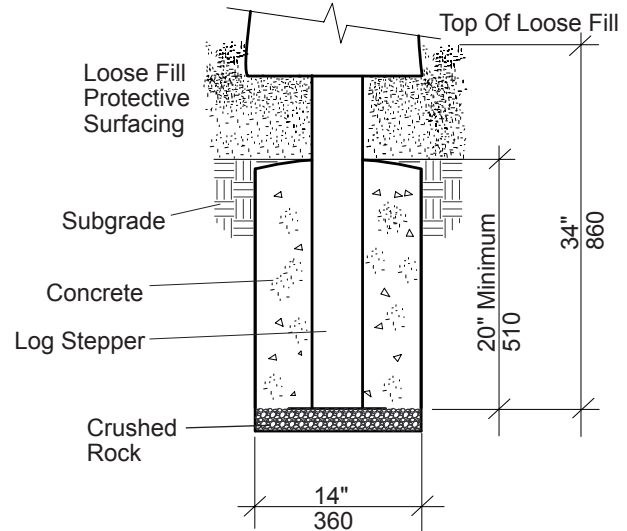
3) Install protective surfacing before users are allowed to play on the structure.

4) **NOTE: After installation if Touch-up/Repairs are needed, contact Landscape Structures at 1-888-574-4678.**

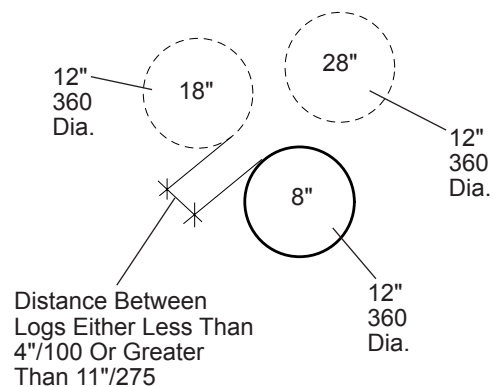
**DETAIL
LOG STEPPER
SPACING**



**DETAIL
DIRECT BURY**



**PLAN VIEW/FOOTING LAYOUT
(LAYOUT VARIES - SEE YOUR PLAN)**



Play Naturally™

173907 8" Height (Shown)
173908 18" Height
173909 28" Height

Climbers

Log Steppers

Parts List

Part#	Description	Qty.
200691	8" Log Stepper (DB), Natural.....	*
200692	18" Log Stepper (DB), Natural.....	*
200693	28" Log Stepper (DB), Natural.....	*
224345	Warning Label Package 2-12 (8" Stepper Only).....	1
183064	Label Warning.....	1
200331	Label 2-5 Yrs.	1
200332	Label 2-12 Yrs.	1
200333	Label 5-12 Yrs.	1

DB = Direct Bury

* = Quantity Determined By Your Order

Specifications

Log Stepper Assy.: (Footer Post) Weldment comprised of 5" O.D. x 11 GA. (.120") wall galvanized steel tubing and 3/16" HRPO steel plate. Finish: ProShield, color specified.
(Log Stepper-fully assembled) Glass reinforced wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.

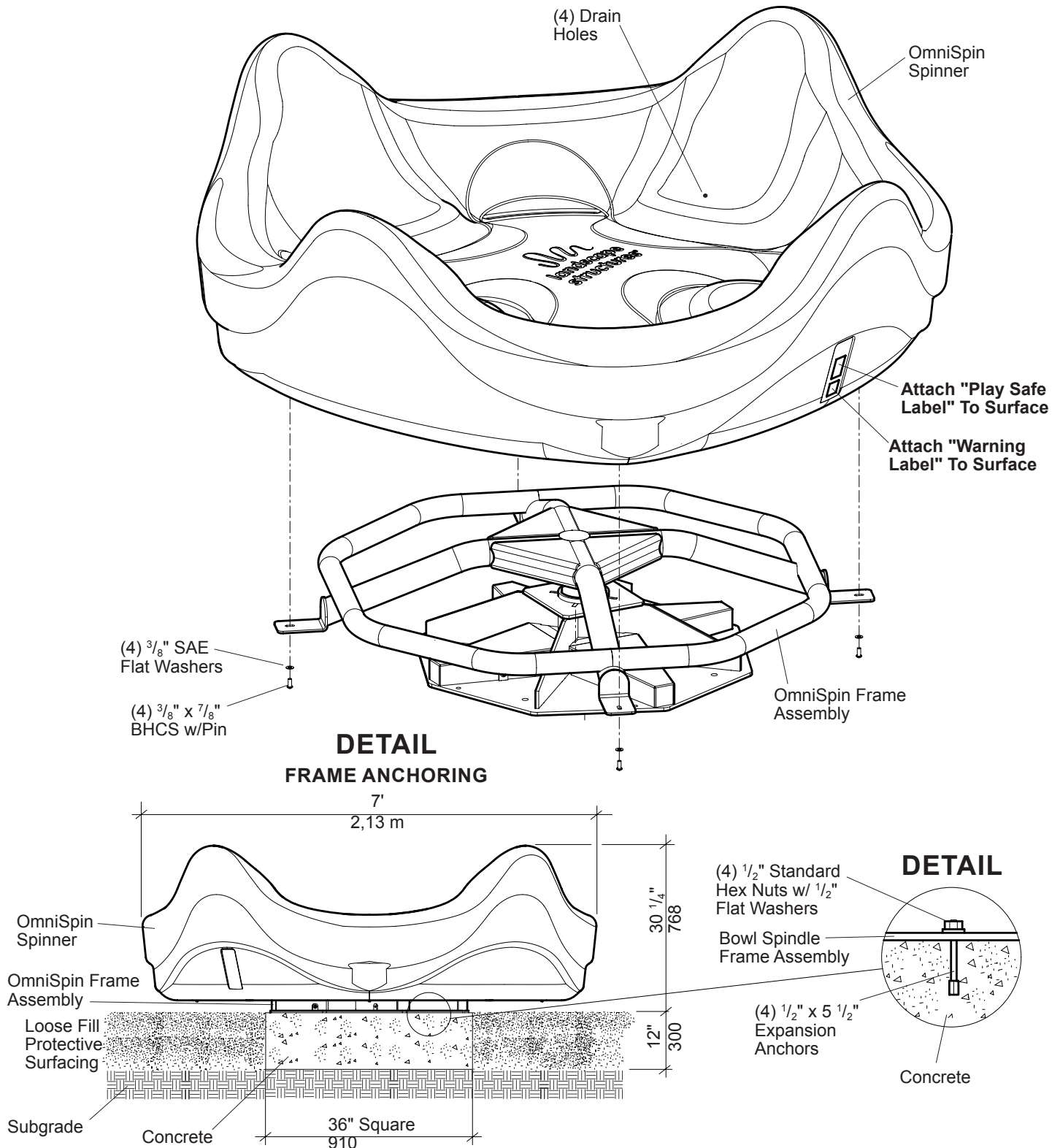
Installation Time: Approx. 1/2 man hour each

Concrete Req.: Approx. 1.78 cu. ft. each

Weight:
8" - 162 lbs.
18" - 230 lbs.
28" - 424 lbs.

Installation Instructions

- 1) **(Direct Bury)** Dig footing as shown. See your Plan View/Footing Layout.
- 2) To unload the log steppers and place in footing holes, a "Lull" type material handler and strap are recommended. Position log steppers in footing holes at dimensions shown, and prop in plumb position. With log steppers and handrail plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 3) **(8" Stepper Only)** Apply the warning label and age label for the intended age range.
- 4) Install protective surfacing before users are allowed to play on the structure



Parts List

Part#	Description	Qty.
171060	OmniSpin Spinner, Specify Color.....	1
171061	OmniSpin Spinner Frame Assy., Black.....	1
183892	OmniSpin Spinner Hardware Package	1
100196	$\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/Pin, SST.....	4
100365	$\frac{3}{8}$ " SAE Flat Washer, SST.....	4
156846	Play Safe Label, 2-12 Years.....	1
183064	Warning Label	1

175599	4 Hole (SM) Hardware Package	1
100271	$\frac{1}{2}$ " x 5 $\frac{1}{2}$ " Expansion Anchor w/Nut/Washer	4

SM = Surface Mount

Specifications

OmniSpin Spinner: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

OmniSpin Spinner

Frame Assembly: **(Frame)** Weldment comprised of 2.375" O.D. RS20 (.095"-.105" wall) galvanized steel tubing, 2.875" O.D. RS40 (.160"-.170" wall) galvanized steel tubing, $\frac{1}{4}$ " HR flat steel and 3 $\frac{1}{2}$ " O.D. CF steel bar. **(Base)** Weldment comprised of $\frac{3}{8}$ " HRPO sheet steel and $\frac{3}{16}$ " HRPO sheet steel. **(Shock Covers)** 16 GA (.060") HRPO sheet steel. **(Crank Arms & Pins)** Fabricated from stainless steel. **(Shocks)** Gas shocks with fixed bearings. Finish: ProShield®, black in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: **(Direct Bury)** Concrete Footing - 2 People approx. 3 hours

Assembly - 3 People 1 hour

Concrete: **(Direct Bury)** 9 cu. ft.

Weight: 499 lbs.

Actual Size: 7' x 7' (2,13 m x 2,13 m)

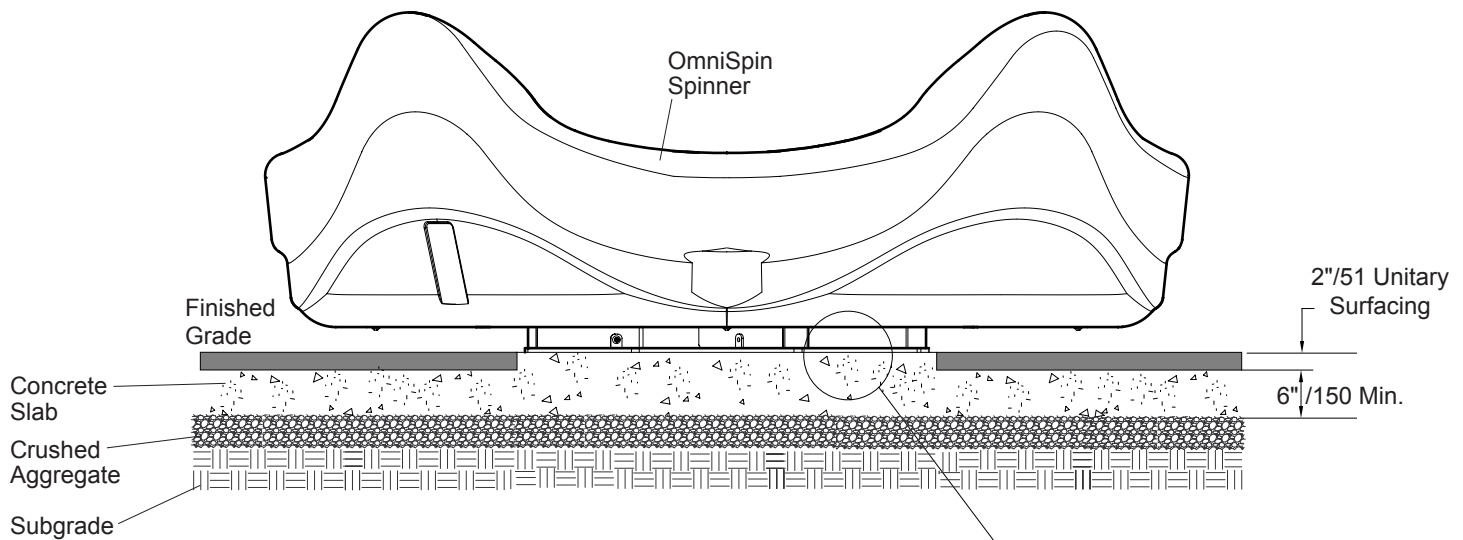
Area Required: 19' (5,79 m) Diameter ASTM

Fall Height: 18" (460 mm)

Installation Instructions

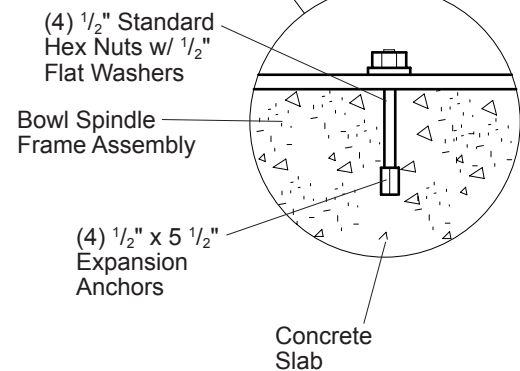
- 1) **(Direct Bury)** Build and pour concrete footing. Refer to Frame Anchoring Details. Allow concrete footing to cure for a minimum of 72 hours before continuing.
- 2) With OmniSpin Spinner frame in position, drill through 4 outside holes in OmniSpin Spinner frame 5 $\frac{1}{2}$ " deep into concrete slab, using $\frac{1}{2}$ " masonry bit and hammer drill. Refer to the Frame Anchoring Detail.
- 3) Tap $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " expansion anchors into drilled holes and secure using $\frac{1}{2}$ " standard hex nuts with $\frac{1}{2}$ " flat washers. Refer to the Frame Anchoring Details.
- 4) Attach OmniSpin Spinner to OmniSpin Spinner frame, using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin and $\frac{3}{8}$ " SAE flat washers.
- 5) Apply labels as shown.
- 6) Install protective surfacing before users are allowed to play on the component.

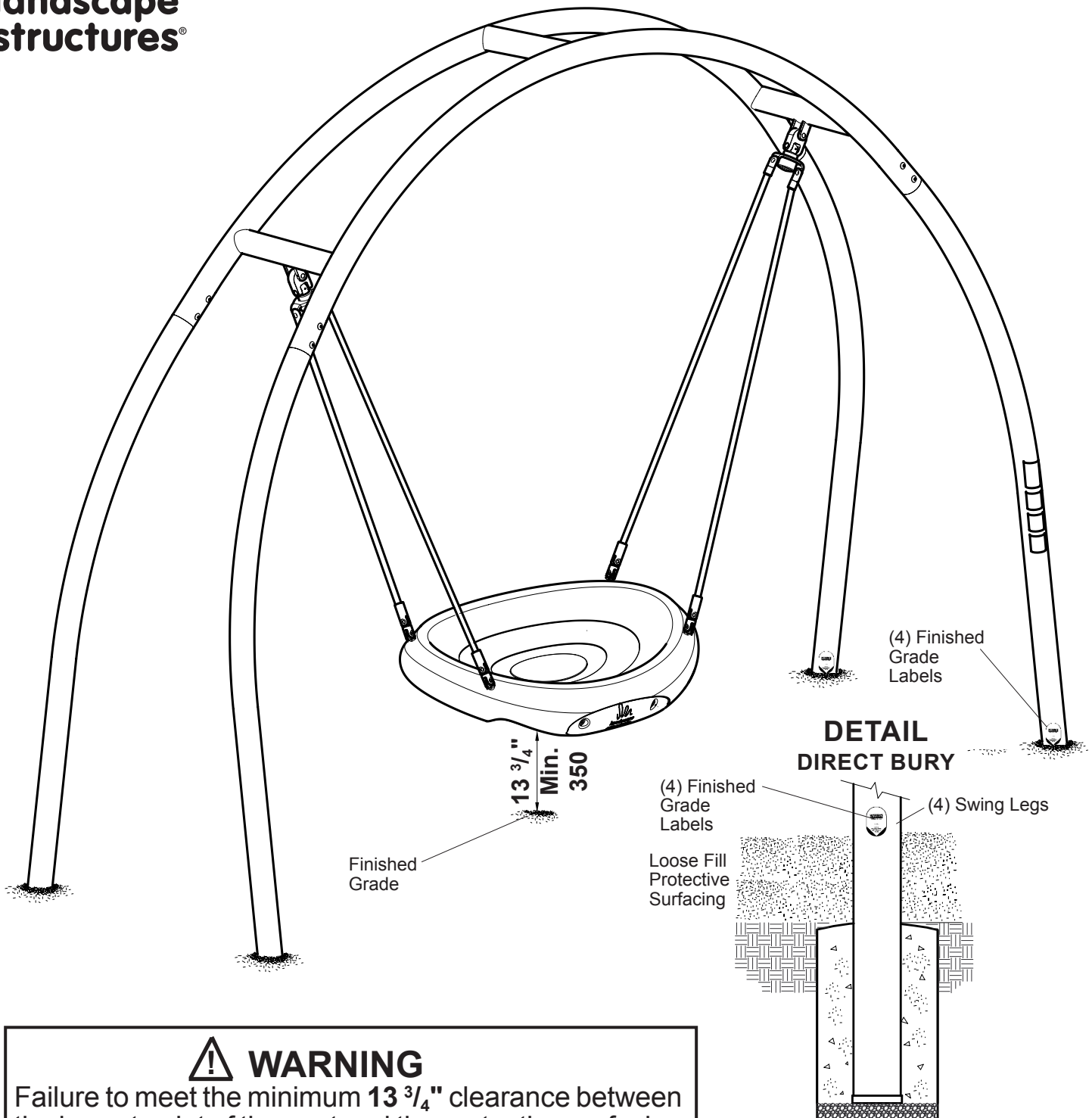
Unitary Surfacing



NOTE: When using unitary surfacing on crushed aggregate, refer to Frame Anchoring Detail for loose fill protective surfacing.

DETAIL





WARNING

Failure to meet the minimum $13 \frac{3}{4}$ " clearance between the lowest point of the seat and the protective surfacing may result in serious injury. Children have sustained broken legs and ankles due to the seat being installed too low.

Swings

173592 Oodle® Swing

Sheet 1 of 3

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DETAILS

FINISHED GRADE TO SWING SEAT MEASUREMENT



NOTE: Take dimension from the lowest point on the seat.

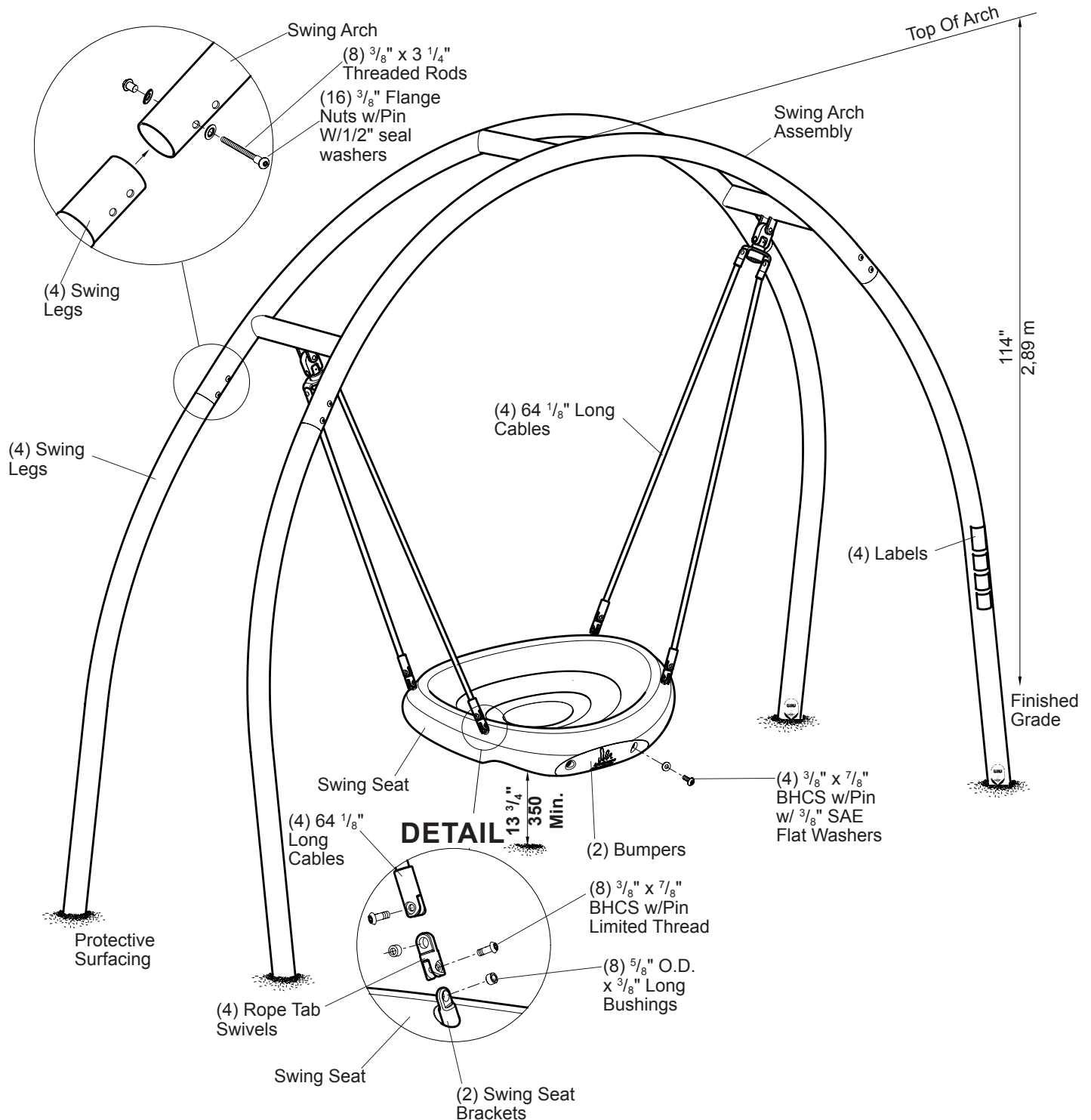
Swings

173592 Oodle® Swing

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**DETAIL
SWING LEG ATTACHMENT**



Swings

173592 Oodle® Swing

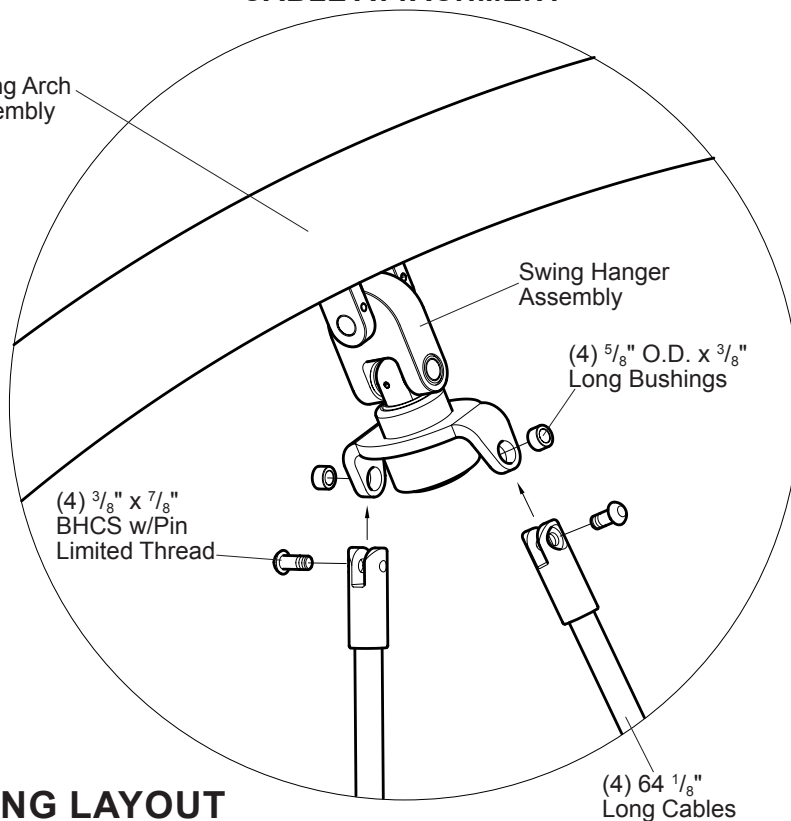
Sheet 2 of 3

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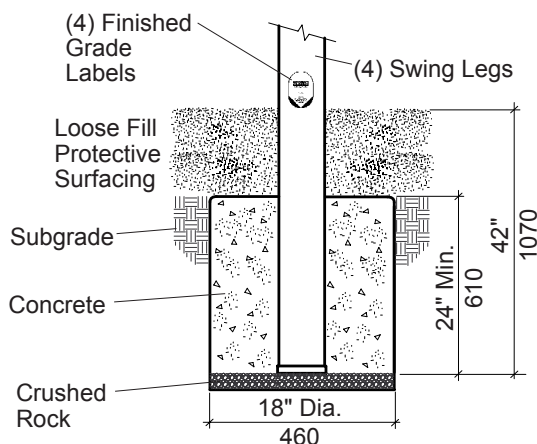
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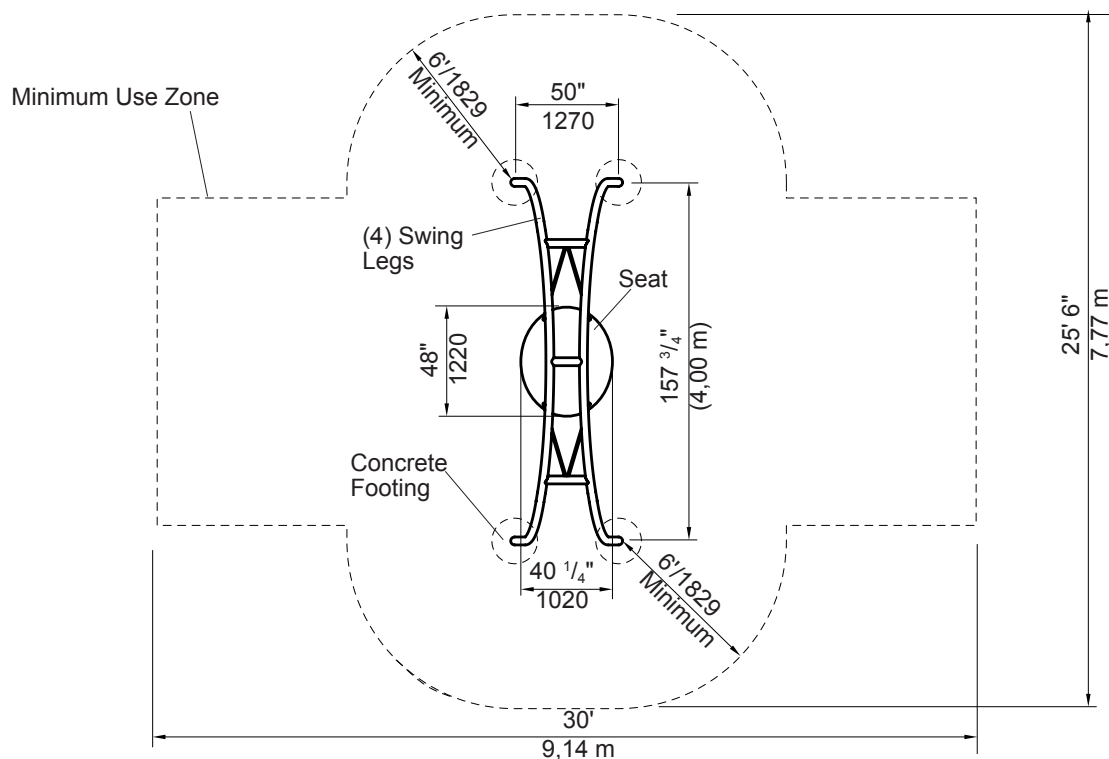
**DETAIL
CABLE ATTACHMENT**



**DETAIL
DIRECT BURY**



PLAN VIEW/FOOTING LAYOUT

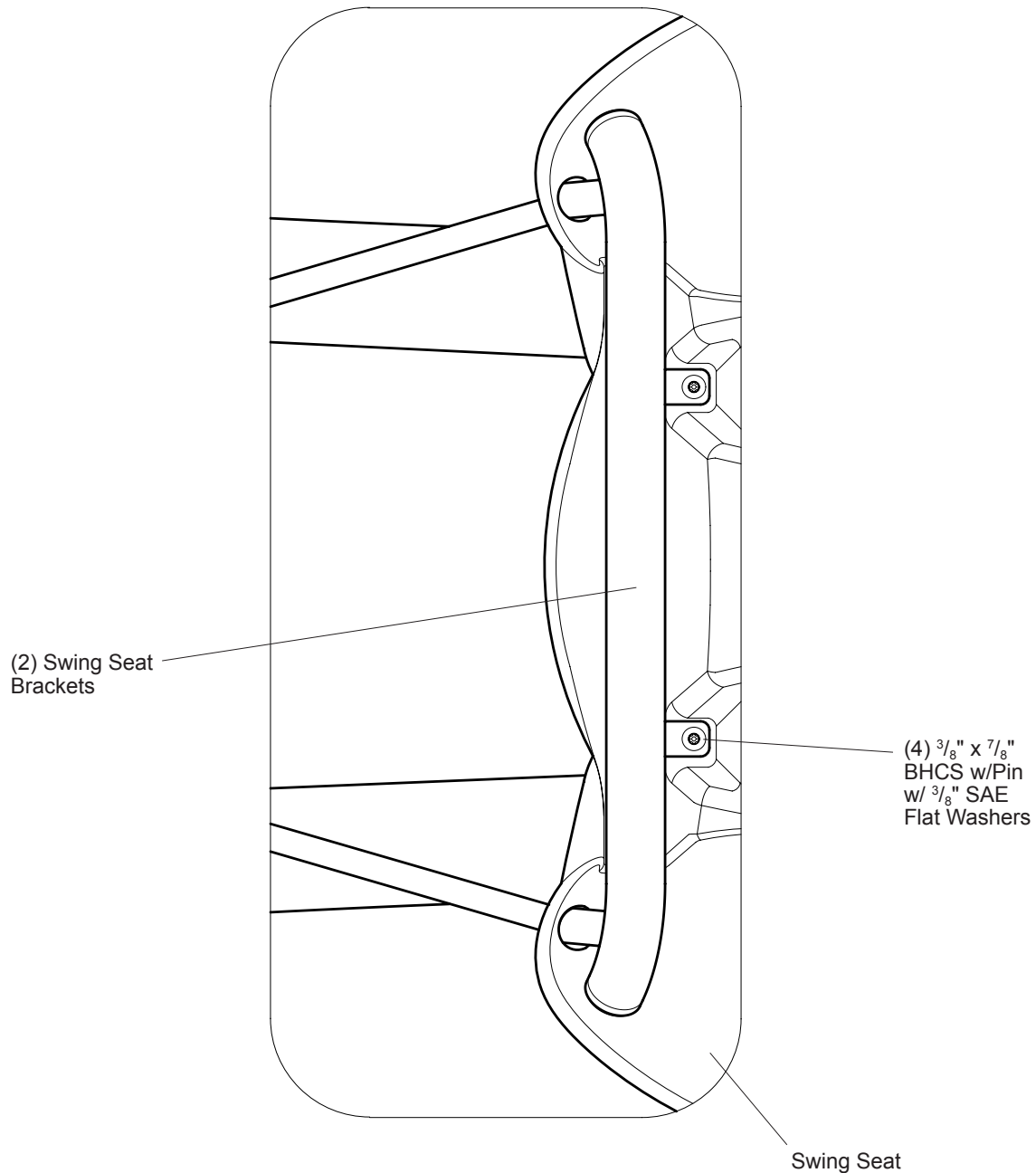


Swings

173592 Oodle® Swing

DETAIL SWING SEAT ATTACHMENT

Bottom View



Parts List

Part#	Description	Qty.
193982	Swing Seat, Specify Color.....	1
172045	Swing Bumper, Black.....	2
174343	Swing Leg, Specify Color.....	4
221013	64 1/8" Swing Cable, Black.....	4
177254	Swing Arch, Specify Color.....	1
189148	Swing Seat Bracket, Specify Color.....	2
218781	Rope Tab Swivel, Aluminum.....	4
223117	Oodle Swing Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST.....	8
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST.....	12
100353	3/8" Flange Nut w/Pin, SST.....	16
100365	3/8" SAE Flat Washer, SST.....	8
176539	3/8" x 3 1/4" Threaded Rod, SST.....	8
127179	5/8" O.D. x 3/8" Long Bushing, SST.....	12
156847	Play Safe Label, 5-12 Yrs.....	1
182213	Hot Surface Warning Label.....	1
182212	Entanglement Warning Label.....	1
115176	Hard Surface Warning Label.....	1
223098	1/2" ID x 1" OD Master Seal Washer.....	16

Specifications

Swing Seat:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Swing Seat Brkt:	Weldment comprised of 1.66" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tube, 1.000" (25,4 mm) O.D. x .750" (19,05 mm) I.D. 1018 steel tube and 7GA (.179") (4,55 mm) HRPO steel sheet. Finish: ProShield®, color specified.
Rope Tab Swivel:	Made from 6061-T6 aluminum.
Cable:	Made of tightly woven polyester-wrapped, six-strand-ed galvanized-steel cable with a polypropylene core. (Cable Connectors) 6061-T6 aluminum.
Bumper:	Molded from U.V. stabilized black EPDM rubber encapsulating 11 GA (.120") HRPO steel sheet.
Swing Arch:	Weldment comprised of 3.500" O.D. RS20 (.080"-.090" wall) galvanized steel tube and 1/2" thick stainless steel tabs. Finish: ProShield®, color specified.
Swing Leg:	3.500" O.D. RS20 (.080"-.090" wall) galvanized steel tube. Finish: ProShield, color specified.
Swing Hanger Assembly:	Assembly comprised of 300 series stainless steel knuckle and yoke, stainless steel swing pin, stainless steel spring pin and oilite bushings.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	8 - 10 man hours
Area Required:	25' 6" x 30' (7,77 m x 9,14 m) minimum
Weight:	395 lbs.
Concrete:	.52 cu. yards
Fall Height:	90" (2,28 m)

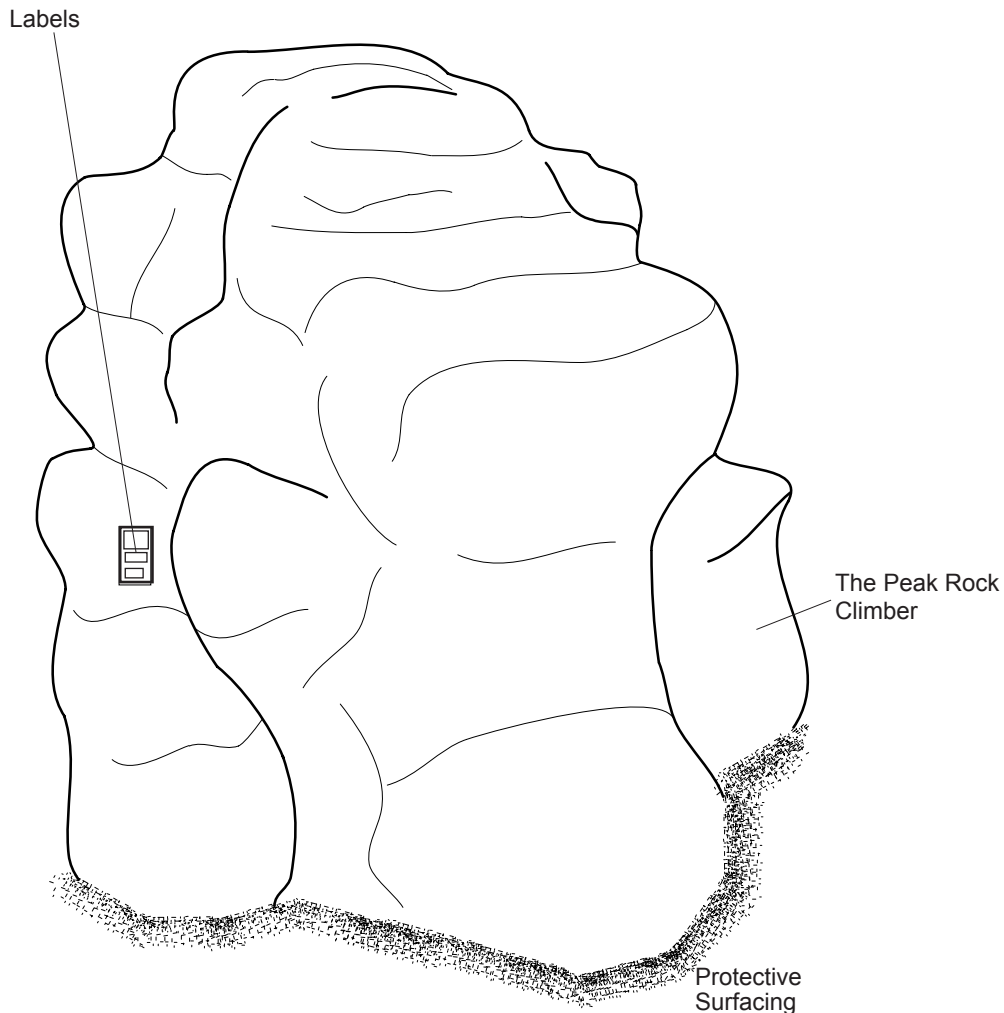
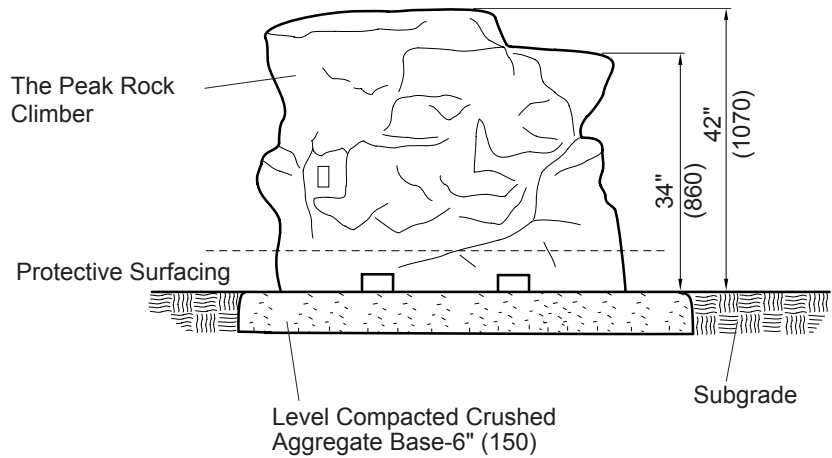
Installation Instructions

- 1) Dig footings spaced as shown. Refer to the Plan View/Footing Layout.
 - 2) Preassemble the Oodle swing over a clean non-scratching surface.
 - 3) Attach swing legs to swing beam assemblies, using 3/8" x 3 1/4" threaded rods, 1/2" seal washers and 3/8" flange nuts w/pin. Refer to the Swing Leg Attachment Detail.
 - 4) Stand swing upright onto legs and position in footing holes. Make final adjustments so arch is at proper height and legs are in line with each other.
- ⚠ WARNING:** Considering the depth of the surfacing material that will be used under the swing, make sure that the finished grade label (attached on each swing leg) is at the appropriate height. This confirms that the swing can be set at a safe and proper elevation.
- 5) Pour concrete footings and let cure for 72 hours before proceeding.
 - 6) Attach bumpers to swing seat, using 3/8" x 7/8" BHCS w/pin and 3/8" SAE flat washers.
 - 7) Attach swing seat brackets to swing seat. Refer to the Swing Seat Attachment Detail.
 - 8) Attach cables to rope tab swivels. Attach rope tab swivels to swing seat brackets. Refer to the Swing Seat Attachment Detail.
 - 9) Attach cables to swing hanger assemblies. Refer to the Cable Attachment Detail.
 - 10) Apply Play Safe and Warning Labels, as shown.
 - 11) Install protective surfacing before users are allowed to play on the structure.

IMPORTANT: Verify seat has a safe clearance from the surfacing material as shown on sheet 1. Failure to do so could result in a hazardous installation that may result in serious injury.

**DETAIL
PLAN VIEW**

NOTE: Steel shims (not supplied), may be required to stabilize The Peak Rock Climber when installed on a concrete slab.



**Nature-Inspired
Climbers**

160418 The Peak™ Rock Climber

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Document #23921800



Nature-Inspired Climbers 160418 The Peak™ Rock Climber

Parts List

Part#	Description	Qty.
218640	The Peak Rock Climber Assembly.....	1
224345	Warning Label Package, 2-12.....	1
183064	Warning Label.....	1
200331	Label 2-5 Yrs.....	1
200332	Label 2-12 Yrs.....	1
200333	Label 5-12 Yrs.....	1

Specifications

Peak Assembly: (Base) Weldment comprised of $\frac{3}{16}$ " (.188") sheet steel. Finish: ProShield®. (Clips) Weldment comprised of 2" x 2" x $\frac{1}{4}$ " steel angle, 3" x 3" x $\frac{3}{16}$ " steel angle and $\frac{3}{8}$ " diameter steel rod. (Peak-fully assembled) Castings are made from Glass Fiber Reinforced Concrete (GFRC). Glass fiber is Alkali Resistant (AR) type glass formulated for concrete. Nominal wall thickness of 1" and weighs about 11 $\frac{1}{2}$ lbs. per square foot. Castings have a strength of 1,500 lbs. per square inch in tension and 5,000 lbs. per square inch in compression. Finish: Latex paint made for concrete, Stone in color.

Installation Time: Approx. 30 minutes

Weight: 3045 lbs.

Min. Use Zone: 6' (1830 mm)

Area Required: 16' 5" x 17' 4" (5,03 m x 5,28 m)

Actual Peak Size: 54" x 64" x 42" high
(1370 mm x 1630 mm x 1070 mm high)

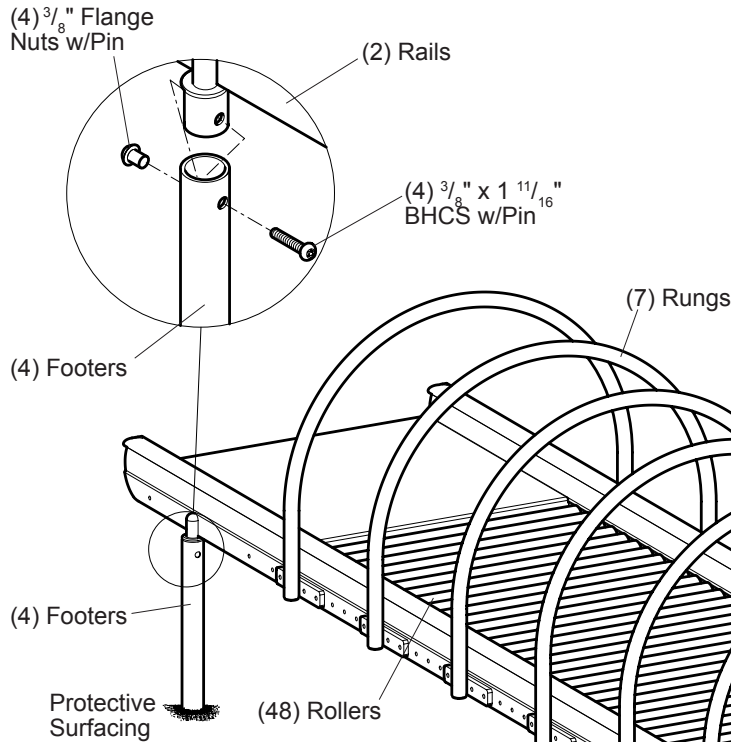
Fall Height: Varies based on surfacing.

Installation Instructions

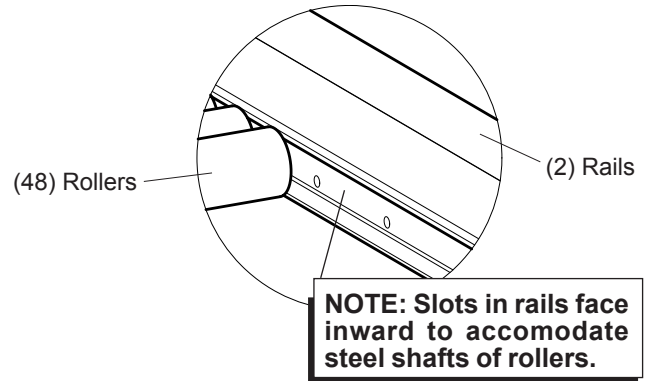
Warning: Never crawl under any part of The Peak Rock Climber especially when it is only supported by a forklift.

- 1) The Peak Rock Climber must be installed over an area of compacted firm stable soil. The compacted surface must be flat and level.
- 2) To unload The Peak Rock Climber a fork lift is recommended. Maximum fork extension size is 3" high x 7" wide with no maximum length. **NOTE: At least 2 people are recommended for The Peak Rock Climber installation. One person to operate the fork lift and one person to spot for the operator.**
- 3) Pick up The Peak Rock Climber by inserting the fork lift forks into the Peak pockets. Be very careful to keep The Peak Rock Climber level to the ground when raising or lowering. Do not tip The Peak Rock Climber on a corner or edge. Do not contact the concrete face of The Peak Rock Climber with material handler forks, chipping can occur.
- 4) Apply the warning label and age label for the intended age range.
- 5) Install protective surfacing before users are allowed to play on the structure.
- 6) **NOTE: After installation if Touch-up/Repairs are needed, contact Landscape Structures at 1-888-574-4678.**

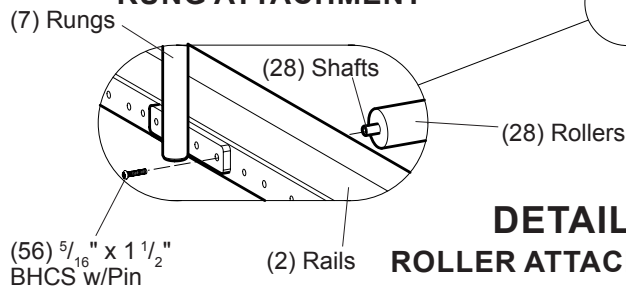
**DETAIL
FOOTER ATTACHMENT**



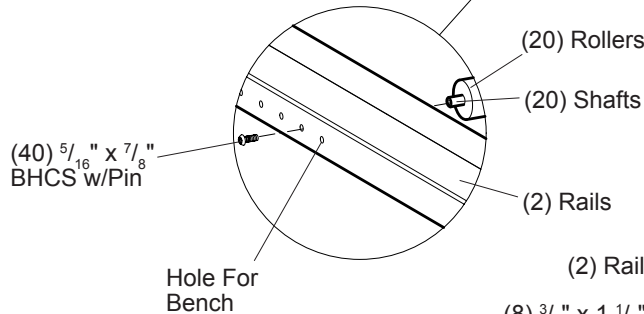
DETAIL



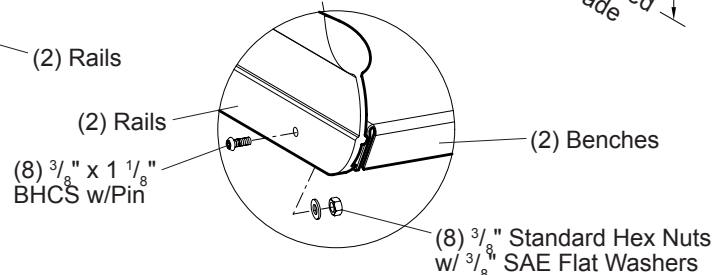
**DETAIL
RUNG ATTACHMENT**



**DETAIL
ROLLER ATTACHMENT**



**DETAIL
BENCH ATTACHMENT**



Parts List

Part#	Description	Qty.
104278	30 ³ / ₈ " Roller Shaft.....	48
115347	Roller Assembly, Specify Color.....	48
168256	Footer, (SM), Specify Color.....	4
171216	Footer, (DB), Specify Color.....	4
168257	Rail, Specify Color.....	2
168259	Bench, Specify Color.....	2
177421	Rung, Specify Color.....	7
184633	Roller Table Hardware Package	1
100198	³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST.....	8
100327	³ / ₈ " Standard Hex Nut, SST.....	8
100353	³ / ₈ " Flange Nut w/Pin, SST.....	4
100365	³ / ₈ " SAE Flat Washer, SST.....	8
123224	³ / ₈ " x 1 ¹¹ / ₁₆ " BHCS w/Pin, SST.....	4
132626	⁵ / ₁₆ " x ⁷ / ₈ " BHCS w/Pin, SST.....	40
149841	⁵ / ₁₆ " x 1 ¹ / ₂ " BHCS w/Pin, SST.....	56
156847	Play Safe Label, 5-12 Yrs.....	1
183064	Warning Label.....	1
111392	2-Hole (SM) Hardware Package	4
100266	¹ / ₂ " x 2 ³ / ₄ " Expansion Anchor.....	8
100322	¹ / ₂ " Standard Hex Nut, SST.....	8
100363	¹ / ₂ " Flat Washer, SST.....	8

DB = Direct Bury

SM = Surface Mount

Specifications

Rollers:	Fabricated from 1.900" O.D. x 16 GA (.060") galvanized steel tubing. Finish: TenderTuff®, color specified.
Roller Shafts:	Fabricated from ¹ / ₂ " diameter CRS zinc-plated with yellow chromate finish.
Support Leg:	Fabricated from 1.900" O.D. RS20 (.090" - .100") galvanized steel tubing. Finish: ProShield®, color specified.
Rail:	Extruded from 6005-T1 aluminum. Finish: ProShield, color specified.
Bench:	Weldment comprised of 11 GA. (.120") HRPO flat steel. Finish: TenderTuff, color specified.
Rung:	Weldment comprised of 1.315" O.D. RS20 (.080"-.090") galvanized steel tube, ⁵ / ₈ " HRPO steel sheet and 12 GA. (.105") HRPO steel sheet. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 8 man hours
Concrete Req.:	Approx. 5.24 cu. ft.
Area Req.:	25' 2" x 14' 9 ¹ / ₂ " (7,67 m x 4,50 m)
Weight:	542 lbs. (DB) 530 lbs. (SM)
Fall Height:	16 ¹ / ₂ " (419 mm)

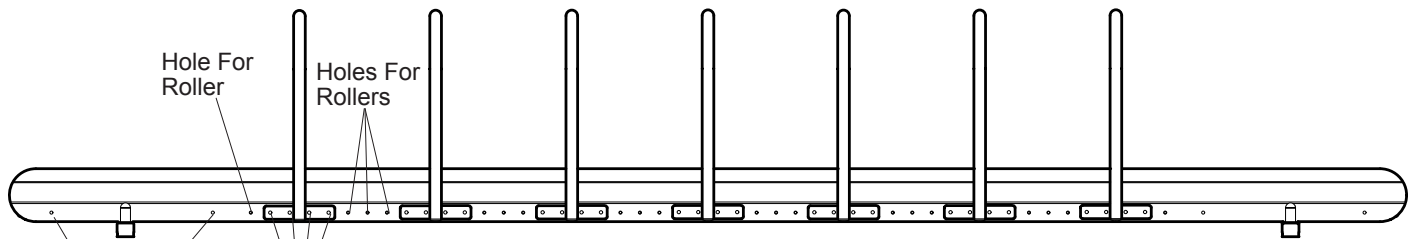
Installation Instructions

- 1) **(Direct Bury)** Dig footing holes spaced as shown.
- 2) Attach one bench to ends of rails, using ³/₈" x 1 ¹/₈" BHCS w/pin and ³/₈" standard hex nuts with ³/₈" SAE flat washers. Refer to the Bench Attachment Detail. **NOTE:** Slots in rails face inward to accommodate steel shafts of rollers.
- 3) Insert the 30 ³/₈" steel roller shafts into the rollers. Starting at the end of the rails with the bench, attach rollers to rails, using ⁵/₁₆" x ⁷/₈" BHCS w/pin. Refer to Roller Attachment Detail. **NOTE:** Refer to Roller/Rail Assembly Detail for spacing of rungs.
- 4) Attach rungs to rails and rollers, using ⁵/₁₆" x 1 ¹/₂" BHCS w/pin. Refer to Rung Attachment Detail. **NOTE:** Refer to Roller/Rail Assembly Detail for spacing of rungs.
- 5) Attach bench to end of rails, using ³/₈" x 1 ¹/₈" BHCS w/pin and ³/₈" standard hex nuts with ³/₈" SAE flat washers. Refer to the Bench Attachment Detail.
- 6) Attach the footers to bottom of rails, using ³/₈" x 1 ¹¹/₁₆" BHCS w/Pin with ³/₈" flange nuts w/Pin. Refer to Footer Attachment Detail.
- 7) **(Direct Bury)** With footers plumb pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

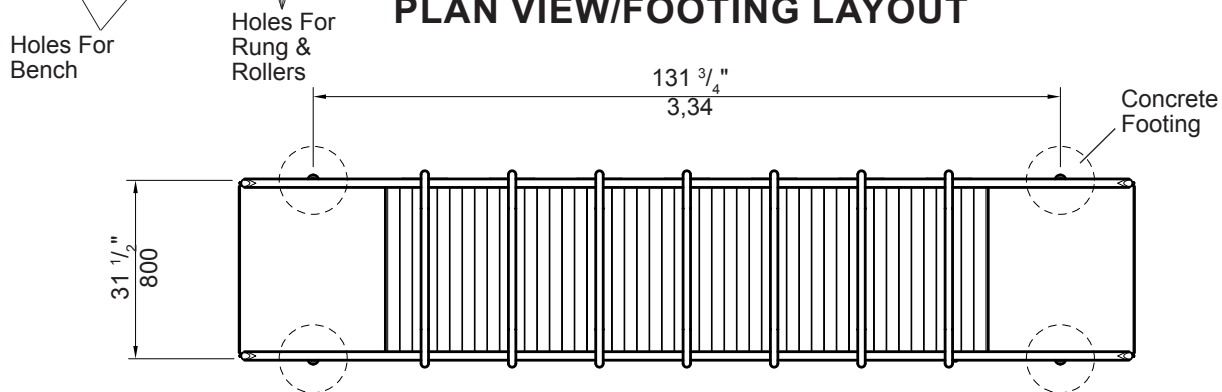
(Surface Mount) Mark anchor bolt locations on concrete slab through holes in footer plates. Move roller table aside. Drill ¹/₂" x 3" deep holes on marks into concrete, using a hammer drill and ¹/₂" masonry bit. Reposition roller table. Tap expansion anchors into drilled holes. Fasten footer plates to expansion anchors using ¹/₂" standard hex nuts with ¹/₂" flat washers.

- 8) Apply labels as shown.
- 9) Install protective surfacing before users are allowed to play on the structure.

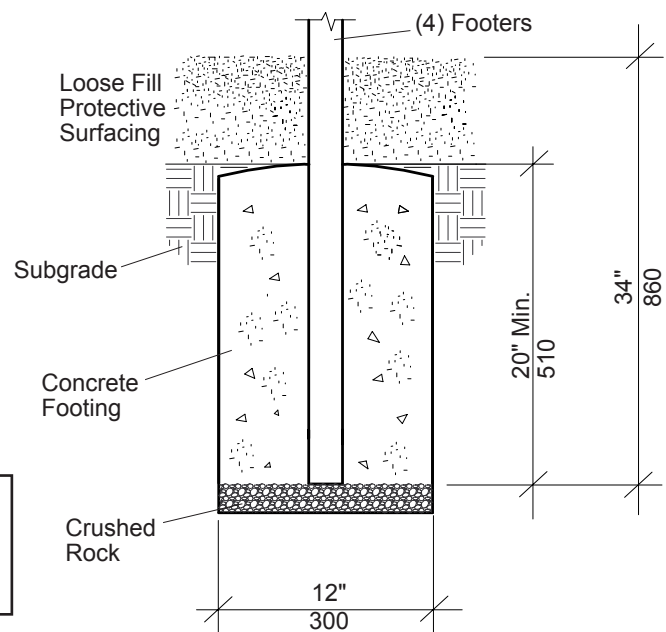
**DETAIL
ROLLER/RAIL ASSEMBLY**



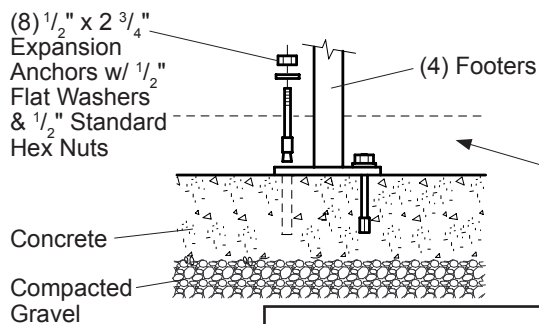
PLAN VIEW/FOOTING LAYOUT



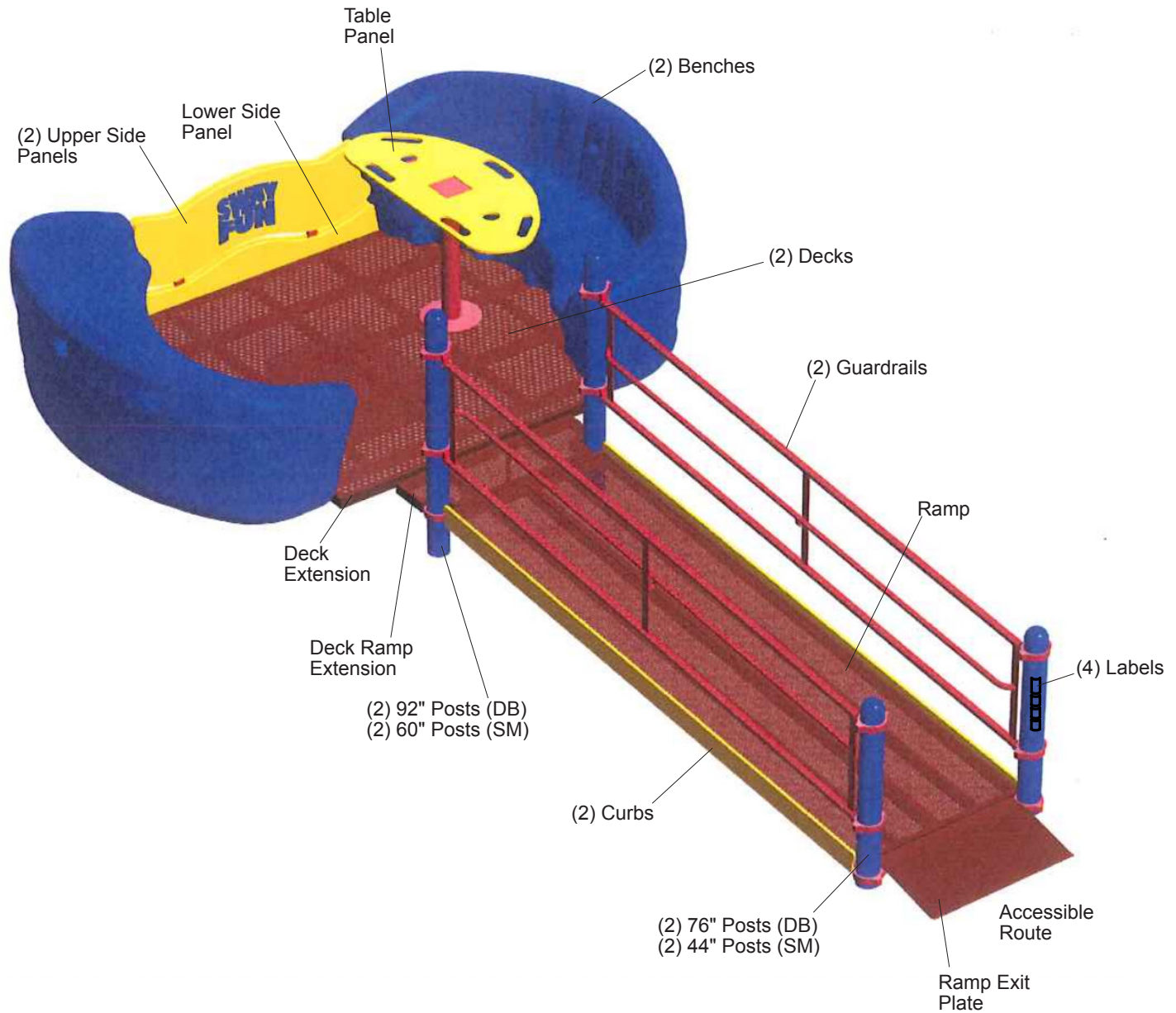
**DETAIL
DIRECT BURY**



**DETAIL
SURFACE MOUNT**



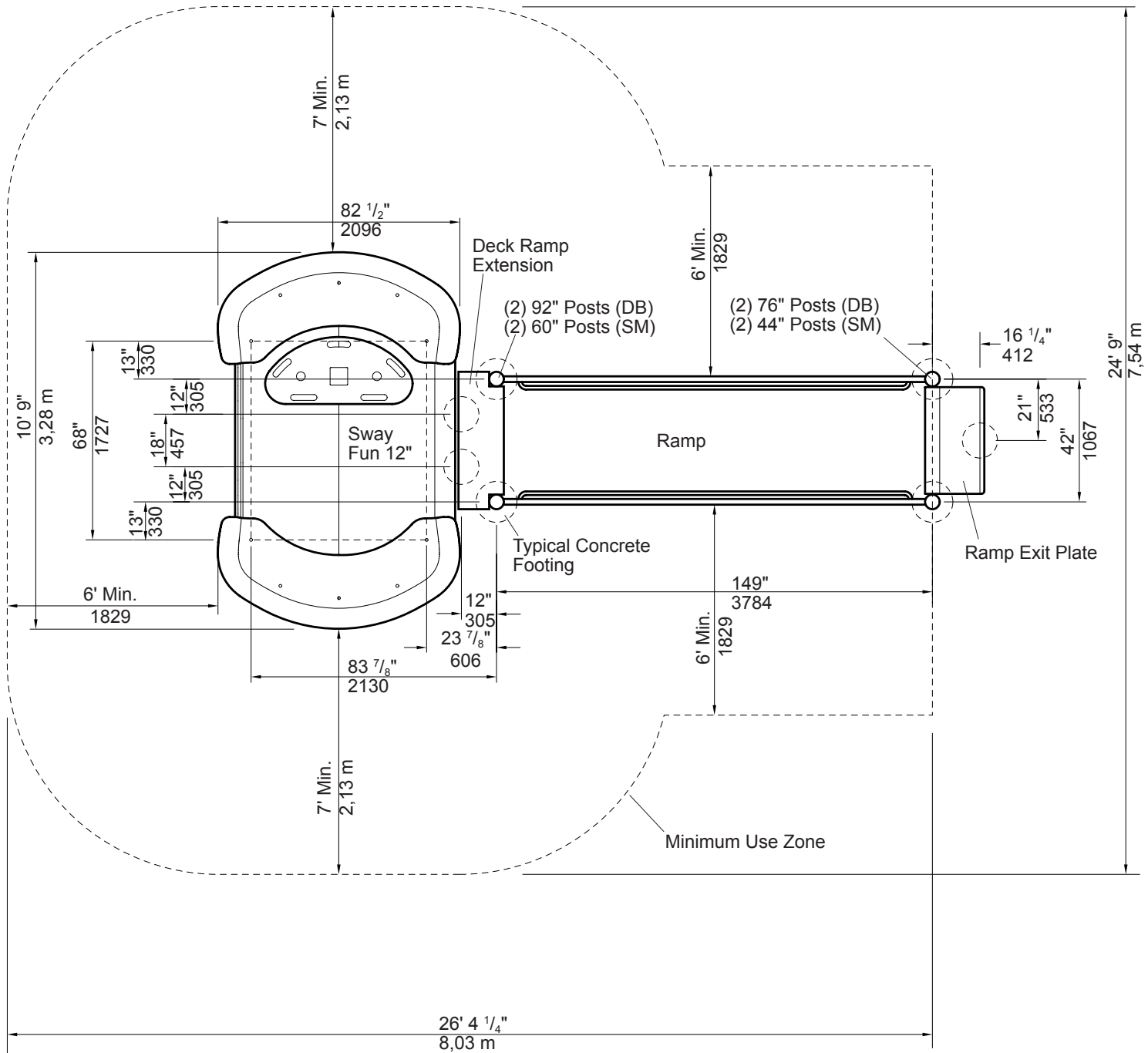
NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.



Sensory Play 177140 Sway Fun®, 12" High w/Ramp, Guardrails & Curbs

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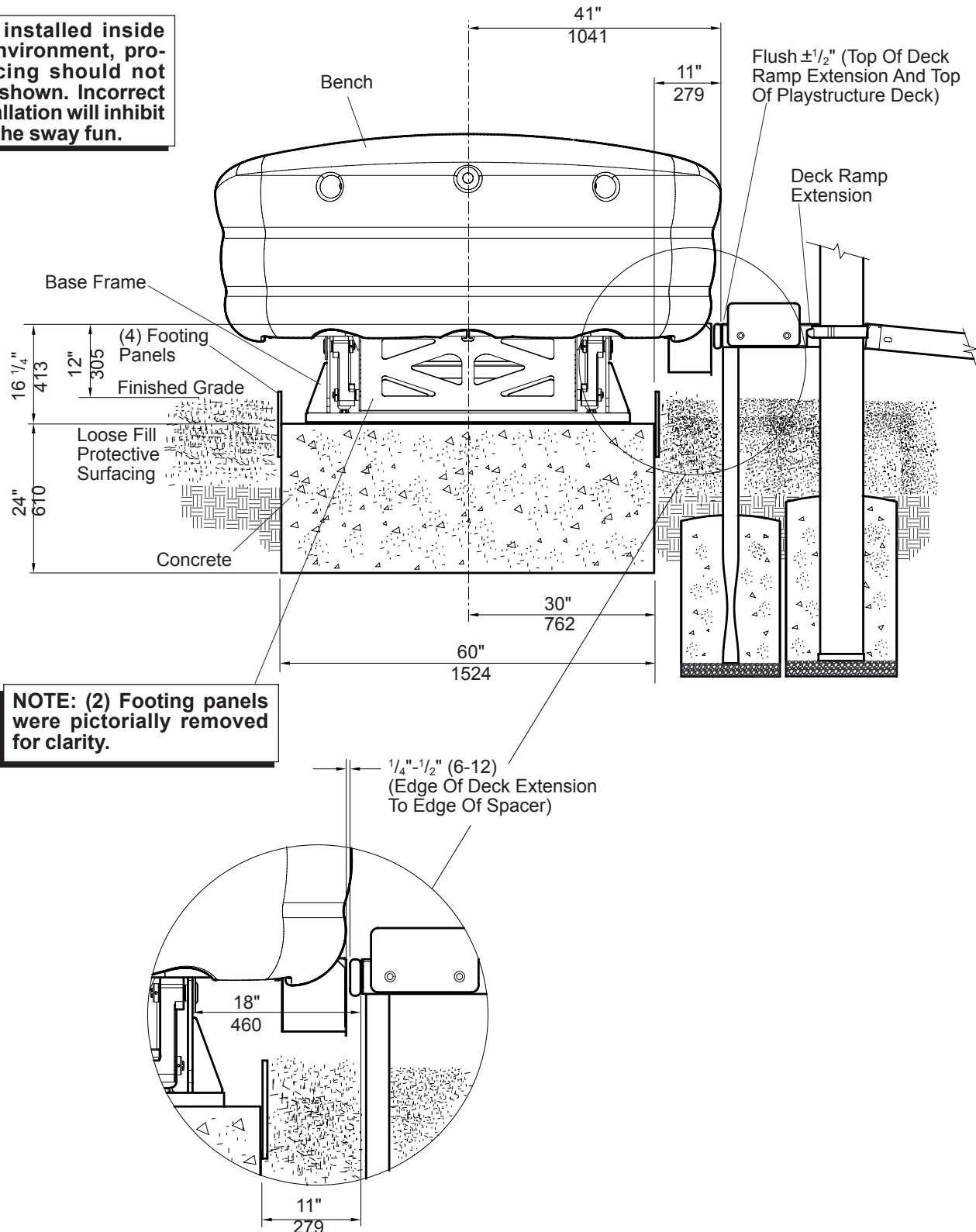
Sensory Play

Plan View/Footing Layout

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NOTE: When installed inside playground environment, protective surfacing should not exceed height shown. Incorrect surfacing installation will inhibit the motion of the sway fun.



NOTE: (2) Footing panels were pictorially removed for clarity.

(8) $\frac{3}{8}$ " x $1\frac{3}{8}$ "
BHCS w/Pin
w/ $\frac{3}{8}$ " SAE
Flat Washers

**DETAIL
BUMPER ATTACHMENT**

(8) Nylok Hex
Nuts w/ $\frac{3}{8}$ " SAE
Flat Washers

**DETAIL
BASE FRAME**

Base Frame

**DETAIL
ARM ASSEMBLY TO BASE FRAME**

**NOTE: Insert $\frac{1}{4}$ " x 2"
spring pins $\frac{1}{16}$ " beyond
first wall of collar.**

**NOTE: Position Arm
Assembly with letter
"A" up as shown.**

(8) Collars

(32) Thrust
Bearings

(4) Bumpers

(8) Axles

(16) $\frac{3}{8}$ " x $1\frac{1}{4}$ "
BHCS w/Pin Limited
Thread Bolts w/ $\frac{3}{8}$ "
SAE Flat Washers
& $\frac{3}{8}$ " Standard Hex
Nuts w/ $\frac{3}{8}$ " SAE Flat
Washers

**DETAIL
ASSEMBLED FRAME**

(8) $\frac{1}{4}$ " x 2"
Spring Pins

(4) Arm
Assemblies

Base Frame

**NOTE: Attach axle
with groove pin hole
horizontal, as shown.**

**DETAIL
ARM ASSEMBLY TO
DECK MOUNT FRAME**

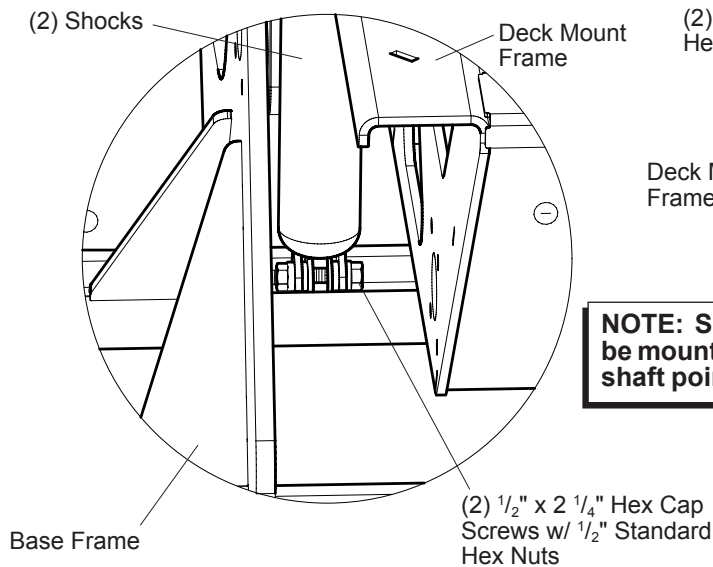
Base Frame

Deck Mount
Frame

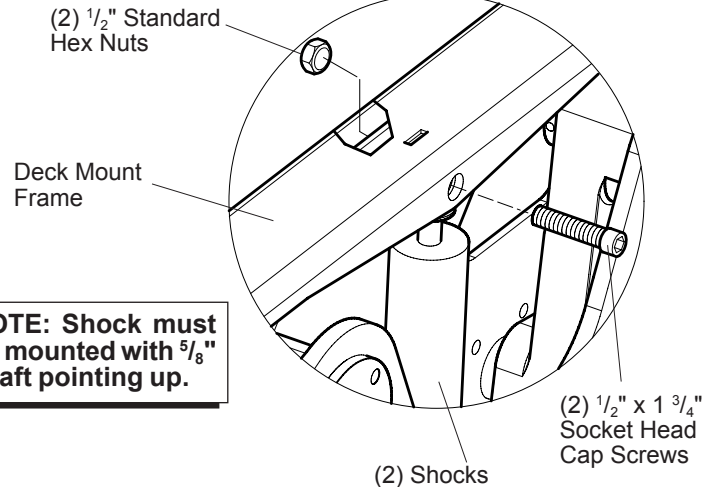
(16) $\frac{3}{8}$ " Standard
Hex Nuts
w/ $\frac{3}{8}$ " SAE Flat
Washers

(16) $\frac{3}{8}$ " x $1\frac{1}{8}$ "
BHCS w/Pin
w/ $\frac{3}{8}$ " SAE Flat
Washers

**DETAIL
SHOCK TO FRAME ATTACHMENT
(BOTTOM)**

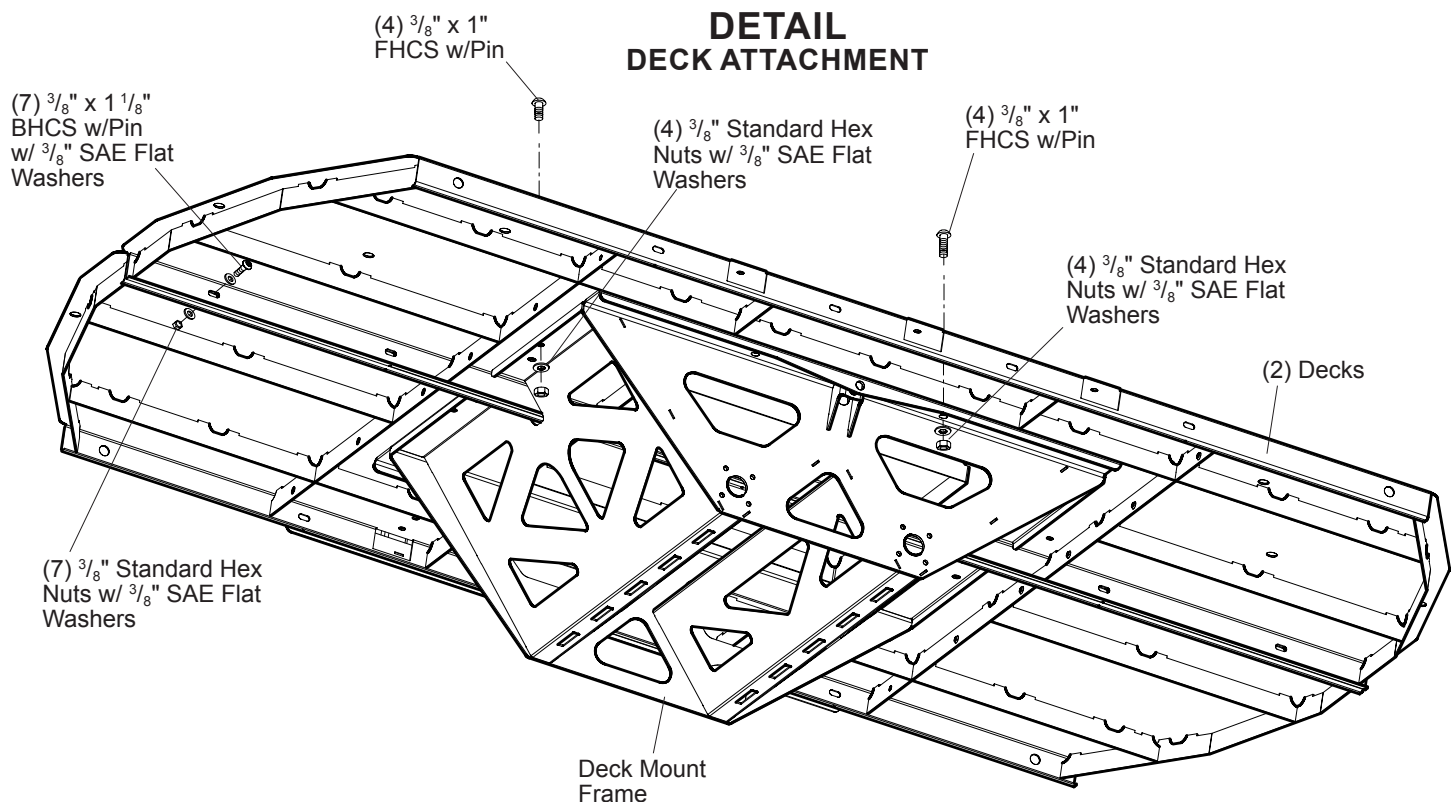


**DETAIL
SHOCK TO FRAME ATTACHMENT
(TOP)**

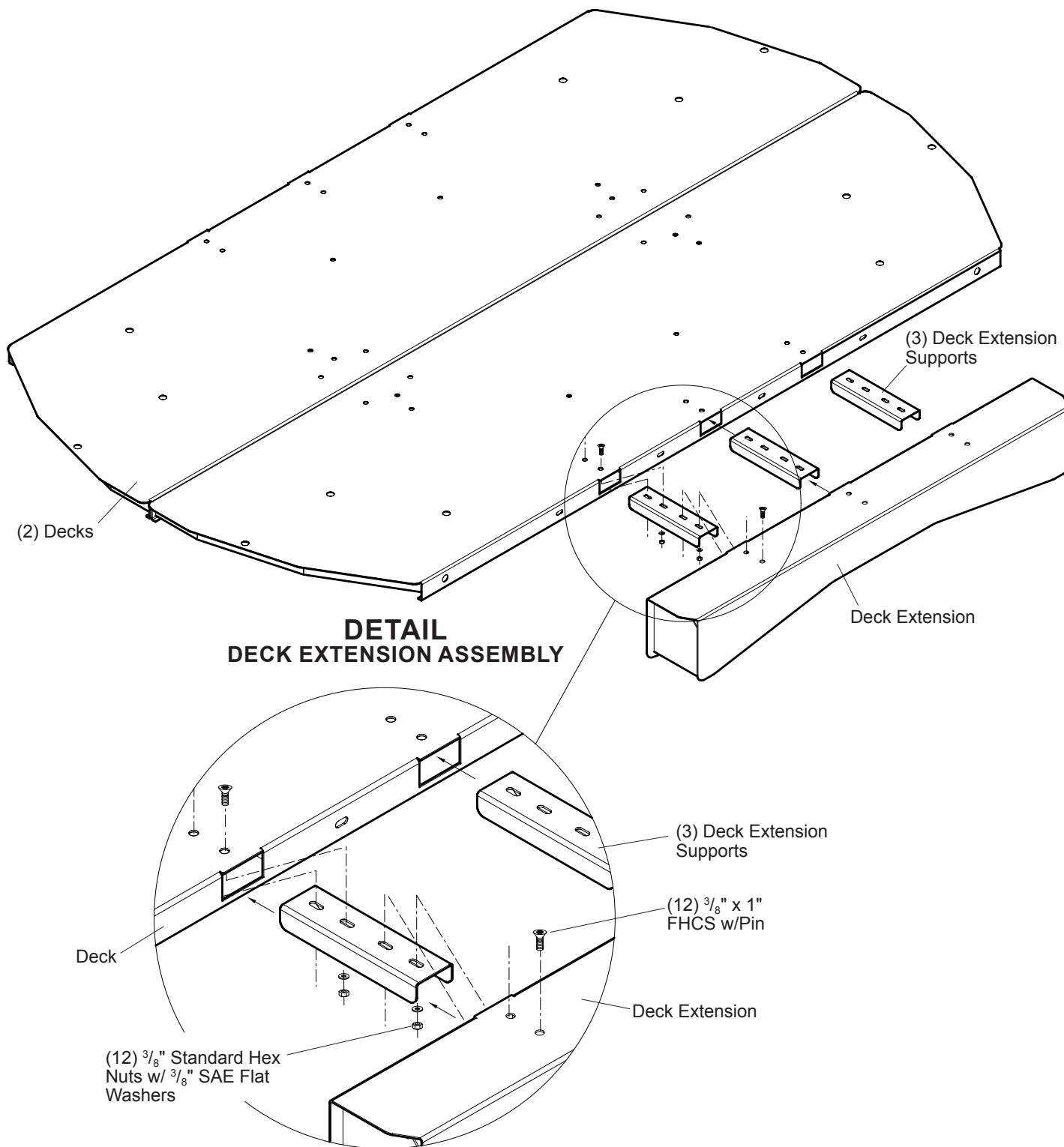


NOTE: Shock must be mounted with 5/8\"

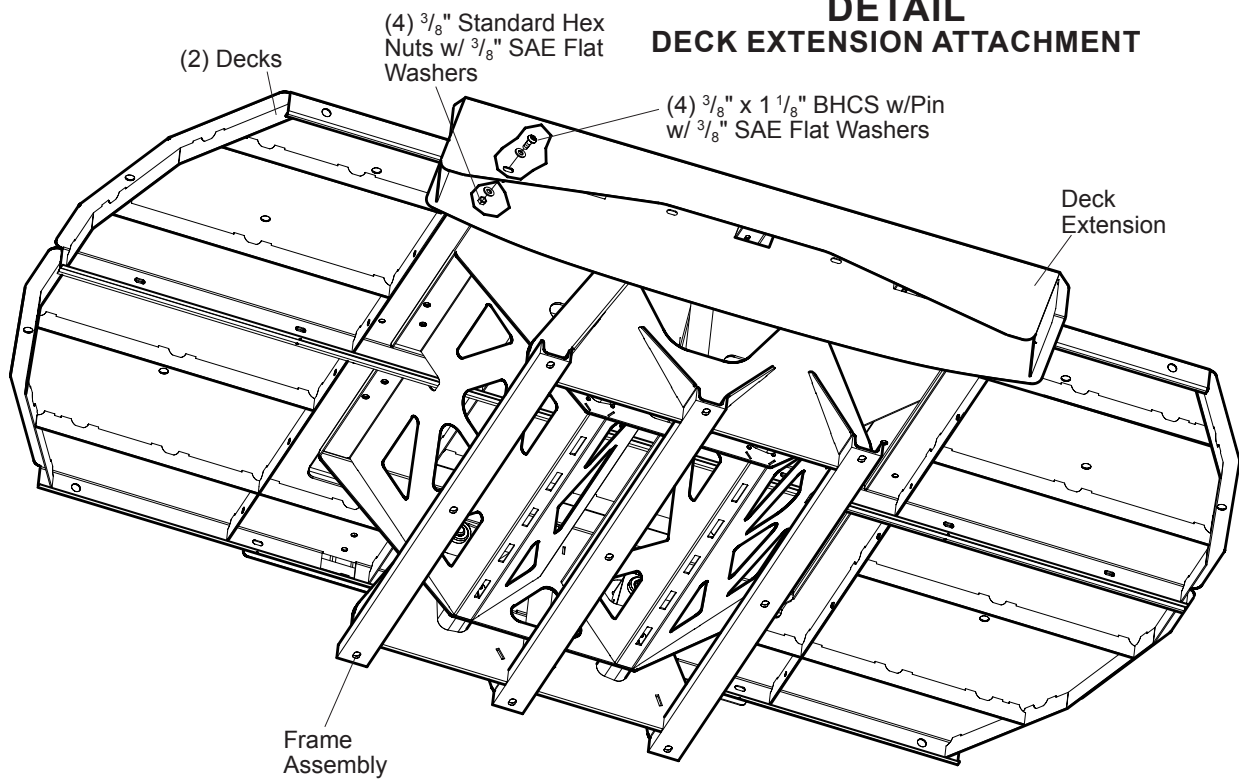
**DETAIL
DECK ATTACHMENT**



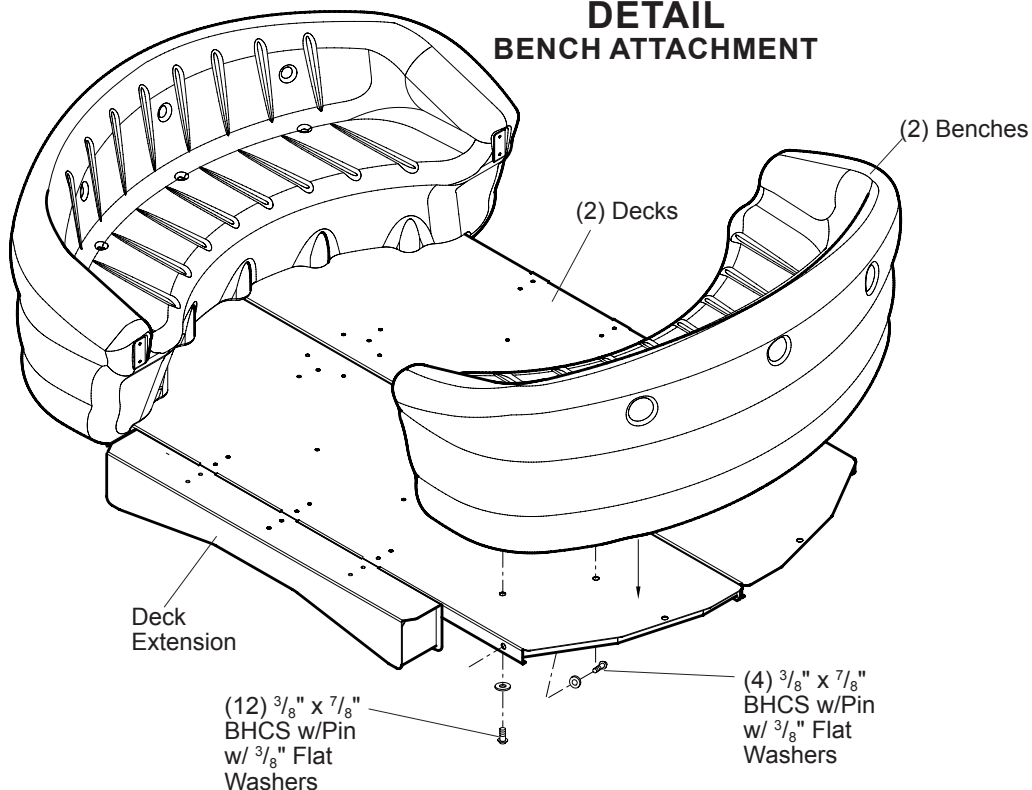
NOTE: Shown without Base Frame for clarity.



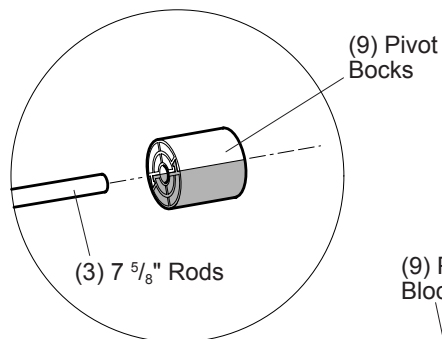
DETAIL DECK EXTENSION ATTACHMENT



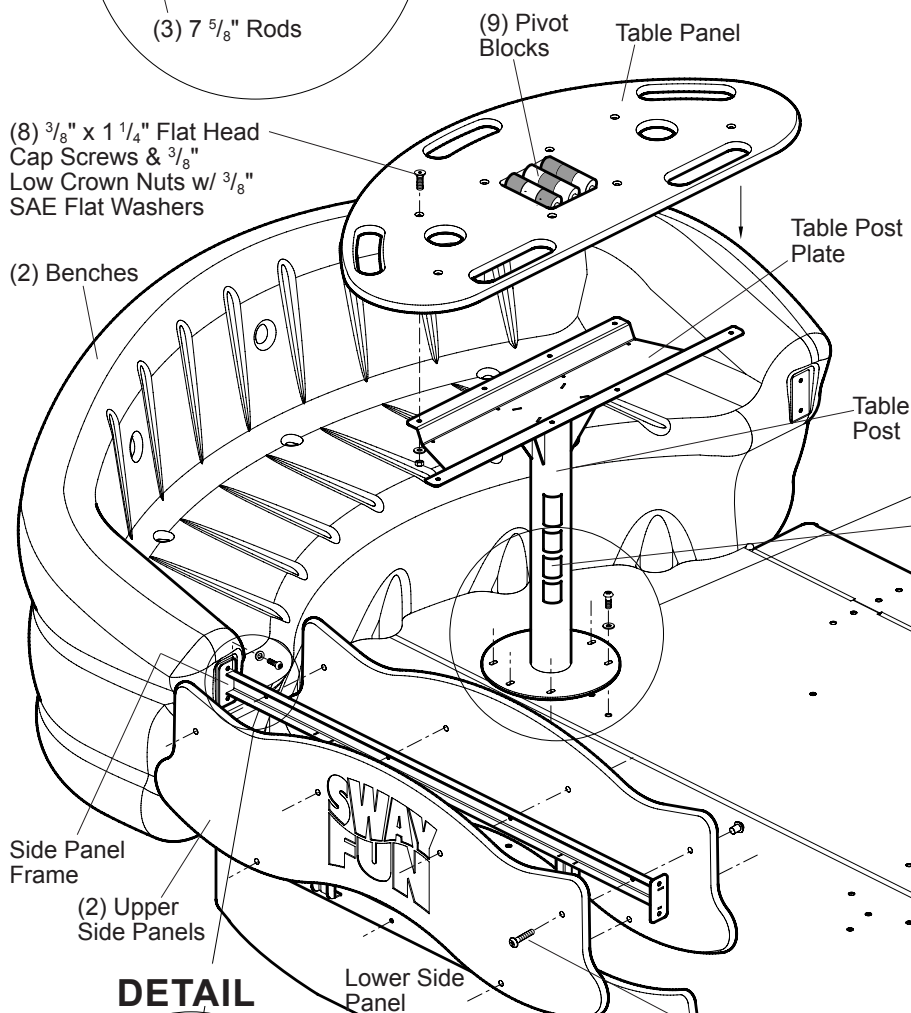
DETAIL BENCH ATTACHMENT



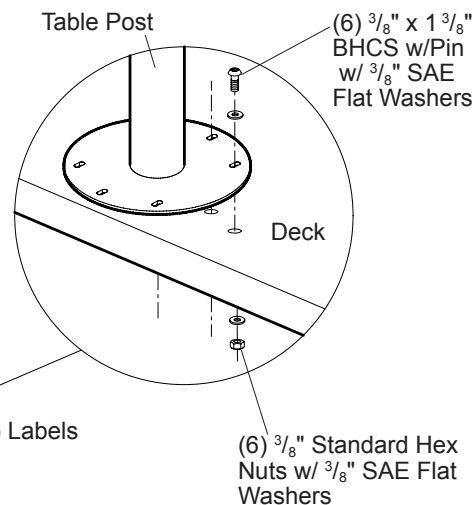
DETAIL PIVOT BLOCK ASSEMBLY



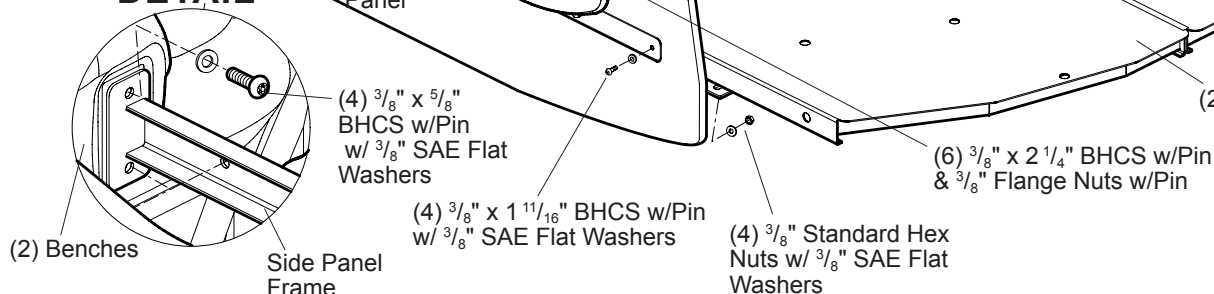
DETAIL TABLE /SIDE PANELS

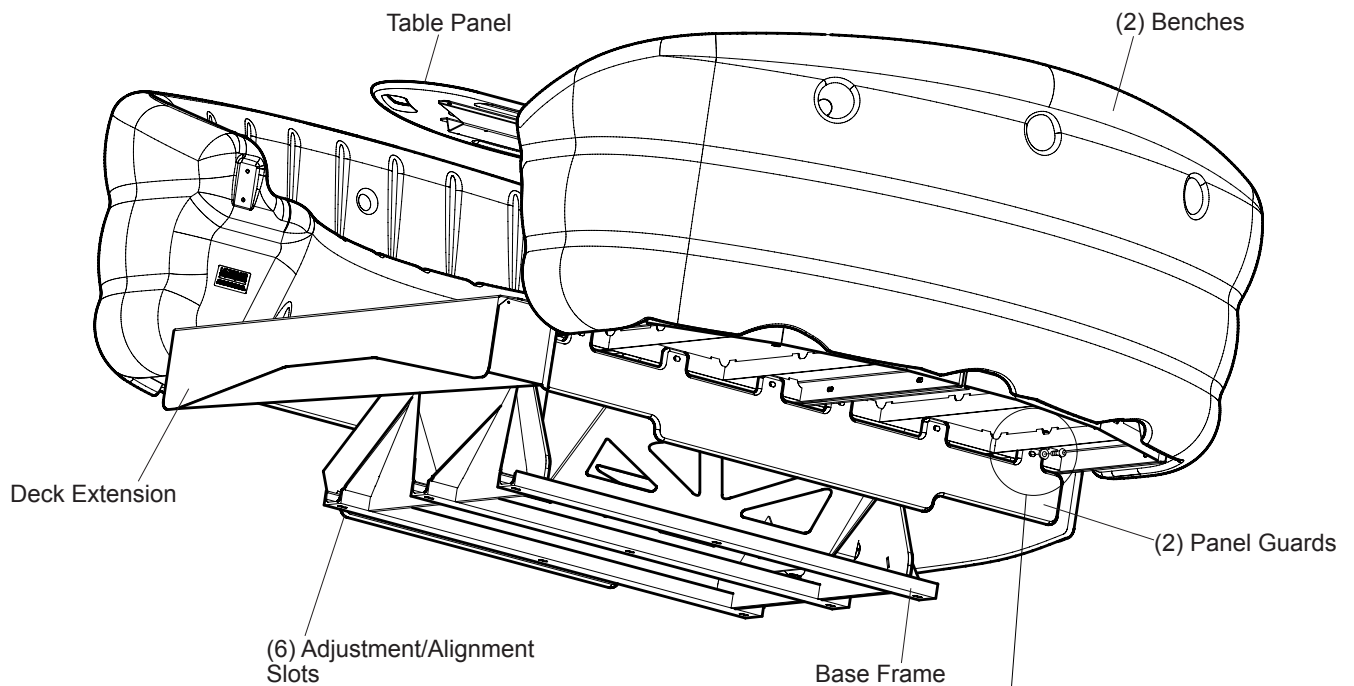


DETAIL TABLE POST ATTACHMENT

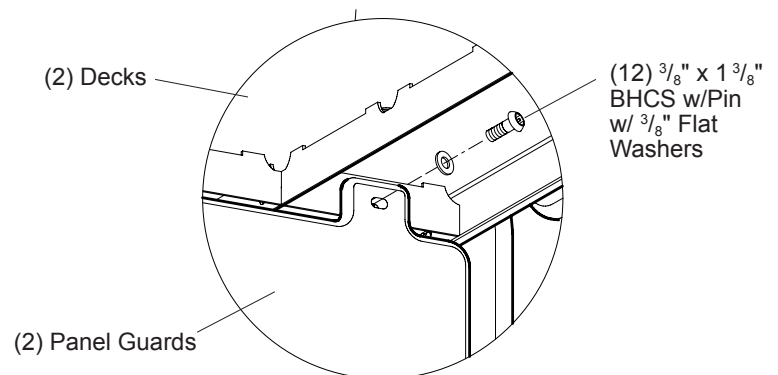


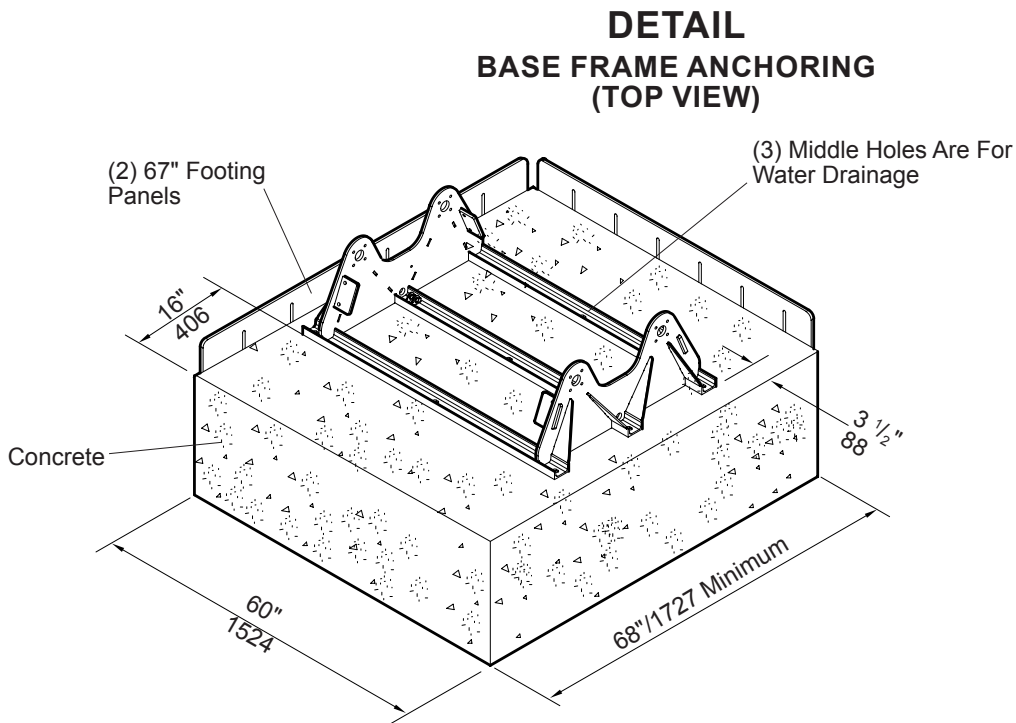
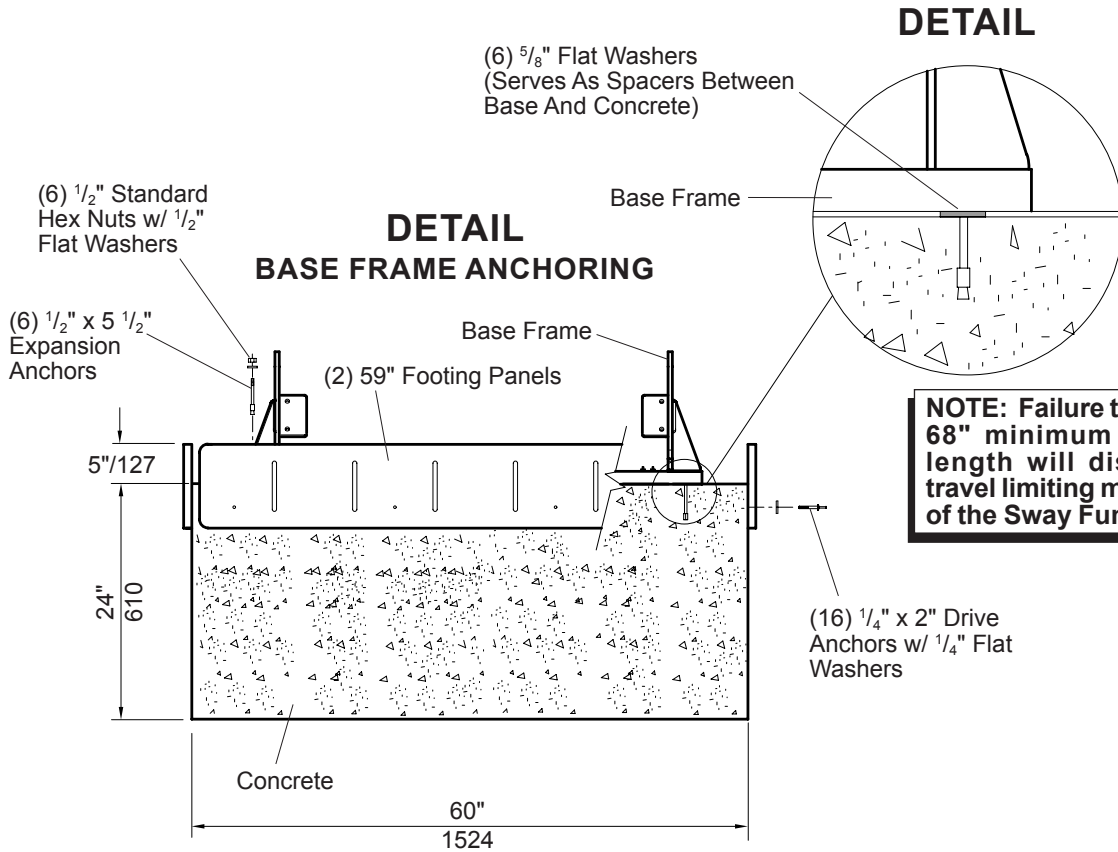
DETAIL





DETAIL PANEL GUARD ATTACHMENT





Sensory Play 177140 Sway Fun®, 12" High w/Ramp, Guardrails & Curbs

(1279,52 mm) wide x 22 ¹⁵/₁₆" (582,60 mm) deep, color specified.

Parts List

Part#	Description	Qty.
134775	Bench, Specify Color.....	2
136761	Table Panel, Specify Color.....	1
136817	Table Post, Specify Color.....	1
136857	Upper Side Panel, Specify Color.....	2
170170	Lower Side Panel, Specify Color.....	1
136833	Side Panel Frame, Specify Color.....	1
137932	Deck, Specify Color.....	2
170171	Deck Extension, Specify Color.....	1
137930	Deck Extension Support, Specify Color.....	3
170172	Panel Guard, Specify Color.....	2
138409	Arm Assembly.....	4
143076	Axle.....	8
169461	Base Frame.....	1
144448	Deck Mount Frame.....	1
144025	Shock.....	2
189077	Spacer, Deck Mount, Black.....	1
170407	59" Footing Panel, Gray.....	2
170408	67" Footing Panel, Gray.....	2
237020	Sway Fun Hardware Package #1	1
100195	³ / ₈ " x ⁵ / ₈ " BHCS w/Pin, SST.....	4
100196	³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST.....	16
100198	³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST.....	31
100199	³ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST.....	6
100252	³ / ₈ " x 1 ¹ / ₄ " Flat Head Cap Screw, SST.....	8
100271	¹ / ₂ " x 5 ¹ / ₂ " Exp. Anchor(w/Nut & Washer),SST.....	6
100292	³ / ₈ " x 1 ¹ / ₄ " BHCS w/Pin Ltd. Thread Bolt, SST.....	16
100327	³ / ₈ " Standard Hex Nut, SST.....	79
100353	³ / ₈ " Flange Nut w/Pin, SST.....	6
100362	³ / ₈ " Flat Washer, SST.....	28
100365	³ / ₈ " SAE Flat Washer, SST.....	166
100366	⁵ / ₈ " Flat Washer, SST.....	6
113027	³ / ₈ " x 1 ³ / ₈ " BHCS w/Pin, SST.....	26
100261	¹ / ₄ " x 2" Drive Anchor.....	16
100349	³ / ₈ " x 16" L/C Nut Cap, SST.....	8
237021	Sway Fun Hardware Package #2	1
121135	¹ / ₄ " x 2" Spring Pin, SST.....	8
123224	³ / ₈ " x 1 ¹¹ / ₁₆ " BHCS w/Pin, SST.....	4
128391	Pivot Block, Tan/Brown.....	9
129692	¹ / ₂ " Standard Hex Nut, SST.....	4
131862	¹ / ₂ " x 2 ¹ / ₄ " Hex Cap Screw, SST.....	2
137777	Thrust Bearings.....	32
137779	Collar, SST.....	8
171013	7 ⁵ / ₈ " Rod, AL.....	3
122039	¹ / ₄ " Flat Washer, SST.....	16
156846	Play Safe Label, 2-12 Yrs.....	1
136931	³ / ₈ " Nylok Hex Nuts, SST.....	8
167612	Rubber Bumper.....	4
137091	³ / ₈ " x 1" FHCS w/Pin, SST.....	22
156847	Play Safe Label, 5-12 Yrs.....	1
182213	Hot Surface Warning Label.....	1
182212	Entanglement Warning Label.....	1
115176	Hard Surface Warning Label.....	1
145157	¹ / ₂ " x 1 ³ / ₄ " Socket Head Cap Screw, SST.....	2

Specifications

Bench: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Table Panel: Solid color Permalene® table measures 50 ³/₈"

Table Post: Weldment comprised of 3.500" (88,9 mm) O.D. RS-20 (.125") (3,18 mm) galvanized steel tubing, 11 GA. (.120) (3,05 mm) HRPO ASTM A1011 sheet steel and ¹/₄ (6,35 mm) HRS flat steel. Finish: ProShield, color specified.

Side Panels: Permalene, color specified.

Spacer: Permalene, black in color.

Side Panel Frame: Weldment comprised of 11 GA (.120") (3,05 mm) sheet steel conforming to ASTM A1011. Finish: ProShield, color specified.

Deck: Flange formed from 11 GA (.120") (3,05 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with ⁵/₁₆" (7,93 mm) diameter holes. Finish: TenderTuff, color specified.

Deck Extension: Flange formed from 11 GA (.120") (3,05 mm) sheet steel conforming to ASTM A1011. Finish: TenderTuff, color specified.

Deck Extension Support: Formed from 11 GA (.120") (3,05 mm) sheet steel conforming to ASTM A1011. Finish: ProShield, color specified.

Panel Guard: Permalene, color specified.

Footing Panels: Solid color Permalene, gray in color.

Arm Assembly: Machined from 6061-T6 aluminum.

Axle: Weldment comprised of 304 stainless steel.

Base Frame: Weldment comprised of 3" x 5" (76 mm x 127 mm) structural steel C channel, ¹/₄" (6,35 mm) HRS flat steel, ¹/₂" (12,7 mm) HRS flat steel and ¹/₂" (12,7 mm) HRPO flat steel. Finish: Hot dip galvanized per ASTM A123 .

Upper Shock Mount Bracket: Weldment comprised of 7 Ga. (.180") (4,57 mm) sheet steel conforming to ASTM A1011. Finish: Hot dip galvanized per ASTM A123 .

Deck Mount Frame: Weldment comprised of 11 GA (.120") (3,05 mm) sheet steel, 7 Ga. (.180") (4,57 mm) HRPO flat steel and ¹/₄" (.250") (6,35 mm) HRPO flat steel. Finish: Hot dip galvanized per ASTM A123 .

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 22 ¹/₄ man hours (DB)
Approx. 20 man hours (SM)

Concrete Req.: Approx. 66 cu. ft. (DB)

Area Req.: 24' 9" x 26' 4 ¹/₄" (7,54 m x 8,03 m)

Weight: 2071 lbs. Aluminum (DB)

2193 lbs. Steel (DB)

2041 lbs. Aluminum (2" SM)

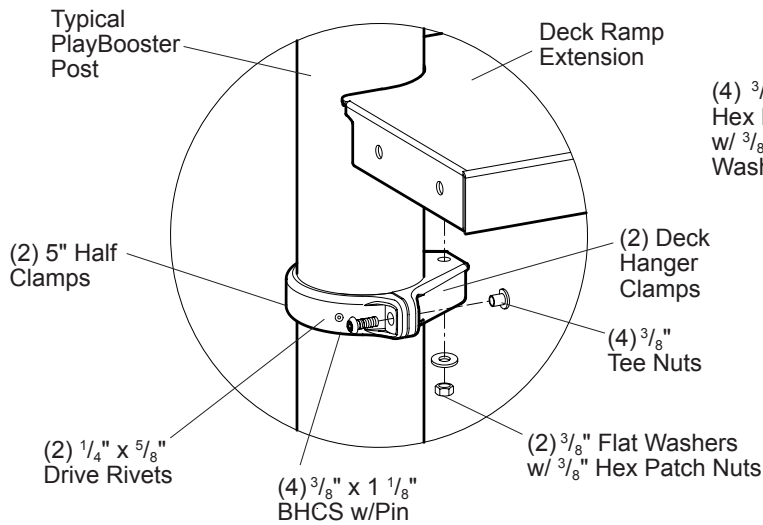
2127 lbs. Steel (2" SM)

Fall Height: 12" (305 mm) Deck Height

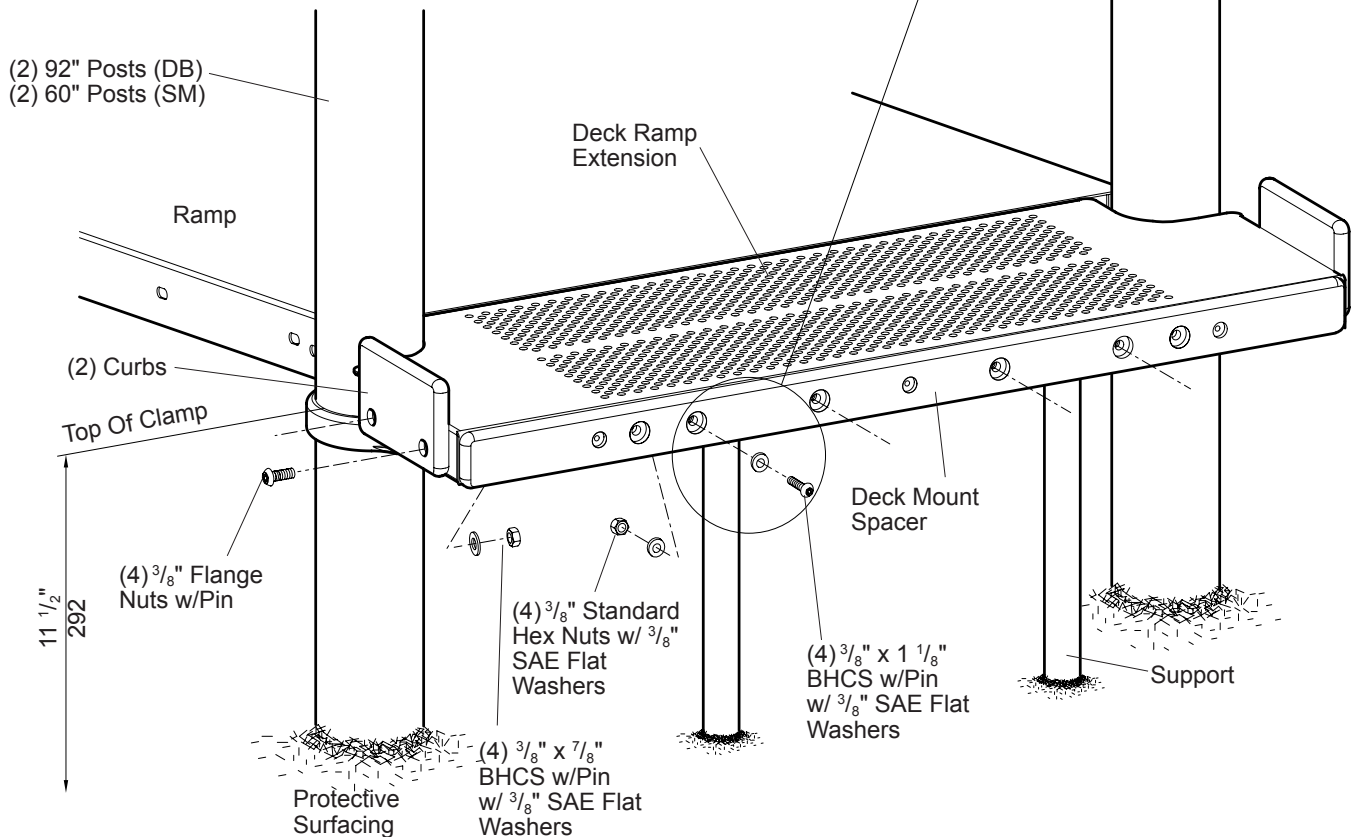
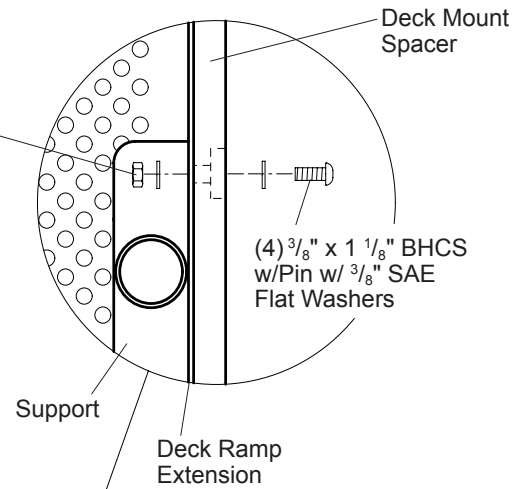
Installation Instructions

- 1) Build and pour concrete footing. Refer to Base Frame Anchoring Details. Allow concrete footing to cure for a minimum of 72 hours before continuing. **NOTE:** *Failure to meet the 68" minimum concrete length will disable the travel limiting mechanism of the Sway Fun.*
- 2) With base frame in position, drill through 6 outside holes in base frame 5" deep into concrete slab using 1/2" masonry bit and hammer drill. Refer to the Base Frame Anchoring Detail. **NOTE:** *Position 5/8" flat washers between base frame outside holes and concrete. Refer to the Base Frame Anchoring Details.*
- 3) Tap expansion anchors into drilled holes and secure using 1/2" standard hex nuts with 1/2" flat washers. Refer to the Base Frame Anchoring Details.
- 4) Attach axles to deck mount frame using thrust bearings, collars, 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. **NOTE:** *Attach axles with groove pin hole horizontal, as shown. Refer to the Arm Assembly To Deck Mount Frame Detail.*
- 5) Attach arm assemblies to deck mount frame axles using thrust bearings, collars and 1/4" x 2" spring pins. Place collar with pin on axle using the groove pinhole as a guide, insert spring pin in until flush with collar. Refer to the Arm Assembly To Base Frame Detail.
- 6) Attach arm assemblies with letter "A" up as shown to deck mount frame axles using thrust bearings, collars and 1/4" x 2" spring pins. Place collar with pin on axle using the groove pinhole as a guide, insert spring pin in until flush with collar. Refer to the Arm Assembly To Base Frame Detail.
- 7) Attach bumpers to base frame plates using 1 3/8" BHCS w/pin with 3/8" SAE flat washer and 3/8" nylok hex nuts with 3/8" SAE flat washers. Refer to the Bumper Attachment Detail.
- 8) Stage and set axles to the arm assembly with thrust bearings on axle prior to attaching axles to base frame using 3/8" x 1 1/4" BHCS w/pin limited thread bolts with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. **NOTE:** *Attach axles with groove pin hole horizontal. Refer to the Arm Assembly To Base Frame Detail.*
- 9) Attach thrust bearings and 1/4" x 2" spring pins to the collar. Place collar with pin on axle using the groove pinhole as a guide, insert spring pin in until flush with collar. **NOTE:** *Insert 1/4" x 2" spring pin 1/16" beyond first wall of collar. Refer to the Arm Assembly To Base Frame Detail.*
- 10) Attach deck extension to deck using deck extension supports, 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Deck Extension Assembly Detail.
- 11) Fasten deck extension to deck face using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Deck Extension Attachment Detail.
- 12) Loosely attach decks to deck mount frame using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers on deck mount frame ends and 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers on deck mount frame sides. Refer to the Deck Attachment Detail.
- 13) Attach decks to each other using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Deck Attachment Detail.
- 14) Tighten bolts from decks to deck mount frame.
- 15) Attach benches to decks using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers. Refer to the Bench Attachment Detail.
- 16) Attach table post to decks using 3/8" x 1 3/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Table Post Attachment Detail.
- 17) Position 7 5/8" rods with pivot blocks between table post plate and table panel.
- 18) Attach table panel to table post plate using 3/8" x 1 1/4" flat head cap screws and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Pivot Block Assembly Detail.
- 19) Attach side panel frame to benches using 3/8" x 5/8" BHCS w/pin with 3/8" SAE flat washers. Refer to the Table/Side Panels Detail.
- 20) Attach side panel frame and lower side panel to the deck using 3/8" x 1 11/16" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Table/Side Panels Detail.
- 21) Attach upper side panels to side panel frame using 3/8" x 2 1/4" BHCS w/pin and 3/8" flange nuts w/pin. Refer to the Table/Side Panels Detail.
- 22) Attach panel guards to decks using 3/8" x 1 3/8" BHCS w/pin with 3/8" flat washers. Refer to the Panel Guard Attachment Detail.
- 23) **(Footing Panels to concrete footing)** Using footing panels as a guide, drill holes 2" deep into concrete footing using a 1/4" masonry bit and hammer drill. Secure footing panels to concrete footing, using 1/4" x 2" drive anchors and 1/4" flat washers. Refer to the Base Frame Anchoring Detail.
- 24) Apply Play Safe and Warning Labels, as shown.
- 25) If installed in playground environment, install protective surfacing before users are allowed to use Sway Fun. **NOTE:** *When installed inside playground environment, protective surfacing should not exceed height shown. Incorrect surfacing installation will inhibit the motion of the Sway Fun.*

**DETAIL
DECK ATTACHMENT**



**DETAIL
(BOTTOM VIEW)**



Sensory Play 177140 Sway Fun®, 12" High w/Ramp, Guardrails & Curbs

Parts

Part#	Description	Qty.
105327	5" Half Clamp, Specify Color	2
107509	92" Steel PlayBooster Post, DB, Specify Color	*
107681	92" Al. PlayBooster Post, DB, Specify Color	*
107460	60" Steel PlayBooster Post, SM, Specify Color	*
107610	60" Al. PlayBooster Post, SM, Specify Color	*
106022	Deck Hanger Clamp, Specify Color	2
182781	Curb, Specify Color	2
163641	Deck Ramp Extension, Specify Color	1
181399	Support, DB, Specify Color	1
181402	Support, 2" SM (12" Deck), Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
182782	Deck Ramp Extension Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100321	3/8" Hex Patch Nut, SST	2
100327	3/8" Standard Hex Nut, SST	4
100351	3/8" Tee Nut, SST	4
100362	3/8" Flat Washer, SST	2
100362	3/8" SAE Flat Washer, SST	12
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100353	3/8" Flange Nuts w/Pin, SST	4
111394	4-Hole (SM) Hardware Package	1
100263	3/8" x 2 3/4" Expansion Anchor	4
100327	3/8" Standard Hex Nut, SST	4
100362	3/8" Flat Washer, SST	4
121348	4-Hole (SM) Hardware Package	2
100266	1/2" x 2 3/4" Expansion Anchor	8
100322	1/2" Standard Hex Nut, SST	8
100363	1/2" Flat Washer, SST	8

SM = Surface Mount

DB = Direct Bury

* = Quantity Determined By Your Order

Specifications

Deck Ramp Ext.: Flange formed from 11 GA (.120") (3,05 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" (7,93 mm) diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 15 3/4" x 47" (66,67 mm x 400,05 mm x 1193 mm). Finish: TenderTuff®, color specified.

Posts: See PlayBooster® General Specifications.

Support (DB): Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,15 mm-2,41 mm) wall galvanized steel tubing and 1 3/4" x 1 3/4" x 1/8" (44,45 mm x 44,45 mm x 3,17 mm) HR angle. Finish: ProShield®, color specified.

Curb: Permalene®, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Instructions

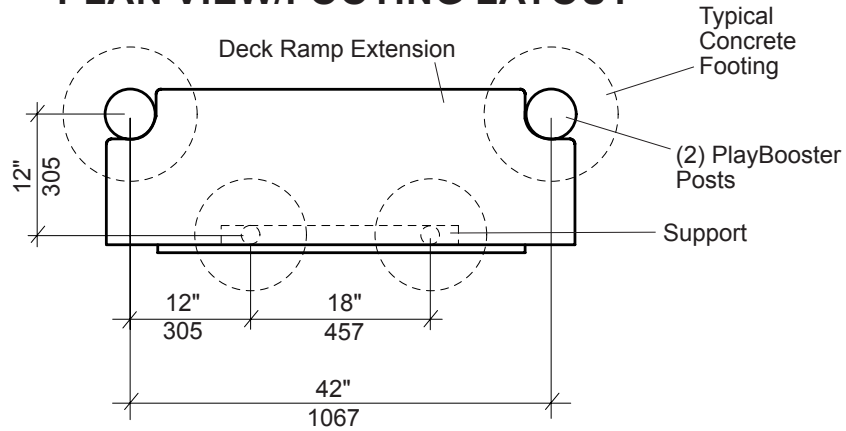
- 1) **(Direct Bury)** Dig footings as shown. Refer to the Plan View/Footing Layout.
- 2) Fasten hanger clamp assemblies to posts at height shown.
- 3) Lift deck ramp extension into position, lining up studs underneath deck ramp extension with deck hanger clamps as shown. Attach with 3/8" flat washers and 3/8" hex patch nuts.
- 4) Attach curbs to deck ramp extension, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
- 5) Attach deck mount spacer and support to deck ramp extension, using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to Detail.
- 6) Level deck and plumb posts. Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 7) **(Direct Bury)** Pour concrete footings per the Direct Bury Detail. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure. **NOTE: Do not pour concrete footings until structure is fully assembled.**

(Surface Mount Support) With support plumb, drill 3" deep holes into concrete slab through holes in support plates, use a 3/8" masonry bit and 3/8" hammer drill. Tap 3/8" x 2 3/4" expansion anchors into holes and secure using 3/8" standard hex nuts with 3/8" flat washers. Refer to the Surface Mount Support Detail. **NOTE: Do not anchor support to concrete until structure is fully assembled.**

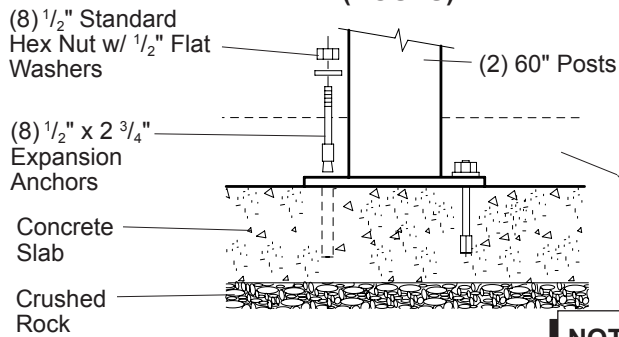
(Surface Mount Posts) With posts plumb, drill 3" deep holes into concrete slab through holes in support plates, use a 1/2" masonry bit and 1/2" hammer drill. Tap 1/2" x 2 3/4" expansion anchors into holes and secure using 1/2" standard hex nuts with 1/2" flat washers. Refer to the Surface Mount Posts Detail. **NOTE: Do not anchor posts to concrete until structure is fully assembled.**

- 8) Install protective surfacing before users are allowed to play on the structure.

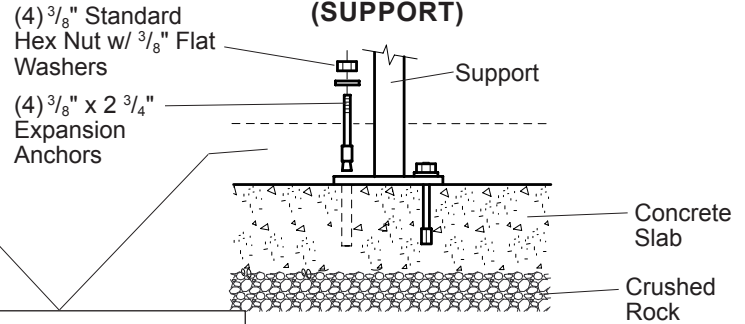
PLAN VIEW/FOOTING LAYOUT



DETAIL SURFACE MOUNT (POSTS)

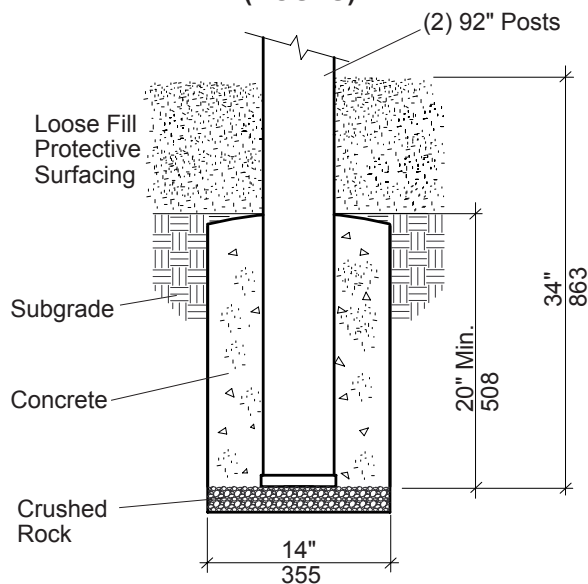


DETAIL SURFACE MOUNT (SUPPORT)

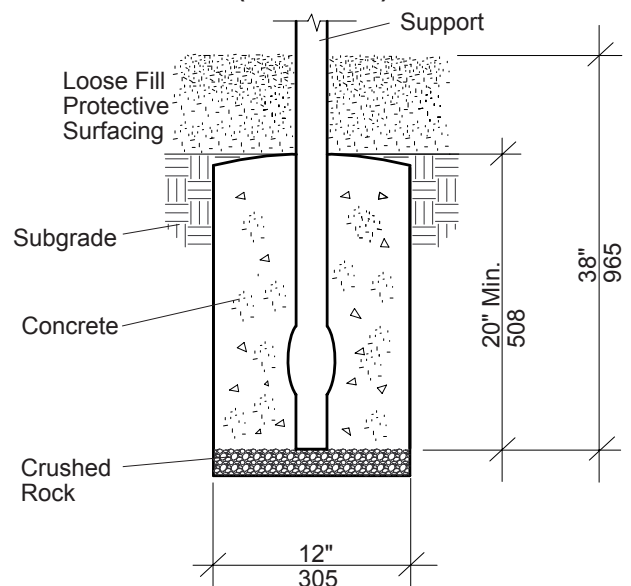


NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

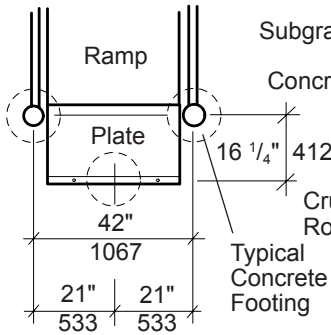
DETAIL DIRECT BURY (POSTS)



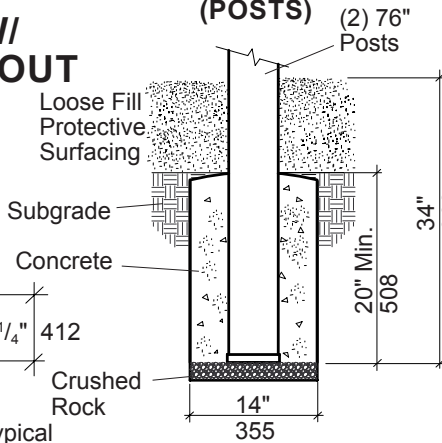
DETAIL DIRECT BURY (SUPPORT)



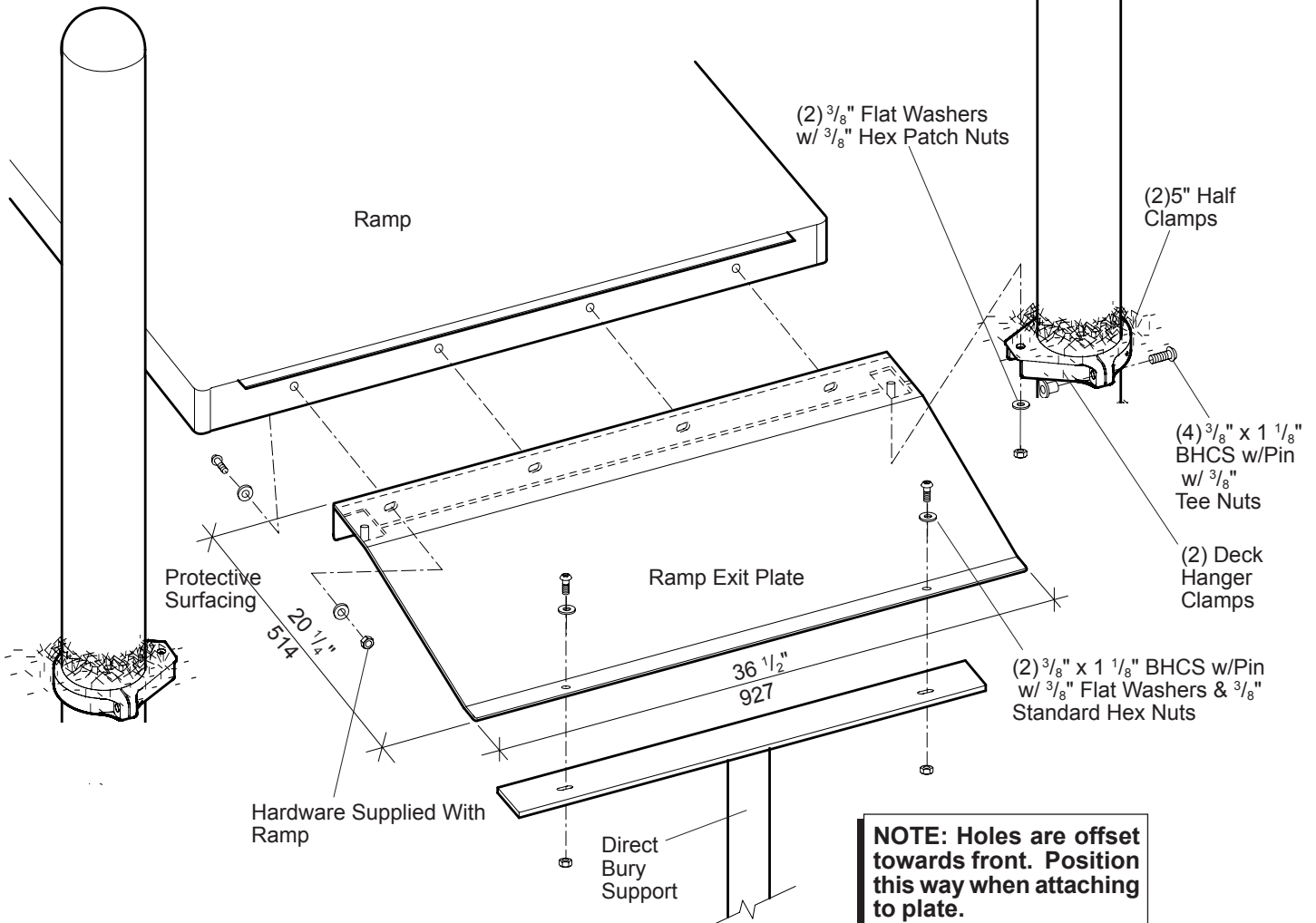
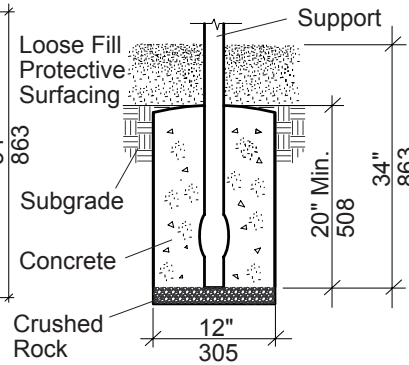
**PLAN VIEW/
FOOTING LAYOUT**



**DETAIL
DIRECT BURY
(POSTS)**



**DETAIL
DIRECT BURY
(SUPPORT)**



NOTE: Holes are offset towards front. Position this way when attaching to plate.

Sensory Play

Ramp Exit Plate, DB

Parts List

Part#	Description	Qty.
177563	Ramp Exit Plate, Specify Color.....	1
180979	Support (DB), Specify Color.....	1
105327	5" Half Clamp, Specify Color.....	2
106022	Deck Hanger Clamp, Specify Color.....	2
107500	76" Steel PlayBooster Post, DB, Specify Color.....	*
107670	76" Al. PlayBooster Post, DB, Specify Color.....	*
107453	44" Steel PlayBooster Post, SM, Specify Color.....	*
107603	44" Al. PlayBooster Post, SM, Specify Color.....	*
121051	Ramp Exit Plate (DB) Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	6
100321	3/8" Hex Patch Nut, SST.....	2
100327	3/8" Standard Hex Nut, SST	2
100351	3/8" Tee Nut, SST.....	4
100362	3/8" Flat Washer, SST	4
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
120439	Ramp Exit Plate (SM) Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100321	3/8" Hex Patch Nut, SST.....	2
100351	3/8" Tee Nut, SST.....	4
100362	3/8" Flat Washer, SST	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
121348	4 Hole (SM) Hardware Package	2
100266	1/2" x 2 3/4" Expansion Anchor	8
100322	1/2" Standard Hex Nut, SST	8
100363	1/2" Flat Washer, SST	8
129321	2-Hole (SM) Hardware Package	1
100261	1/4" x 2" Drive Anchor	2
122039	1/4" Flat Washer, SST	2

DB = Direct Bury

SM = Surface Mount

* = Quantity Determined By Your Order

Specifications

Support: Fabricated from 1/4" x 3" (6,35 mm x 76 mm) zinc plated HRS plate continuously welded to 2 3/8" (60,32 mm) O.D. RS20 galvanized steel tubing. Finish: ProShield[®], color specified.

Posts: See PlayBooster[®] General Specifications.

Ramp Exit Plate: Fabricated from 10 GA (.135") (3,42 mm) HRPO steel plate with 3/8" x 1" stainless steel mounting stud. Finish: TenderTuff[®], color specified.

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

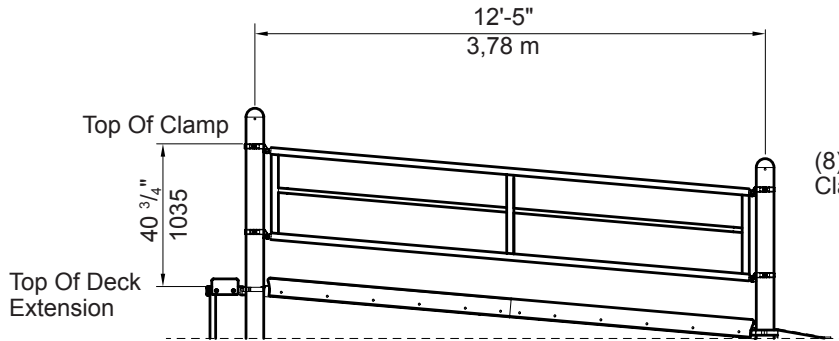
Installation Instructions

- 1) **(Direct Bury)** Dig footings as shown.
- 2) Install exit plate in conjunction with ramp.
- 3) Mark posts for the appropriate height to install clamps. Fasten deck hanger clamps to the marked position on posts using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Position ramp exit plate over deck hanger clamps and attach using 3/8" hex patch nuts with 3/8" flat washers, as shown.
- 5) Attach support to ramp exit plate using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washers and 3/8" standard hex nuts, as shown.
- 6) **(Direct Bury)** With support and posts plumb, pour concrete footing. **NOTE:** Do not pour concrete footings until structure is fully assembled.

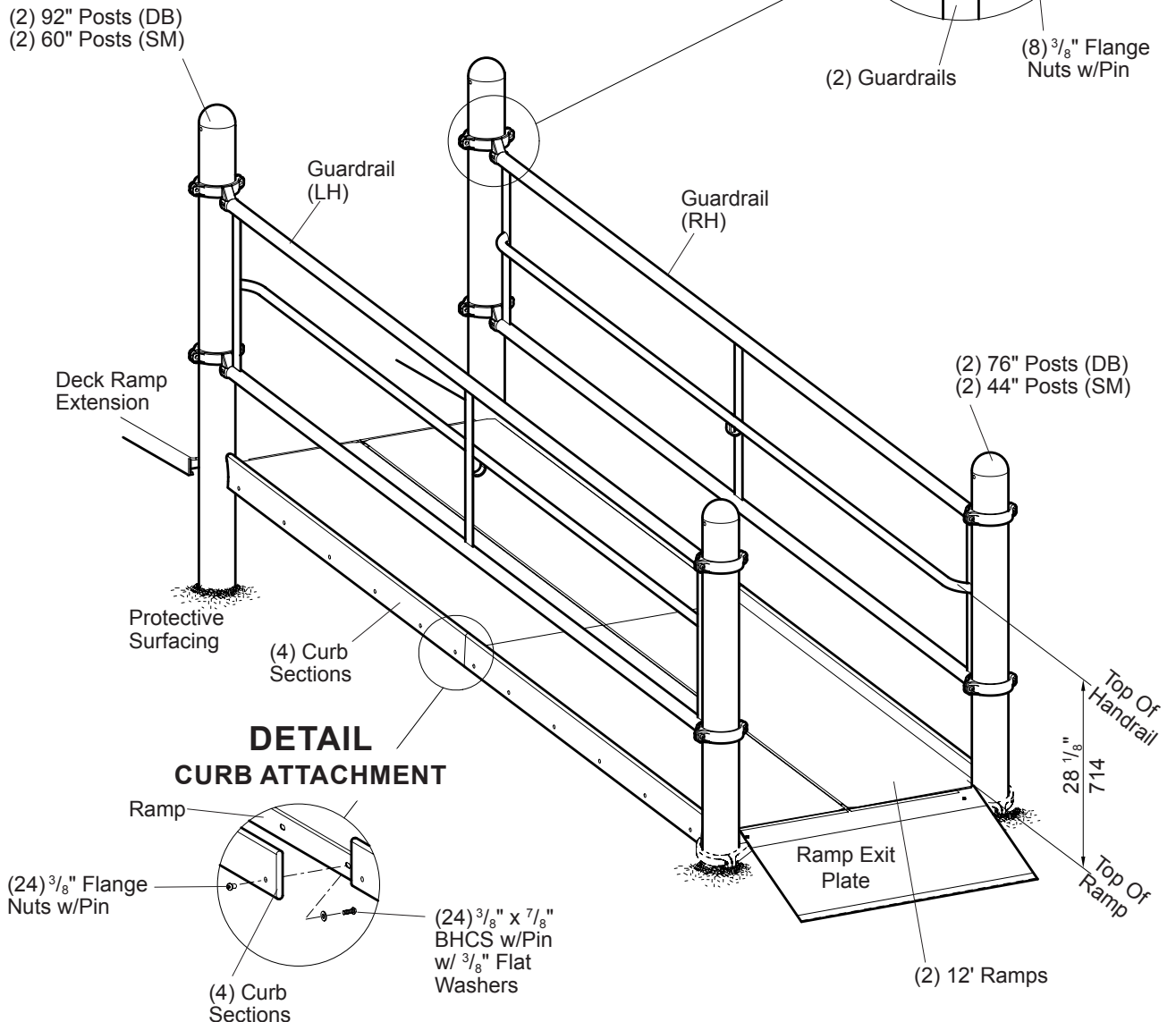
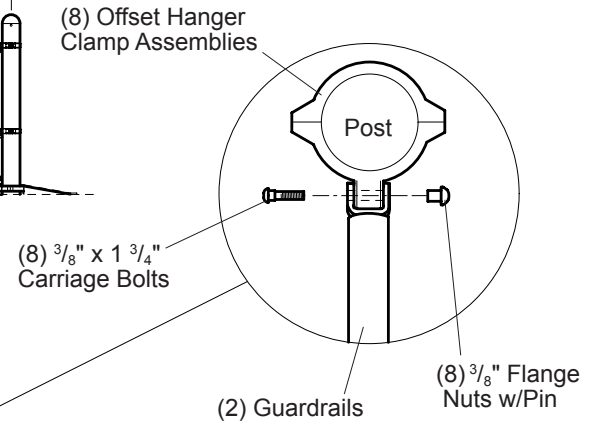
(Surface Mount) Secure ramp exit plate to surface using 1/4" x 2" drive anchors and 1/4" flat washers. **NOTE:** Do not anchor ramp exit plate to concrete until structure is fully assembled.

(Surface Mount) With posts plumb, drill 3" deep holes into concrete slab through holes in support plates, use a 1/2" masonry bit and hammer drill. Tap 1/2" x 2 3/4" expansion anchors into holes and secure using 1/2" standard hex nuts with 1/2" flat washers. Refer to the Surface Mount Posts Detail. **NOTE:** Do not anchor posts to concrete until structure is fully assembled.
- 7) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 8) Install protective surfacing before users are allowed to play on the structure.

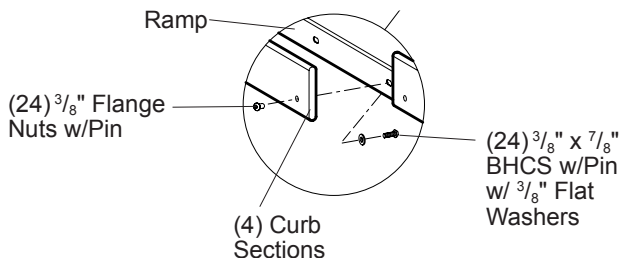
PLAN VIEW/FOOTING LAYOUT



**DETAIL
GUARDRAIL ATTACHMENT**



**DETAIL
CURB ATTACHMENT**



Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	8
105327	5" Half Clamp, Specify Color	8
113729	5" Offset Hanger Clamp, Specify Color.....	8
178017	12" Ramp, Specify Color	2
178019	Guardrail (RH), Specify Color	1
178018	Guardrail (LH), Specify Color	1
174797	Curb, Specify Color.....	4
171409	Curb Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	24
100353	3/8" Flange Nut w/Pin, SST	24
100362	3/8" Flat Washer, SST	24
159480	Barrier Hardware Package	1
100148	3/8" x 1 3/4" Carriage Bolt, SST	8
100198	3/8" x 1 1/8" BHCS w/Pin, SST	16
100351	3/8" Tee Nut, SST.....	16
100353	3/8" Flange Nut w/Pin, SST	8
228066	Ramp Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	20
100327	3/8" Standard Hex Nut, SST	8
100362	3/8" Flat Washer, SST	44
113027	3/8" x 1 3/8" BHCS w/Pin, SST	2
100349	3/8" Low Crown Cap Nut, SST	14

(RH) = Right Hand

(LH) = Left Hand

Specifications

Guardrail: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080"- .090") (2,03 mm-2,29 mm) wall galvanized steel tube, 1.900" (48,26 mm) O.D. RS20 (.085" - .095") (2,16 mm-2,41 mm) wall galvanized steel tube, 3/16" (4,75 mm) HRPO flat steel, 1/4" (6,35 mm) HRPO flat steel and 1/4" (6,35 mm) HRPO flat steel. Finish: ProShield®, color specified.

Bridge/Ramp: Weldment comprised of 12 GA (.105") (2,67 mm) sheet HRPO steel conforming to ASTM A1011, 1/4" (6,35 mm) HR flat steel and 3/16" (4,75 mm) (7,94 mm) HR flat steel. Standing surface is perforated with 5/16" (7,94 mm) diameter holes. Finish: TenderTuff®, color specified.

Curb: Permalene®, color specified.

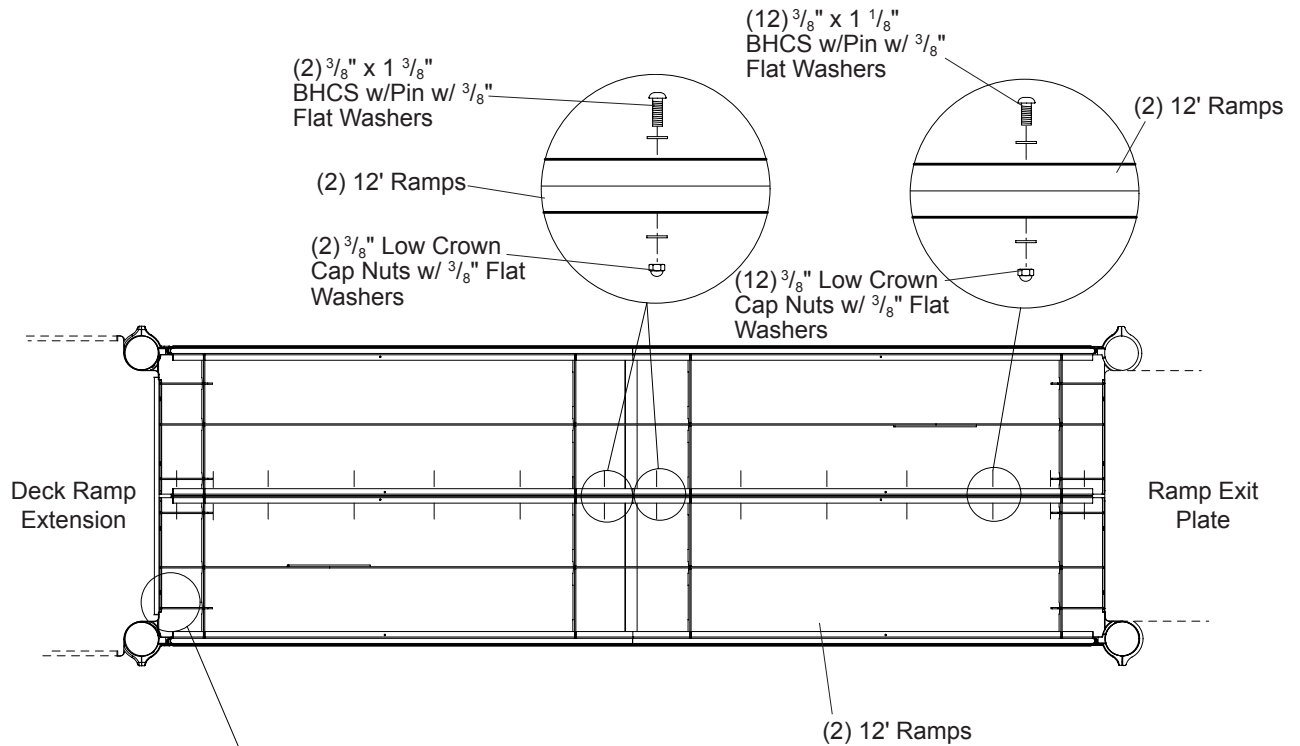
Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

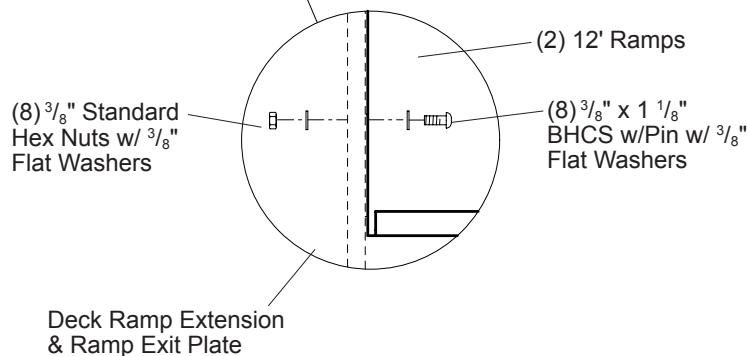
Installation Instructions

- 1) With posts, deck ramp extension and ramp exit plate in proper position, set ramps on deck ramp extension and ramp exit plate. Fasten ramps to deck ramp extension and ramp exit plate, using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washers and 3/8" standard hex nuts with 3/8" flat washers. Refer to the Ramp Attachment Details.
- 2) Fasten ramps together. Refer to the Ramp Attachment Details.
- 3) Attach (4) curb sections to faces of ramp in position shown, using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers and 3/8" flange nuts w/pin. Refer to the Curb Attachment Detail.
- 4) Fasten an offset hanger clamp to the end of each guardrail, using 3/8" x 1 3/4" carriage bolt and 3/8" flange nut w/pin. Refer to Guardrail Attachment Detail. Attach guardrails to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

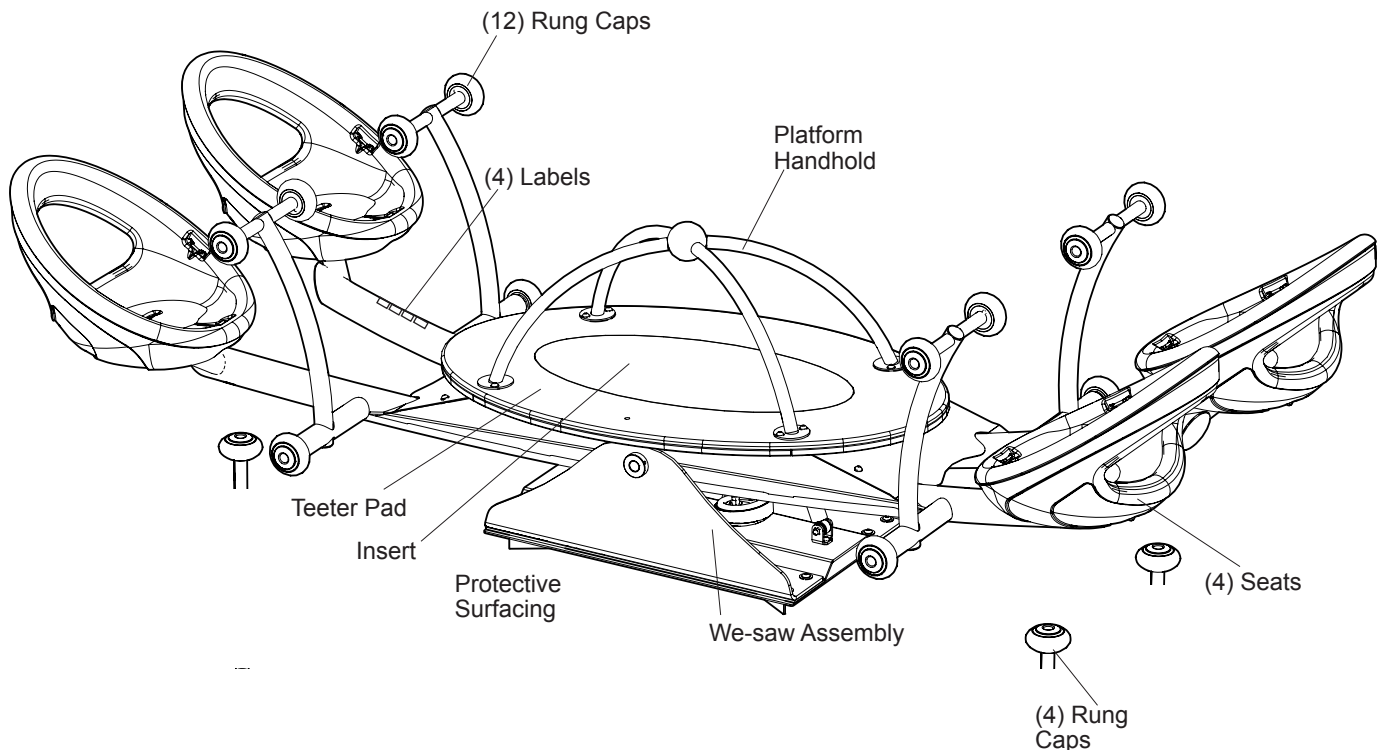
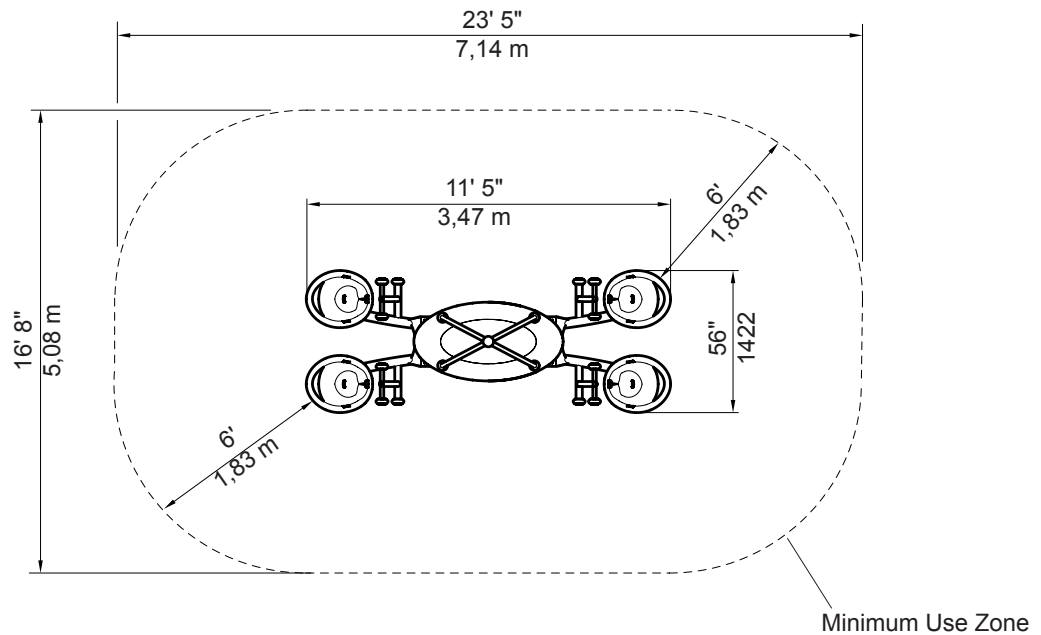
**DETAIL
RAMP ATTACHMENT
(BOTTOM VIEW)**



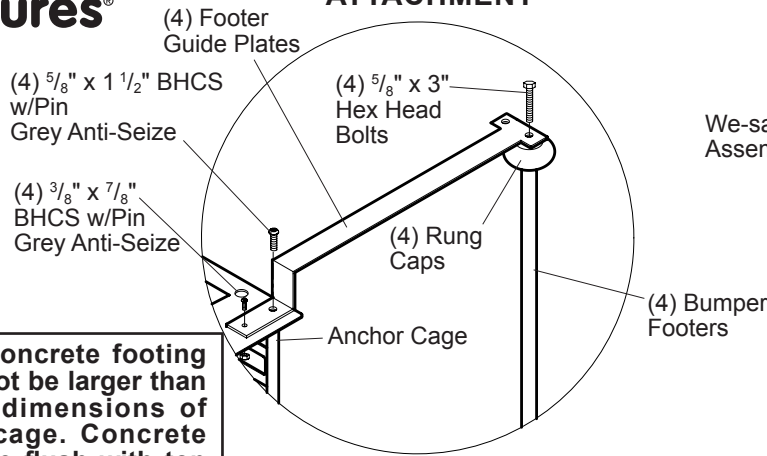
DETAIL



PLAN VIEW

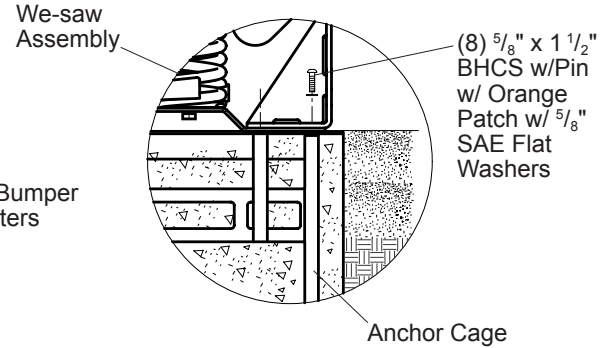


**DETAIL
BUMPER FOOTER
ATTACHMENT**

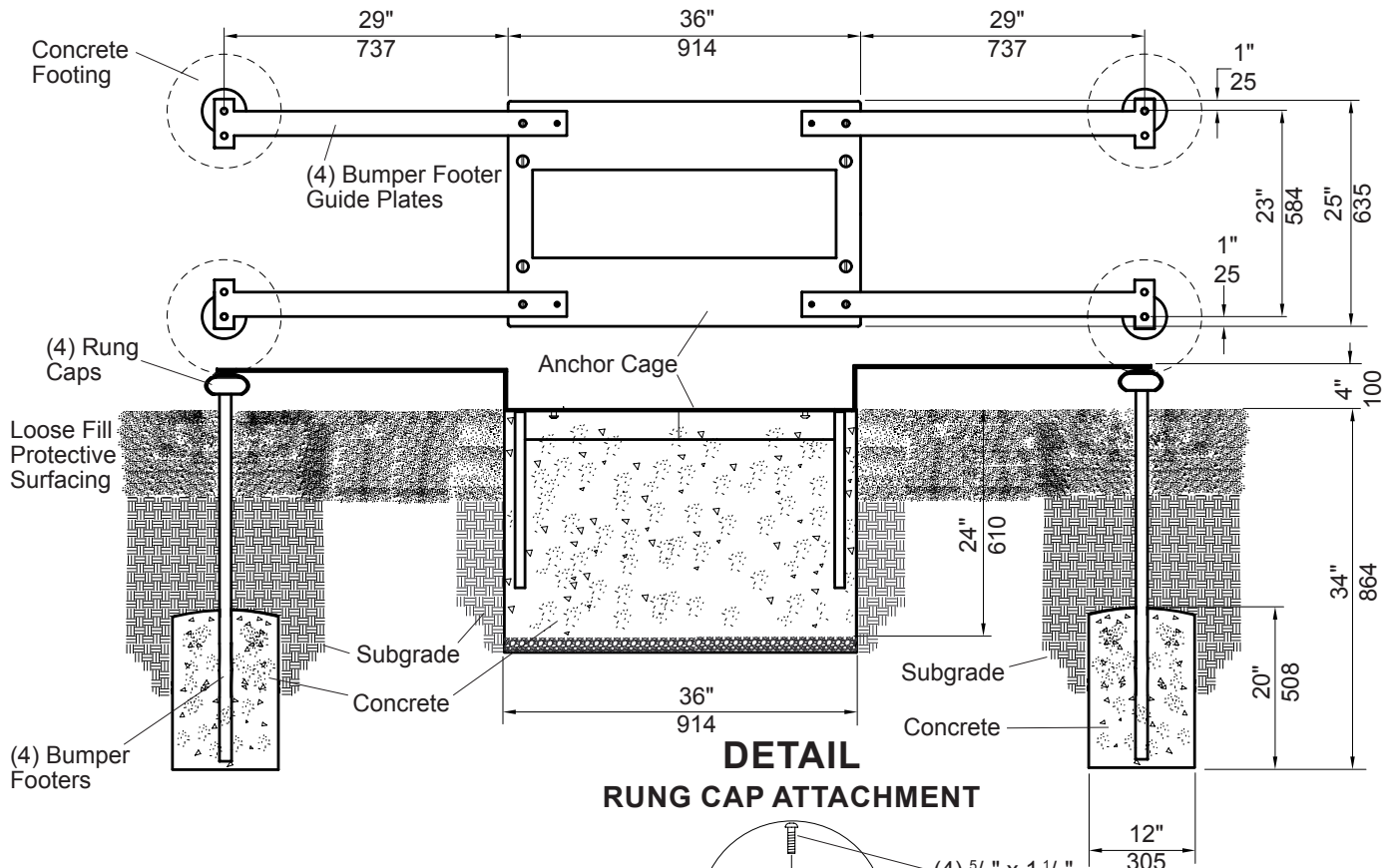


NOTE: Concrete footing should not be larger than outside dimensions of anchor cage. Concrete should be flush with top of anchor cage.

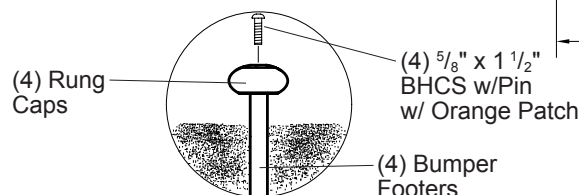
**DETAIL
WE-SAW ASSEMBLY
ATTACHMENT**

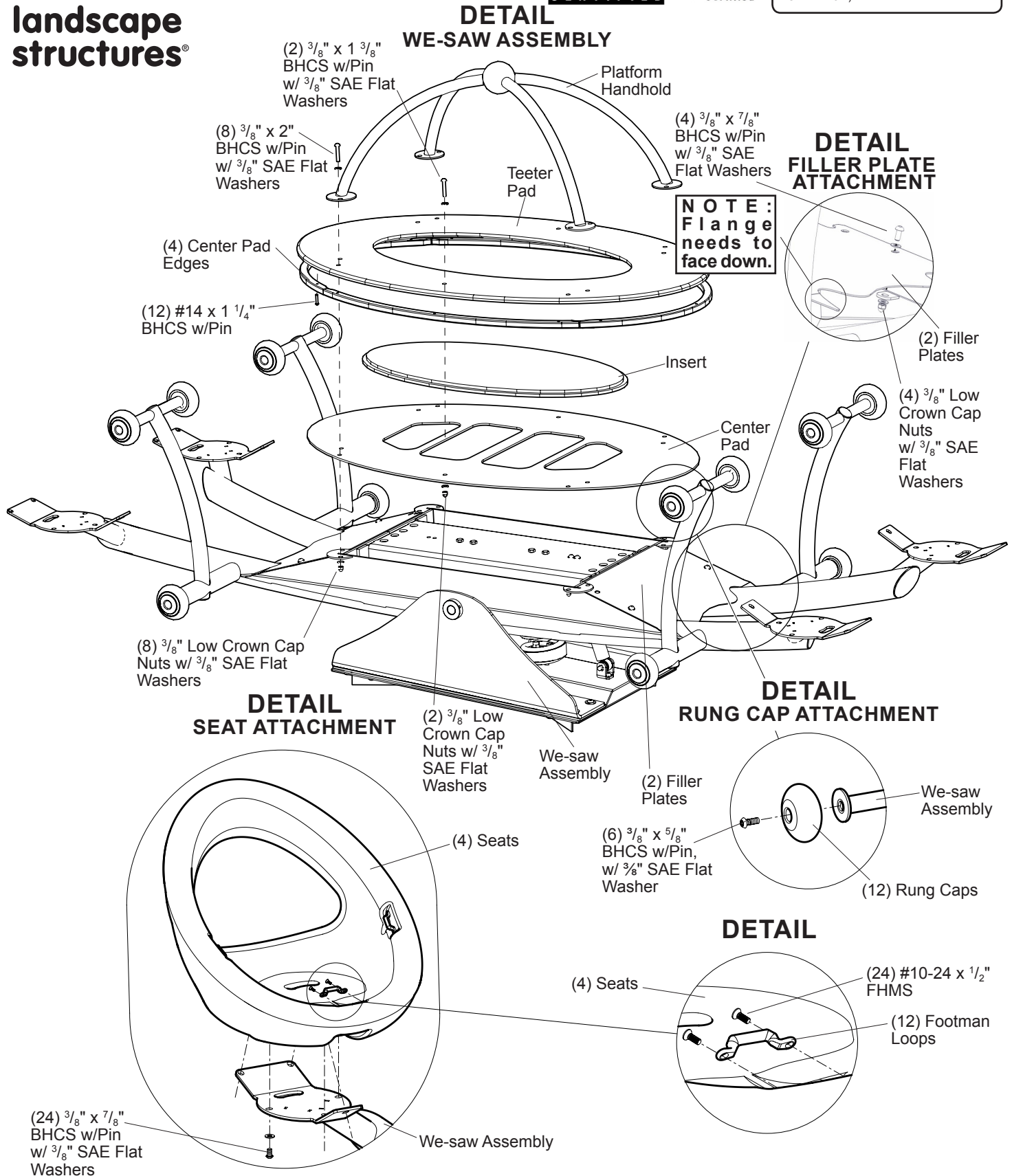


**DETAIL
CONCRETE FOOTINGS
(WITH FOOTER GUIDE PLATES)**



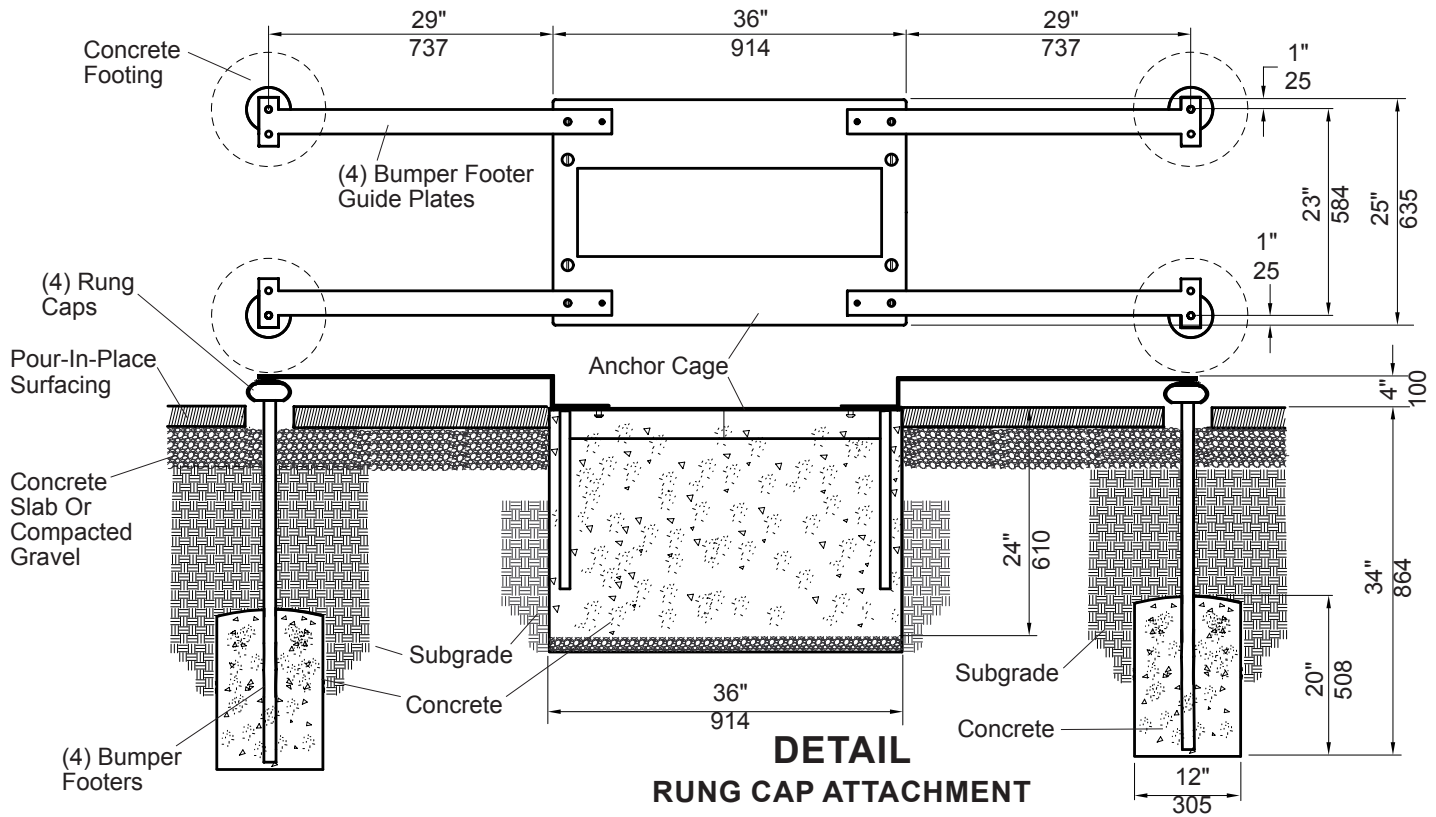
**DETAIL
RUNG CAP ATTACHMENT**



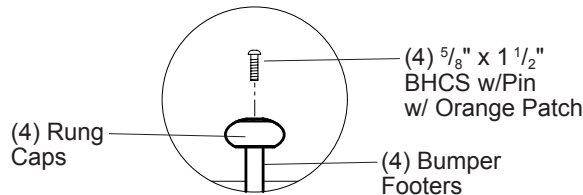


**DETAIL
DIRECT BURY WITH
POUR-IN-PLACE SURFACING**

**CONCRETE FOOTINGS
(WITH FOOTER GUIDE PLATES)**



**DETAIL
RUNG CAP ATTACHMENT**



Parts List

Part#	Description	Qty.
181123	Seat, Specify Color.....	4
182262	Rung Cap, Black.....	16
182458	Platform Handhold, Specify Color.....	1
182947	Center Pad, Specify Color.....	1
211277	GripX Insert, Black.....	1
183327	Teeter Pad, Specify Color.....	1
183328	Pad Edge Long, Specify Color.....	2
183329	Pad Edge Short, Specify Color.....	2
183748	Filler Plate, Specify Color.....	2
186453	Anchor Cage, Specify Color.....	1
187231	Bumper Footer, Specify Color.....	4
188068	We-saw Assembly, Specify Color.....	1
186951	Footer Guide Plate, Specify Color.....	4
249513	We-saw Hardware Package	1
100173	3/8" x 2" BHCS w/Pin, SST.....	8
100196	3/8" x 7/8" BHCS w/Pin, SST.....	28
100201	5/8" x 1 1/2" BHCS w/Pin, SST-Patch	12
100365	3/8" SAE Flat Washer, SST.....	64
129500	5/8" SAE Flat Washer, SST.....	8
129672	#14 x 1 1/4" TORX BHCS, SST.....	12
207709	Footman Loop, SST.....	12
162462	#10-24 x 1/2" FHMS.....	24
115176	ASTM Hard Surface Warning Label	1
156846	Play Safe Label, 2-12 Years.....	1
182212	Entanglement Warning Label	1
182213	Hot Surface Warning Label	1
100349	3/8" Low Crown Cap Nut, SST	14
127463	Bit Hex TPP T-27 Torx	1
113027	3/8" x 1 3/8" BHCS w/Pin, SST	2
100195	3/8" x 5/8" BHCS w/Pin, SST	12
188123	Bumper Guide Plate Hardware Package	1
127546	3/8" x 7/8" BHCS w/Pin, SST	4
127551	5/8" x 1 1/2" BHCS w/Pin, SST	4
188124	5/8" x 3" Hex Cap Screw, ZP.....	4

Specifications

We-saw Assembly: (**Arm Assembly**) Weldment comprised of 3.500" (88,9 mm) O.D. x 8 GA. (.162") (4,11 mm) wall galvanized steel tubing, 2.375" (60,33) O.D. RS40 (.130"-.140") (3,30 mm-3,56 mm) wall galvanized steel tubing, 1.900" (48,26 mm) O.D. RS40 (.120"-.130") (3,05 mm-3,30 mm) wall galvanized steel tubing, .375" (9,52 mm) thick HRPO steel plate and .250" (6,35 mm) stainless steel plate. Finish: ProShield®, specify color. (**Rocker Assembly**) Weldment comprised .250" (6,35 mm) HRPO steel plate and 2" (50 mm) x 5/16" (7,93 mm) wall steel tubing. Finish: ProShield, specify color. (**Base**) Weldment comprised .375" (9,53 mm) HRPO steel plate and 2.500" (63,50 mm) O.D. x 1.150" (29,21 mm) I.D. stainless steel tubing. Finish: ProShield, color specified. (**Base Plate**) Fabricated from .250" (6,35 mm) HRPO steel plate. Finish: ProShield, specify color. (**Spring**) 5 5/8" (142,87 mm) diameter 13/16" (20,62 mm) tempered alloy steel coil. Finish: ProShield, specify color. (**Spring Wedge**) Cast from ductile iron alloy. Finish: ProShield, specify color. (**Bearings**) 1.145" (29,08 mm) I.D. oilite bronze. (**Shaft**) 1.14" (28,96 mm) O.D. stainless steel. (**Cylinder**) Chrome plated steel.

Kids In Motion 186490 We-saw™

Filler Plate: Fabricated from 5052 Sheet Aluminum. Finish: ProShield, color specified.

GripX Insert: 3/4" (19,05 mm) Thick Permalene®, black in color.

Teeter Pad & Edges: Permalene®, color specified.

Platform Handhold: Weldment comprised of 1.315" (33,4 mm) O.D. RS20 (.080"-.090") (2,03 mm - 2,28 mm) wall galvanized steel tubing, 10 GA (.135") (3,42 mm) HRPO steel sheet and 7 GA. (.179") (4,54 mm) HRPO steel sheet. Finish: Proshield®, color specified.

Anchor Cage: Weldment comprised of 1.029" (26,13 mm) O.D. RS20 (.070"-.080") (1,77 mm - 2,03 mm) wall galvanized steel tubing with 203 or 303 stainless steel welded inserts with 5/8" internal threads and 7 GA. (.179") (4,54 mm) HRPO steel sheet. Finish: Proshield®, specify color.

Rung Cap: Molded from U.V. stabilized black EPDM rubber encapsulating .250" (6,35 mm) thick aluminum sheet and .125" (3,18 mm) thick aluminum plate.

Center Pad: Fabricated from .250" (6,35 mm) thick HRPO steel sheet plate. Finish: Proshield®, specify color.

Bumper Footer: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm - 2,29 mm) wall galvanized steel tubing with 203 or 303 stainless steel welded inserts with 5/8" internal threads and .250" (6,35 mm) thick stainless steel plate. Finish: Proshield®, color specified.

Seat: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 16 man hours

Fall Height: 54" (1,37 m)

Min. Use Zone: 6' (1,83 m)

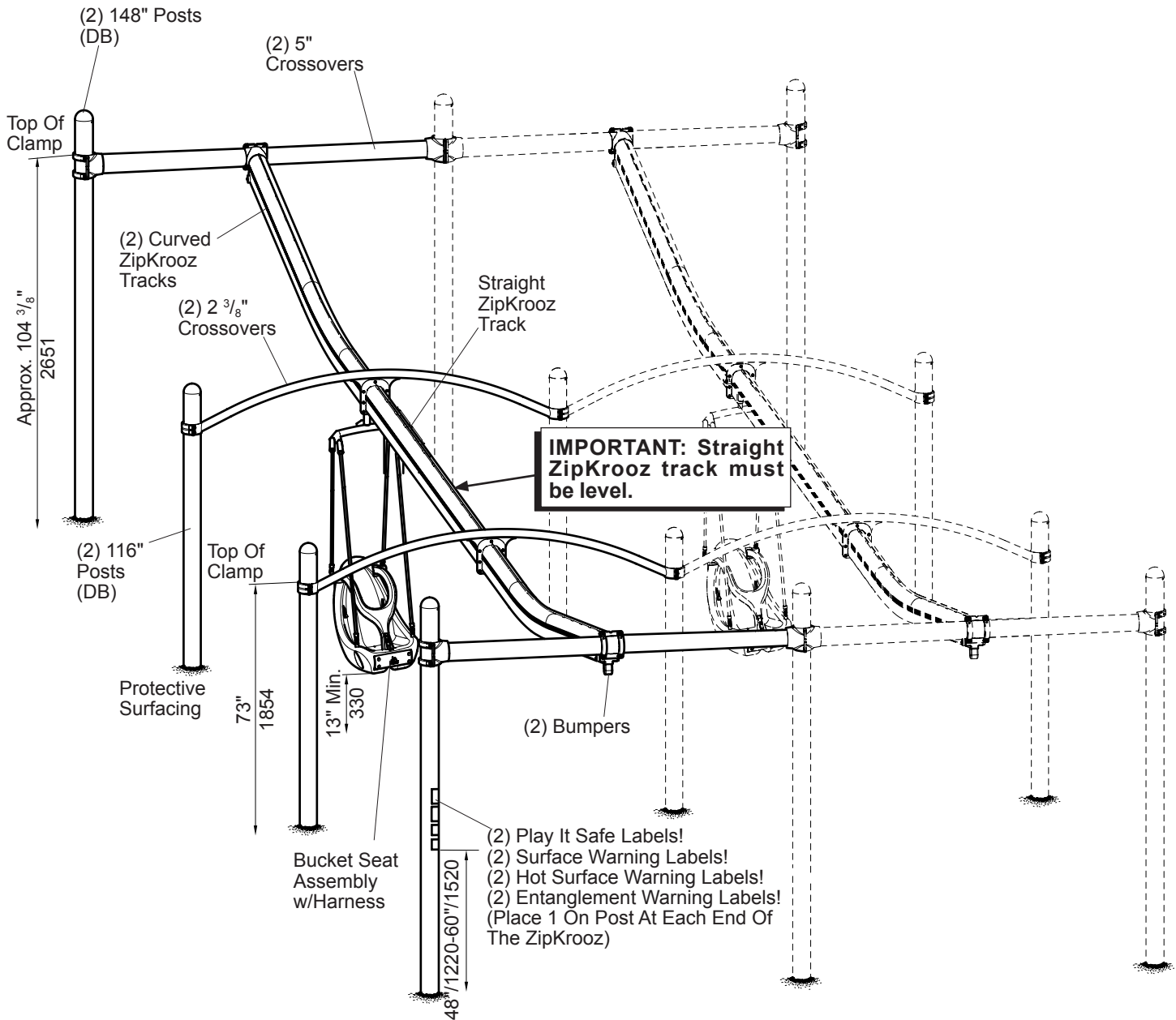
Area Required: 16' 8" x 23' 5" (5,08 m x 7,14 m)

Concrete Req.: Approx. 17.82 cu. ft.

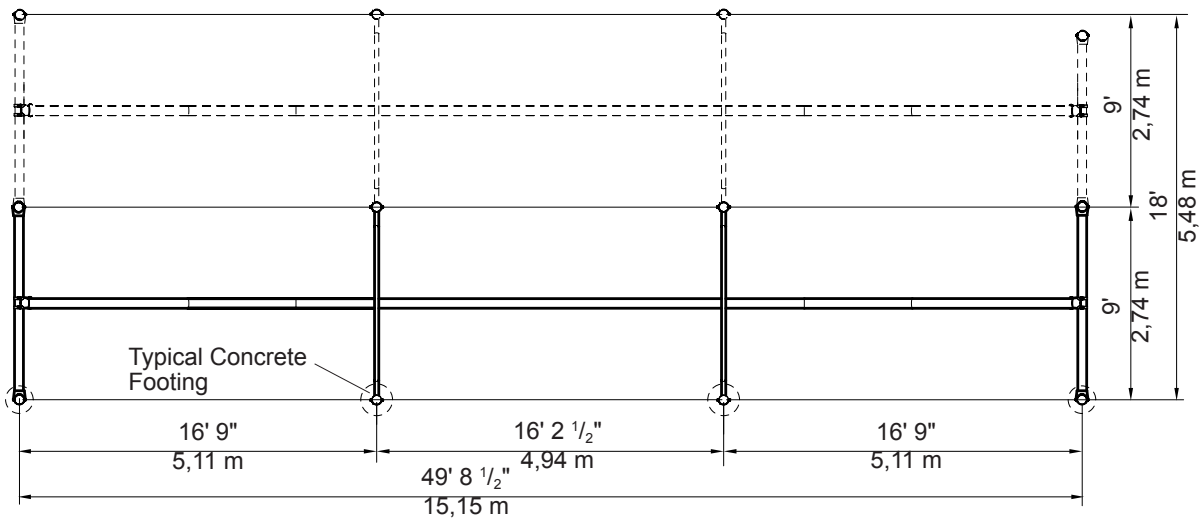
Weight: 783 lbs.

Installation Instructions

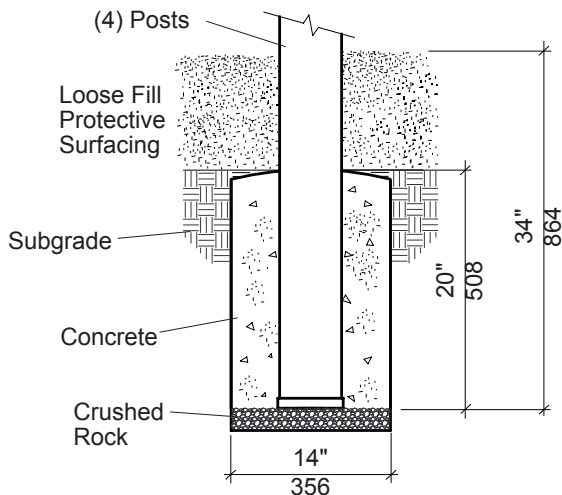
- 1) **(Direct Bury)** Dig footing holes for anchor cage and bumper footers. Build a form for anchor cage concrete footing. Concrete footing for anchor cage should not be larger than outside dimensions of anchor cage. Refer to Concrete Footing Details.
- 2) Attach rung caps and bumper footers to bumper footer guide plates using $\frac{5}{8}$ " x 3" hex head bolts. Refer to the Bumper Footer Attachment Detail.
- 3) Attach bumper footer guide plates to anchor cage using $\frac{5}{8}$ " x 1 $\frac{1}{2}$ " BHCS w/pin and $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin. Refer to the Bumper Footer Attachment Detail.
- 4) Place anchor cage and bumper footers in footing holes, as shown. Top of anchor cage should be flush with finished grade. With anchor cage level and bumper footers plumb, pour concrete. Concrete should be flush with top of anchor cage. Allow concrete footing to cure for a minimum of 72 hours before continuing. Refer to the Concrete Footing Details.
- 5) Remove footer guide plates from anchor cage and bumper footers. Discard bumper guard plates and hardware. Attach rung caps to bumper footers using $\frac{5}{8}$ " x 1 $\frac{1}{2}$ " BHCS w/pin. Refer to the Rung Cap Attachment Detail.
- 6) Set We-saw assembly onto anchor cage. Line up holes in We-saw assembly bottom plate with threaded inserts in anchor cage. Attach We-saw assembly to anchor cage using $\frac{5}{8}$ " x 1 $\frac{1}{2}$ " BHCS w/pin with $\frac{5}{8}$ " SAE flat washers. Refer to the We-saw Assembly Attachment Detail.
- 7) Attach filler plates to We-saw assembly using #3/8 x 7/8" BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " low crown cap nuts with $\frac{3}{8}$ " SAE flat washers. Refer to the Filler Plate Attachment Detail. Make sure flanges on filler plates are pointing downwards.
- 8) Attach center pad edges to teeter pad, using #14 x 1 $\frac{1}{4}$ " BHCS w/pin. Refer to the We-saw Assembly Detail.
- 9) Attach platform handhold, teeter pad, insert and center pad to We-saw assembly attachment plates, using $\frac{3}{8}$ " x 2" BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " low crown cap nuts with $\frac{3}{8}$ " SAE flat washers. Refer to the We-saw Assembly Detail.
- 10) Attach teeter pad to center pad using $\frac{3}{8}$ " x 1 $\frac{3}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " low crown cap nuts with $\frac{3}{8}$ " SAE flat washers. Refer to the We-saw Assembly Detail.
- 11) Attach rung caps to We-saw assembly using $\frac{5}{8}$ " x 1 $\frac{1}{2}$ " BHCS w/pin. Refer to the Rung Cap Attachment Detail.
- 12) Attach seats to We-saw assembly using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers. Refer to the Seat Attachment Detail.
- 13) Attach footman loops, using #10-24 x $\frac{1}{2}$ " flat head screws, as shown. Footman loops are used for seat belts (not included).
- 14) Apply Play Safe and warning labels, as shown.
- 15) Install protective surfacing before users are allowed to play on the structure.



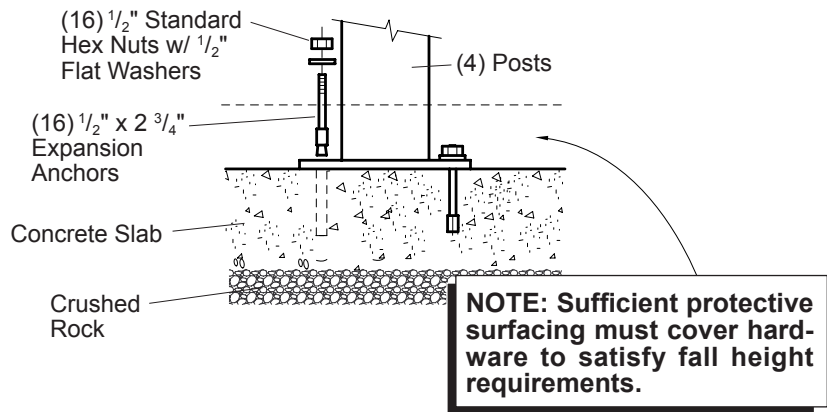
PLAN VIEW/FOOTING LAYOUT



DETAIL DIRECT BURY



DETAIL SURFACE MOUNT

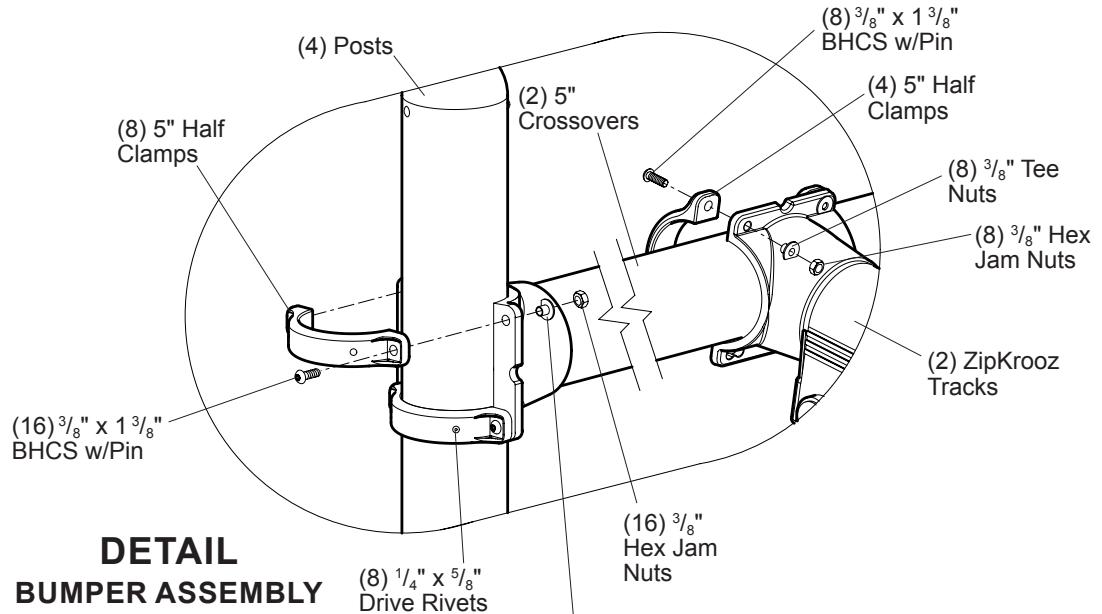


Kids In Motion 196213 ZipKrooz®, Assisted, Additional Bay, 50 Ft.

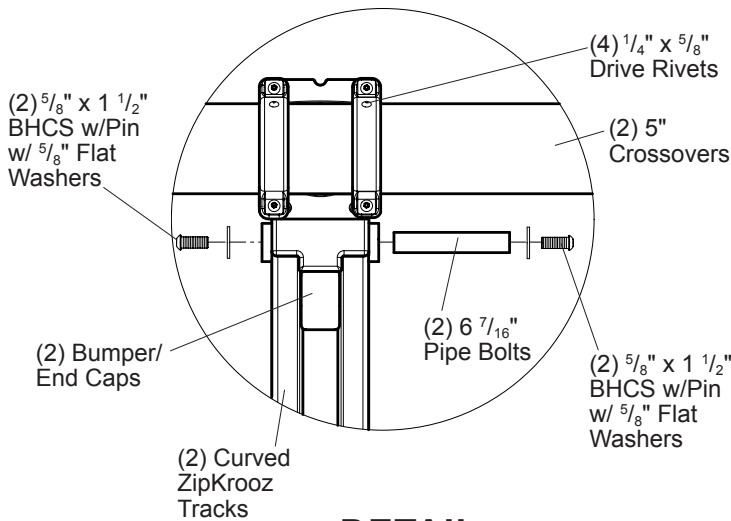
601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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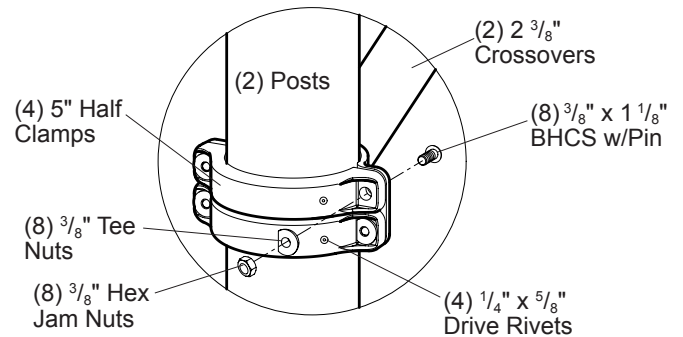
DETAIL TRACK ATTACHMENT



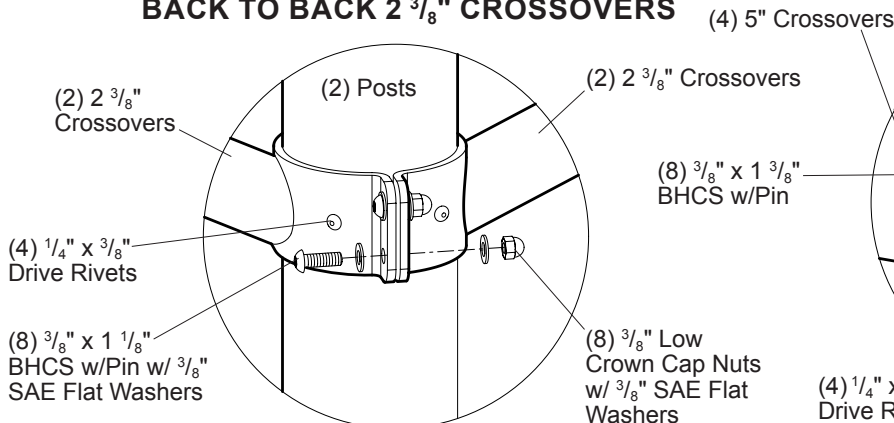
DETAIL BUMPER ASSEMBLY



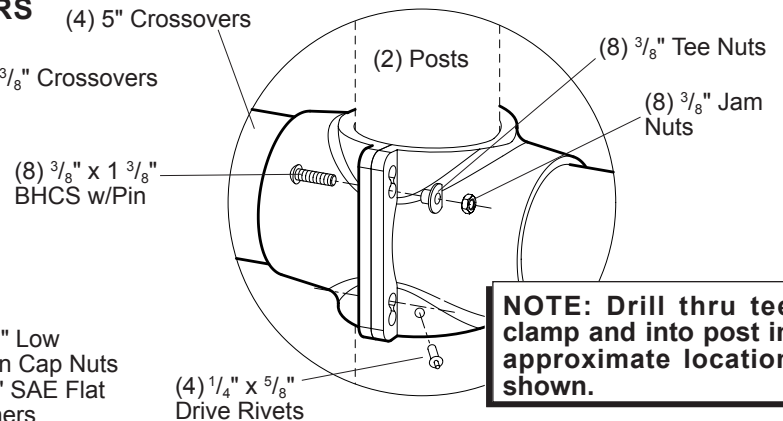
DETAIL CROSSOVER ATTACHMENT



DETAIL BACK TO BACK 2 3/8" CROSSEVERS

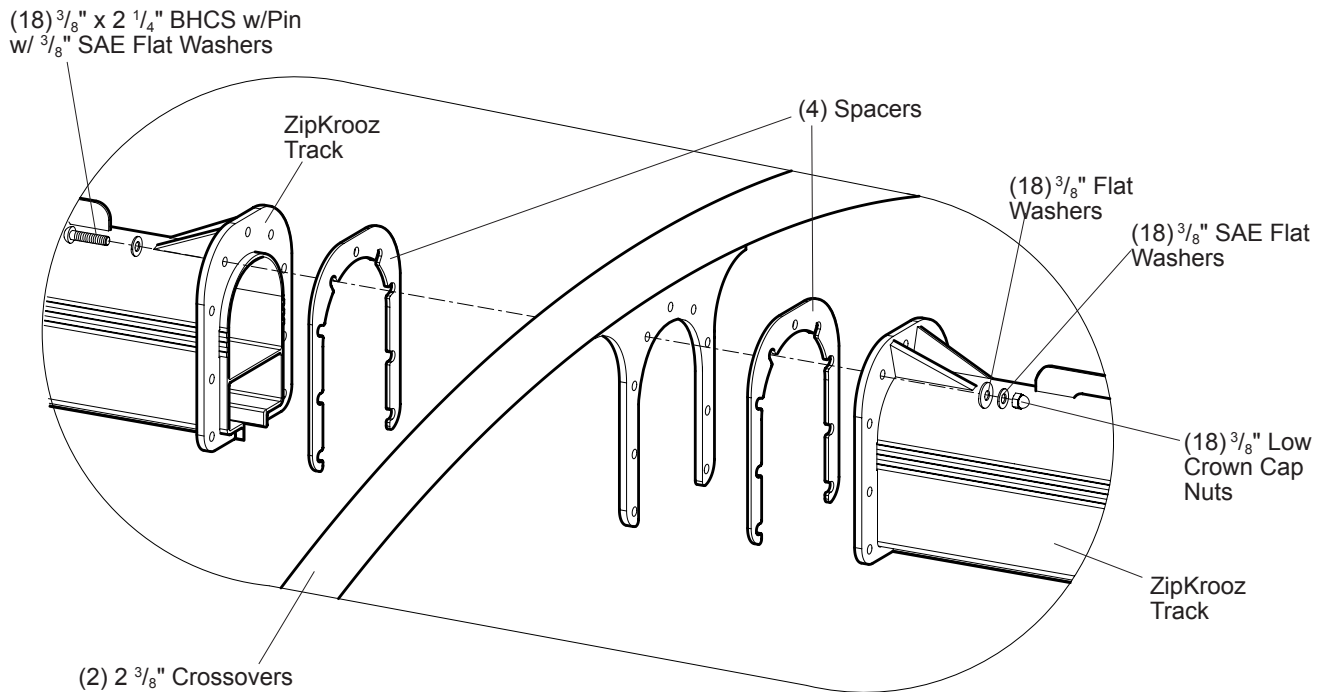


DETAIL BACK TO BACK TEE CLAMPS



NOTE: Drill thru tee clamp and into post in approximate location shown.

DETAIL TRACK ASSEMBLY



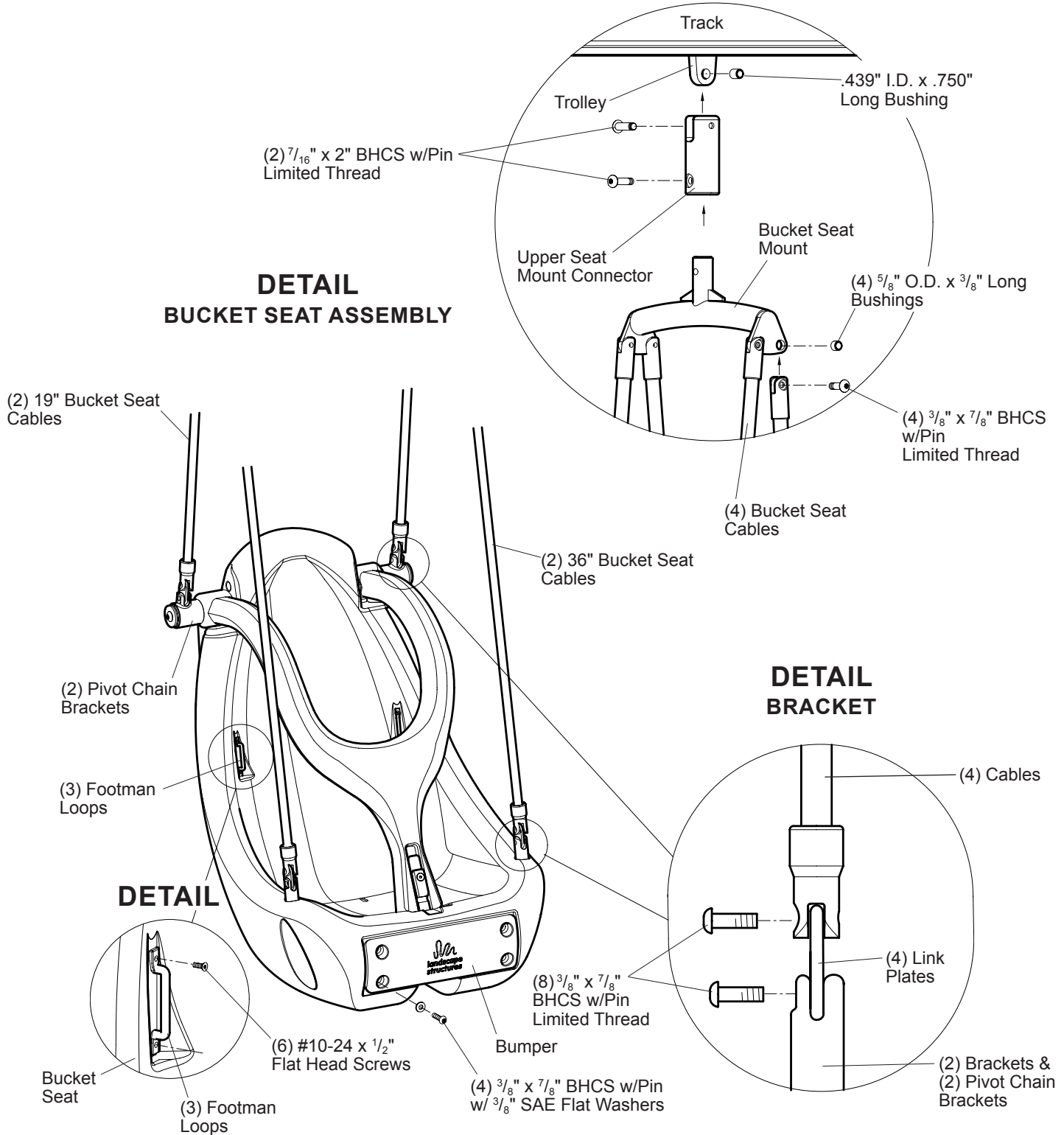
Kids In Motion 196213 ZipKrooz®, Assisted, Additional Bay, 50 Ft.

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DETAIL BUCKET SEAT ATTACHMENT

DETAIL BUCKET SEAT ASSEMBLY



Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivety, AL/SST	12
105327	5" Half Clamp, Specify Color	4
199896	Crossover Beam, Specify Color	2
107470	84" Steel Post w/Cap, SM, Specify Color	2
198216	116" Steel Post w/Cap, SM, Specify Color	4
107520	116" Steel Post w/Cap, DB, Specify Color	2
198214	148" Steel Post w/Cap, DB, Specify Color	4
107623	84" Aluminum Post w/Cap, SM, Specify Color	2
198217	116" Aluminum Post w/Cap, SM, Specify Color	4
107694	116" Aluminum Post w/Cap, DB, Specify Color	2
198215	148" Aluminum Post w/Cap, DB, Specify Color	4
142136	Bumper, Black	2
182025	Bucket Seat Assembly w/Harness, Specify Color	1
205138	2 3/8" Crossover, Specify Color	2
205042	Curved ZipKrooz Track, Specify Color	2
205043	Straight ZipKrooz Track, Specify Color	1
205855	Upper Seat Mount Connector, Aluminum	1
205861	Bucket Seat Mount, Specify Color	1
196328	36" Bucket Seat Cable, Black	2
196329	19" Bucket Seat Cable, Black	2
229287	ZipKrooz Trolley Assembly, Black	1
205192	Spacer, Aluminum	4
206172	ZipKrooz 50 Ft. Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	16
113027	3/8" x 1 3/8" BHCS w/Pin, SST	24
100201	5/8" x 1 1/2" BHCS w/Pin, SST	4
100349	3/8" Low Crown Cap Nut, SST	18
100351	3/8" Tee Nut, SST	40
100365	3/8" SAE Flat Washer, SST	36
100362	3/8" Flat Washer, SST	18
100366	5/8" Flat Washer, SST	4
100199	3/8" x 2 1/4" BHCS w/Pin, SST	18
121105	6 7/16" Aluminum Pipe Bolt	2
115176	ASTM HD Surface Warning Label	2
156847	Play Safe Label, 5-12 YRS	2
182212	Entanglement Warning Label	2
182213	Hot Surface Warning Label	2
128296	3/8" Hex Jam Nut, SST	40
196735	Back To Back Steel Clamp Hardware Package	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100349	3/8" Low Crown Cap Nut, SST	8
100365	3/8" SAE Flat Washer, SST	16
100611	1/4" x 3/8" Drive Rivet, AL/SST	4
208041	Assisted Bucket Seat w/Yoke Hdw. Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	12
100365	3/8" SAE Flat Washer, SST	4
106035	Seat Mounting Bracket	2
127179	5/8" O.D. x 3/8" Long Bushing, SST	4
207709	Footman Loop, SST	3
162462	#10-24 x 1/2" Flat Head Screw, SST	6
196321	5/16" x 1" x 2 1/2" Link Plates, SST	4
157704	7/16" x 2" BHCS w/Pin Limited Thread, SST	2
203702	.439" I.D. x .750" Long Bushing, SST	1
196733	Back To Back Double Tee Clamp Hdw. Pkg.	2
100351	3/8" Tee Nut, SST	8
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
113027	3/8" x 1 3/8" BHCS w/Pin, SST	8
128296	3/8" Hex Jam Nut, SST	8
121348	4-Hole (SM) Hardware Package	4
100266	1/2" x 2 3/4" Expansion Anchor	16
100322	1/2" Standard Hex Nut, SST	16
100363	1/2" Flat Washer, SST	16

DB = Direct Bury
SM = Surface Mount

Specifications

Track: Extruded from 6005-T4 aluminum alloy. Finish: ProShield®, color specified.

Bumper: Urethane, black in color.

Specifications are subject to change without notice.

Spacer: .190"(4,82 mm) Thick aluminum sheet.

Bucket Seat Assy.: **(Bucket Seat & Yoke)** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified. **(Pipebolt)** Made from 1.125" (28,58 mm) O.D. 6005-T5 threaded anodized aluminum tube. **(Bearings)** UHMW PE lubricated. **(Brackets)** Made from 356-T6 aluminum.

Posts: See PlayBooster® (PB) General Specifications.

Bucket Seat Mount: Weldment comprised of 1.42" (36,06 mm) diameter stainless steel, 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,16 mm-2,41 mm) wall galvanized steel tubing, 3/8" (9,53 mm) thick HRPO steel plate and 1/4" (6,35 mm) HRPO steel plate. Finish: ProShield®, color specified.

Seat Mounting Bracket: Cast from 535 aluminum magnesium.

Bucket Seat Bumper: Molded from U.V. stabilized black EPDM rubber encapsulating 11 GA (.120") (3,05 mm) HRPO steel sheet.

Trolley Assy.: Steel body with urethane rollers. Completely assembled. Steel Body Finish: ProShield®, black in color.

ZipKrooz Crossover: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tubing, 3/8" (9,52 mm) thick HRPO steel plate and 1/4" (6,35 mm) thick HRPO steel. Finish: ProShield®, color specified.

Crossover: Weldment comprised of tee clamps and a 5" (127 mm) O.D. extruded 6005-T5 aluminum alloy tube with a .125" (3,17 mm) wall Finish: ProShield, color specified.

Cable Assembly: **(Cable)** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connectors)** 6063-T6 aluminum.

Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: **(DB)** Approx. 12 man hours

(SM) Approx. 11 man hours

Min. Area Req.: 62' 2" x 9' (18,95 m x 2,74 m)

Concrete: **(DB)** Approx. 7.13 cu. ft.

Weight: **(DB)** 1435 lbs. Steel

(DB) 1079 lbs. Aluminum

(SM) 1291 lbs. Steel

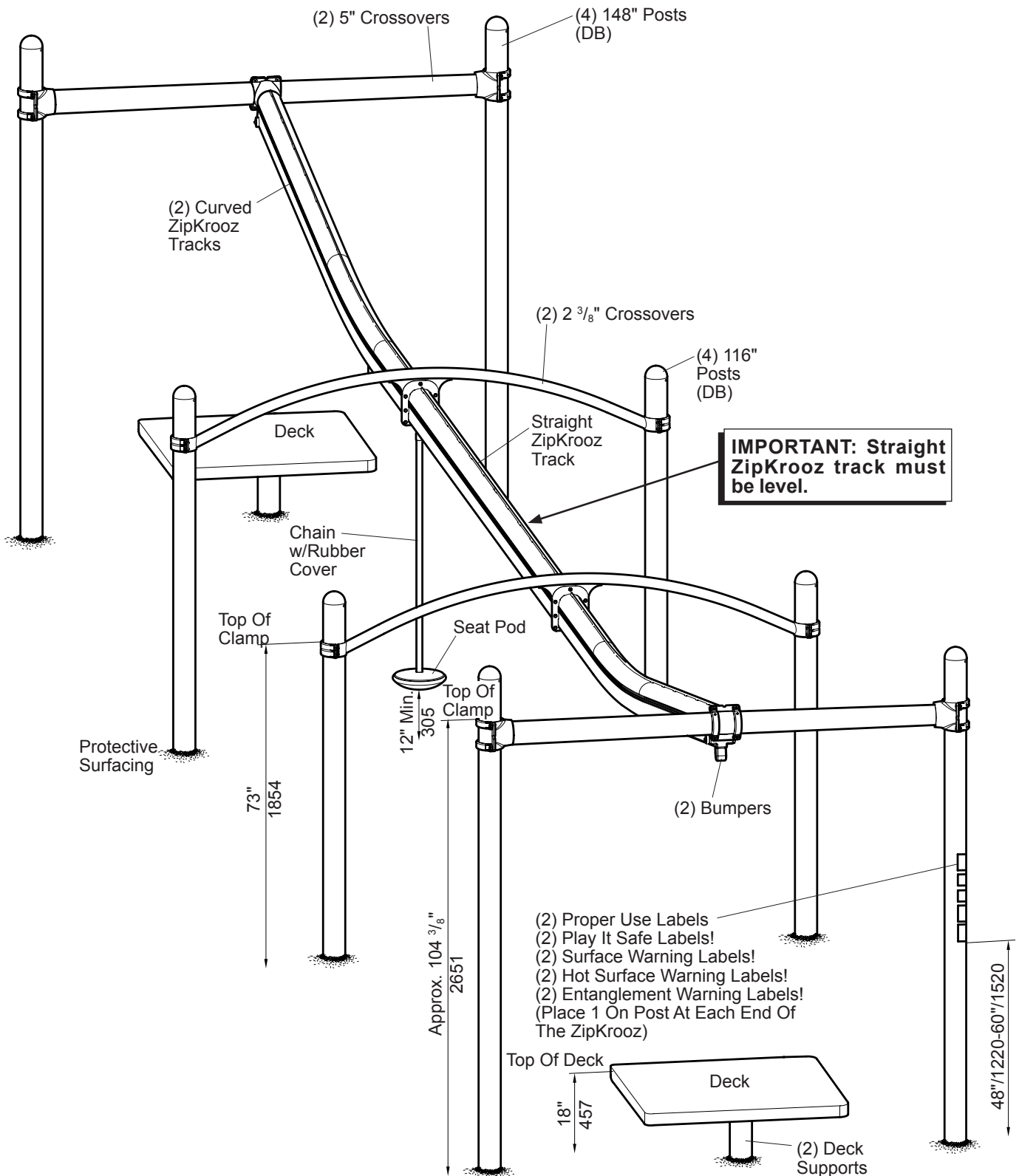
(SM) 1043 lbs. Aluminum

Max. Fall Height: 105" (2,67 m)

Installation Instructions

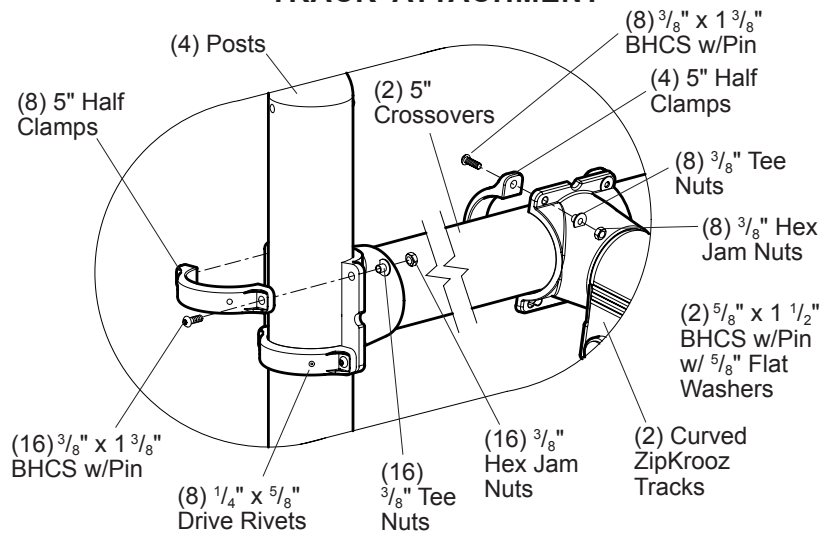
- 1) **(Direct Bury)** Dig footings as shown. Refer to the Plan View Footing Layout.
- 2) Attach 5" crossover beams to posts at height shown. Refer to the Beam Attachment Detail.
- 3) Attach back to back crossovers to posts using 1 3/8" BHCS w/pin and 3/8" tee nuts with 3/8" jam nuts. Refer to the Back to Back Tee Clamp Detail.
- 4) Attach 2 3/8" crossover beams to posts at height shown. Refer to the Beam Attachment Detail.
- 5) Attach 2 3/8" crossover beam to 2 3/8" crossover beam. Refer to the Back To Back 2 3/8" Crossovers Detail.
- 6) Attach the ZipKrooz tracks to the center of the crossover beams. Refer to the Track Attachment Detail.
- 7) Attach the ZipKrooz tracks to 2 3/8" crossover beam. Refer to the Track Assembly Detail. **IMPORTANT:** *Straight section of ZipKrooz tracks must be level.*
- 8) Insert trolley assembly, then bumpers into track ends. Line up hole in bumper with collars on track and insert pipe bolt. Fasten with 5/8" x 1 1/2" BHCS w/pin and 5/8" flat washers. Refer to the Bumper Detail.
- 9) **(Direct Bury)** With posts plumb and decks level, pour concrete footings. Refer to the Direct Bury Detail. **NOTE:** *Allow concrete to cure for 72 hours before attaching cable with pod to trolley.*

(Surface Mount) Drill 1/2" x 3" deep holes through post plates using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten 5" posts to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- 10) Attach upper seat mount connector and bucket seat mount to trolley. Refer to the Bucket Seat Attachment Detail.
- 11) Insert seat mounting brackets into molded-in holes in front of bucket seat. Refer to Bucket Seat Assembly Details.
- 12) Attach ends of cables to pivot brackets and seat mounting brackets. Refer to Bucket Seat Assembly Details.
- 13) Attach cables to bucket seat mount. Refer to the Bucket Seat Attachment Detail.
- 14) Attach footman loops to bucket seat. Refer to the Bucket Seat Assembly Detail. **NOTE:** *Footman loops are used for seat belts (not included).*
- 15) Attach bumper to front of bucket seat. Refer to the Bucket Seat Assembly Details.
- 16) Install 1/4" x 5/8" drive rivets in all half clamps and tee clamps. Refer to the Typical Tee Clamp Spec Sheet.
- 17) (Back To Back 2 3/8" Crossovers) Drill through 2 3/8" crossover clamps and into 5" post with a 1/4" or "F" (only) drill bit, insert 1/4" x 3/8" drive rivets into holes through clamps and into post. Hammer drive rivet pins in until flush with head. Refer to the Back To Back 2 3/8" Crossovers Detail.
- 18) Apply Labels, as shown.
- 19) Install protective surfacing before users are allowed to play on the component.

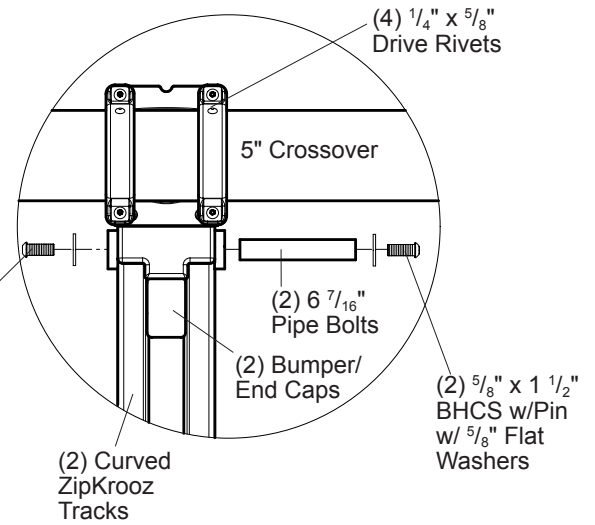


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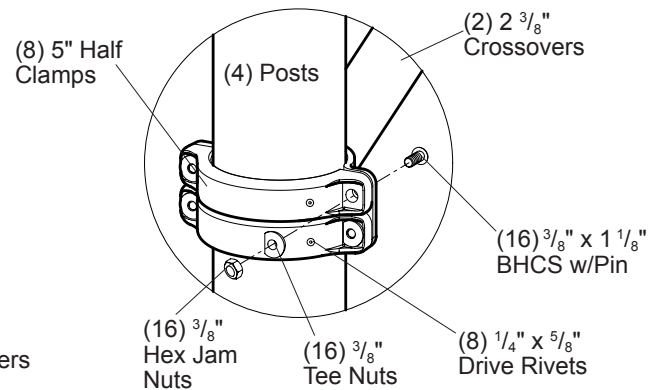
**DETAIL
TRACK ATTACHMENT**



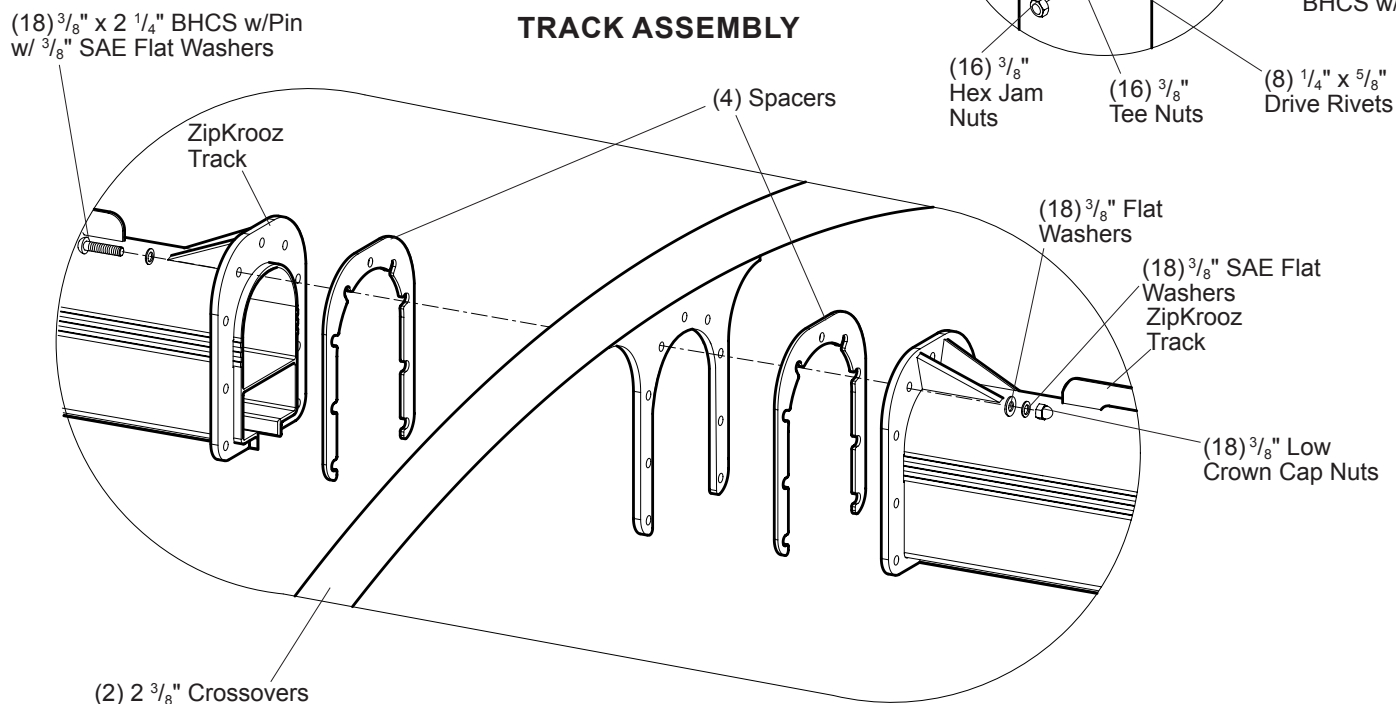
**DETAIL
BUMPER ASSEMBLY**



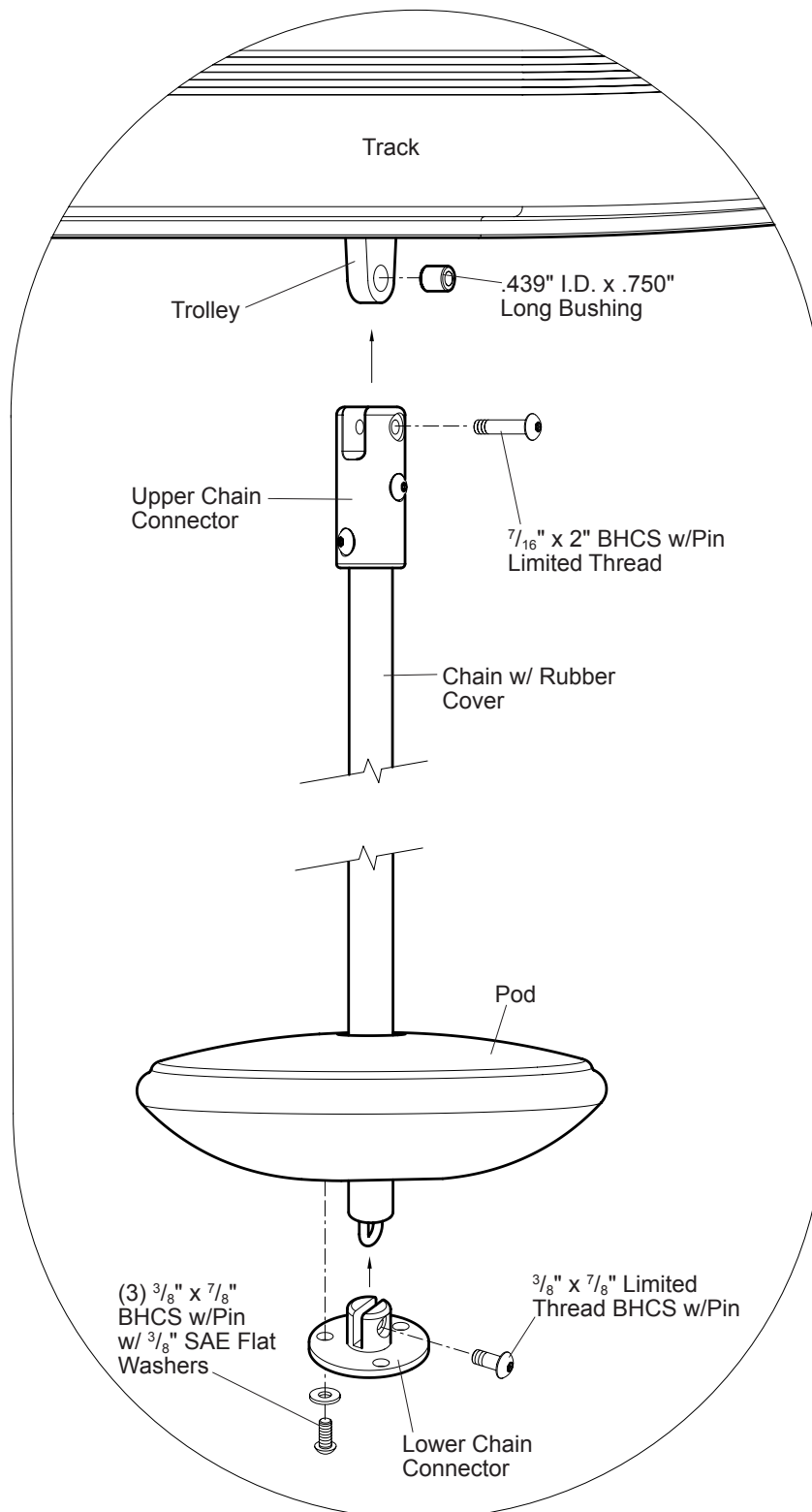
**DETAIL
CROSSOVER ATTACHMENT**



**DETAIL
TRACK ASSEMBLY**



**DETAIL
TROLLEY ASSEMBLY**



Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	20
105327	5" Half Clamp, Specify Color	20
199896	Crossover Beam, Specify Color	2
107470	84" Steel Post w/Cap, SM, Specify Color	4
198216	116" Steel Post w/Cap, SM, Specify Color	4
107520	116" Steel Post w/Cap, DB, Specify Color	4
198214	148" Steel Post w/Cap, DB, Specify Color	4
107623	84" Aluminum Post w/Cap, SM, Specify Color	4
198217	116" Aluminum Post w/Cap, SM, Specify Color	4
107694	116" Aluminum Post w/Cap, DB, Specify Color	4
198215	148" Aluminum Post w/Cap, DB, Specify Color	4
142136	Bumper, Black	2
199792	Deck, Specify Color	2
154460	Evos Climb Across Pod, Specify Color	1
205138	2 3/8" Crossover, Specify Color	2
205042	Curved ZipKrooz Track, Specify Color	2
205043	Straight ZipKrooz Track, Specify Color	1
195731	Lower Chain Connector, Aluminum, Black	1
229287	ZipKrooz Trolley Assembly, Black	1
196442	Chain w/Rubber Cover	1
199899	Deck Support 18" Deck, DB, Specify Color	2
199900	Deck Support 18" Deck, SM, Specify Color	2
205192	Spacer, Aluminum	4
199927	Deck Support Hardware Package	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100362	3/8" Flat Washer, SST	8
206172	ZipKrooz 50 Ft. Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	16
113027	3/8" x 1 3/8" BHCS w/Pin, SST	24
100201	5/8" x 1 1/2" BHCS w/Pin, SST	4
100349	3/8" Low Crown Cap Nut, SST	18
100351	3/8" Tee Nut, SST	40
100365	3/8" SAE Flat Washer, SST	36
100362	3/8" Flat Washer, SST	18
100366	5/8" Flat Washer, SST	4
100199	3/8" x 2 1/4" BHCS w/Pin, SST	18
121105	6 7/16" Aluminum Pipe Bolt	2
197123	Proper Use Label	2
115176	ASTM HD Surface Warning Label	2
156847	Play Safe Label, 5-12 YRS	2
182212	Entanglement Warning Label	2
128296	3/8" Hex Jam Nut, SST	40
196651	ZipKrooz Pod Seat Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	3
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	1
100365	3/8" SAE Flat Washer, SST	3
157704	7/16" x 2" BHCS w/Pin Limited Thread, SST	1
203702	.439" I.D. x .750" Long Bushing, SST	1
121348	4-Hole (SM) Hardware Package	10
100266	1/2" x 2 3/4" Expansion Anchor	40
100322	1/2" Standard Hex Nut, SST	40
100363	1/2" Flat Washer, SST	40

DB = Direct Bury
SM = Surface Mount

Specifications

Track: Extruded from 6005-T4 aluminum alloy. Finish: ProShield®, color specified.

Bumper: Urethane, black in color.

Spacer: .190"(4,82 mm) Thick aluminum sheet.

Deck Support: Weldment comprised of 5" (127 mm) O.D. x 7 GA. (.179") (4,54 mm) wall galvanized steel tube, and 1/2" (12,7 mm) HRPO steel plate. Finish: ProShield®, color specified.

Posts: See PlayBooster®(PB) General Specifications.

Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Deck: Flange formed from 12 GA (.105") (2,66 mm) sheet steel conforming to ASTM A1011, 1/4" (6,35 mm) HRPO flat steel and 3/8" (9,53 mm) HRPO flat steel. Standing surface is perforated with 5/16" (7,94 mm) diameter holes. The finished size measures 2 1/8" x 38 1/2" x 38 1/2" (53,98 mm x 977 mm x 977 mm). Finish: TenderTuff™, color specified.

Trolley Assy.: Steel body with urethane rollers. Completely assembled. Steel Body Finish: ProShield®, black in color.

ZipKrooz Crossover: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tubing, 3/8" (9,52 mm) thick HRPO steel plate and 1/4" (6,35 mm) thick HRPO steel. Finish: ProShield®, color specified.

Crossover: Weldment comprised of tee clamps and a 5" (127 mm) O.D. extruded 6005-T5 aluminum alloy tube with a .125" (3,17 mm) wall Finish: ProShield, color specified.

Chain w/ Rubber Cover: (Chain) Steel 1/4" (6,35 mm) straight link chain, 3,150 lbs. (1428,82 kilograms) working load limit. Finish: ProGuard. (Cover) High pressure Buna-N Rubber hose, black in color. (Connector) Aluminum.

Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: (DB) Approx. 14 man hours

(SM) Approx. 13 man hours

Min. Area Req.: 66' 10" x 21' 5" (20,37 m x 6,52 m)

Concrete: (DB) Approx. 17.82 cu. ft.

Weight: (DB) 1463 lbs. Steel

(DB) 1023 lbs. Aluminum

(SM) 1319 lbs. Steel

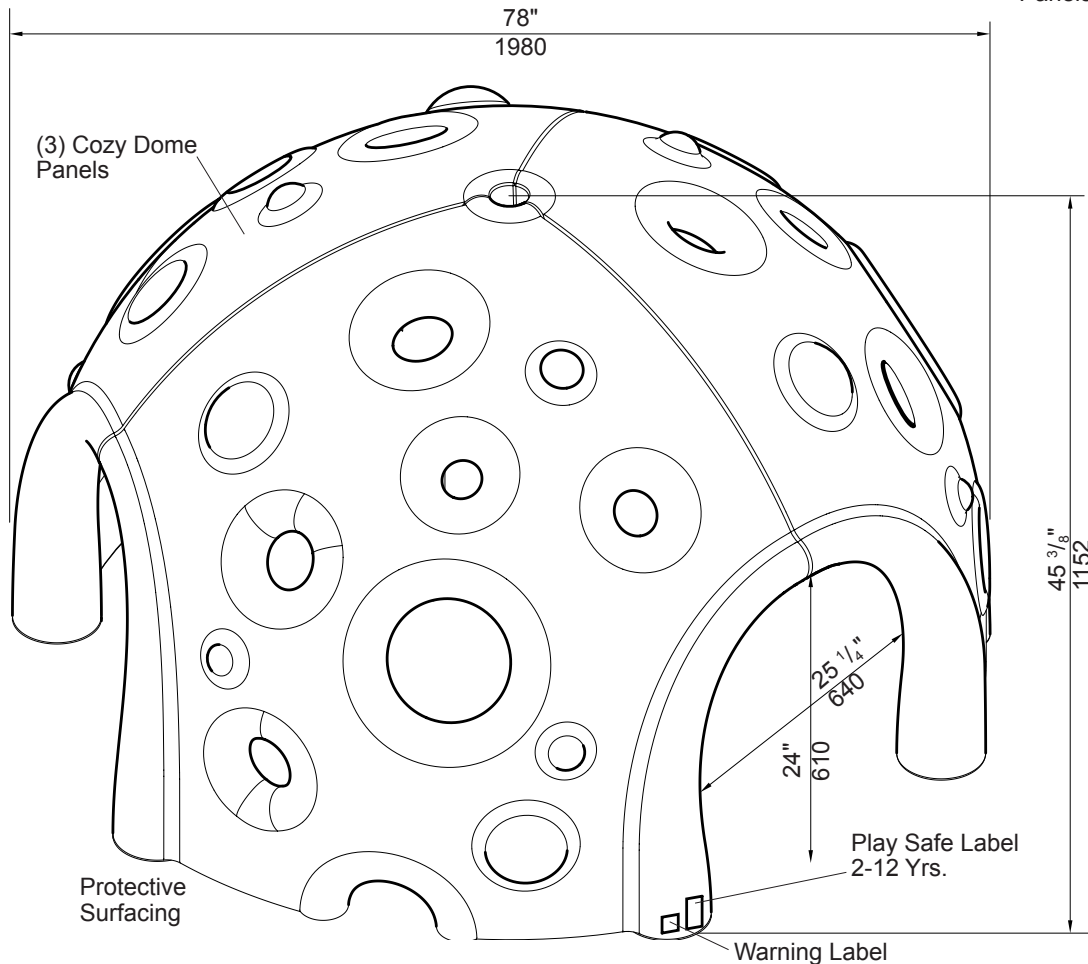
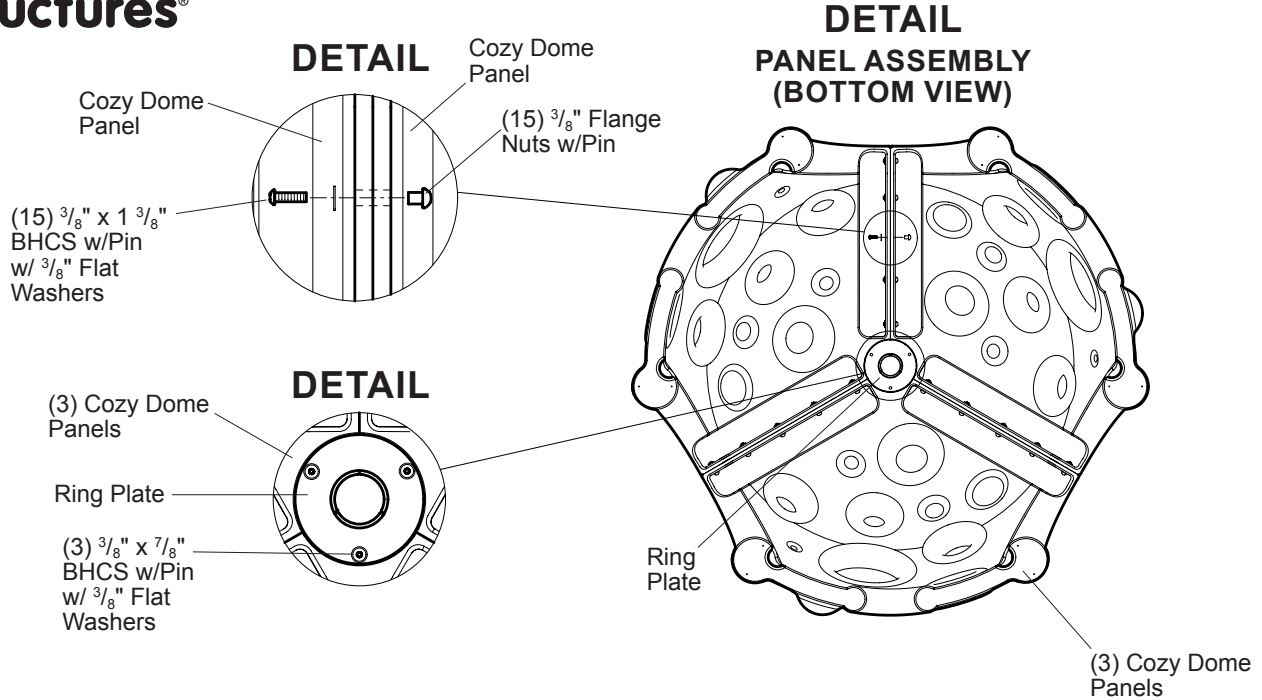
(SM) 987 lbs. Aluminum

Max. Fall Height: 105" (2,67 m)

Installation Instructions

- 1) **(Direct Bury)** Dig footings as shown. Refer to the Plan View Footing Layout.
- 2) Attach support posts to decks, using $\frac{3}{8}$ " x $1 \frac{1}{8}$ " BHCS w/pin & $\frac{3}{8}$ " flat washers. Refer to the Deck Support Attachment Detail.
- 3) Attach 5" crossover beams to posts at height shown. Refer to the Beam Attachment Detail.
- 4) Attach 2 $\frac{3}{8}$ " crossover beams to posts at height shown. Refer to the Beam Attachment Detail.
- 5) Attach the ZipKrooz tracks to the center of the crossover beams. Refer to the Track Attachment Detail.
- 6) Attach the ZipKrooz tracks to 2 $\frac{3}{8}$ " crossover beam. Refer to the Track Assembly Detail. **IMPORTANT:** *Straight ZipKrooz track must be level.*
- 7) Insert trolley assembly, then bumpers into track ends. Line up hole in bumper with collars on track and insert pipe bolt. Fasten with $\frac{5}{8}$ " x $1 \frac{1}{2}$ " BHCS w/pin and $\frac{5}{8}$ " flat washers. Refer to the Bumper Detail.
- 8) **(Direct Bury)** With posts plumb and decks level, pour concrete footings. Refer to the Direct Bury Detail. **NOTE:** *Allow concrete to cure for 72 hours before attaching cable with pod to trolley.*

(Surface Mount) Drill $\frac{1}{2}$ " x 3" deep holes through post plates using hammer drill and $\frac{1}{2}$ " masonry bit. Tap expansion anchors into drilled holes. Fasten 5" posts to expansion anchors using $\frac{1}{2}$ " standard hex nuts with $\frac{1}{2}$ " flat washers.
- 9) Attach chain w/rubber cover to trolley. Refer to the Trolley Assembly Detail.
- 10) Attach pod to chain w/rubber cover. Refer to the Pod Attachment Detail.
- 11) Install $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Tee Clamp Spec Sheet.
- 12) Apply Labels, as shown.
- 13) Install protective surfacing before users are allowed to play on the component.



Parts List

Part#	Description	Qty.
167519	Cozy Dome Panel, Specify Color.....	3
167705	Ring Plate, Specify Color.....	1
167706	Direct Bury Plate, Specify Color.....	6
169488	Mount Plate, (SM), Specify Color.....	6
169478	1 1/8" O.D. x 1 3/8" Long Spacer Tube, AL.....	12
183888	Cozy Dome Hardware Package for DB	1
100196	3/8" x 7/8" BHCS w/Pin, SST	15
100353	3/8" Flange Nut w/Pin, SST	15
100362	3/8" Flat Washer, SST	30
113027	3/8" x 1 3/8" BHCS w/Pin, SST	15
156846	Play Safe Label 2-12 Yrs.....	1
183064	Warning Label	1
240643	Cozy Dome Hardware Package for SM	1
100196	3/8" x 7/8" BHCS w/Pin, SST	3
100263	3/8" x 2 3/4" Expansion Anchor	6
100327	3/8" Standard Hex Nut, SST	6
100353	3/8" Flange Nut w/Pin, SST	15
100362	3/8" Flat Washer, SST	24
113027	3/8" x 1 3/8" BHCS w/Pin, SST	15
116695	3/8" x 2" FHCS, SST.....	12
156846	Play Safe Label 2-12 Yrs.....	1
183064	Warning Label	1

DB = Direct Bury
SM = Surface Mount

Specifications

Cozy Dome Panel:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Ring Plate:	Fabricated from 1/4" HRPO steel plate. Finish: ProShield®, color specified.
Mount Plate:	Fabricated from 1/4" HRPO steel plate. Finish: ProShield, color specified.
Direct Bury Plate:	Weldment comprised of 2.375" O.D. RS20 (.095"-.105") wall galvanized steel tubing and 1/4" HRPO steel plate. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	DB - Approx. 4 man hours SM - Approx. 2 1/2 man hours
Concrete Req.:	DB - Approx. 7.85 cu. ft.
Weight:	DB - 247 lbs. SM - 197 lbs.
Area Required:	18' 6" (5,63 m) diameter
Min. Use Zone:	6' (1,82 m)
Fall Height:	46" (1,16 m)

Installation Instructions

(Direct Bury)

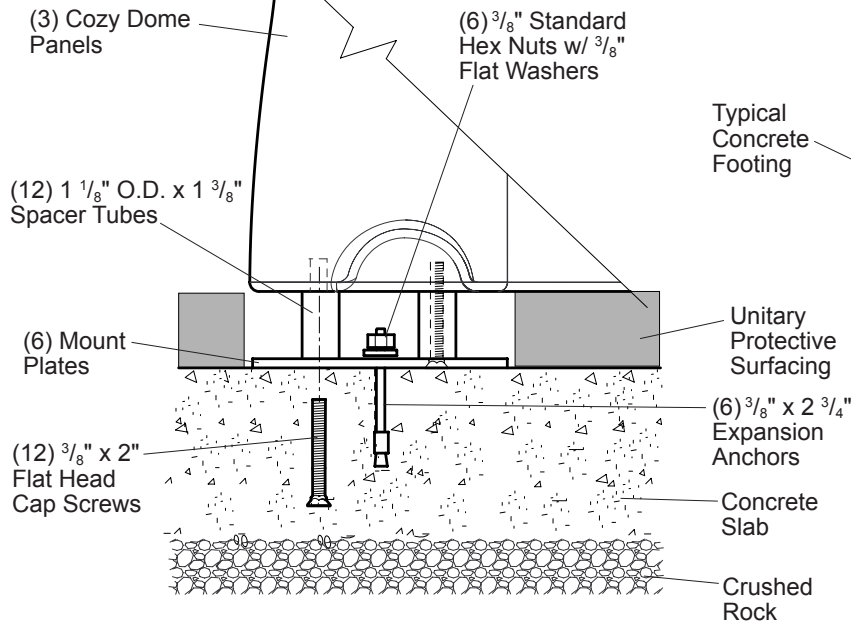
- 1) Refer to the Site Plan for footing locations.
- 2) Attach ring plate to Cozy Dome panels, using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Panel Assembly Details.
- 3) Attach Cozy Dome panels together, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers and 3/8" flange nuts w/pin. Refer to the Panel Assembly Details. **NOTE:** For ease of installation, insert the 3 interior bolts first, followed by the 3 outer bolts and then the interior bolts.
- 4) Attach direct bury plates to Cozy Dome panels, using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers. Refer to the Direct Bury Detail.
- 5) With Cozy Dome in position and level, pour concrete footings. Allow concrete to cure a minimum of 72 hours before allowing users to play on the structure.
- 6) Apply labels as shown.
- 7) Install protective surfacing before users are allowed to play on the structure.

(Surface Mount)

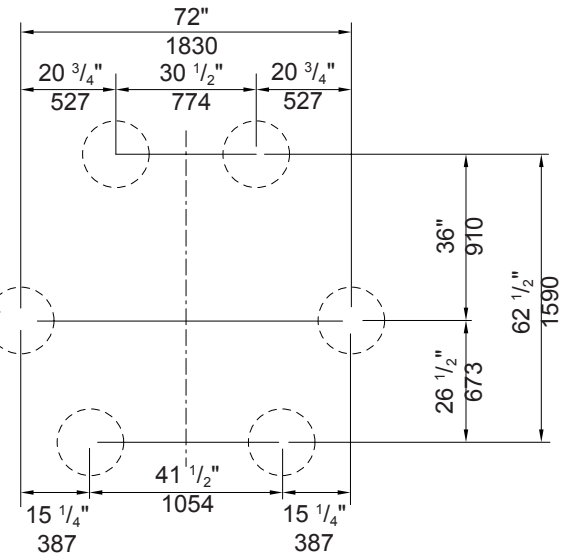
- 1) Attach ring plate to Cozy Dome panels, using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Panel Assembly Details.
- 2) Attach Cozy Dome panels together, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers and 3/8" flange nuts w/pin. Refer to the Panel Assembly Details. **NOTE:** For ease of installation, insert the 3 interior bolts first, followed by the 3 outer bolts and then the interior bolts.
- 3) Attach mount plates to Cozy Dome panels, using 1 3/8" spacer tubes and 3/8" x 2" flat head cap screws. Refer to the Surface Mount Detail.
- 4) With Cozy Dome in position, mark anchor bolt locations on the concrete slab (through holes in mount plates). Move Cozy Dome aside. Drill 3/8" x 3" deep holes, using a hammer drill and 3/8" masonry bit.
- 5) Reposition Cozy Dome. Tap 3/8" x 2 3/4" expansion anchors into drilled holes. Fasten mount plates to 3/8" x 2 3/4" expansion anchors, using 3/8" standard hex nuts with 3/8" flat washers. Refer to the Surface Mount Detail.
- 6) Apply labels as shown.
- 7) Install protective surfacing before users are allowed to play on the structure.

**DETAIL
PLAN VIEW/FOOTING LAYOUT**

**DETAIL
SURFACE MOUNT**



Typical
Concrete
Footing



**DETAIL
DIRECT BURY**

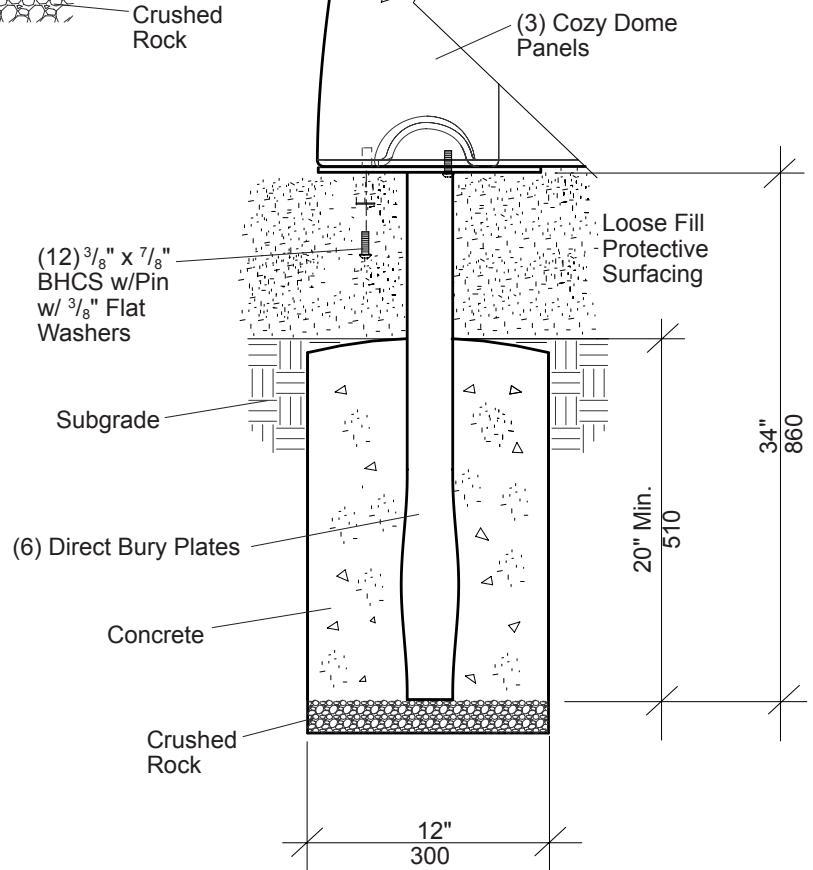


Exhibit B: Sign-in sheet identifying the attendees of the mandatory pre-bid meeting.



Name - Organization	Email (and/or Phone)
Susan Muir – Director of Parks and Recreation, City of McMinnville	Susan.Muir@mcminnvilleoregon.gov / 503-434-7359
Jim Sandlin – Landscape Architect, Mackay Spósito, Inc.	jsandlin@mackaysposito.com / 503-381-2386
Rich Spofford – Engineering Services Manager	Rich.spofford@mcminnvilleoregon.gov / 503-434-7321
David Renshaw - Public Works Superintendent	David.renshaw@mcminnvilleoregon.gov / 503-434-7316
Anne Lane – Parks and Recreation Manager	Anne.lane@mcminnvilleoregon.gov / 503-435-0407
Mike Lyon - Lyon Excavating, Inc	MUELYONEX.COM (503) 318-7396
Austin Owings - Brown Contracting	SEAN@browncontracting.net / 541-338-9345
Daryl Wimmer - Kosark Pacific Const.	Daryl@kosarkca.com 503.777.5494
Jeanie Braun - Braun Construction	JBbraun@msn.com 503-638-6406
Robert Dousten - R&R General Contractors, Inc.	estimating@rgcinc.net (503) 586-0388
Tylan Hershey - Tapani, Inc.	QUOTES@TAPANI.COM (360) 687-1148
Aron Skwik - Emery and Sons	bids@emeryandsons.com 583 588 7576
Don Mienke D+D Concrete & Utilities	DOD AT DDCU LLC, com 503-266-5229
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