

# Westlake Village Community Park

Westlake Village, CA June 24, 2016 56052-1-9-1



\*Custom products are shown as conceptual only. \*Custom product manufacturing time for this project will be approximately 4 weeks from the time of LSI order acceptance.

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# Westlake Village Community Park

Westlake Village, CA June 24, 2016 56052-1-9-2



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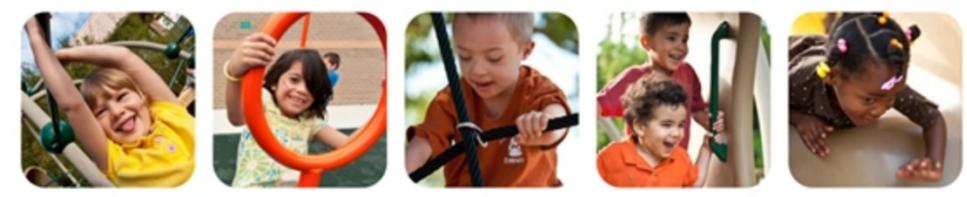
# Westlake Village Community Park

Westlake Village, CA June 24, 2016 56052-1-9-3



\*Custom products are shown as conceptual only. \*Custom product manufacturing time for this project will be approximately 4 weeks from the time of LSI order acceptance.

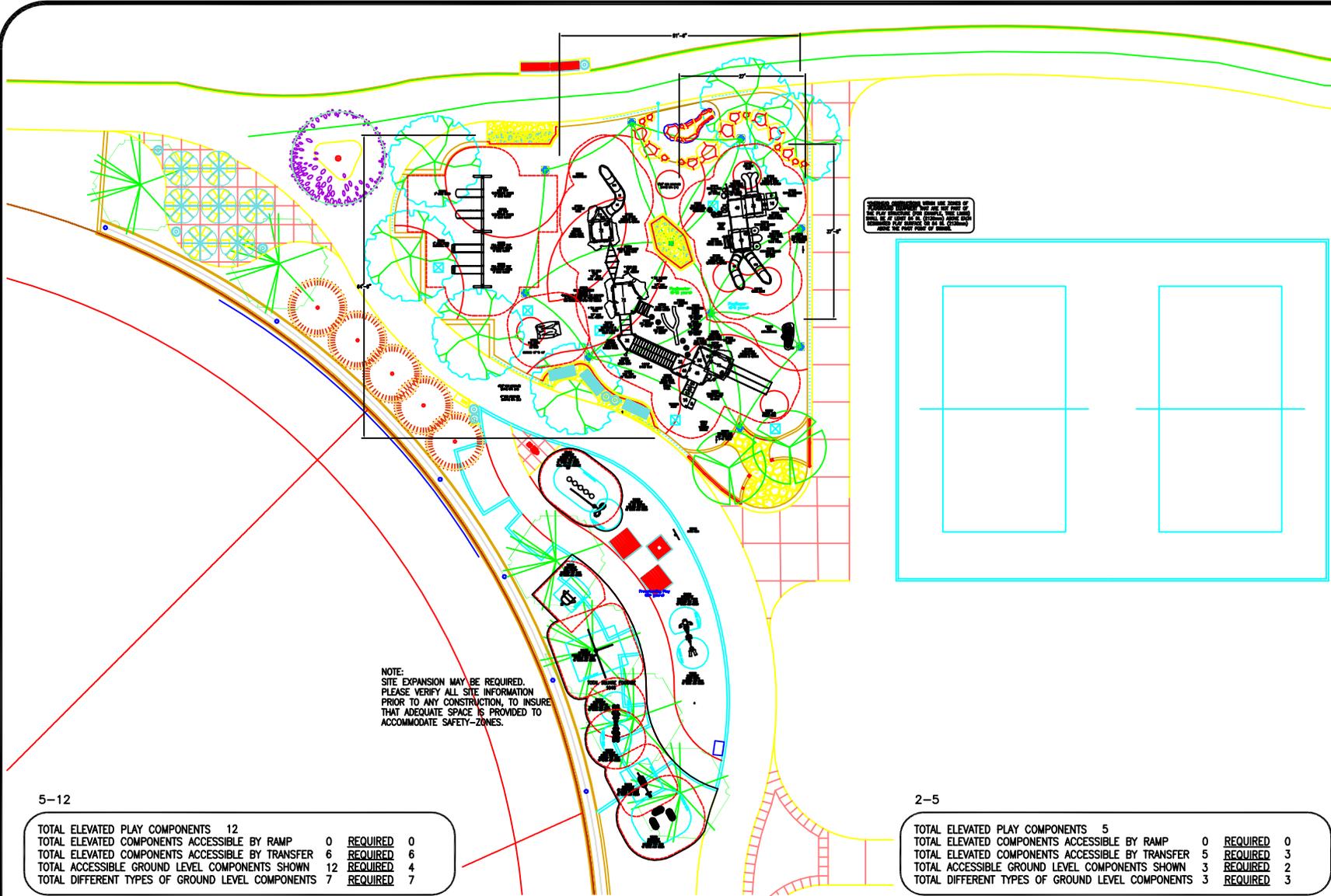
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REFER TO DRAWING WITH THE TITLE OF THIS PLAN TO VERIFY THE LOCATION OF ALL PLAY COMPONENTS. VERIFY THE LOCATION OF ALL PLAY COMPONENTS AND THE LOCATION OF ALL PLAY COMPONENTS AND THE LOCATION OF ALL PLAY COMPONENTS.

NOTE:  
SITE EXPANSION MAY BE REQUIRED.  
PLEASE VERIFY ALL SITE INFORMATION  
PRIOR TO ANY CONSTRUCTION, TO INSURE  
THAT ADEQUATE SPACE IS PROVIDED TO  
ACCOMMODATE SAFETY-ZONES.

5-12

TOTAL ELEVATED PLAY COMPONENTS	12	0	REQUIRED	0
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY RAMP	0	REQUIRED	6	6
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY TRANSFER	6	REQUIRED	12	4
TOTAL ACCESSIBLE GROUND LEVEL COMPONENTS SHOWN	12	REQUIRED	7	7
TOTAL DIFFERENT TYPES OF GROUND LEVEL COMPONENTS	7	REQUIRED		

2-5

TOTAL ELEVATED PLAY COMPONENTS	5	0	REQUIRED	0
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY RAMP	0	REQUIRED	5	3
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY TRANSFER	5	REQUIRED	3	2
TOTAL ACCESSIBLE GROUND LEVEL COMPONENTS SHOWN	3	REQUIRED	3	3
TOTAL DIFFERENT TYPES OF GROUND LEVEL COMPONENTS	3	REQUIRED		

landscape structures



The play components identified on this plan are IREMA certified. (Unless model number is preceded with \*) The use and layout of these components conform to the requirements of ASTM F1487. To verify product certification, visit [www.irema.org](http://www.irema.org)

THIS LAYOUT INCLUDES FITNESS EQUIPMENT FOR USERS AGES 13 AND OLDER. IF THE MANUFACTURERS OPINION AND INTENT THAT THE USE AND LAYOUT OF THESE COMPONENTS CONFORM WITH THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS, ASTM F2131.

THIS PLAY AREA & PLAY EQUIPMENT IS DESIGNED FOR AGES 2-12 YEARS UNLESS OTHERWISE NOTED ON PLAN.

IT IS THE MANUFACTURERS OPINION THAT THIS PLAY AREA DOES CONFORM TO THE A.D.A. ACCESSIBILITY STANDARDS, ASSUMING AN ACCESSIBLE PROTECTIVE SURFACING IS PROVIDED, AS INDICATED, OR WITHIN THE ENTIRE USE ZONE.

THIS CONCEPTUAL PLAN WAS BASED ON INFORMATION AVAILABLE TO US PRIOR TO CONSTRUCTION. DETAILED SITE INFORMATION INCLUDING SITE DIMENSIONS, TOPOGRAPHY, EXISTING UTILITIES, SOIL CONDITIONS, AND DRAINAGE SOLUTIONS SHOULD BE OBTAINED, EVALUATED, & UTILIZED IN THE FINAL DESIGN. PLEASE VERIFY ALL DIMENSIONS OF PLAY AREA, SIZE, ORIENTATION, AND LOCATION OF ALL EXISTING UTILITIES, EQUIPMENT, AND SITE FINISHINGS PRIOR TO ORDERING. SLIDES SHOULD NOT FACE THE HOT AFTERNOON SUN.

CHOOSE A PROTECTIVE SURFACING MATERIAL THAT HAS A CRITICAL HEIGHT VALUE TO MEET THE MAXIMUM FALL HEIGHT FOR THE EQUIPMENT (REF. ASTM F1487 STANDARD). CONSIDER SAFETY PERFORMANCE SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE, SECTION 8 CURRENT EDITION. THE SURFACING MUST BE WELL DRAINED. IF THE SOIL DOES NOT DRAIN NATURALLY IT MUST BE TILED OR SLOPED 1/4" TO 1/4" PER FOOT TO A STORM SEWER OR A "TRENCH DRAIN".

AREA OF ACCESSIBLE/PROTECTIVE SURFACING (POURED-IN-PLACE SUGGESTED)

DESIGNED BY:  
SS

COPYRIGHT: 6/13/16  
LANDSCAPE STRUCTURES, INC.  
401 7th STREET SOUTH - P.O. BOX 188  
MELAND, MINNESOTA 55328  
Ph: 1-800-358-0030 Fax: 1-763-872-0091

Date	Previous Drawing #	Initials



Westlake Village Community Park  
Westlake Village, CA

RecWest Outdoor Products, Inc.  
Joel Shnowski

SYSTEM TYPE:  
PlayBooster  
DRAWING #:  
56052-1-7



# Installation Specifications

2-5 Year Installation Spec



MODEL NUMBERS NOT FOUND

225026



**110070 is the Site Plan**

**Not an Install doc.**



115176 is a hard  
surface label

Not an Install doc.



120688 is a danger  
keep off sign

Not an Install doc.



120688 is a danger  
keep off sign

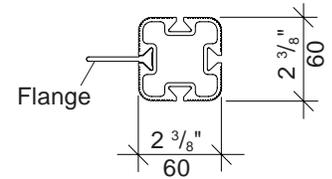
Not an Install doc.



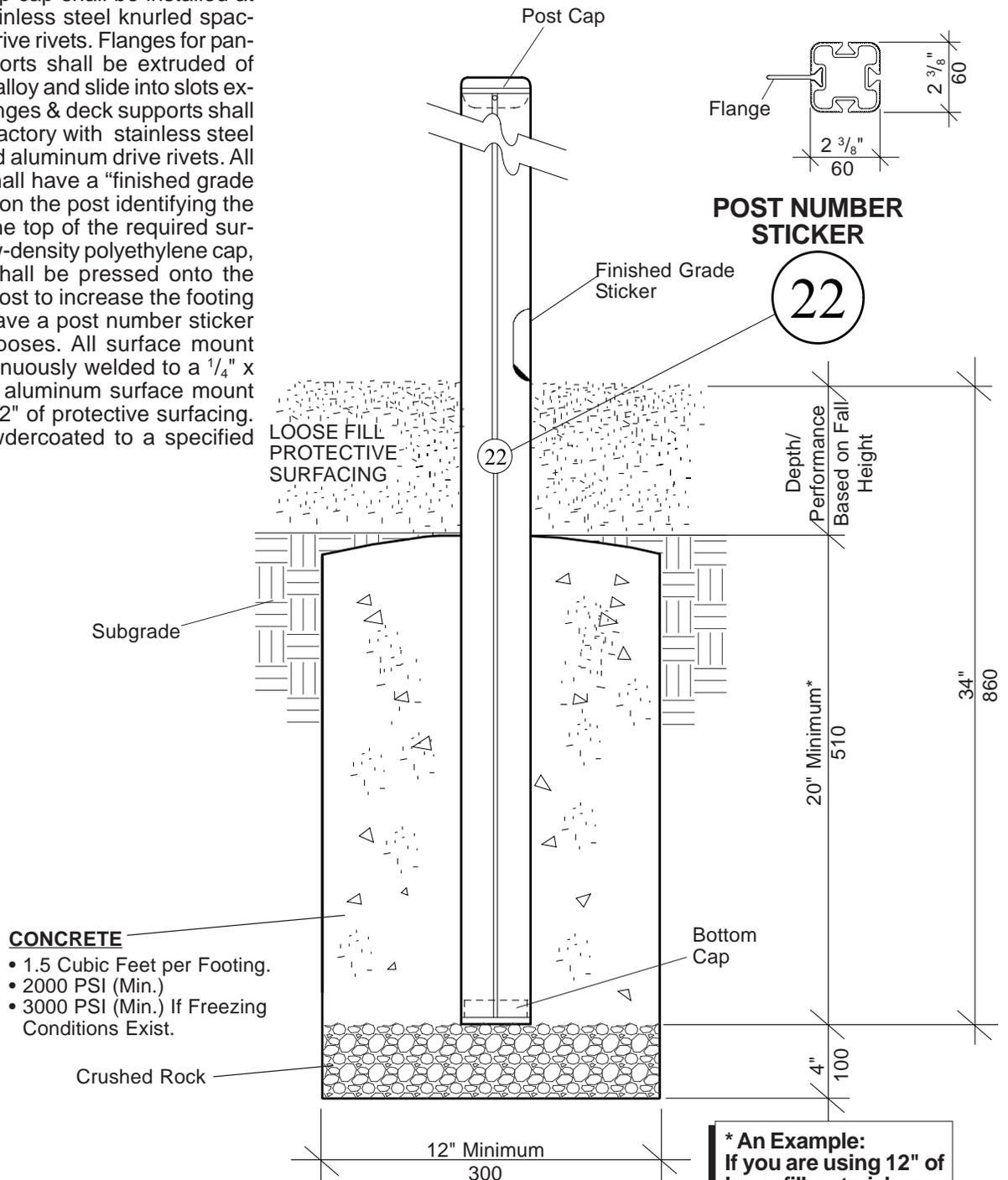
**Post Specifications:**

2 3/8" square aluminum posts shall have a minimum wall thickness of .125" and be extruded of 6005-T5 aluminum alloy and have rounded corners and ribbed faces for maximum safety. A cast aluminum top cap shall be installed at the factory with stainless steel knurled spacers and aluminum drive rivets. Flanges for panels and deck supports shall be extruded of 6005-T5 aluminum alloy and slide into slots extruded in posts. Flanges & deck supports shall be attached in the factory with stainless steel knurled spacers and aluminum drive rivets. All direct bury posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line and the top of the required surfacing. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area. Posts shall have a post number sticker for installation purposes. All surface mount posts shall be continuously welded to a 1/4" x 6" square 6061-T6 aluminum surface mount plate and allow for 2" of protective surfacing. Posts shall be powdercoated to a specified color.

**POST  
CROSS SECTION**



**POST NUMBER  
STICKER**



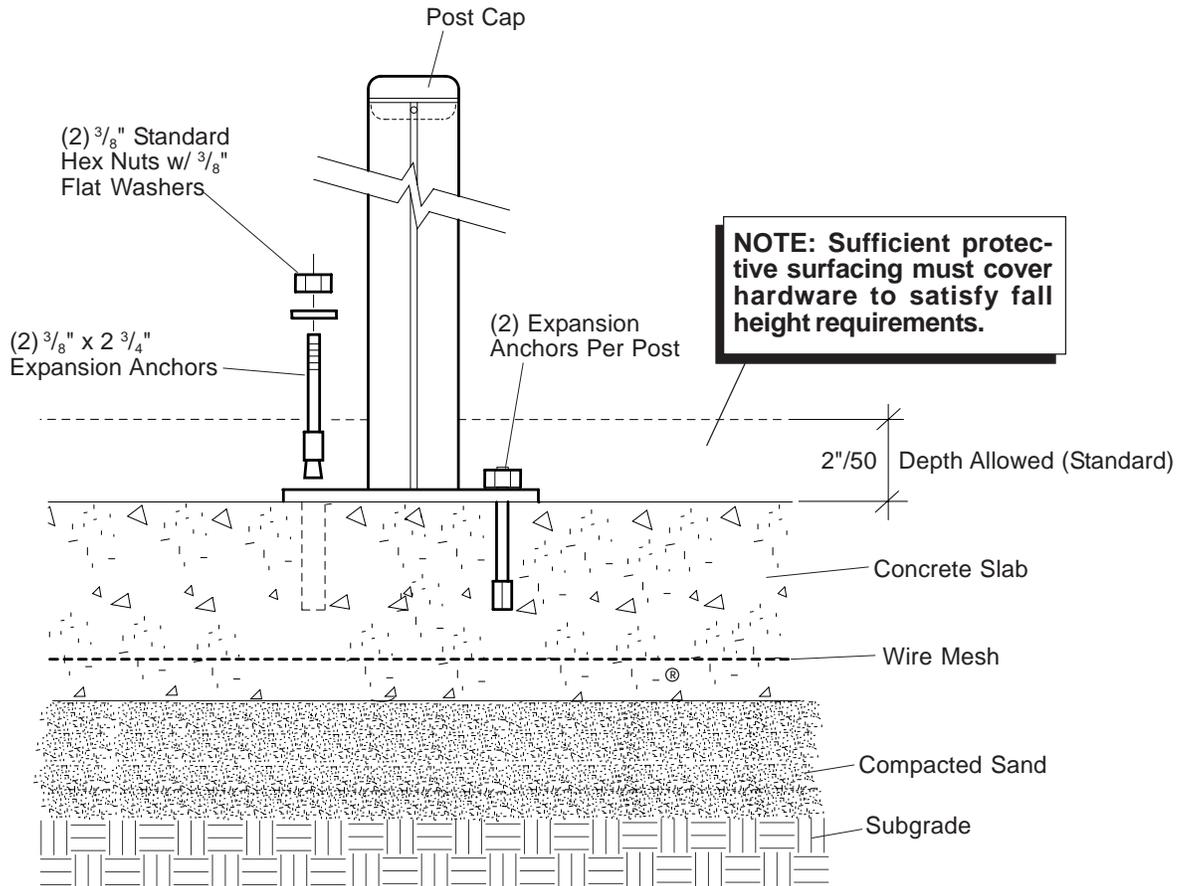
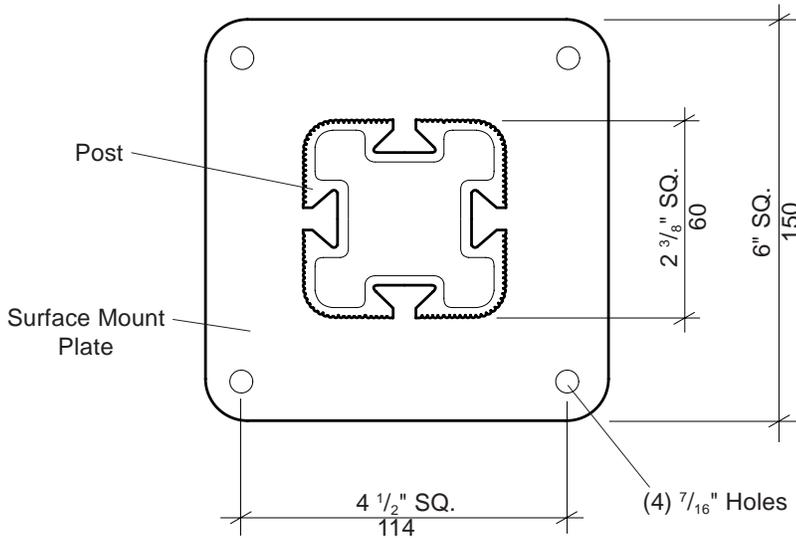
- CONCRETE**
- 1.5 Cubic Feet per Footing.
  - 2000 PSI (Min.)
  - 3000 PSI (Min.) If Freezing Conditions Exist.

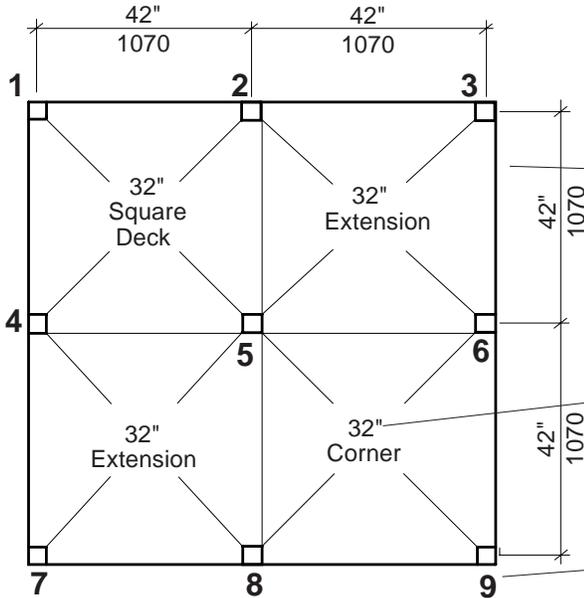
**\* An Example:**  
If you are using 12" of loose fill material, your concrete footing will be 22" deep.

**SAFETY NOTE**  
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

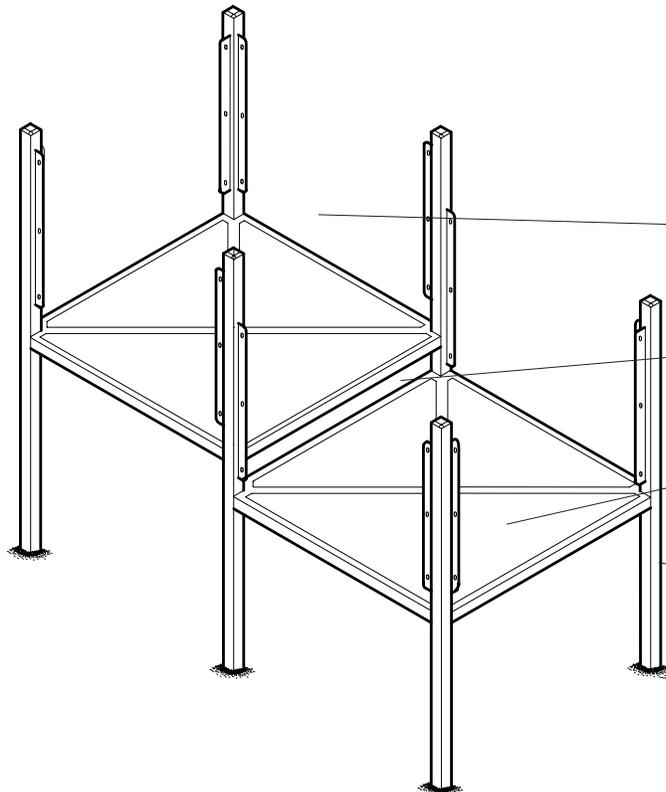
124919a0

**POST CROSS SECTION**





- Panels or components are required on any decks higher than 16" as indicated on your plan drawing.
- Dimension indicates center to center spacing of concrete footings.
- Number indicates height of deck above finished grade/protective surfacing.
- Number indicates post number as indicated on your plan drawing and post itself.



- Panels/ Components** - Refer to your plan drawing for locations and their respective spec sheets for installation.
- Kick Plates** - Refer to your plan drawing for location and the Kick Plate spec sheet for installation.
- Decks** - Refer to your plan drawing for heights and orientation. Refer to the appropriate deck spec sheet for installation.
- Posts** - Refer to your plan drawing for location & orient according to deck mount flanges.
- Footings** - Refer to the Typical Post Concrete Footing/Surface Mount spec sheet for footing installation.

## Installation Instructions

**Before Starting, Read the General Construction Guidelines, Installation Hints, All Typical Detail Sheets and Specific Installation Instructions for Each Component Labeled on Your Plan.**

- 1) Dig footing holes spaced as shown on the plan and spec sheets. Refer to the typical concrete footing spec sheet.
- 2) Note the post numbers as shown on the plan and set posts in their appropriate footing holes. The post number is indicated on the finished grade sticker on each post.
- 3) Orient the post flanges in proper direction with the deck mount flanges facing deck. Attach decks to posts. Be sure that the decks are snug (no gaps) to the posts.
- 4) After all the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the typical concrete footing spec sheet.
- 5) Continue installing panels and components and pour concrete footings as you progress, making sure everything is plumb and level.
- 6) When installation is complete, install protective surfacing under and around all equipment before users are allowed to play on the structure.

## PlayShaper Installation

- 1) Before starting installation, study your *PlayShaper* plan drawing and all installation instructions carefully for location of posts, deck heights, components and safety enclosures. Make sure slides are oriented away from the afternoon sun and that the structure is visible (easily supervised) and accessible.
- 2) Clear an area large enough for your *PlayShaper* and at least the required minimum use zone around it, as shown on your plan drawing. The subsurface must be well drained. If the soil does not drain naturally it must be tiled or sloped at  $\frac{1}{8}$ " to  $\frac{1}{4}$ " per foot to a storm sewer or a "French Drain". If your *PlayShaper* is over 30' in length it is recommended to install more than one "French Drain" or similar system to allow drainage from the center of the play area and decrease the overall slope. If this is not possible, the structure may need to be "stepped" to take up the grade change.
- 3) Overhead Obstructions: Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example, tree limbs) shall be at least 84 in. (2130 mm) above each designated play surface or 84 in. (2130 mm) above the pivot point of swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes, such as the National Electrical Safety Code.
- 4) Locate all mainstructure post footing holes according to the dimensions shown on your plan. This can be accomplished by laying a deck on the ground and measuring from it; by laying out a base line string grid or using a builders transit. This step is very important and worth taking extra time to be precise. Location of component footings such as slide supports can be done at a later time.
- 5) Refer to the Typical Concrete Footing installation sheet. Dig holes to the proper width and depth as shown. (Only dig enough holes for one day's construction. Do not leave holes open over night.) Pour crushed rock in each hole **level with each other** and at least 4" deep as shown. This can be easily accomplished either with a builders transit or by laying out hole locations with a string grid, leveling the grid, and measuring down from the grid for each footing. Tamp the crushed rock down until compacted and at proper level. This step is important to ensure all posts will be at the proper height relative to each other, and it greatly simplifies installation. If the soils are loose or unstable, larger diameter holes may be necessary. Check with a local engineer if in doubt.
- 6) Start with the lowest deck and work your way to the highest deck following instructions on the installation sheets for typical post/deck assembly. Install barriers and roofs as located on the plan for stability.
- 7) After the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Detail.
- 8) During construction, the site and all the material on it must be secured when unattended to prevent children from playing on them. Do not leave decks with unprotected openings when unattended-use temporary barricades if necessary.
- 9) Install all other play components per the installation instructions. After all components and enclosures are properly attached, pour the remaining concrete footings per the Typical Concrete Footing Detail.
- 10) Install protective surfacing material.
- 11) Carefully and thoroughly inspect the entire *PlayShaper* to be sure all fastening hardware is tight. According to ASTM F1487, section 6.2 sharp points, edges and protrusions; any exposed bolt ends should not protrude beyond the face of the nut more than two (2) threads. This condition is not planned, but may exist in some applications because materials and finishes will vary. To remedy this situation, add a second nut or washer(s), extras have been added to the spare parts kit. See illustrations on reverse side of this sheet. Children should not be allowed on the structure until this inspection is complete.
- 12) Before children are allowed on the structure, the site must be cleaned and free of all construction debris and packaging material. Do not burn on the site.

## Tools Required

Tools required for installation are an auger, or other equipment for digging 12" diameter footing holes; shovels, rubber mallet, drill (with  $\frac{1}{4}$ ",  $\frac{7}{16}$ ",  $\frac{9}{16}$ ",  $\frac{11}{16}$ " and  $\frac{3}{8}$ " drill bits), tape measure, hex keys or allen wrenches, level,  $\frac{3}{8}$ " socket set, hammer, open end wrench set, screw driver, for surface mount a hammer drill,  $\frac{3}{8}$ " and  $\frac{1}{2}$ " masonry bits and transit or string line to aid in layout.

## Materials Required

All *PlayShaper* materials are supplied except concrete for footings, protective surfacing material, and curbing or edging material. With the exception of the special wrenches required (for the pinned hex fasteners) no other tools are supplied.

## Recycling

Many of our packaging materials can be recycled, please take the time to separate and deliver them to a recycler. Thank You.

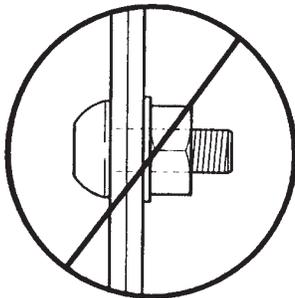
## Installation Times

Installation times, as noted on the back of the installation sheets, are *approximate* and will vary depending on soil conditions, installer's equipment and ability. Times indicated *do not* include unloading or unpacking equipment. The man hours given are for one person installing (unless otherwise noted). Cut time in half for two people.

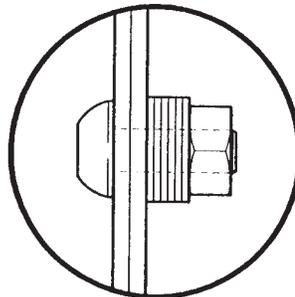
## Technical Services

If you have any questions or concerns about the installation of your structure, call our Technical Services Department at: **1-800-328-0035** (7:30 - 5:30p.m. CST/M-F).

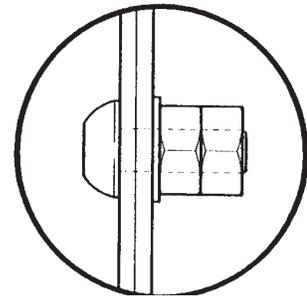
### Illustrations For Note 9, (Reverse Side Of This Sheet)



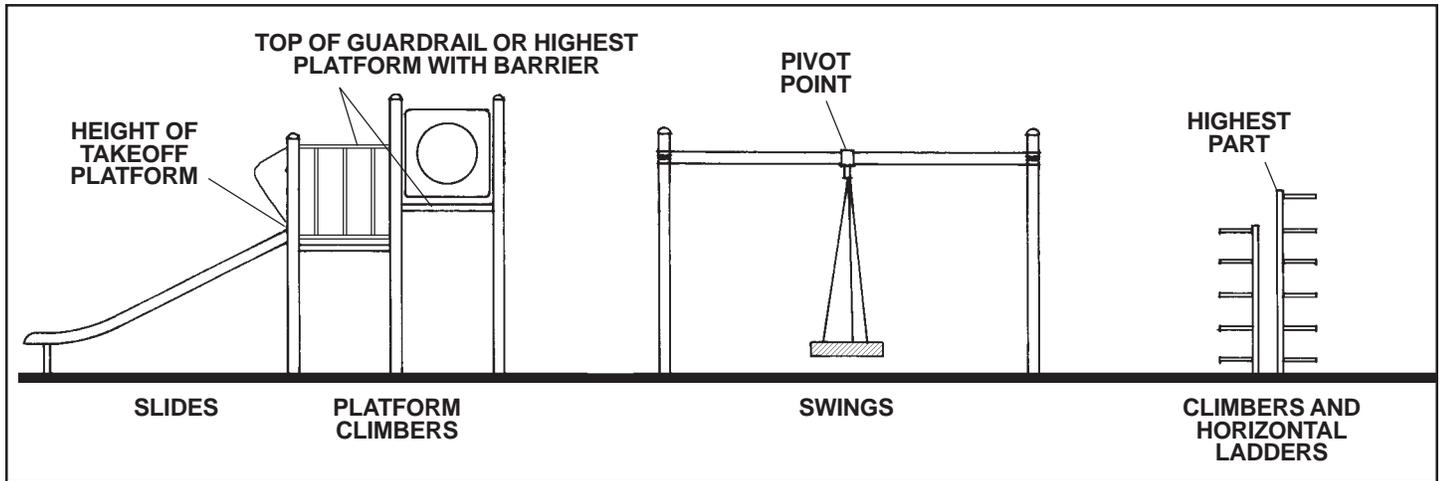
More Than Two (2)  
Threads Exposed



Add Washers



Add Another Nut  
(Align Flat Areas)



- 1.) Determine the highest accessible part - by definition.
- 2.) Determine the type of surfacing material desired:
  - *Unitary* - Bound rubber type materials for the accessible areas.
  - *Loose-fill* - Sand, wood chips, etc. for non-accessible areas.
- 3.) Select a material that has a Critical Height value of at least the height of the highest accessible part.
  - According to the CPSC, Critical Height is defined as the maximum height from which the instrumented metal headform, upon impact, yields both a peak deceleration of no more than 200 G's and a HIC value of no more than 1,000 when tested in accordance with the procedure described in the ASTM Test Method F1292.
  - Request independent laboratory test results showing the critical height of each product per the above procedures for commercially available products. The CPSC has tested some common loose-fill materials that are commonly not tested as a protective surfacing. (See back page.)
- 4.) Cover the designated use zone with the desired materials. If a different type of material is used for the accessible route of travel, make sure the surfaces are maintained flush.



**SAFETY NOTE**  
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

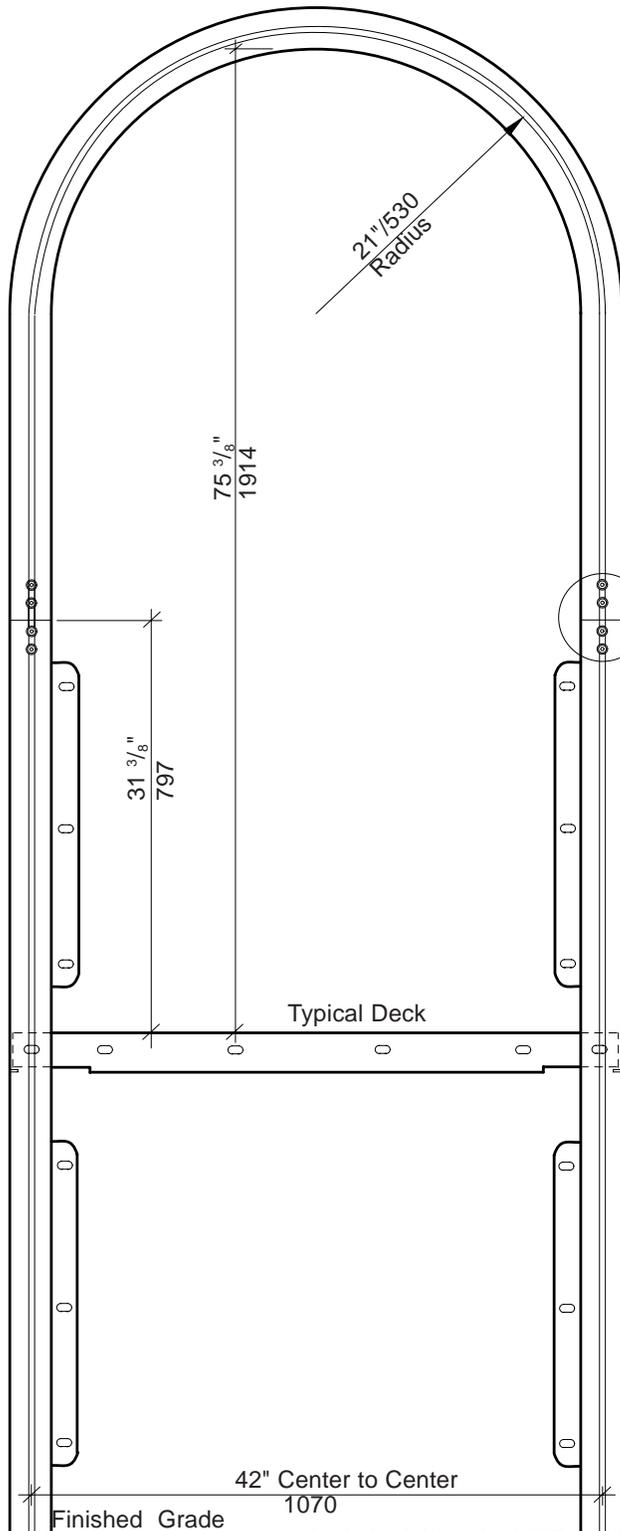
### Critical Heights (in Feet)

Material	Uncompressed Depth			Compressed Depth *
	6"	9"	12"	9"
* Wood Mulch .....	7'	10'	11' .....	10'
* Double Shredded Bark Mulch .....	6'	10'	11' .....	7'
* Uniform Wood Chips .....	6'	7'	12' .....	6'
* Fine Sand .....	5'	5'	9' .....	5'
* Coarse Sand .....	5'	5'	6' .....	4'
* Fine Gravel .....	6'	7'	10' .....	6'
* Medium Gravel .....	5'	5'	6' .....	5'

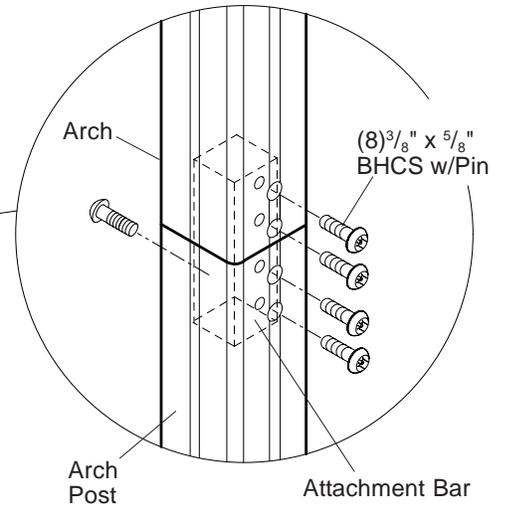
NA = Not Available

- \* **NOTE:** Compressed depths most accurately depict conditions on a playground.
- \* An approximation of the maximum fall height from which a life-threatening head injury would not be expected to occur, based on tests in which a headform yielded both a peak deceleration of less than 200 G's and a HIC of less than 1000 upon impact.
- \* Handbook for *Public Playground Safety*, published by the U.S. Consumer Products Safety Commission, Section 10, Table 2, page 21.

## Critical Heights



**DETAIL  
ARCH POST ATTACHMENT**



**NOTE:** Attach the attachment bars loosely to the arches first, using  $\frac{3}{8}$ " x  $\frac{5}{8}$ " BHCS w/Pin. This will eliminate the possibility of dropping bar into post.

**NOTE:** Refer to your Plan Drawing for location of Arches.

Standard Concrete Footings Required w/ 34" Bury

## Parts List

Part#	Description	Qty.
113395-00	Arch, Specify Color .....	1
<b>114215-00</b>	<b>Arch Hardware Package</b> .....	1
100195-00	$\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/Pin, SST .....	16
113310-00	Attachment Bar .....	2

## Specifications

**Arch:** See PlayShaper (PS) General Specifications.

**Attachment Bar:** Fabricated from 1  $\frac{1}{4}$ " square x 5  $\frac{3}{4}$ " 6061-T6511 aluminum.

**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) **NOTE:** Attach the attachment bars loosely to the arches first, using  $\frac{3}{8}$ " x  $\frac{5}{8}$ " BHCS w/pin. This will eliminate the possibility of dropping bar into post.
- 2) Insert arches with attachment bars into posts and attach loosely using  $\frac{3}{8}$ " x  $\frac{5}{8}$ " BHCS w/pin, see detail. **NOTE:** Minimize the gap between the arch and posts then tighten all hardware.
- 3) Install protective surfacing before users are allowed to play on the structure.

## "How to distribute your hardware *Headache Free*"



We have received feedback from you, our customers, that the most common delay in completing your playground installation is lost or misplaced hardware.

Some of our most successful installations have used a "*check-out*" system with one person appointed to distribute the various hardware packages. Installation sheets are provided for each component that indicate hardware packages/items required to assemble that component. Refer to these sheets to determine which hardware items to request from the designated "*check-out*" person.

### HELPFUL HINTS:

Read installation sheets.

Be sure to use the correct length hardware as specified on the installation sheets.

Be sure to use clamps in the correct location as indicated on the installation sheets.



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# Warning

**Your playground may include equipment containing moving parts. Moving parts are more vulnerable to wear, mis-use and abuse than other non-moving parts. It is critical these parts be inspected and maintained according to our recommendations.**

**As the owner, it is your responsibility to perform preventative maintenance and record your findings. Failure to do so may create a hazard and cause serious injury or death.**



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# ***IMPORTANT SAFETY NOTES!***

According to the U.S. Consumer Product Safety Commission (CPSC) nearly 70% of all playground injuries are caused by falls to the surface.

## **PLEASE INSTALL AND MAINTAIN ADEQUATE PROTECTIVE SURFACING UNDER AND AROUND YOUR PLAYSTRUCTURE!**

Never let children play on the equipment before protective surfacing is installed.

Consult the CPSC's Handbook for Public Playground Safety, the ASTM F1487 Standard or your Landscape Structures representative for more information.





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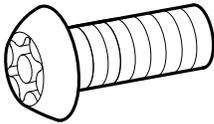
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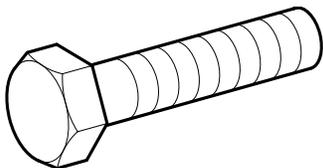
## Common Parts & Fasteners

### Button Head Cap Screws BHCS w/Pin



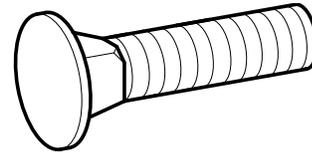
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
137277-00	1/4" x 3/8"	(6,4 x 9,5)	SST-PAT	10	1,4
131849-00	5/16" x 1/2"	(7,9 x 12,7)	SST-PAT	10	1,4
132626-00	5/16" x 7/8"	(7,9 x 22,2)	SST-PAT	10	1,4
192071-00		M8x24mm	SST-PAT	10	1,4
100195-00	3/8" x 5/8"	(9,5 x 15,9)	SST-PAT	15	2
100196-00	3/8" x 7/8"	(9,5 x 22,2)	SST-PAT	15	2
100198-00	3/8" x 1 1/8"	(9,5 x 28,6)	SST-PAT	15	2
113027-00	3/8" x 1 3/8"	(9,5 x 34,9)	SST-PAT	15	2
100171-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
123224-00	3/8" x 1 11/16"	(9,5 x 42,9)	SST-PAT	15	2
100173-00	3/8" x 2"	(9,5 x 50,8)	SST-PAT	15	2
100199-00	3/8" x 2 1/4"	(9,5 x 57,2)	SST-PAT	15	2
100174-00	3/8" x 2 1/2"	(9,5 x 63,5)	SST-PAT	15	2
100175-00	3/8" x 2 3/4"	(9,5 x 69,9)	SST-PAT	15	2
100176-00	3/8" x 3"	(9,5 x 76,2)	SST-PAT	15	2
100168-00	3/8" x 3 1/8"	(9,5 x 82,6)	SST-PAT	15	2
100200-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	15	2
124460-00	3/8" x 3 3/4"	(9,5 x 95,2)	SST-PAT	15	2
100201-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST-PAT	50	7
127551-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST	50	7
			ANTI-SIEZE		
100203-00	5/8" x 2 1/4"	(15,9 x 57,2)	SST-PAT	50	7

### Hex Cap Screws



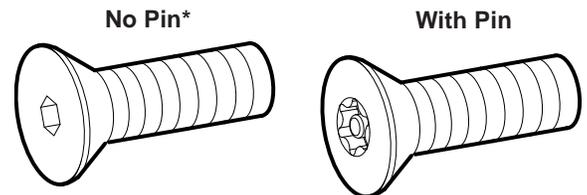
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100206-00	3/8" x 1"	(9,5 x 25,4)	SST-PAT	15	2
100208-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100209-00	3/8" x 1 3/4"	(9,5 x 44,4)	SST-PAT	15	2
135682-00	3/8" x 3 1/8"	(9,5 x 79,3)	SST-PAT	15	2
135683-00	3/8" x 4 5/8"	(9,5 x 117,5)	SST	15	2
100214-00	3/8" x 5"	(9,5 x 127)	SST-PAT	15	2
121499-00	7/16" x 1 3/4"	(11,1 x 114,3)	SST-PAT	15	2
100216-00	1/2" x 1 1/4"	(12,7 x 31,7)	SST	15	2
131862-00	1/2" x 2 1/4"	(12,7 x 57,1)	SST-PAT	20	2,8

### Carriage Bolts



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100135-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST-PAT	5	0,7
100147-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	15	2
116017-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100148-00	3/8" x 1 3/4"	(9,5 x 44,5)	SST-PAT	15	2

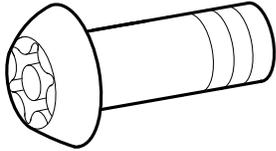
### Flat Head Cap Screws (FHCS)



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
148686-00	3/8" x 3/4"	(9,5 x 19,05)	SST-PAT	13	1,8
100252-00*	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	13	1,8
151421-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	13	1,8
148765-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	13	1,8
130824-00*	1/2" x 2 1/4"	(12,5 x 57,2)	SST	20	2,8

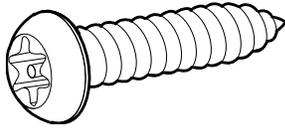
**NOTE:** These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.

## BHCS w/Pin Limited Thread Bolts



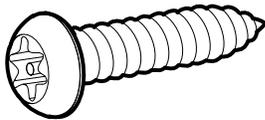
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100290-00	3/8" x 7/8"	(9,5 x 22,2)	SST/PAT	21	3
100292-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST/PAT	21	3
157704-00	7/16" x 2"	(11,11 x 51)	SST/PAT	40	5,5
127068-00	7/16" x 2 7/16"	(11,11 x 61,91)	SST/PAT	40	5,5

## Lag Screws



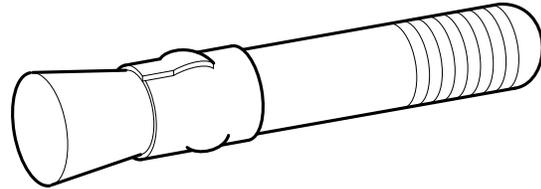
Part #	Sizes		Mat'l or Grade	Head Type
	Inches	mm		
100127-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST	Hex Head
168198-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST	Button Head (Shown)
139039-00	3/8" x 2"	(9,5 x 50,8)	SST	Button Head (Shown)

## Screw, Type AB Thread BHCS w/Pin



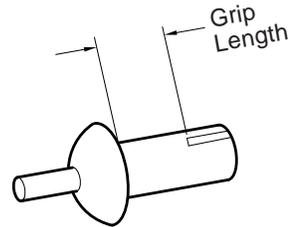
Part #	Size	Mat'l or Grade
129671-00	#14 x 1/2"	SST
127872-00	#14 x 3/4"	SST
136232-00	#14 x 1"	SST
129672-00	#14 x 1 1/4"	SST

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



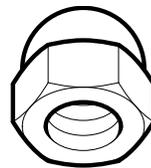
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100263-00	3/8" x 2 3/4"	(9,5 x 69,9)	Alloy Steel	15	2
100266-00	1/2" x 2 3/4"	(12,7 x 69,9)	Alloy Steel	20	2,8

## Drive Rivets



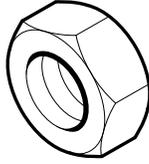
Part #	Sizes		Mat'l
	Inches	mm	
100609-00	1/4" x 3/16"	(6,4 x 4,8)	Alum Rivet/Alum Pin
100611-00	1/4" x 3/8"	(6,4 x 9,5)	Alum Rivet/SST Pin
113300-00	1/4" x 1/2"	(6,4 x 12,7)	Alum Rivet/Alum Pin
100610-00	1/4" x 5/8"	(6,4 x 15,9)	Alum Rivet/SST Pin
139152-00	1/4" x 3/4"	(6,4 x 19,05)	Alum Rivet/Alum Pin
100613-00	1/4" x 7/8"	(6,4 x 22,2)	Alum Rivet/Alum Pin
118158-00	1/4" x 1"	(6,4 x 25,4)	Alum Rivet/Alum Pin

## Low Crown Cap Nut



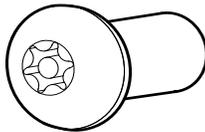
Part #	Size Inches	Mat'l
100349-00	3/8" -16UNC	SST

## Standard Hex Nuts



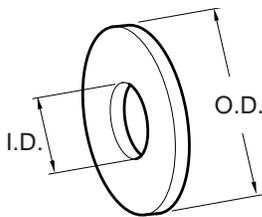
Part #	Sizes Inches	Mat'l or Grade
100326-00	5/16"-18 UNC	SST
100321-00	3/8"-16 UNC	SST-Pat
100327-00	3/8"-16 UNC	SST
128296-00	3/8"-16 UNC (Jam Nut)	SST
100328-00	7/16"-14 UNC	SST
145021-00	7/16"-14 UNC (Jam Nut)	SST
100322-00	1/2"-13 UNC	SST-Pat
129692-00	1/2"-13 UNC	SST-Pat
129693-00	1/2"-13 UNC (Jam Nut)	SST
100323-00	5/8"-11 UNC	SST

## Flange Nut w/Pin



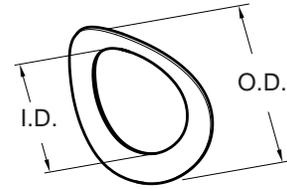
Part #	Sizes Inches	Mat'l or Grade
192064-00	M8 x 24 mm	SST
100353-00	3/8"-16 UNC	SST

## Flat Washers



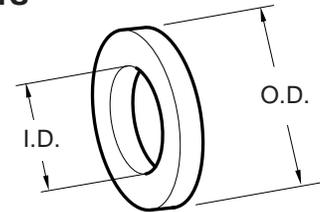
Part #	Sizes Inches	mm	or Grade	I.D.	O.D.
122039-00	1/4"	(6,3)	SST	0.312	.734
100362-00	3/8"	(9,5)	SST	0.406	1.002
112793-00	7/16"	(11,1)	SST	0.505	1.262
100363-00	1/2"	(12,7)	SST	0.536	1.262
100366-00	5/8"	(15,9)	SST	0.688	1.750
123737-00	1 1/8"	(28,6)	SST	1.140	1.750

## Curved Spring Washer



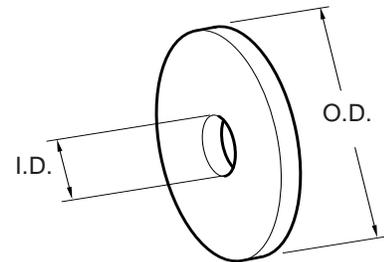
Part #	Sizes Inches	mm	Mat'l or Grade	I.D.	O.D.
100380-00	1/2"	(12,7)	SST	0.531	0.795

## SAE Flat Washers



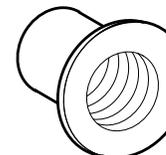
Part #	Sizes Inches	mm	Mat'l or Grade	I.D.	O.D.
100364-00	1/4"	(6,35)	SST	0.281	0.625
100365-00	3/8"	(9,5)	SST	0.411	0.816
113550-00	1/2"	(12,7)	SST	0.531	1.062
129500-00	5/8"	(15,9)	SST	0.686	1.342

## Fender Washers



Part #	Sizes Inches	mm	Mat'l or Grade	I.D.	O.D.
100378-00	3/8" x 1 1/2"	(9,53 x 38,1)	SST	0.406	1.500
100379-00	1/2" x 2"	(12,7 x 50,8)	SST	0.531	2.000

## Tee Nut (PlayBooster Clamps)



Part #	Sizes Inches	Mat'l or Grade
100351-00	3/8"-16 UNC	SST

**Set Screw**



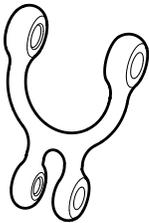
Part #	Sizes		Mat'l or Grade
	Inches	mm	
100298-00	3/8" x 7/16"	(9,5x11,1)	SST

**Bolt Link**



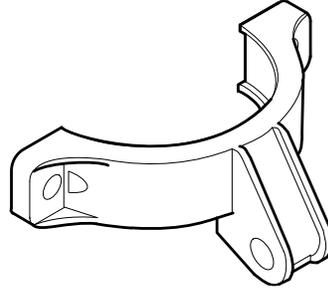
Part #	Mat'l or Grade
138915-00	SST

**Double Clevis**



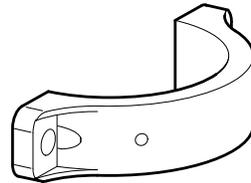
Part #	Mat'l or Grade
138917-00	SST

**Offset Hanger Clamp (PlayBooster)**



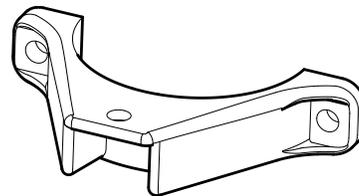
Part #	Mat'l
113729-00	CastAluminum

**Half Clamp (PlayBooster)**



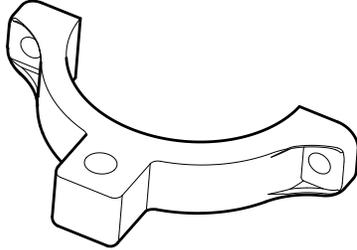
Part #	Mat'l
105327-01	CastAluminum

**Deck Hanger Clamp (PlayBooster)**



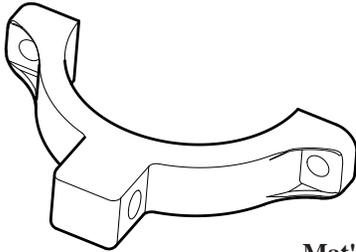
Part #	Mat'l
106022-00	CastAluminum

### Swing Hanger Clamp



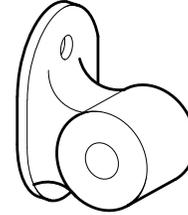
Part #	Mat'l
121289-00	CastAluminum

### Ring/Rail Hanger Clamp (PlayBooster)



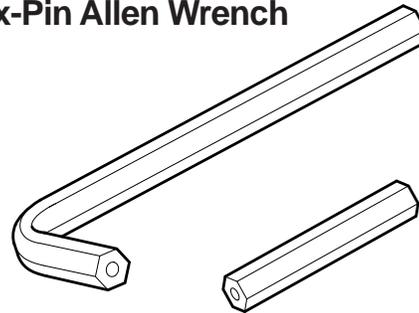
Part #	Mat'l
105330-00	CastAluminum

### Offset Bolt Bracket (PlayShaper)



Part #	Mat'l
113895-00	CastAluminum

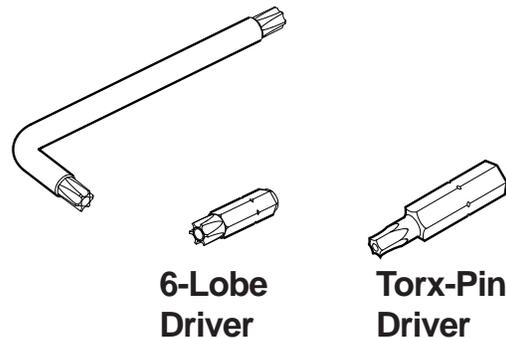
### Hex-Pin Allen Wrench



### Hex-Pin Driver

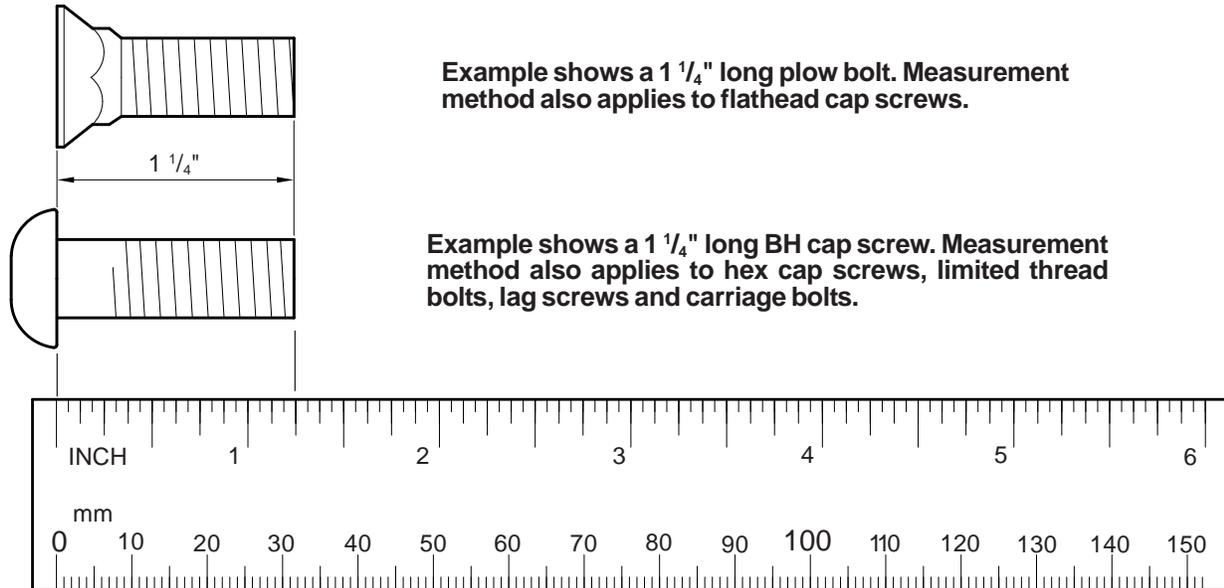
Part #	Description
100685-00	Hex-Pin Allen Wrench
100686-00	Hex-Pin Driver (Used With A <sup>5</sup> / <sub>16</sub> " Socket)

### 6-Lobe Wrench



Part #	Description
146017-00	6-Lobe Wrench (T-45)
146007-00	6-Lobe Driver (T-45) (Used With A <sup>5</sup> / <sub>16</sub> " Socket)
127463-00	Torx-Pin Driver (T-27) (Used With A <sup>1</sup> / <sub>4</sub> " Socket)

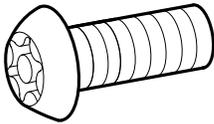
## HOW TO DETERMINE BOLT LENGTHS



**Rule: Measurements should be based on the part of the screw that penetrates the surface.**

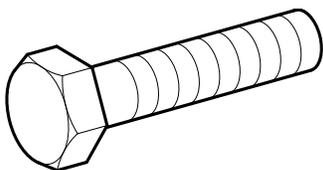
## Common Parts & Fasteners

### Button Head Cap Screws BHCS w/Pin



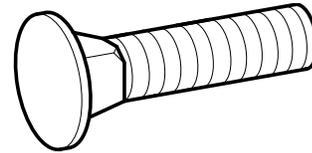
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
137277-00	1/4" x 3/8"	(6,4 x 9,5)	SST-PAT	10	1,4
131849-00	5/16" x 1/2"	(7,9 x 12,7)	SST-PAT	10	1,4
132626-00	5/16" x 7/8"	(7,9 x 22,2)	SST-PAT	10	1,4
192071-00		M8x24mm	SST-PAT	10	1,4
100195-00	3/8" x 5/8"	(9,5 x 15,9)	SST-PAT	15	2
100196-00	3/8" x 7/8"	(9,5 x 22,2)	SST-PAT	15	2
100198-00	3/8" x 1 1/8"	(9,5 x 28,6)	SST-PAT	15	2
113027-00	3/8" x 1 3/8"	(9,5 x 34,9)	SST-PAT	15	2
100171-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
123224-00	3/8" x 1 11/16"	(9,5 x 42,9)	SST-PAT	15	2
100173-00	3/8" x 2"	(9,5 x 50,8)	SST-PAT	15	2
100199-00	3/8" x 2 1/4"	(9,5 x 57,2)	SST-PAT	15	2
100174-00	3/8" x 2 1/2"	(9,5 x 63,5)	SST-PAT	15	2
100175-00	3/8" x 2 3/4"	(9,5 x 69,9)	SST-PAT	15	2
100176-00	3/8" x 3"	(9,5 x 76,2)	SST-PAT	15	2
100168-00	3/8" x 3 1/8"	(9,5 x 82,6)	SST-PAT	15	2
100200-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	15	2
124460-00	3/8" x 3 3/4"	(9,5 x 95,2)	SST-PAT	15	2
100201-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST-PAT	50	7
127551-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST	50	7
			ANTI-SIEZE		
100203-00	5/8" x 2 1/4"	(15,9 x 57,2)	SST-PAT	50	7

### Hex Cap Screws



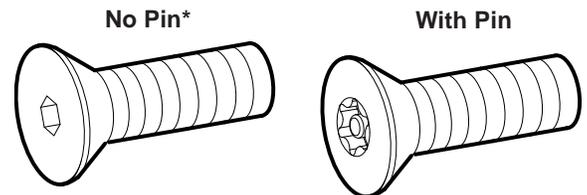
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100206-00	3/8" x 1"	(9,5 x 25,4)	SST-PAT	15	2
100208-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100209-00	3/8" x 1 3/4"	(9,5 x 44,4)	SST-PAT	15	2
135682-00	3/8" x 3 1/8"	(9,5 x 79,3)	SST-PAT	15	2
135683-00	3/8" x 4 5/8"	(9,5 x 117,5)	SST	15	2
100214-00	3/8" x 5"	(9,5 x 127)	SST-PAT	15	2
121499-00	7/16" x 1 3/4"	(11,1 x 114,3)	SST-PAT	15	2
100216-00	1/2" x 1 1/4"	(12,7 x 31,7)	SST	15	2
131862-00	1/2" x 2 1/4"	(12,7 x 57,1)	SST-PAT	20	2,8

### Carriage Bolts



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100135-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST-PAT	5	0,7
100147-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	15	2
116017-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100148-00	3/8" x 1 3/4"	(9,5 x 44,5)	SST-PAT	15	2

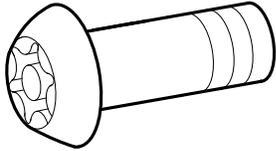
### Flat Head Cap Screws (FHCS)



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
148686-00	3/8" x 3/4"	(9,5 x 19,05)	SST-PAT	13	1,8
100252-00*	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	13	1,8
151421-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	13	1,8
148765-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	13	1,8
130824-00*	1/2" x 2 1/4"	(12,5 x 57,2)	SST	20	2,8

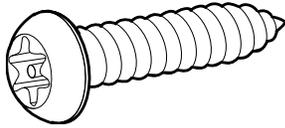
**NOTE:** These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.

## BHCS w/Pin Limited Thread Bolts



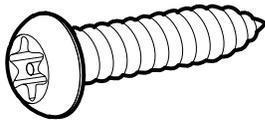
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100290-00	3/8" x 7/8"	(9,5 x 22,2)	SST/PAT	21	3
100292-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST/PAT	21	3
157704-00	7/16" x 2"	(11,11 x 51)	SST/PAT	40	5.5
127068-00	7/16" x 2 7/16"	(11,11 x 61,91)	SST/PAT	40	5.5

## Lag Screws



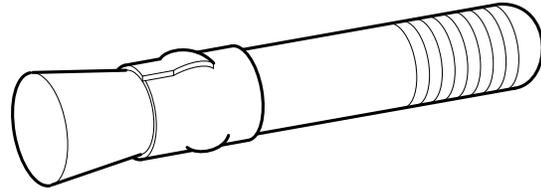
Part #	Sizes		Mat'l or Grade	Head Type
	Inches	mm		
100127-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST	Hex Head
168198-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST	Button Head (Shown)
139039-00	3/8" x 2"	(9,5 x 50,8)	SST	Button Head (Shown)

## Screw, Type AB Thread BHCS w/Pin



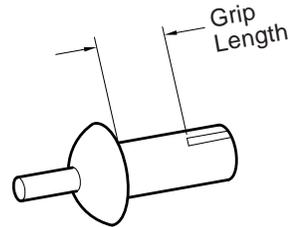
Part #	Size	Mat'l or Grade
129671-00	#14 x 1/2"	SST
127872-00	#14 x 3/4"	SST
136232-00	#14 x 1"	SST
129672-00	#14 x 1 1/4"	SST

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



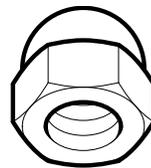
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100263-00	3/8" x 2 3/4"	(9,5 x 69,9)	Alloy Steel	15	2
100266-00	1/2" x 2 3/4"	(12,7 x 69,9)	Alloy Steel	20	2.8

## Drive Rivets



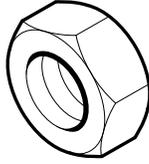
Part #	Sizes		Mat'l
	Inches	mm	
100609-00	1/4" x 3/16"	(6,4 x 4,8)	Alum Rivet/Alum Pin
100611-00	1/4" x 3/8"	(6,4 x 9,5)	Alum Rivet/SST Pin
113300-00	1/4" x 1/2"	(6,4 x 12,7)	Alum Rivet/Alum Pin
100610-00	1/4" x 5/8"	(6,4 x 15,9)	Alum Rivet/SST Pin
139152-00	1/4" x 3/4"	(6,4 x 19,05)	Alum Rivet/Alum Pin
100613-00	1/4" x 7/8"	(6,4 x 22,2)	Alum Rivet/Alum Pin
118158-00	1/4" x 1"	(6,4 x 25,4)	Alum Rivet/Alum Pin

## Low Crown Cap Nut



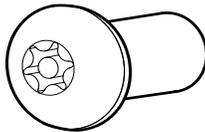
Part #	Size Inches	Mat'l
100349-00	3/8" -16UNC	SST

## Standard Hex Nuts



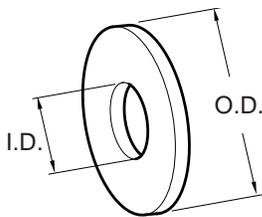
Part #	Sizes Inches	Mat'l or Grade
100326-00	5/16"-18 UNC	SST
100321-00	3/8"-16 UNC	SST-Pat
100327-00	3/8"-16 UNC	SST
128296-00	3/8"-16 UNC (Jam Nut)	SST
100328-00	7/16"-14 UNC	SST
145021-00	7/16"-14 UNC (Jam Nut)	SST
100322-00	1/2"-13 UNC	SST-Pat
129692-00	1/2"-13 UNC	SST-Pat
129693-00	1/2"-13 UNC (Jam Nut)	SST
100323-00	5/8"-11 UNC	SST

## Flange Nut w/Pin



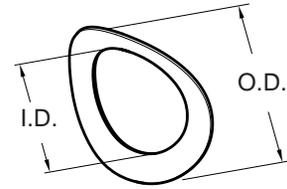
Part #	Sizes Inches	Mat'l or Grade
192064-00	M8 x 24 mm	SST
100353-00	3/8"-16 UNC	SST

## Flat Washers



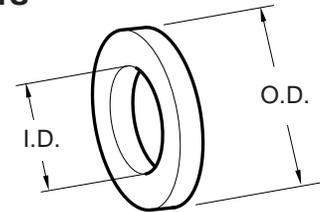
Part #	Sizes		or Grade	I.D.	O.D.
	Inches	mm			
122039-00	1/4"	(6,3)	SST	0.312	.734
100362-00	3/8"	(9,5)	SST	0.406	1.002
112793-00	7/16"	(11,1)	SST	0.505	1.262
100363-00	1/2"	(12,7)	SST	0.536	1.262
100366-00	5/8"	(15,9)	SST	0.688	1.750
123737-00	1 1/8"	(28,6)	SST	1.140	1.750

## Curved Spring Washer



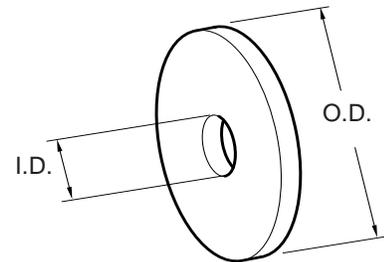
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100380-00	1/2"	(12,7)	SST	0.531	0.795

## SAE Flat Washers



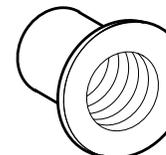
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100364-00	1/4"	(6,35)	SST	0.281	0.625
100365-00	3/8"	(9,5)	SST	0.411	0.816
113550-00	1/2"	(12,7)	SST	0.531	1.062
129500-00	5/8"	(15,9)	SST	0.686	1.342

## Fender Washers



Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100378-00	3/8" x 1 1/2"	(9,53 x 38,1)	SST	0.406	1.500
100379-00	1/2" x 2"	(12,7 x 50,8)	SST	0.531	2.000

## Tee Nut (PlayBooster Clamps)



Part #	Sizes Inches	Mat'l or Grade
100351-00	3/8"-16 UNC	SST

**Set Screw**



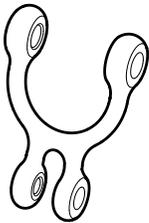
Part #	Sizes		Mat'l or Grade
	Inches	mm	
100298-00	3/8" x 7/16"	(9,5x11,1)	SST

**Bolt Link**



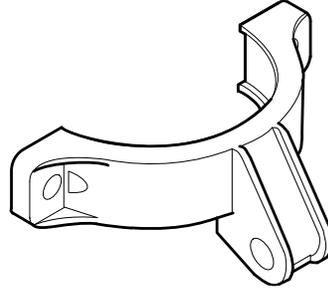
Part #	Mat'l or Grade
138915-00	SST

**Double Clevis**



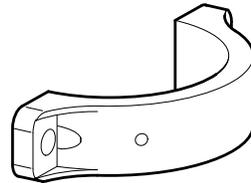
Part #	Mat'l or Grade
138917-00	SST

**Offset Hanger Clamp (PlayBooster)**



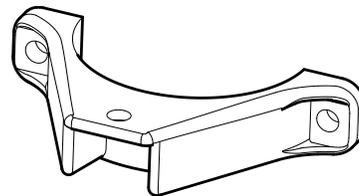
Part #	Mat'l
113729-00	CastAluminum

**Half Clamp (PlayBooster)**



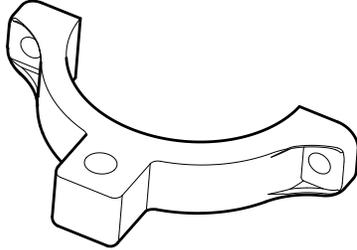
Part #	Mat'l
105327-01	CastAluminum

**Deck Hanger Clamp (PlayBooster)**



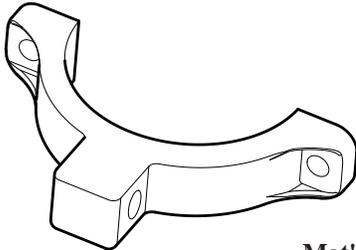
Part #	Mat'l
106022-00	CastAluminum

### Swing Hanger Clamp



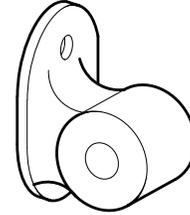
Part #	Mat'l
121289-00	CastAluminum

### Ring/Rail Hanger Clamp (PlayBooster)



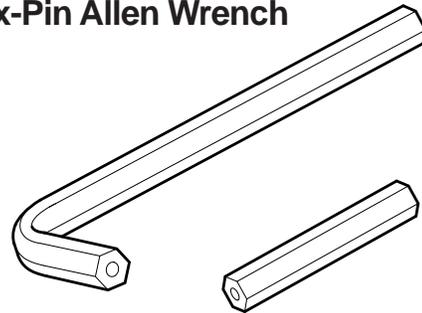
Part #	Mat'l
105330-00	CastAluminum

### Offset Bolt Bracket (PlayShaper)



Part #	Mat'l
113895-00	CastAluminum

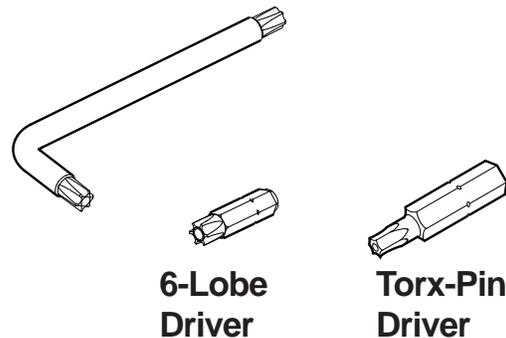
### Hex-Pin Allen Wrench



### Hex-Pin Driver

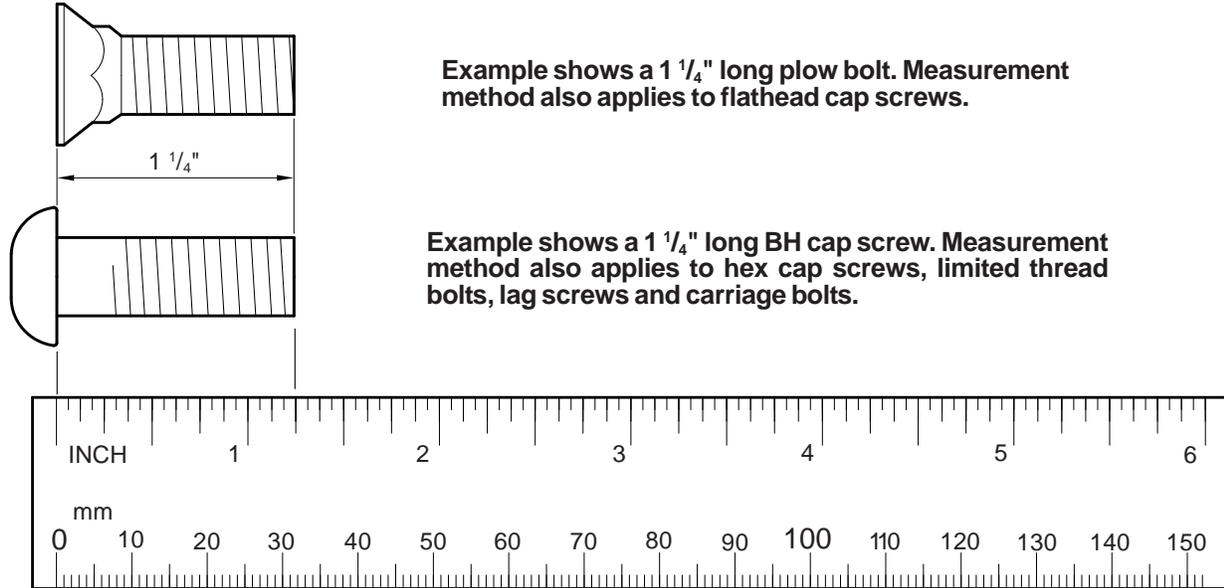
Part #	Description
100685-00	Hex-Pin Allen Wrench
100686-00	Hex-Pin Driver (Used With A <sup>5</sup> / <sub>16</sub> " Socket)

### 6-Lobe Wrench



Part #	Description
146017-00	6-Lobe Wrench (T-45)
146007-00	6-Lobe Driver (T-45) (Used With A <sup>5</sup> / <sub>16</sub> " Socket)
127463-00	Torx-Pin Driver (T-27) (Used With A <sup>1</sup> / <sub>4</sub> " Socket)

## HOW TO DETERMINE BOLT LENGTHS



**Rule: Measurements should be based on the part of the screw that penetrates the surface.**

Did you know that most of the packaging materials you receive on a Landscape Structures order are recyclable? Do you reuse or recycle everything you can from your playground sites? We're making it easier for you to do the right thing and keep these materials out of landfills!

## FOAM/SCRIM SHEETS

Landscape Structures has partnered with our supplier to recycle foam/scrim material, the grey and white sheets that are layered between the large painted parts. This material is not usually accepted at general recycling facilities but this supplier will re-use it in their manufacturing of new packaging materials. It's easy! Just put the foam/scrim from your installation site in a box and ship it to the facility closest to you.

Here is a list of participating facilities throughout the U.S.:

### Foam/Scrim Products Only

Pregis Plant  
159 N San Antonio Ave.  
Pomona, CA 91767

Pregis Plant  
8201 W Elwin Ct.  
Visalia, CA 93291

Pregis Plant  
7574 Presidents Dr.  
Orlando, FL 32809

Pregis Plant  
1411 Pidco Dr.  
Plymouth, IN 46563

Pregis Plant  
300 Harris Rd.  
Wurtland, KY 41144

Pregis Plant  
3825 N Main St.  
Granite Falls, NC 28630

Pregis Plant  
18 Peck Ave.  
Glens Falls, NY 12801

Pregis Plant  
3500 S Highway 287  
Corsicana, TX 75109

Pregis Plant  
310 Old Station Rd.  
Wenatchee, WA 98801

### Foam/Scrim, Plastic Banding, Shrink Wrap

Anchor Facility  
480 Broadway St.  
St Paul, MN 55101

Anchor Facility  
1501 Swasey Rd.  
Hudson, WI 54016

**Don't stop here! Most of the other packaging materials can also be recycled, reused or repurposed.**

- **CORRUGATED CARDBOARD:** Boxes can be broken down and recycled at a local recycler, or reused for other storage.
- **SHRINK WRAP:** Contact your local plastic recycler and ask if they accept polyethylene plastic.
- **PLASTIC BANDING:** Contact your local plastic recycler and ask if they accept polypropylene.

If you have suggestions for recycling, reusing or repurposing other materials, please email them to: [info@playlsi.com](mailto:info@playlsi.com). Just one more way Landscape Structures is building healthy, sustainable communities.



182212 is an  
entanglement label

Not an Install doc.



182213 is a hot surface  
label

Not an Install doc.





Look for compliance to the following guidelines and standards whenever you install playground equipment. It's your assurance that the products you install meet the most rigorous safety and quality assurance standards.

Landscape Structures is a member in good standing of **IPEMA**, the **International Play Equipment Manufacturers Association**. IPEMA is a member-driven, international trade organization that represents and promotes an open market for manufacturers of play equipment.



In the interest of playground safety, IPEMA provides a Third Party Certification Service whereby a designated independent laboratory validates a participant's certification of conformance to ASTM F1487, Standard Consumer Safety Performance Specification for Playground Equipment for Public Use, except sections 7.1.1, 10 and 12.6.1; CAN/CSA Z614, Children's Playspaces and Equipment Standards, except clauses 9.8, 10 and 11; or both. The use of the corresponding logo in the Landscape Structures Inc. catalog signifies that Landscape Structures Inc. has received written validation from the independent laboratory that the product(s) associated with the use of the logo conforms with the requirements of the indicated standards. Check the IPEMA website ([www.ipema.org](http://www.ipema.org)) to confirm product certification. The use zone and fall height requirements in this publication are shown to ASTM standards. The requirements for other standards may be different. According to the CSA, playground maintenance and inspection is a continuous and integral part of budgetary costs. The cost of inspection and maintenance shall be considered and incorporated into the budget at the time of design, purchase equipment and installation (11.1.1 Budgeting).

#### International Play Equipment Manufacturers Association

4305 N. Sixth St. Suite A  
Harrisburg, PA 17110  
[www.ipema.org](http://www.ipema.org)



**The Consumer Product Safety Commission (CPSC)** is a governmental organization that provides technical safety guidelines for designing, constructing, operating and maintaining public playgrounds.

#### U.S. Consumer Product Safety Commission

4330 East West Hwy.  
Bethesda, MD 20814  
[www.cpsc.gov](http://www.cpsc.gov)

**The American Society for Testing and Materials (ASTM)** is a scientific and technical organization that is a major developer of standards for testing different types of materials. In 1993, the ASTM published "Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use," designation F1487-93. ASTM is more technical than the CPSC. ASTM revised its old standard and published a new standard in 1995, 1998, 2001, 2005, 2007 and again in 2011.

#### American Society for Testing and Materials

100 Barr Harbor Dr.  
P.O. Box C700  
West Conshohocken, PA 19428  
[www.astm.org](http://www.astm.org)



#### The Canadian Standards Association

Nearly all equipment developed by Landscape Structures is certified to meet CAN/CSA-Z614-07, the Children's Playspaces and Equipment Standard, through IPEMA.

**The European Standard** was developed by the European Committee for Standardization. The majority of Landscape Structures products have been designed to be TUV certified by a third-party validator to EN 1176: 2008, the European Standard for Playground Equipment.



**ISO 9001:2008** has a process-orientated structure, is customer focused and emphasizes continuous improvement in quality.



**ISO 14001:2004** drives us toward operating in a manner that is environmentally conscious.



## PS/PB/FP/Evos/Weevos Guidelines & Standards

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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4305 N. Sixth St. Suite A  
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[www.ipema.org](http://www.ipema.org)



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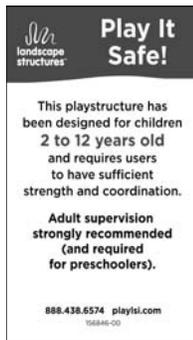
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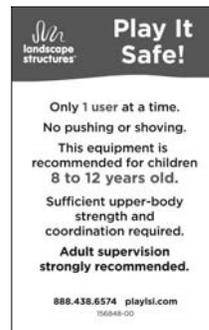
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Part No. 115176-00-000



Part No. 156846-00-000



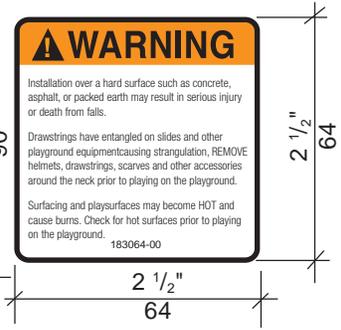
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Part No. 166751-00-000



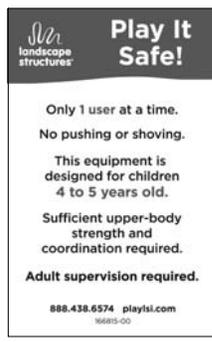
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Part No. 183064-00-000



Part No. 156850-00-000



Part No. 166815-00-000



Part No. 200331-00-000

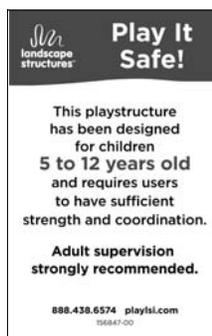


Part No. 200332-00-000



Part No. 200333-00-000

**NOTE: The Playstructure design will determine which *Play It Safe* sticker will be supplied.**



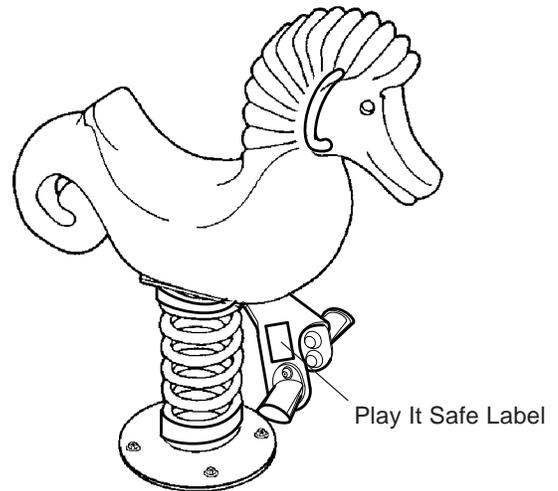
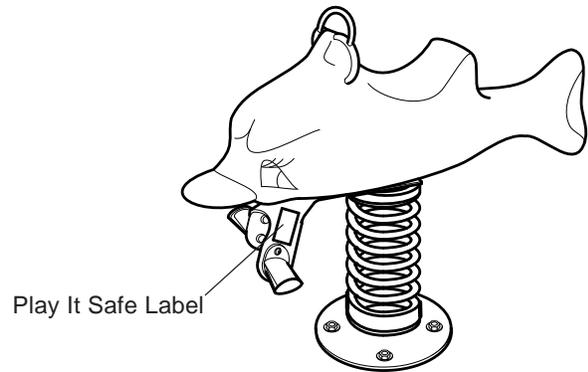
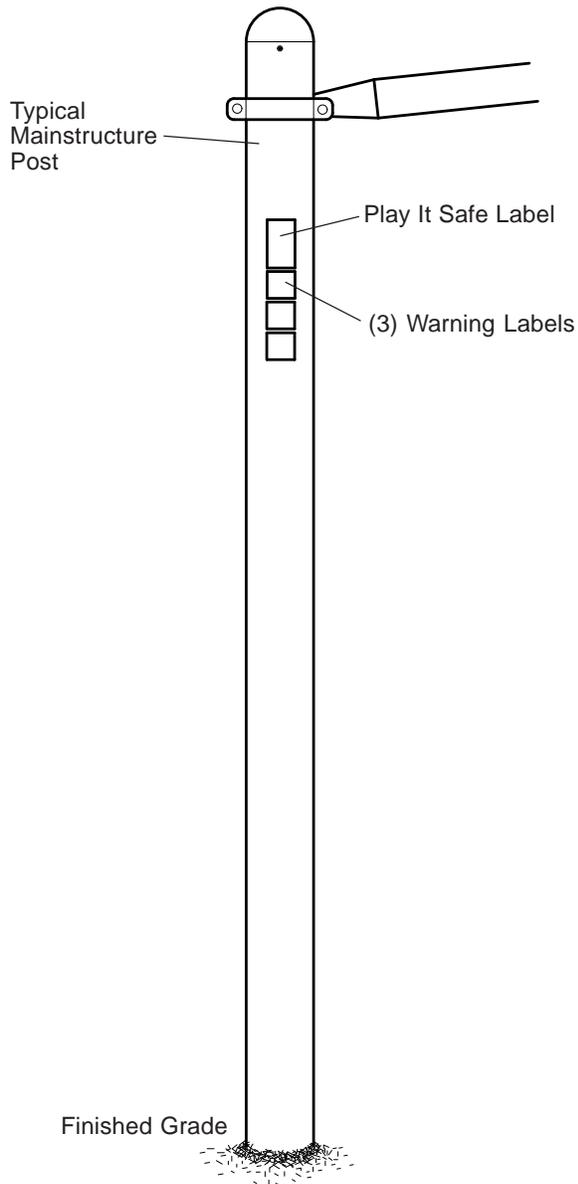
Part No. 156847-00-000



Part No. 156845-00-000

## INSTRUCTIONS:

Surface must be clean and dry prior to applying sticker. Peel backing sheet away from back of sticker and place sticker in position. Using backing sheet, rub over face of sticker to burnish down into place. Choose a location visible to adults in a conspicuous location on product. Stickers work best on painted parts. Where possible, avoid placing on rotationally-molded plastic parts, TenderTuff-coated parts or where children may step and wear off sticker. This applies to both Freestanding Play items and Composite Playstructures. Apply sticker adjacent to or visible from the primary entrance to the structure. Apply 4'-5' above the surface. Apply at least (1) one to every structure and (2) two to large Composite Playstructures.



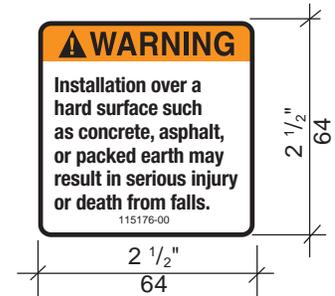
## PB/PS/FP/Evos®/Weevos® Warning Labels



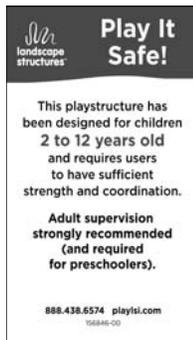
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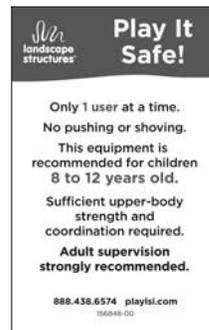
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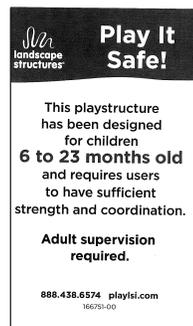
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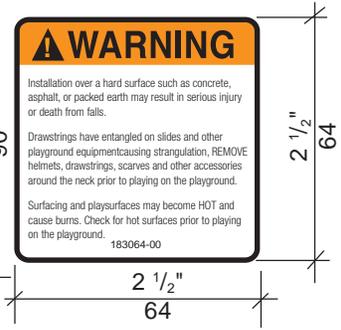
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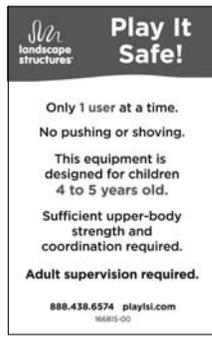
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Part No. 200331-00-000

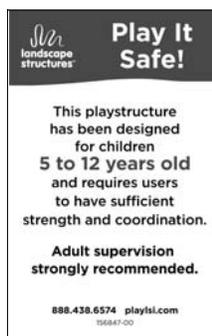


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Part No. 200333-00-000

**NOTE: The Playstructure design will determine which *Play It Safe* sticker will be supplied.**



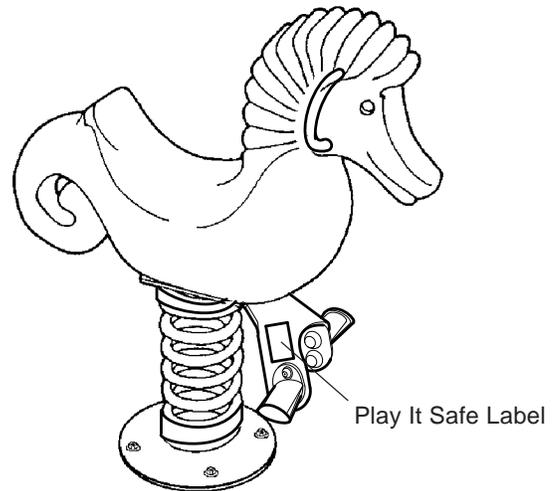
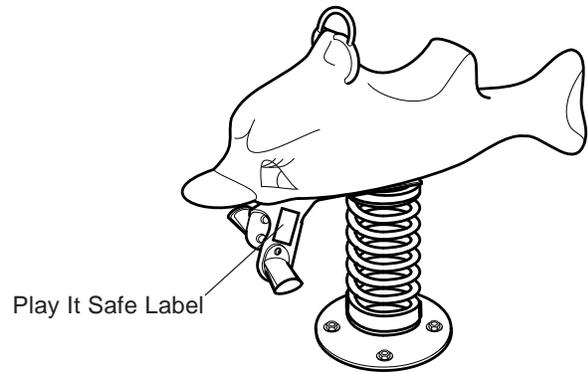
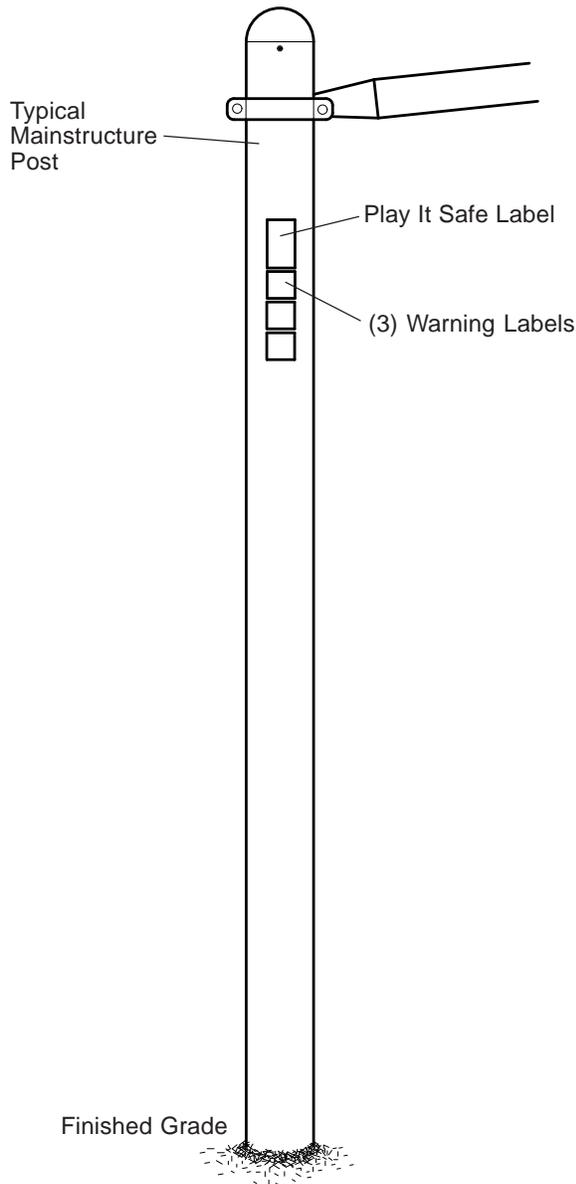
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Part No. 156845-00-000

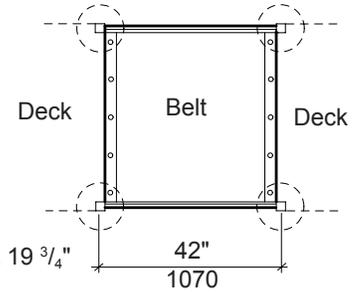
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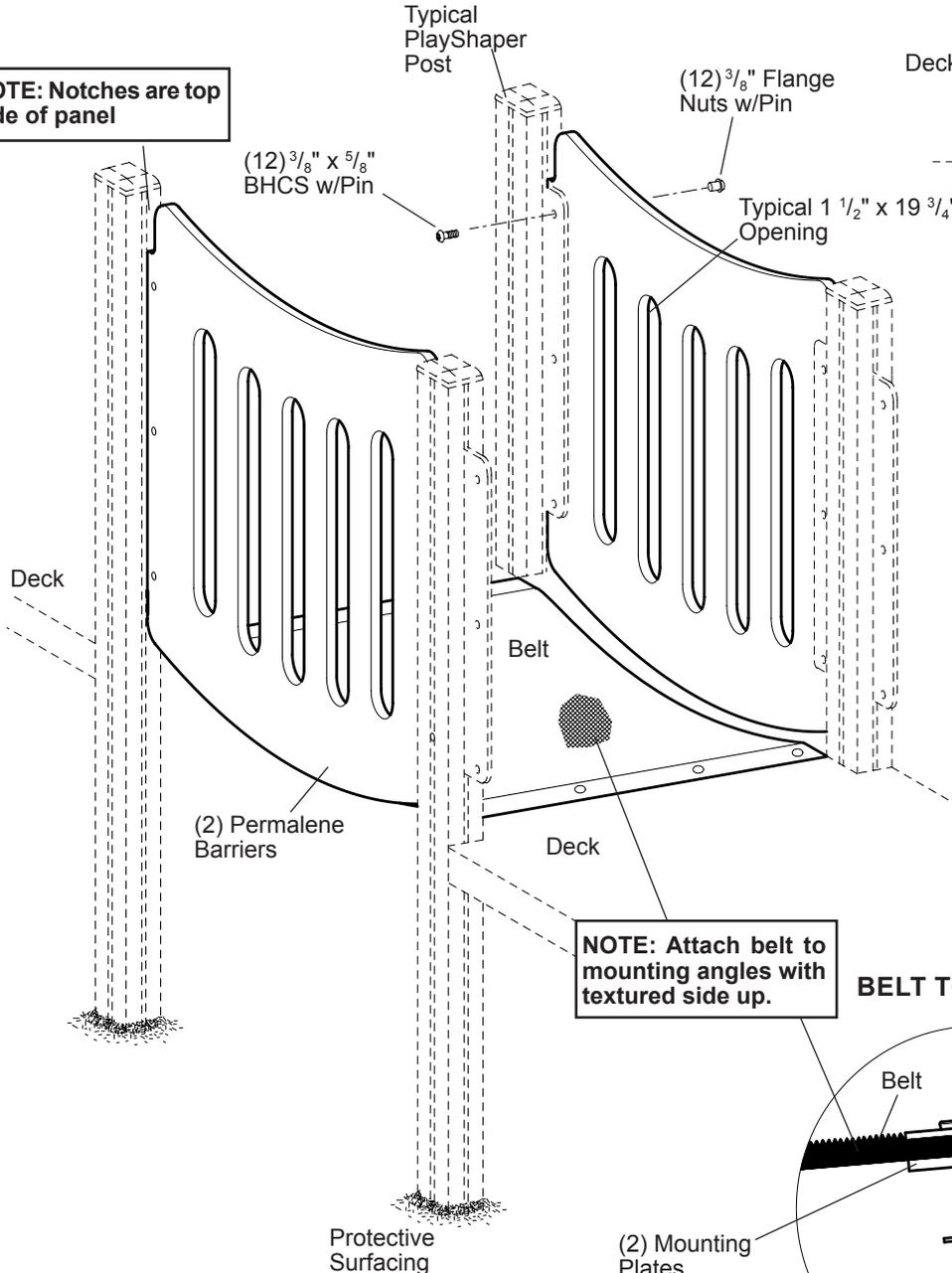


## PB/PS/FP/Evos®/Weevos® Warning Labels

**PLAN/VIEW FOOTING LAYOUT**

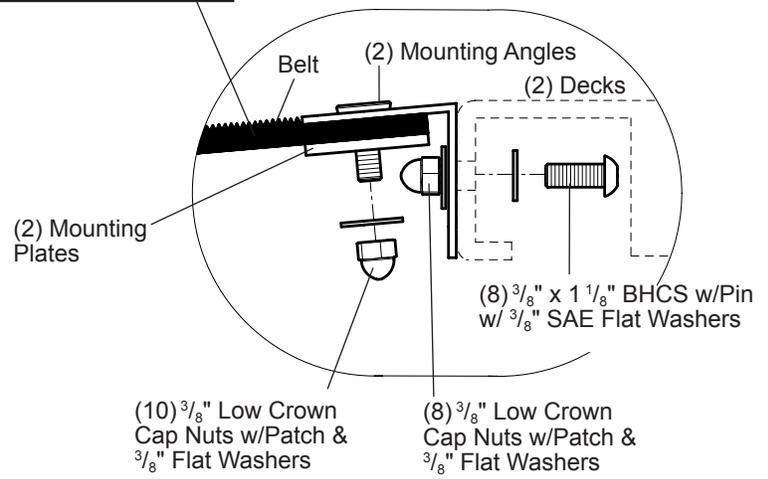


**NOTE: Notches are top side of panel**



**NOTE: Attach belt to mounting angles with textured side up.**

**DETAIL BELT TO DECK ATTACHMENT**



**PlayShaper® 131956 Belt Bridge, 42" w/Permalene®, 16"-48"**



# PlayShaper® 131956 Belt Bridge, 42" w/Permalene, 16"-48"

## Parts List

Part#	Description	Qty.
166446	Mounting Plate, Specify Color.....	2
130353	Mounting Angle, Specify Color.....	2
142073	Permalene Barrier, Specify Color.....	2
156881	Belt.....	1
<b>106480</b>	<b>Panel Attachment Hardware Package</b> .....	<b>2</b>
100195	3/8" x 5/8" BHCS w/Pin, SST.....	12
100353	3/8" Flange Nut w/Pin, SST.....	12
<b>205098</b>	<b>Belt Bridge Attachment Hardware Package</b> .....	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8
203378	3/8" Low Crown Cap Nut w/Patch, SST.....	18
100362	3/8" Flat Washer, SST.....	18
100365	3/8" SAE Flat Washer, SST.....	8

## Installation Instructions

- 1) With posts/ decks in position, attach mounting angles to face of decks. Refer to the Belt To Deck Attachment Detail.
- 2) Attach belt to mounting angles. Refer to the Belt To Deck Attachment Detail.
- 3) Attach barriers to outside of posts flanges using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.
- 4) Install protective surfacing before users are allowed to play on the structure.

## Specifications

**Belt:** Made from .315" thick mini rough top 3-ply rubber belting with polyester fabric plys, 40" wide x 39 3/8" long, black in color.

**Permalene® Barrier:** Solid color panel measures 39 1/2" wide x 33 5/8" high, color specified.

**Mounting Angle:** Weldment comprised of 2 1/2" wide x 2 1/2" high x 36 15/16" long formed 10 GA (.135") carbon steel with 3/8" x 1 1/8" stainless steel studs. Finish: TenderTuff™, color specified.

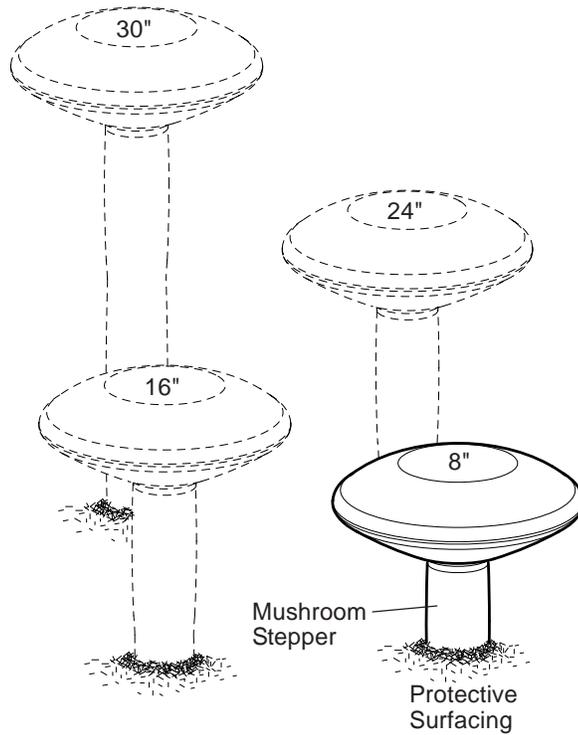
**Mounting Plate:** Fabricated from 2" wide x 36 1/2" long 3/16" HR flat steel. Finish: ProShield®, color specified.

**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).

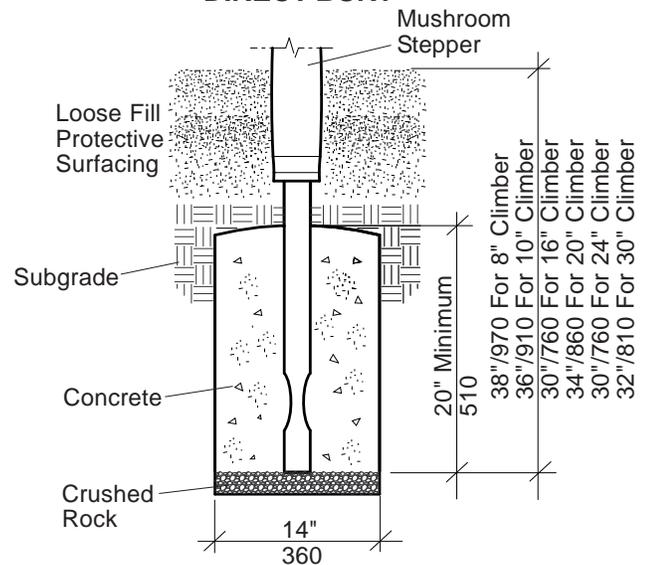
**Installation Time:** Approx. 1 man hour

**Area Req.:** 6' (1,83 m) minimum use zone

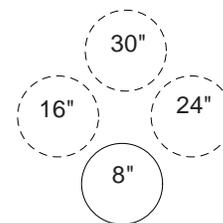
**Weight:** 113 lbs.



**DETAIL  
 DIRECT BURY**



**PLAN VIEW/FOOTING LAYOUT**  
 (Layout Varies - See Your Plan)



- 171568 8" Height (Shown)
- 171569 10" Height
- 171570 16" Height
- 171571 20" Height
- 171572 24" Height
- 171573 30" Height

*Play Naturally™*

**Climbers**

**Mushroom Steppers**



# Climbers Mushroom Steppers

## Parts List

Part#	Description	Qty.
206827	GFRM Mushroom 8"-16" (DB) .....	*
206828	GFRM Mushroom 20"-24" (DB) .....	*
206829	GFRM Mushroom 30"-32" (DB) .....	*

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**GFRM Mushroom Assembly:** (Support) Comprised of 2  $\frac{3}{8}$ " O.D. RS40 (.130"-.140" wall) galvanized steel tubing. Finish: ProShield®. (Mushroom Stepper) Glass reinforced wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.

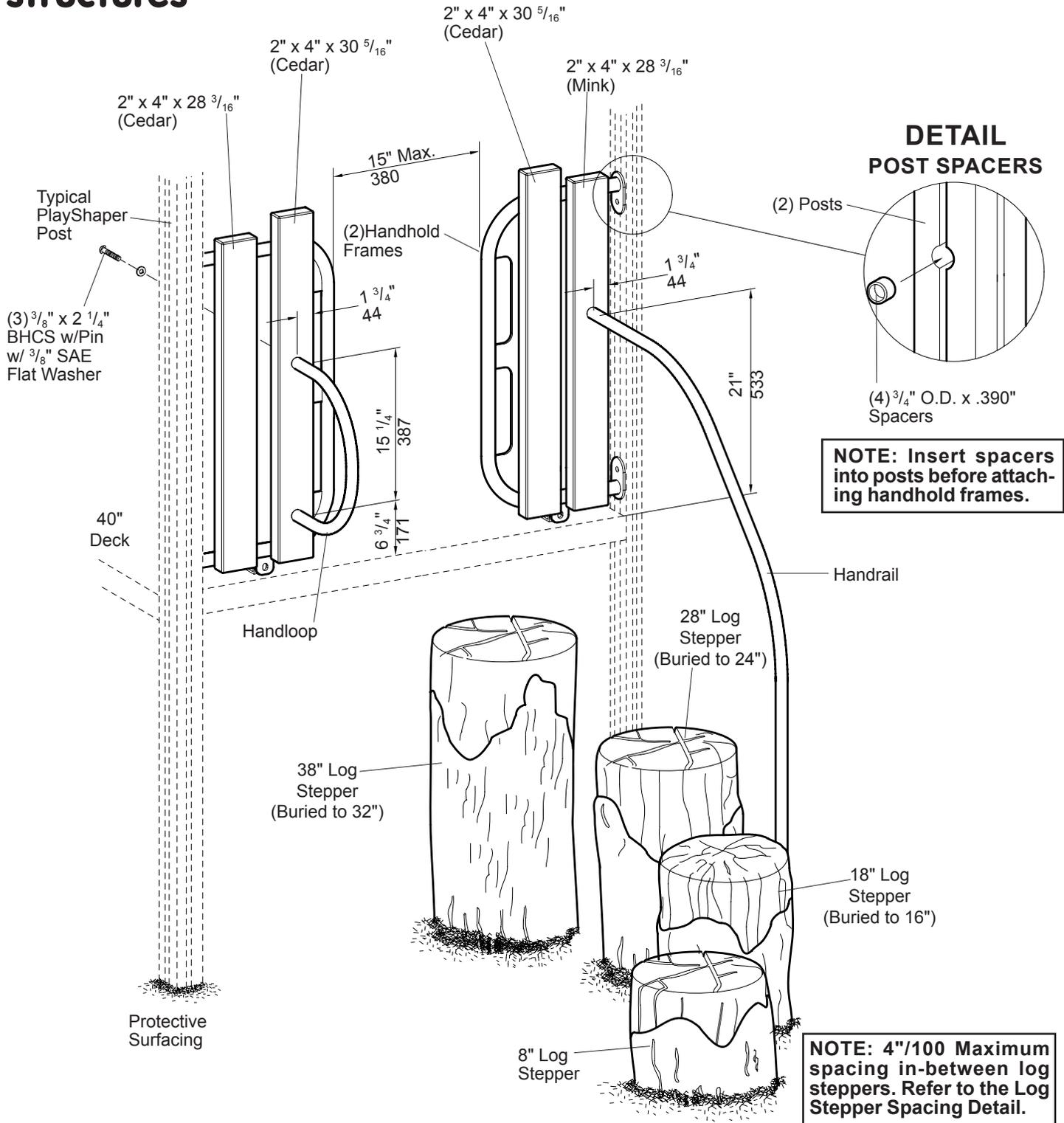
**Installation Time:** Approx.  $\frac{3}{4}$  man hour each

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

**Weight:**  
 8" - 333 lbs.  
 10" - 333 lbs.  
 16" - 333 lbs.  
 20" - 337 lbs.  
 24" - 337 lbs.  
 30" - 342 lbs.

## Installation Instructions

- 1) **(Direct Bury)** Dig footing as shown. Refer to your Site Plan For Footing Locations.
- 2) To unload the Mushroom Stepper and place in footing hole, a "Lull" type material handler and strap are recommended. Position Mushroom Stepper in footing hole, and prop in plumb position. With Mushroom Stepper plumb, pour concrete footing. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 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.**



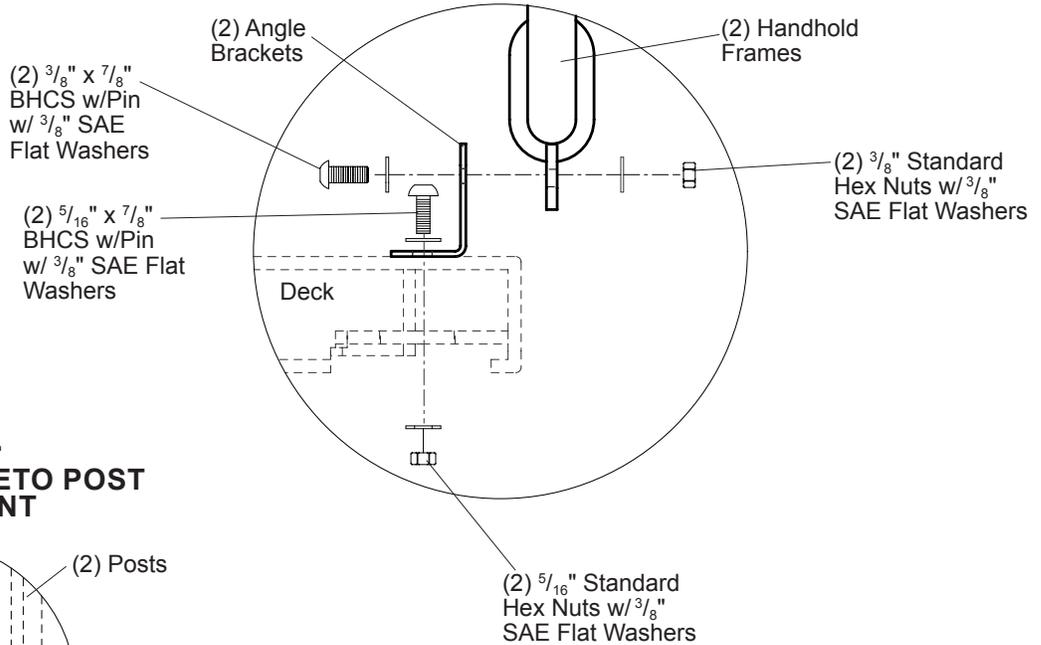
Play Naturally™

PlayShaper®

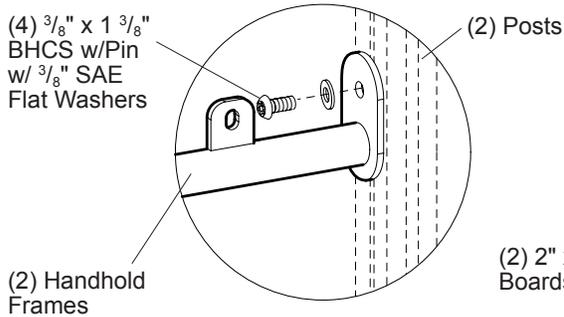
185861 Log Steppers, 40"

Sheet 1 of 2

**DETAIL**  
**HANDHOLD FRAME TO DECK ATTACHMENT**

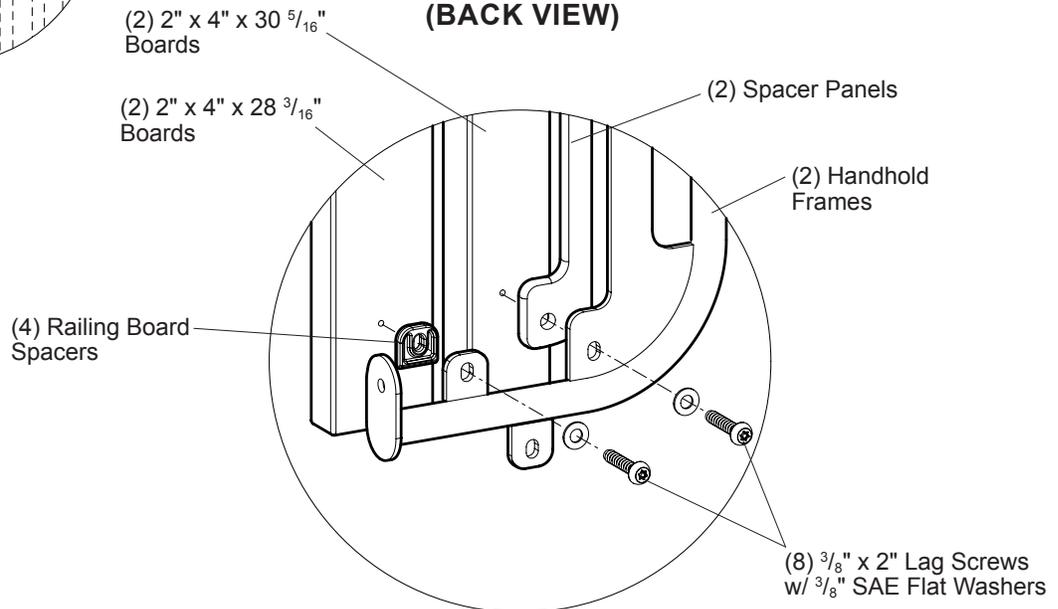


**DETAIL**  
**HANDHOLD FRAME TO POST ATTACHMENT**

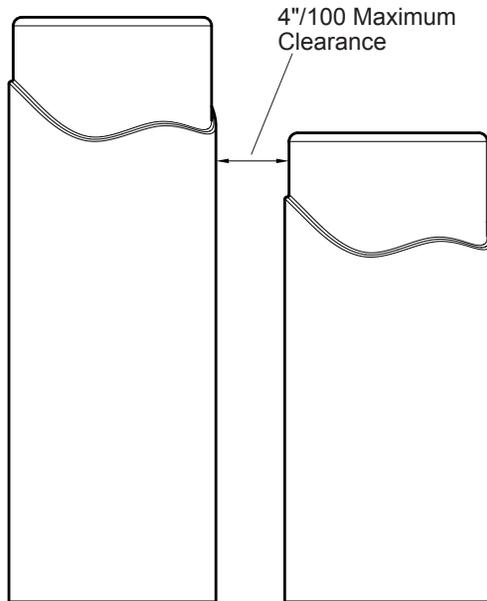


**NOTE: Insert spacers into posts before attaching handhold frames.**

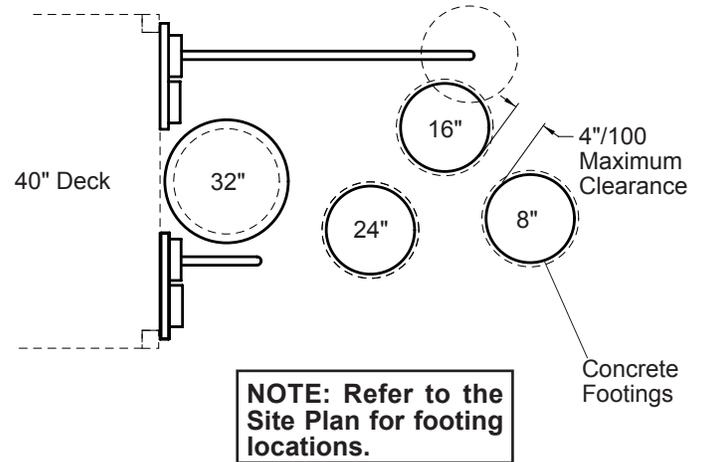
**DETAIL**  
**BOARD ATTACHMENT (BACK VIEW)**



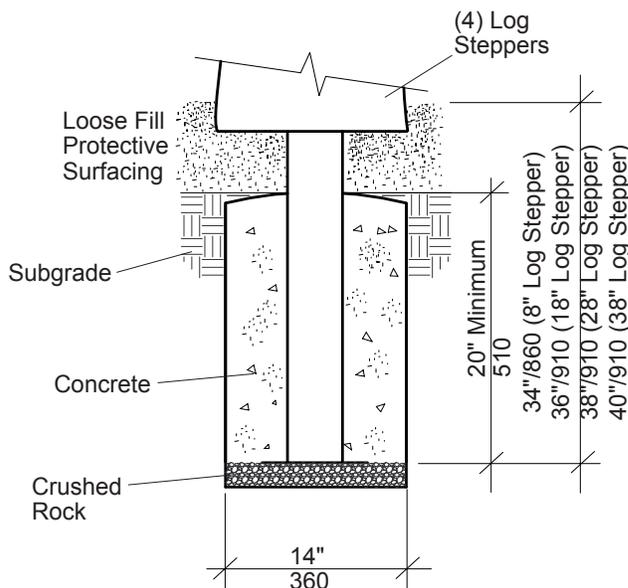
**DETAIL  
LOG STEPPER  
SPACING**



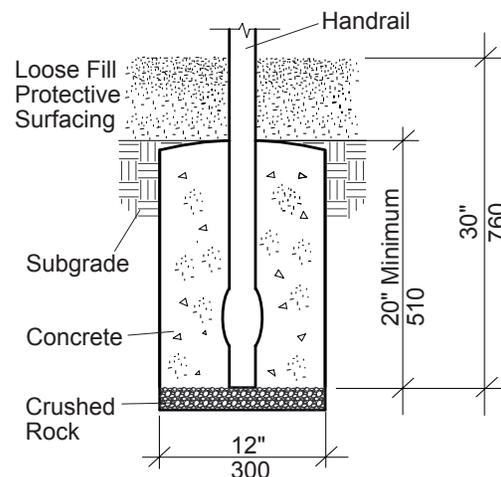
**PLAN VIEW/FOOTING LAYOUT**



**DETAIL  
DIRECT BURY**



**DETAIL  
DIRECT BURY**



## Parts List

Part#	Description	Qty.
135075	Handrail, Specify Color.....	1
135553	Handloop, Specify Color.....	1
200691	8" Log Stepper (DB), Natural.....	1
200692	18" Log Stepper (DB), Natural.....	1
200693	28" Log Stepper (DB), Natural.....	1
200694	38" Log Stepper (DB), Natural.....	1
185504	Handhold Frame, Tan.....	2
176730	2" x 4" x 30 5/16" Board, Cedar.....	2
176729	2" x 4" x 28 3/16" Board, Mink.....	1
176729	2" x 4" x 28 3/16" Board, Cedar.....	1
185505	Spacer Panel, Tan.....	2
<b>214945</b>	<b>Tree House HHold (PR) Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	2
113027	3/8" x 1 3/8" BHCS w/Pin, SST.....	4
100326	5/16" Standard Hex Nut, SST.....	2
100327	3/8" Standard Hex Nut, SST.....	2
100365	3/8" SAE Flat Washer, SST.....	20
106187	1 3/4" x 2 5/8" Angle Bracket, SST.....	2
132626	5/16" x 7/8" BHCS w/Pin, SST.....	2
139039	3/8" x 2" BH Lag Screw, SST.....	8
166868	3/4" O.D. x .390" Spacer, AL.....	4
207485	Railing Board Spacer, Tan.....	4
<b>175296</b>	<b>Tree House Handloop Hardware Package</b> .....	<b>1</b>
100199	3/8" x 2 1/4" BHCS w/Pin, SST.....	2
100365	3/8" SAE Flat Washer, SST.....	2
<b>175292</b>	<b>Handrail Hardware Package</b> .....	<b>1</b>
100199	3/8" x 2 1/4" BHCS w/Pin, SST.....	1
100365	3/8" SAE Flat Washer, SST.....	1

DB = Direct Bury

## Specifications

<b>Log Stepper Assy.:</b>	(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.
<b>Handhold Frame:</b>	Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 5/8" internal thread and 1/4" HRPO steel plate. Finish: ProShield, tan in color.
<b>Handloop:</b>	Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread. Finish: TenderTuff™, color specified.
<b>Handrail:</b>	Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread. Finish: TenderTuff, color specified.
<b>Poly Board:</b>	Recycled high-density polyethylene, cedar or mink in color.
<b>Panel:</b>	Permalene®, tan 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. 4 man hours

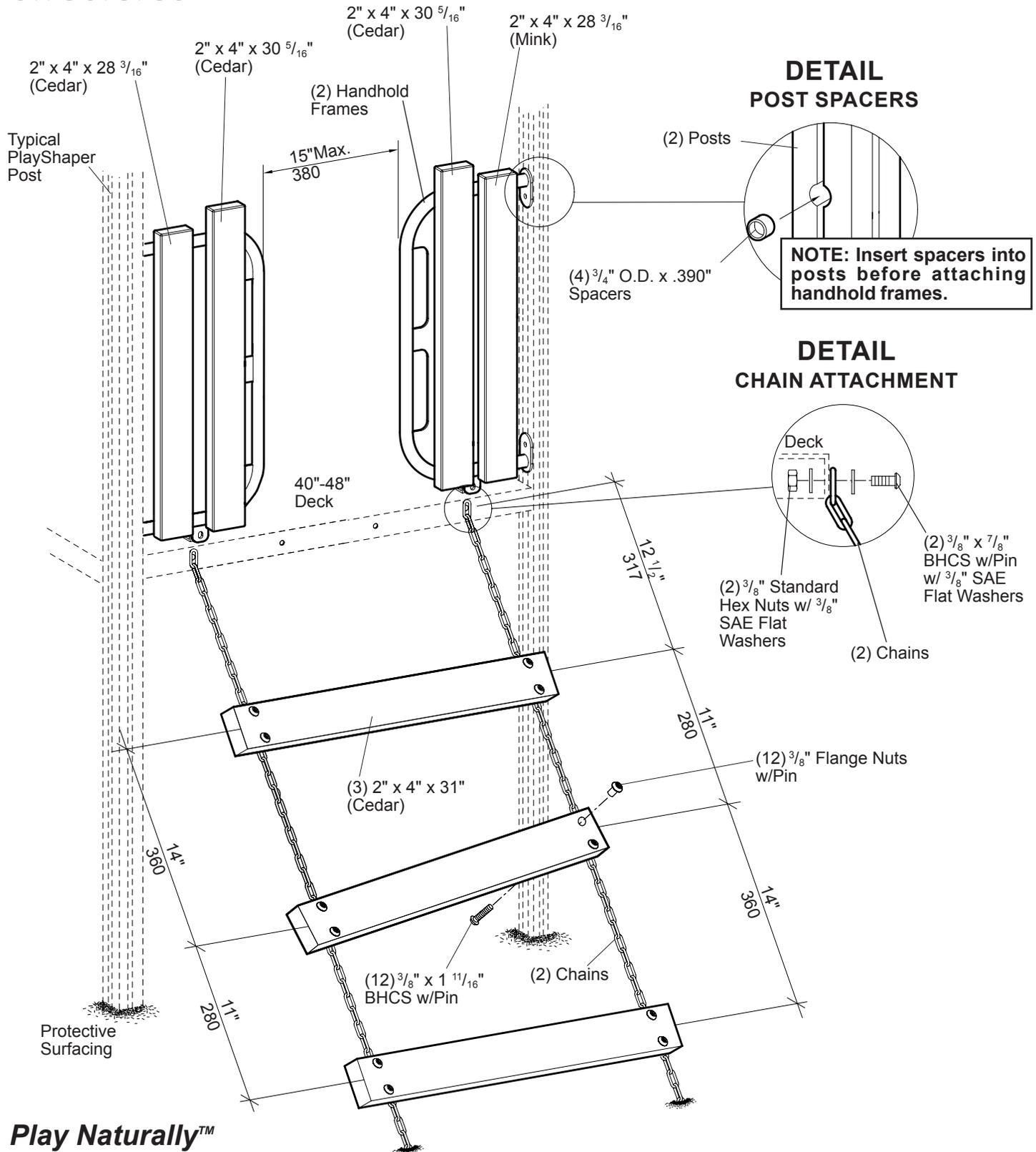
**Concrete Req.:** Approx 8.43 cu. ft.

**Weight:** 1687 lbs.

**Fall Height:** Deck Height

## Installation Instructions

- (Direct Bury)** Dig footing spaced as shown. See your Plan View/Footing Layout.
- Insert 3/4" O.D. x .390" spacers into post. Attach handhold frame to post, using 3/8" x 1 3/8" BHCS w/pin and 3/8" SAE flat washers. Refer to Detail.
- Attach angle bracket to handhold frame tab, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washer and 3/8" standard hex nut with 3/8" SAE flat washer. Refer to the Handhold Frame to Deck Attachment Detail.
- Using the holes in the angle brackets as a guide, drill through the deck using a 3/8" drill bit. Attach angle brackets to deck using 5/16" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 5/16" standard hex nuts with 3/8" SAE flat washers. Refer to the Handhold Frame to Deck Attachment Detail.
- Line up pilot holes in boards with spacers and handhold frame tabs, and attach using 3/8" x 2" lag screws with 3/8" SAE flat washers. Place spacer panels between handhold frames and boards. Attach boards and spacer panels to handhold frames, using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- (Handloop & Handrail) Using a 1/4" drill bit, drill pilot holes through boards at dimensions shown. Use a 7/16" drill bit to drill through pilot holes. Attach handloop and handrail to boards, using 3/8" x 2 1/4" BHCS w/pin and 3/8" SAE flat washers.
- 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.
- Install protective surfacing before users are allowed to play on the structure.
- NOTE: After installation if Touch-up/Repairs are needed to the concrete, contact Landscape Structures at 1-888-574-4678.**

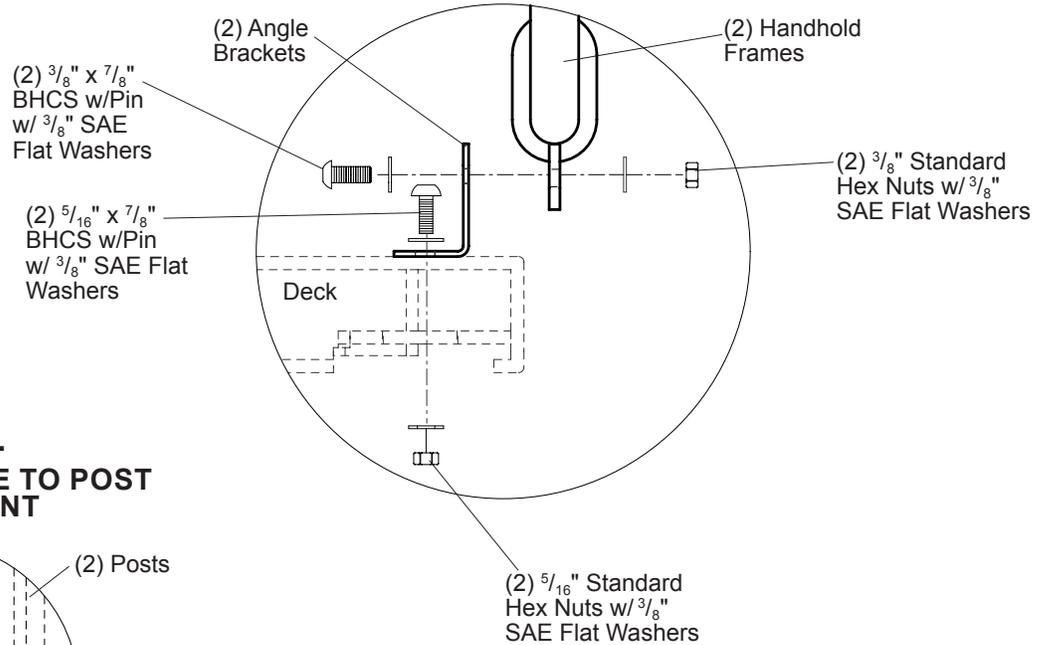


Play Naturally™

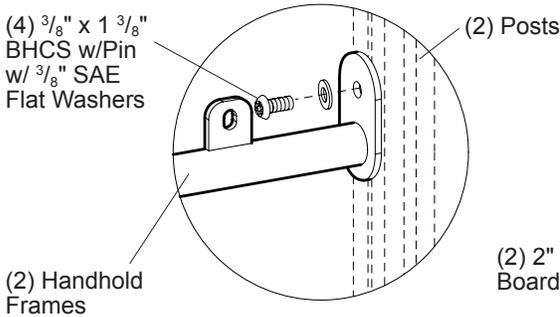
PlayShaper® 185862 Wood Wiggle Ladder, 40"-48"

Sheet 1 of 2

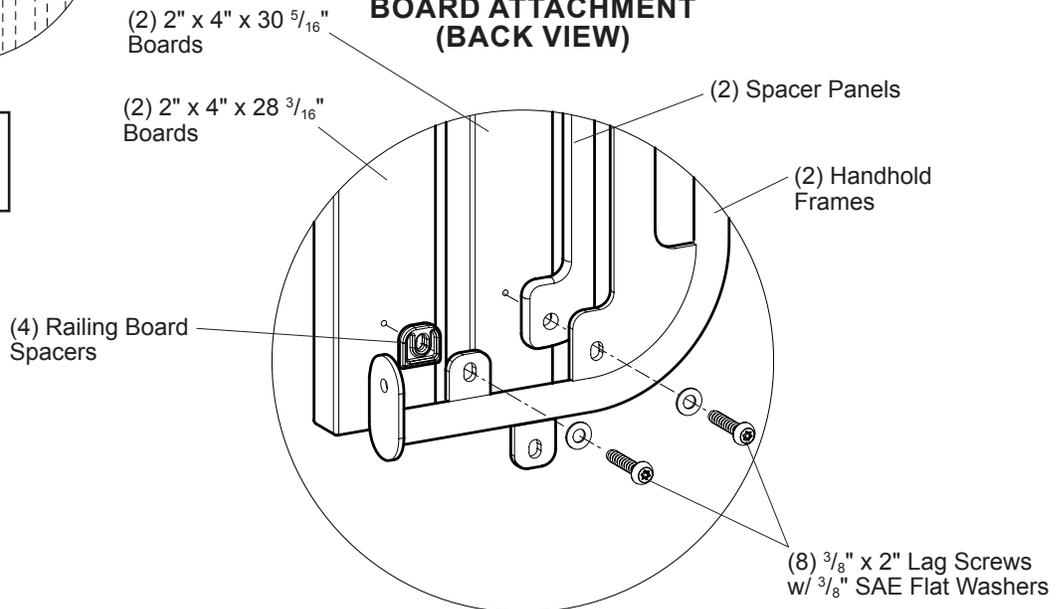
**DETAIL  
HANDHOLD FRAME TO DECK  
ATTACHMENT**



**DETAIL  
HANDHOLD FRAME TO POST  
ATTACHMENT**

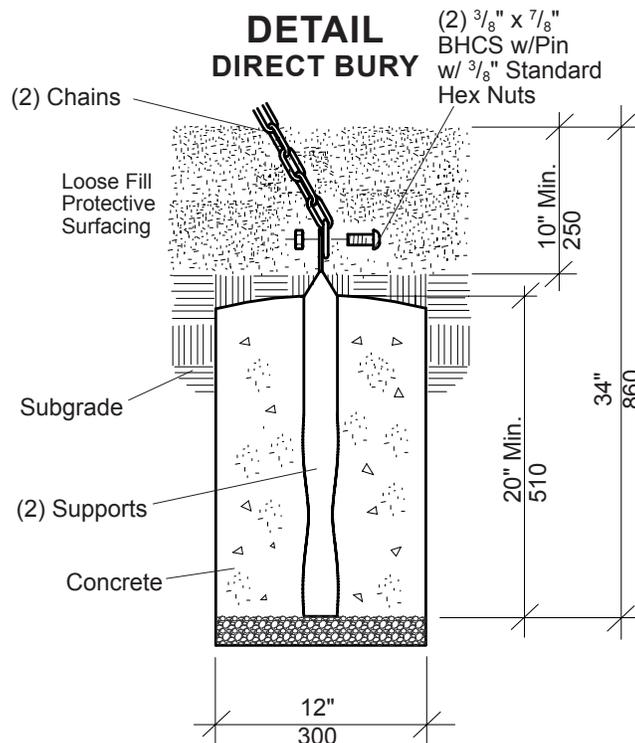
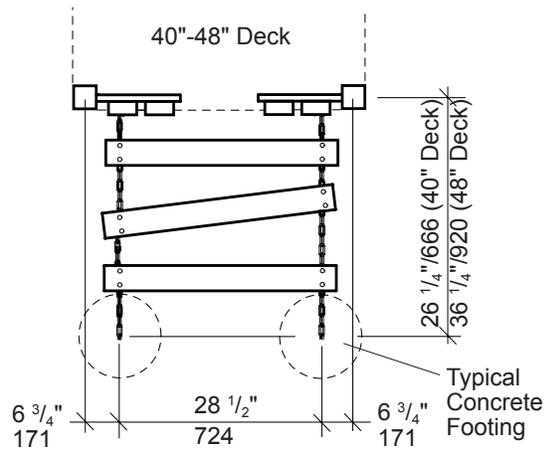


**DETAIL  
BOARD ATTACHMENT  
(BACK VIEW)**



**NOTE: Insert spacers into posts before attaching handhold frames.**

**PLAN VIEW/FOOTING LAYOUT**





# PlayShaper® 185862 Wood Wiggle Ladder, 40"-48"

## Parts List

Part#	Description	Qty.
118029	Support (DB) .....	2
169120	2" x 4" x 31" Wiggle Ladder Board, Cedar .....	3
185504	Handhold Frame, Tan .....	2
176730	2" x 4" x 30 5/16" Board, Cedar .....	2
176729	2" x 4" x 28 3/16" Board, Mink .....	1
176729	2" x 4" x 28 3/16" Board, Cedar .....	1
185505	Spacer Panel, Tan .....	2
175251	3/16" x 57 7/16" Chain, (40" Deck) .....	2
174404	3/16" x 67 7/8" Chain, (48" Deck) .....	2
<b>214939</b>	<b>Wiggle Ladder Hardware Package</b> .....	1
100196	3/8" x 7/8" BHCS w/Pin, SST .....	6
113027	3/8" x 1 3/8" BHCS w/Pin, SST .....	4
100326	5/16" Standard Hex Nut, SST .....	2
100327	3/8" Standard Hex Nut, SST .....	6
100353	3/8" Flange Nut w/Pin, SST .....	12
100365	3/8" SAE Flat Washer, SST .....	24
106187	1 3/4" x 2 5/8" Angle Bracket, SST .....	2
123224	3/8" x 1 11/16" BHCS w/Pin, SST .....	12
132626	5/16" x 7/8" BHCS w/Pin, SST .....	2
139039	3/8" x 2" BH Lag Screw, SST .....	8
166868	3/4" O.D. x .390" Spacer, AL .....	4
207485	Railing Board Spacer, Tan .....	4

DB = Direct Bury

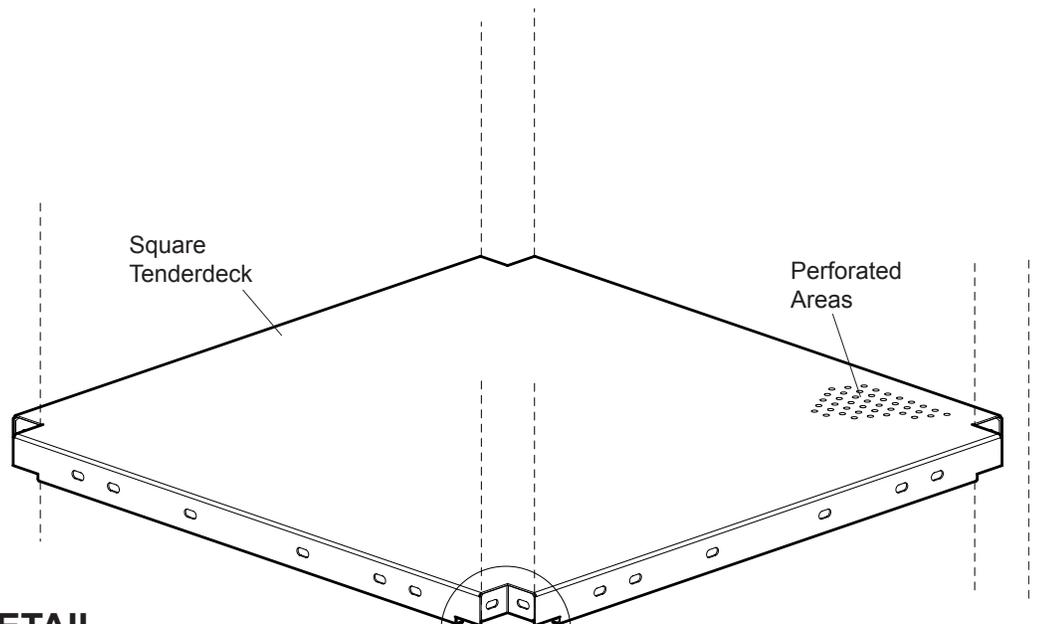
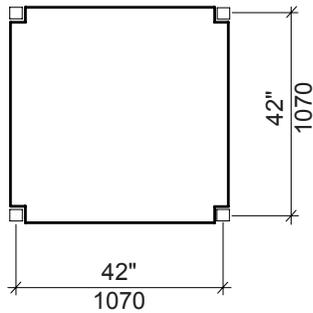
## Specifications

<b>Support (DB):</b>	Fabricated from 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing.
<b>Chain/Uncoated:</b>	Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.
<b>Poly Board:</b>	Recycled high-density polyethylene, cedar or mink in color.
<b>Spacer Panel:</b>	Permalene®, tan in color.
<b>Handhold Frame:</b>	Weldment comprised of 1.125" O.D. 11 GA. (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread and 1/4" HRPO steel plate. Finish: ProShield®, tan in color.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Approx. 3 3/4 man hours
<b>Concrete:</b>	Approx. 2.62 cu. ft.
<b>Weight:</b>	86 lbs. (40" Deck) 87 lbs. (48" Deck)
<b>Fall Height:</b>	Deck Height

## Installation Instructions

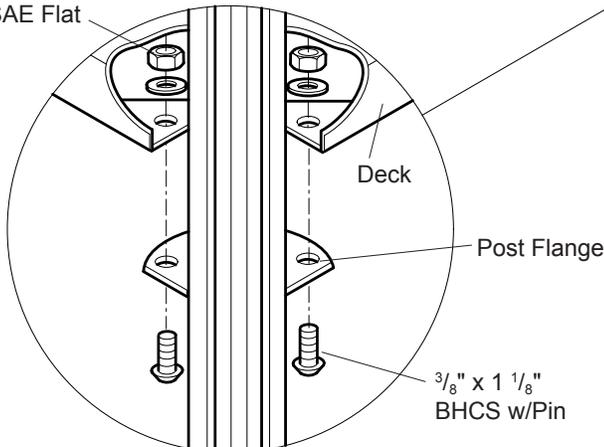
- 1) Insert 3/4" O.D. x .390" spacers into posts. Attach handhold frames to posts, using 3/8" x 1 3/8" BHCS w/pin and 3/8" SAE flat washers. Refer to Handhold Frame To Post Attachment Detail.
- 2) Attach angle brackets to handhold frame tabs, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Handhold Frame to Deck Attachment Detail.
- 3) Using the holes in the angle brackets as a guide, drill through the deck using a 3/8" drill bit. Attach angle brackets to deck using 5/16" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 5/16" standard hex nuts with 3/8" SAE flat washers. Refer to the Handhold Frame to Deck Attachment Detail.
- 4) Line up pilot holes in board with spacers and handhold frame tabs, and attach using 3/8" x 2" lag screws with 3/8" SAE flat washers. Place spacer panel between handhold frame and board. Attach board and spacer panel to handhold frame, using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- 5) Attach chains to deck, 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.
- 6) Attach boards to chains, using 3/8" x 1 11/16" BHCS w/pin and 3/8" flange nuts w/pin.
- 7) Determine footing locations by pulling chains tight and laying end on subgrade. Dig footing holes where chains meet subgrade to the width and depth shown.
- 8) Fasten chains to supports using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts.
- 9) Pour concrete into footing holes. Push supports into concrete until chain is tight and top of support is positioned 1 3/4" above subgrade. Temporarily brace supports into position until concrete has cured. Refer to the Direct Bury Detail.
- 10) After concrete has cured a minimum of 72 hours, remove support brace and install protective surfacing before users are allowed to play on the structure.

**PLAN VIEW  
FOOTING LAYOUT**



**DETAIL  
DECK ATTACHMENT**

3/8" Standard Hex Nut w/ 3/8" SAE Flat Washer



See Detail

Typical Posts



# PlayShaper® 111237 Tenderdeck

## Parts List

Part#	Description	Qty.
153298	Tenderdeck, Specify Color .....	1
<b>106695</b>	<b>Hardware Package</b> .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	8
100327	$\frac{3}{8}$ " Standard Hex Nut, SST .....	8
100365	$\frac{3}{8}$ " SAE Flat Washer, SST .....	8

## Specifications

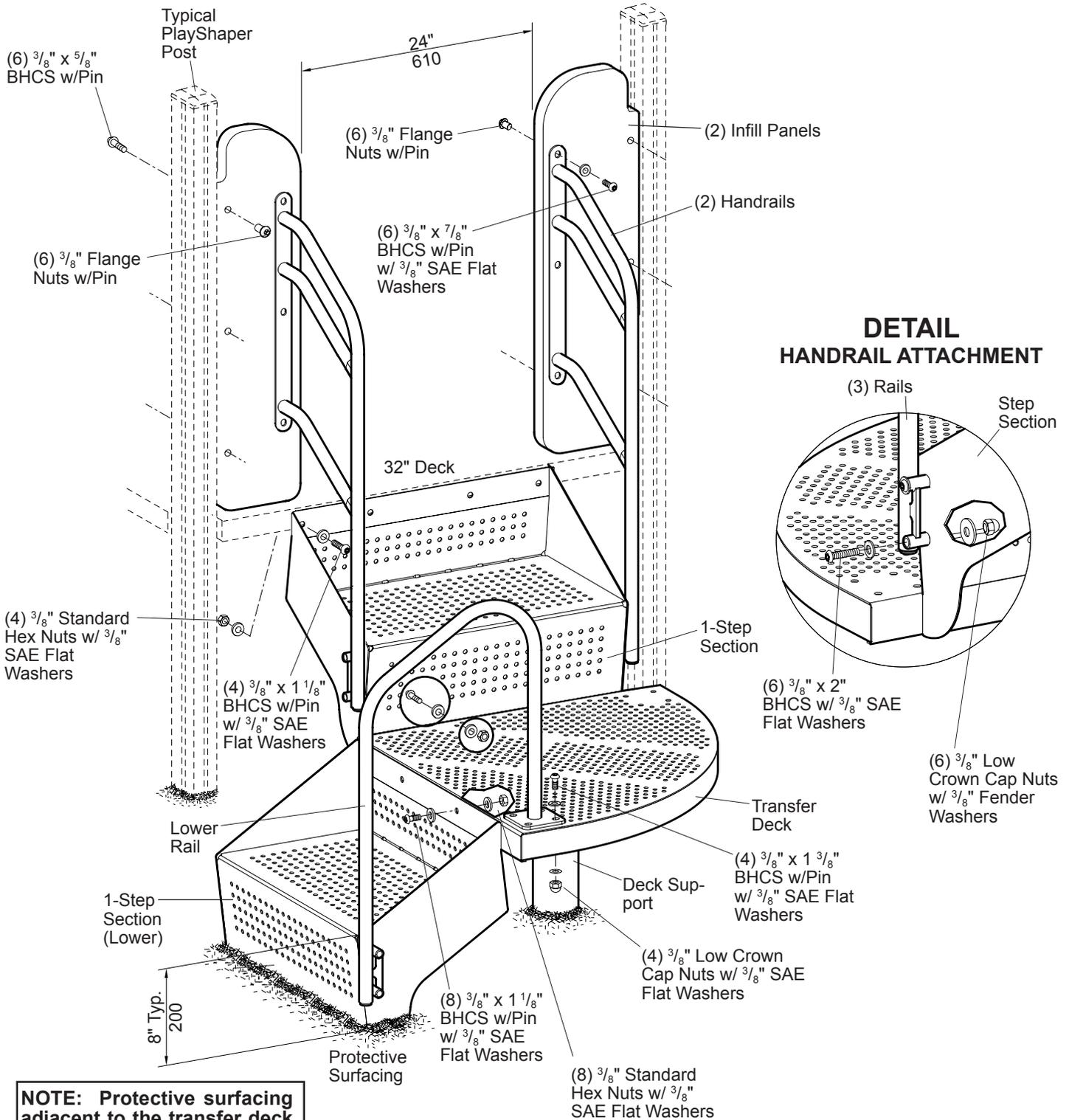
**Square Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with  $\frac{5}{16}$ " diameter holes. Deck face has (6) slotted holes for face mounting components. The finished size measures  $2\frac{5}{8}$ " x  $44\frac{3}{8}$ " x  $44\frac{3}{8}$ ". Finish: TenderTuff™, 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:  $\frac{3}{4}$  man hour  
**Weight:** 102 lbs.

## Installation Instructions

- 1) Orient posts correctly according to labeled post letters and set in proper footing holes.
- 2) Position deck on post flanges and attach using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/ pin and  $\frac{3}{8}$ " standard hex nuts with  $\frac{3}{8}$ " SAE flat washers. See Deck Attachment Detail.
- 3) Level deck and plumb posts.
- 4) Install other panels/ components according to their respective installation sheets.
- 5) Pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- 6) Install protective surfacing before users are allowed to play on the structure.



**NOTE: Protective surfacing adjacent to the transfer deck must be accessible.**



# PlayShaper® 153020 Transfer Module, 32", w/Handrails

## Parts List

Part#	Description	Qty.
144696	1-Step Section, Specify Color	2
153398	Transfer Deck, Specify Color	1
175516	1-Step Handrail, Specify Color	2
152641	Lower Rail, Specify Color	1
181371	Deck Support (DB), Specify Color	1
181373	Deck Support (SM), Specify Color	1
181374	Step Support (DB), Specify Color	1
181376	Step Support (SM), Specify Color	1
175530	Infill Panel, Specify Color	2
<b>204036</b>	<b>Transfer Module Hardware Package</b>	1
100173	3/8" x 2" BHCS, SST	6
100195	3/8" x 5/8" BHCS w/Pin, SST	6
100196	3/8" x 7/8" BHCS w/Pin, SST	12
100198	3/8" x 1 1/8" BHCS w/Pin, SST	12
100327	3/8" Standard Hex Nut, SST	16
100353	3/8" Flange Nut w/Pin, SST	12
100365	3/8" SAE Flat Washer, SST	50
113027	3/8" x 1 3/8" BHCS w/Pin, SST	4
100378	3/8" Fender Washer, SST	6
100349	3/8" Low Crown Cap Nut, SST	12
<b>111393</b>	<b>4-Hole (SM) Hardware Package</b>	1
100263	3/8" x 2 3/4" Expansion Anchors	4
100327	3/8" Standard Hex Nut, SST	4
100365	3/8" SAE Flat Washers, SST	4
<b>121256</b>	<b>2-Hole (SM) Hardware Package</b>	1
100263	3/8" x 2 3/4" Expansion Anchors	2
100327	3/8" Standard Hex Nut, SST	2
100365	3/8" SAE Flat Washers, SST	2

DB=Direct Bury  
SM=Surface Mount

## Specifications

<b>Deck:</b>	Flange formed from 12 GA (.105") HRPO sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measure 29" per (2) sides. Finish: TenderTuff™, color specified.
<b>Railings:</b>	Weldment comprised of formed 1 1/8" O.D. x 11 GA (.120") steel tubing, 3/16" thick HRPO flat steel, 3/16" thick HRPO steel plate and 3/4" O.D. x 11 GA. (.120") stainless steel tubing. Finish: TenderTuff, color specified.
<b>Step Sections:</b>	Formed from 12 GA (.105") HRPO sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.
<b>Deck Support:</b>	Weldment comprised of 3 1/2" O.D. RS20 (.125") galvanized steel tubing and 3/8" O.D. x 5" long rod. Finish: ProShield®, color specified.
<b>Step Support:</b>	Weldment comprised of 1.660 O.D. RS20 (.080"-.095) and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.
<b>Panel:</b>	Solid color Permalene®, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	<b>SM</b> - Approx. 3 man hours <b>DB</b> - Approx. 4 man hours
<b>Concrete Req.:</b>	Approx. 3.4 cu. ft.
<b>Weight:</b>	<b>SM</b> - 179 lbs. <b>DB</b> - 194 lbs.
<b>Fall Height:</b>	Deck Height

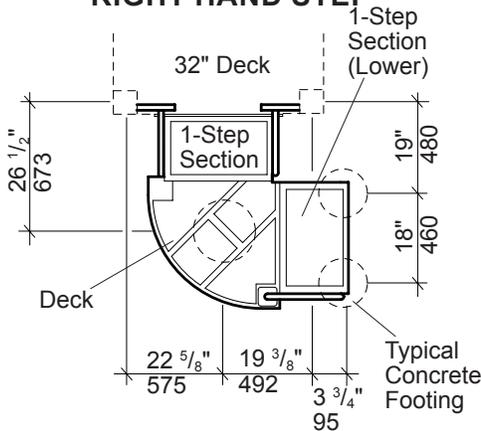
## Installation Instructions

- 1) **(Direct Bury)** Dig footings as shown. Refer to your Plan View/Footing Layout.
- 2) Attach the deck support to the transfer deck using 3/8" x 7/8" BHCS w/pin and 3/8" low crown cap nuts with 3/8" SAE flat washers. **NOTE: Make sure 3/8" rod on support is under support strap on deck as shown.** Refer to the Deck Support Attachment Detail.
- 3) Attach the 1-step section to the transfer deck 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.
- 4) Attach the 1-step section to the mainstructure deck 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.
- 5) Attach the step support to the 1-step section (lower) using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts. Refer to the Step Support Attachment Detail.
- 6) Attach the 1-step section (lower) to the transfer deck 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.
- 7) Attach infill panels to the posts using 3/8" x 5/8" BHCS w/pin with 3/8" flange nuts w/pin.
- 8) Attach the handrails to the steps using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.
- 9) Attach handrails to the infill panels using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
- 10) Attach the lower rail to the transfer deck using 3/8" x 1 3/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" SAE flat washers.
- 11) Attach the lower rail to the 1-step section (lower) using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.
- 12) **(Direct Bury)** With transfer deck and steps level and supports plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.

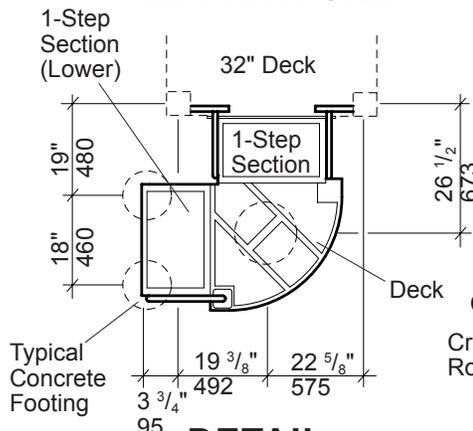
**(Surface Mount)** Mark holes for expansion anchors on concrete slab through support plates. Detach the module from the mainstructure and slide module aside, drill 3/8" x 3" deep holes on marks using hammer drill and 3/8" masonry bit. Reposition module over drilled holes and tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers. Reattach module to structure.

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

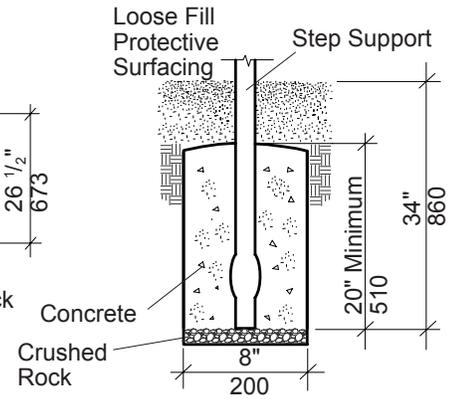
**PLAN VIEW  
 FOOTING LAYOUT  
 RIGHT HAND STEP**



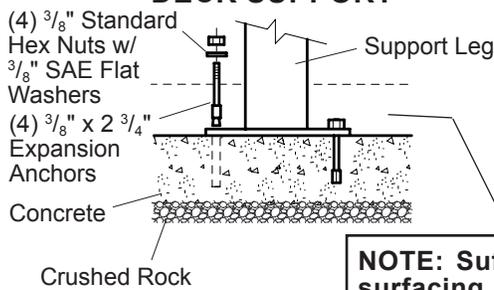
**PLAN VIEW  
 FOOTING LAYOUT  
 LEFT HAND STEP**



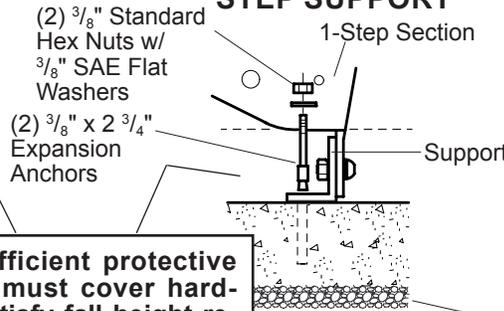
**DETAIL  
 STEP SUPPORT BURY**



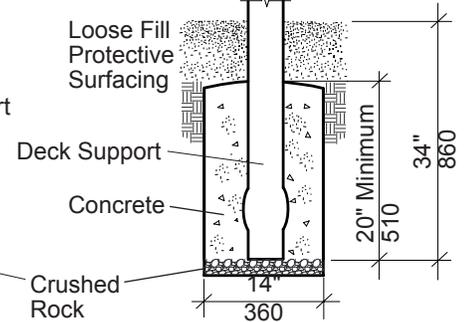
**DETAIL  
 SURFACE MOUNT  
 DECK SUPPORT**



**DETAIL  
 SURFACE MOUNT  
 STEP SUPPORT**

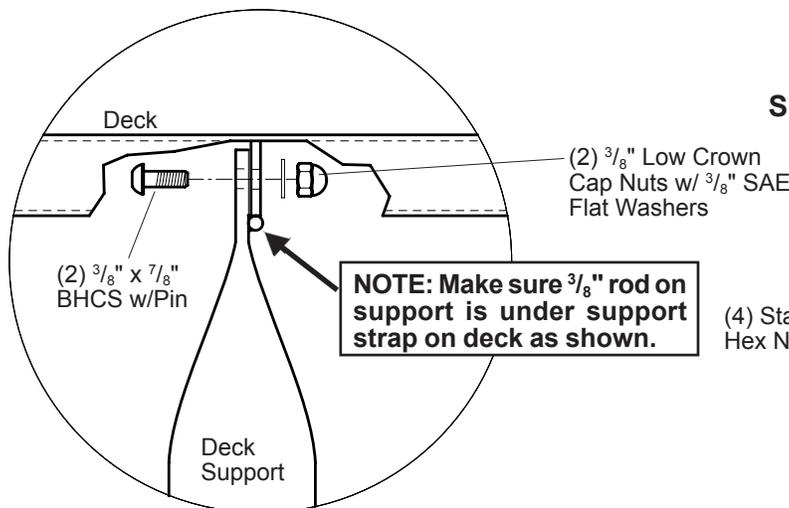


**DETAIL  
 DECK SUPPORT BURY**



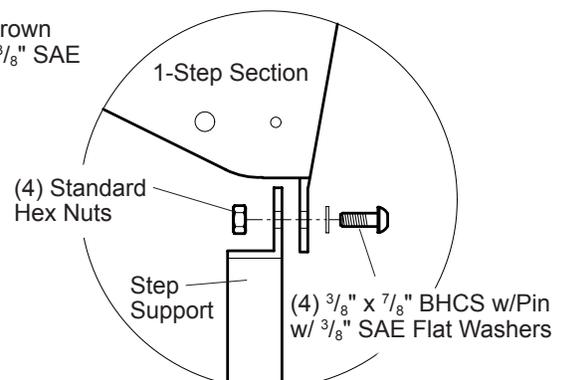
**NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.**

**DETAIL  
 DECK SUPPORT ATTACHMENT**



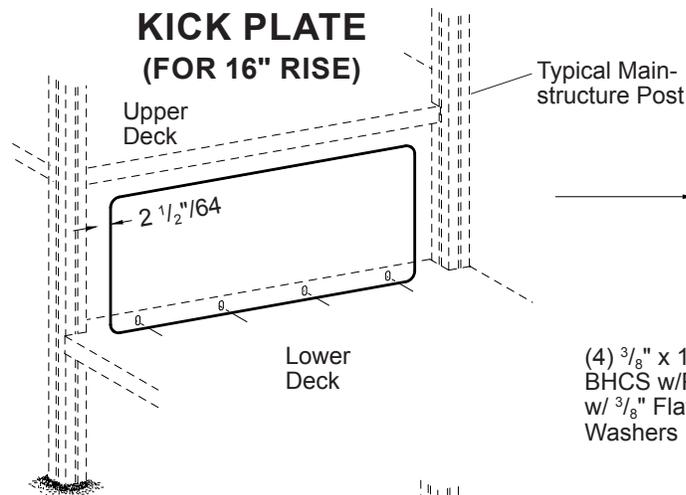
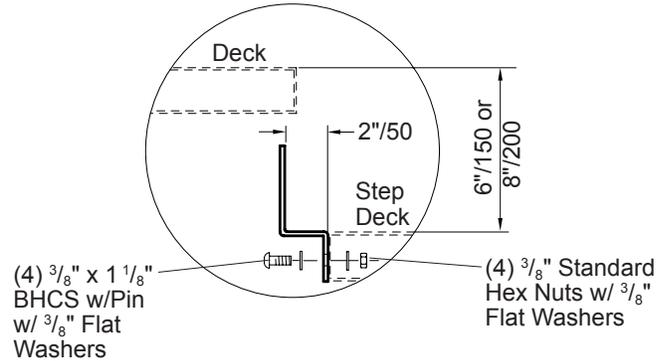
**NOTE: Make sure 3/8 inch rod on support is under support strap on deck as shown.**

**DETAIL  
 STEP SUPPORT ATTACHMENT**

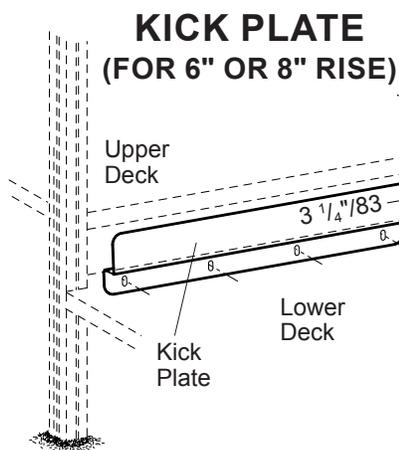
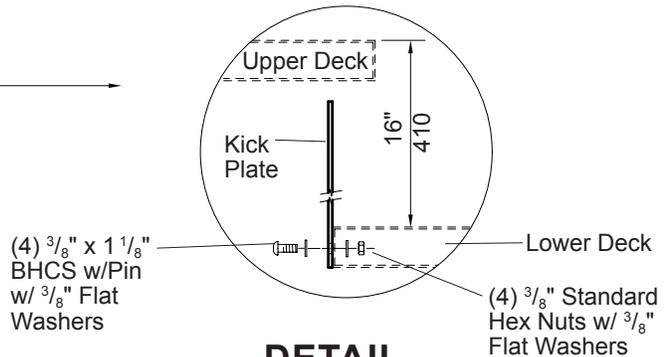




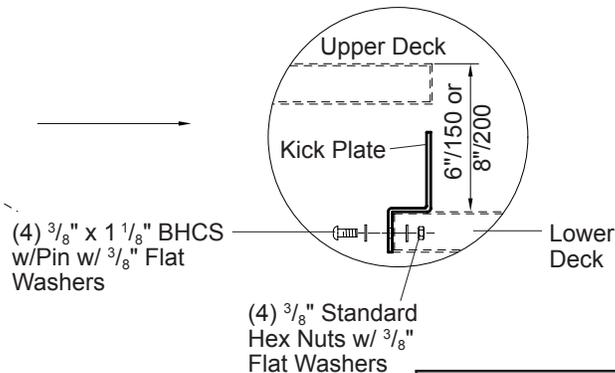
**DETAIL**  
**KICK PLATE ATTACHMENT**  
**(FOR 6" OR 8" RISE)**



**DETAIL**  
**KICK PLATE ATTACHMENT**  
**(FOR 16" RISE)**



**DETAIL**  
**KICK PLATE ATTACHMENT**  
**(FOR 6" OR 8" RISE)**



**NOTE: Kick Plates mount to face of lower deck.**



# PlayShaper® 179349 Kick Plates, Tenderdecks, 6", 8" & 16"

## Parts List

Part#	Description	Qty.
121819	Kick Plate (For 6" or 8" Rise), Specify Color .....	1
121818	Kick Plate (For 16" Rise), Specify Color .....	1
<b>156058</b>	<b>Kick Plate Tenderdeck Hardware Package</b> .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	4
100327	$\frac{3}{8}$ " Standard Hex Nut, SST .....	4
100362	$\frac{3}{8}$ " Flat Washer, SST .....	8

## Specifications

**Kick Plate:** Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff™, color specified.

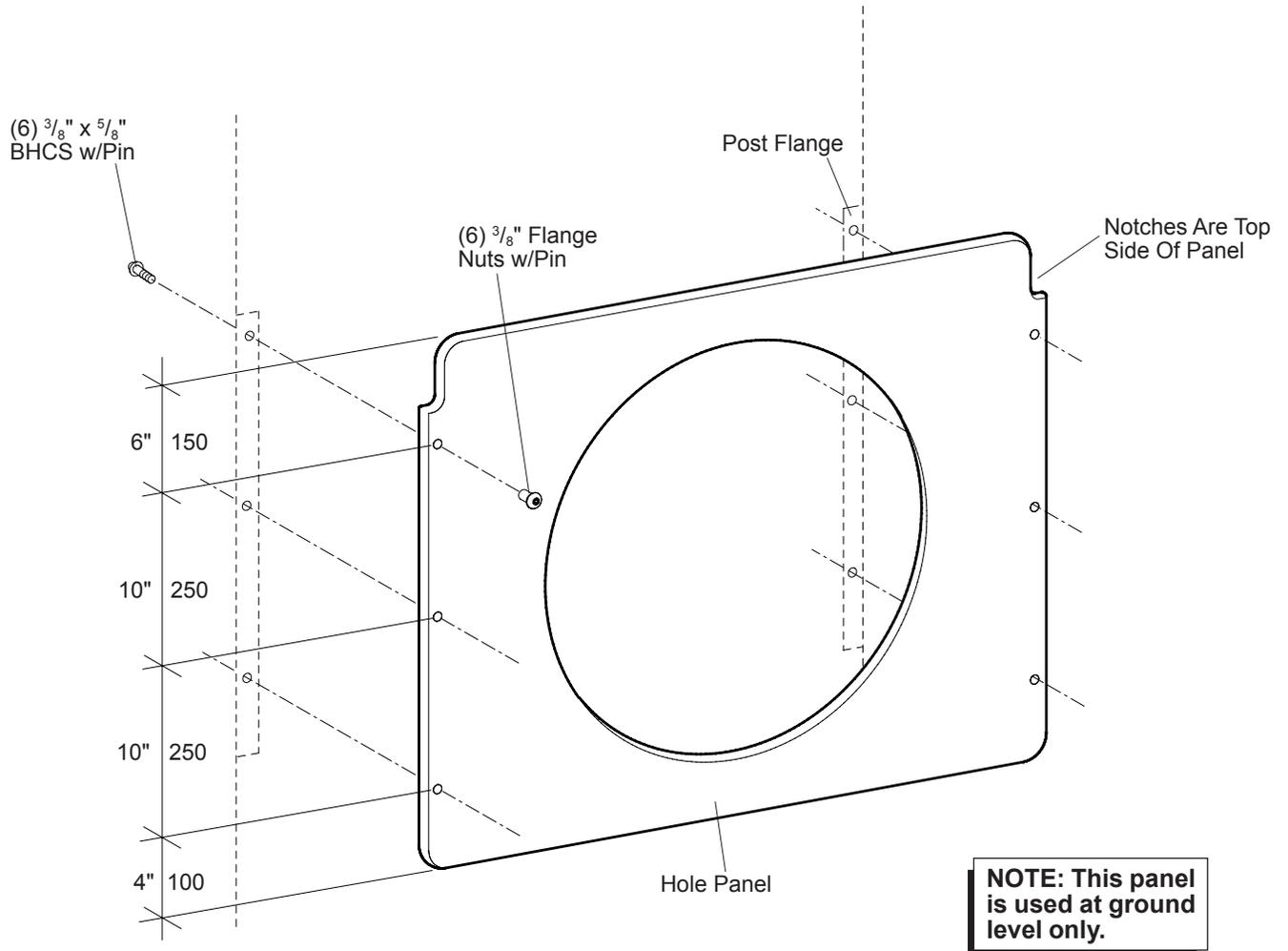
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx.  $\frac{1}{4}$  man hour  
**Weight:** Kick Plate (For 6" or 8" Rise) 13 lbs.  
 Kick Plate (For 16" Rise) 22 lbs.

## Installation Instructions

- 1) Locate kick plates as labeled on your plan drawing.
- 2) Attach kick plate using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " flat washers and  $\frac{3}{8}$ " standard hex nuts with  $\frac{3}{8}$ " flat washers, as shown. **NOTE:** *Kick plates mount to face of lower deck.*
- 3) Install protective surfacing before users are allowed to play on the structure.

**PS = Playshaper**  
**LW = Learning Wall - Mounted 1 3/4" Above The Playing Surface.**



**NOTE: This panel is used at ground level only.**

**PlayShaper® 111284/184854 Hole Panel, (Ground Level)**



# PlayShaper® 111284/184854 Hole Panel, (Ground Level)

## Parts List

Part#	Description	Qty.
108763	Hole Panel, Specify Color .....	1
<b>106480</b>	<b>Panel Hardware Package</b> .....	1
100195	3/8" x 5/8" BHCS w/Pin, SST .....	6
100353	3/8" Flange Nut w/Pin, SST .....	6

## Specifications

**Permalene® Panel:** Solid color panel measures 39 1/2" wide x 30" high, color specified.

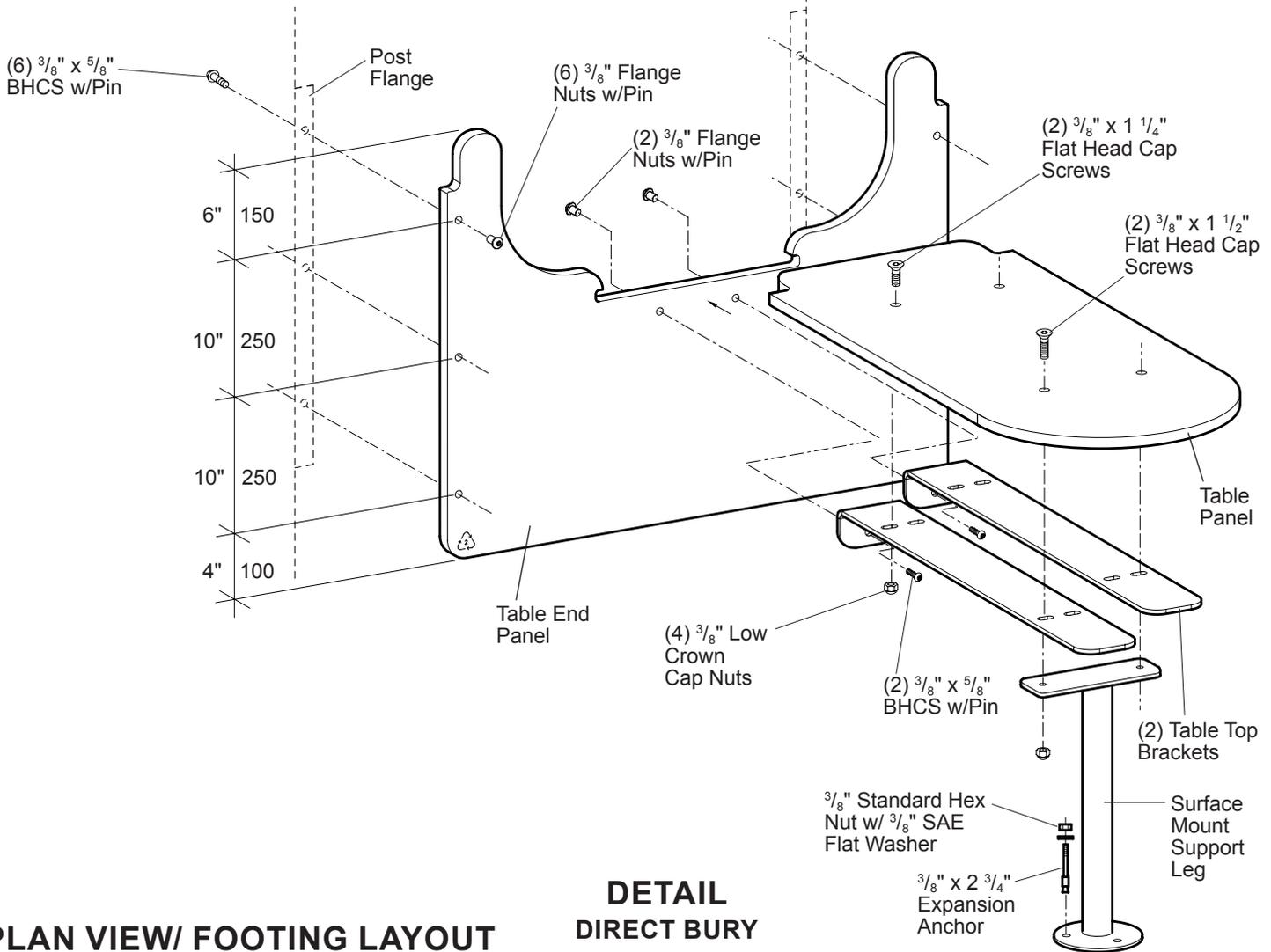
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1/4 man hour  
**Weight:** 21 lbs.

## Installation Instructions

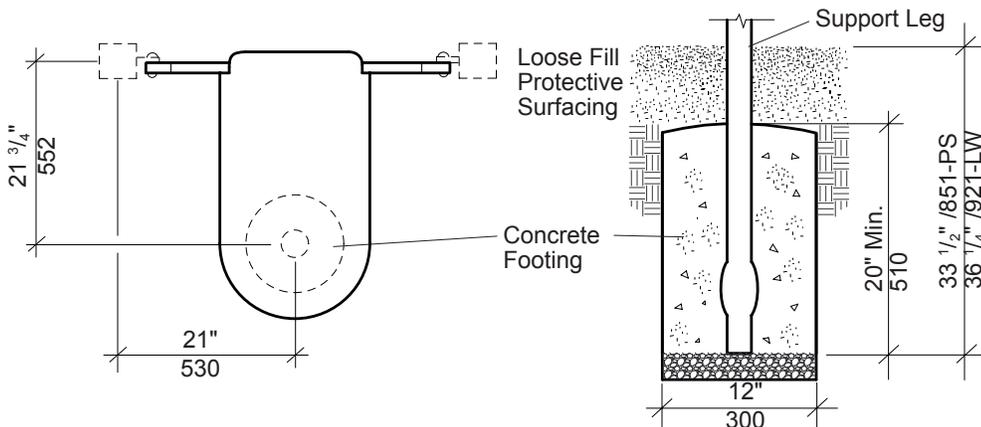
- 1) Attach panel to posts flanges using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.
- 2) Install protective surfacing before users are allowed to play on the structure.

**PS = Playshaper**  
**LW = Learning Wall - Mounted 1 3/4"**  
**Above The Playing Surface.**



**PLAN VIEW/ FOOTING LAYOUT**

**DETAIL DIRECT BURY**



**PlayShaper® 111292/184861 Table Panel, Ground Level**



# PlayShaper® 111292/184861 Table Panel, Ground Level

## Parts List

Part#	Description	Qty.
165143	Table Top Bracket, Specify Color .....	2
103116	Support Leg, (DB), Specify Color.....	1
103119	Support Leg, (SM), PS, Specify Color.....	1
114290	Support Leg, (SM), LW, Specify Color.....	1
109334	Table End Panel, Specify Color.....	1
130370	Table Panel, Specify Color.....	1
<b>152774</b>	<b>Hardware Package</b> .....	1
100195	$\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/Pin, SST .....	8
100252	$\frac{3}{8}$ " x $1\frac{1}{4}$ " Flat Head Cap Screw, SST .....	2
151421	$\frac{3}{8}$ " x $1\frac{1}{2}$ " Flat Head Cap Screw, SST .....	2
100349	$\frac{3}{8}$ " Low Crown Cap Nut, SST .....	4
100353	$\frac{3}{8}$ " Flange Nut w/Pin, SST.....	8
<b>112980</b>	<b>1-Hole (SM) Hardware Package</b> .....	1
100263	$\frac{3}{8}$ " x $2\frac{3}{4}$ " Expansion Anchor .....	1
100327	$\frac{3}{8}$ " Standard Hex Nut, SST .....	1
100365	$\frac{3}{8}$ " SAE Flat Washer, SST.....	1

DB=Direct Bury  
SM=Surface Mount

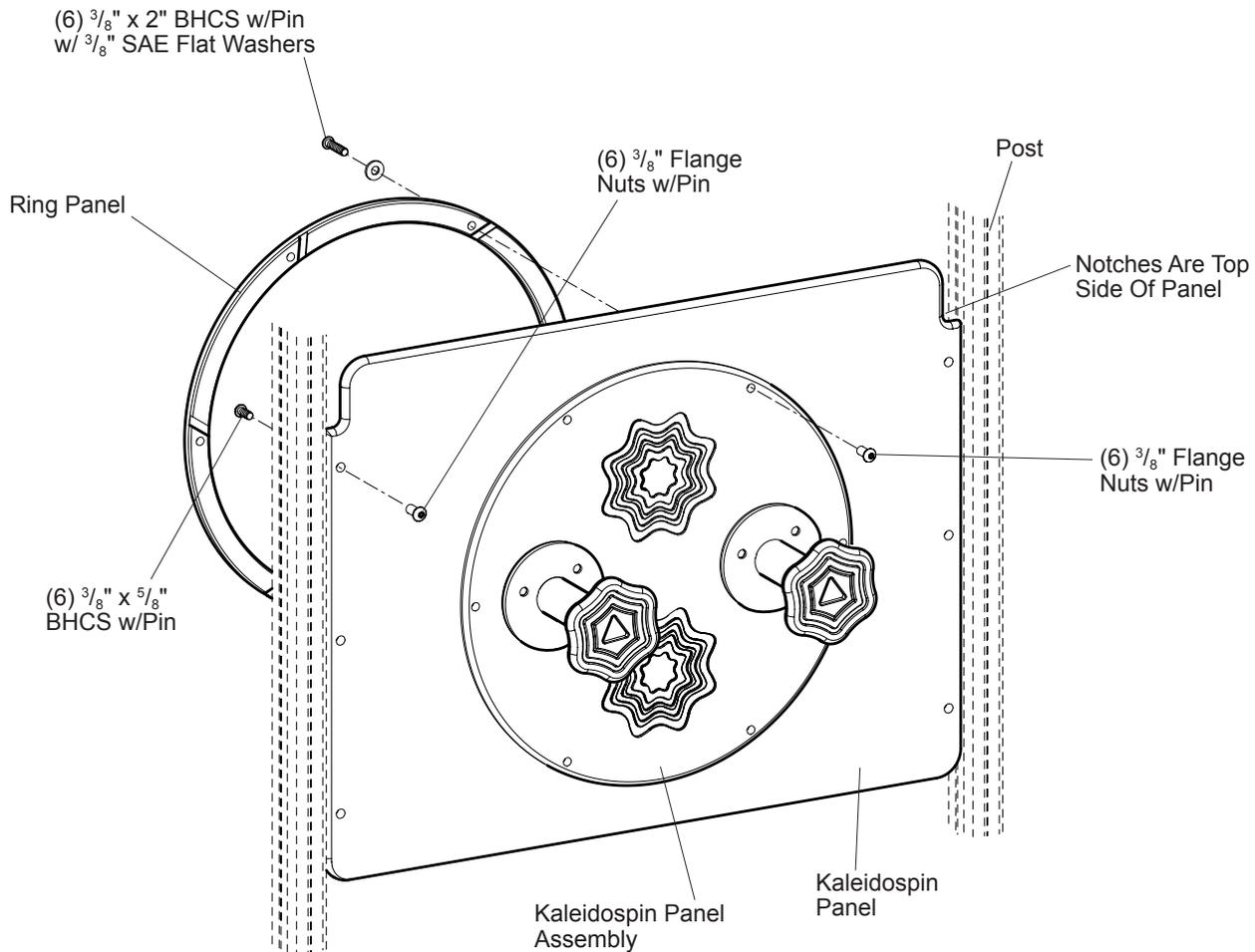
## Specifications

- Permalene® Panel:** Solid color panel measures 39  $\frac{1}{2}$ " wide x 30" high, color specified.
- Table Top Panel:** Solid color Permalene panel measures 19  $\frac{1}{2}$ " wide x 34  $\frac{3}{4}$ " high, color specified.
- Support Leg:** Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and  $\frac{1}{4}$ " x  $2\frac{1}{2}$ " x 9" flat plate. Finish: ProShield®, color specified.
- Table Top Bracket:** Fabricated from  $\frac{1}{4}$ " x  $3\frac{1}{2}$ " x  $28\frac{9}{16}$ " HRPO flat steel. Finish: ProShield, color matched to posts.
- 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. 1  $\frac{1}{2}$  man hours  
**Concrete Req.:** Approx. 1.3 cu. ft.  
**Weight:** 68 lbs.

## Installation Instructions

- (Direct Bury)** Dig footing hole spaced and to depth shown on front of sheet.
- Attach table top brackets and support leg to underside of table top panel using  $\frac{3}{8}$ " x  $1\frac{1}{4}$ " flat head cap screws through panel and table top brackets, and  $\frac{3}{8}$ " x  $1\frac{1}{2}$ " flat head cap screws through panel, table top brackets and support leg. Secure with  $\frac{3}{8}$ " low crown cap nuts.
- Attach table top assembly to table end panel using  $\frac{3}{8}$ " x  $\frac{5}{8}$ " BHCS w/ pin through table top brackets and  $\frac{3}{8}$ " flange nuts w/pin through panel.
- Attach panel to post flanges using  $\frac{3}{8}$ " x  $\frac{5}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " flange nuts w/pin.
- (Direct Bury)** Level table and prop in position. Pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.  
  
**(Surface Mount)** Using  $\frac{3}{8}$ " masonry bit, drill through holes in base plate into concrete slab 3" deep. Insert and tap  $\frac{3}{8}$ " x  $2\frac{3}{4}$ " expansion anchors into holes and secure with  $\frac{3}{8}$ " standard hex nuts and  $\frac{3}{8}$ " SAE flat washers.
- Install protective surfacing before users are allowed to play on the structure.

**PS = Playshaper**  
**LW = Learning Wall - Mounted 10 3/4" Above The Playing Surface.**



**NOTE:**  
 The Kaleidospin Panel is preassembled at the factory.

**PlayShaper® 173571/184896 Kaleidospin Panel®**



# PlayShaper® 173571/184896 Kaleidospin Panel®

## Parts List

Part#	Description	Qty.
181245	Kaleidospin Panel Assembly, Specify Color.....	1
173734	Kaleidospin Panel, Specify Color.....	1
167014	Ring Panel, Specify Color.....	1
<b>174505</b>	<b>Kaleidospin Panel Hardware Package</b> .....	<b>1</b>
100173	3/8" x 2" BHCS w/Pin, SST.....	6
100353	3/8" Flange Nut w/Pin, SST.....	6
100365	3/8" SAE Flat Washer, SST.....	6
<b>106480</b>	<b>Panel Hardware Package</b> .....	<b>1</b>
100195	3/8" x 5/8" BHCS w/Pin, SST.....	6
100353	3/8" Flange Nut w/Pin, SST.....	6

## Specifications

### Kaleidoscope

**Panel Assembly:** (Panels) Two color Permalene® panels, color specified. (Tubes) Weldment comprised of 2.375" O.D. RS40 (.130"-.140") galvanized tubing and 7 GA. (.179") sheet HRPO steel. Finish: ProShield®, color specified. (Mirror) Fabricated from 22 GA. (.030") stainless steel sheet.

**Panels:** Two color Permalene panel, color specified.

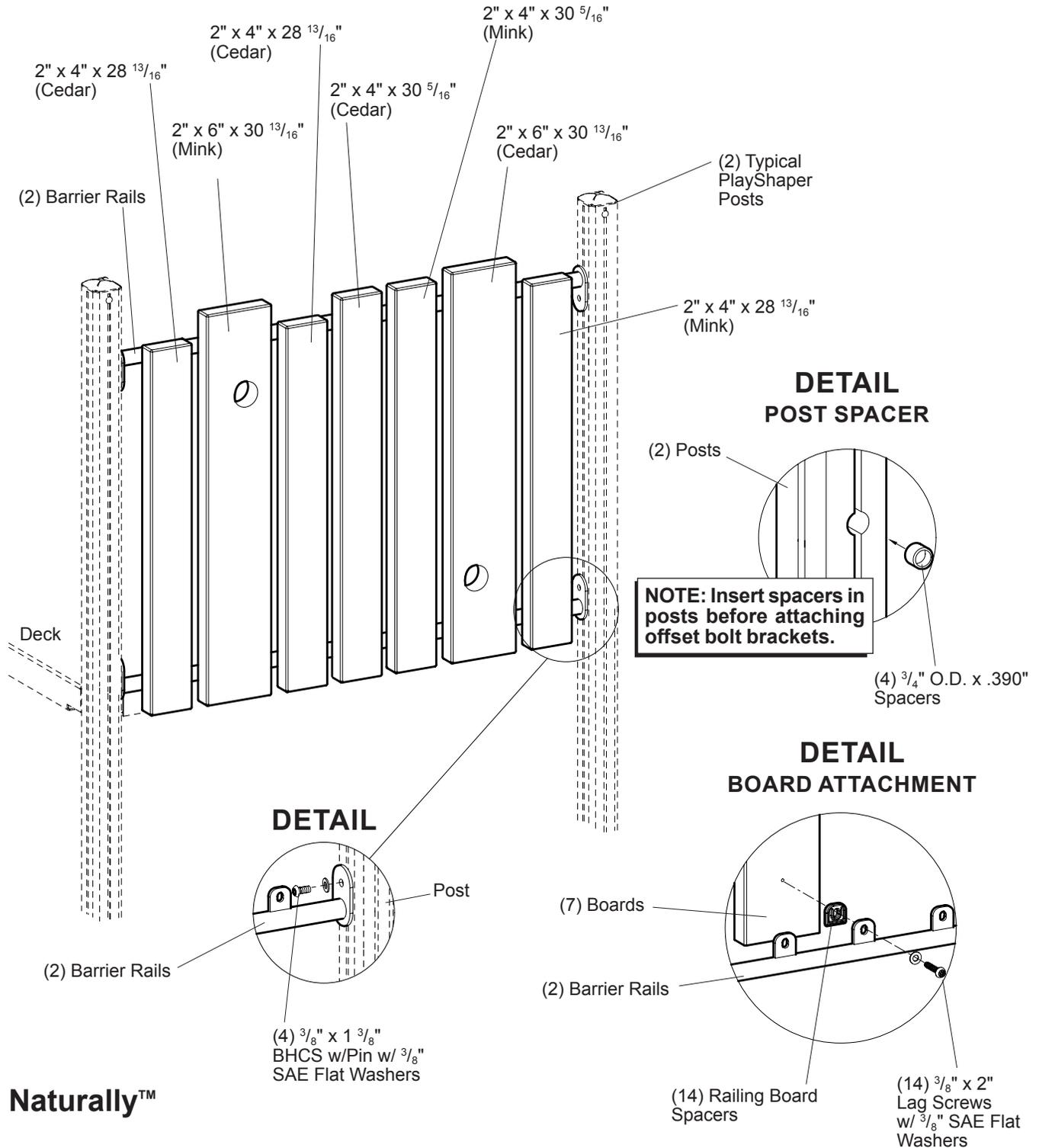
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1/4 man hour

**Weight:** 74 lbs.

## Installation Instructions

- 1) Attach Kaleidospin panel assembly to Kaleidospin panel, using ring panel, 3/8" x 2" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
- 2) Attach panel to post flanges using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin as shown.
- 3) Install protective surfacing before users are allowed to play on the structure.



Play Naturally™

PlayShaper®

## 173586 Recycled Lumber Panel



# PlayShaper® 173586 Recycled Lumber Panel

## Parts List

Part#	Description	Qty.
176217	Barrier Rail, Tan .....	2
176729	2" x 4" x 28 13/16" Board, Cedar .....	2
176729	2" x 4" x 28 13/16" Board, Mink .....	1
176730	2" x 4" x 30 5/16" Board, Cedar .....	1
176730	2" x 4" x 30 5/16" Board, Mink .....	1
172552	2" x 6" x 30 13/16" Board, Mink .....	1
172553	2" x 6" x 30 13/16" Board, Cedar .....	1
<b>215170</b>	<b>Lumber Hardware Package</b> .....	1
113027	3/8" x 1 3/8" BHCS w/Pin, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	18
139039	3/8" x 2" Lag Screw, SST .....	14
166868	3/4" O.D. x .390" Spacer, AL .....	4
207485	Railing Board Spacer, Tan .....	14

## Specifications

**Poly Board:** Recycled 1 1/2" x 3 1/2" and 1 1/2" x 5 1/2" high-density polyethylene, cedar or mink in color.

**Barrier Rail:** Weldment comprised of 1.125" O.D. 11 GA. (.120") steel tubing with 203 or 303 stainless steel inserts, with 5/8" internal threads, 3/16" HRPO steel plate and 1/4" HRPO steel plate. Finish: ProShield®, tan 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).

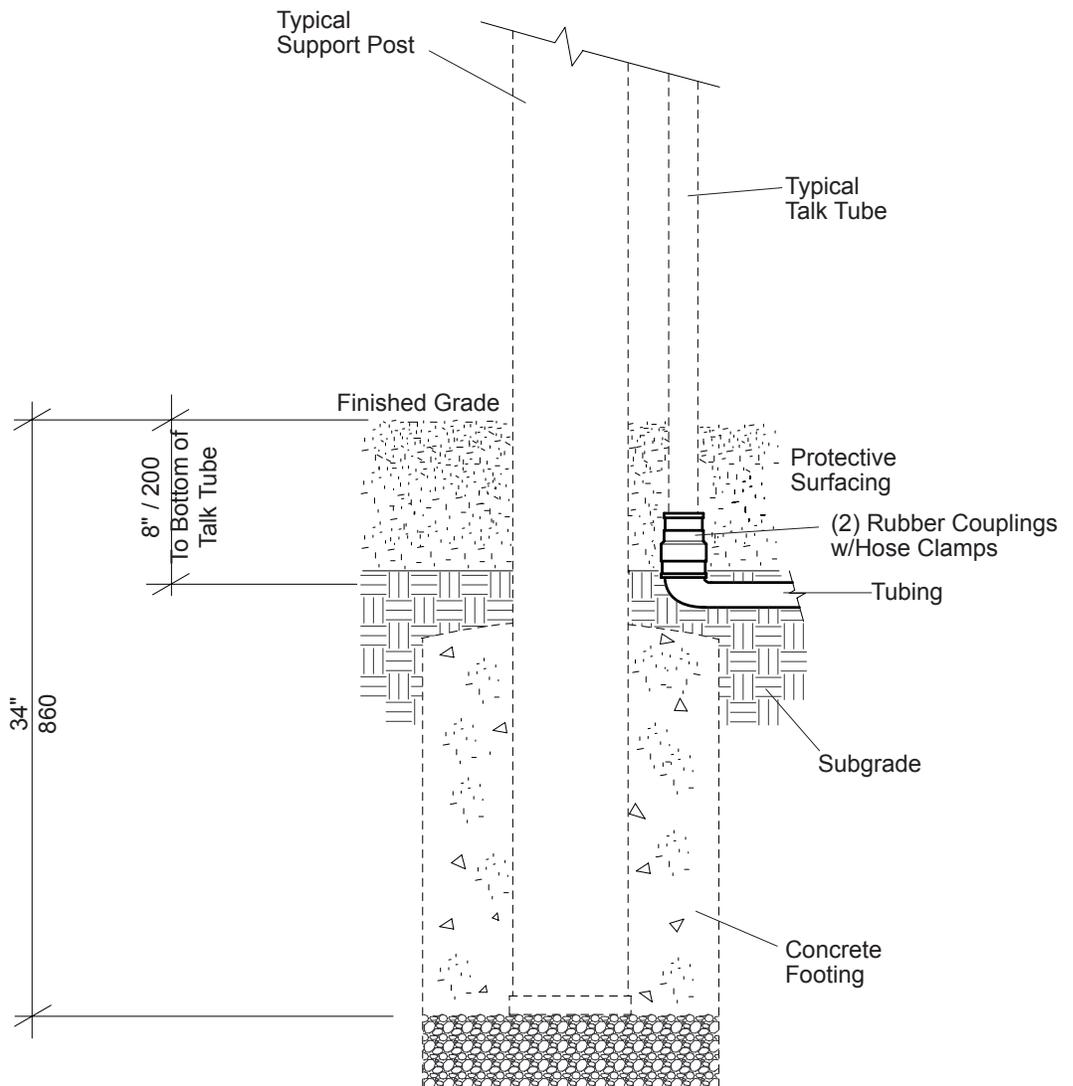
**Installation Time:** Approx. 1 1/4 man hours

**Weight:** 65 lbs.

**Fall Height:** Deck Height

## Installation Instructions

- 1) Insert 3/4" O.D. x .390" spacers into posts. Attach barrier rails to posts, using 3/8" x 1 3/8" BHCS w/pin and 3/8" SAE flat washers.
- 2) Line up pilot holes in barrier boards with spacers and barrier rail tabs, and attach using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- 3) Install protective surfacing before users are allowed to play on the structure.



**PB/PS**

**111362 Talk Tube Tubing Kit**



# PB/PS 111362 Talk Tube Tubing Kit

## Parts List

Part#	Description	Qty
173612	1.75" O.D. Plastic Tube.....	50 Ft.
<b>173622-00</b>	<b>Hardware Package</b> .....	1
173611-00	Rubber Coupling w/SST Hose Clamps .....	2

## Specifications

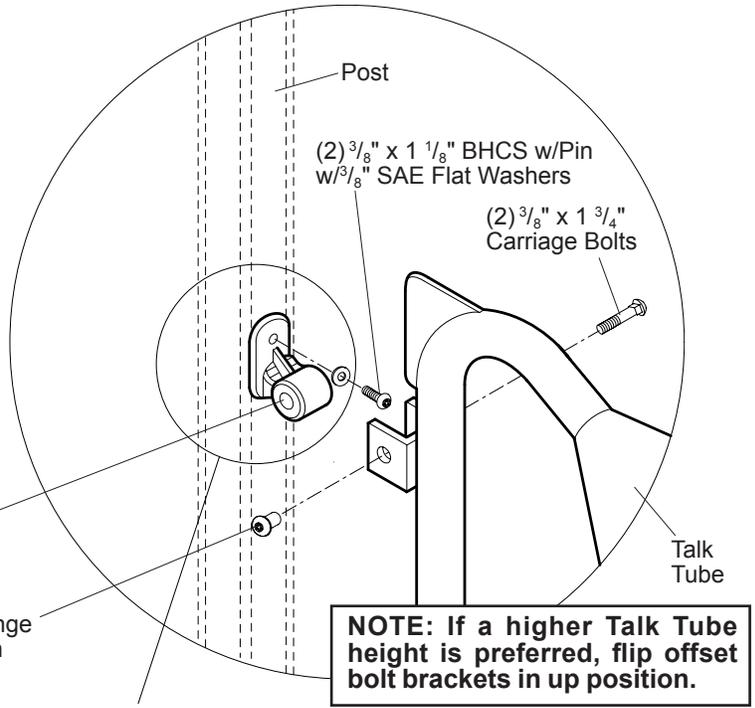
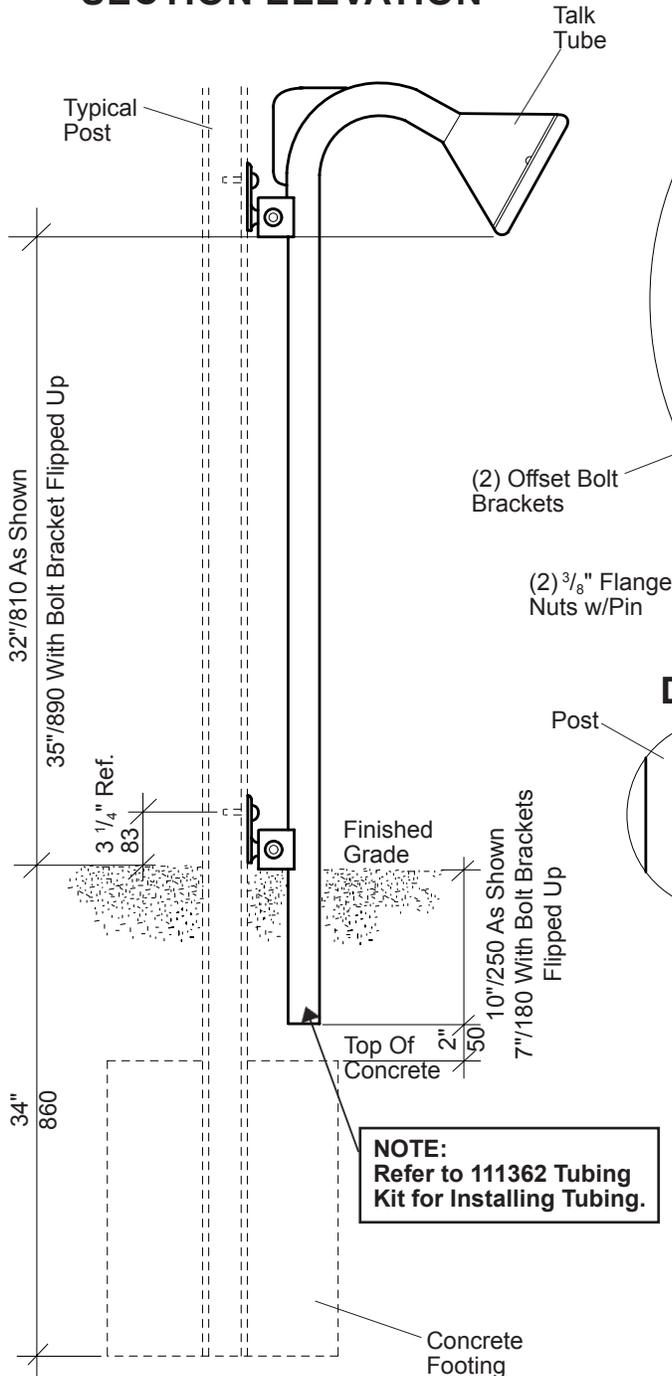
- Talk Tube Hose:** Made from HDPE conduit.
- Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- Installation Time:** Approx. 1-3 man hours
- Weight:** 14 lbs.

## Installation Instructions

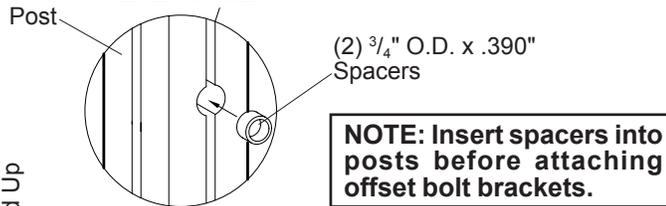
- 1) Dig a trench into subgrade between the two footings for placement of plastic tubing.
- 2) Cut plastic tubing to correct length for your installation, lay plastic tubing flat in trench.
- 3) Connect plastic tubing to talk tubes with rubber couplings with hose clamps, as shown.
- 4) Backfill trench to top of subgrade.
- 5) Install protective surfacing before users are allowed to play on the structure.

**DETAIL  
ATTACHMENT TO POST**

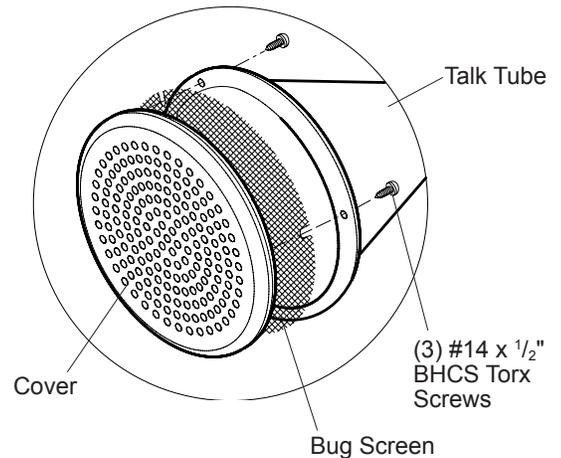
**SECTION ELEVATION**



**DETAIL**



**DETAIL  
COVER ATTACHMENT**



## Parts List

Part#	Description	Qty.
146344	Talk Tube, Ground Level, Specify Color .....	1
113895	Offset Bolt Bracket, Specify Color .....	2
<b>132388</b>	<b>Talk Tube Hardware Package .....</b>	<b>1</b>
100148	$\frac{3}{8}$ " x $1\frac{3}{4}$ " Carriage Bolt, SST .....	2
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	2
100353	$\frac{3}{8}$ " Flange Nut w/Pin, SST .....	2
100365	$\frac{3}{8}$ " SAE Flat Washer, SST .....	2
166868	$\frac{3}{4}$ " O.D. x .390" Spacer, Aluminum .....	2
<b>146168</b>	<b>Talk Tube Cover Hardware Package .....</b>	<b>1</b>
129671	#14 x $\frac{1}{2}$ " BHCS Torx, SST .....	3
145134	Talk Tube Cover, Tan .....	1
127463	Bit Hex TPP T-27 (Torx) .....	1
146528	Bug Screen .....	1

## Specifications

**Talk Tube:** Weldment comprised of 1.660" O.D. RS20 (.085" - .095") and  $\frac{3}{16}$ " HRPO bracket. Finish: ProShield®, color specified.

**Talk Tube Cover:** Solid color Permalene®, Tan in color.

**Bug Screen:** 18 x 16 Weave .011 Ga. charcoal fiberglass screen.

**Bolt Bracket:** Cast from 369.1 aluminum alloy. 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).

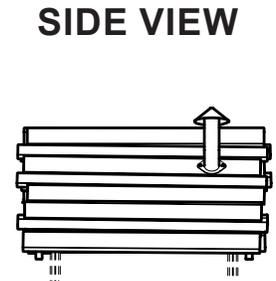
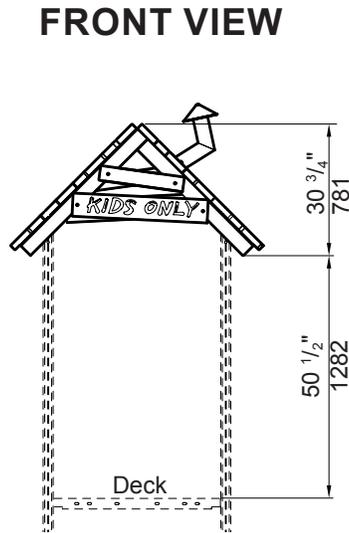
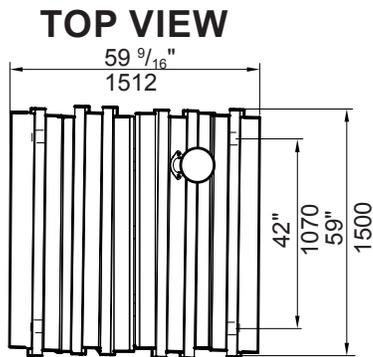
**Installation Time:** Approx.  $\frac{1}{2}$  man hour per talk tube

**Area Req:** 6' (1.82 m) minimum use zone

**Weight:** 15 lbs.

## Installation Instructions

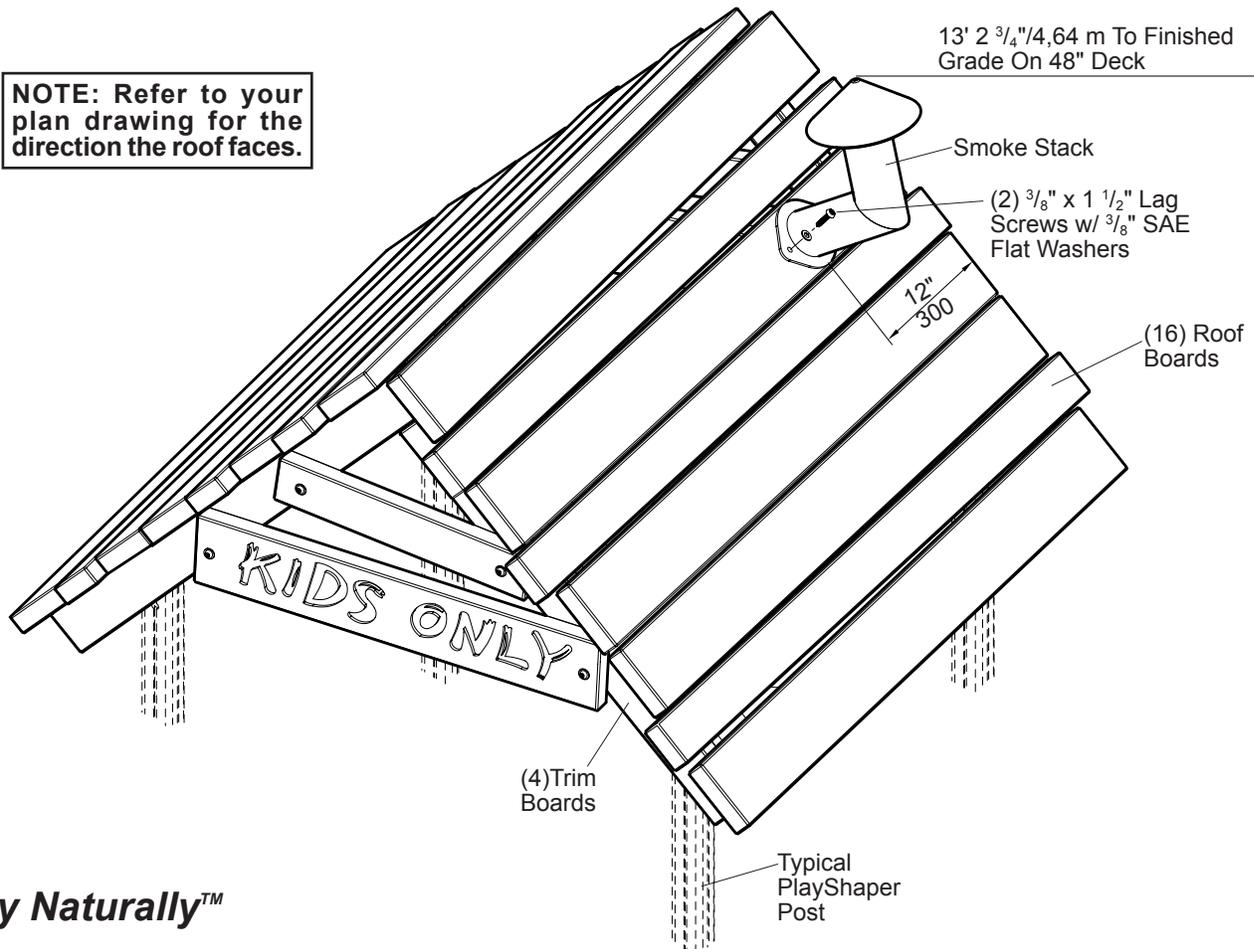
- 1) Determine placement of talk tubes. Refer to your plan drawing. Maximum distance apart is 40 feet.
- 2) Dig a trench into subgrade between the two footings for placement of plastic tubing.
- 3) Attach offset bolt brackets to talk tubes using  $\frac{3}{8}$ " x  $1\frac{3}{4}$ " carriage bolts and  $\frac{3}{8}$ " flange nuts w/pin. See Attachment To Post Detail.
- 4) Attach talk tube cover and bug screen to talk tube using #14 x  $\frac{1}{2}$ " torx screws. Refer to the Cover Attachment Detail.
- 5) **Refer to 111362 Tubing Kit** for connecting tubing.
- 6) Fasten offset bolt brackets with talk tube to posts using  $\frac{3}{4}$ " O.D. x .390" spacers and  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " SAE flat washers. See Attachment To Post Details.
- 7) Backfill trench to top of subgrade.
- 8) Install protective surfacing before users are allowed to play on the structure.



**NOTE: Attach Smoke Stack to 2" x 6" roof board, approx. as shown.**

13' 2 3/4"/4,64 m To Finished Grade On 48" Deck

**NOTE: Refer to your plan drawing for the direction the roof faces.**



**Play Naturally™**



# PlayShaper® 211191 Recycled Tree House Roof, w/Stack & w/Kids Only

## Parts List

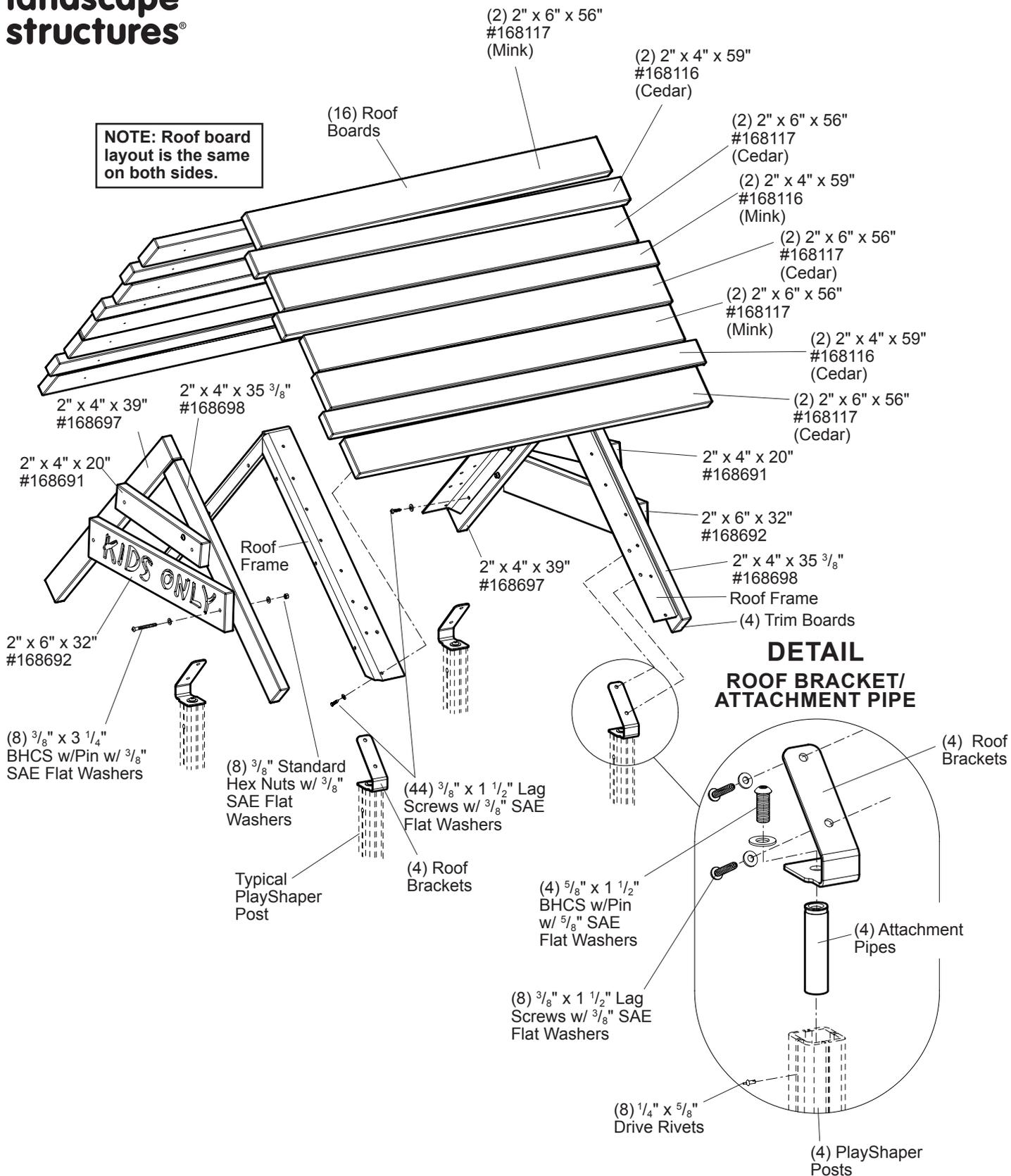
Part#	Description	Qty.
172558	Attachment Pipe, Tan	4
174547	Roof Bracket, Tan	4
169412	Roof Frame, Tan	2
168694	Smoke Stack, Black	1
168116	2" x 4" x 59" Board, Cedar or Mink	6
168117	2" x 6" x 56" Board, Cedar or Mink	10
168691	2" x 4" x 20" Board, Cedar	2
168692	2" x 6" x 32" Board, Mink	2
168697	2" x 4" x 39" Board, Cedar	2
168698	2" x 4" x 35 3/8" Board, Cedar	2
<b>174648</b>	<b>Tree House Roof Hardware Package</b>	<b>1</b>
100168	3/8" x 3 1/4" BHCS w/Pin, SST	8
100201	5/8" x 1 1/2" BHCS w/Pin, SST	4
100327	3/8" Standard Hex Nut, SST	8
100365	3/8" SAE Flat Washer, SST	70
100610	1/4" x 5/8" Drive Rivet, AL	8
129500	5/8" SAE Flat Washer, SST	4
168198	3/8" x 1 1/2" Lag Screw, SST	54

## Specifications

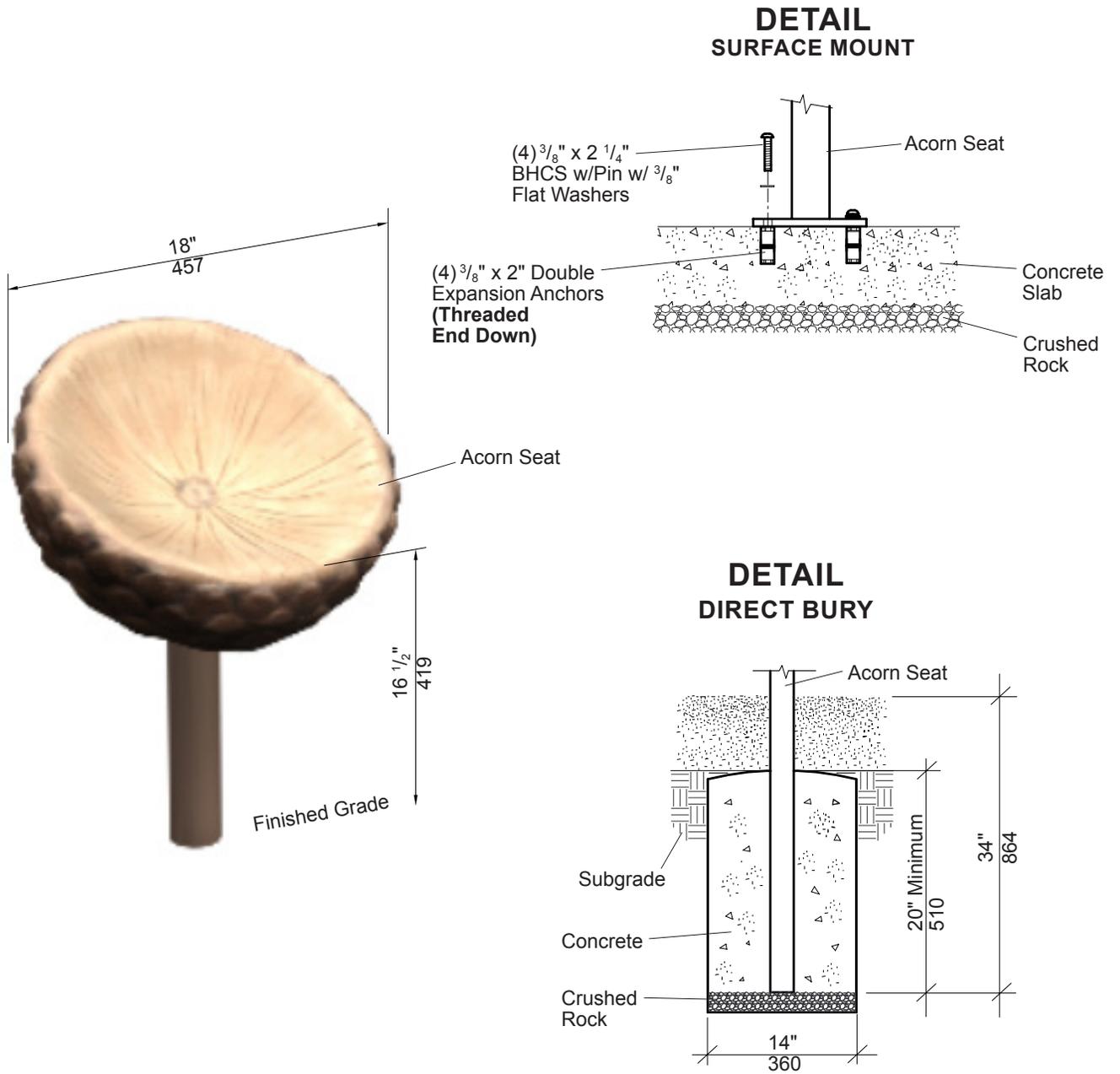
<b>Roof/Trim Boards:</b>	Recycled 1 1/2" x 3 1/2" and 1 1/2" x 5 1/2" high-density polyethylene, cedar and mink in color.
<b>Smoke Stack:</b>	Weldment comprised of 3.500" O.D. RS20 (.125" wall) galvanized steel tube, 3/16" HRPO steel plate and 14 GA. (.078") galvanized steel sheet. Finish: ProShield®, black in color.
<b>Roof Frame:</b>	Fabricated from 3/16" x 6" aluminum 5052-H32 angle. Finish: ProShield, tan in color.
<b>Roof Bracket:</b>	Fabricated from 7 GA. HRPO steel sheet. Finish: ProShield, tan in color.
<b>Attachment Pipe:</b>	Weldment comprised of 1 1/8" O.D. x 11 GA. (.120" wall) steel tubing with 203 or 303 stainless steel insert with 5/8" internal threads. Finish: ProShield, tan in color.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Approx. 4 3/4 man hours
<b>Weight:</b>	302 lbs.

## Installation Instructions

- NOTE:** Be sure posts are plumb, 42" on center and at same height to one another. This will greatly simplify installation of roof.
- Attach roof brackets to attachment pipes, using 5/8" BHCS w/pin with 5/8" SAE flat washers. Insert roof brackets and attachment pipes into tops of posts. **NOTE:** Make sure brackets are square and in line with each other.
- Position frames onto roof brackets with closed side of frame angle facing outward. Align (2) inside holes of frames with holes in roof bracket and fasten second and third roof boards to frames using 3/8" x 1 1/2" lag screws with 3/8" SAE flat washers through roof brackets, frames and into pilot holes in roof boards. Do not yet final tighten lag screws.
- Attach smoke stack to 2" x 6" roof board, using 3/8" x 1 1/2" lag screws with 3/8" SAE flat washers.
- Attach all remaining roof boards with 3/8" x 1 1/2" lag screws with 3/8" SAE flat washers. Do not yet final tighten lag screws.
- Attach (2) 39" long and (2) 35 3/8" long trim boards to frames, starting at top, using 3/8" x 1 1/2" lag screws with 3/8" SAE flat washers. Do not yet final tighten lag screws.
- Attach (2) 32" long and (2) 20" long boards to trim boards, using 3/8" x 3 1/4" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
- Final tighten lag screws in boards.
- Drill 1/4" holes through attachment pipes, using the predrilled holes in posts as a guide. Install 1/4" x 5/8" drive rivets into drilled holes and tap pins in until flush with rivet heads. See Roof Bracket Attachment Detail.
- Install protective surfacing before users are allowed to play on the structure.







Play Naturally™

Site Furnishings

**186579 Acorn Seat**



# Site Furnishings 186579 Acorn Seat

## Parts List

Part#	Description	Qty.
186015	Acorn Seat, (SM), Natural.....	1
187562	Acorn Seat, (DB), Natural.....	1
<b>188103</b>	<b>4-Hole (SM) Hardware Package</b> .....	1
100199	3/8" x 2 1/4" BHCS w/Pin, SST .....	4
187933	3/8" x 2" Double Expansion Anchor.....	4
100362	3/8" Flat Washer, SST .....	4

DB = Direct Bury  
SM = Surface Mount

## Specifications

**Acorn Seat:** (**Support**) Comprised of 2 3/8" O.D. RS20 (.095"-.105") (2,41 mm-2,66 mm) wall galvanized steel tubing. Finish: ProShield®, acorn in color. (**Acorn Seat**) Glass reinforced wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.

**Installation Time:** Approx. 3/4 man hour (DB)  
Approx. 1/4 man hour (SM)  
**Concrete Req.:** Approx. 1.782 cu. ft. (DB)  
**Weight:** 126 lbs. (DB)  
125 lbs. (SM)

## Installation Instructions

- 1) **(Direct Bury)** Dig footing hole as shown.
- 2) Place acorn seat in footing hole and temporarily brace in plumb position. Pour concrete footing and let cure for a minimum of 24 hours before removing bracing.
- 3) **(Surface Mount)** Set acorn seat in proper position and use a center punch to mark expansion anchor locations.

Move acorn seat aside and drill 3/4" x 2 1/4" deep holes into concrete, using a hammer drill and 3/4" masonry bit. **NOTE: Drill holes perpendicular to the work surface. To assure full holding power, do not ream holes or allow the drill to wobble. Verify hole depth after drilling. Clean holes using compressed air.**

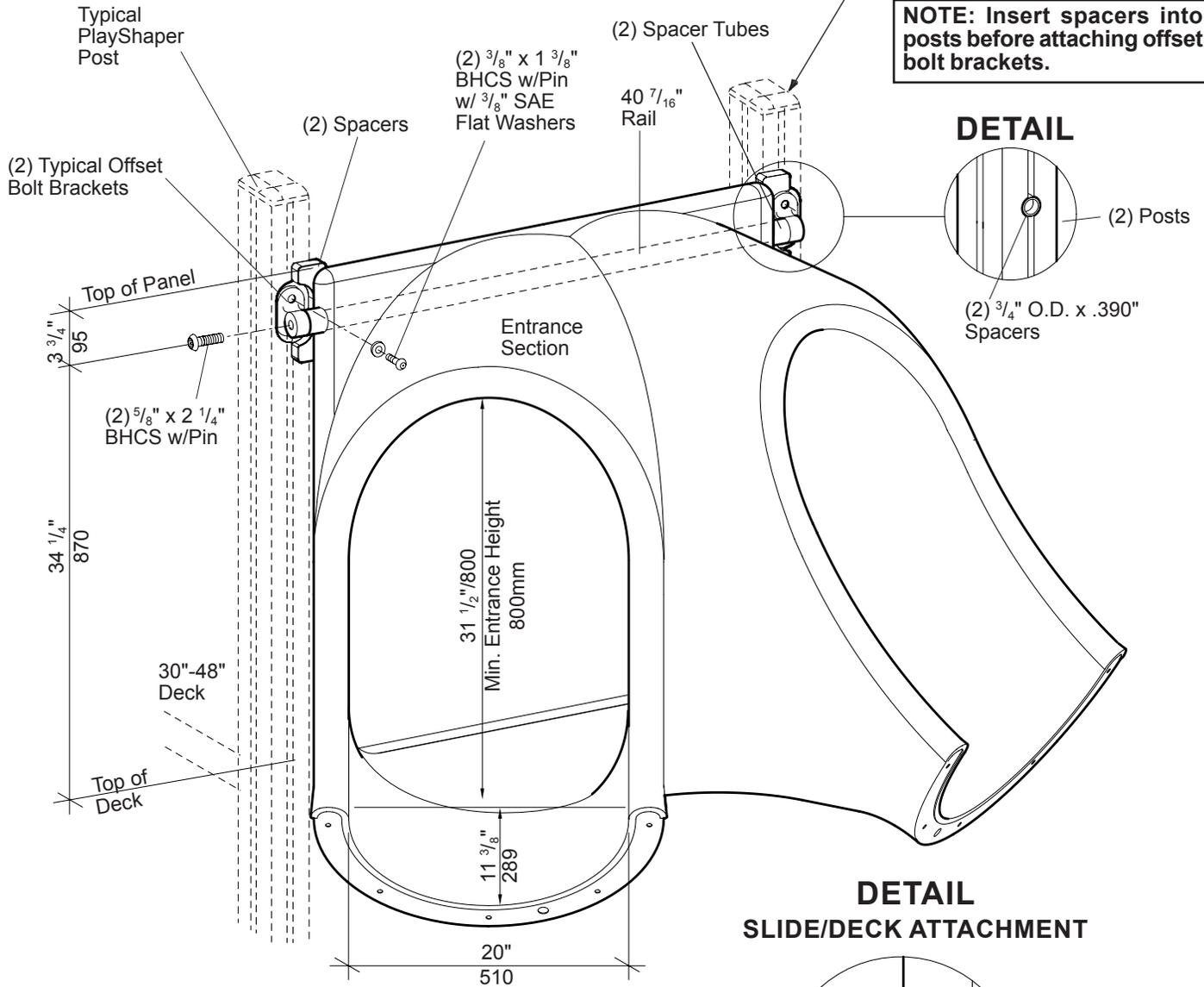
Tap double expansion anchors (**with threaded end down**) into drilled holes. Reposition acorn seat. Fasten acorn seat to expansion anchors, using 3/8" x 2 1/4" BHCS w/pin and 3/8" flat washers.

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

**ENTRANCE SECTION ATTACHMENT**

**NOTE:**  
**Non-Standard Posts:**  
 30" Deck - Use 102" Posts  
 32" Deck - Use 106" Posts  
 36" Deck - Use 108" Posts  
 40" Deck - Use 114" Posts  
 48" Deck - Use 129" Posts

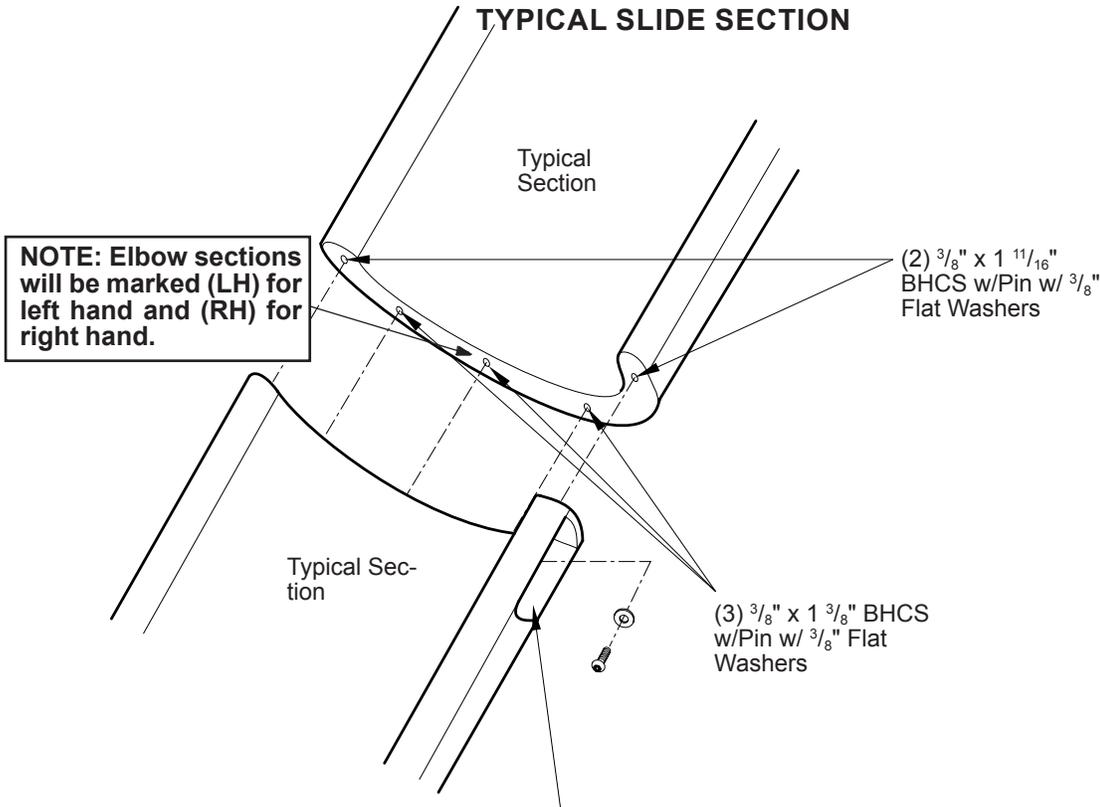
**NOTE: Insert spacers into posts before attaching offset bolt brackets.**



**NOTE: Refer to your plan drawing for location of footings, layout and direction of Gemini SlideWinder2 sections.**

**DETAIL**

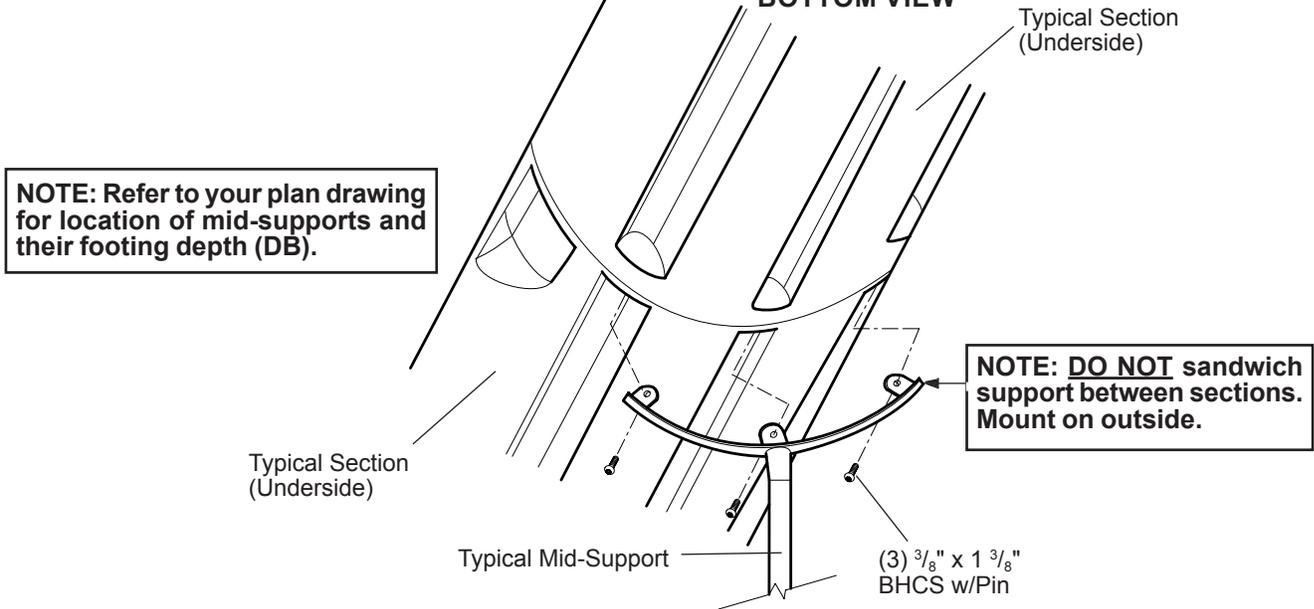
**TYPICAL SLIDE SECTION**



**NOTE: Elbow sections will be marked (LH) for left hand and (RH) for right hand.**

**NOTE: Fasten top of slide section with pockets to bottom of slide section without pockets.**

**DETAIL  
TYPICAL MID-SUPPORT  
(48"- 96" SLIDES ONLY)  
BOTTOM VIEW**



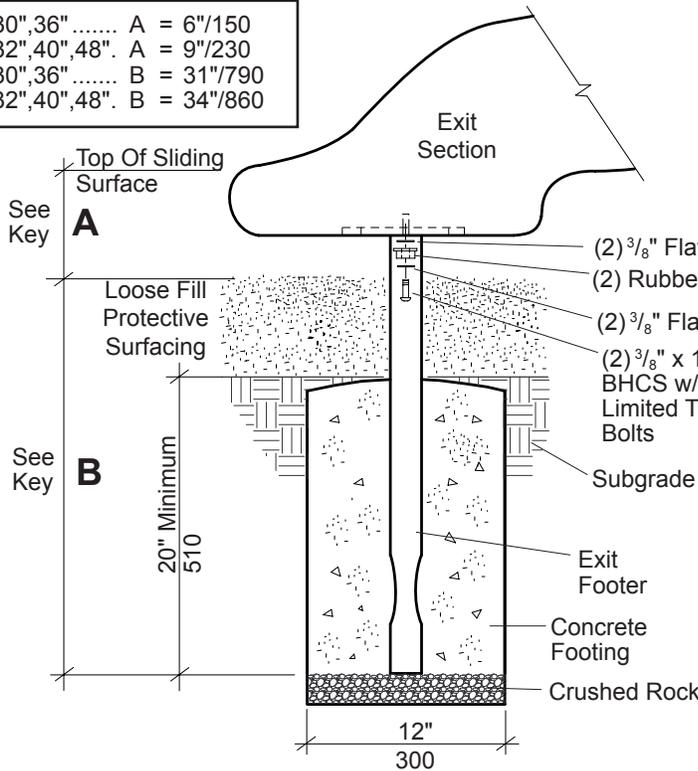
**NOTE: Refer to your plan drawing for location of mid-supports and their footing depth (DB).**

**NOTE: DO NOT sandwich support between sections. Mount on outside.**

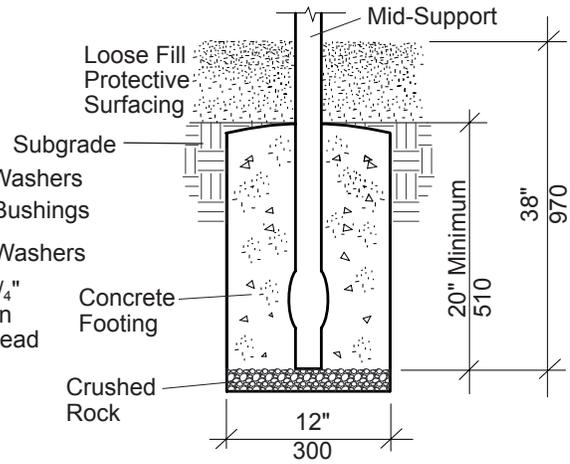
**KEY:**

Deck Hgts	Dimension
30",36".....	A = 6"/150
32",40",48".....	A = 9"/230
30",36".....	B = 31"/790
32",40",48".....	B = 34"/860

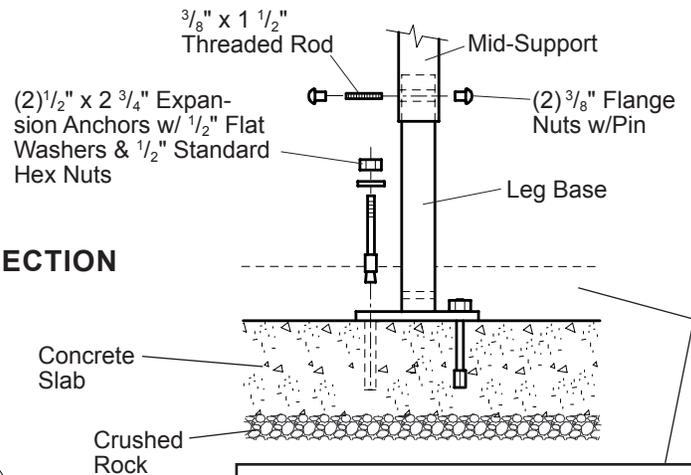
**DETAIL  
DIRECT BURY / EXIT SECTION**



**DETAIL  
DIRECT BURY / MID-SUPPORT  
(48\"/>**

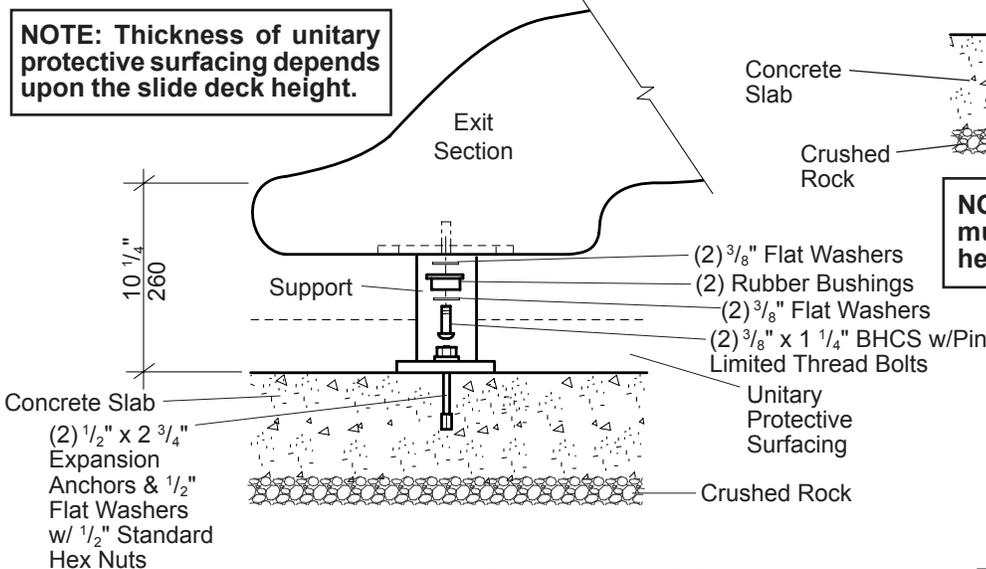


**DETAIL  
SURFACE MOUNT / MID-SUPPORTS**



**NOTE: Attach bolts in the center of the footer slots to allow for expansion and contraction. Snug bolts down only, do not overtighten!**

**DETAIL  
SURFACE MOUNT / EXIT SECTION**



**NOTE: Thickness of unitary protective surfacing depends upon the slide deck height.**

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

**NOTE: Exit Heights may vary if the protective surfacing is not level. Do not put pressure/tension on the entrance section when adjusting the exit height.**



# PlayShaper® 133426 Gemini SlideWinder2™, 30"-48"

## Parts List

Part#	Description	Qty.
124867	Right Elbow Section, Specify Color	*
124868	Left Elbow Section, Specify Color	*
125655	Straight Section (15 1/4" Long), Specify Color	*
124864	Straight Section (30 1/2" Long), Specify Color	*
100583	40 7/16" Rail, Specify Color	1
113895	Offset Bolt Bracket, Specify Color	2
125562	Support Base (SM), Specify Color	*
128434	66" Mid-Support (DB), Specify Color	*
128079	20 3/4" Mid-Support (SM), Specify Color	*
128261	Exit Footer (DB), Specify Color	2
128262	Exit Footer (SM), Specify Color	2
139980	Spacer, Specify Color	2
129685	Entrance Section, Specify Color	1
124877	Exit Section, Specify Color	2
132443	Spacer Tube, Specify Color	2
<b>121371</b>	<b>Entrance/Deck Mounting Hardware Package</b>	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100362	3/8" Flat Washer, SST	4
<b>154942</b>	<b>SlideWinder Section Hardware Package</b>	1
100362	3/8" Flat Washer, SST	*
113027	3/8" x 1 3/8" BHCS w/Pin, SST	*
123224	3/8" x 1 11/16" BHCS w/Pin, SST	*
<b>140008</b>	<b>Offset Bolt Bracket Attachment Hardware Package</b>	1
113027	3/8" x 1 3/8" BHCS w/Pin, SST	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100365	3/8" SAE Flat Washer, SST	2
166868	3/4" O.D. x .390" Spacer, Aluminum	2
<b>125670</b>	<b>Mid-Support Hardware Package (SM)</b>	1
100266	1/2" x 2 3/4" Expansion Anchor	*
100322	1/2" Standard Hex Nut, SST	*
100353	3/8" Flange Nut w/Pin, SST	*
100363	1/2" Flat Washer, SST	*
115813	3/8" x 1 1/2" Threaded Rod, SST	*
<b>128373</b>	<b>Exit Support Hardware Package (DB)</b>	2
100292	3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST	4
100362	3/8" Flat Washer, SST	8
111442	Rubber Bushing	4
<b>128343</b>	<b>Exit Support Hardware Package (SM)</b>	2
100266	1/2" x 2 3/4" Expansion Anchor	4
100292	3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST	4
100322	1/2" Standard Hex Nut, SST	4
100362	3/8" Flat Washer, SST	8
100363	1/2" Flat Washer, SST	4
111442	Rubber Bushing	4

DB = Direct Bury

SM = Surface Mount

\* = Quantity Varies Per Deck Height

## Specifications

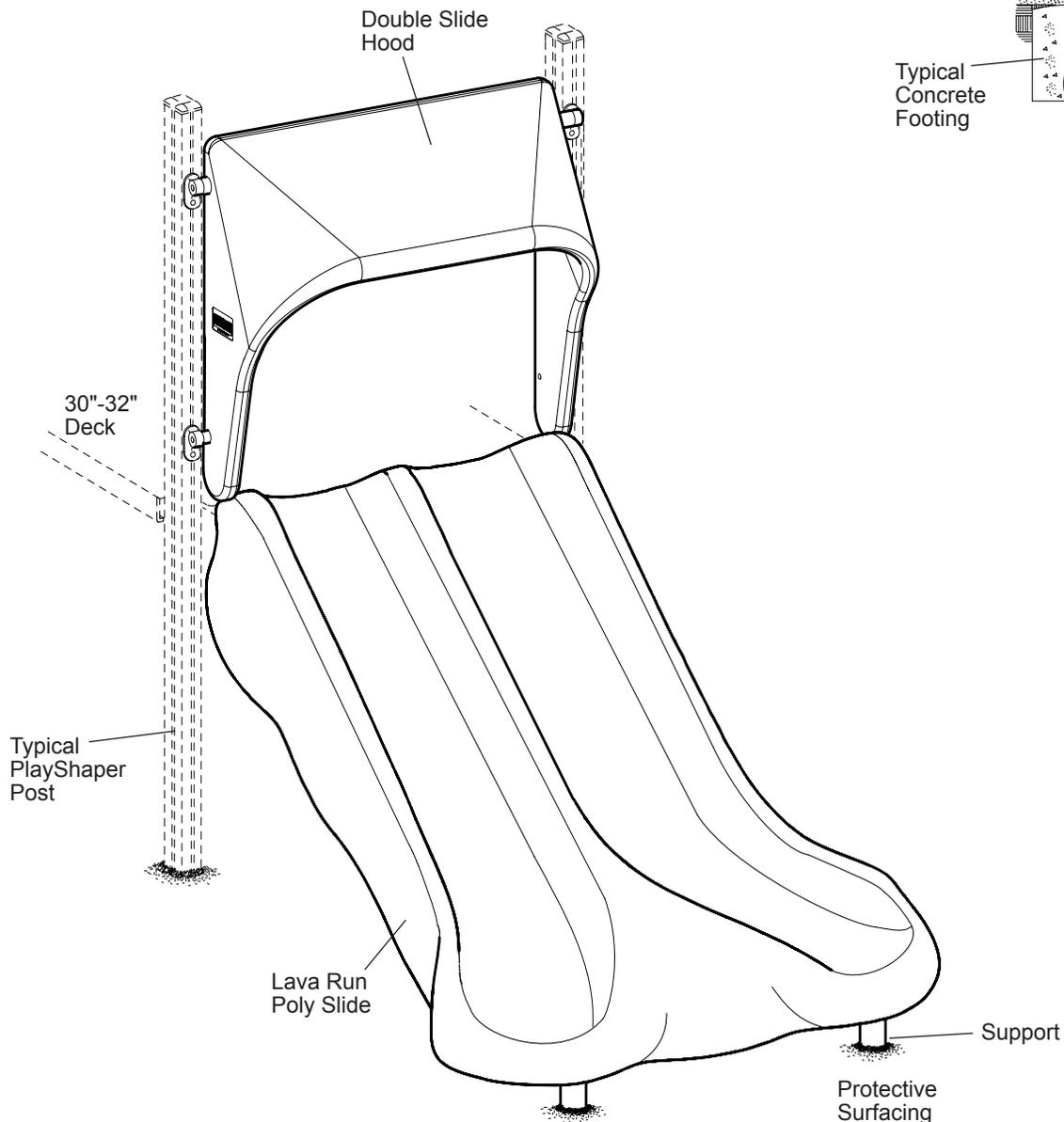
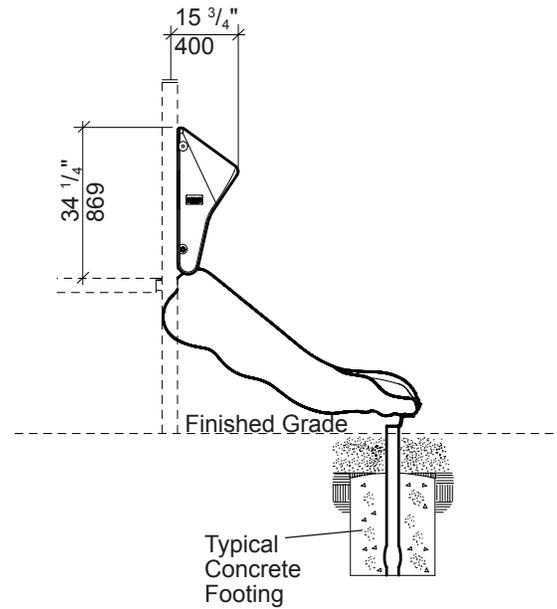
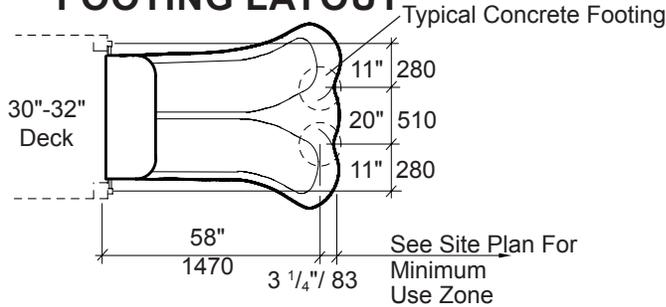
<b>Slide Sections:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
<b>Rail:</b>	1 1/8" O.D. 6005-T5 aluminum extrusion with 5/16" walls. Finish: ProShield®, color specified.
<b>Spacer Tube:</b>	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.
<b>Mid-Support:</b>	Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and 3/16" x 1 1/4" zinc plated steel strap. Finish: ProShield, color specified.
<b>Support Base (SM):</b>	Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" x 8" mounting plate. Finish: ProShield, color specified.
<b>Exit Footer:</b>	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" x 7 1/2" mounting plate. Finish: ProShield, color specified.
<b>Spacer:</b>	Solid color Permalene®, color specified.
<b>Offset Bolt Brkt:</b>	Cast from 356-T6 aluminum alloy. Finish: ProShield, color specified.
<b>Fasteners:</b>	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:** 30" - 48" Approx. 6 man hours  
**Concrete Req.:** 30"-31" Depth - Approx. 2.6 cu. ft.  
 34" Depth - Approx. 3 cu. ft.  
**Weight:** 30"-32" - 247 lbs.  
 40" - 273 lbs.  
 48" - 323 lbs.  
**Fall Height:** Deck Height

## Installation Instructions

- Refer to your plan drawing for location of footings and direction of SlideWinder sections.
- (Direct Bury)** Dig footing holes spaced as shown, depending upon slide. Refer to the Direct Bury Exit Section and Direct Bury Mid-Support Details.
- Insert 40 7/16" rail into entrance section, place spacer tubes over each end of the 40 7/16" rail, attach offset bolt brackets using 3/8" x 2 1/4" BHCS w/Pin.
- Attach entrance section to the face of the deck using 3/8" x 7/8" BHCS w/pin and 3/8" flat washers.
- Attach offset bolt brackets to posts using 3/4" O.D. x .390" spacers, 3/8" x 1 3/8" BHCS w/pin with 3/8" SAE flat washers and spacers. Refer to the Entrance Section Attachment and Details.
- Fasten SlideWinder sections together loosely starting in the middle and working your way to the outside of each section, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers on the 3 inside holes and 3/8" x 1 11/16" BHCS w/pin with 3/8" flat washers on the 2 outside holes. When all bolts are started, pull the tops flush with each other and tighten. The left elbow section reads (LH) and the right elbow section reads (RH). Attach entrance and exit section last. Refer to the Typical Slide Section Detail.
- (Direct Bury)** If required attach mid-supports, refer to your plan drawing for locations. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/pin. Refer to the Typical Mid-Support Detail.  
**(Surface Mount)** If required attach mid-supports, refer to your plan drawing for locations. Assemble mid-supports by placing support base inside mid-support and attach using 3/8" x 1 1/2" threaded rod and 3/8" flange nuts w/pin. Refer to the Surface Mount/Mid Support Detail. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/pin. Refer to the Typical Mid-Support Detail.
- Attach exit footer to base of slide using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers.  
**NOTE:** Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not overtighten. See Direct Bury/Exit Section Detail.
- With SlideWinders fully assembled attach slides to entrance section using 3/8" x 1 3/8" BHCS w/pin with 3/8" flat washers.
- (Direct Bury)** With supports 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 anchor plates. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap 1/2" x 2 3/4" expansion anchors into drilled holes and fasten using 1/2" standard hex nuts with 1/2" flat washers.
- Install protective surfacing before users are allowed to play on the structure.

**PLAN VIEW/  
FOOTING LAYOUT**





# PlayShaper® 137967 Lava Run, 30"-32"

## Parts List

Part#	Description	Qty.
134967	Lava Run, Specify Color .....	1
131987	Double Slide Hood, Specify Color .....	1
113895	Offset Bolt Bracket, Specify Color .....	4
132443	Rail Spacer, Specify Color .....	2
100583	40 7/16" Rail, Aluminum, Specify Color .....	1
134233	1 1/8" O.D. x 1 1/4" Spacer, AL., Specify Color .....	2
137461	Support (DB), Specify Color .....	1
137749	Support 30" Deck (SM), Specify Color .....	1
137751	Support 32" Deck (SM), Specify Color .....	1
<b>137972</b>	<b>Lava Run Hardware Package</b> .....	1
100196	3/8" x 7/8" BHCS w/Pin, SST .....	4
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST .....	2
100362	3/8" Flat Washer, SST .....	8
111442	Rubber Bushing .....	2
<b>145599</b>	<b>Lava Run Slide Hood Hardware Package</b> .....	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100168	3/8" x 3 1/4" BHCS, SST .....	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST .....	2
100365	3/8" SAE Flat Washer, SST .....	6
166868	3/4" O.D. x .390" Spacer, Aluminum .....	4
<b>111392</b>	<b>2-Hole (SM) Hardware Package</b> .....	1
100266	1/2" x 2 3/4" Expansion Anchor .....	2
100322	1/2" Standard Hex Nut, SST .....	2
100363	1/2" Flat Washer, SST .....	2

DB=Direct Bury  
SM=Surface Mount

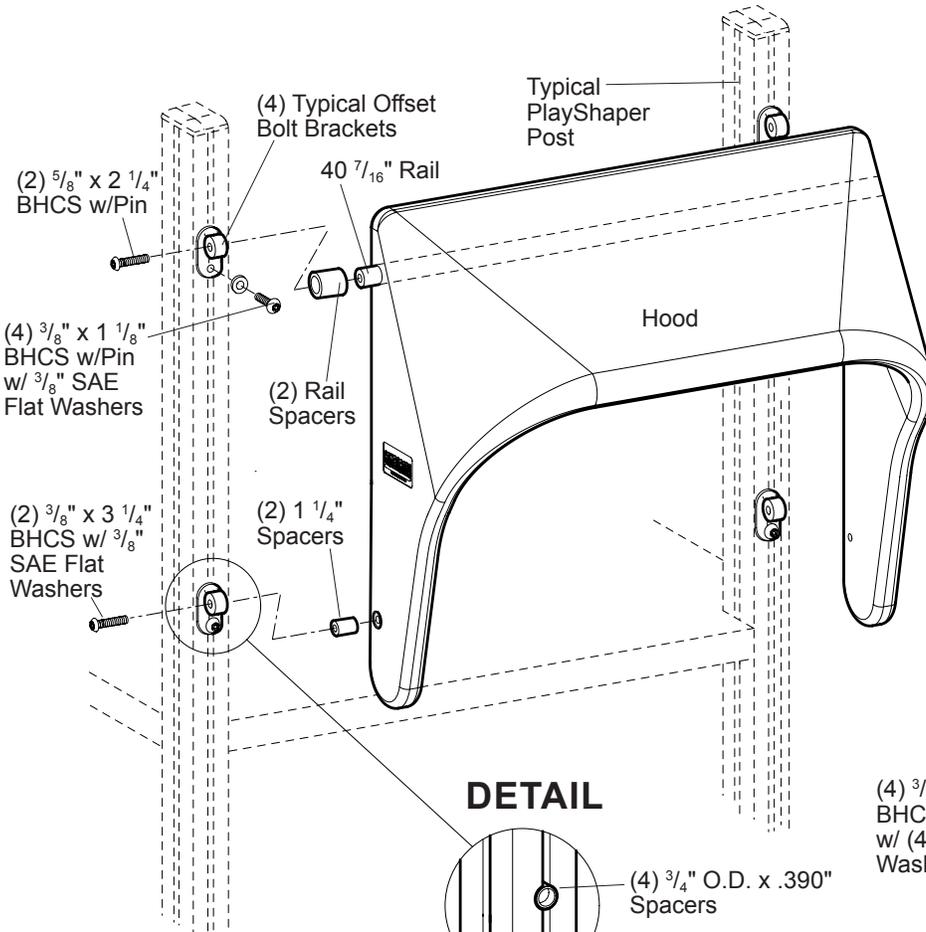
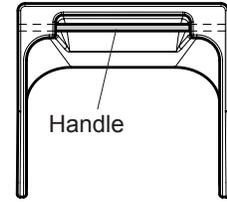
## Specifications

<b>Lava Run:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
<b>Hood:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
<b>Rail:</b>	Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield®, color specified.
<b>Rail Spacer:</b>	Fabricated from 1.3125" O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.
<b>Support:</b>	Weldment comprised of 1.660" O.D. RS20 (.085" - .095") galvanized steel tubing and fabricated 7 GA (.179") steel plate. Finish: ProShield, color specified.
<b>Offset Bolt Bracket:</b>	Cast from 356-T6 aluminum alloy. Finish: ProShield, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	SM - Approx. 1 1/2 man hours DB - Approx. 2 man hours
<b>Concrete Req.:</b>	Approx. 2.6 cu. ft.
<b>Area Req.:</b>	6' (1.83 m) minimum use zone at exit
<b>Weight:</b>	99 lbs.
<b>Fall Height:</b>	Deck Height

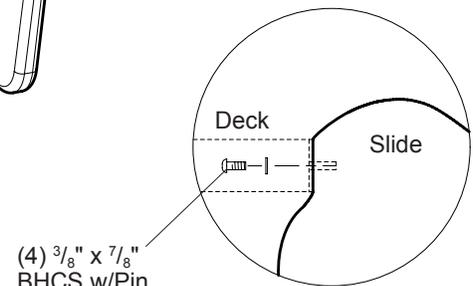
## Installation Instructions

- (Direct Bury)** Dig footings spaced as shown.
- Insert 3/4" O.D. x .390" spacers into posts. Attach offset bolt brackets to posts using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers. Refer to Detail.
- Place 40 7/16" rail in hood and attach rail and rail spacers to offset bolt brackets using 5/8" x 2 1/4" BHCS w/pin.
- Attach bottom of hood to offset bolt brackets using spacers and 3/8" x 3 1/4" BHCS with 3/8" SAE flat washers.
- Attach support to Lava Run using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Attachment Detail. **NOTE: Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not overtighten.**
- Attach Lava Run to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers. Refer to the Deck Connection Detail.
- (Direct Bury)** With supports plumb pour concrete footings. Allow concrete footings to cure 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 the support plate and remove the Lava Run. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition Lava Run and reattach to the face of the deck following step 6. Fasten support to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- Install protective surfacing before users are allowed to play on the structure.

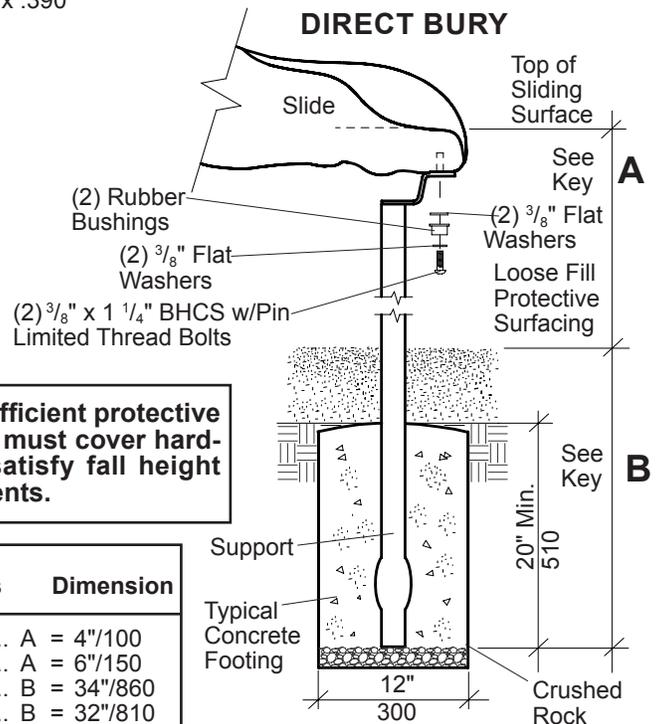
**HOOD - HANDLE DETAIL**



**DETAIL SLIDE/DECK CONNECTION**



**DETAIL DIRECT BURY**



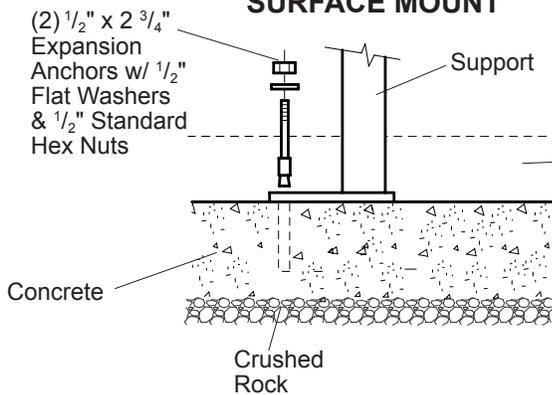
**NOTE: Insert spacers into posts before attaching offset bolt brackets.**

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

**KEY:**

Deck Hgts	Dimension
30" .....	A = 4"/100
32" .....	A = 6"/150
30" .....	B = 34"/860
32" .....	B = 32"/810

**DETAIL SURFACE MOUNT**



# Installation Specifications

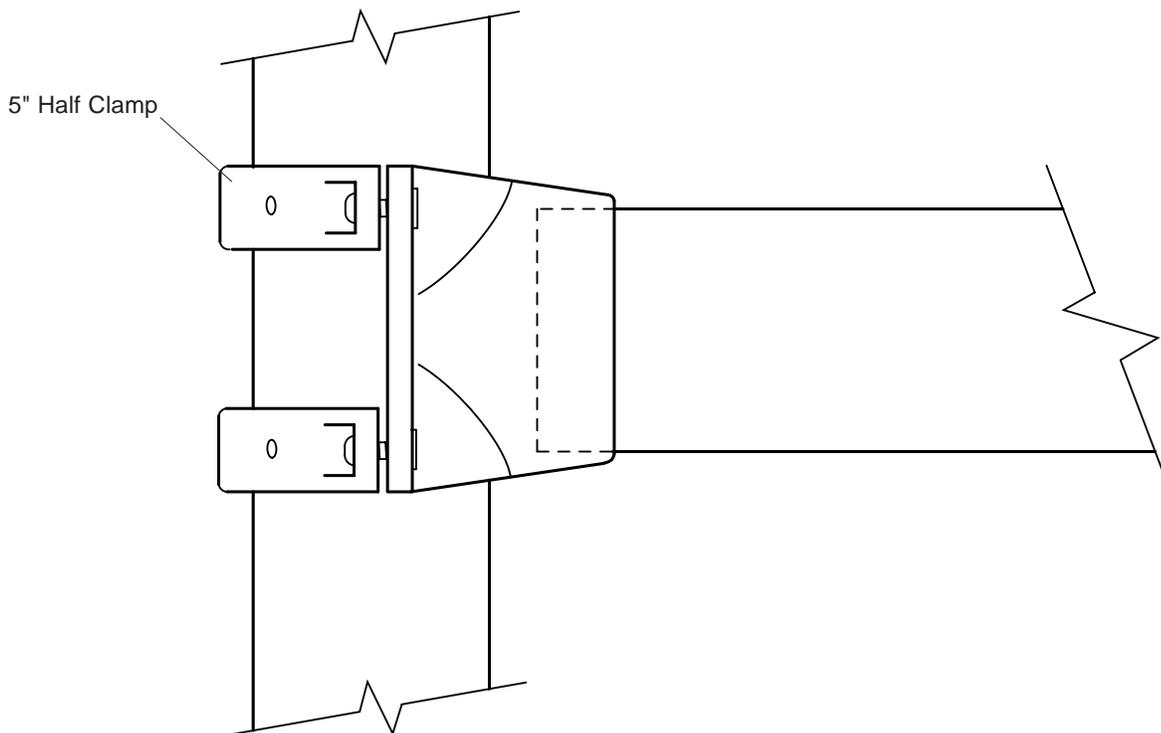
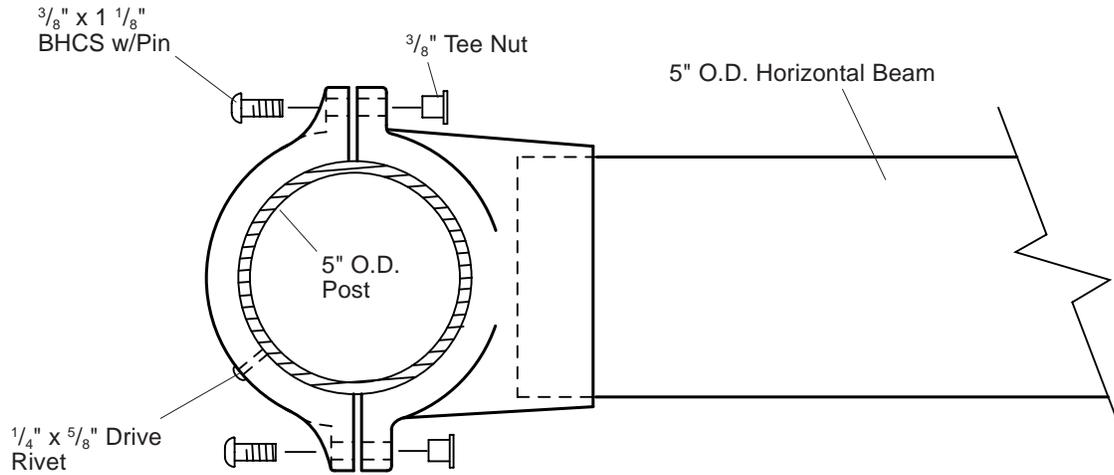
5-12 Year Installation Spec



**110070 is the Site Plan**

**Not an Install doc.**





## Parts List

Part#	Description	Qty
105327-01	5" Half Clamp, Specify Color .....	2
100198-00	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST .....	4
100351-00	$\frac{3}{8}$ " Tee Nut, SST .....	4
100610-00	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, SST .....	2

## Specifications

**Tee/Beam:** 356 alloy treated to T-6 hardness and welded to 5" aluminum beams or mechanically fastened to 5" steel beams. Finish: Powdercoat, color specified.

**Half Clamps:** Cast aluminum. Finish: Powdercoat, 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.  $\frac{1}{2}$  man hour

**Weight:** 2 lbs.

## Installation Instructions

- 1) Locate and mark center of clamp location on 5" pipe.
- 2) With beam in position, fasten 5" half clamps to tee clamp using  $\frac{3}{8}$ " x 1  $\frac{1}{8}$ " BHCS w/Pin and tee nuts as shown. Tighten cap screws evenly.
- 3) **IMPORTANT:** *Install drive rivets in half clamps by drilling holes in clamps and into 5" pipe using a  $\frac{1}{4}$ " or "F"(only) drill bit. Insert rivet in hole, and hammer rivet pin in until it is flush with head.*

115176 is a hard  
surface label

Not an Install doc.

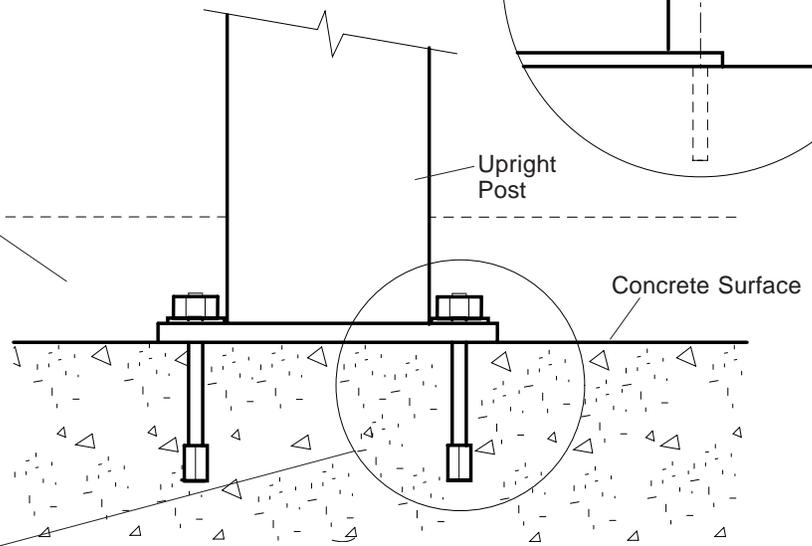
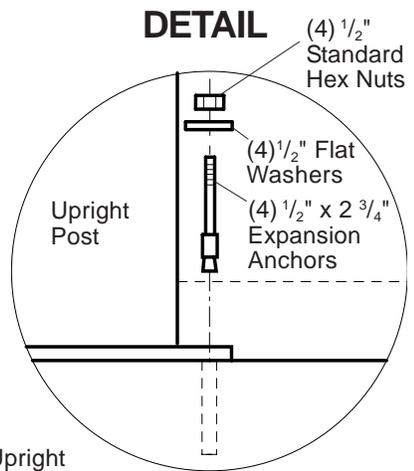
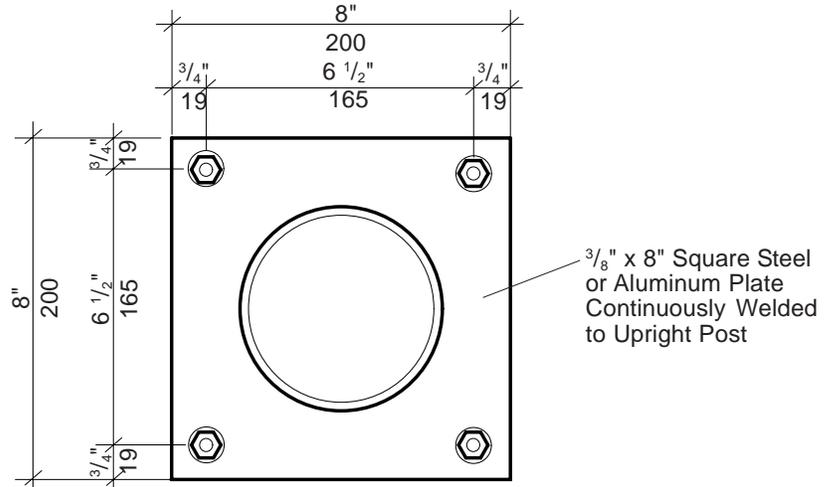


**NOTE:**  
Surface mounting will not work in all applications. Consult Landscape Structures Inc. for your particular requirements.

- CONCRETE SLAB SPECS**
- Base under slab to be 4" - 6" of sand over a stable subgrade.
  - Depth of concrete slab to be 4" - 6" with a wire mesh support.
  - Minimum of 7 days curing time full cure after 30 days.
  - Surface of concrete to be trowled smooth and acid etched.
  - Concrete: 3000 PSI (Min)  
30 Days 3500 PSI  
 $\frac{3}{4}$ " Minus Crushed Rock

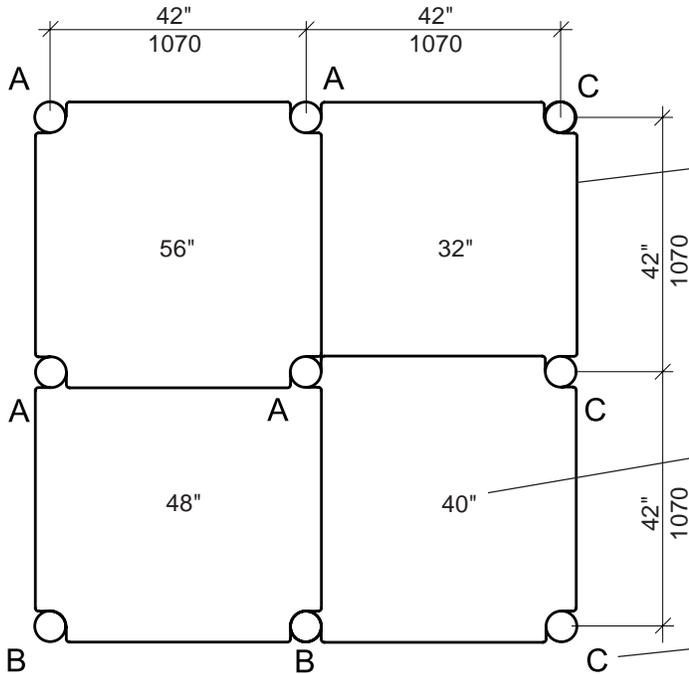
**NOTE:** Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

**NOTE:**  
Drill 3" deep hole using hammer drill and  $\frac{1}{2}$ " masonry bit. Tap anchors into concrete and secure with  $\frac{1}{2}$ " standard hex nuts and  $\frac{1}{2}$ " flat washers.





**SAFETY NOTE**  
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487, SECTION 9.)

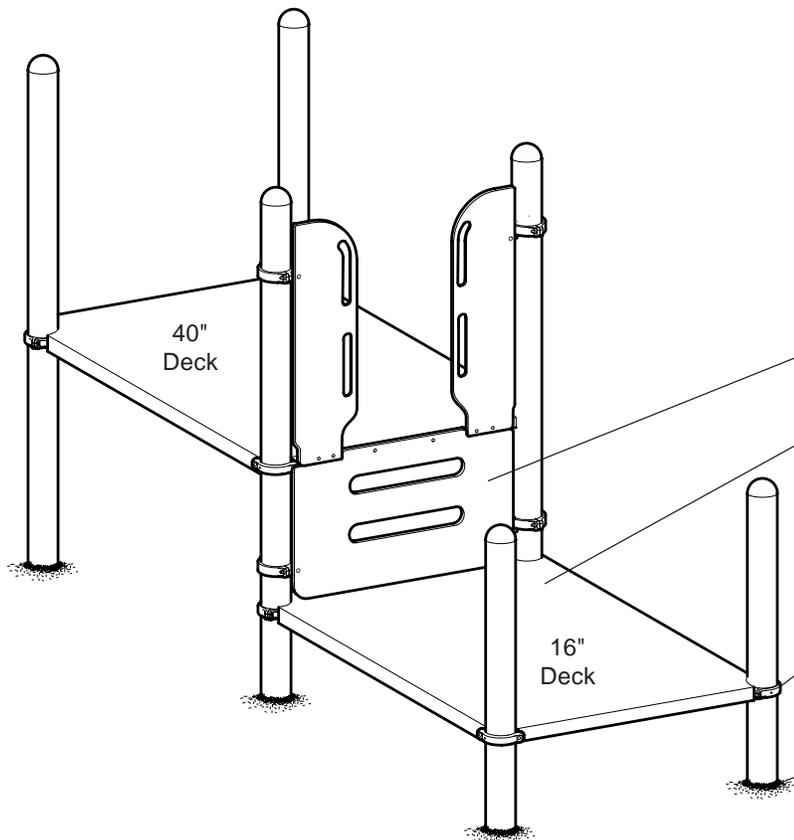


Enclosures or components are required on any decks higher than 28" as indicated on your plan drawing.

Dimension indicates center to center spacing of concrete footings.

Number indicates height of deck above finished grade.

Letter indicates post length as indicated on your plan drawing.



**Enclosures/ Components** - Refer to your plan drawing for locations and their respective spec sheets for installation.

**Vertical Ladders** - Refer to your plan drawing for locations and the Vertical Ladder spec sheet for installation.

**Decks** - Refer to your plan drawing for heights and orientation. Refer to the appropriate deck spec sheet for installation.

**Deck Hanger Clamp Assembly** - Refer to the appropriate Deck Assembly spec sheet for installation.

**Concrete Footings** - Refer to the Typical Concrete Footing spec sheet for installation.

**Kick Plates** - Refer to your plan drawing for locations and the Kick Plate spec sheet for installation.

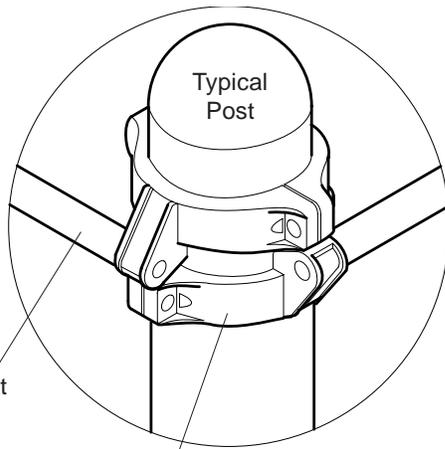
**PlayBooster General Post/Tenderdeck Information**

## Installation Instructions

**Before Starting, Read the General Construction Guidelines, Installation Hints, All Typical Detail Sheets and Specific Installation Instructions for Each Component Labeled on Your Plan.**

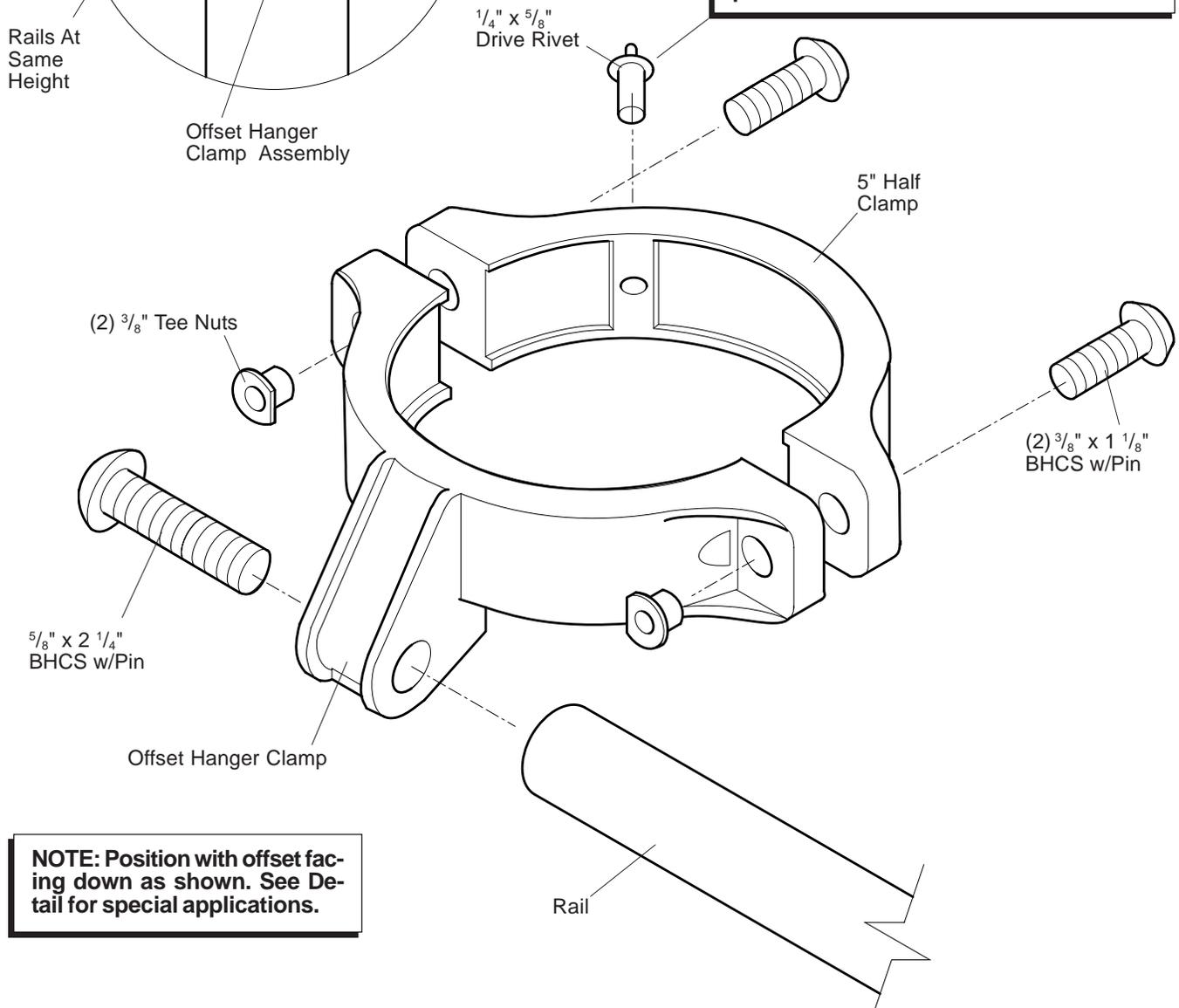
- 1) Dig footing holes spaced as shown on the plan and spec sheets. Refer to the Typical Concrete Footing Spec Sheet.
- 2) Note the post lengths as shown on the plan and set in their appropriate footing holes. The post length is indicated on the finished grade sticker on each post.
- 3) Mark the appropriate posts for the deck heights you are installing and attach decks to posts at marked height. Refer to the appropriate deck spec sheet for installation.
- 4) After all the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Spec Sheet.
- 5) Continue installing enclosures and components and pour concrete footings as you progress, making sure everything is plumb and level.
- 6) When installation is complete, install Drive Rivets in all clamps per the Typical Offset Hanger Clamp Spec Sheet.
- 7) Install protective surfacing under and around all equipment before users are allowed to play on the structure.

**DETAIL  
ASSEMBLED CLAMP**



The Offset Hanger Clamp allows rails to be installed at same height for special applications, like at 90° to each other as shown, or when there are clamp conflicts, offset can be positioned upward.

**NOTE: A drive rivet is not required in all applications. See Drive Rivet Addendum for a listing of components that do not require drive rivets.**



**NOTE: Position with offset facing down as shown. See Detail for special applications.**

**PlayBooster® 114261 Offset Hanger Clamp Assembly**



# PlayBooster® 114261 Offset Hanger Clamp Assembly

J:\SPECS\123\12382100.P65

## Parts List

Part#	Description	Qty
100198-00	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST .....	2
100351-00	$\frac{3}{8}$ " Tee Nut, SST .....	2
100610-00	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST .....	1
105327-01	5" Half Clamp, Specify Color .....	1
113729-00	Offset Hanger Clamp, Specify Color .....	1
100203-00	$\frac{5}{8}$ " x 2 $\frac{1}{4}$ " BHCS w/Pin, SST .....	1

## Specifications

**Clamp:** Cast aluminum. Finish: Powdercoat, color specified.

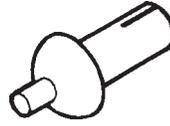
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx.  $\frac{1}{4}$  man hour

**Weight:** 3 lbs.

## Installation Instructions

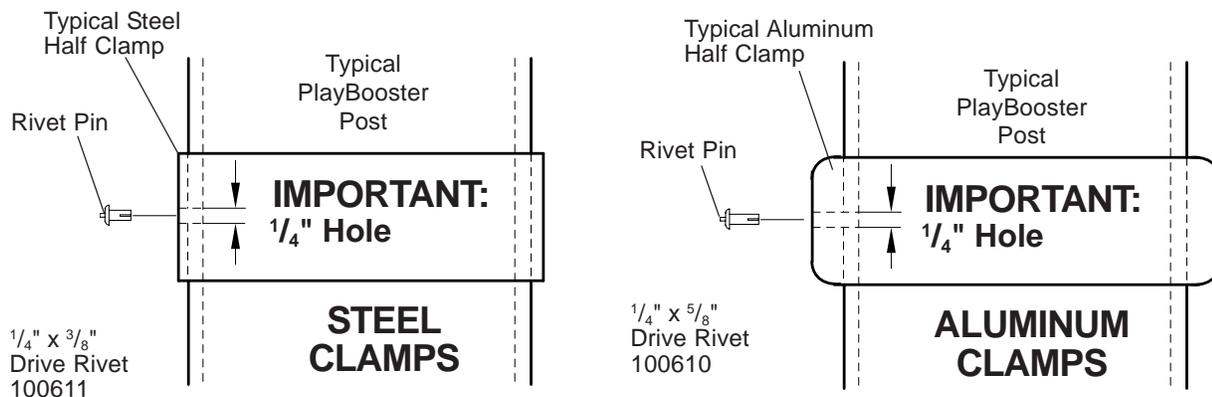
- 1) Locate and mark position of clamp on 5" post.
- 2) Position clamp in proper direction and assemble with  $\frac{3}{8}$ " x 1  $\frac{1}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " tee nuts as shown and lightly tighten. Position rail against clamp and screw in  $\frac{5}{8}$ " x 2  $\frac{1}{4}$ " BHCS w/pin until rail bottoms out on clamp. Final tighten all fasteners.
- 3) **IMPORTANT:** *Drill through hole in 5" half clamp and into 5" post with a  $\frac{1}{4}$ " or "F" (only) drill bit, insert rivet in hole and hammer rivet pin in until it is flush with head.*



## General Rules For Use Of Drive Rivets

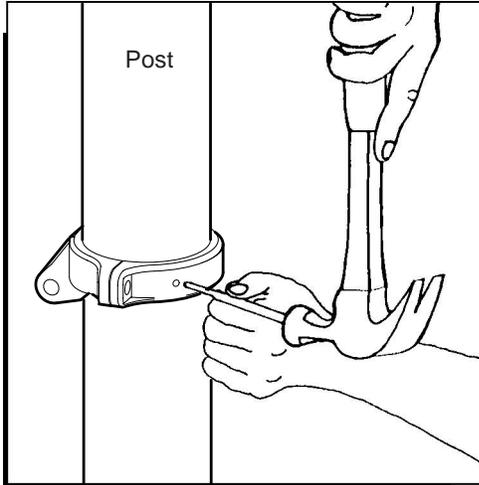
- Rivets are used as "Insurance" to keep clamps from sliding down the posts. In many cases this "Insurance" is achieved in other ways; i.e. Panels that attach to the deck face.
- Refer to the Spec Sheet Parts List and follow Installation Instructions for each component.
- Decks and Overhead Events always need rivets.
- Any component fastened to the Deck does not need rivets.

Benefits of not installing unnecessary rivets: saves time, it makes clamp adjustments as well as the removal of clamps for replacement or adding phases much easier, and you will have fewer damaged clamps or posts due to poor installation techniques.

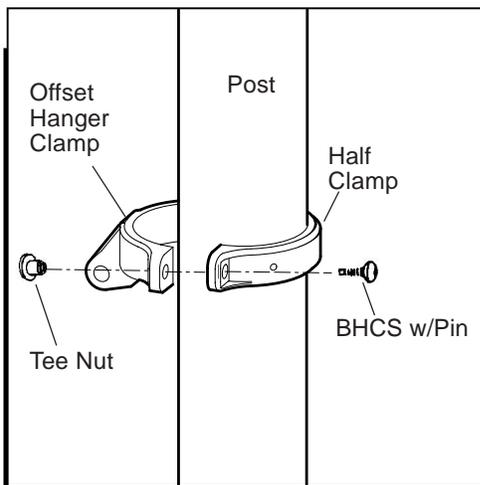


**INSTRUCTIONS:**

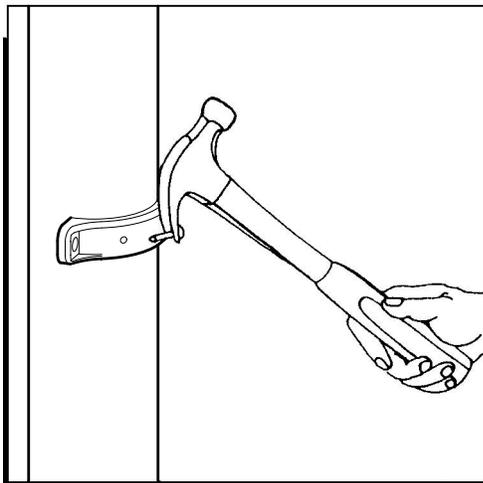
**NOTE:** Use Only Bit Size "F" or 1/4" Drill Bit.  
After Play Component Assembly is Complete, Drill Hole into Post Through Half Clamp, Insert Rivet in Hole, and Hammer Rivet Pin in Until it is Flush with Head.



- 1) Drive Center Pin of Rivet Straight into Post Using  $\frac{1}{8}$ " Diameter Punch and Hammer.



- 2) Unbolt BHCS w/Pin and Tee Nuts from Clamp Using Tamperproof Hex Wrench. Remove Offset Hanger Clamp. Lightly Tap on Half Clamp with Hammer Until Head of Drive Rivet Pulls Away From Half Clamp.



- 3) Pull Out Drive Rivet Using Claw End of Hammer.

**Tools Needed:**

- Claw Hammer
- $\frac{1}{8}$ " Diameter Steel Punch
- Tamperproof Hex Wrench

## Drive Rivet Removal

120688 is a danger  
keep off sign

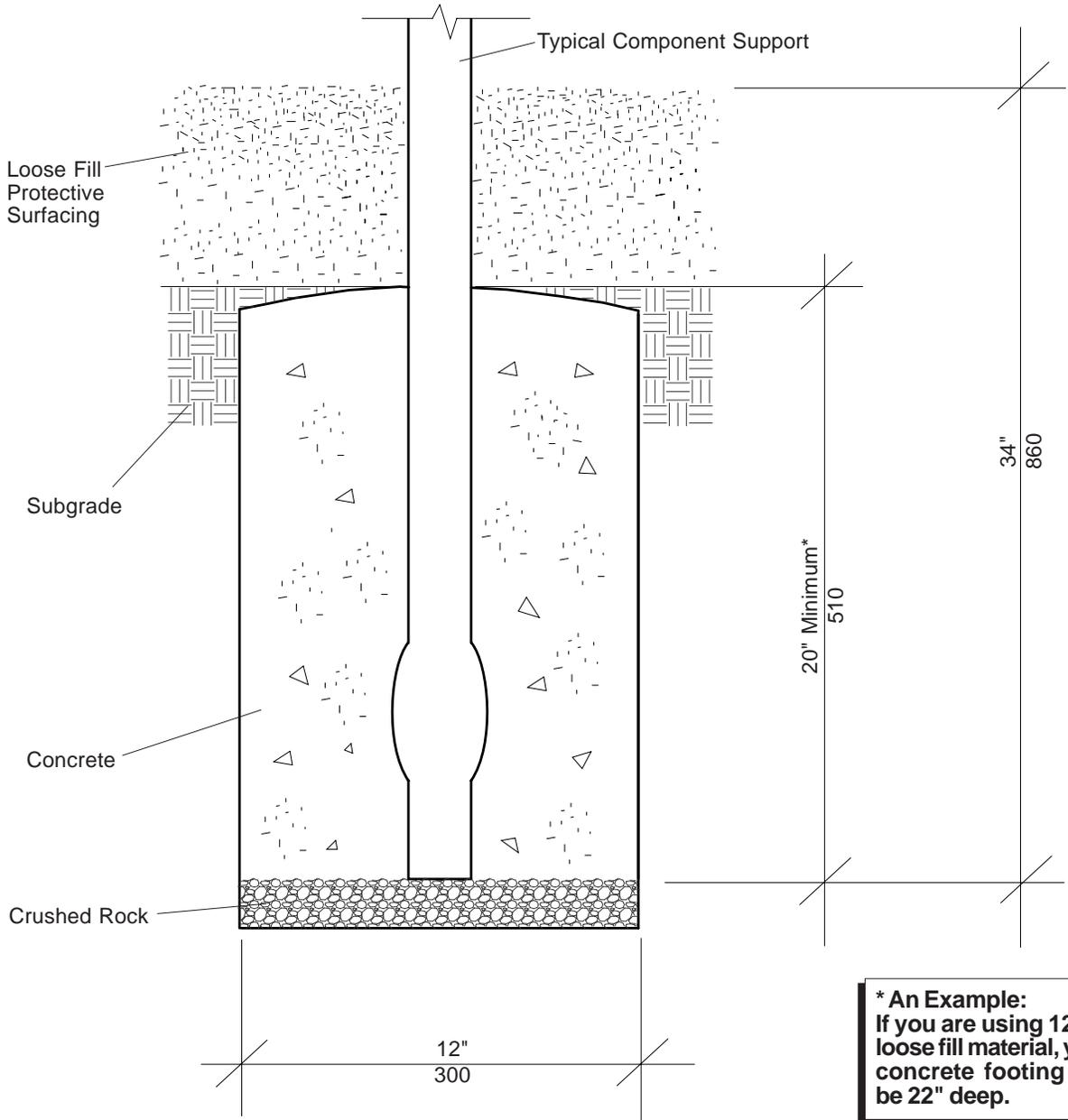
Not an Install doc.



120688 is a danger  
keep off sign

Not an Install doc.





**Minimum 1.2 Cubic Feet of Concrete Required per Support.**



## PlayBooster Installation

- 1) Before starting installation, study your *PlayBooster* plan drawing and all installation instructions carefully for location of posts, deck heights, components and safety enclosures. Make sure slides are oriented away from the afternoon sun and that the structure is visible (easily supervised) and accessible.
- 2) Clear an area large enough for your *PlayBooster* and at least the required minimum use zone around it, as shown on your plan drawing. The subsurface must be well drained. If the soil does not drain naturally it must be tiled or sloped at  $\frac{1}{8}$ " to  $\frac{1}{4}$ " per foot to a storm sewer or a "French Drain". If your *PlayBooster* is over 30' in length it is recommended to install more than one "French Drain" or similar system to allow drainage from the center of the play area and decrease the overall slope. If this is not possible, the structure may need to be "stepped" to take up the grade change.
- 3) Overhead Obstructions: Overhead obstructions within the use zones of playground equipment that are not part of the play structure (for example, tree limbs) shall be at least 84 in. (2130 mm) above each designated play surface or 84 in. (2130 mm) above the pivot point of swings. All overhead utility line clearances above the use zone areas shall comply with all local, state, and national codes, such as the National Electrical Safety Code.
- 4) Locate all mainstructure post footing holes according to the dimensions shown on your *PlayBooster* plan. This can be accomplished by laying a deck on the ground and measuring from it; by laying out a base line string grid or using a builders transit. This step is very important and worth taking extra time to be precise. Location of component footings such as slide supports can be done at a later time.
- 5) Refer to the Typical Concrete Footing installation sheet. Dig holes to the proper width and depth as shown. (Only dig enough holes for one day's construction. Do not leave holes open over night.) Pour crushed rock in each hole **level with each other** and at least 4" deep as shown. This can be easily accomplished either with a builders transit or by laying out hole locations with a string grid, leveling the grid, and measuring down from the grid for each footing. Tamp the crushed rock down until compacted and at proper level. This step is important to ensure all posts will be at the proper height relative to each other, and it greatly simplifies installation. If the soils are loose or unstable, larger diameter holes may be necessary. Check with a local engineer if in doubt.
- 6) Start with the lowest deck and work your way to the highest deck following instructions on the installation sheets for typical post/deck assembly. Install barriers and roofs as located on the plan for stability.
- 7) After the posts are at proper heights and plumb, and the decks are at proper height and level, pour the concrete footings per the Typical Concrete Footing Detail.
- 8) During construction, the site and all the material on it must be secured when unattended to prevent children from playing on them. Do not leave decks with unprotected openings when unattended-use temporary barricades if necessary.
- 9) Install all other play components per the installation instructions. After all components and enclosures are properly attached, pour the remaining concrete footings per the Typical Concrete Footing Detail.
- 10) Install protective surfacing material.
- 11) Attach play hardware such as 'D' rings and swing seats last, **after** protective surfacing is in place and footings have cured at least 3 days.
- 12) Carefully and thoroughly inspect the entire *PlayBooster* to be sure all fastening hardware is tight. According to ASTM F1487, section 6.2 sharp points, edges and protrusions; any exposed bolt ends should not protrude beyond the face of the nut more than two (2) threads. This condition is not planned, but may exist in some applications because materials and finishes will vary. To remedy this situation, add a second nut or washer(s), extras have been added to the spare parts kit. See illustrations on reverse side of this sheet. Children should not be allowed on the structure until this inspection is complete.
- 13) Before children are allowed on the structure, the site must be cleaned and free of all construction debris and packaging material. Do not burn on the site.

## Tools Required

Tools required for installation are an auger, or other equipment for digging 14" diameter footing holes; shovels, rubber mallet, drill (with  $\frac{1}{4}$ " ,  $\frac{7}{16}$ " ,  $\frac{9}{16}$ " ,  $\frac{11}{16}$ " and  $\frac{3}{8}$ " drill bits), tape measure, hex keys or allen wrenches, level,  $\frac{3}{8}$ " socket set, hammer, open end wrench set, screw driver, for surface mount a hammer drill,  $\frac{3}{8}$ " and  $\frac{1}{2}$ " masonry bits and transit or string line to aid in layout. Some washable felt tip pens are also useful for marking clamp locations.

## Materials Required

All *PlayBooster* materials are supplied except concrete for footings, protective surfacing material, and curbing or edging material. With the exception of the special wrenches required (for the pinned hex fasteners) no other tools are supplied.

## Recycling

Many of our packaging materials can be recycled, please take the time to separate and deliver them to a recycler. Thank You.

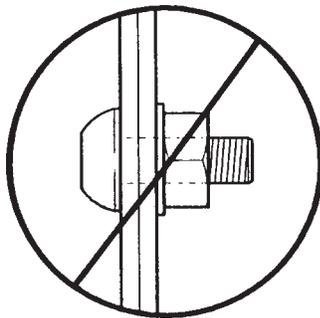
## Installation Times

Installation times, as noted on the back of the installation sheets, are *approximate* and will vary depending on soil conditions, installer's equipment and ability. Times indicated *do not* include unloading or unpacking equipment. The man hours given are for one person installing (unless otherwise noted). Cut time in half for two people.

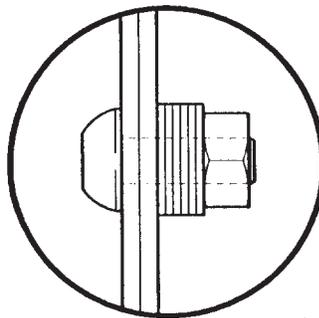
## Technical Services

If you have any questions or concerns about the installation of your structure, call our Technical Services Department at: **1-800-328-0035** (7:30 - 5:30p.m. CST/M-F).

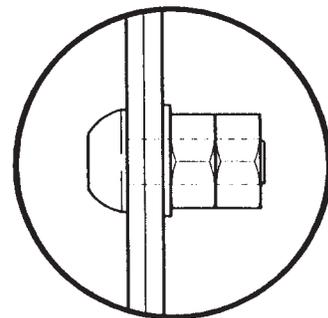
### Illustrations For Note 10, (Reverse Side Of This Sheet)



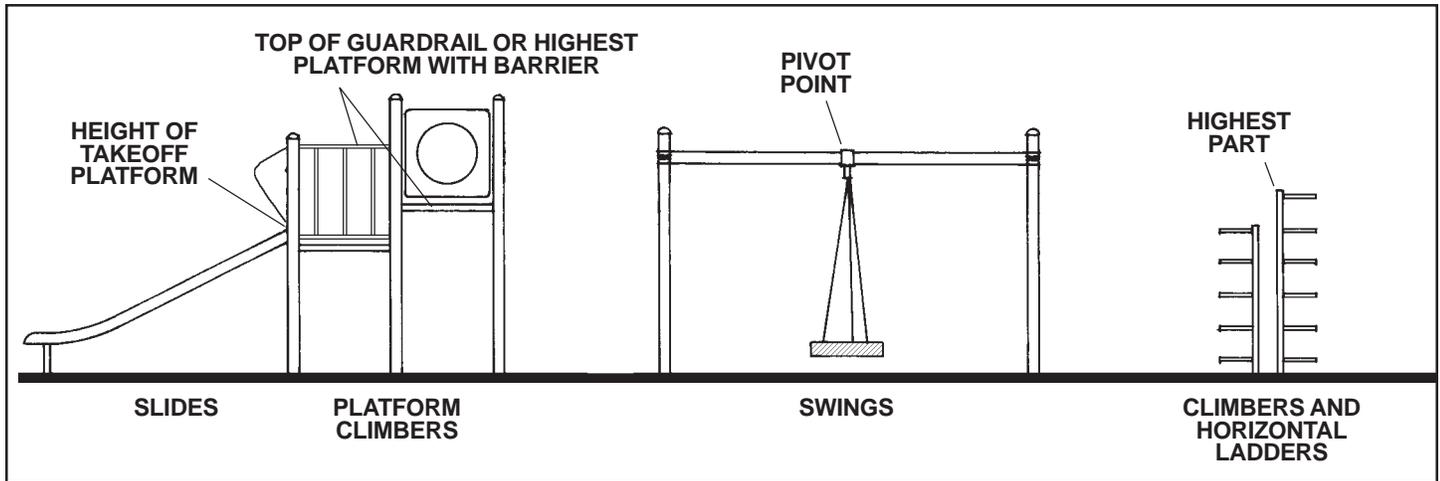
More Than Two (2)  
Threads Exposed



Add Washers



Add Another Nut  
(Align Flat Area)



- 1.) Determine the highest accessible part - by definition.
- 2.) Determine the type of surfacing material desired:
  - *Unitary* - Bound rubber type materials for the accessible areas.
  - *Loose-fill* - Sand, wood chips, etc. for non-accessible areas.
- 3.) Select a material that has a Critical Height value of at least the height of the highest accessible part.
  - According to the CPSC, Critical Height is defined as the maximum height from which the instrumented metal headform, upon impact, yields both a peak deceleration of no more than 200 G's and a HIC value of no more than 1,000 when tested in accordance with the procedure described in the ASTM Test Method F1292.
  - Request independent laboratory test results showing the critical height of each product per the above procedures for commercially available products. The CPSC has tested some common loose-fill materials that are commonly not tested as a protective surfacing. (See back page.)
- 4.) Cover the designated use zone with the desired materials. If a different type of material is used for the accessible route of travel, make sure the surfaces are maintained flush.



**SAFETY NOTE**  
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

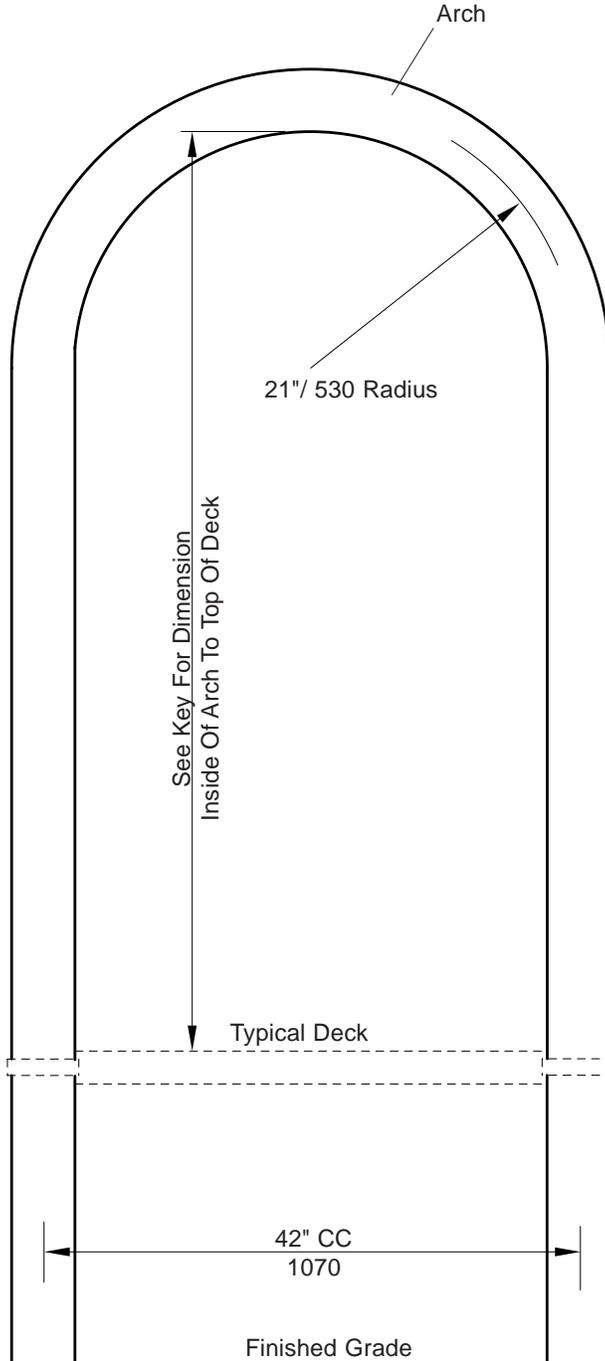
### Critical Heights (in Feet)

Material	Uncompressed Depth			Compressed Depth *
	6"	9"	12"	9"
* Wood Mulch .....	7'	10'	11'	<b>10'</b>
* Double Shredded Bark Mulch .....	6'	10'	11'	<b>7'</b>
* Uniform Wood Chips .....	6'	7'	12'	<b>6'</b>
* Fine Sand .....	5'	5'	9'	<b>5'</b>
* Coarse Sand .....	5'	5'	6'	<b>4'</b>
* Fine Gravel .....	6'	7'	10'	<b>6'</b>
* Medium Gravel .....	5'	5'	6'	<b>5'</b>

NA = Not Available

- \* **NOTE:** Compressed depths most accurately depict conditions on a playground.
- \* An approximation of the maximum fall height from which a life-threatening head injury would not be expected to occur, based on tests in which a headform yielded both a peak deceleration of less than 200 G's and a HIC of less than 1000 upon impact.
- \* Handbook for *Public Playground Safety*, published by the U.S. Consumer Products Safety Commission, Section 10, Table 2, page 21.

## Critical Heights



Standard Concrete Footings Required w/ 34"/860 Bury

**SPECIFICATIONS:**  
 Arch formed from 5" O.D. 6005-T5 aluminum tubing with 1/8" wall thickness. Unit is coated with a baked-on polyester powder-coating, color specified.

**Key:**

Deck Height	Dimension
32"/810 .....	92 1/2"/2350
40"/1020 .....	98 1/2"/2502
48"/1220 .....	90 1/2"/2299
56"/1420 .....	98 1/2"/2502
64"/1630 .....	90 1/2"/2299
72"/1830 .....	90 1/2"/2299
At Grade (No Deck)...	97 1/4"/2470

**NOTE:**  
 Refer To Your Plan For Location Of Arches.



## "How to distribute your hardware *Headache Free*"



We have received feedback from you, our customers, that the most common delay in completing your playground installation is lost or misplaced hardware.

Some of our most successful installations have used a "*check-out*" system with one person appointed to distribute the various hardware packages. Installation sheets are provided for each component that indicate hardware packages/items required to assemble that component. Refer to these sheets to determine which hardware items to request from the designated "*check-out*" person.

### HELPFUL HINTS:

Read installation sheets.

Be sure to use the correct length hardware as specified on the installation sheets.

Be sure to use clamps in the correct location as indicated on the installation sheets.



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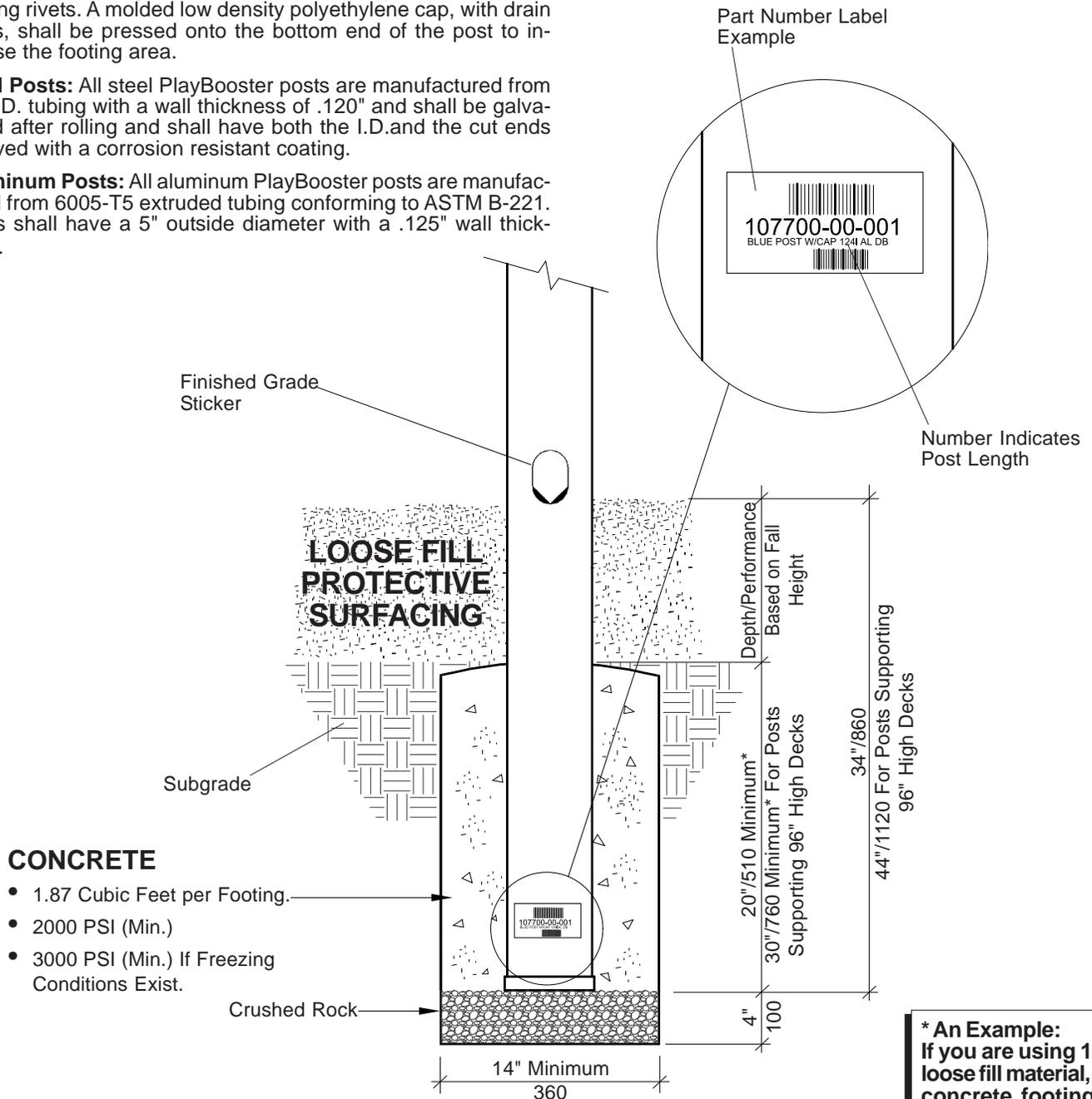
Be sure to use clamps in the correct location as indicated on the installation sheets.



**Post Specifications:** Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

**Steel Posts:** All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

**Aluminum Posts:** All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.



**\* An Example:**  
If you are using 12" of loose fill material, your concrete footing will be 22" deep.

**PlayBooster® Concrete Footings, 5" Posts**



# Warning

**Your playground may include equipment containing moving parts. Moving parts are more vulnerable to wear, mis-use and abuse than other non-moving parts. It is critical these parts be inspected and maintained according to our recommendations.**

**As the owner, it is your responsibility to perform preventative maintenance and record your findings. Failure to do so may create a hazard and cause serious injury or death.**



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# ***IMPORTANT SAFETY NOTES!***

According to the U.S. Consumer Product Safety Commission (CPSC) nearly 70% of all playground injuries are caused by falls to the surface.

**PLEASE INSTALL AND MAINTAIN  
ADEQUATE PROTECTIVE SURFACING  
UNDER AND AROUND YOUR  
PLAYSTRUCTURE!**

Never let children play on the equipment before protective surfacing is installed.

Consult the CPSC's Handbook for Public Playground Safety, the ASTM F1487 Standard or your Landscape Structures representative for more information.





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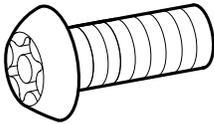
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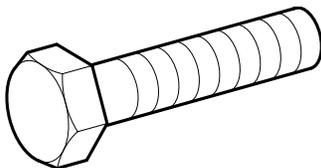
## Common Parts & Fasteners

### Button Head Cap Screws BHCS w/Pin



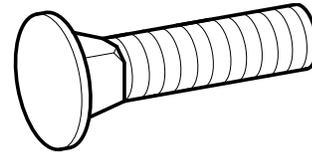
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
137277-00	1/4" x 3/8"	(6,4x9,5)	SST-PAT	10	1,4
131849-00	5/16" x 1/2"	(7,9x12,7)	SST-PAT	10	1,4
132626-00	5/16" x 7/8"	(7,9x22,2)	SST-PAT	10	1,4
192071-00		M8x24mm	SST-PAT	10	1,4
100195-00	3/8" x 5/8"	(9,5x15,9)	SST-PAT	15	2
100196-00	3/8" x 7/8"	(9,5x22,2)	SST-PAT	15	2
100198-00	3/8" x 1 1/8"	(9,5x28,6)	SST-PAT	15	2
113027-00	3/8" x 1 3/8"	(9,5x34,9)	SST-PAT	15	2
100171-00	3/8" x 1 1/2"	(9,5x38,1)	SST-PAT	15	2
123224-00	3/8" x 1 11/16"	(9,5x42,9)	SST-PAT	15	2
100173-00	3/8" x 2"	(9,5x50,8)	SST-PAT	15	2
100199-00	3/8" x 2 1/4"	(9,5x57,2)	SST-PAT	15	2
100174-00	3/8" x 2 1/2"	(9,5x63,5)	SST-PAT	15	2
100175-00	3/8" x 2 3/4"	(9,5x69,9)	SST-PAT	15	2
100176-00	3/8" x 3"	(9,5x76,2)	SST-PAT	15	2
100168-00	3/8" x 3 1/8"	(9,5x82,6)	SST-PAT	15	2
100200-00	3/8" x 3 1/2"	(9,5x88,9)	SST-PAT	15	2
124460-00	3/8" x 3 3/4"	(9,5x95,2)	SST-PAT	15	2
100201-00	5/8" x 1 1/2"	(15,9x38,1)	SST-PAT	50	7
127551-00	5/8" x 1 1/2"	(15,9x38,1)	SST	50	7
100203-00	5/8" x 2 1/4"	(15,9x57,2)	ANTI-SIEZE SST-PAT	50	7

### Hex Cap Screws



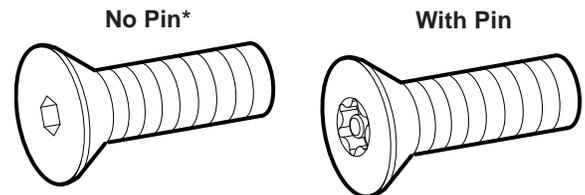
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100206-00	3/8" x 1"	(9,5x25,4)	SST-PAT	15	2
100208-00	3/8" x 1 1/2"	(9,5x38,1)	SST-PAT	15	2
100209-00	3/8" x 1 3/4"	(9,5x44,4)	SST-PAT	15	2
135682-00	3/8" x 3 1/8"	(9,5x79,3)	SST-PAT	15	2
135683-00	3/8" x 4 5/8"	(9,5x117,5)	SST	15	2
100214-00	3/8" x 5"	(9,5x127)	SST-PAT	15	2
121499-00	7/16" x 1 3/4"	(11,1x114,3)	SST-PAT	15	2
100216-00	1/2" x 1 1/4"	(12,7x31,7)	SST	15	2
131862-00	1/2" x 2 1/4"	(12,7x57,1)	SST-PAT	20	2,8

### Carriage Bolts



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100135-00	5/16" x 1 1/4"	(7,9x31,8)	SST-PAT	5	0,7
100147-00	3/8" x 1 1/4"	(9,5x31,8)	SST-PAT	15	2
116017-00	3/8" x 1 1/2"	(9,5x38,1)	SST-PAT	15	2
100148-00	3/8" x 1 3/4"	(9,5x44,5)	SST-PAT	15	2

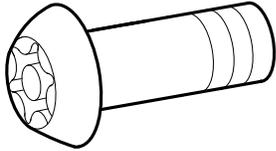
### Flat Head Cap Screws (FHCS)



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
148686-00	3/8" x 3/4"	(9,5x19,05)	SST-PAT	13	1,8
100252-00*	3/8" x 1 1/4"	(9,5x31,8)	SST-PAT	13	1,8
151421-00	3/8" x 1 1/2"	(9,5x38,1)	SST-PAT	13	1,8
148765-00	3/8" x 3 1/2"	(9,5x88,9)	SST-PAT	13	1,8
130824-00*	1/2" x 2 1/4"	(12,5x57,2)	SST	20	2,8

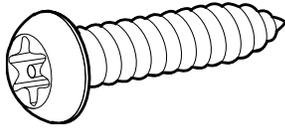
**NOTE:** These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.

## BHCS w/Pin Limited Thread Bolts



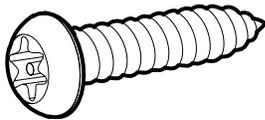
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100290-00	3/8" x 7/8"	(9,5 x 22,2)	SST/PAT	21	3
100292-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST/PAT	21	3
157704-00	7/16" x 2"	(11,11 x 51)	SST/PAT	40	5.5
127068-00	7/16" x 2 7/16"	(11,11 x 61,91)	SST/PAT	40	5.5

## Lag Screws



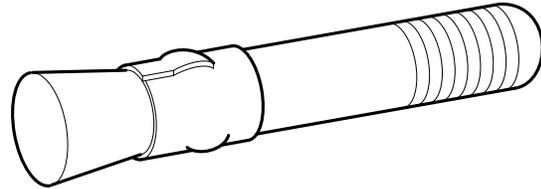
Part #	Sizes		Mat'l or Grade	Head Type
	Inches	mm		
100127-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST	Hex Head
168198-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST	Button Head (Shown)
139039-00	3/8" x 2"	(9,5 x 50,8)	SST	Button Head (Shown)

## Screw, Type AB Thread BHCS w/Pin



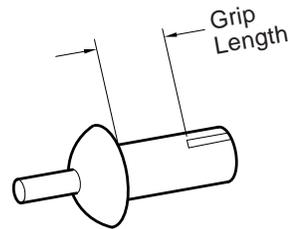
Part #	Size	Mat'l or Grade
129671-00	#14 x 1/2"	SST
127872-00	#14 x 3/4"	SST
136232-00	#14 x 1"	SST
129672-00	#14 x 1 1/4"	SST

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



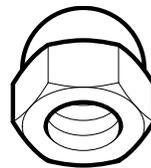
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100263-00	3/8" x 2 3/4"	(9,5 x 69,9)	Alloy Steel	15	2
100266-00	1/2" x 2 3/4"	(12,7 x 69,9)	Alloy Steel	20	2.8

## Drive Rivets



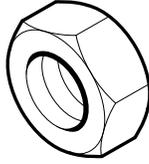
Part #	Sizes		Mat'l
	Inches	mm	
100609-00	1/4" x 3/16"	(6,4 x 4,8)	Alum Rivet/Alum Pin
100611-00	1/4" x 3/8"	(6,4 x 9,5)	Alum Rivet/SST Pin
113300-00	1/4" x 1/2"	(6,4 x 12,7)	Alum Rivet/Alum Pin
100610-00	1/4" x 5/8"	(6,4 x 15,9)	Alum Rivet/SST Pin
139152-00	1/4" x 3/4"	(6,4 x 19,05)	Alum Rivet/Alum Pin
100613-00	1/4" x 7/8"	(6,4 x 22,2)	Alum Rivet/Alum Pin
118158-00	1/4" x 1"	(6,4 x 25,4)	Alum Rivet/Alum Pin

## Low Crown Cap Nut



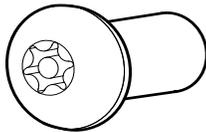
Part #	Size Inches	Mat'l
100349-00	3/8" -16UNC	SST

## Standard Hex Nuts



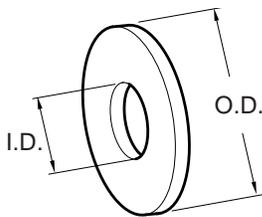
Part #	Sizes Inches	Mat'l or Grade
100326-00	5/16"-18 UNC	SST
100321-00	3/8"-16 UNC	SST-Pat
100327-00	3/8"-16 UNC	SST
128296-00	3/8"-16 UNC (Jam Nut)	SST
100328-00	7/16"-14 UNC	SST
145021-00	7/16"-14 UNC (Jam Nut)	SST
100322-00	1/2"-13 UNC	SST-Pat
129692-00	1/2"-13 UNC	SST-Pat
129693-00	1/2"-13 UNC (Jam Nut)	SST
100323-00	5/8"-11 UNC	SST

## Flange Nut w/Pin



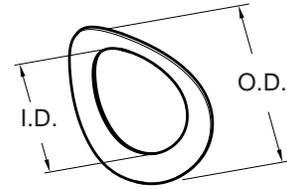
Part #	Sizes Inches	Mat'l or Grade
192064-00	M8 x 24 mm	SST
100353-00	3/8"-16 UNC	SST

## Flat Washers



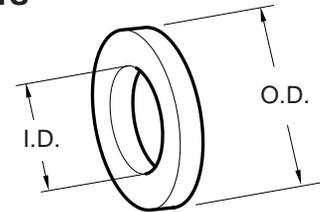
Part #	Sizes		or Grade	I.D.	O.D.
	Inches	mm			
122039-00	1/4"	(6,3)	SST	0.312	.734
100362-00	3/8"	(9,5)	SST	0.406	1.002
112793-00	7/16"	(11,1)	SST	0.505	1.262
100363-00	1/2"	(12,7)	SST	0.536	1.262
100366-00	5/8"	(15,9)	SST	0.688	1.750
123737-00	1 1/8"	(28,6)	SST	1.140	1.750

## Curved Spring Washer



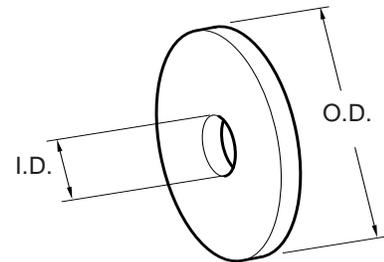
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100380-00	1/2"	(12,7)	SST	0.531	0.795

## SAE Flat Washers



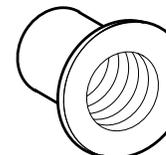
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100364-00	1/4"	(6,35)	SST	0.281	0.625
100365-00	3/8"	(9,5)	SST	0.411	0.816
113550-00	1/2"	(12,7)	SST	0.531	1.062
129500-00	5/8"	(15,9)	SST	0.686	1.342

## Fender Washers



Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100378-00	3/8" x 1 1/2"	(9,53 x 38,1)	SST	0.406	1.500
100379-00	1/2" x 2"	(12,7 x 50,8)	SST	0.531	2.000

## Tee Nut (PlayBooster Clamps)



Part #	Sizes Inches	Mat'l or Grade
100351-00	3/8"-16 UNC	SST

**Set Screw**



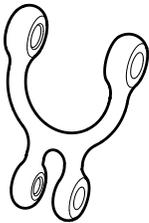
Part #	Sizes		Mat'l or Grade
	Inches	mm	
100298-00	3/8" x 7/16"	(9,5x11,1)	SST

**Bolt Link**



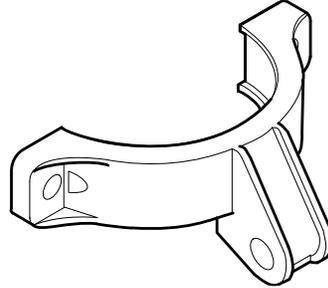
Part #	Mat'l or Grade
138915-00	SST

**Double Clevis**



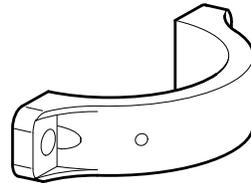
Part #	Mat'l or Grade
138917-00	SST

**Offset Hanger Clamp (PlayBooster)**



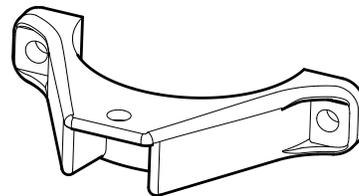
Part #	Mat'l
113729-00	CastAluminum

**Half Clamp (PlayBooster)**



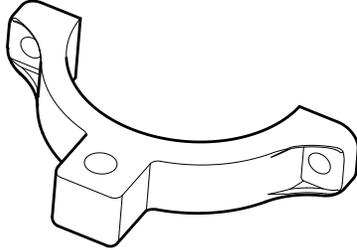
Part #	Mat'l
105327-01	CastAluminum

**Deck Hanger Clamp (PlayBooster)**



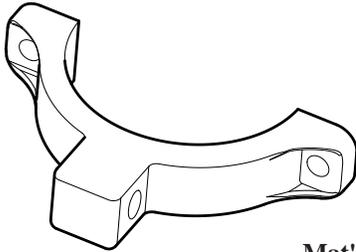
Part #	Mat'l
106022-00	CastAluminum

### Swing Hanger Clamp



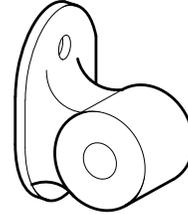
Part #	Mat'l
121289-00	CastAluminum

### Ring/Rail Hanger Clamp (PlayBooster)



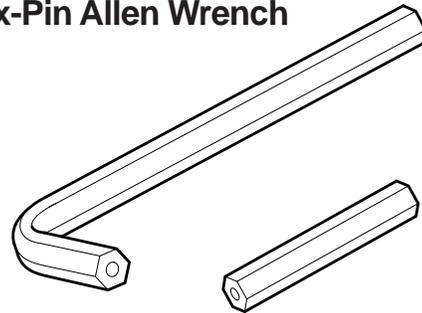
Part #	Mat'l
105330-00	CastAluminum

### Offset Bolt Bracket (PlayShaper)



Part #	Mat'l
113895-00	CastAluminum

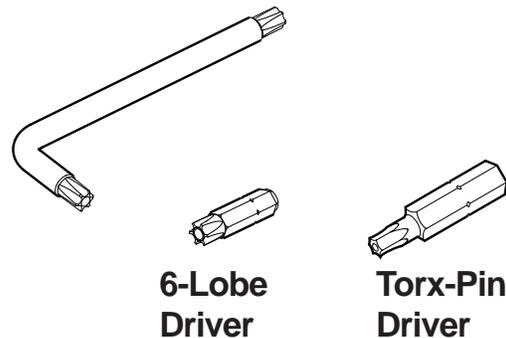
### Hex-Pin Allen Wrench



### Hex-Pin Driver

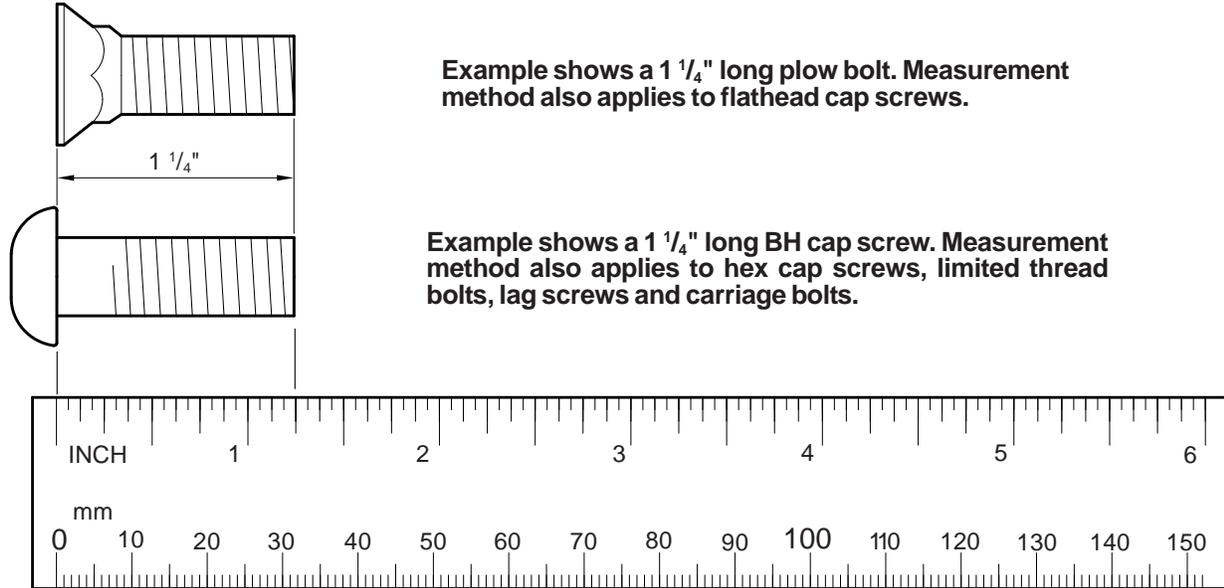
Part #	Description
100685-00	Hex-Pin Allen Wrench
100686-00	Hex-Pin Driver (Used With A <sup>5</sup> / <sub>16</sub> " Socket)

### 6-Lobe Wrench



Part #	Description
146017-00	6-Lobe Wrench (T-45)
146007-00	6-Lobe Driver (T-45) (Used With A <sup>5</sup> / <sub>16</sub> " Socket)
127463-00	Torx-Pin Driver (T-27) (Used With A <sup>1</sup> / <sub>4</sub> " Socket)

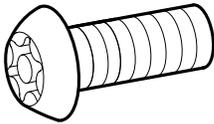
## HOW TO DETERMINE BOLT LENGTHS



**Rule: Measurements should be based on the part of the screw that penetrates the surface.**

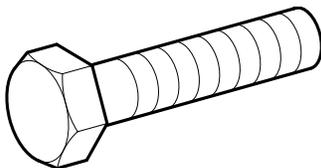
## Common Parts & Fasteners

### Button Head Cap Screws BHCS w/Pin



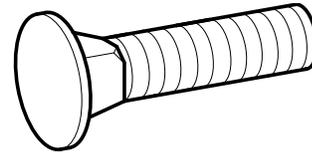
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
137277-00	1/4" x 3/8"	(6,4 x 9,5)	SST-PAT	10	1,4
131849-00	5/16" x 1/2"	(7,9 x 12,7)	SST-PAT	10	1,4
132626-00	5/16" x 7/8"	(7,9 x 22,2)	SST-PAT	10	1,4
192071-00		M8x24mm	SST-PAT	10	1,4
100195-00	3/8" x 5/8"	(9,5 x 15,9)	SST-PAT	15	2
100196-00	3/8" x 7/8"	(9,5 x 22,2)	SST-PAT	15	2
100198-00	3/8" x 1 1/8"	(9,5 x 28,6)	SST-PAT	15	2
113027-00	3/8" x 1 3/8"	(9,5 x 34,9)	SST-PAT	15	2
100171-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
123224-00	3/8" x 1 11/16"	(9,5 x 42,9)	SST-PAT	15	2
100173-00	3/8" x 2"	(9,5 x 50,8)	SST-PAT	15	2
100199-00	3/8" x 2 1/4"	(9,5 x 57,2)	SST-PAT	15	2
100174-00	3/8" x 2 1/2"	(9,5 x 63,5)	SST-PAT	15	2
100175-00	3/8" x 2 3/4"	(9,5 x 69,9)	SST-PAT	15	2
100176-00	3/8" x 3"	(9,5 x 76,2)	SST-PAT	15	2
100168-00	3/8" x 3 1/8"	(9,5 x 82,6)	SST-PAT	15	2
100200-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	15	2
124460-00	3/8" x 3 3/4"	(9,5 x 95,2)	SST-PAT	15	2
100201-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST-PAT	50	7
127551-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST	50	7
			ANTI-SIEZE		
100203-00	5/8" x 2 1/4"	(15,9 x 57,2)	SST-PAT	50	7

### Hex Cap Screws



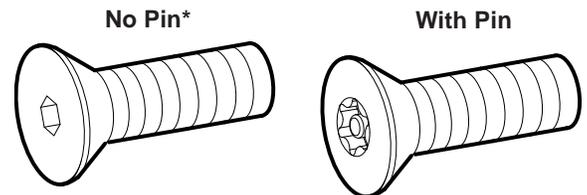
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100206-00	3/8" x 1"	(9,5 x 25,4)	SST-PAT	15	2
100208-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100209-00	3/8" x 1 3/4"	(9,5 x 44,4)	SST-PAT	15	2
135682-00	3/8" x 3 1/8"	(9,5 x 79,3)	SST-PAT	15	2
135683-00	3/8" x 4 5/8"	(9,5 x 117,5)	SST	15	2
100214-00	3/8" x 5"	(9,5 x 127)	SST-PAT	15	2
121499-00	7/16" x 1 3/4"	(11,1 x 114,3)	SST-PAT	15	2
100216-00	1/2" x 1 1/4"	(12,7 x 31,7)	SST	15	2
131862-00	1/2" x 2 1/4"	(12,7 x 57,1)	SST-PAT	20	2,8

### Carriage Bolts



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100135-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST-PAT	5	0,7
100147-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	15	2
116017-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100148-00	3/8" x 1 3/4"	(9,5 x 44,5)	SST-PAT	15	2

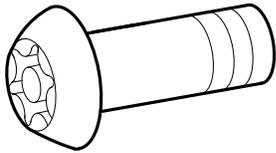
### Flat Head Cap Screws (FHCS)



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
148686-00	3/8" x 3/4"	(9,5 x 19,05)	SST-PAT	13	1,8
100252-00*	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	13	1,8
151421-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	13	1,8
148765-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	13	1,8
130824-00*	1/2" x 2 1/4"	(12,5 x 57,2)	SST	20	2,8

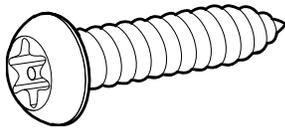
**NOTE:** These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.

## BHCS w/Pin Limited Thread Bolts



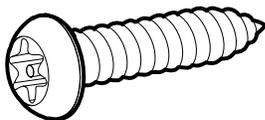
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100290-00	3/8" x 7/8"	(9,5 x 22,2)	SST/PAT	21	3
100292-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST/PAT	21	3
157704-00	7/16" x 2"	(11,11 x 51)	SST/PAT	40	5.5
127068-00	7/16" x 2 7/16"	(11,11 x 61,91)	SST/PAT	40	5.5

## Lag Screws



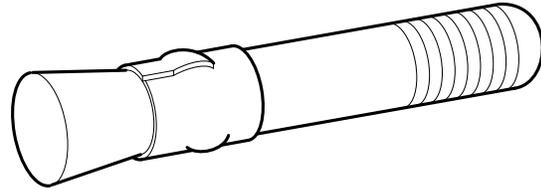
Part #	Sizes		Mat'l or Grade	Head Type
	Inches	mm		
100127-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST	Hex Head
168198-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST	Button Head (Shown)
139039-00	3/8" x 2"	(9,5 x 50,8)	SST	Button Head (Shown)

## Screw, Type AB Thread BHCS w/Pin



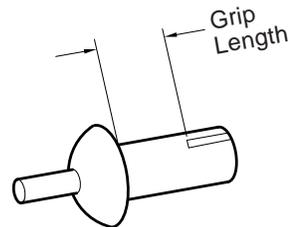
Part #	Size	Mat'l or Grade
129671-00	#14 x 1/2"	SST
127872-00	#14 x 3/4"	SST
136232-00	#14 x 1"	SST
129672-00	#14 x 1 1/4"	SST

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



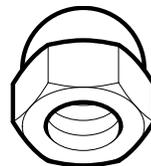
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100263-00	3/8" x 2 3/4"	(9,5 x 69,9)	Alloy Steel	15	2
100266-00	1/2" x 2 3/4"	(12,7 x 69,9)	Alloy Steel	20	2.8

## Drive Rivets



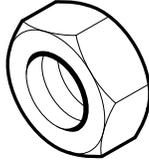
Part #	Sizes		Mat'l
	Inches	mm	
100609-00	1/4" x 3/16"	(6,4 x 4,8)	Alum Rivet/Alum Pin
100611-00	1/4" x 3/8"	(6,4 x 9,5)	Alum Rivet/SST Pin
113300-00	1/4" x 1/2"	(6,4 x 12,7)	Alum Rivet/Alum Pin
100610-00	1/4" x 5/8"	(6,4 x 15,9)	Alum Rivet/SST Pin
139152-00	1/4" x 3/4"	(6,4 x 19,05)	Alum Rivet/Alum Pin
100613-00	1/4" x 7/8"	(6,4 x 22,2)	Alum Rivet/Alum Pin
118158-00	1/4" x 1"	(6,4 x 25,4)	Alum Rivet/Alum Pin

## Low Crown Cap Nut



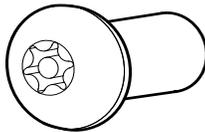
Part #	Size Inches	Mat'l
100349-00	3/8" -16UNC	SST

## Standard Hex Nuts



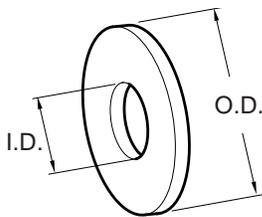
Part #	Sizes Inches	Mat'l or Grade
100326-00	5/16"-18 UNC	SST
100321-00	3/8"-16 UNC	SST-Pat
100327-00	3/8"-16 UNC	SST
128296-00	3/8"-16 UNC (Jam Nut)	SST
100328-00	7/16"-14 UNC	SST
145021-00	7/16"-14 UNC (Jam Nut)	SST
100322-00	1/2"-13 UNC	SST-Pat
129692-00	1/2"-13 UNC	SST-Pat
129693-00	1/2"-13 UNC (Jam Nut)	SST
100323-00	5/8"-11 UNC	SST

## Flange Nut w/Pin



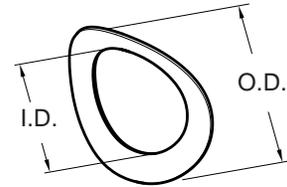
Part #	Sizes Inches	Mat'l or Grade
192064-00	M8 x 24 mm	SST
100353-00	3/8"-16 UNC	SST

## Flat Washers



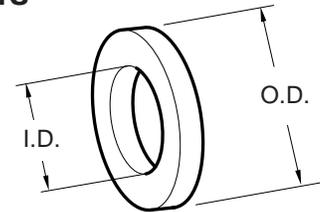
Part #	Sizes		or Grade	I.D.	O.D.
	Inches	mm			
122039-00	1/4"	(6,3)	SST	0.312	.734
100362-00	3/8"	(9,5)	SST	0.406	1.002
112793-00	7/16"	(11,1)	SST	0.505	1.262
100363-00	1/2"	(12,7)	SST	0.536	1.262
100366-00	5/8"	(15,9)	SST	0.688	1.750
123737-00	1 1/8"	(28,6)	SST	1.140	1.750

## Curved Spring Washer



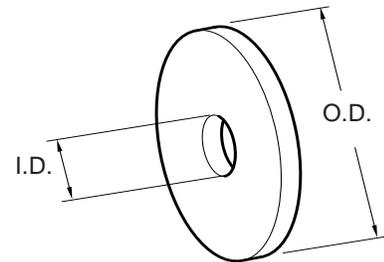
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100380-00	1/2"	(12,7)	SST	0.531	0.795

## SAE Flat Washers



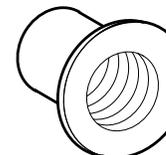
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100364-00	1/4"	(6,35)	SST	0.281	0.625
100365-00	3/8"	(9,5)	SST	0.411	0.816
113550-00	1/2"	(12,7)	SST	0.531	1.062
129500-00	5/8"	(15,9)	SST	0.686	1.342

## Fender Washers



Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100378-00	3/8" x 1 1/2"	(9,53 x 38,1)	SST	0.406	1.500
100379-00	1/2" x 2"	(12,7 x 50,8)	SST	0.531	2.000

## Tee Nut (PlayBooster Clamps)



Part #	Sizes Inches	Mat'l or Grade
100351-00	3/8"-16 UNC	SST

**Set Screw**



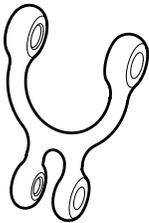
Part #	Sizes		Mat'l or Grade
	Inches	mm	
100298-00	3/8" x 7/16"	(9,5x11,1)	SST

**Bolt Link**



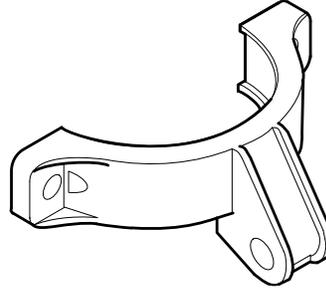
Part #	Mat'l or Grade
138915-00	SST

**Double Clevis**



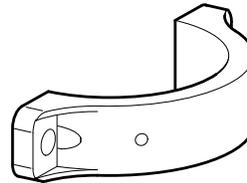
Part #	Mat'l or Grade
138917-00	SST

**Offset Hanger Clamp (PlayBooster)**



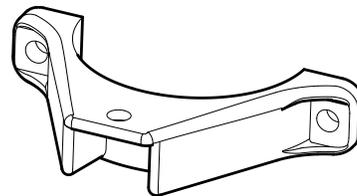
Part #	Mat'l
113729-00	CastAluminum

**Half Clamp (PlayBooster)**



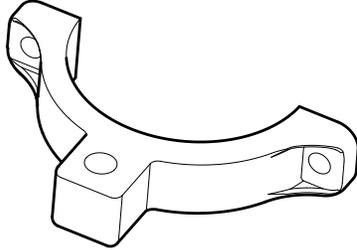
Part #	Mat'l
105327-01	CastAluminum

**Deck Hanger Clamp (PlayBooster)**



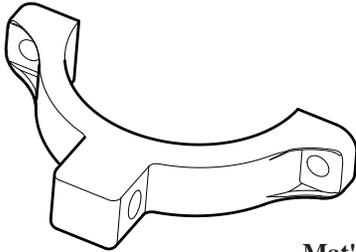
Part #	Mat'l
106022-00	CastAluminum

### Swing Hanger Clamp



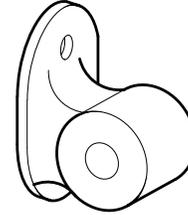
Part #	Mat'l
121289-00	CastAluminum

### Ring/Rail Hanger Clamp (PlayBooster)



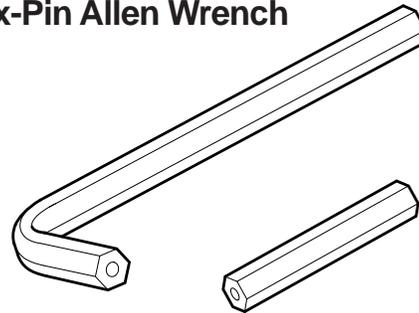
Part #	Mat'l
105330-00	CastAluminum

### Offset Bolt Bracket (PlayShaper)



Part #	Mat'l
113895-00	CastAluminum

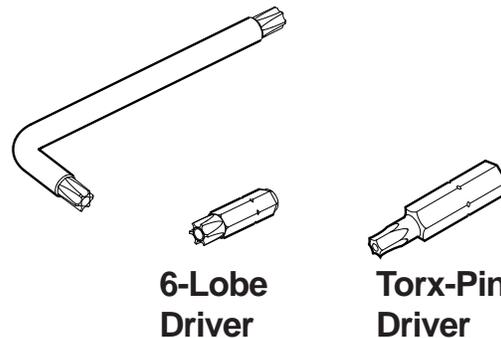
### Hex-Pin Allen Wrench



### Hex-Pin Driver

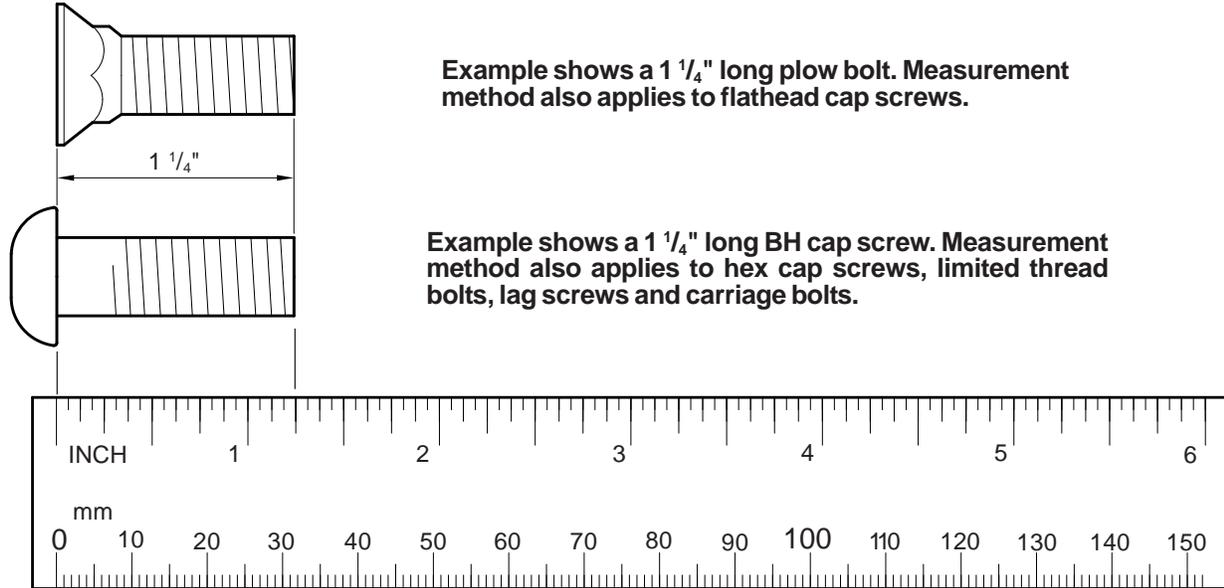
Part #	Description
100685-00	Hex-Pin Allen Wrench
100686-00	Hex-Pin Driver (Used With A <sup>5</sup> / <sub>16</sub> " Socket)

### 6-Lobe Wrench



Part #	Description
146017-00	6-Lobe Wrench (T-45)
146007-00	6-Lobe Driver (T-45) (Used With A <sup>5</sup> / <sub>16</sub> " Socket)
127463-00	Torx-Pin Driver (T-27) (Used With A <sup>1</sup> / <sub>4</sub> " Socket)

## HOW TO DETERMINE BOLT LENGTHS



**Rule:** Measurements should be based on the part of the screw that penetrates the surface.

Did you know that most of the packaging materials you receive on a Landscape Structures order are recyclable? Do you reuse or recycle everything you can from your playground sites? We're making it easier for you to do the right thing and keep these materials out of landfills!

## FOAM/SCRIM SHEETS

Landscape Structures has partnered with our supplier to recycle foam/scrim material, the grey and white sheets that are layered between the large painted parts. This material is not usually accepted at general recycling facilities but this supplier will re-use it in their manufacturing of new packaging materials. It's easy! Just put the foam/scrim from your installation site in a box and ship it to the facility closest to you.

Here is a list of participating facilities throughout the U.S.:

### Foam/Scrim Products Only

Pregis Plant  
159 N San Antonio Ave.  
Pomona, CA 91767

Pregis Plant  
8201 W Elwin Ct.  
Visalia, CA 93291

Pregis Plant  
7574 Presidents Dr.  
Orlando, FL 32809

Pregis Plant  
1411 Pidco Dr.  
Plymouth, IN 46563

Pregis Plant  
300 Harris Rd.  
Wurtland, KY 41144

Pregis Plant  
3825 N Main St.  
Granite Falls, NC 28630

Pregis Plant  
18 Peck Ave.  
Glens Falls, NY 12801

Pregis Plant  
3500 S Highway 287  
Corsicana, TX 75109

Pregis Plant  
310 Old Station Rd.  
Wenatchee, WA 98801

### Foam/Scrim, Plastic Banding, Shrink Wrap

Anchor Facility  
480 Broadway St.  
St Paul, MN 55101

Anchor Facility  
1501 Swasey Rd.  
Hudson, WI 54016

**Don't stop here! Most of the other packaging materials can also be recycled, reused or repurposed.**

- **CORRUGATED CARDBOARD:** Boxes can be broken down and recycled at a local recycler, or reused for other storage.
- **SHRINK WRAP:** Contact your local plastic recycler and ask if they accept polyethylene plastic.
- **PLASTIC BANDING:** Contact your local plastic recycler and ask if they accept polypropylene.

If you have suggestions for recycling, reusing or repurposing other materials, please email them to: [info@playlsi.com](mailto:info@playlsi.com). Just one more way Landscape Structures is building healthy, sustainable communities.



182212 is an  
entanglement label

Not an Install doc.



182213 is a hot surface  
label

Not an Install doc.





Look for compliance to the following guidelines and standards whenever you install playground equipment. It's your assurance that the products you install meet the most rigorous safety and quality assurance standards.

Landscape Structures is a member in good standing of **IPEMA**, the **International Play Equipment Manufacturers Association**. IPEMA is a member-driven, international trade organization that represents and promotes an open market for manufacturers of play equipment.



In the interest of playground safety, IPEMA provides a Third Party Certification Service whereby a designated independent laboratory validates a participant's certification of conformance to ASTM F1487, Standard Consumer Safety Performance Specification for Playground Equipment for Public Use, except sections 7.1.1, 10 and 12.6.1; CAN/CSA Z614, Children's Playspaces and Equipment Standards, except clauses 9.8, 10 and 11; or both. The use of the corresponding logo in the Landscape Structures Inc. catalog signifies that Landscape Structures Inc. has received written validation from the independent laboratory that the product(s) associated with the use of the logo conforms with the requirements of the indicated standards. Check the IPEMA website ([www.ipema.org](http://www.ipema.org)) to confirm product certification. The use zone and fall height requirements in this publication are shown to ASTM standards. The requirements for other standards may be different. According to the CSA, playground maintenance and inspection is a continuous and integral part of budgetary costs. The cost of inspection and maintenance shall be considered and incorporated into the budget at the time of design, purchase equipment and installation (11.1.1 Budgeting).

#### International Play Equipment Manufacturers Association

4305 N. Sixth St. Suite A  
Harrisburg, PA 17110  
[www.ipema.org](http://www.ipema.org)



**The Consumer Product Safety Commission (CPSC)** is a governmental organization that provides technical safety guidelines for designing, constructing, operating and maintaining public playgrounds.

#### U.S. Consumer Product Safety Commission

4330 East West Hwy.  
Bethesda, MD 20814  
[www.cpsc.gov](http://www.cpsc.gov)

**The American Society for Testing and Materials (ASTM)** is a scientific and technical organization that is a major developer of standards for testing different types of materials. In 1993, the ASTM published "Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use," designation F1487-93. ASTM is more technical than the CPSC. ASTM revised its old standard and published a new standard in 1995, 1998, 2001, 2005, 2007 and again in 2011.

#### American Society for Testing and Materials

100 Barr Harbor Dr.  
P.O. Box C700  
West Conshohocken, PA 19428  
[www.astm.org](http://www.astm.org)



#### The Canadian Standards Association

Nearly all equipment developed by Landscape Structures is certified to meet CAN/CSA-Z614-07, the Children's Playspaces and Equipment Standard, through IPEMA.

**The European Standard** was developed by the European Committee for Standardization. The majority of Landscape Structures products have been designed to be TUV certified by a third-party validator to EN 1176: 2008, the European Standard for Playground Equipment.



**ISO 9001:2008** has a process-orientated structure, is customer focused and emphasizes continuous improvement in quality.



**ISO 14001:2004** drives us toward operating in a manner that is environmentally conscious.



## PS/PB/FP/Evos/Weevos Guidelines & Standards

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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Look for compliance to the following guidelines and standards whenever you install playground equipment. It's your assurance that the products you install meet the most rigorous safety and quality assurance standards.

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In the interest of playground safety, IPEMA provides a Third Party Certification Service whereby a designated independent laboratory validates a participant's certification of conformance to ASTM F1487, Standard Consumer Safety Performance Specification for Playground Equipment for Public Use, except sections 7.1.1, 10 and 12.6.1; CAN/CSA Z614, Children's Playspaces and Equipment Standards, except clauses 9.8, 10 and 11; or both. The use of the corresponding logo in the Landscape Structures Inc. catalog signifies that Landscape Structures Inc. has received written validation from the independent laboratory that the product(s) associated with the use of the logo conforms with the requirements of the indicated standards. Check the IPEMA website ([www.ipema.org](http://www.ipema.org)) to confirm product certification. The use zone and fall height requirements in this publication are shown to ASTM standards. The requirements for other standards may be different. According to the CSA, playground maintenance and inspection is a continuous and integral part of budgetary costs. The cost of inspection and maintenance shall be considered and incorporated into the budget at the time of design, purchase equipment and installation (11.1.1 Budgeting).

#### International Play Equipment Manufacturers Association

4305 N. Sixth St. Suite A  
Harrisburg, PA 17110  
[www.ipema.org](http://www.ipema.org)



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#### U.S. Consumer Product Safety Commission

4330 East West Hwy.  
Bethesda, MD 20814  
[www.cpsc.gov](http://www.cpsc.gov)

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#### American Society for Testing and Materials

100 Barr Harbor Dr.  
P.O. Box C700  
West Conshohocken, PA 19428  
[www.astm.org](http://www.astm.org)



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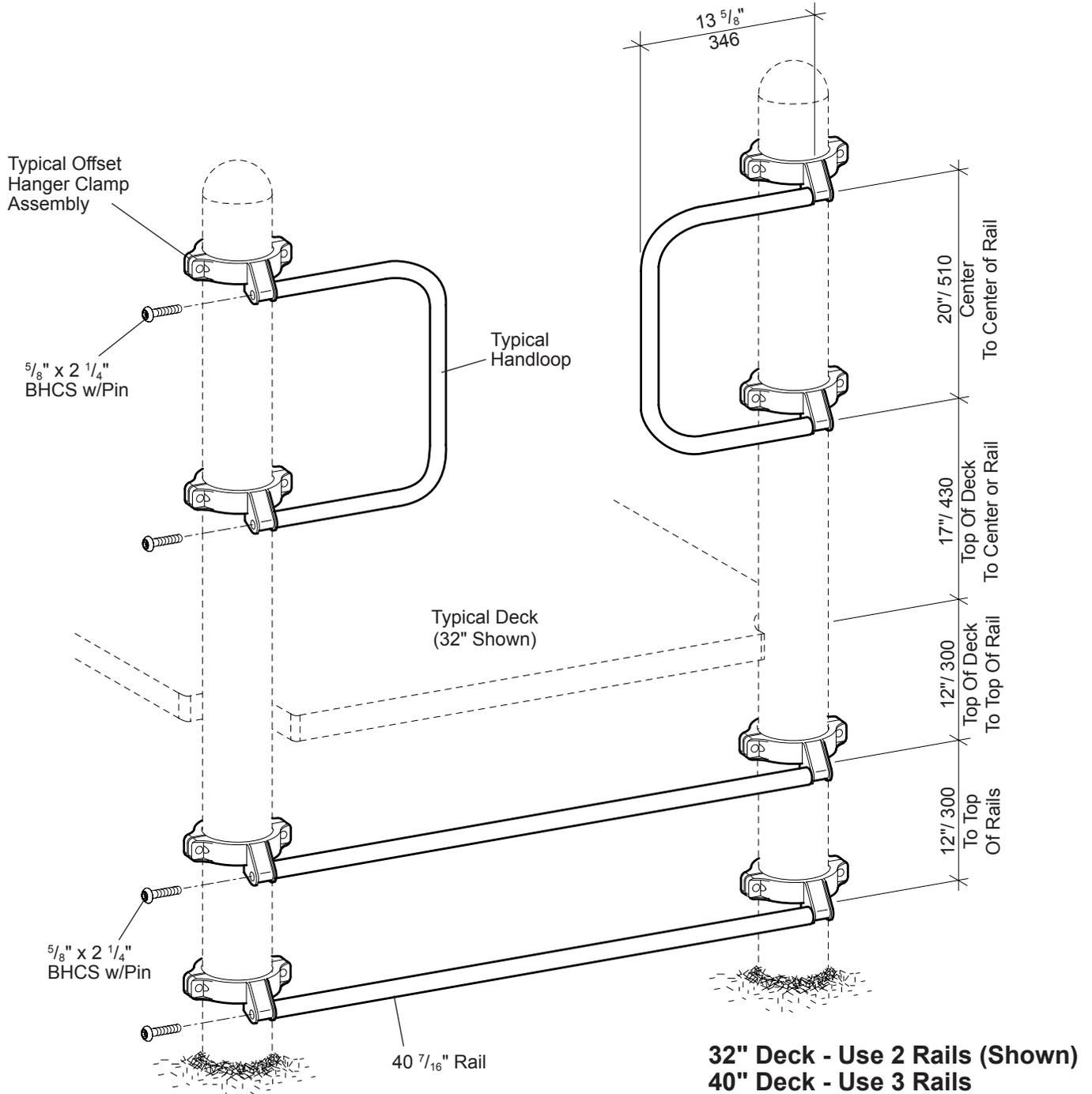


## PS/PB/FP/Evos/Weevos Guidelines & Standards

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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## Parts List

Part#	Description	Qty.
<b>111275</b>	<b>Handloop Assembly</b> .....	1
108542	Handloop, Specify Color .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	4
100203	$\frac{5}{8}$ " x $2\frac{1}{4}$ " BHCS w/Pin, SST .....	2
100351	$\frac{3}{8}$ " Tee Nut, SST .....	4
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, SST .....	2
105327	5" Half Clamp, Specify Color .....	2
113729	Offset Hanger Clamp, Specify Color .....	2
<b>111276</b>	<b>Rail Assembly</b> .....	1
108569	Rail, Specify Color .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	4
100203	$\frac{5}{8}$ " x $2\frac{1}{4}$ " BHCS w/Pin, SST .....	2
100351	$\frac{3}{8}$ " Tee Nut, SST .....	4
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, SST .....	2
105327	5" Half Clamp, Specify Color .....	2
113729	Offset Hanger Clamp, Specify Color .....	2

## Specifications

**Handloop:** Weldment comprised of 1.125" O.D. 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with  $\frac{5}{8}$ " internal thread. Finish: TenderTuff™, color specified.

**Rail:** Weldment comprised of 1.125" O.D. 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with  $\frac{5}{8}$ " internal thread. Finish: TenderTuff™, color specified.

**Offset 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 Time:** Approx.  $\frac{3}{4}$  man hour  
**Weight:** 111275-00 (One) 11 lbs.  
 111276-00 (One) 11 lbs.

## Installation Instructions

- 1) Mark locations of clamps on posts per dimensions on front of sheet.
- 2) Attach offset clamps to ends of rails/handloops using  $\frac{5}{8}$ " x  $2\frac{1}{4}$ " BHCS w/pin.
- 3) Position rail/handloop on marked position on posts and attach using 5" half clamps and  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " tee nuts. Refer to the Typical Offset Hanger Clamp Assembly Sheet.
- 4) Install drive rivets in half clamps per the Typical Offset Hanger Clamp Assembly Sheet.
- 5) Install protective surfacing before users are allowed to play on the structure.



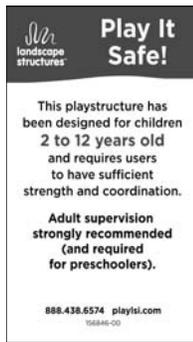
Part No. 156844-00-000



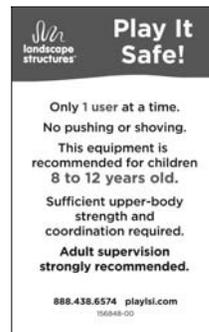
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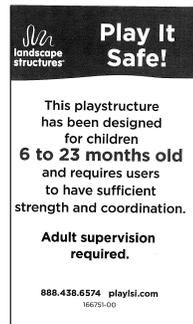
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Part No. 156846-00-000



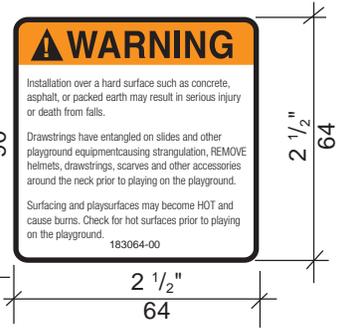
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Part No. 166751-00-000



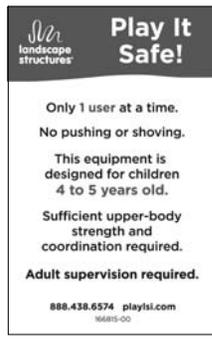
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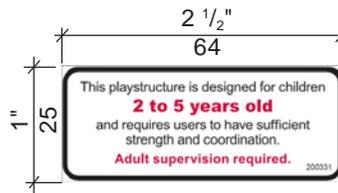
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Part No. 156850-00-000



Part No. 166815-00-000



Part No. 200331-00-000



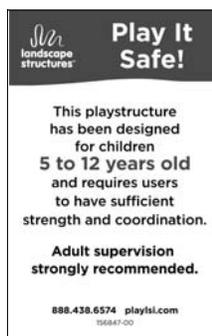
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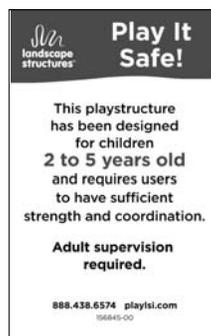
Part No. 200333-00-000

**NOTE: The Playstructure design will determine which Play It Safe sticker will be supplied.**

Part No. 156847-00-000 Part No. 156845-00-000



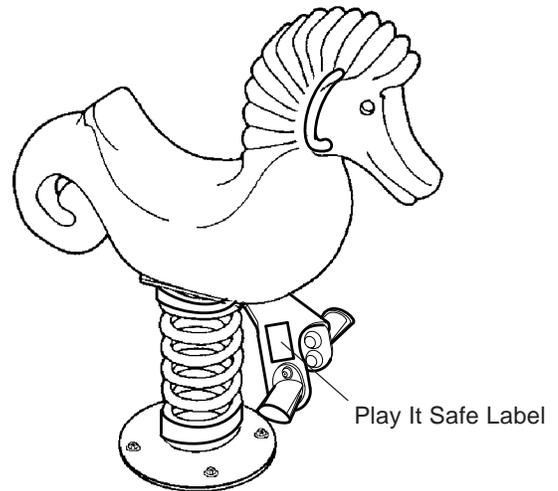
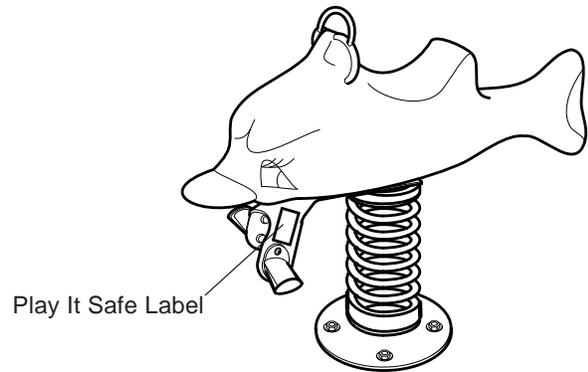
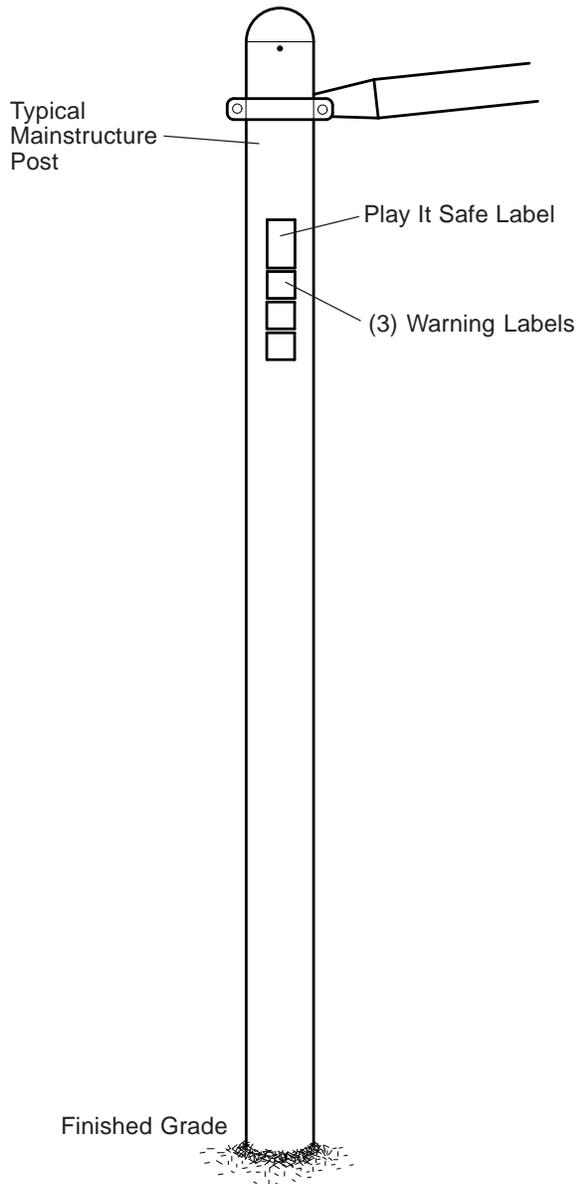
Part No. 156847-00-000



Part No. 156845-00-000

## INSTRUCTIONS:

Surface must be clean and dry prior to applying sticker. Peel backing sheet away from back of sticker and place sticker in position. Using backing sheet, rub over face of sticker to burnish down into place. Choose a location visible to adults in a conspicuous location on product. Stickers work best on painted parts. Where possible, avoid placing on rotationally-molded plastic parts, TenderTuff-coated parts or where children may step and wear off sticker. This applies to both Freestanding Play items and Composite Playstructures. Apply sticker adjacent to or visible from the primary entrance to the structure. Apply 4'-5' above the surface. Apply at least (1) one to every structure and (2) two to large Composite Playstructures.



## PB/PS/FP/Evos®/Weevos® Warning Labels



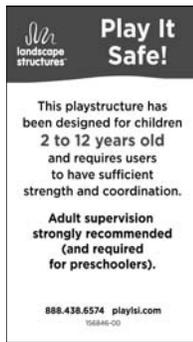
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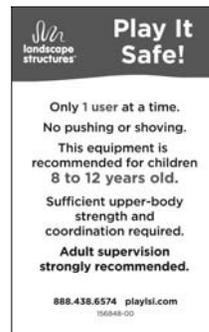
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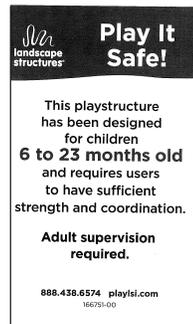
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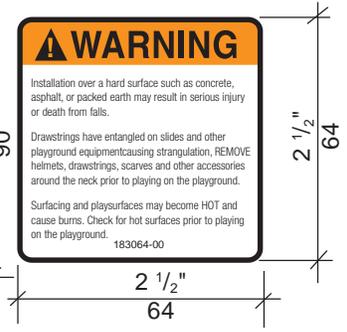
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Part No. 166751-00-000



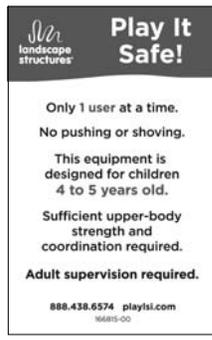
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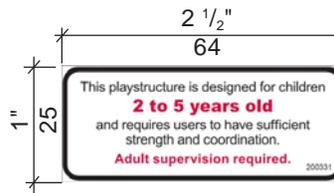
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Part No. 156850-00-000



Part No. 166815-00-000



Part No. 200331-00-000

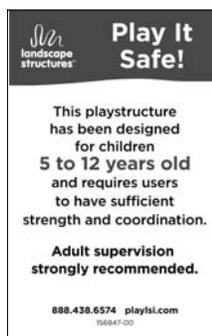


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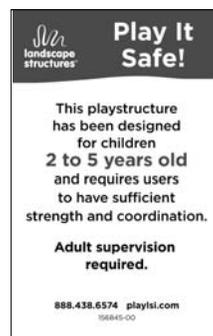


Part No. 200333-00-000

**NOTE: The Playstructure design will determine which Play It Safe sticker will be supplied.**



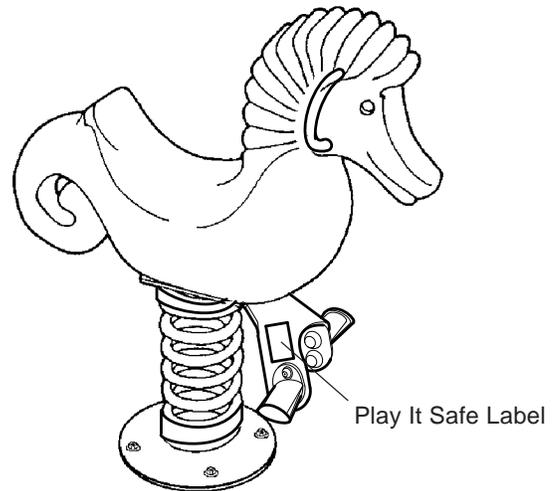
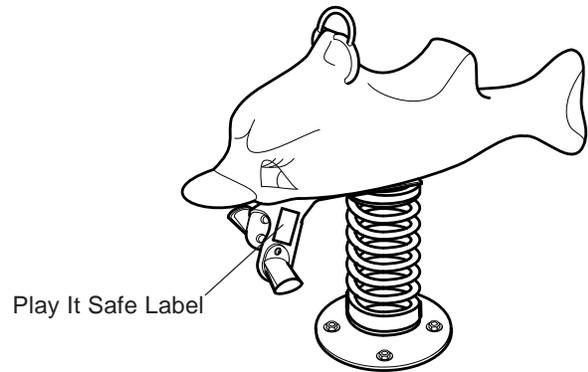
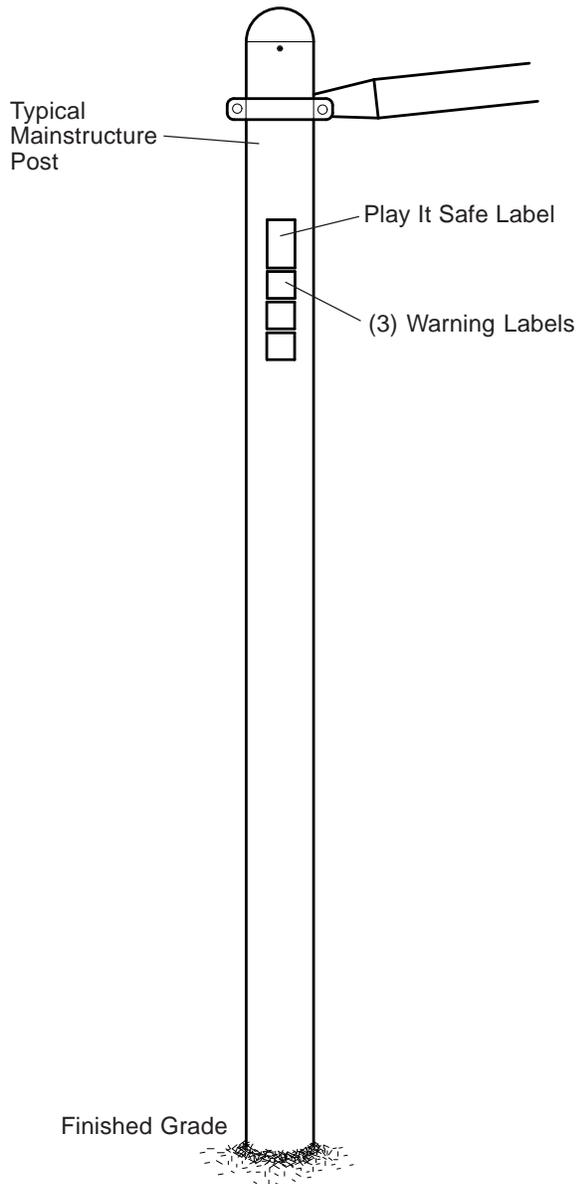
Part No. 156847-00-000



Part No. 156845-00-000

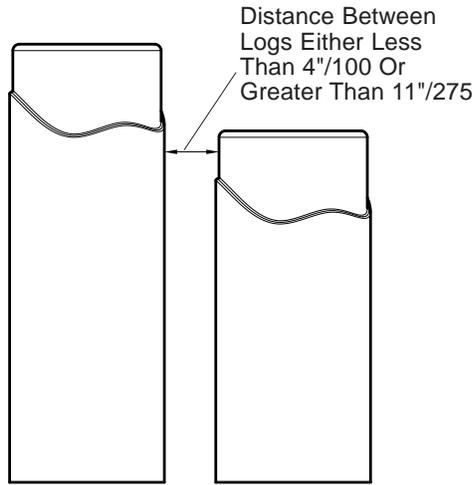
## INSTRUCTIONS:

Surface must be clean and dry prior to applying sticker. Peel backing sheet away from back of sticker and place sticker in position. Using backing sheet, rub over face of sticker to burnish down into place. Choose a location visible to adults in a conspicuous location on product. Stickers work best on painted parts. Where possible, avoid placing on rotationally-molded plastic parts, TenderTuff-coated parts or where children may step and wear off sticker. This applies to both Freestanding Play items and Composite Playstructures. Apply sticker adjacent to or visible from the primary entrance to the structure. Apply 4'-5' above the surface. Apply at least (1) one to every structure and (2) two to large Composite Playstructures.

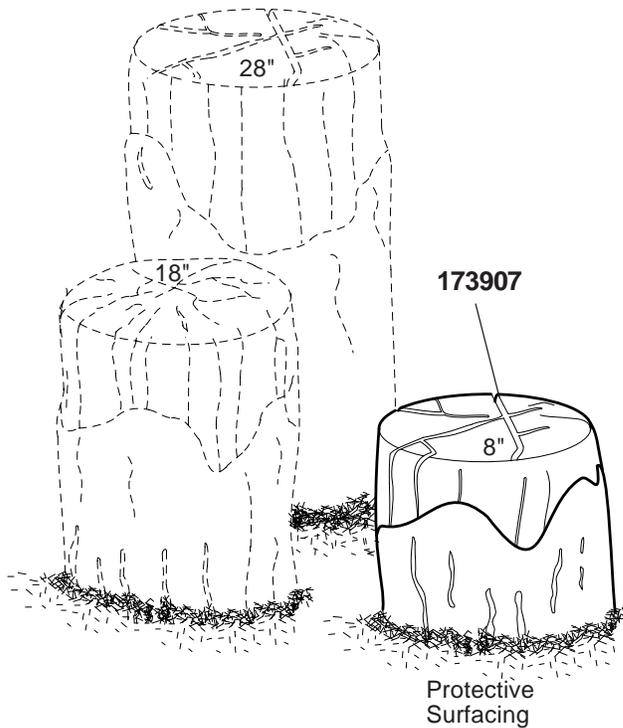
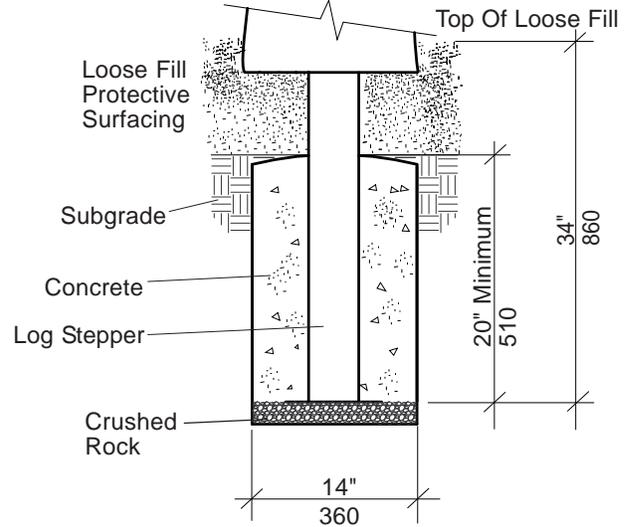


## PB/PS/FP/Evos®/Weevos® Warning Labels

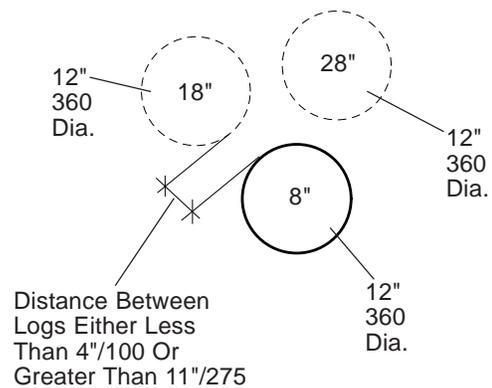
**DETAIL  
LOG STEPPER  
SPACING**



**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 .....	*

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  $\frac{3}{16}$ " 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.

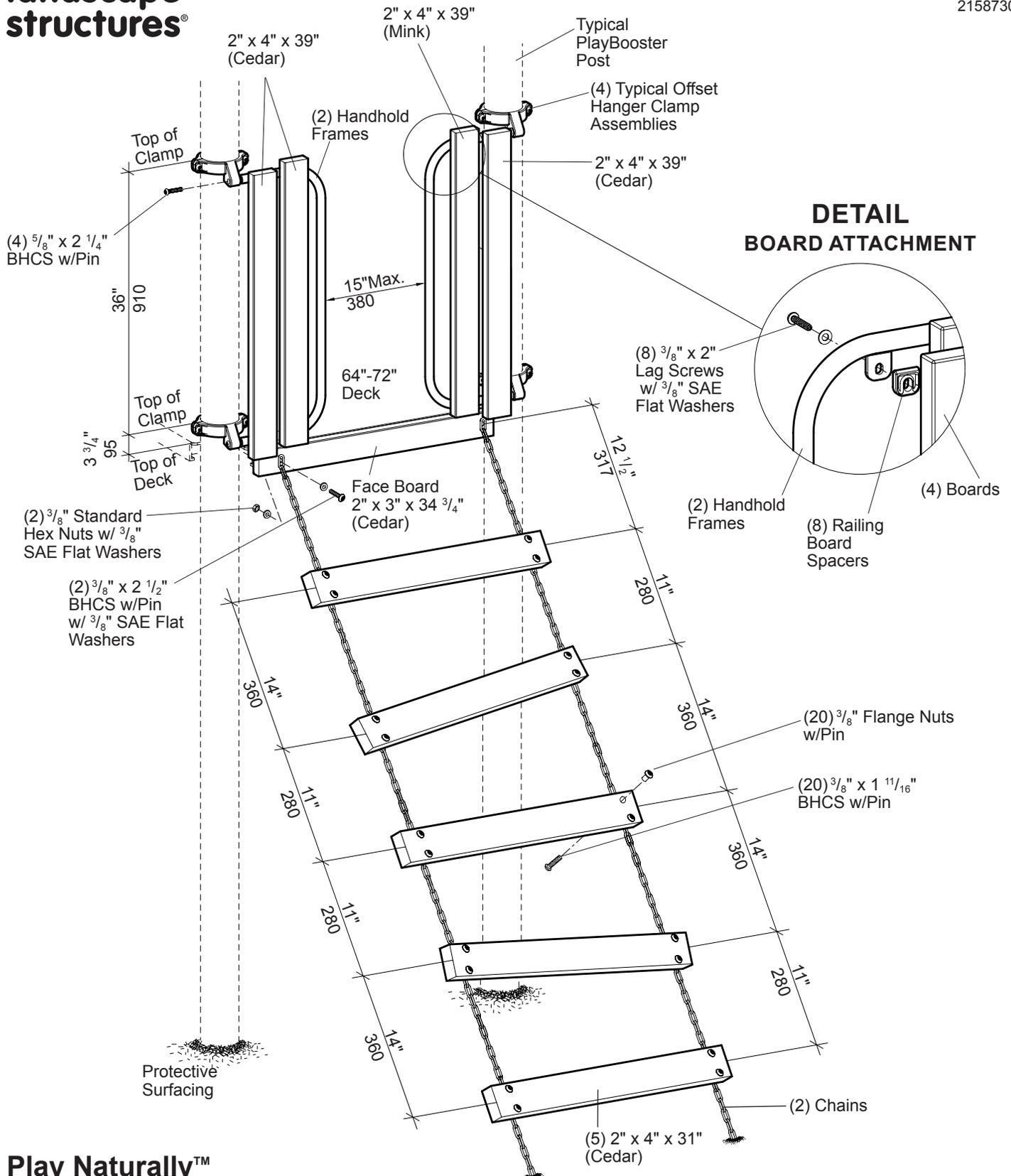
**Installation Time:** Approx.  $\frac{1}{2}$  man hour each

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



Play Naturally™

PlayBooster® 169318 Wood Wiggle Ladder, 64" - 72" Deck



# PlayBooster® 169318 Wood Wiggle Ladder, 64" - 72" Deck

## Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
118029	Support (DB)	2
168211	Handhold Frame, Tan	2
168467	2" x 4" x 39" Board, Cedar or Mink	4
175267	2" x 3" x 34 3/4" Deck Face Board, Cedar	1
169120	2" x 4" x 31" Wiggle Ladder Board, Cedar	5
175253	3/16" x 82 3/16" Chain, (64" Deck)	2
174884	3/16" x 90 11/16" Chain, (72" Deck)	2
<b>214832</b>	<b>Wiggle Ladder Hardware Package</b>	1
100174	3/8" x 2 1/2" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	4
100327	3/8" Standard Hex Nut, SST	4
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	20
100365	3/8" SAE Flat Washer, SST	12
123224	3/8" x 1 11/16" BHCS w/Pin, SST	20
139039	3/8" x 2" Lag Screw, SST	8
207485	Railing Board Spacer, Tan	8

DB = Direct Bury

## Specifications

**Support (DB):** Fabricated from 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing.

**Chain/Uncoated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard®.

**Poly Board:** Recycled high-density polyethylene, cedar or mink in color.

**Handhold Frame:** Weldment comprised of 1.125" O.D. 11 GA. (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread and 1/4" HRPO steel plate. Finish: ProShield®, tan in color.

**Spacer:** Extruded from 1.125" O.D. x .290" w. 6061-T6 aluminum. Finish: ProShield, tan in color.

**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 Time:** Approx. 3.5 man hours

**Concrete:** Approx. 2.6 cu. ft.

**Weight:** 92 lbs. (64" Deck)

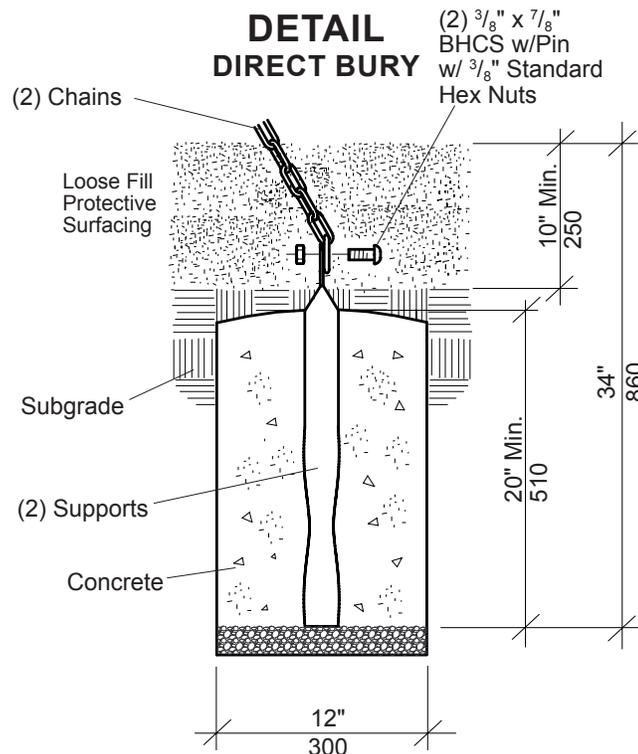
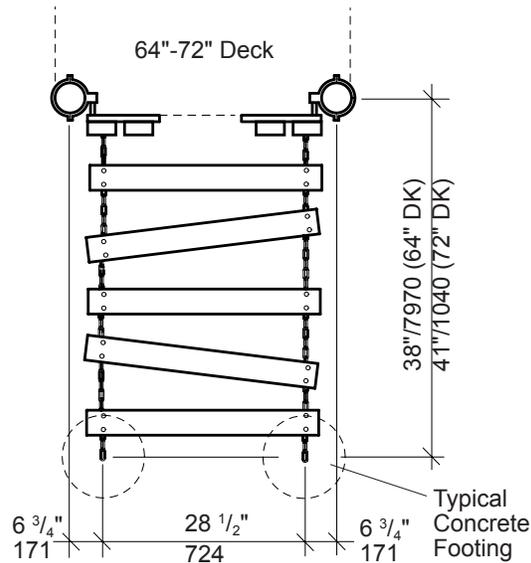
94 lbs. (72" Deck)

**Fall Height:** Deck Height

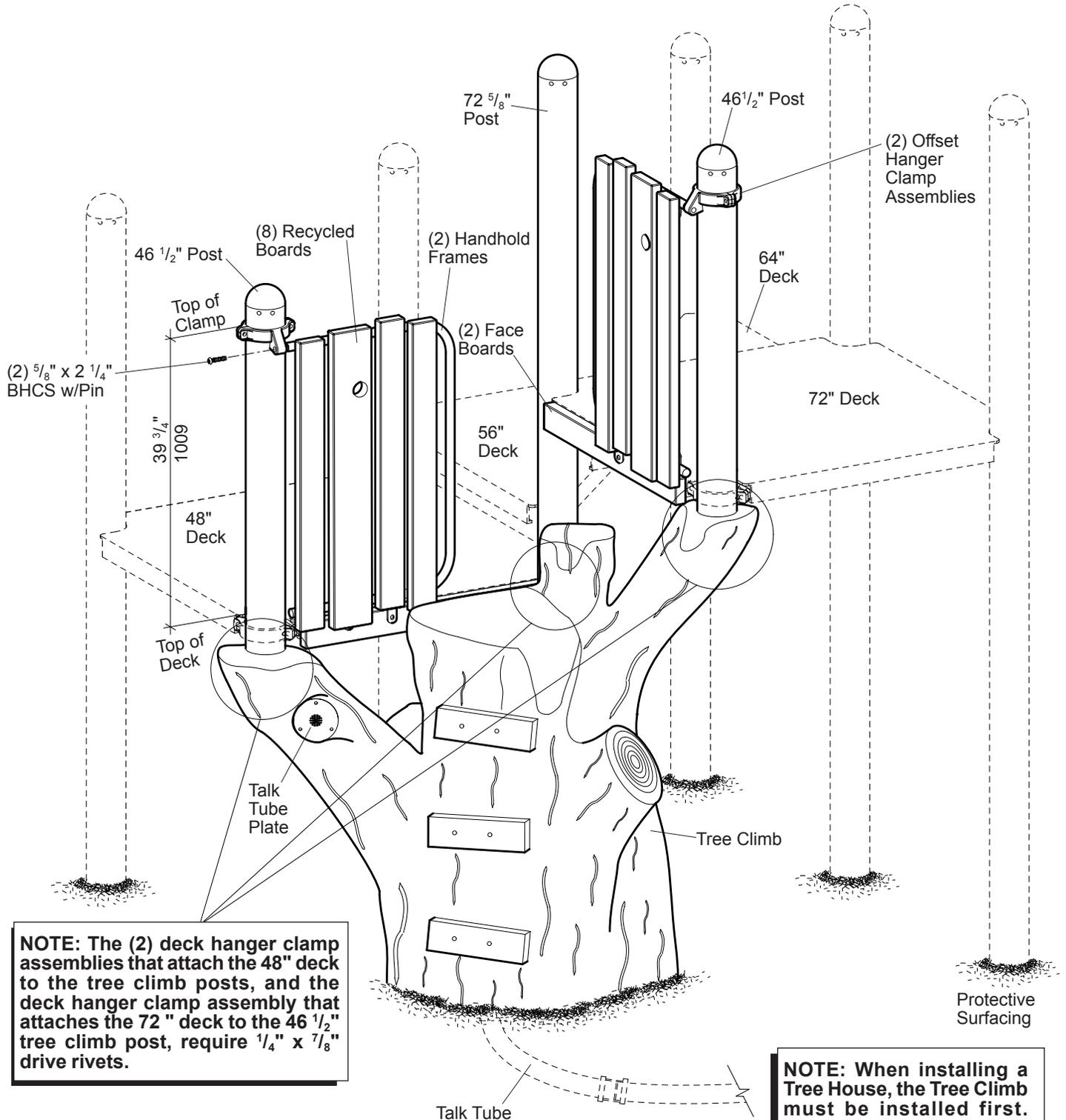
## Installation Instructions

- 1) Drill 7/16" holes thru face board, using pilot holes as a guide. Attach chains and deck face board to the face of deck, using 3/8" x 2 1/2" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
- 2) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach handhold frames to offset hanger clamps, using 5/8" x 2 1/4" BHCS w/Pin.
- 4) Line up pilot holes in boards with spacers and handhold frame tabs and attach, using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- 5) Attach boards to chains, using 3/8" x 1 11/16" BHCS w/pin and 3/8" flange nuts w/pin.
- 6) Determine footing locations by pulling chains tight and laying end on subgrade. Dig footing holes where chains meet subgrade to the width and depth shown.
- 7) Fasten chains to the supports using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts.
- 8) Pour concrete into footing holes. Push supports into concrete until chain is tight and top of support is positioned 1 3/4" above subgrade. Temporarily brace supports into position until concrete has cured. Refer to the Direct Bury Detail.
- 9) After concrete has cured a minimum of 72 hours, remove support brace and install protective surfacing before users are allowed to play on the structure.

**PLAN VIEW/FOOTING LAYOUT**







**NOTE:** The (2) deck hanger clamp assemblies that attach the 48" deck to the tree climb posts, and the deck hanger clamp assembly that attaches the 72" deck to the 46 1/2" tree climb post, require 1/4" x 7/8" drive rivets.

**NOTE:** When installing a Tree House, the Tree Climb must be installed first. Refer to the Site Plan for proper location.

*Play Naturally™*

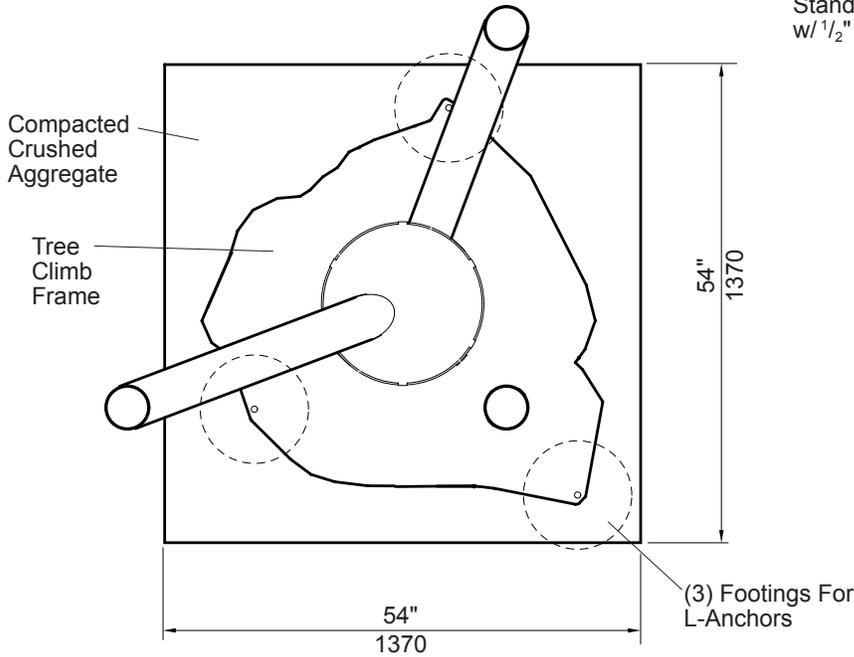
**PlayBooster® 169322 Discovery Tree Climb™, wo/ Roof**

Sheet 1 of 3

**SAFETY NOTE**  
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487, SECTION 9.)

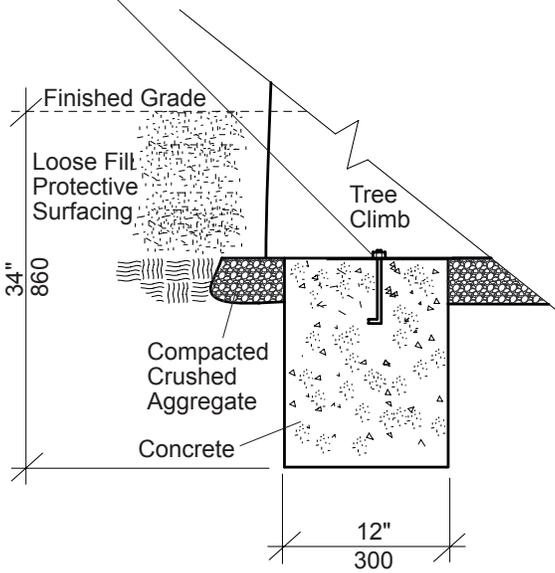
169323b

**DETAIL  
 AGGREGATE BASE**

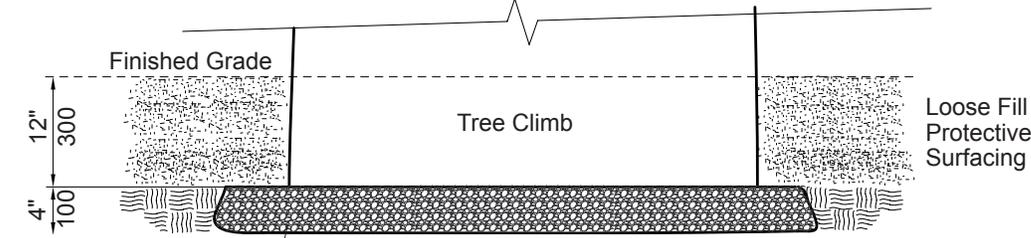


(3) L-Anchors & 1/2" Standard Hex Nuts w/ 1/2" Flat Washers

**DETAIL  
 L-ANCHOR FOOTING**



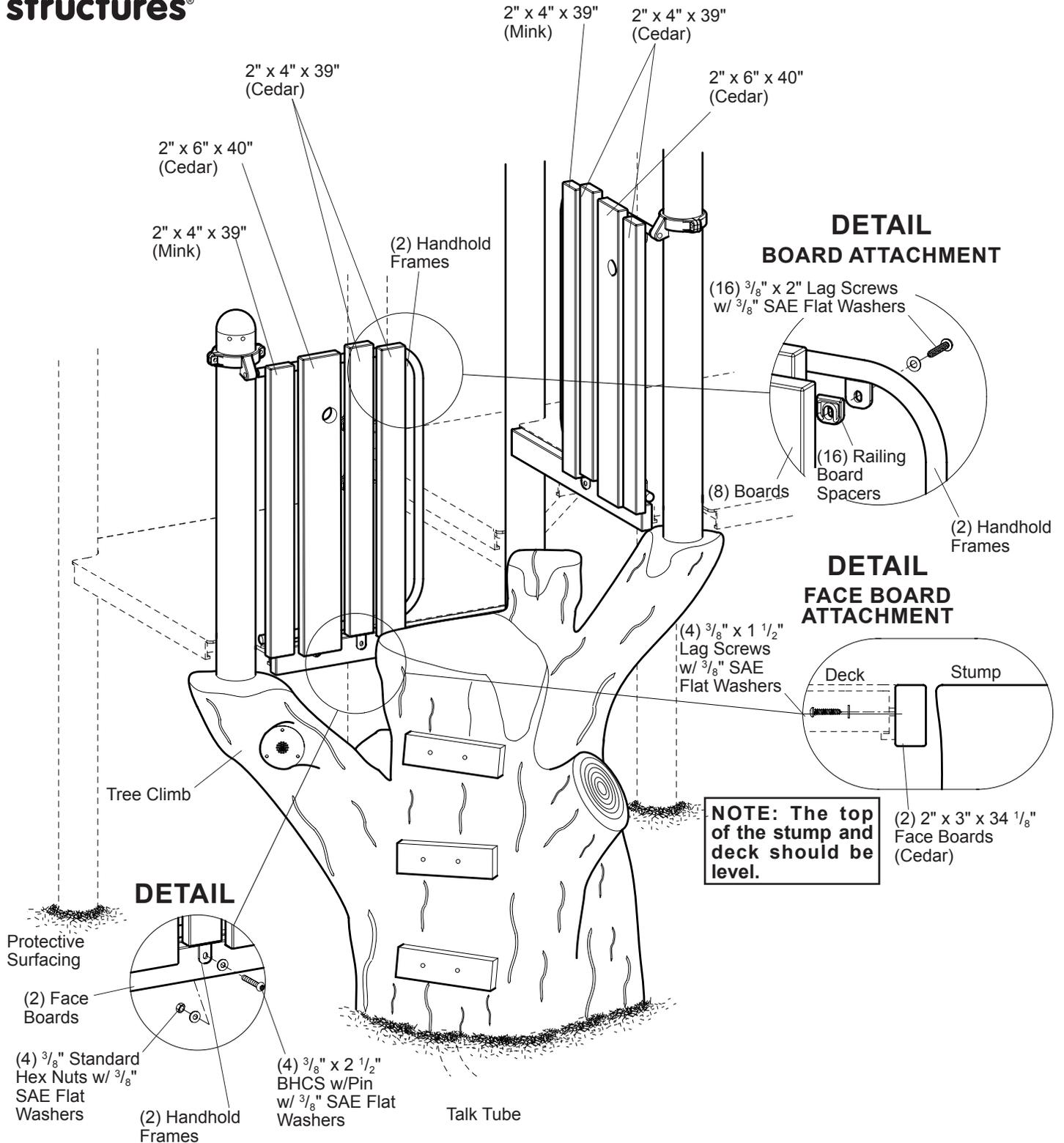
**DETAIL  
 AGGREGATE BASE**



Level Compacted Crushed Aggregate Base

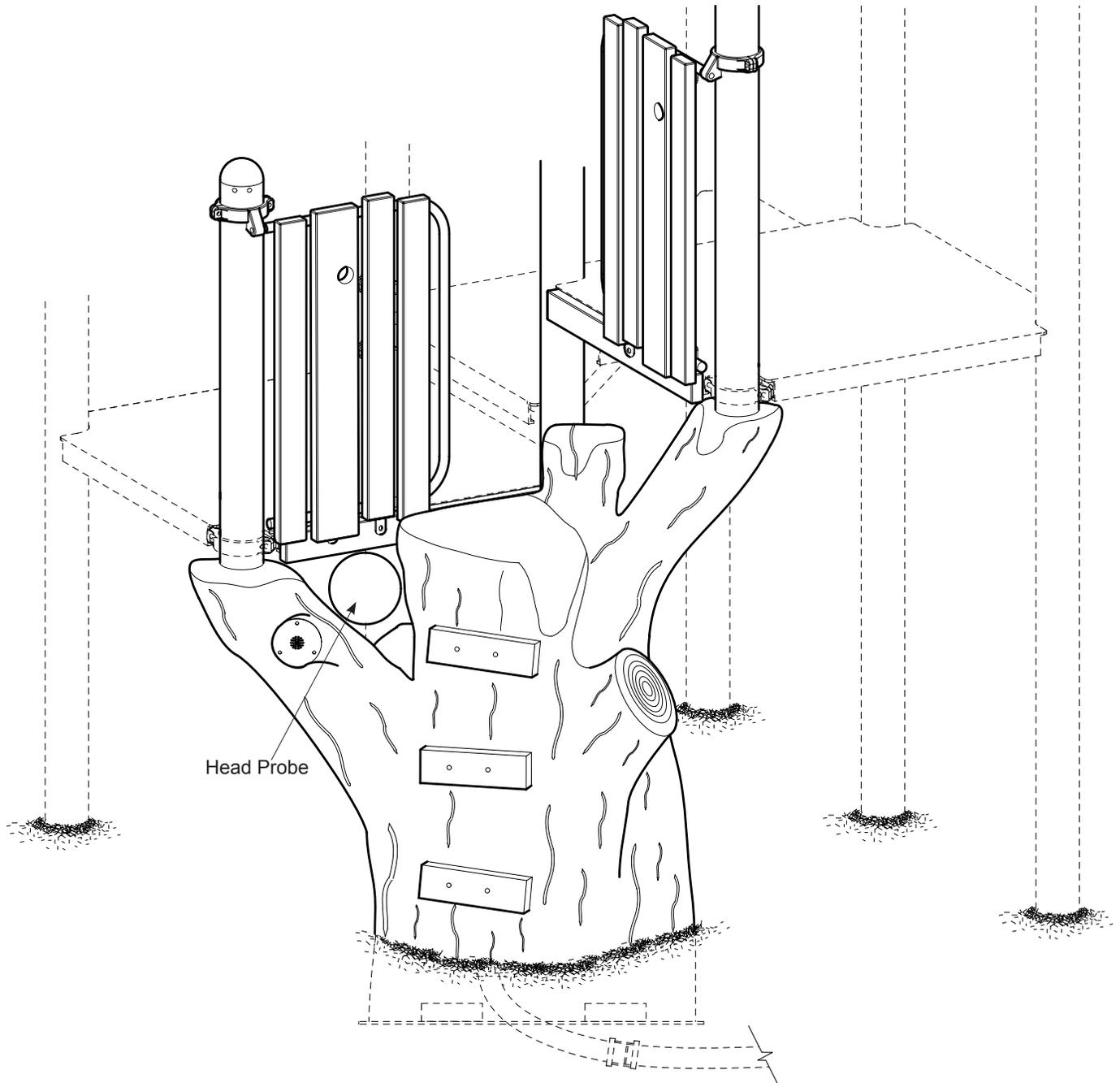
**NOTE: Aggregate must be at same level as subgrade, or below subgrade.**

**PlayBooster® 169322 Discovery Tree Climb™, wo/ Roof**



**PlayBooster® 169322 Discovery Tree Climb™, wo/ Roof**

- 1) Head probe should pass through opening. Check with probe perpendicular to opening.
- 2) If it does not pass, then raise the deck until a compliant space is achieved using the head probe.



Head Probe

## PlayBooster® 169322 Discovery Tree Climb™, wo/ Roof

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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# PlayBooster® 169322 Discovery Tree Climb™, wo/ Roof

## Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
170081	Tree Climb, Natural	1
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
206977	Handhold Frame, Tan	2
168467	2" x 4" x 39" Board, Specify Color	6
168471	2" x 6" x 40" Board, Cedar	2
175267	2" x 3" x 34 1/8" Deck Face Board, Cedar	2
169517	46 1/2" Steel Post, Specify Color	*
175320	72 5/8" Steel Post, Specify Color	*
169520	46 1/2" Aluminum Post, Specify Color	*
175321	72 5/8" Aluminum Post, Specify Color	*
<b>169651</b>	<b>Recycled Deck Face/Kick Brd. Hdw. Package</b>	2
100365	3/8" SAE Flat Washer, SST	8
168198	3/8" x 1 1/2" Lag Screw, SST	8
<b>214730</b>	<b>Wide Handhold Hardware Package</b>	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100174	3/8" x 2 1/2" BHCS w/Pin, SST	4
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100327	3/8" Standard Hex Nut, SST	4
100351	3/8" Tee Nut, SST	4
100365	3/8" SAE Flat Washer, SST	24
139039	3/8" x 2" Lag Screw, SST	16
207485	Railing Board Spacer, Tan	16
<b>170214</b>	<b>Tree Climb Hardware Package</b>	1
100322	1/2" Standard Hex Nut, SST	3
100363	1/2" Flat Washer, SST	3
100613	1/4" x 7/8" Drive Rivet, AL/SST	3
168380	1/2" x 10" L-Anchor	3

\* = Quantity Determined By Your Order

## Specifications

**Tree Climb Assy.:** (Frame) Weldment comprised of 5" O.D. x 11 GA. (.120") wall galvanized steel tubing, 2.375" O.D. RS20 (.095"-.105") wall galvanized steel tubing, 1/4" HRPO steel plate, 3/16" HRPO steel plate, 18" O.D. 1/4" (.250") wall steel tube. Finish: ProShield. **(Talk Tube Plate)**Weldment comprised of 1.250" O.D. x 11 GA. (.120") black steel tube and 12 Ga. (.105") HRPO flat steel. Finish: ProShield, color specified. **(Tree Climb-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 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, natural colors.

**Posts:** See PlayBooster (PB) General Specifications.

**Poly Board:** Recycled high-density polyethylene, color specified.

**Handhold Frame:** Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 5/8" internal thread and 1/4" HRPO steel plate. Finish: ProShield, tan in color.

**Hose Clamp:** Band and housing made from 300 series stainless steel. Slotted screw with hex head and safety collar is cadmium-plated carbon steel.

**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 Time:** Approx. 6 man hours

**Concrete Req.:** Approx. 3.9 cu. ft.

**Weight:** 1916 lbs. w/steel posts  
1862 lbs. w/aluminum posts

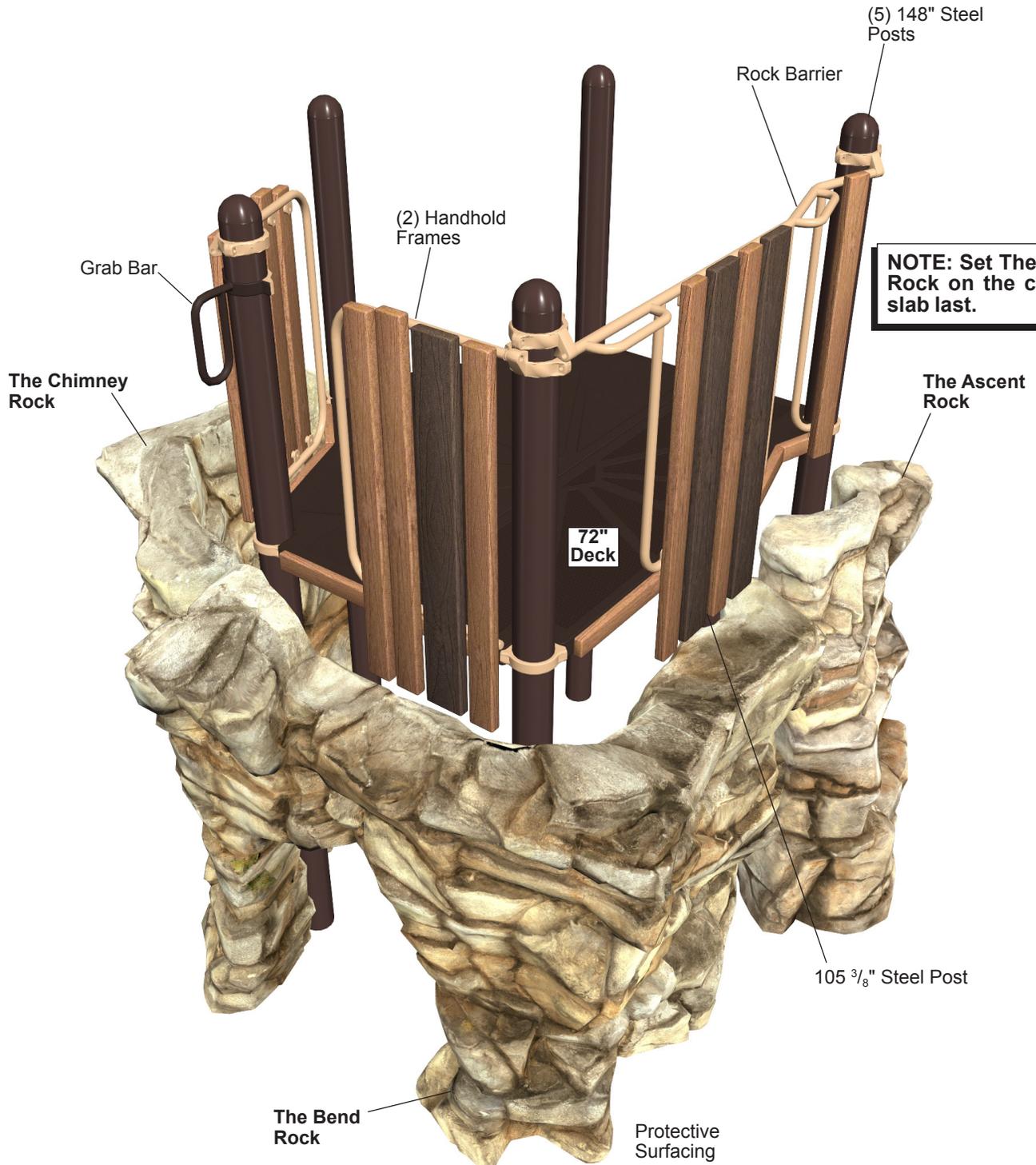
**Fall Height:** Deck Height



# PlayBooster® 169322 Discovery Tree Climb™, wo/ Roof

## Installation Instructions

- 1) The Tree Climb must be installed over an area of compacted firm stable soil. The base for the Tree Climb requires an area of compacted  $\frac{3}{4}$ " minus crushed aggregate, 54" wide x 54" long. The crushed aggregate should be 4" thick and compacted to at least 95% with a vibratory compactor. The compacted crushed aggregate surface must be flat and level with subgrade. Refer to the Aggregate Base Detail.
- 2) Dig footing holes as shown. Refer to the Plan View/Footing Layout.
- 3) To unload the tree climb, a "Lull" type material handler with at least an 4,000 lb. capacity is recommended. Maximum fork extension size is 3  $\frac{1}{2}$ " high x 7  $\frac{1}{2}$ " wide with no maximum length. **NOTE: At least 2 people are recommended for the tree climb installation. One person to operate the material handling equipment and one person to spot for the operator.**
- 4) Pick up the tree climb by inserting the material handling forks into the forklift pockets. Be very careful to keep the tree climb level to the ground when raising or lowering. Do not tip the tree climb on a corner or edge. Do not contact the concrete face of the tree climb with material handler forks, chipping can occur. Place the Tree Climb on aggregate base.
- 5) Place posts onto tree climb sleeves, as shown.
- 6) Attach decks. Refer to Plan View and Tenderdeck spec sheets.
- 7) Attach offset hanger clamps to posts at heights shown using 5" half clamps,  $\frac{3}{8}$ " x 1  $\frac{1}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 8) Line up pilot holes in deck face board with holes in deck and attach, using  $\frac{3}{8}$ " x 1  $\frac{3}{8}$ " lag screws with  $\frac{3}{8}$ " SAE flat washers. Refer to the Face Board Attachment Detail.
- 9) Attach handhold frames to offset hanger clamps, using  $\frac{5}{8}$ " x 2  $\frac{1}{4}$ " BHCS w/Pin.
- 10) Using handhold frame tabs as a guide, drill a  $\frac{3}{8}$ " hole through face boards and decks. Attach handhold frames to face boards and decks, using  $\frac{3}{8}$ " x 2  $\frac{1}{2}$ " BHCS w/pin with  $\frac{3}{8}$ " SAE flat washers and  $\frac{3}{8}$ " standard hex nuts with  $\frac{3}{8}$ " SAE flat washers. Refer to Detail.
- 11) Line up pilot holes in boards with spacers and handhold frame tabs and attach, using  $\frac{3}{8}$ " x 2" lag screws with  $\frac{3}{8}$ " SAE flat washers. Refer to the Board Attachment Detail.
- 12) **(Offset Hanger Clamp Assemblies)** Drill through holes in 5" half clamps with a  $\frac{1}{4}$ " or "F" (only) drill bit, insert  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets into holes and hammer rivet pins in until it is flush with heads. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 13) **(3 Deck Hanger Clamp Assemblies)** Drill through holes in 5" half clamps, posts and tree climb sleeves with a  $\frac{1}{4}$ " or "F" (only) drill bit, insert  $\frac{1}{4}$ " x  $\frac{7}{8}$ " drive rivets into holes and hammer rivet pins in until it is flush with heads. Refer to Detail.
- 14) Attach L-anchors to the tree climb frame, using  $\frac{1}{2}$ " standard hex nuts with  $\frac{1}{2}$ " flat washers. Refer to the Direct Bury Detail.
- 15) With posts plumb, pour concrete footings. Holes should be filled with concrete up to the bottom of the tree climb frame.
- 16) Install protective surfacing before users are allowed to play on the structure.
- 17) **NOTE: After installation if Touch-up/Repairs are needed to the concrete, contact Landscape Structures at 1-888-574-4678.**



Play Naturally™

PlayBooster® 207579 Canyon Collection, Formation 3

Sheet 1 of 7

**RECOMMENDED INSTALLATION TOOLS  
(NOT INCLUDED)**



## PREPARING FOR INSTALLATION OF CANYON COLLECTION



**DIG POST  
HOLE  
FOOTINGS  
AND SET UP  
FORM FOR  
CONCRETE**

**NOTE: Refer to Site Plan for footing hole locations and concrete frame dimensions.**



**INSTALL  
POSTS INTO  
FOOTING  
HOLES**



**ASSEMBLE DECKS AND COMPONENTS TO LOCK EVERYTHING IN PLACE**



**POUR  
CONCRETE  
BASE TO SET  
ROCKS ON.  
CONCRETE  
MUST BE  
FINISHED  
LEVEL**

## STRAP LOCATIONS FOR LIFTING

**THE ASCENT ROCK**



**THE CHIMNEY ROCK**



**ALWAYS USE FORK POCKETS FOR INSTALL. STRAPS SHOULD ONLY BE USED IF ROCKS ARE UNABLE TO BE PLACED USING THE FORK POCKETS. ALWAYS USE PADDING BETWEEN THE STRAPS AND ROCK FOR PROTECTION**

**THE BEND ROCK**



## LINING UP THE ROCKS WITH POSTS



INSTALL THE ROCKS WITH A TELEHANDLER. IN THE BASE OF EACH ROCK, THERE ARE ALIGNMENT CUT OUTS FOR EASE OF PLACING THE ROCKS. THE CUT OUTS ARE DESIGNED TO HELP LINE UP THE ROCKS WITH THE POSTS. USE THE CUT OUTS AS GUIDANCE FOR PROPER ROCK PLACEMENT.

USING THE PRY BAR FOR FINAL ROCK PLACEMENT



Correct



Incorrect

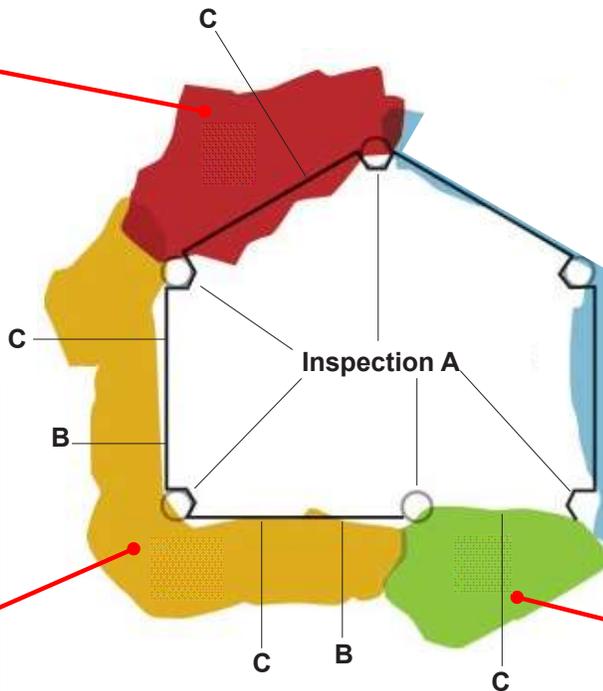
**NOTE:** When using pry bar, always use the steel baseplate as a contact point. Using the concrete only could damage the product.



**WARNING**  
Failure to position rock panel correctly may result in serious injury.

AFTER PLACING ROCKS USING THE ALIGNMENT CUTOUTS, BOLT TO THE POSTS. IT IS EASIER TO INSTALL THE CLIPS ON THE ROCKS BEFORE PLACING THEM NEAR THE POSTS. INSTALL POST CLAMPS LOOSELY ON POSTS BEFORE PLACING ROCKS

**POSITIONING INSPECTION**  
PERFORM THE INSPECTION TYPE IN THE AREAS IDENTIFIED BELOW.  
SEE POSITIONING INSPECTION DESCRIPTION FOR DETAILS



PlayBooster® 207579 Canyon Collection, Formation 3

**POSITIONING INSPECTION DESCRIPTION  
PRIOR TO SURFACING BEING INSTALLED, INSPECT OPENINGS TO VERIFY  
ROCKS ARE POSITIONED CORRECTLY**



**INSPECTION A**  
Place torso template between post and rock. Template should be perpendicular to the opening. Torso template shall not pass between post and rock.

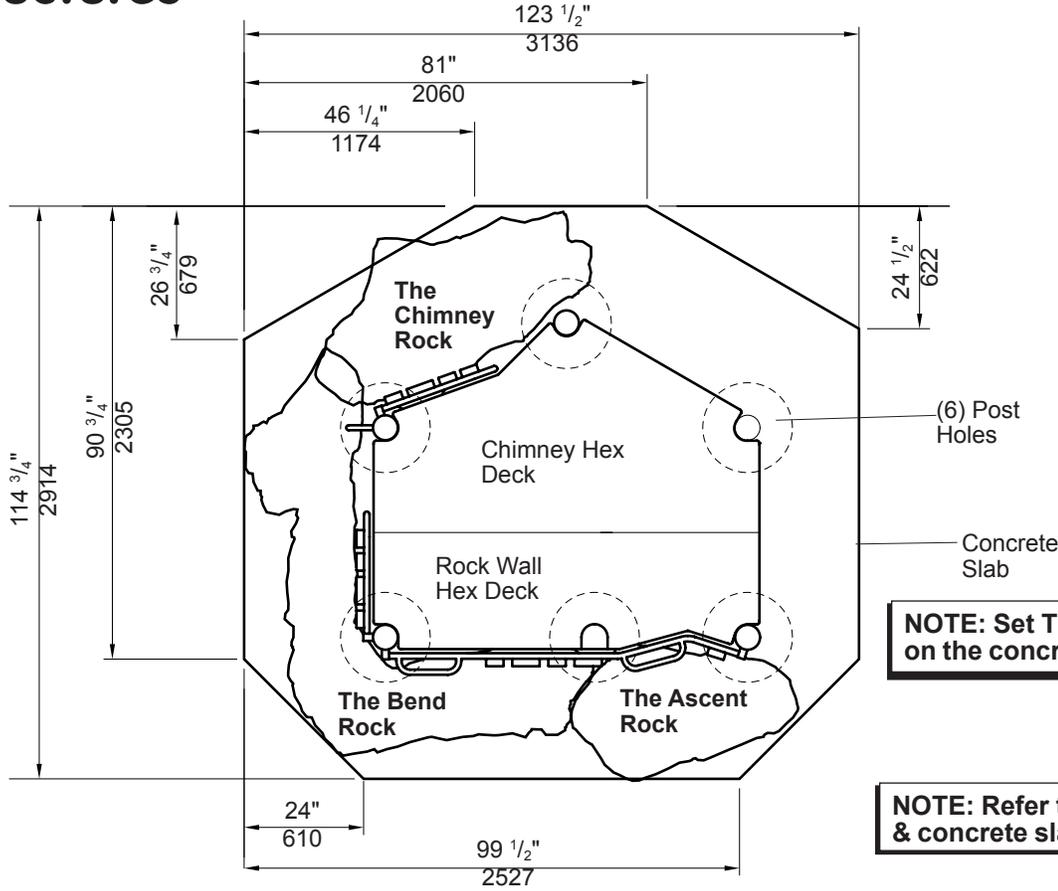


**INSPECTION B**  
Place torso template between barrier boards and rock. Template should be perpendicular to the opening. Torso template shall not pass between boards and rock.



**INSPECTION C**  
Place head template between deck and rock. Template should be perpendicular to the opening. Head template shall pass between deck and rock.

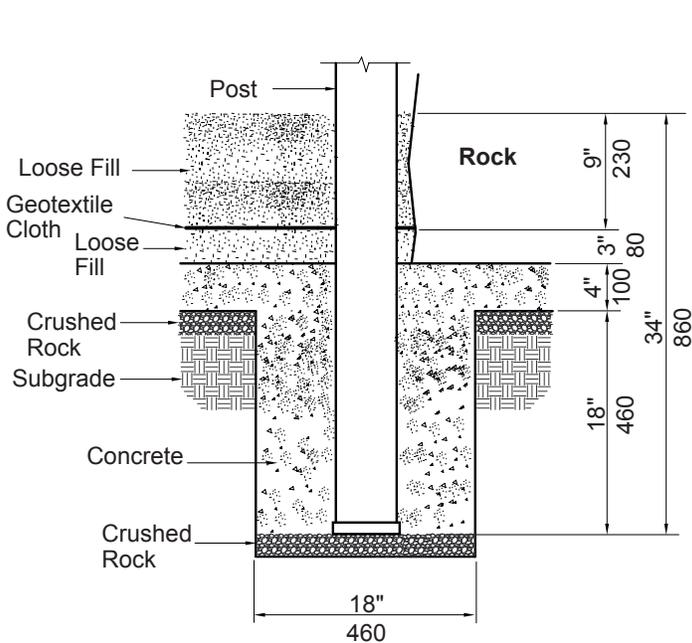
**DETAIL  
CONCRETE SLAB DIMENSIONS**



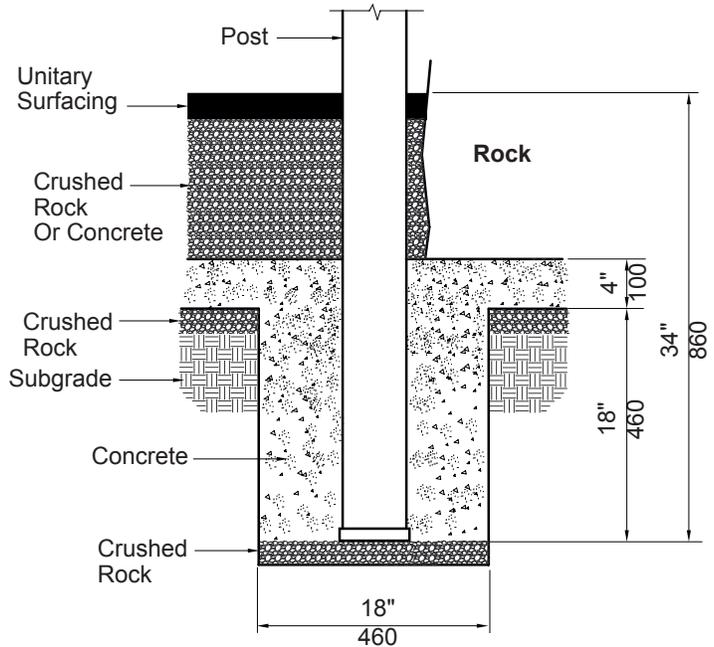
**NOTE: Set The Ascent Rock on the concrete slab last.**

**NOTE: Refer to Site Plan for footing & concrete slab locations.**

**DETAIL  
CONCRETE SLAB W/LOOSE FILL**

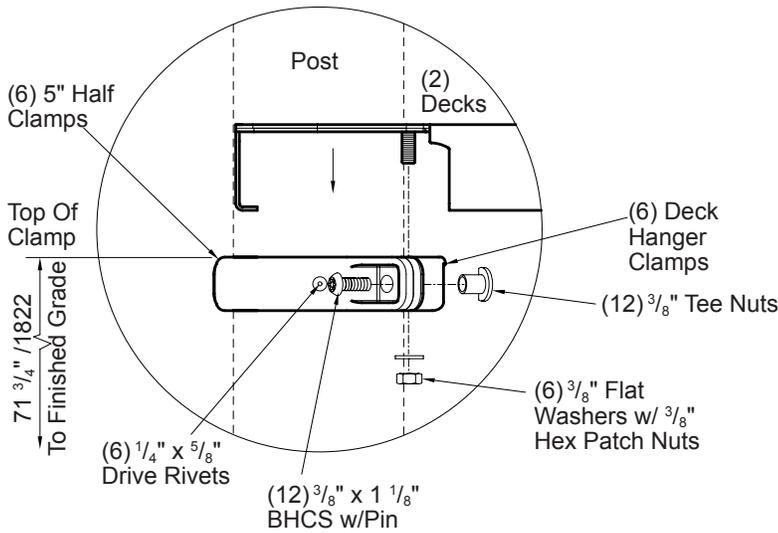


**DETAIL  
CONCRETE SLAB W/POUR-IN PLACE**

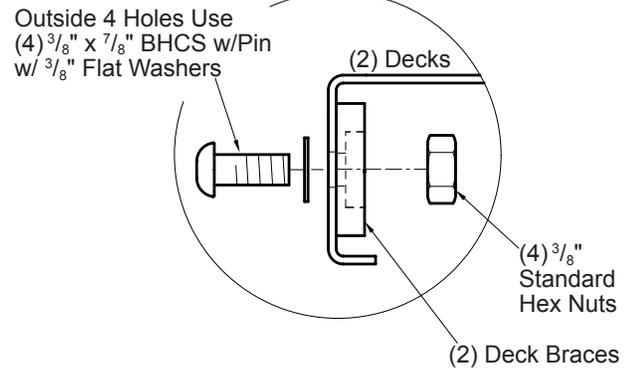


**PlayBooster® 207579 Canyon Collection, Formation 3**

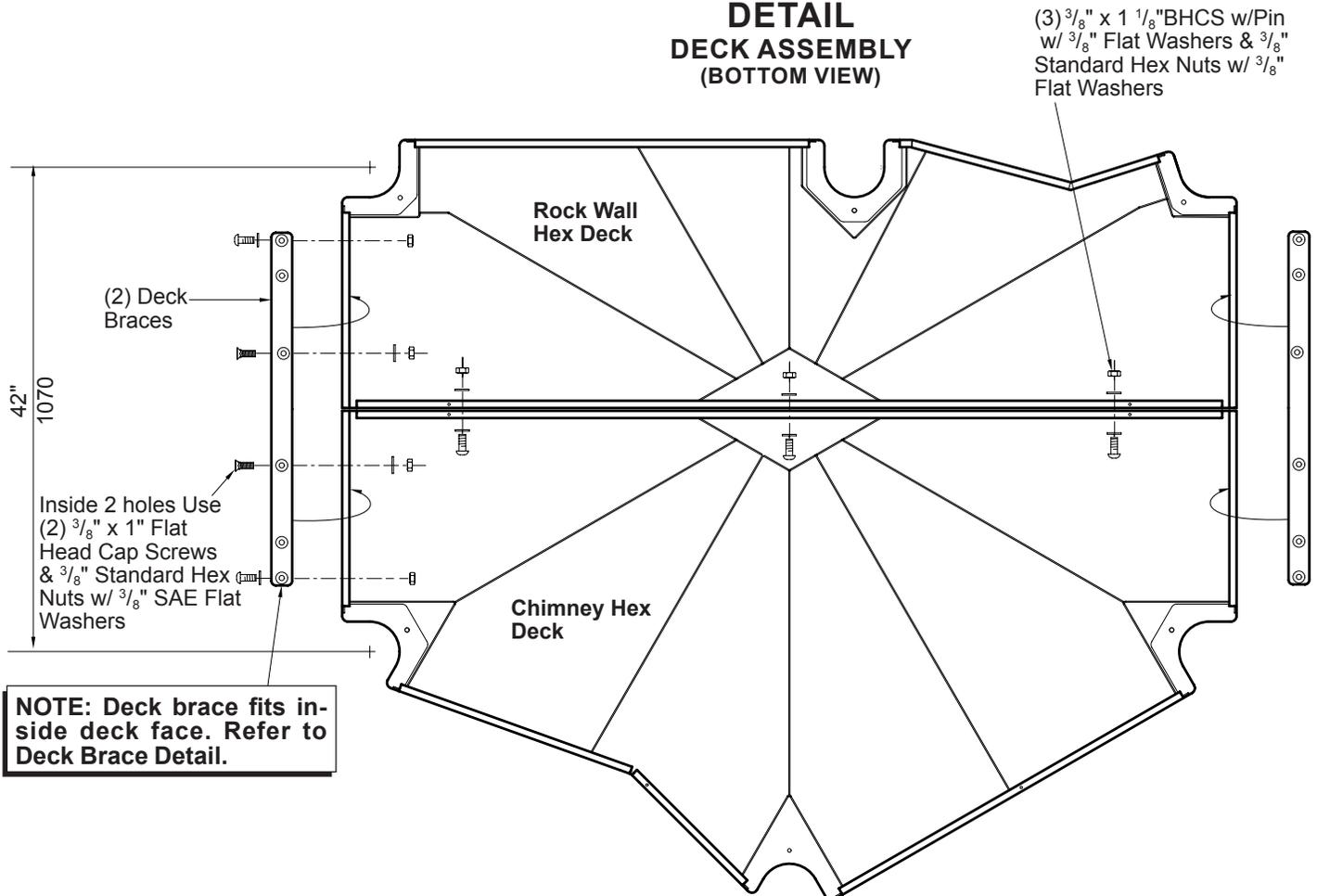
**DETAIL  
DECK HANGER CLAMP**



**DETAIL  
DECK BRACE**

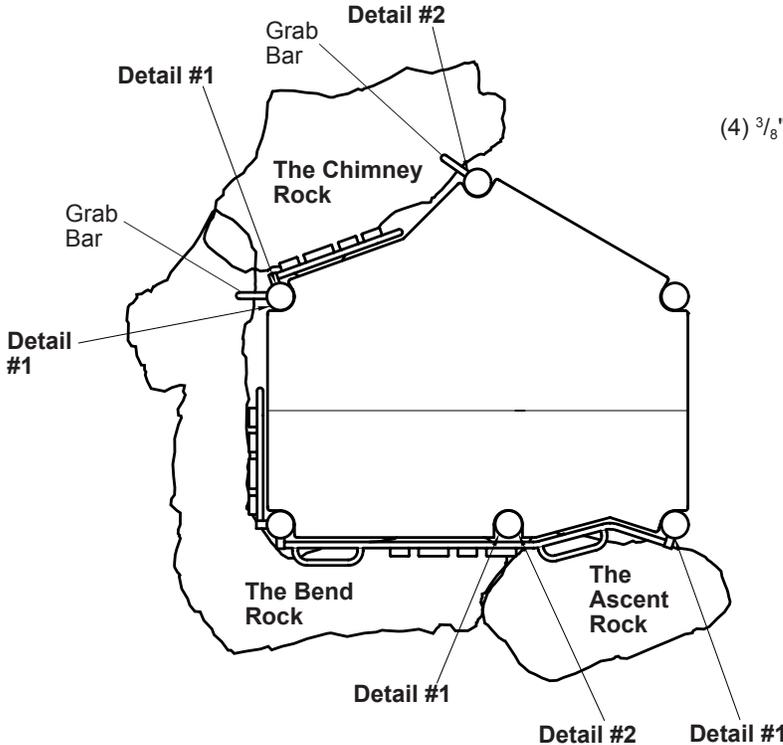


**DETAIL  
DECK ASSEMBLY  
(BOTTOM VIEW)**

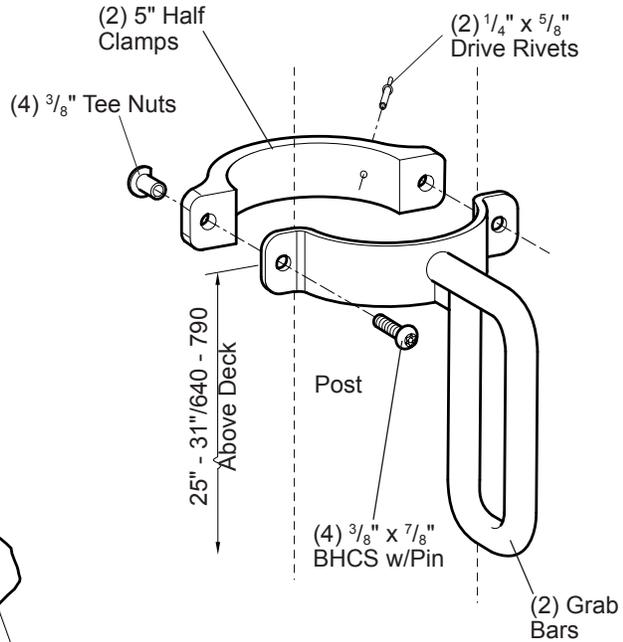


**NOTE: Deck brace fits inside deck face. Refer to Deck Brace Detail.**

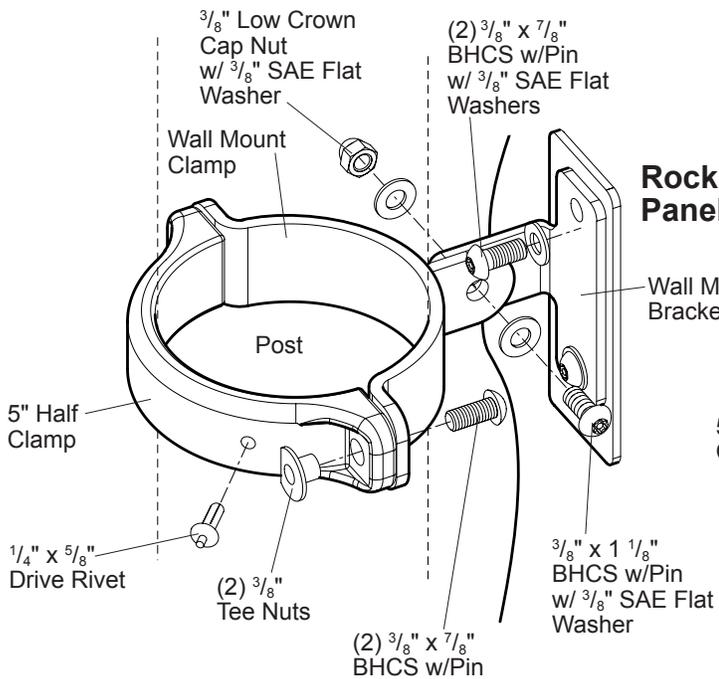
**DETAIL  
CLAMP ORIENTATION**



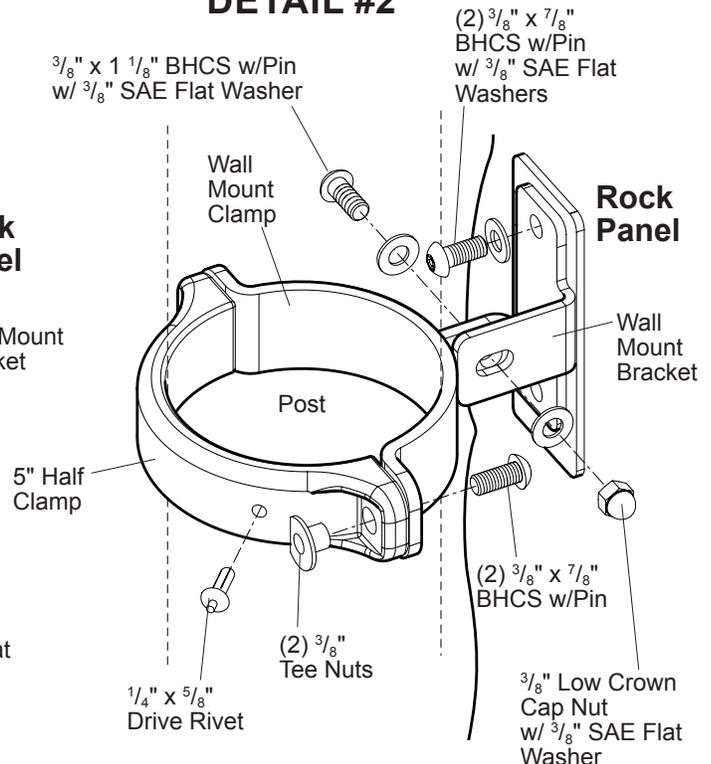
**DETAIL  
GRAB BAR**



**DETAIL #1**

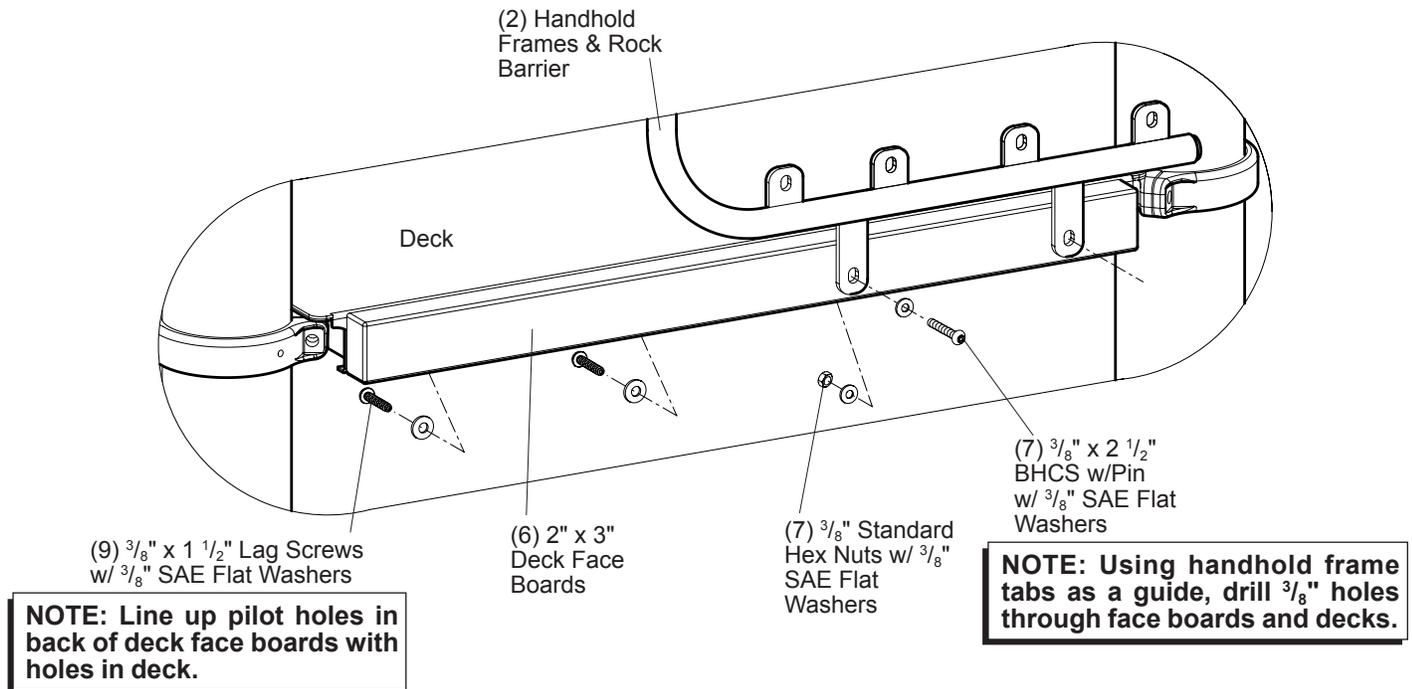


**DETAIL #2**

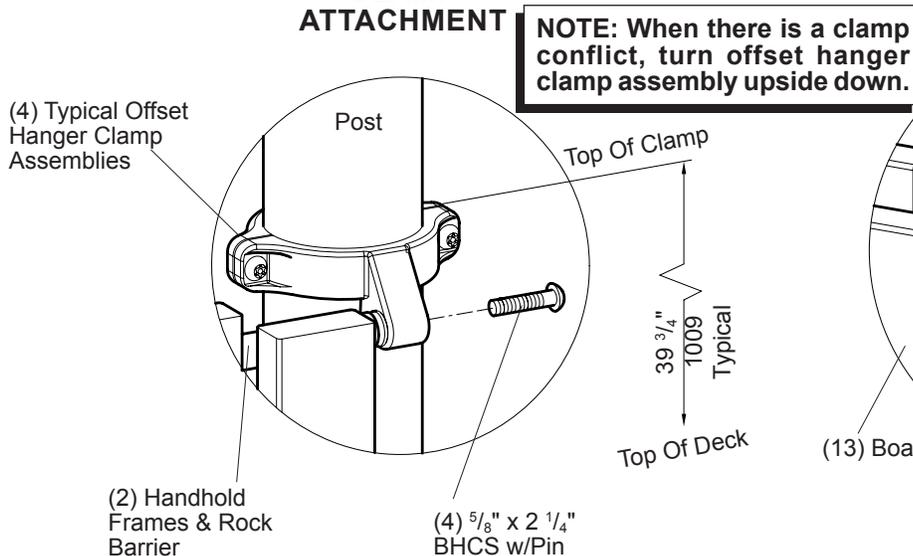


**PlayBooster® 207579 Canyon Collection, Formation 3**

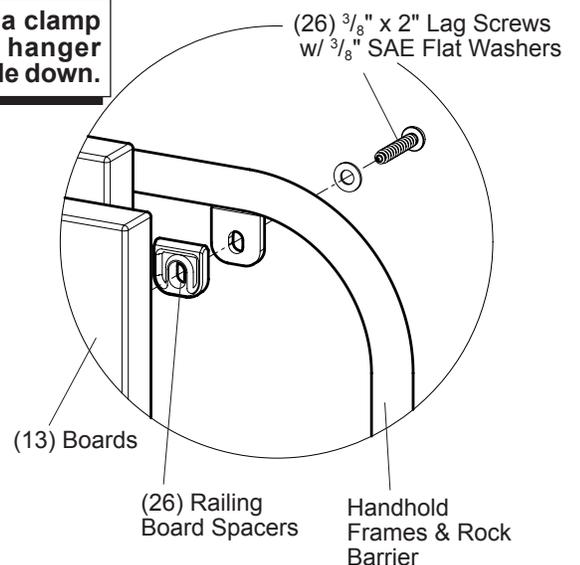
**DETAIL  
FACE BOARD/HANDHOLD/ROCK BARRIER  
ATTACHMENT**



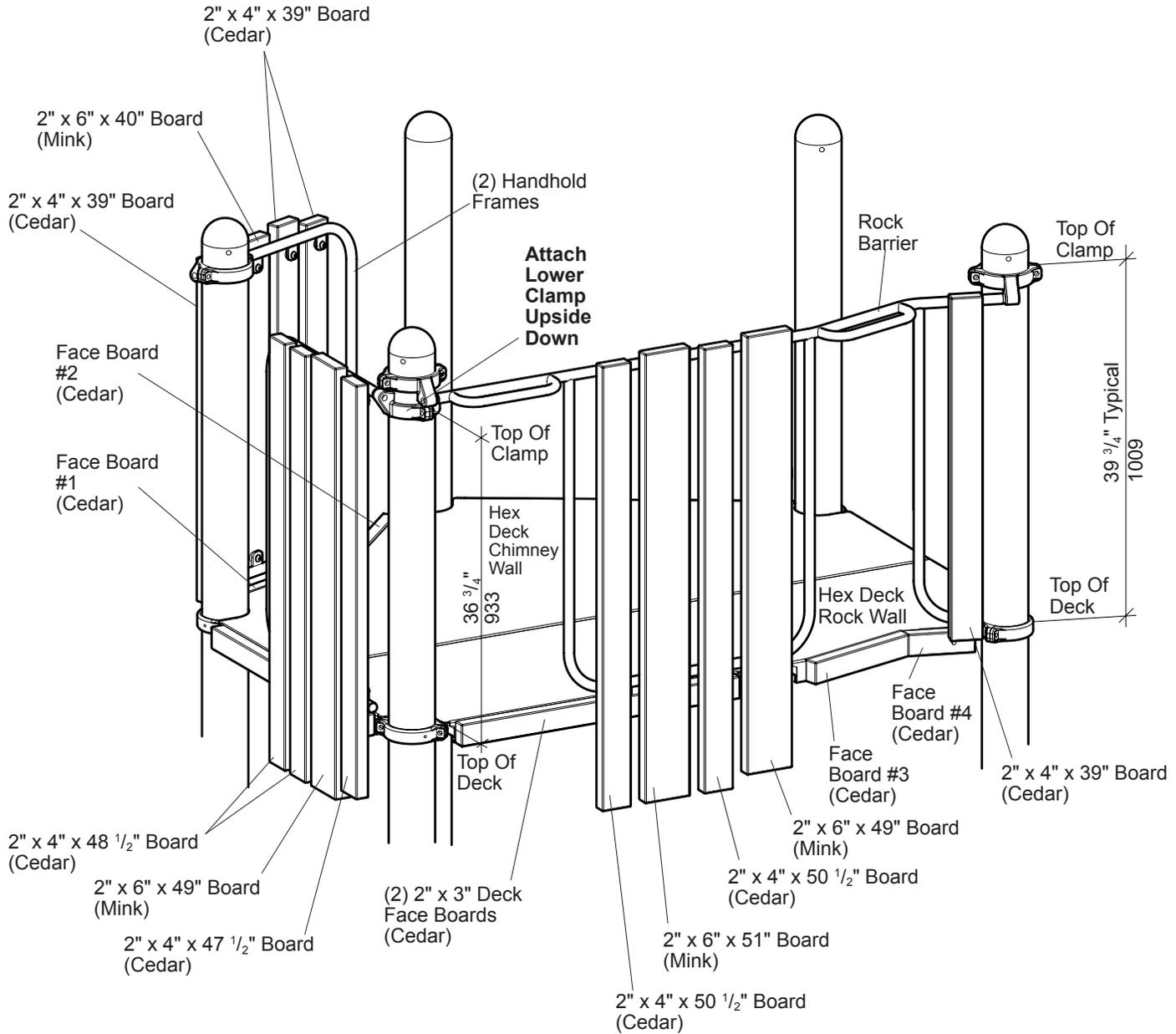
**DETAIL  
CLAMP  
ATTACHMENT**



**DETAIL  
BOARD ATTACHMENT**



**DETAIL  
CLAMP HEIGHTS**



**PlayBooster® 207579 Canyon Collection, Formation 3**



## Parts List

Part#	Description	Qty.
207499	Chimney Hex Deck, Specify Color	1
207500	Rock Wall Hex Deck, Specify Color	1
107537	148" Steel Post w/Cap, (DB), Specify Color	5
107515	105 3/8" Steel Post Flush, (DB), Specify Color	1
147090	D Cap Flush Mount Post, Specify Color	1
106022	Deck Hanger Clamp, Specify Color	6
105327	5" Half Clamp, Specify Color	18
205132	GFRC Rock Barrier, Tan	1
113729	Offset Hanger Clamp, Specify Color	4
216289	The Ascent Rock, Natural Tree Color	1
216291	The Chimney Rock, Natural Tree Color	1
205878	The Bend Rock, Natural Tree Color	1
207534	2" x 3" x 20 11/16" Face Board #1, Cedar	1
207535	2" x 3" x 12 7/8" Face Board #2, Cedar	1
207536	2" x 3" x 14 1/8" Face Board #3, Cedar	1
207537	2" x 3" x 7 3/4" Face Board #4, Cedar	1
175267	2" x 3" x 34 1/8" Face Board, Cedar	2
206977	Handhold Frame, Tan	2
168467	2" x 4" x 39" Recycled Board, Cedar	4
168472	2" x 6" x 40" Recycled Board, Mink	1
207549	2" x 4" x 48 1/2" Recycled Board, Cedar	2
207550	2" x 6" x 49" Recycled Board, Mink	2
207553	2" x 4" x 50 1/2" Recycled Board, Cedar	2
207691	2" x 6" x 51" Recycled Board, Mink	1
209595	2" x 4" x 47 1/2" Recycled Board, Cedar	1
207485	Railing Board Spacer, Tan	26
207385	Hex Deck Brace, Cool Silver	2
206535	Wall Mount Bracket, Specify Color	6
206536	Wall Mount Clamp, Specify Color	6
100610	1/4" x 5/8" Drive Rivet, AL./SST	18
141541	Grab Bar, Specify Color	1
<b>172311</b>	<b>Flush Post Cap Hardware Package</b>	1
100611	1/4" x 3/8" Drive Rivet, AL./SST	2
100613	1/4" x 7/8" Drive Rivet, AL.	1
<b>137121</b>	<b>Hex Deck Hardware Package</b>	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	15
100321	3/8" Hex Patch Nut, SST	6
100327	3/8" Standard Hex Nut, SST	11
100351	3/8" Tee Nut, SST	12
100362	3/8" Flat Washer, SST	20
100365	3/8" SAE Flat Washer, SST	4
100610	1/4" x 5/8" Drive Rivet, AL./SST	6
119174	Label I.D.	1
137091	3/8" x 1" Flat Head Cap Screw, SST	4
<b>169651</b>	<b>Recycled Deck/Kick Board Hardware Package</b>	4
100365	3/8" SAE Flat Washer, SST	16
168198	3/8" x 1 1/2" BH Lag Screw, SST	16
<b>207870</b>	<b>Rock Wall Barrier Hardware Package</b>	1
100174	3/8" x 2 1/2" BHCS w/Pin, SST	3
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100327	3/8" Standard Hex Nut, SST	3
100351	3/8" Tee Nut, SST	4
100365	3/8" SAE Flat Washer, SST	16
139039	3/8" x 2" BH Lag Screw, SST	10

<b>207631</b>	<b>Wide Handhold Hardware Package</b>	2
100174	3/8" x 2 1/2" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100327	3/8" Standard Hex Nut, SST	4
100351	3/8" Tee Nut, SST	4
100365	3/8" SAE Flat Washer, SST	24
139039	3/8" x 2" BH Lag Screw, SST	16
<b>207876</b>	<b>Rock Clamp (Pair) Hardware Package</b>	3
100196	3/8" x 7/8" BHCS w/Pin, SST	24
100198	3/8" x 1 1/8" BHCS w/Pin, SST	6
100351	3/8" Tee Nut, SST	12
100365	3/8" SAE Flat Washer, SST	24
100349	3/8" Low Crown Cap Nut, SST	6
100610	1/4" x 5/8" Drive Rivet, AL./SST	6
<b>106518</b>	<b>Grab Bar/Handhold Hardware Package</b>	1
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	2
100610	1/4" x 5/8" Drive Rivet, AL./SST	1

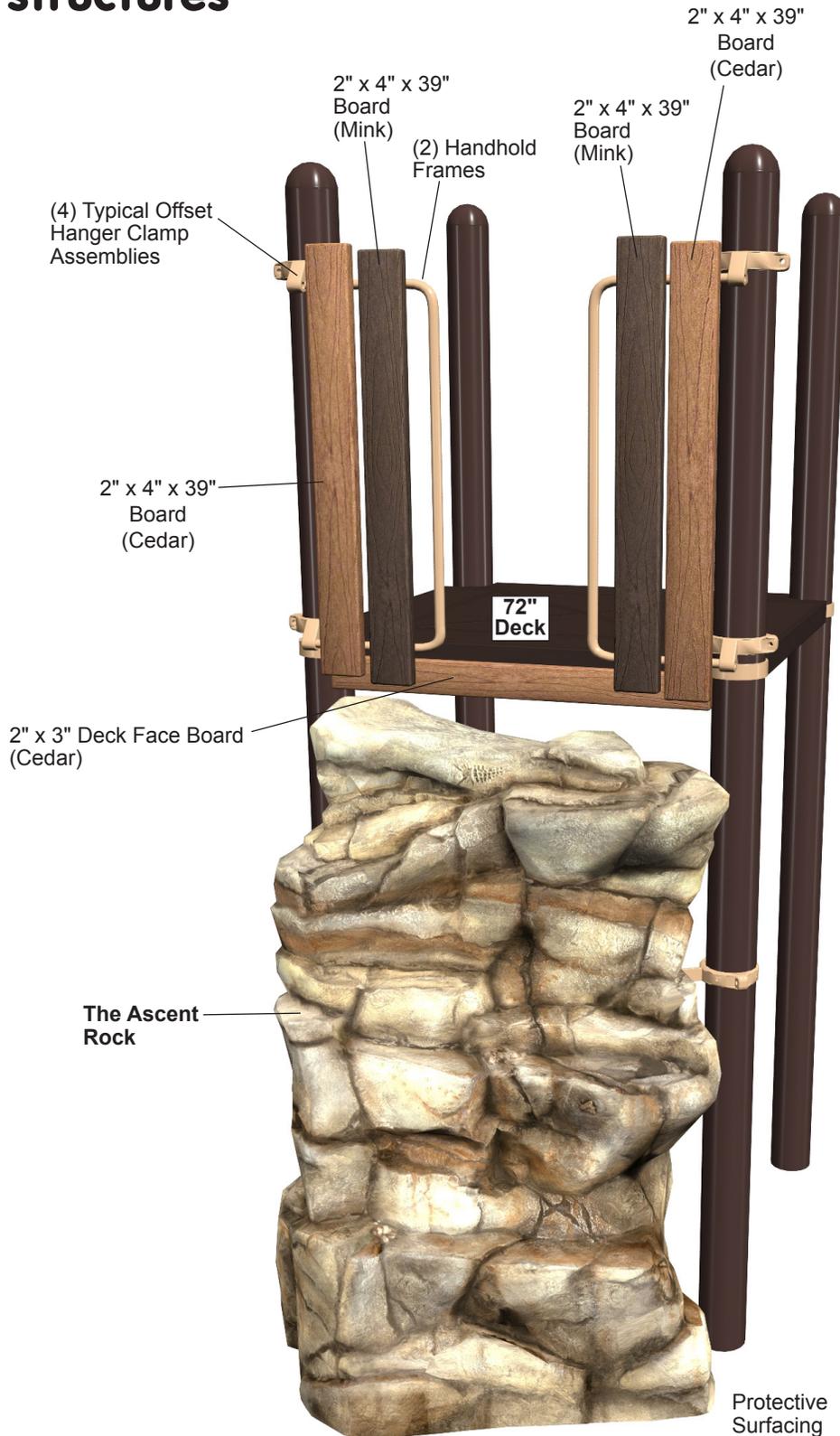
DB = Direct Bury

## Specifications

<b>Post:</b>	See PlayBooster® (PB) General Specifications.
<b>Rock Panel:</b>	Weldment comprised of $\frac{5}{8}$ " (15,87 mm) & $\frac{3}{4}$ " (19,06 mm) rebar, $\frac{1}{4}$ " (6,35 mm) HRPO steel sheet and 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®. <b>(Rock-fully assembled)</b> Wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.
<b>Flush Mount Post:</b>	Weldment comprised of 4.675" (118,74 mm) O.D. x .150" (3,81 mm) wall aluminum tubing and $\frac{3}{16}$ " (4,75 mm) thick aluminum plate. Finish: TenderTuff™, color specified.
<b>Rock Barrier:</b>	Weldment comprised of 1.125" (28,58 mm) O.D. 11 GA. (.120") (3,05 mm) steel tubing with 203 or 303 stainless steel inserts, with $\frac{5}{8}$ " (15,87 mm) internal threads, 1.029" (26,14 mm) O.D. RS20 (.070"-.080") (1,77 mm - 2,03 mm) wall galvanized steel tubing and $\frac{1}{4}$ " (6,35 mm) HRPO steel plate. Finish: ProShield®, tan in color.
<b>Handhold Frame:</b>	Weldment comprised of 1.125" (28,58 mm) O.D. 11 GA. (.120") (3,05 mm) steel tubing with 203 or 303 stainless steel inserts, with $\frac{5}{8}$ " (15,87 mm) internal threads, and $\frac{1}{4}$ " (6,35 mm) HRPO steel sheet. Finish: ProShield®, tan in color.
<b>Hex Deck:</b>	Weldment comprised of 12 GA (.105") (2,67 mm) HRPO steel conforming to ASTM A1011. Standing surface is perforated with $\frac{5}{16}$ " (7,94 mm) diameter holes. Finish: TenderTuff™, color specified.
<b>Wall Mount Brkt.:</b>	Fabricated from 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®, color specified.
<b>Deck Brace:</b>	Fabricated from $\frac{3}{8}$ " (9,53 mm) x $1\frac{3}{4}$ " (44,45 mm) zinc plated steel strap. Finish: ProShield®, cool silver in color.
<b>Wall Mount Clamp:</b>	Weldment comprised of $\frac{1}{4}$ " (6,35 mm) HRPO steel plate. Finish: ProShield®, color specified.
<b>Grab Bar:</b>	Weldment comprised of formed $\frac{7}{8}$ " (22,22 mm) O.D. 11 GA (.120") (3,05 mm) and $\frac{1}{4}$ " (6,35 mm) x $1\frac{3}{4}$ " (44,45 mm) stainless steel half clamp. Finish: TenderTuff™, color specified.
<b>Board:</b>	Recycled high-density polyethylene, cedar or mink in color.
<b>Clamp:</b>	Cast aluminum. Finish: ProShield®, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Approx. 52 man hours
<b>Fall Height:</b>	76" (1,93 m)
<b>Concrete:</b>	Approx. 1.65 cu. yds. (DB)
<b>Weight:</b>	11,647 lbs. (DB)

## Installation Instructions

- 1) **(Direct Bury)** Dig footing holes and build frame for concrete slab. Refer to Direct Bury Detail and Site Plan.  
**Warning: Never crawl under any part of the Rock Panels - especially when it is only supported by a forklift.**
- 2) Attach deck hanger clamps to posts at height shown. Refer to the Deck Hanger Clamp Detail.
- 3) Assemble hex deck. Refer to the Hex Deck Assembly Detail.
- 4) Place steel posts in footing holes.
- 5) Attach hex deck assembly to deck hanger clamps. Refer to the Deck Hanger Clamp Detail.
- 6) Plumb posts and decks.
- 7) With posts plumb and decks level, pour concrete footings and slab.  
**NOTE: Concrete slab must be level.**
- 8) Allow concrete to cure a minimum of 24 hours before placing Rock Panels on concrete slab.
- 9) To unload Rock Panels a "Lull" type material handler with at least an 8000 lb. capacity is recommended. **NOTE: At least 2 people are recommended for Rock Panel installation. One person to operate the material handling equipment and one person to spot for the operator.**
- 10) Pick up the Rock Panels by inserting the material handling forks into the forklift pockets. Be very careful to keep the Rock Panels level to the ground when raising or lowering. Do not tip the Rock Panels on a corner or edge. Do not contact the concrete face of the Rock Panels with material handler forks, chipping can occur. Refer to the Site Plan for proper orientation.
- 11) Attach Rock Panels to posts. Refer to the Clamp Orientation Detail.
- 12) Attach grab bar, handhold frames and boards to posts and decks. Refer to Details.
- 13) Install  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 14) Install protective surfacing before users are allowed to play on the structure.
- 15) **NOTE: After installation if Touch-up/Repairs are needed, contact Landscape Structures at 1-888-574-4678.**



**NOTE: Deck and posts sold separately.**

**Play Naturally™**

**PlayBooster®**

**207581 The Ascent™ Rock**

Sheet 1 of 4

**RECOMMENDED INSTALLATION TOOLS  
(NOT INCLUDED)**



**PADDING FOR PROTECTION. ONLY NEEDED IF USING LIFTING STRAPS**



**COMPOSITE SHIMS FOR FINAL ROCK PLACEMENT**



## LINING UP THE ROCK WITH POSTS



INSTALL THE ROCKS WITH A TELEHANDLER. IN THE BASE OF EACH ROCK, THERE ARE ALIGNMENT CUT OUTS FOR EASE OF PLACING THE ROCKS. THE CUT OUTS ARE DESIGNED TO HELP LINE UP THE ROCKS WITH THE POSTS. USE THE CUT OUTS AS GUIDANCE FOR PROPER ROCK PLACEMENT.

## STRAP LOCATIONS FOR LIFTING

### THE ASCENT ROCK



## USING THE PRY BAR FOR FINAL ROCK PLACEMENT



Correct

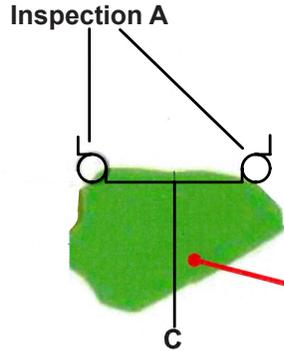
**NOTE:** When using pry bar, always use the steel baseplate as a contact point. Using the concrete only could damage the product.



Incorrect

ALWAYS USE FORK POCKETS FOR INSTALL. STRAPS SHOULD ONLY BE USED IF ROCKS ARE UNABLE TO BE PLACED USING THE FORK POCKETS. ALWAYS USE PADDING BETWEEN THE STRAPS AND ROCK FOR PROTECTION

**POSITIONING INSPECTION**  
 PERFORM THE INSPECTION TYPE IN THE AREAS IDENTIFIED BELOW.  
 SEE POSITIONING INSPECTION DESCRIPTION FOR DETAILS



**Ascent Rock**


**WARNING**  
 Failure to position rock panel correctly may result in serious injury.

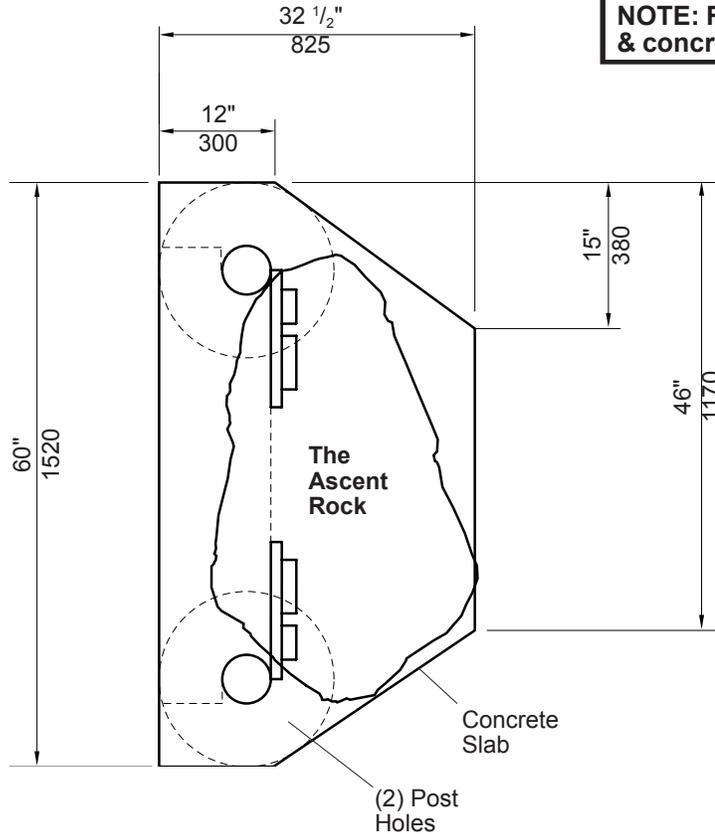
**POSITIONING INSPECTION DESCRIPTION**  
 PRIOR TO SURFACING BEING INSTALLED, INSPECT OPENINGS TO VERIFY  
 ROCKS ARE POSITIONED CORRECTLY



**INSPECTION A**  
 Place torso template between post and rock.  
 Template should be perpendicular to the opening.  
 Torso template shall not pass between post and rock.

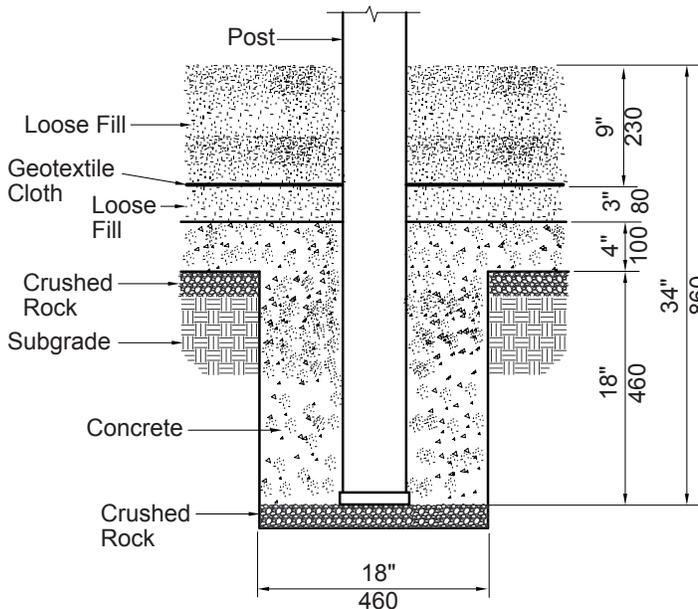
**INSPECTION C**  
 Place head template between deck and rock.  
 Template should be perpendicular to the opening.  
 Head template shall pass between deck and rock.

**DETAIL  
CONCRETE SLAB DIMENSIONS**

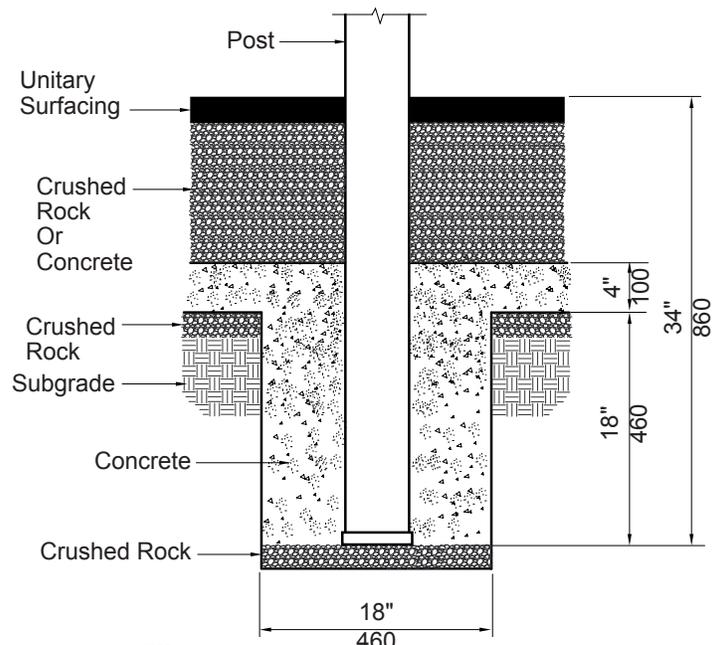


**NOTE: Refer to Site Plan for footing & concrete slab locations.**

**DETAIL  
CONCRETE SLAB W/LOOSE FILL**

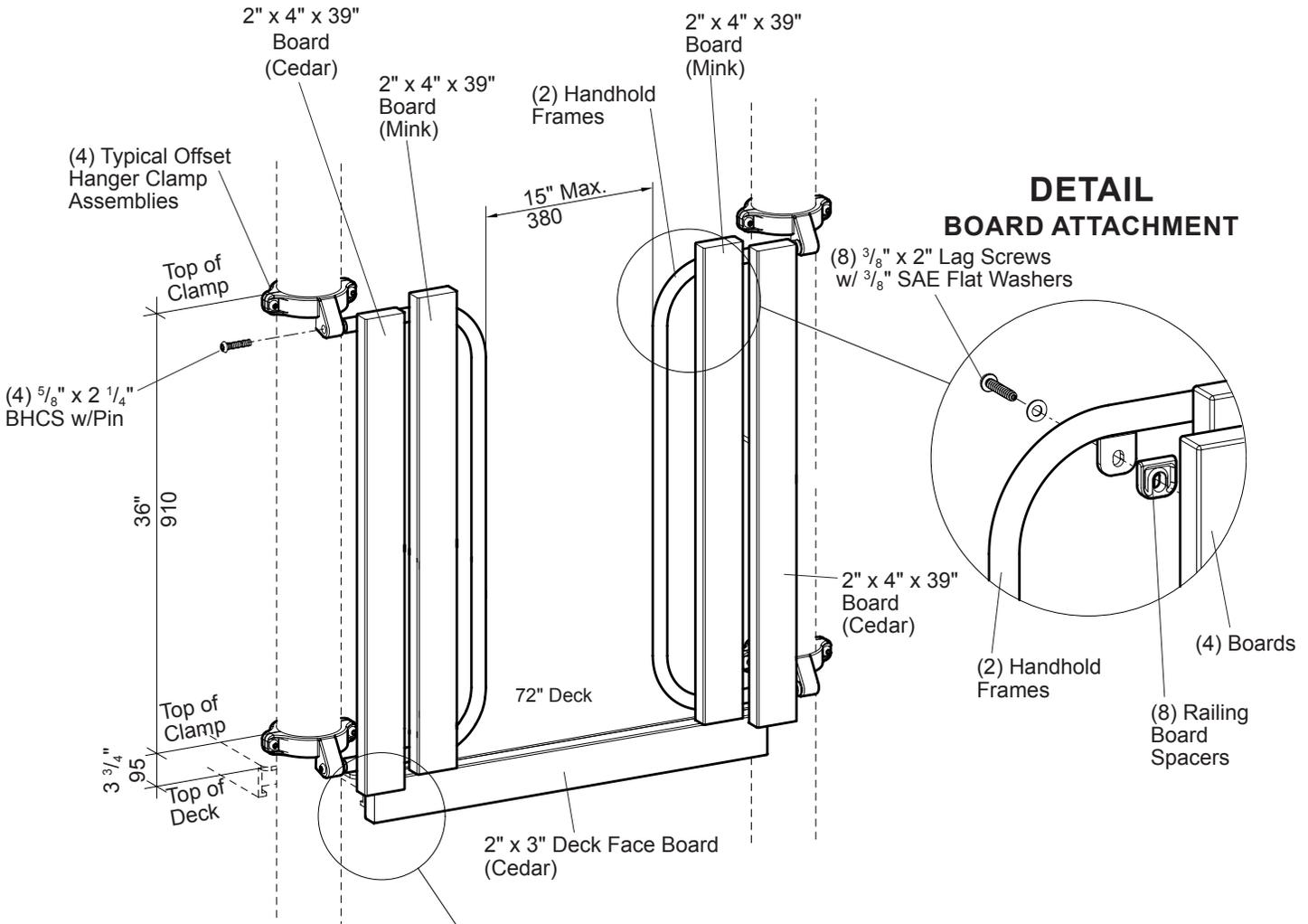


**DETAIL  
CONCRETE SLAB W/POUR-IN PLACE**

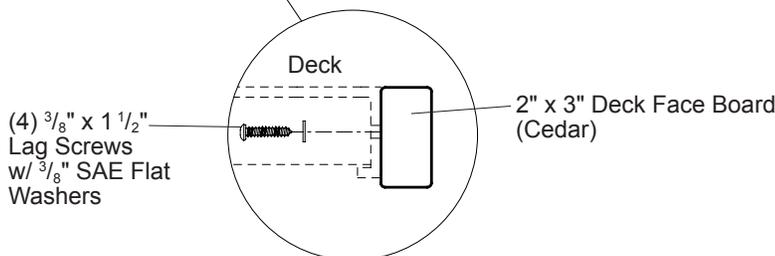


**PlayBooster® 207581 The Ascent™ Rock**

**DETAIL  
FACE BOARD/HANDHOLD  
ATTACHMENT**

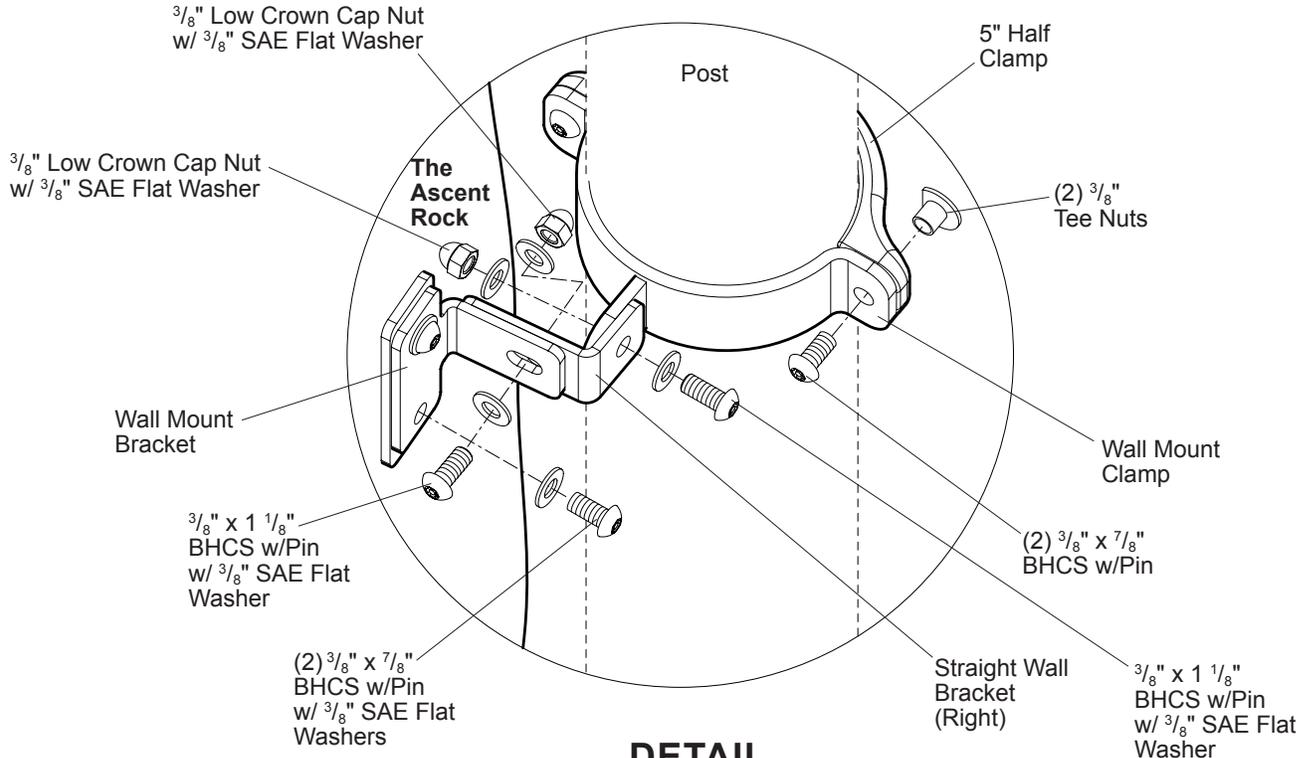


**DETAIL  
FACE BOARD  
ATTACHMENT**

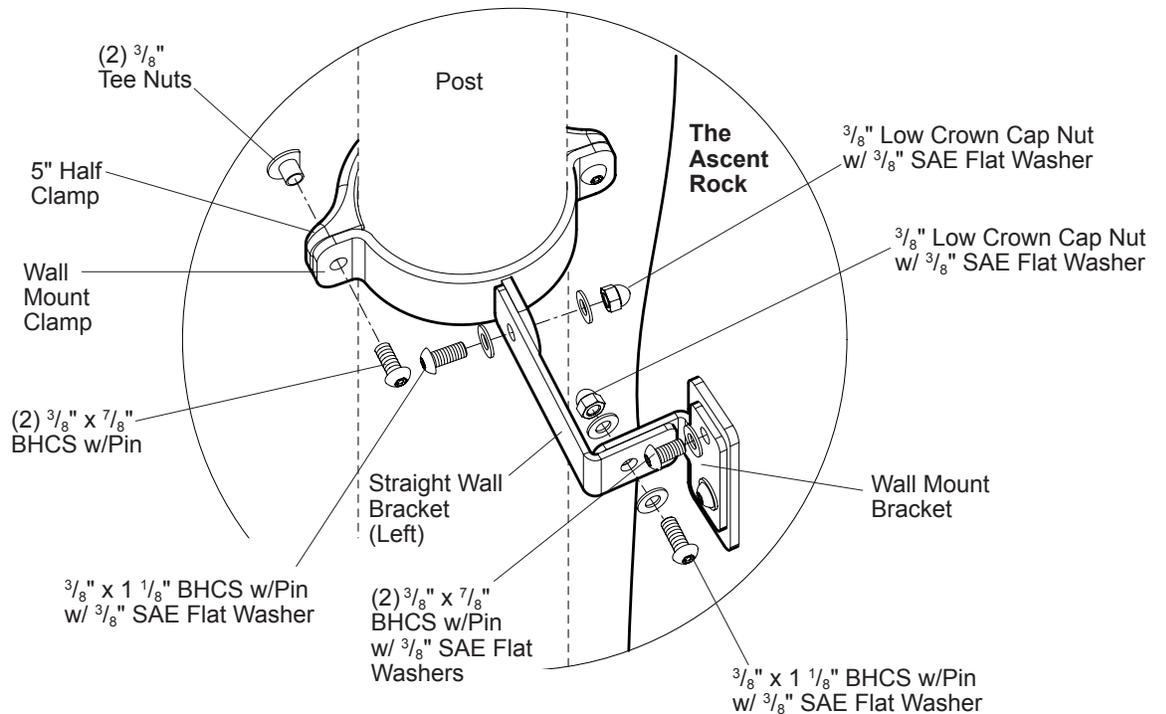


**NOTE: Line up pilot holes in back of deck face board with holes in deck.**

**DETAIL  
STRAIGHT WALL BRACKET  
(RIGHT)**



**DETAIL  
STRAIGHT WALL BRACKET  
(LEFT)**



## Parts List

Part#	Description	Qty.
216289	The Ascent Rock, Natural Tree Color .....	1
105327	5" Half Clamp, Specify Color .....	6
113729	Offset Hanger Clamp, Specify Color .....	4
175267	2" x 3" Recycled Deck Face Board, Cedar.....	1
207485	Railing Board Spacer, Tan.....	8
206535	Wall Mount Bracket, Specify Color .....	2
206536	Wall Mount Clamp, Specify Color.....	2
207512	Straight Wall Bracket Left, Specify Color.....	1
207514	Straight Wall Bracket Right, Specify Color .....	1
168211	Handhold Frame, Tan .....	2
168467	2" x 4" x 39" Recycled Board, Cedar.....	2
168467	2" x 4" x 39" Recycled Board, Mink.....	2
100610	1/4" x 5/8" Drive Rivet, AL./SST.....	6
<b>169651</b>	<b>Recycled Deck/Kick Board Hardware Pkg</b> .....	<b>1</b>
100365	3/8" SAE Flat Washer, SST.....	4
168198	3/8" x 1 1/2" BH Lag Screw, SST.....	4
<b>207877</b>	<b>Ascent Rock Clamp (Pair) Hardware Package</b> ....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	8
100351	3/8" Tee Nut, SST.....	4
100365	3/8" SAE Flat Washer, SST.....	12
100349	3/8" Low Crown Cap Nut, SST.....	4
100610	1/4" x 5/8" Drive Rivet, AL./SST.....	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	4
<b>175287</b>	<b>Tree House Handhold (Pair) Hardware Pkg.</b> .....	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST.....	4
100351	3/8" Tee Nut, SST.....	8
100365	3/8" SAE Flat Washer, SST.....	16
139039	3/8" x 2" BH Lag Screw, SST.....	8

## Specifications

<b>Rock Panel:</b>	Weldment comprised of 5/8" (15,87 mm) & 3/4" (19,06 mm) rebar, 1/4" (6,35 mm) HRPO steel sheet and 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®. <b>(Rock-fully assembled)</b> Wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.
<b>Poly Board:</b>	Recycled high-density polyethylene, cedar or mink in color.
<b>Handhold Frame:</b>	Weldment comprised of 1.125" (28,58 mm) O.D. 11 GA. (.120") (3,05 mm) steel tubing with 203 or 303 stainless steel inserts, with 5/8" (15,87 mm) internal threads, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield®, tan in color.
<b>Spacer Tube:</b>	Made from 1 1/8" (28,57 mm) O.D. 6061-T6 aluminum tube. Finish: ProShield®, tan in color.
<b>Wall Mount Brkt.:</b>	Fabricated from 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®, color specified.
<b>Straight Wall Brkt.:</b>	Fabricated from 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®, color specified.
<b>Wall Mount Clamp:</b>	Weldment comprised of 1/4" (6,35 mm) HRPO steel plate. Finish: ProShield®, color specified.
<b>Clamp:</b>	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).

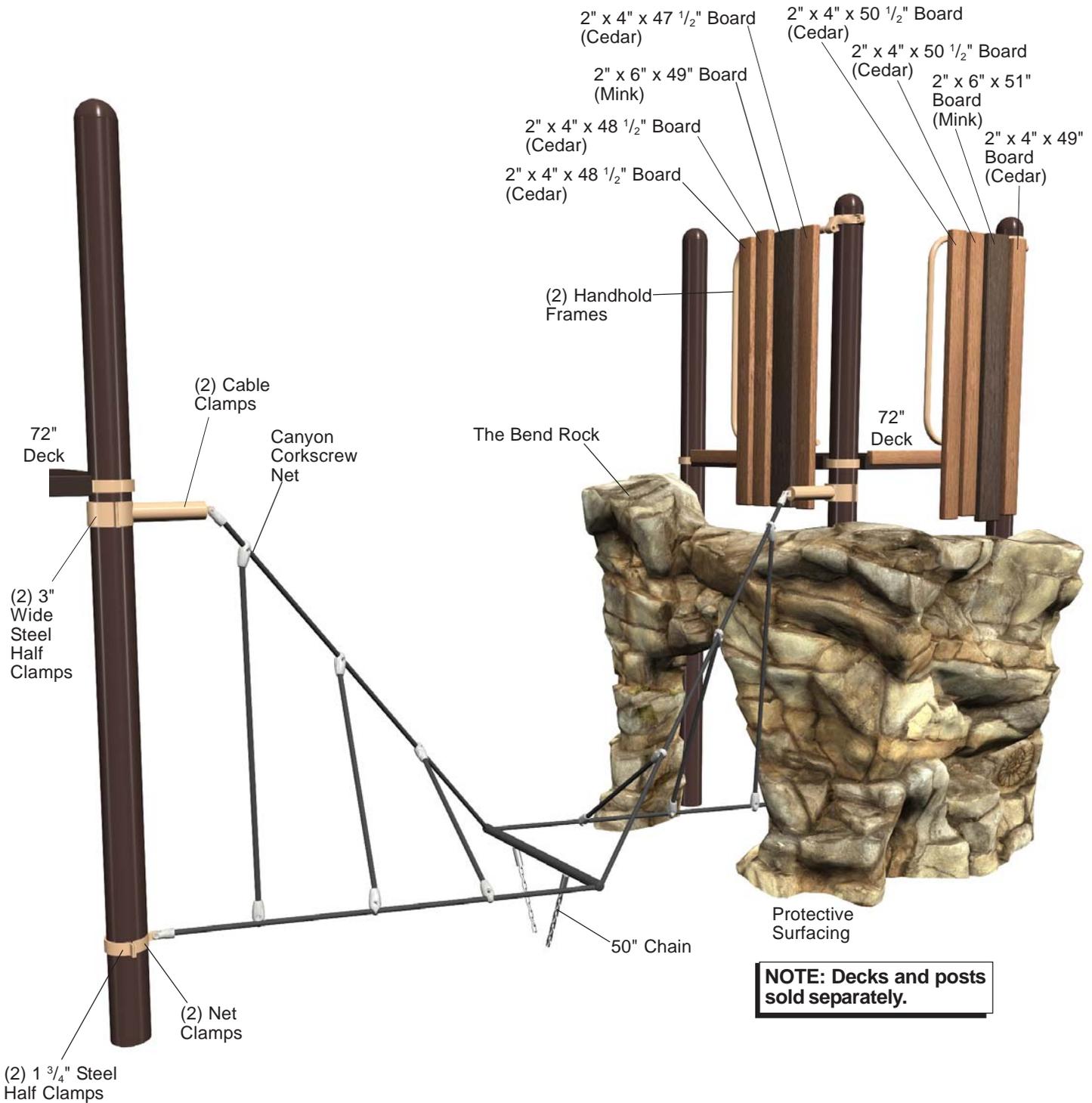
**Installation Time:** Approx. 8 man hours  
**Fall Height:** 72" (1,83 m)  
**Concrete:** Approx. 9.12 cu. ft.  
**Weight:** 2892 lbs.

## Installation Instructions

- 1) **(Direct Bury)** Dig footing holes and build frame for concrete slab. Refer to Direct Bury Detail and Site Plan.

**Warning: Never crawl under any part of the Rock Panels - especially when it is only supported by a forklift.**

- 2) With posts plumb and deck level, pour concrete footings and slab. **NOTE: Concrete slab must be level.**
- 3) Allow concrete to cure a minimum of 24 hours before placing Rock Panel on concrete slab.
- 4) To unload a Rock Panel a "Lull" type material handler with at least an 8000 lb. capacity is recommended. **NOTE: At least 2 people are recommended for Rock Panel installation. One person to operate the material handling equipment and one person to spot for the operator.**
- 5) Pick up the Rock Panel by inserting the material handling forks into the forklift pockets. Be very careful to keep the Rock Panel level to the ground when raising or lowering. Do not tip the Rock Panel on a corner or edge. Do not contact the concrete face of the Rock Panel with material handler forks, chipping can occur. Refer to the Site Plan for proper orientation.
- 6) Attach Rock Panel to posts. Refer to the Wall Bracket Details.
- 7) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 8) Attach handhold frames to offset hanger clamps, using 5/8" x 2 1/4" BHCS w/pin.
- 9) Line up pilot holes in boards with spacers and handhold frame tabs and attach, using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- 10) Line up pilot holes in deck face board with holes in deck and attach, using 3/8" x 1 1/2" lag screws with 3/8" SAE flat washers. Refer to the Face Board Attachment Detail.
- 11) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 12) Install protective surfacing before users are allowed to play on the structure.
- 13) **NOTE: After installation if Touch-up/Repairs are needed, contact Landscape Structures at 1-888-574-4678.**



**Play Naturally™**

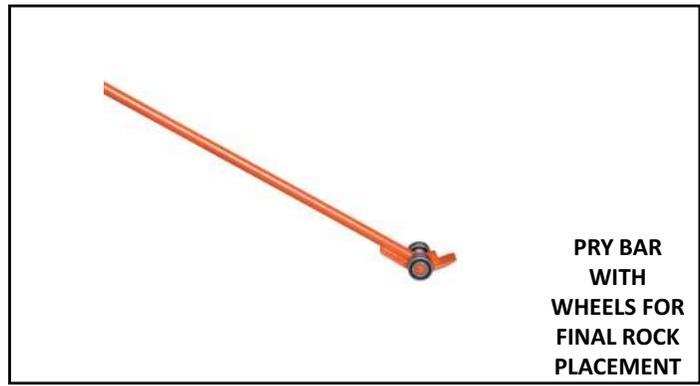
**PlayBooster® 207851 Canyon Corkscrew Net/The Bend™ Rock Combo**

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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Sheet 1 of 6 Document #20789000

**RECOMMENDED INSTALLATION TOOLS  
 (NOT INCLUDED)**



**LINING UP THE ROCK WITH POSTS**



INSTALL THE ROCKS WITH A TELEHANDLER. IN THE BASE OF EACH ROCK, THERE ARE ALIGNMENT CUT OUTS FOR EASE OF PLACING THE ROCKS. THE CUT OUTS ARE DESIGNED TO HELP LINE UP THE ROCKS WITH THE POSTS. USE THE CUT OUTS AS GUIDANCE FOR PROPER ROCK PLACEMENT.

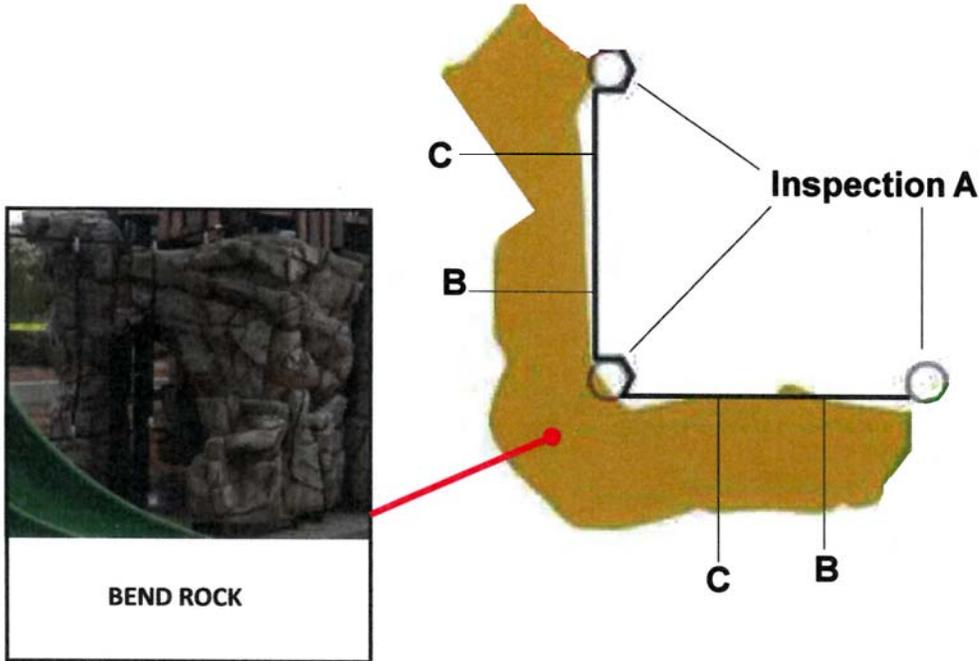
**STRAP LOCATIONS FOR LIFTING**

**THE BEND ROCK**



ALWAYS USE FORK POCKETS FOR INSTALL. STRAPS SHOULD ONLY BE USED IF ROCKS ARE UNABLE TO BE PLACED USING THE FORK POCKETS. ALWAYS USE PADDING BETWEEN THE STRAPS AND ROCK FOR PROTECTION

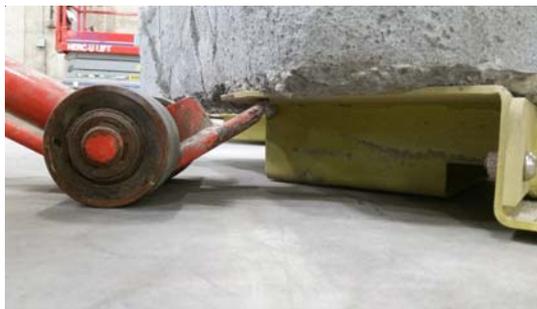
**POSITIONING INSPECTION**  
 PERFORM THE INSPECTION TYPE IN THE AREAS IDENTIFIED BELOW.  
 SEE POSITIONING INSPECTION DESCRIPTION FOR DETAILS



**⚠ WARNING**

Failure to position rock panel correctly may result in serious injury.

**USING THE PRY BAR FOR FINAL ROCK PLACEMENT**



Correct

**NOTE:** When using pry bar, always use the steel baseplate as a contact point. Using the concrete only could damage the product.



Incorrect

**POSITIONING INSPECTION DESCRIPTION  
 PRIOR TO SURFACING BEING INSTALLED, INSPECT OPENINGS TO VERIFY  
 ROCKS ARE POSITIONED CORRECTLY**



**INSPECTION A**  
 Place torso template between post and rock.  
 Template should be perpendicular to the opening.  
 Torso template shall not pass between post and rock.

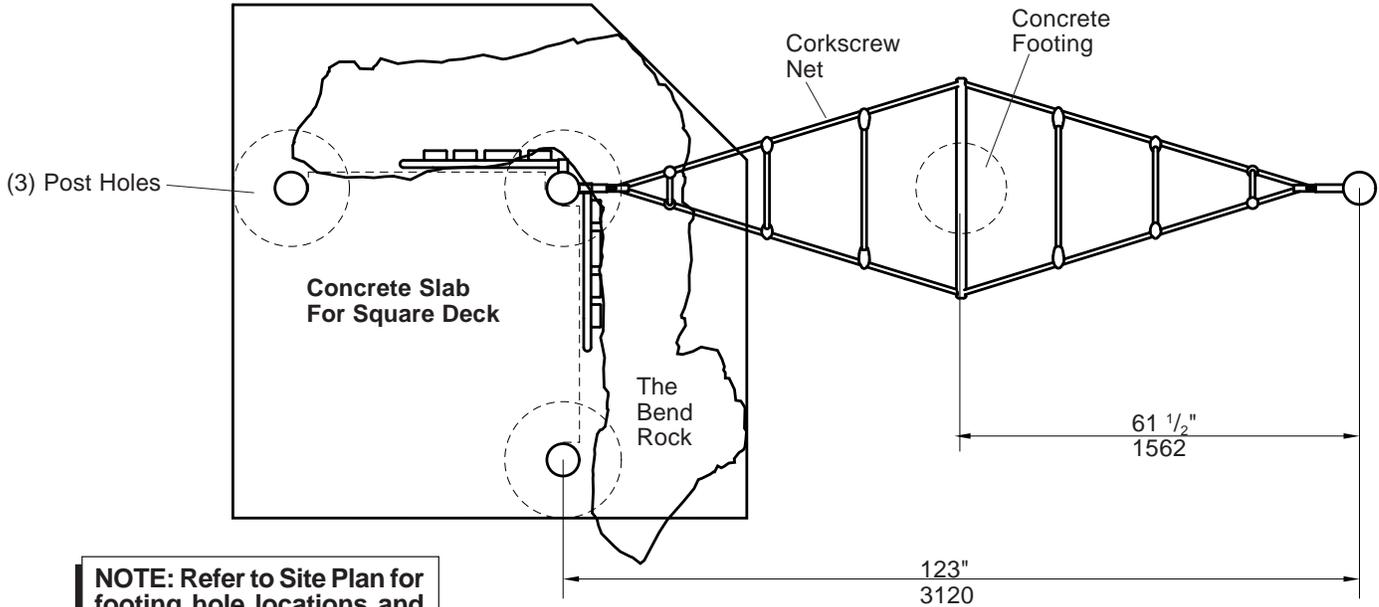


**INSPECTION B**  
 Place torso template between barrier boards and rock.  
 Template should be perpendicular to the opening.  
 Torso template shall not pass between boards and rock.



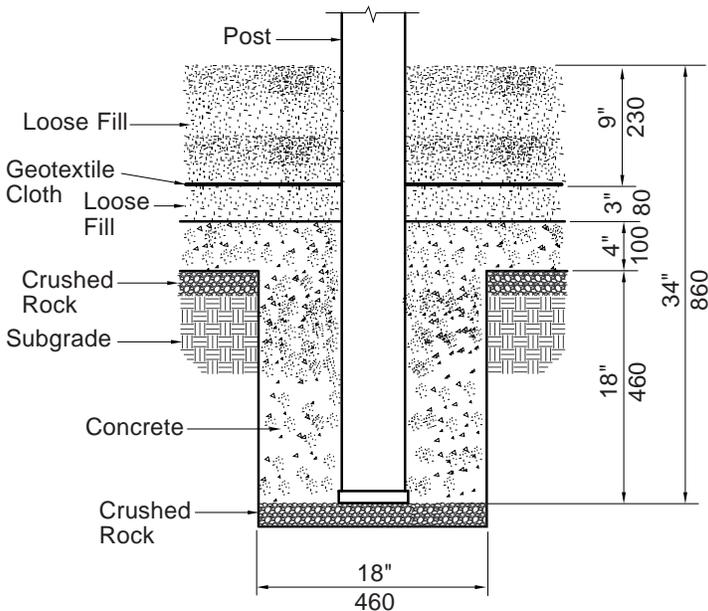
**INSPECTION C**  
 Place head template between deck and rock.  
 Template should be perpendicular to the opening.  
 Head template shall pass between deck and rock.

**DETAIL  
CONCRETE SLAB**

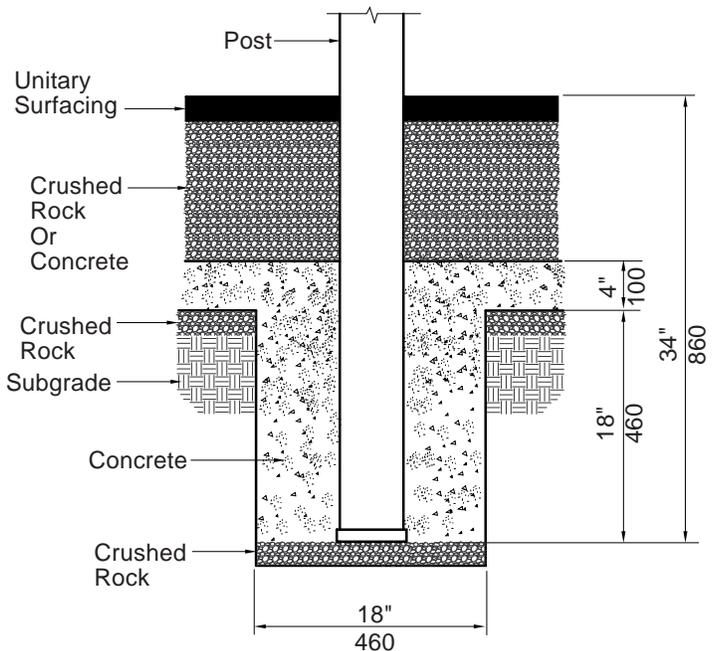


**NOTE: Refer to Site Plan for footing hole locations and concrete frame dimensions.**

**DETAIL  
CONCRETE SLAB W/LOOSE FILL**

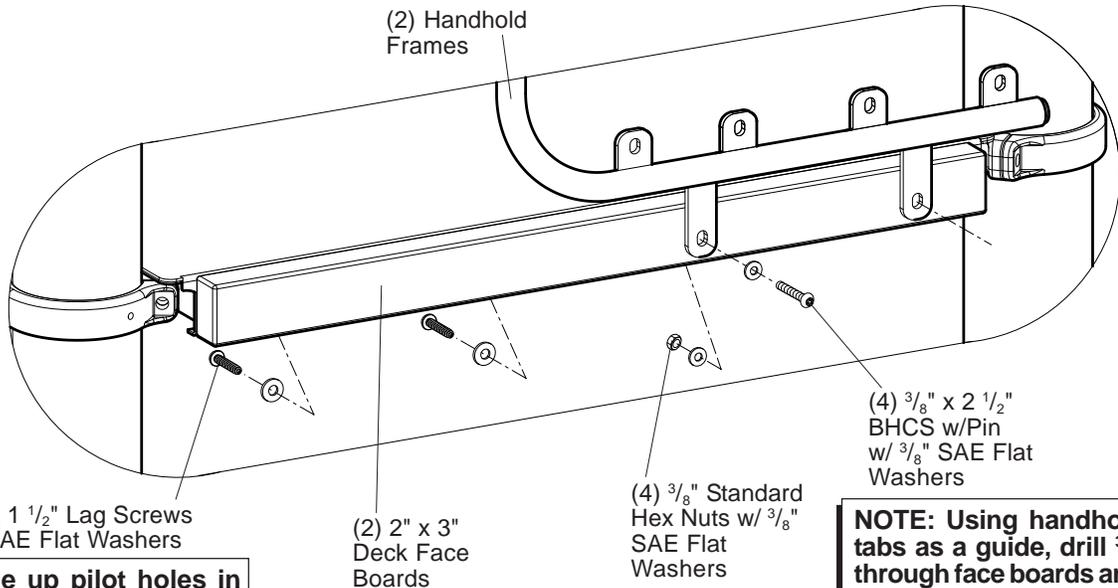


**DETAIL  
CONCRETE SLAB W/POUR-IN PLACE**



**PlayBooster® 207851 Canyon Corkscrew Net/The Bend™ Rock Combo**

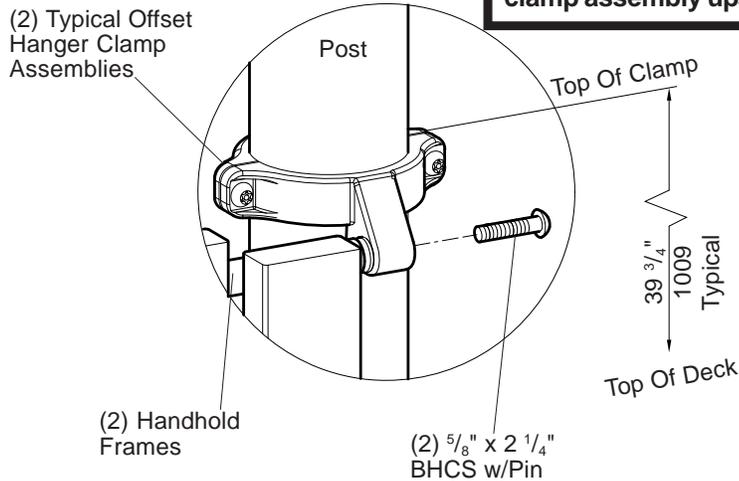
**DETAIL  
FACE BOARD/HANDHOLD  
ATTACHMENT**



**NOTE: Line up pilot holes in back of deck face board with holes in deck.**

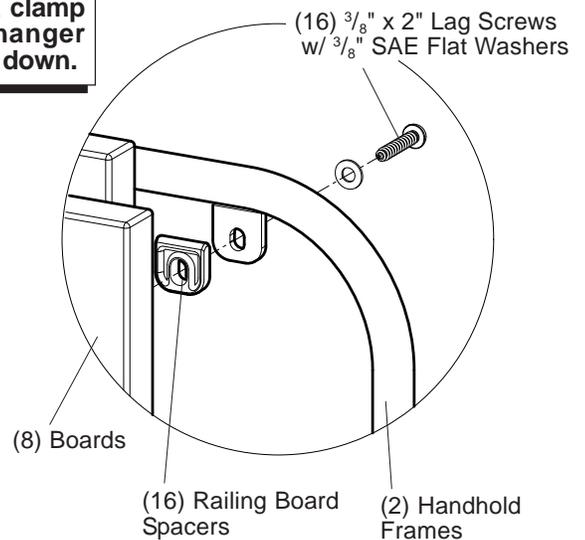
**NOTE: Using handhold frame tabs as a guide, drill  $\frac{3}{8}$ " holes through face boards and decks.**

**DETAIL  
CLAMP  
ATTACHMENT**

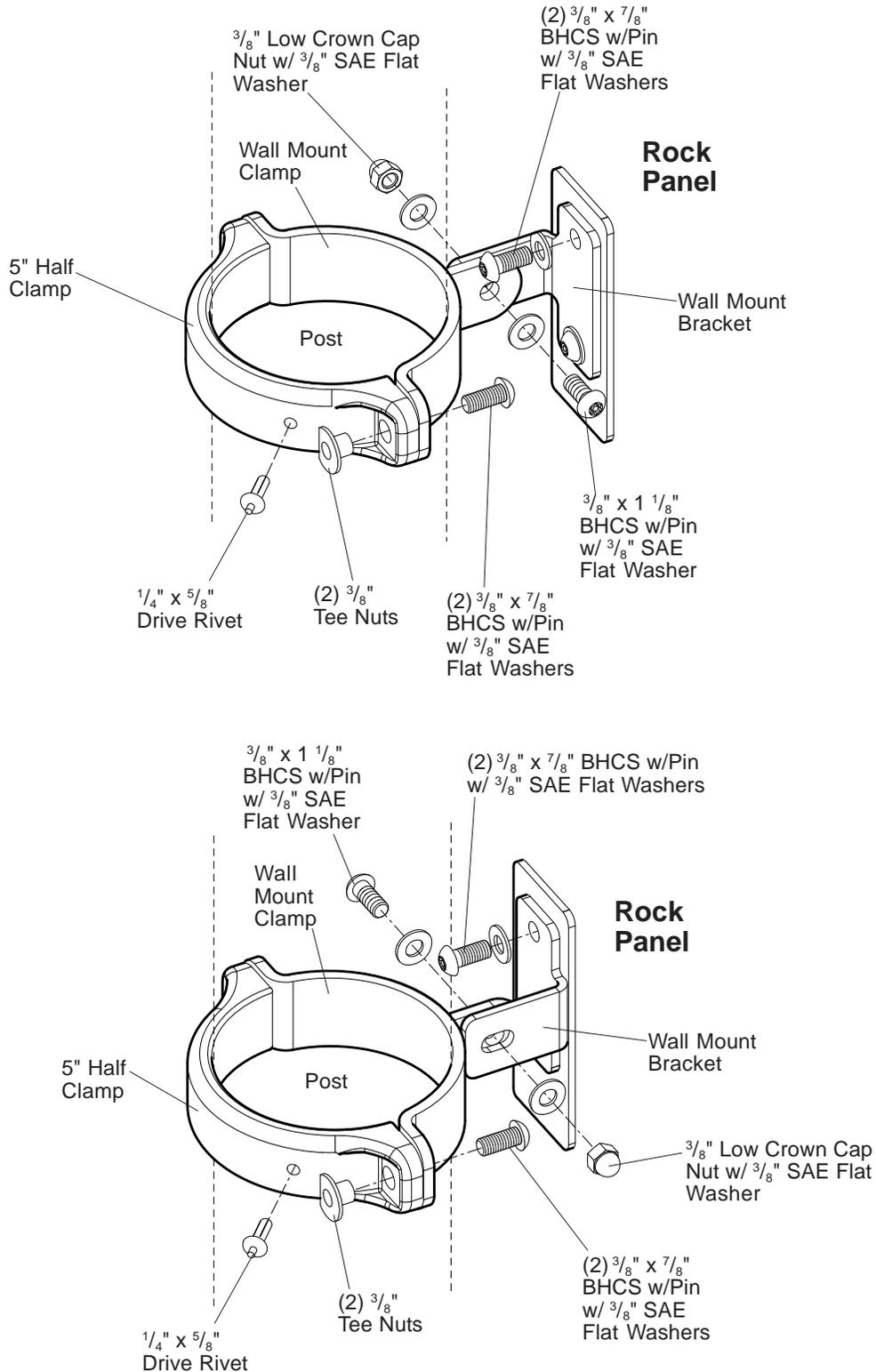


**NOTE: When there is a clamp conflict, turn offset hanger clamp assembly upside down.**

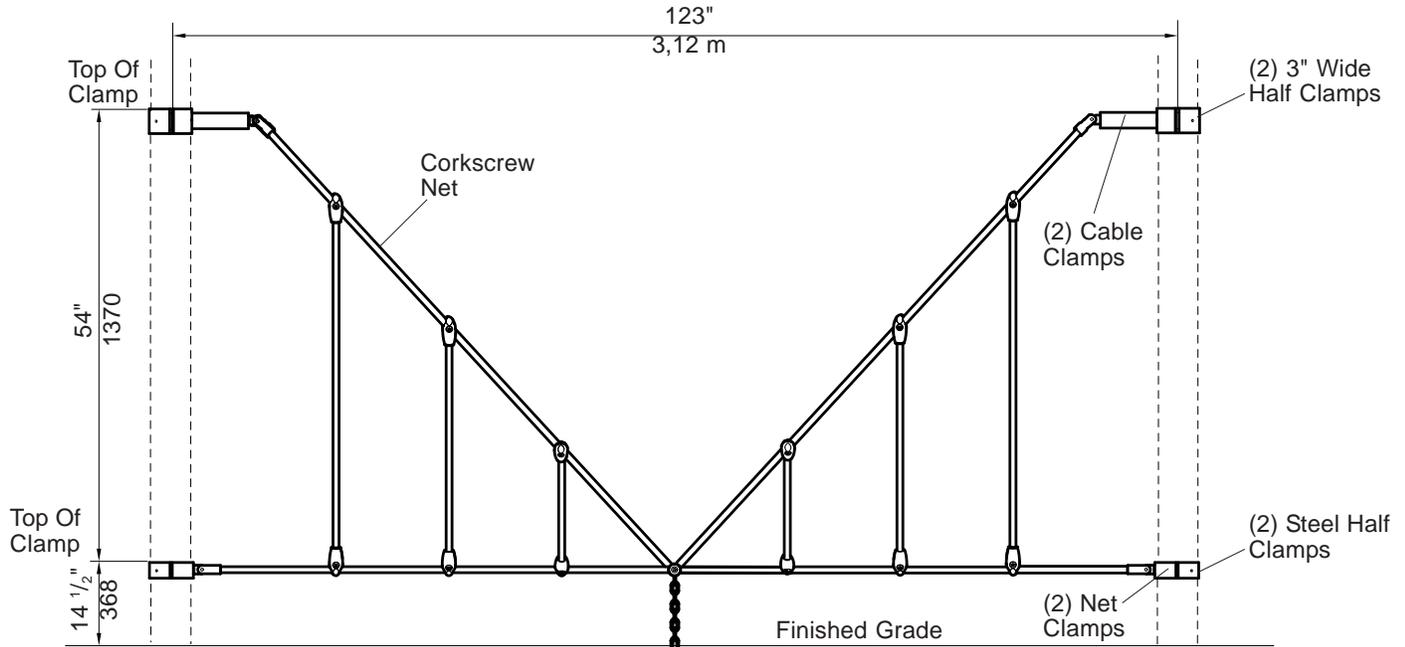
**DETAIL  
BOARD ATTACHMENT**



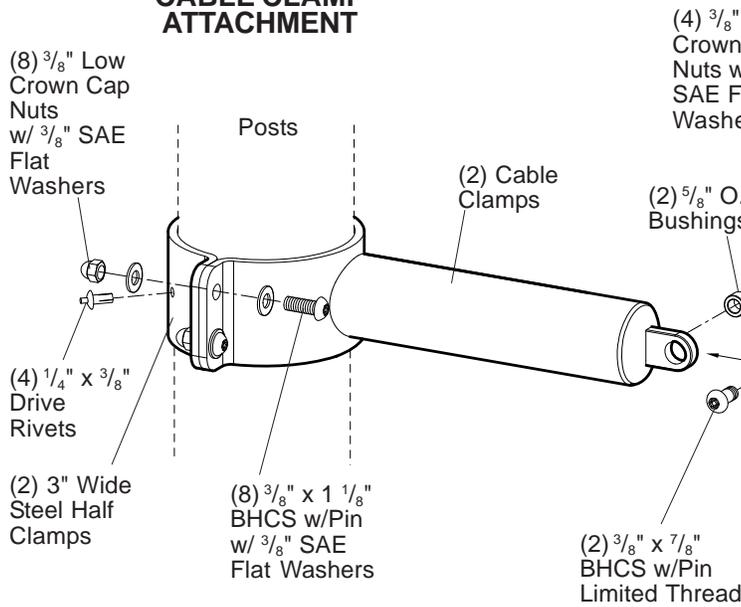
**DETAIL**  
**CLAMP ATTACHMENT**  
**(LEFT & RIGHT)**



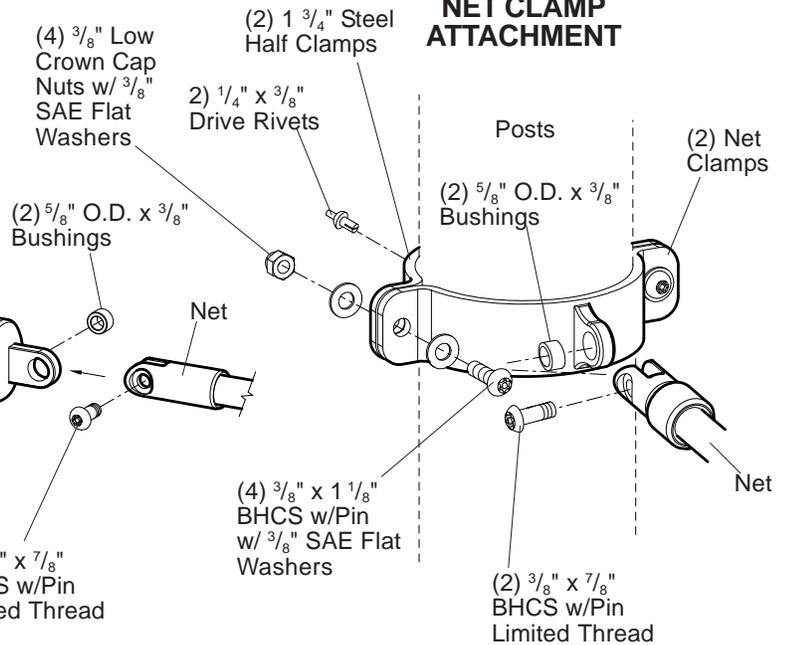
**DETAIL  
CABLE CLAMP HEIGHT**



**DETAIL  
CABLE CLAMP  
ATTACHMENT**



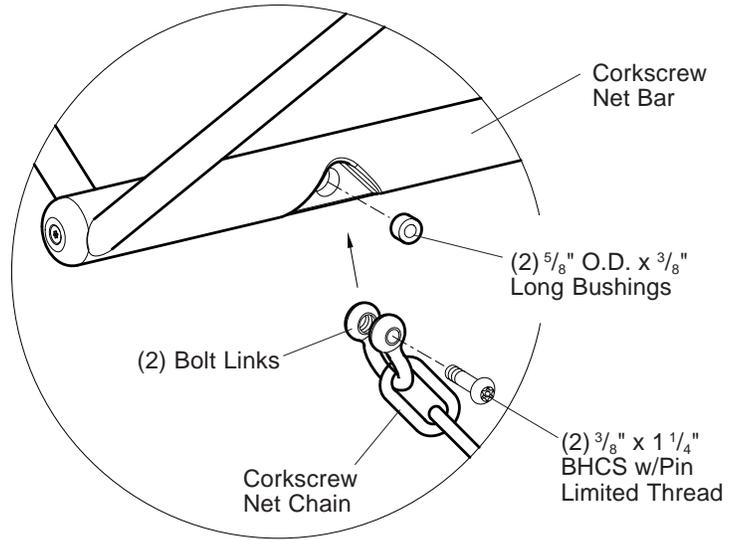
**DETAIL  
NET CLAMP  
ATTACHMENT**



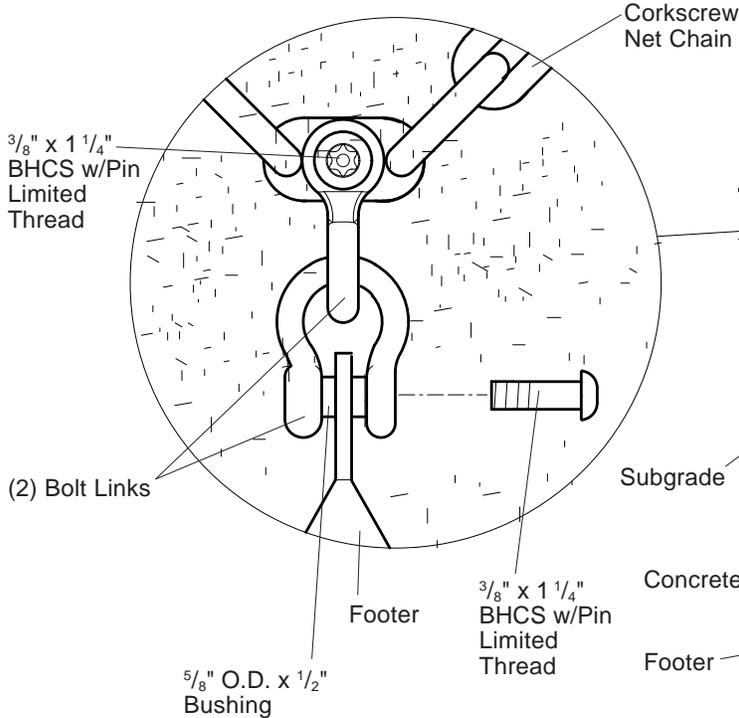
**PlayBooster® 207851 Canyon Corkscrew Net/The Bend™ Rock Combo**

**CORKSCREW NET DETAILS**

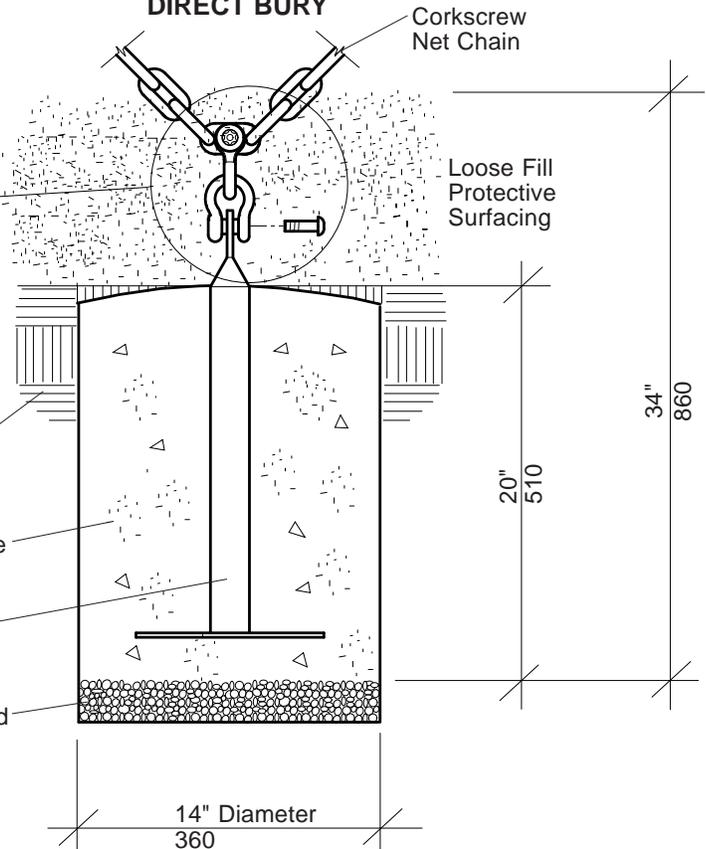
**DETAIL  
CORKSCREW NET CHAIN  
ATTACHMENT**



**DETAIL  
FOOTER ATTACHMENT**



**DETAIL  
DIRECT BURY**





# 207851 Canyon Corkscrew Net/The Bend™ Rock Combo

## Parts List

Part#	Description	Qty.
205878	The Bend Rock, Natural Tree Color .....	1
206977	Handhold Frame, Tan .....	2
175267	2" x 3" Recycled Deck Face Board, Cedar .....	2
207485	Railing Board Spacer, Tan .....	16
207549	2" x 4" x 48 1/2" Recycled Board, Cedar .....	2
207550	2" x 6" x 49" Recycled Board, Mink .....	1
207553	2" x 4" x 50 1/2" Recycled Board, Cedar .....	2
209595	2" x 4" x 47 1/2" Recycled Board, Cedar .....	1
207691	2" x 6" x 51" Recycled Board, Mink .....	1
209598	2" x 4" x 49" Recycled Board, Cedar .....	1
209399	Canyon Cable Clamp, Specify Color .....	2
206535	Wall Mount Bracket, Specify Color .....	2
206536	Wall Mount Clamp, Specify Color .....	2
105327	5" Half Clamp, Specify Color .....	4
113729	Offset Hanger Clamp, Specify Color .....	2
100610	1/4" x 5/8" Drive Rivet, AL./SST .....	4
207266	Canyon Corkscrew Net, Specify Color .....	1
164367	Single Post Footer, Specify Color .....	1
167071	50" Chain .....	1
125711	3" Wide Half Clamp, Specify Color .....	2
104731	1 3/4" Steel Half Clamp, Specify Color .....	2
161898	Net Clamp, Specify Color .....	2
<b>19651</b>	<b>Recycled Deck/Kick Board Hardware Package</b> .....	<b>2</b>
100365	3/8" SAE Flat Washer, SST .....	8
168198	3/8" x 1 1/2" BH Lag Screw, SST .....	8
<b>207876</b>	<b>Rock Clamp (Pair) Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST .....	8
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	2
100351	3/8" Tee Nut, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	8
100349	3/8" Low Crown Cap Nut, SST .....	2
100610	1/4" x 5/8" Drive Rivet, AL./SST .....	2
<b>207267</b>	<b>Corkscrew Net Hardware Package</b> .....	<b>1</b>
127179	5/8" O.D. x 3/8" Long, SST .....	6
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST .....	4
100292	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
138915	Bolt Link, SST .....	4
156962	5/8" O.D. x 1/2" Bushing, SST .....	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	12
100365	3/8" SAE Flat Washer, SST .....	24
100349	3/8" Low Crown Cap Nut, SST .....	12
100611	1/4" x 3/8" Drive Rivet, AL./SST .....	4
<b>207631</b>	<b>Wide Handhold Hardware Package</b> .....	<b>2</b>
100174	3/8" x 2 1/2" BHCS w/Pin, SST .....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100203	5/8" x 2 1/4" BHCS w/Pin, SST .....	2
100327	3/8" Standard Hex Nut, SST .....	4
100351	3/8" Tee Nut, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	24
139039	3/8" x 2" BH Lag Screw, SST .....	16

## Specifications

<b>Rock Panel:</b>	Weldment comprised of 5/8" (15,87 mm) & 3/4" (19,06 mm) rebar, 1/4" (6,35 mm) HRPO steel sheet and 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®. <b>(Rock-fully assembled)</b> Wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.
<b>Chain:</b>	Steel 1/4" (6,35 mm) straight link chain, 3,150 lb. working load limit. Finish: ProGuard.
<b>Single Post Footer:</b>	Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095") (2,15 mm-2,41 mm) wall galvanized steel tubing and 7GA. (.179") (4,54 mm) HRPO steel sheet. Finish: ProShield, color specified.
<b>Cable Clamp:</b>	Weldment comprised of 2 3/8" (60,32 mm) O.D. RS40 (.130"-.140") (3,30 mm-3,55 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel plate and 3/8" (9,52 mm) HRPO steel plate. Finish: ProShield®, color specified.
<b>Board:</b>	Recycled high-density polyethylene, cedar or mink in color.
<b>Corkscrew Net Assy.:</b>	<b>(Net)</b> Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. <b>(T-Connectors)</b> fabricated from 6061-T6 aluminum, <b>(Cable Connectors)</b> fabricated from 1.25" (31,75 mm) O.D. 6061-T6 aluminum and 1.500" (38,1 mm) O.D. 6061-T6 aluminum bar.
<b>Handhold Frame:</b>	Weldment comprised of 1.125" (28,58 mm) O.D. 11 GA. (.120") (3,05 mm) steel tubing with 203 or 303 stainless steel inserts, with 5/8" (15,87 mm) internal threads, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield®, tan in color
<b>Wall Mount Brkt.:</b>	Fabricated from 7 GA. (.179") (4,55 mm) thick HRPO steel plate. Finish: ProShield®, color specified.
<b>Wall Mount Clamp:</b>	Weldment comprised of 1/4" (6,35 mm) HRPO steel plate. Finish: ProShield®, color specified.
<b>Net Clamp:</b>	Weldment comprised of 1/4" (6,35 mm) x 1 3/4" (44,45 mm) HRPO flat steel and .375" (9,53 mm) stainless steel sheet. Finish: ProShield, color specified.
<b>Steel Half Clamps:</b>	Fabricated from of 1/4" (6,35 mm) HRPO flat steel. Finish: ProShield, color specified.
<b>Clamp:</b>	Cast aluminum. Finish: ProShield®, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Approx. 15 man hours
<b>Fall Height:</b>	72" (1,83 m) to 76" (1,93 m)
<b>Concrete:</b>	Approx. 23.64 cu. ft.
<b>Weight:</b>	4738 lbs.

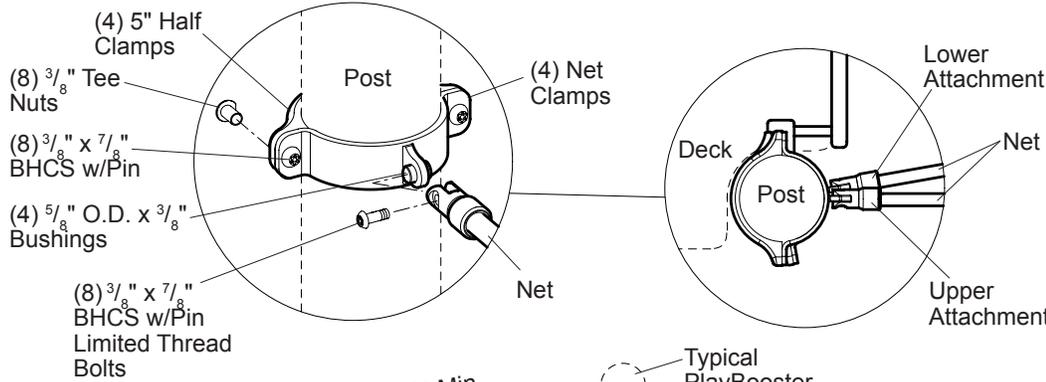
## Installation Instructions

- 1) **(Direct Bury)** Dig footing holes and build frame for concrete slab. Refer to Direct Bury Detail and Site Plan.

**Warning: Never crawl under any part of the Rock Panels - especially when it is only supported by a forklift.**

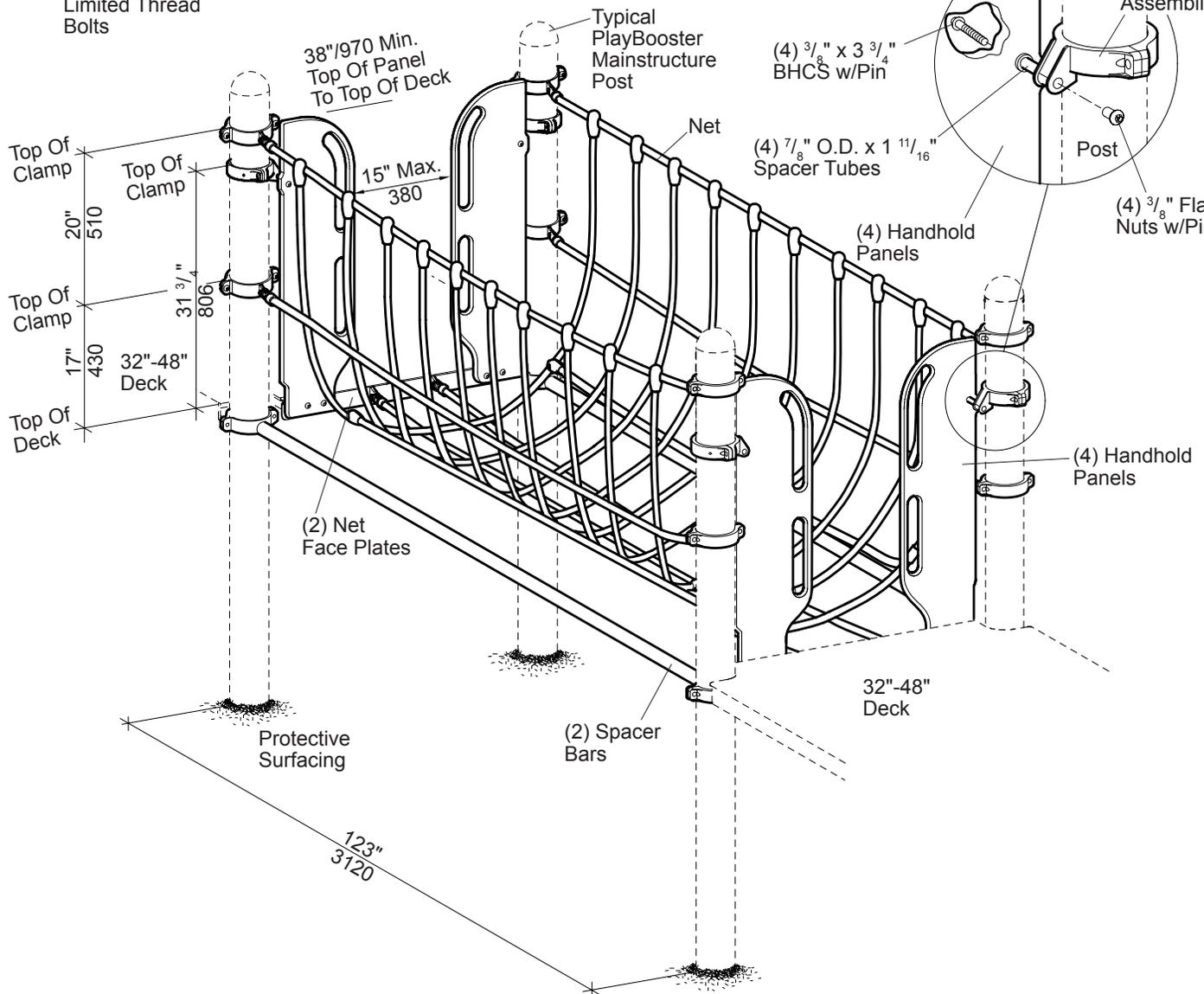
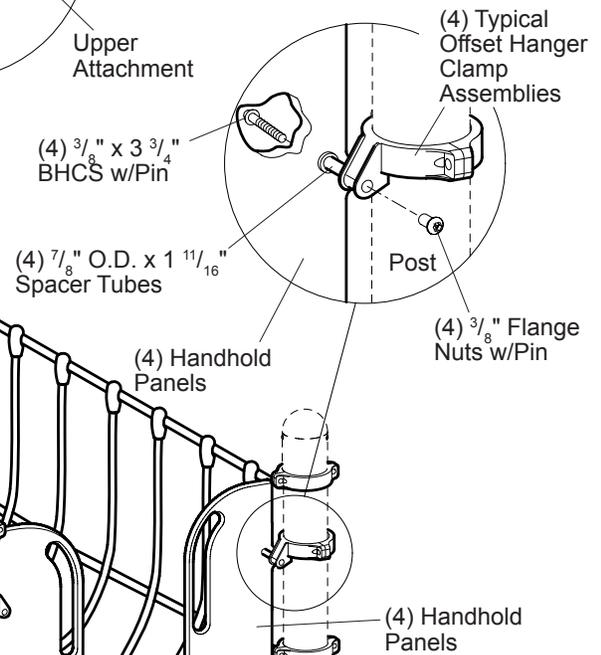
- 2) With posts plumb and deck level, pour concrete footings and slab. **NOTE: Concrete slab must be level.**
- 3) Allow concrete to cure a minimum of 24 hours before placing Rock Panel on concrete slab.
- 4) To unload Rock Panel a "Lull" type material handler with at least an 8000 lb. capacity is recommended. **NOTE: At least 2 people are recommended for Rock Panel installation. One person to operate the material handling equipment and one person to spot for the operator.**
- 5) Pick up the Rock Panel by inserting the material handling forks into the forklift pockets. Be very careful to keep the Rock Panel level to the ground when raising or lowering. Do not tip the Rock Panel on a corner or edge. Do not contact the concrete face of the Rock Panel with material handler forks, chipping can occur. Refer to the Site Plan for proper orientation.
- 6) Attach Rock Panel to posts. Refer to the Clamp Attachment Details.
- 7) Attach cable clamps and net clamps to posts at heights shown. Refer to the Cable Clamp Height Detail.
- 8) Insert  $\frac{5}{8}$ " O.D. x  $\frac{3}{8}$ " bushings into clamps. Attach corkscrew net to cable clamps and net clamps. Refer to the Cable Clamp and Net Clamp Attachment Details.
- 9) Attach corkscrew net chain to corkscrew net bar. Refer to the Corkscrew Net Chain Attachment Detail.
- 10) Attach bolt link to corkscrew net chain and footer to bolt link. Refer to the Corkscrew Net Chain Attachment Detail.
- 11) Attach offset hanger clamps to posts at heights shown using 5" half clamps,  $\frac{3}{8}$ " x 1  $\frac{1}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 12) Attach handhold frames to offset hanger clamps. Refer to the Clamp Attachment Detail.
- 13) Attach boards to handhold frames. Refer to the Board Attachment Detail.
- 14) Attach face boards and handhold frames to deck. Refer to the Face Board/Handhold Attachment Detail.
- 15) Install  $\frac{1}{4}$ " x  $\frac{3}{8}$ " drive rivets in all steel half clamps and  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 16) Install protective surfacing before users are allowed to play on the structure.
- 17) **NOTE: After installation if Touch-up/Repairs are needed, contact Landscape Structures at 1-888-574-4678.**

**DETAIL  
NET TO POST ATTACHMENT**



**NOTE: Lower net clamp assemblies will be turned in slightly, as shown.**

**DETAIL  
PANEL ATTACHMENT**



**PlayBooster® 145107 SpaceWalk Climber™, Deck to Deck, 32"-48"** Sheet 1 of 2



# PlayBooster® 145107 SpaceWalk, Deck to Deck, 32"-48"

## Parts List

Part#	Description	Qty.
202598	Net, Specify Color.....	1
171211	Net Face Plate, Specify Color.....	2
139563	Handhold Panel, Specify Color.....	4
145154	Spacer Bar, Specify Color.....	2
161898	Net Clamp, Specify Color.....	8
105327	5" Half Clamp, Specify Color.....	16
113729	5" Offset Hanger Clamp, Specify Color.....	4
113468	7/8" O.D. x 1 11/16" Spacer Tube, Specify Color.....	4
100610	1/4" x 5/8" Drive Rivet, AL/SST.....	16
<b>175510</b>	<b>SpaceWalk Climber Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	32
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	12
100351	3/8" Tee Nut, SST.....	32
100353	3/8" Flange Nut w/Pin, SST.....	12
100362	3/8" Flat Washer, SST.....	12
100365	3/8" SAE Flat Washer, SST.....	4
124460	3/8" x 3 3/4" BHCS w/Pin, SST.....	4
100290	3/8" x 7/8" BHCS w/Pin Ltd. Thread Bolt, SST.....	12
127179	5/8" O.D. x 3/8" Bushing, SST.....	12
100327	3/8" Standard Hex Nuts, SST.....	4

## Specifications

**Net:** Made of tightly woven polyester-wrapped, six-strand ed galvanized-steel cable with a polypropylene core, color specified. Connector fabricated from 1.250" O.D. 6063-T6 aluminum.

**Net Face Plate:** Fabricated from 1/4" HRPO sheet steel. Finish: ProShield®, color specified.

**Spacer Bar:** Weldment comprised of 1.660" O.D. RS40 (.111" - .121") galvanized steel tubing and 1/4" x 1 3/4" steel half clamps. Finish: ProShield, color specified.

**Handhold Panel:** Recycled Permalene®, color specified.

**Spacer Tubes:** Made from 6061-T6 aluminum 7/8" O.D. Finish: ProShield, color specified.

**Net Clamp:** Weldment comprised of 1/4" x 1 3/4" HRPO flat steel and .375" stainless steel sheet. Finish: ProShield, 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 Time:** Approx. 2 man hours

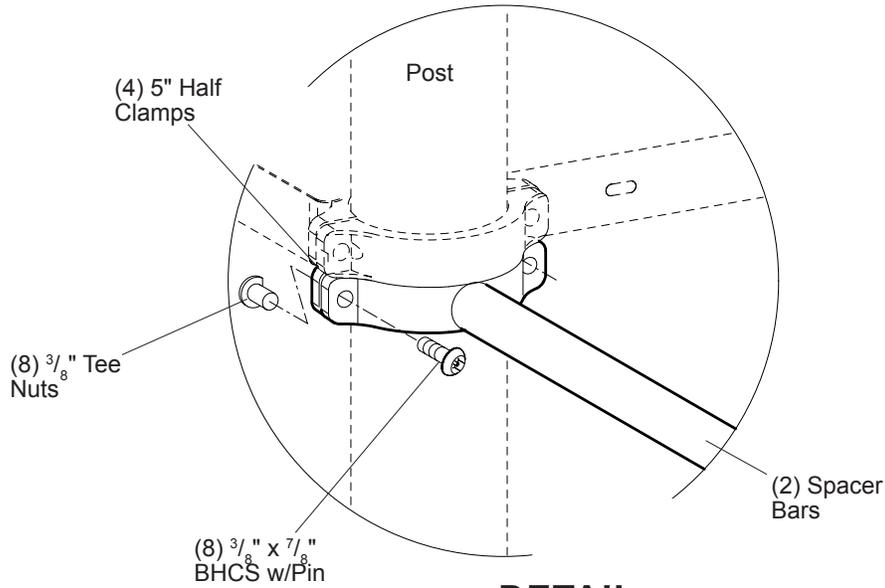
**Weight:** 155 lbs.

**Fall Height:**  
49" (32" Deck Height)  
57" (40" Deck Height)  
65" (48" Deck Height)

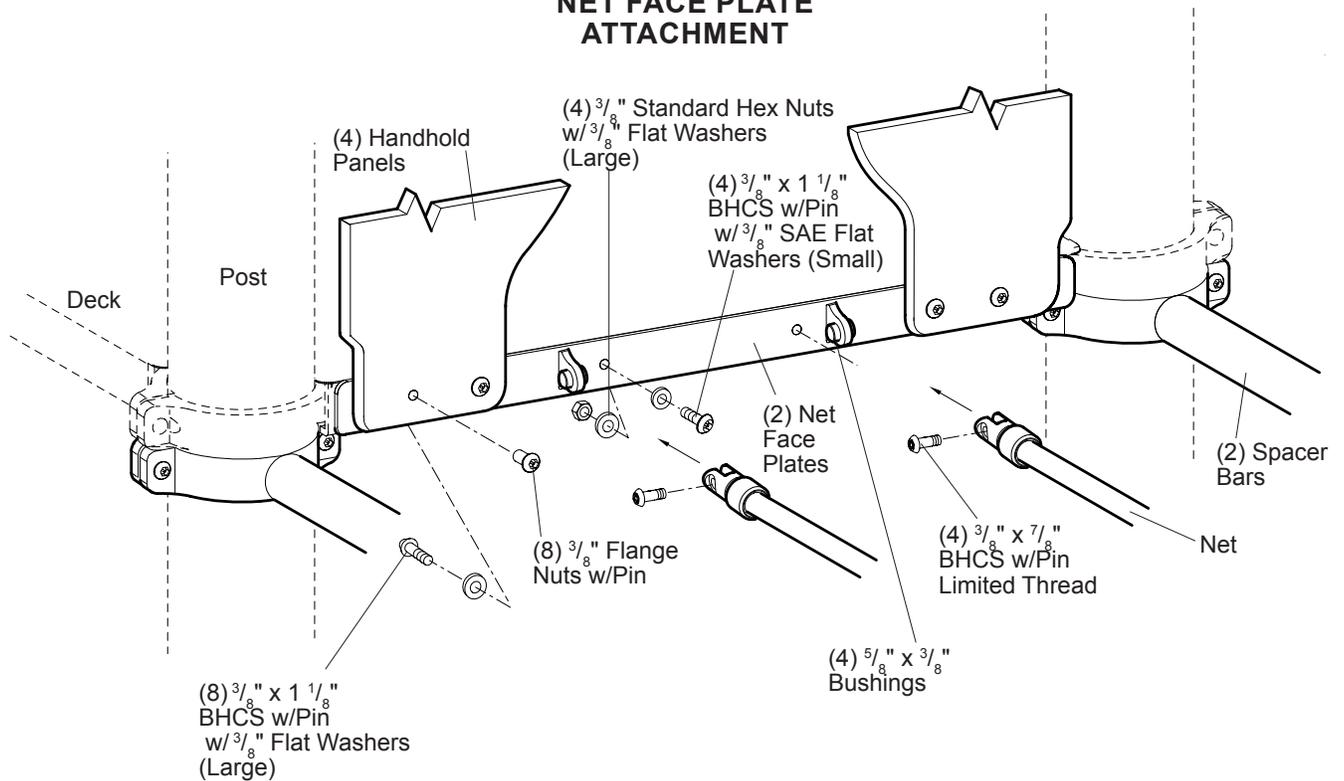
## Installation Instructions

- 1) Attach offset hanger clamps 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.
- 2) Attach net clamps to posts at height shown, using 5" half clamps and 3/8" x 7/8" BHCS w/pin with 3/8" tee nuts. Refer To The Net To Post Attachment Detail. **NOTE:** Lower net clamp assemblies will be turned in slightly, as shown. Refer to Detail.
- 3) Attach handhold panels and net face plate to the face of the deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washers and 3/8" flange nuts w/ pin. Refer to the Net Face Plate Attachment Detail.
- 4) Attach handhold panels to offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS w/pin, 7/8" O.D. x 1 11/16" spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 5) Attach net face plate to the face of the deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers (small) and 3/8" standard hex nuts with 3/8" flat washers (large). Refer to the Net Face Plate Attachment Detail.
- 6) With mainstructure posts and decks in position, attach spacer bars to mainstructure posts using 5" half clamps, 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts. Refer to the Spacer Bar Attachment Detail.
- 7) Insert 5/8" O.D. x 3/8" bushings into net clamp tabs. Attach net to net clamps with bushings, using 3/8" x 7/8" BHCS w/pin limited thread. Refer to the Net to Post Attachment Detail.
- 8) Insert 5/8" O.D. x 3/8" bushings into net face plate tabs. Attach net to net face plate, using 3/8" x 7/8" BHCS w/pin limited thread. Refer to the Net Face Plate Attachment Detail.
- 9) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Offset Hanger Clamp Spec Sheet.
- 10) Install protective surfacing before users are allowed to play on the structure.

**DETAIL  
 SPACER BAR ATTACHMENT**

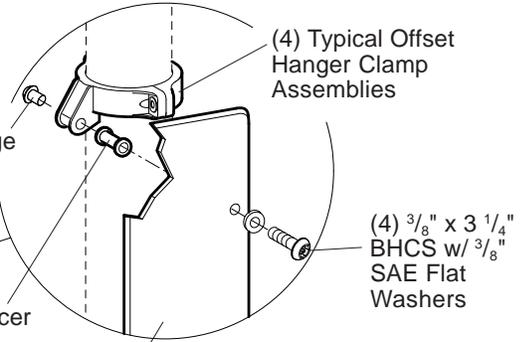


**DETAIL  
 NET FACE PLATE  
 ATTACHMENT**

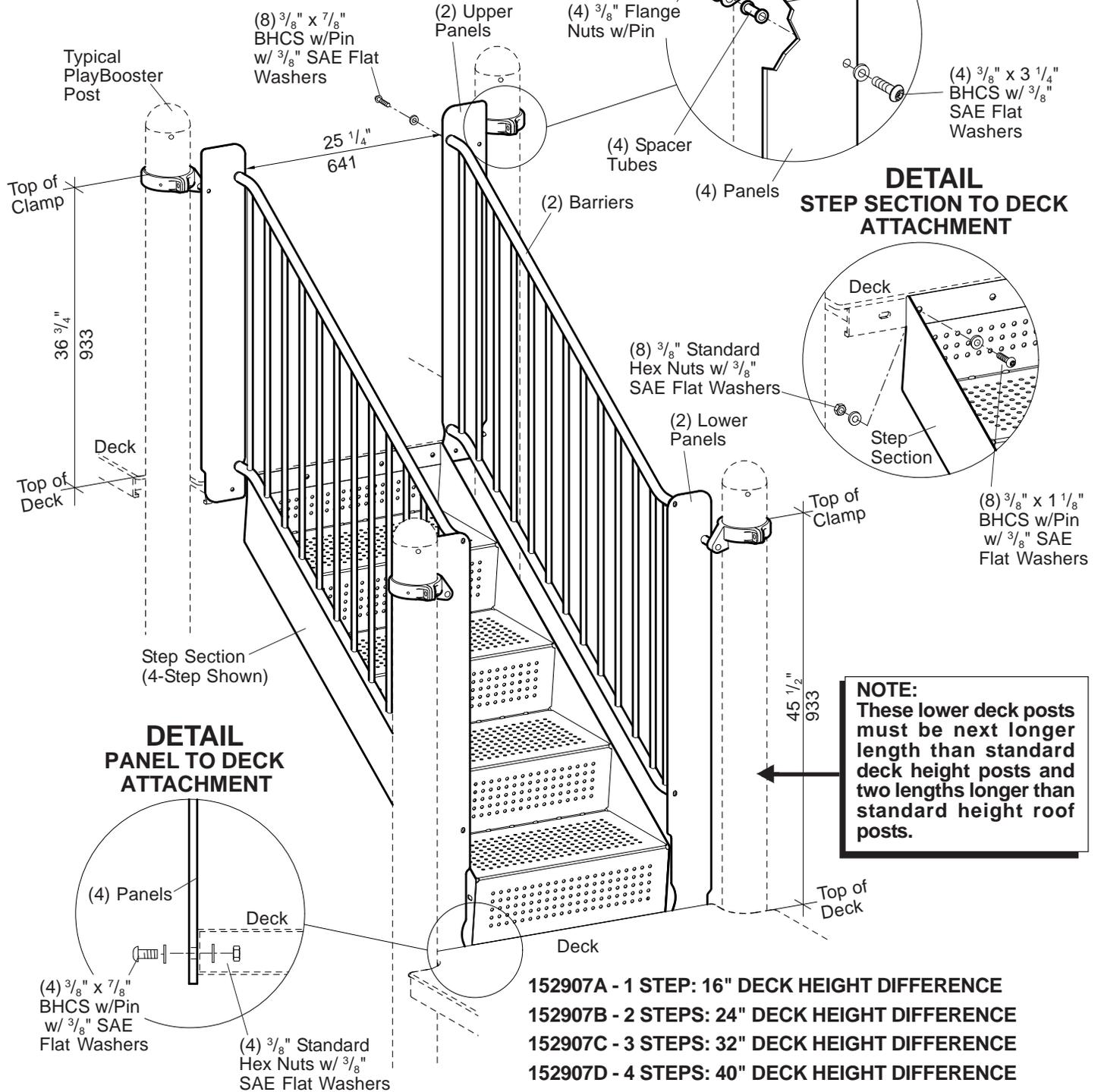
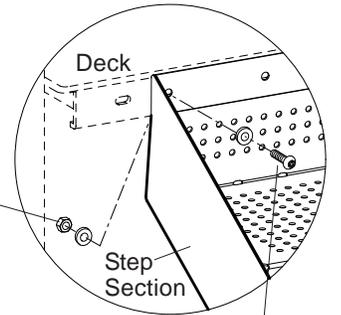




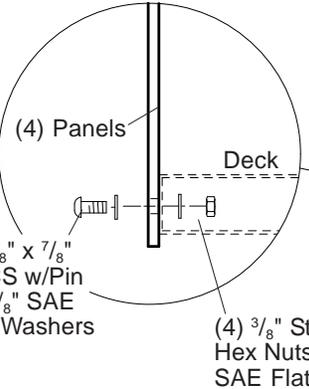
**DETAIL  
PANEL TO CLAMP  
ATTACHMENT**



**DETAIL  
STEP SECTION TO DECK  
ATTACHMENT**



**DETAIL  
PANEL TO DECK  
ATTACHMENT**



**NOTE:**  
These lower deck posts must be next longer length than standard deck height posts and two lengths longer than standard height roof posts.

- 152907A - 1 STEP: 16" DECK HEIGHT DIFFERENCE
- 152907B - 2 STEPS: 24" DECK HEIGHT DIFFERENCE
- 152907C - 3 STEPS: 32" DECK HEIGHT DIFFERENCE
- 152907D - 4 STEPS: 40" DECK HEIGHT DIFFERENCE

## Parts List

Part#	Description	Qty.
144696	1-Step Section, Specify Color .....	1
144698	2-Step Section, Specify Color .....	1
144700	3-Step Section, Specify Color .....	1
144702	4-Step Section, Specify Color .....	1
144703	1-Step Barrier, Specify Color .....	2
144705	2-Step Barrier, Specify Color .....	2
144707	3-Step Barrier, Specify Color .....	2
144709	4-Step Barrier, Specify Color .....	2
153896	Lower Panel, Specify Color .....	2
153895	Upper Panel, Specify Color .....	2
113468	Spacer Tube, Specify Color .....	4
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	4
105327	5" Half Clamp, Specify Color .....	4
113729	Offset Hanger Clamp, Specify Color .....	4
<b>156283</b>	<b>Deck Link Barr/Hrail Hardware Package .....</b>	<b>1</b>
100168	3/8" x 3 1/4" BHCS, SST .....	4
100196	3/8" x 7/8" BHCS w/Pin, SST .....	12
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	16
100327	3/8" Standard Hex Nut, SST .....	12
100351	3/8" Tee Nut, SST .....	8
100353	3/8" Flange Nut w/Pin, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	36

## Specifications

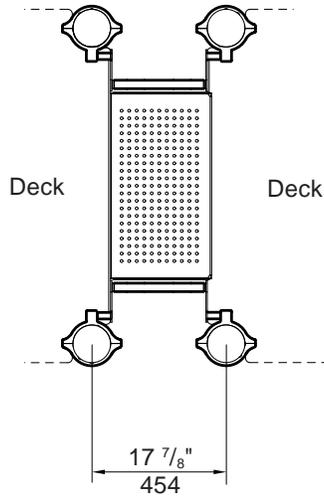
<b>Panels:</b>	Zinc plated 7 GA. (.179") HR flat steel. Finish: ProShield®, color specified.
<b>Step Section:</b>	Formed from 12 GA (.105) sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.
<b>Barrier:</b>	Weldment comprised of 1.125" O.D. x 11 Ga. (.120" wall) steel tubing, 5/8" O.D. steel bar with 203 or 303 stainless steel inserts with 3/8" internal threads. Finish: TenderTuff, color specified.
<b>Spacer Tube:</b>	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
<b>Clamps:</b>	Cast aluminum. Finish: ProShield, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Approx. 1 1/2 man hours
<b>Weight:</b>	1-Step - 130 lbs. 2-Step - 182 lbs. 3-Step - 236 lbs. 4-Step - 296 lbs.
<b>Fall Height:</b>	Deck Height

## Installation Instructions

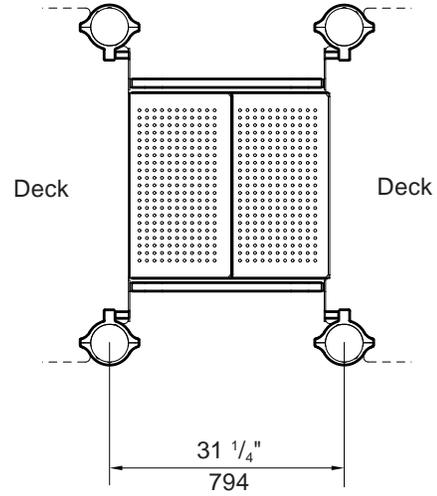
- 1) Attach step section to decks using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers, as shown. Refer to the Step Section To Deck Attachment Detail.
- 2) Attach upper and lower panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Panel to Deck Attachment Detail.
- 3) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Attach upper and lower panels to offset hanger clamps using 3/8" x 3 1/4" BHCS with 3/8" SAE flat washers, spacer tubes and 3/8" flange nuts w/pin. Refer to the Panel To Clamp Attachment Detail.
- 5) Attach barriers to upper and lower panels using 3/8" x 7/8" BHCS w/pin and 3/8" SAE flat washers, as shown.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 7) Install protective surfacing before users are allowed to play on the structure.

**PLAN VIEW/FOOTING LAYOUTS**

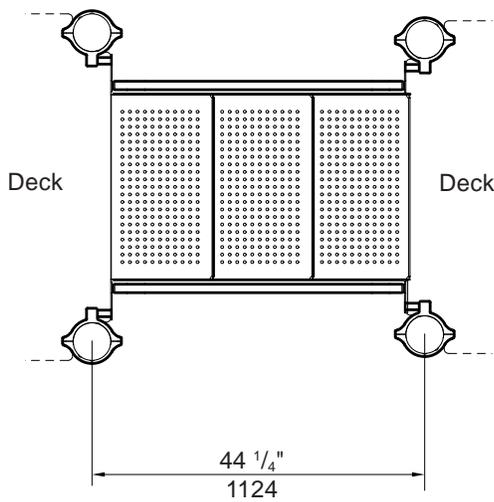
**FOOTINGS/ 1-STEP**



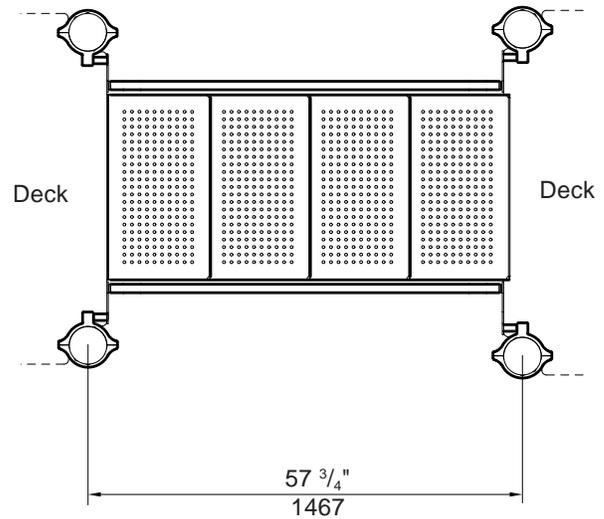
**FOOTINGS/ 2-STEP**



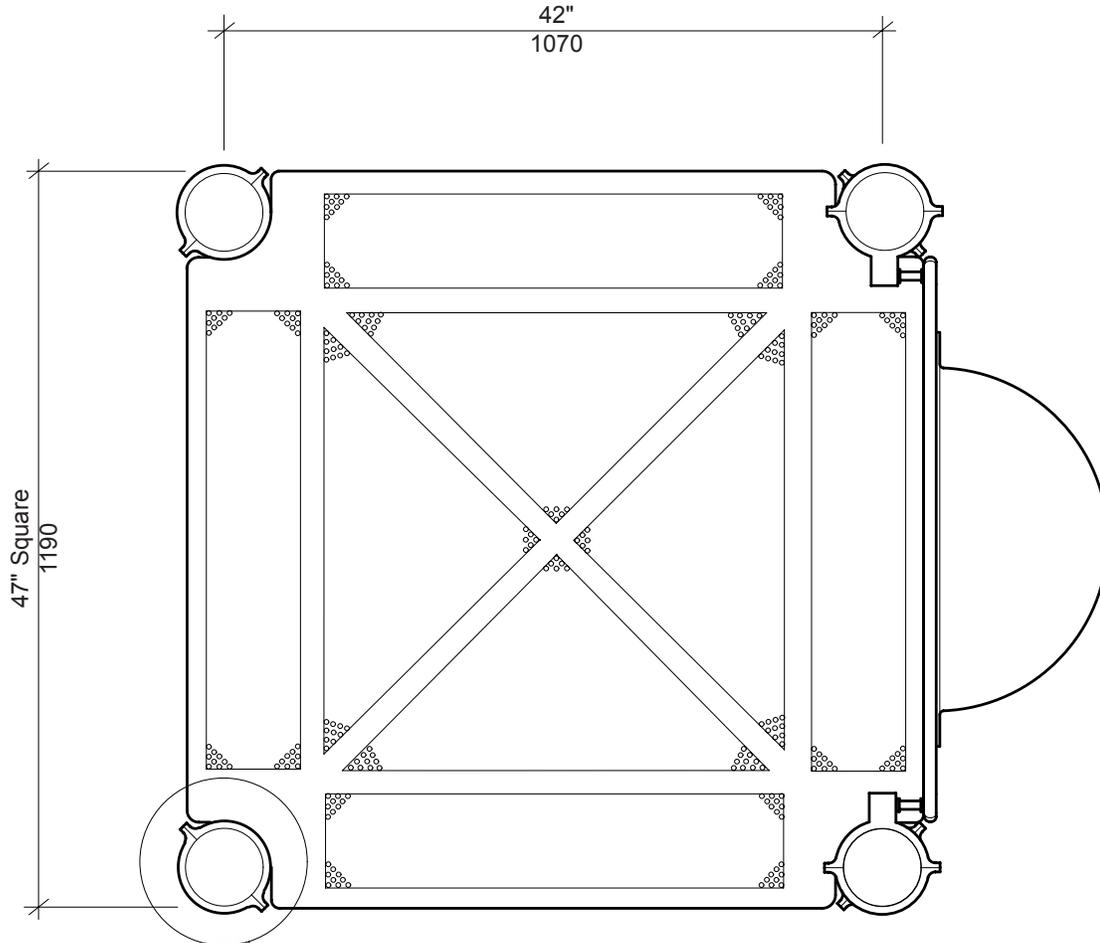
**FOOTINGS/ 3-STEP**



**FOOTINGS/ 4-STEP**

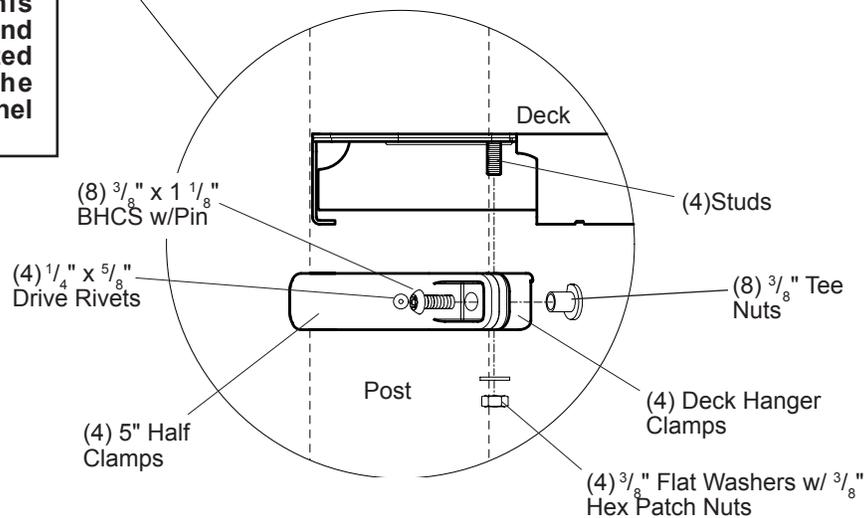






**DETAIL  
DECK HANGER CLAMP**

**NOTE: When using this deck, ALL enclosures and components are mounted on the OUTSIDE of the posts like the bubble panel shown above.**



## Parts List

Part#	Description	Qty.
145656	Tenderdeck, Specify Color .....	1
105327	5" Half Clamp, Specify Color .....	4
106022	5" Deck Hanger Clamp, Specify Color .....	4
<b>119491</b>	<b>Hardware Package</b> .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	8
100321	$\frac{3}{8}$ " Hex Patch Nut, SST .....	4
100351	$\frac{3}{8}$ " Tee Nut, SST .....	8
100362	$\frac{3}{8}$ " Flat Washer, SST .....	4
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, SST .....	4

## Specifications

**Square Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with  $\frac{5}{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures  $2\frac{5}{8}$ " x 47" x 47". Finish: TenderTuff™, color specified.

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

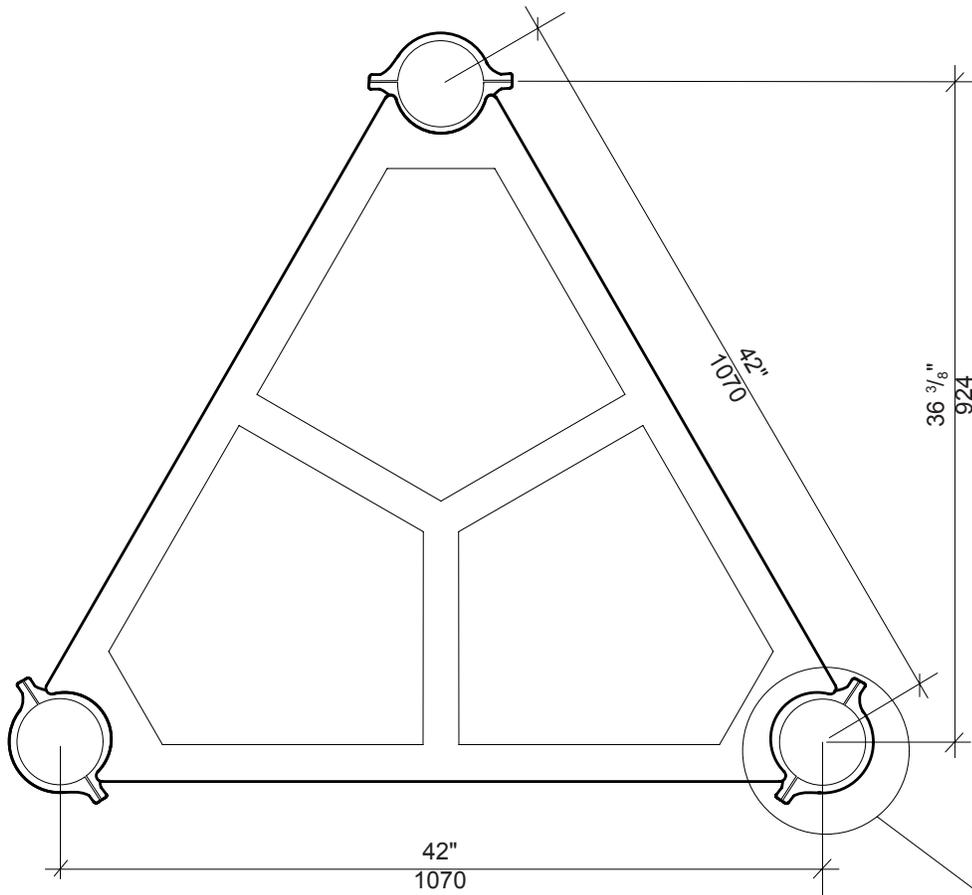
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1 man hour

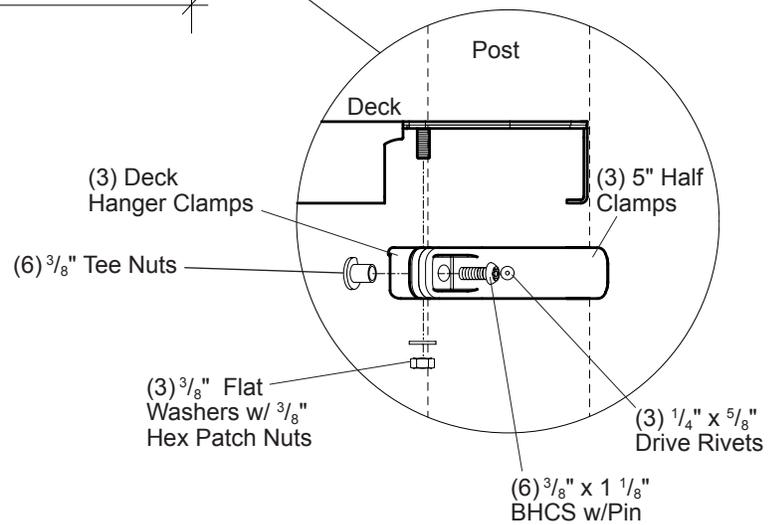
**Weight:** 119 lbs.

## Installation Instructions

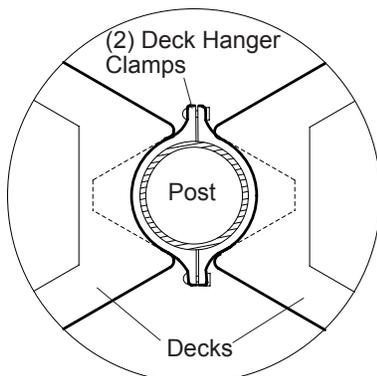
- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck into position, lining up studs underneath deck with deck hanger clamp as shown. Attach with  $\frac{3}{8}$ " flat washers and  $\frac{3}{8}$ " hex patch nuts.
- 4) Level deck and plumb posts. Install the drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) After all enclosures/components are installed, pour concrete footings per the Typical Concrete Footing Detail Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.



**DETAIL  
DECK HANGER CLAMP**



**DETAIL**



**Configuration for Back to Back Decks at Same Height.**



# PlayBooster® 111231 Triangular Tenderdeck

## Parts List

Part#	Description	Qty.
145657	Tri-Deck, Specify Color .....	1
105327	5" Half Clamp, Specify Color .....	3
106022	Deck Hanger Clamp, Specify Color.....	3
<b>120203</b>	<b>Triangular Deck Hardware Package .....</b>	<b>1</b>
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	6
100321	$\frac{3}{8}$ " Hex Patch Nut, SST.....	3
100351	$\frac{3}{8}$ " Tee Nut, SST.....	6
100362	$\frac{3}{8}$ " Flat Washer, SST .....	3
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST .....	3

## Specifications

**Triangular Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with  $\frac{5}{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures  $2\frac{5}{8}$ " x  $37\frac{3}{4}$ ". 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).

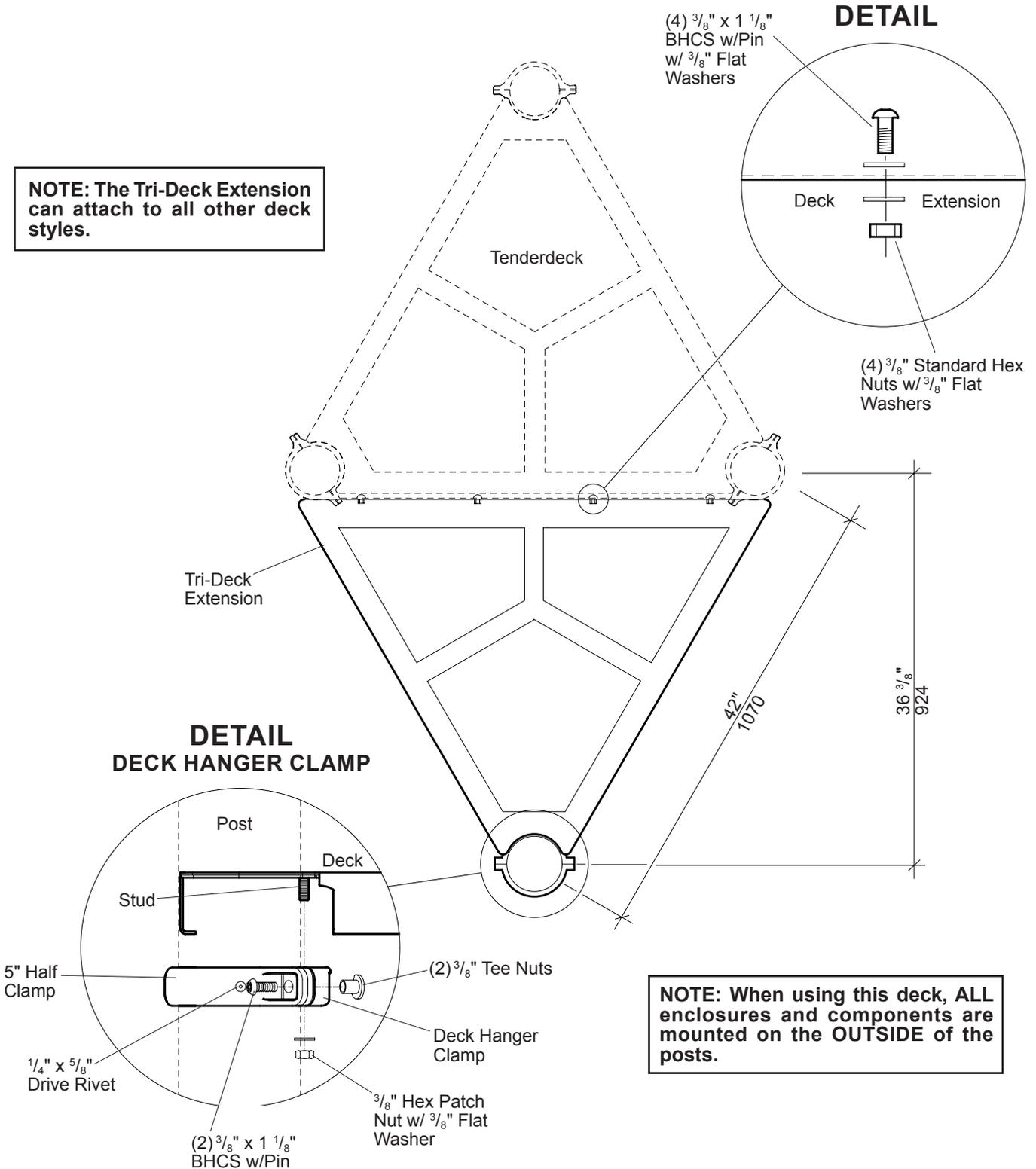
**Installation Time:** Approx.  $\frac{1}{2}$  man hour

**Weight:** 61 lbs.

## Installation Instructions

- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten deck hanger clamps to marked position on posts. See Detail on the front of this sheet.
- 3) Lift deck assembly into position, lining up stud underneath deck with deck hanger clamp as shown. Attach using  $\frac{3}{8}$ " hex patch nuts with  $\frac{3}{8}$ " flat washers. With deck level and posts plumb, final tighten all hardware.
- 4) Install  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) After attachment of enclosures and components is complete, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- 6) Install protective surfacing before users are allowed to play on the structure.

**NOTE: The Tri-Deck Extension can attach to all other deck styles.**



# PlayBooster® 119646 Triangular Tenderdeck Extension



# PlayBooster® 119646 Triangular Tenderdeck Extension

## Parts List

Part#	Description	Qty.
145663	Tri-Deck Extension, Specify Color .....	1
105327	5" Half Clamp, Specify Color .....	1
106022	5" Deck Hanger Clamp, Specify Color .....	1
<b>119593</b>	<b>Tri-Deck Extension Hardware Package</b> .....	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	6
100321	3/8" Hex Patch Nut, SST.....	1
100327	3/8" Standard Hex Nut, SST .....	4
100351	3/8" Tee Nut, SST.....	2
100362	3/8" Flat Washer, SST .....	9
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	1

## Specifications

### Tri-Deck

**Extension:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size of two of the three sides measures 2 5/8" x 37 7/8" on the face of the deck and the other side measures 2 5/8" x 43 3/4". Finish: TenderTuff™, color specified.

### Deck Hanger Clamp Assembly:

Cast aluminum. Finish: ProShield®, color specified.

### Fasteners:

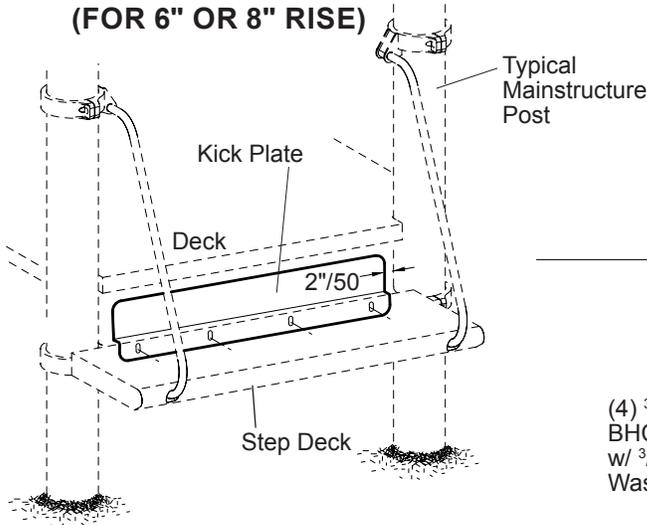
Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 3/4 man hour  
**Weight:** 52 lbs.

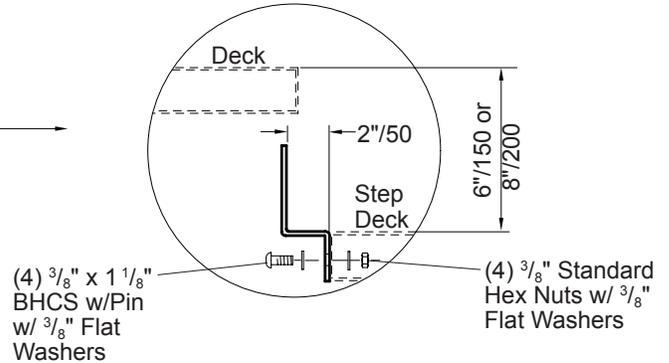
## Installation Instructions

- 1) Mark the post for the appropriate height of the deck you are installing.
- 2) Fasten the deck hanger clamp to the marked position on the post. Refer to the Deck Hanger Clamp Detail.
- 3) Lift the deck into position, line up the studs underneath the deck with the deck hanger clamp. Attach using a 3/8" hex patch nut and 3/8" flat washer, as shown.
- 4) Attach the tri-deck extension to the tenderdeck 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.
- 5) With the tri-deck extension level and the post plumb, install the 1/4" x 5/8" drive rivet in the 5" half clamp. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

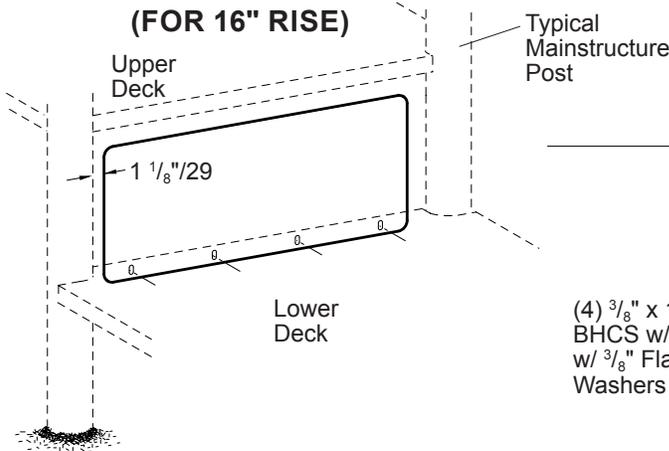
**KICK PLATE  
(FOR 6" OR 8" RISE)**



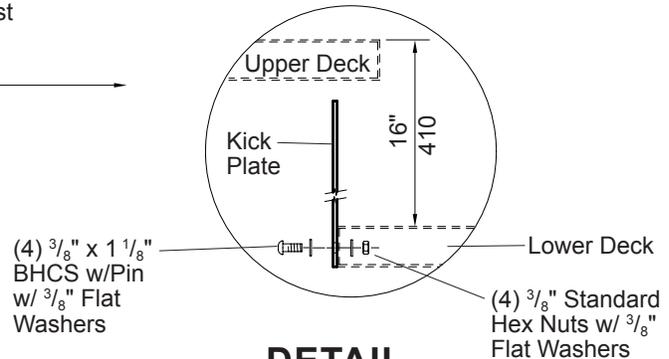
**DETAIL  
KICK PLATE ATTACHMENT  
(FOR 6" OR 8" RISE)**



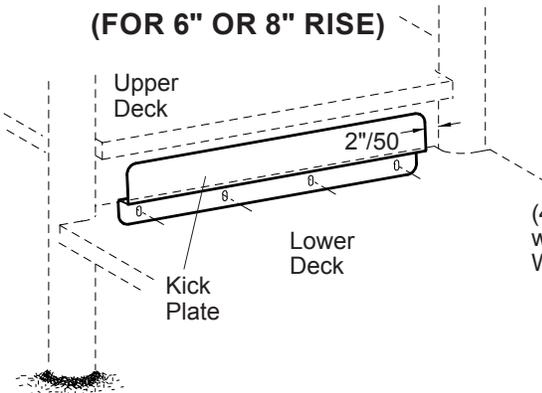
**KICK PLATE  
(FOR 16" RISE)**



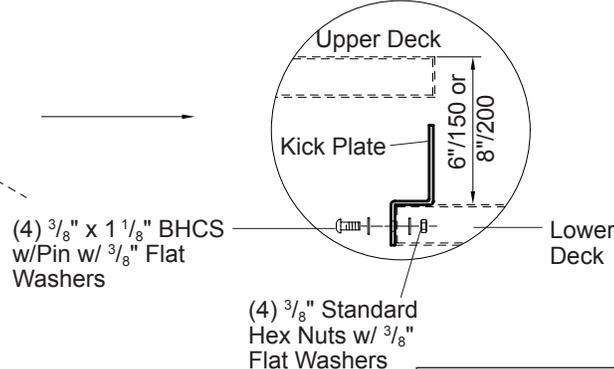
**DETAIL  
KICK PLATE ATTACHMENT  
(FOR 16" RISE)**



**KICK PLATE  
(FOR 6" OR 8" RISE)**



**DETAIL  
KICK PLATE ATTACHMENT  
(FOR 6" OR 8" RISE)**



**NOTE: Kick Plates mount to face of lower deck.**

**PlayBooster® 121948 Kick Plates, Tenderdecks, 6", 8" & 16"**



# PlayBooster® 121948 Kick Plates, Tenderdecks, 6", 8" & 16"

## Parts List

Part#	Description	Qty.
121819	Kick Plate (For 6" or 8" Rise), Specify Color .....	1
121818	Kick Plate (For 16" Rise), Specify Color .....	1
<b>156058</b>	<b>Kick Plate Tenderdeck Hardware Package</b> .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	4
100327	$\frac{3}{8}$ " Standard Hex Nut, SST .....	4
100362	$\frac{3}{8}$ " Flat Washer, SST .....	8

## Specifications

**Kick Plate:** Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff™, brown or gray in color.

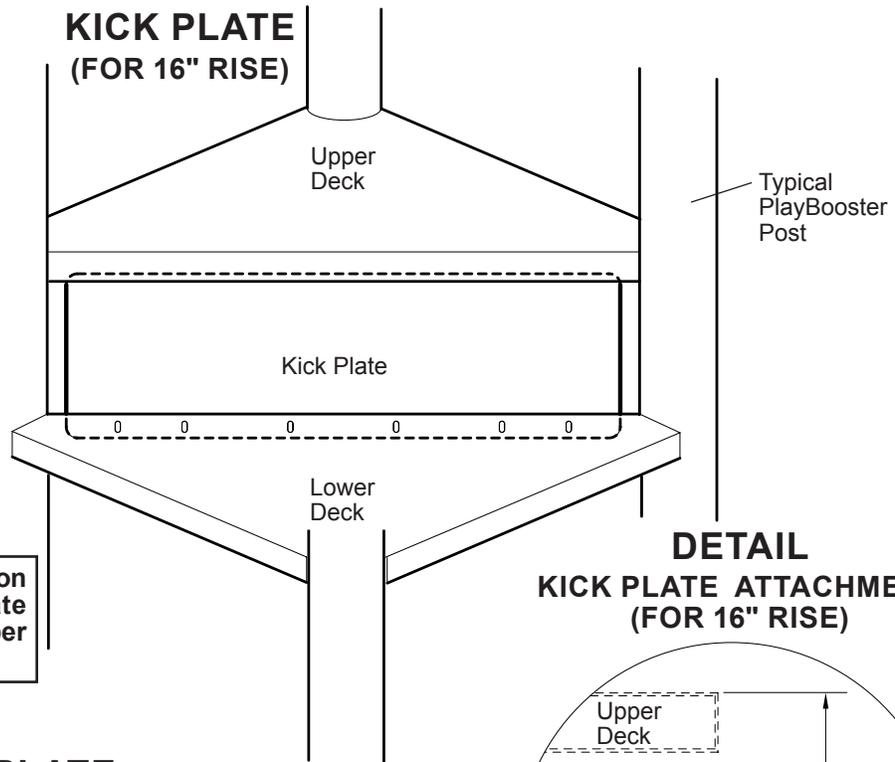
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx.  $\frac{1}{4}$  man hour  
**Weight:** Kick Plate (For 6" or 8" Rise) 13 lbs.  
 Kick Plate (For 16" Rise) 23 lbs.

## Installation Instructions

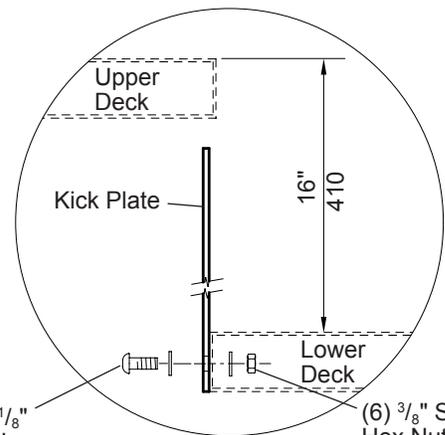
- 1) Locate kick plates as labeled on your plan drawing.
- 2) Attach kick plate using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " flat washers and  $\frac{3}{8}$ " standard hex nuts with  $\frac{3}{8}$ " flat washers, as shown. **NOTE:** *Kick plates mount to face of lower deck.*
- 3) Install protective surfacing before users are allowed to play on the structure.

**KICK PLATE  
(FOR 16" RISE)**



**NOTE:** Tri-Deck configuration may require the kick plate to be mounted to the upper deck.

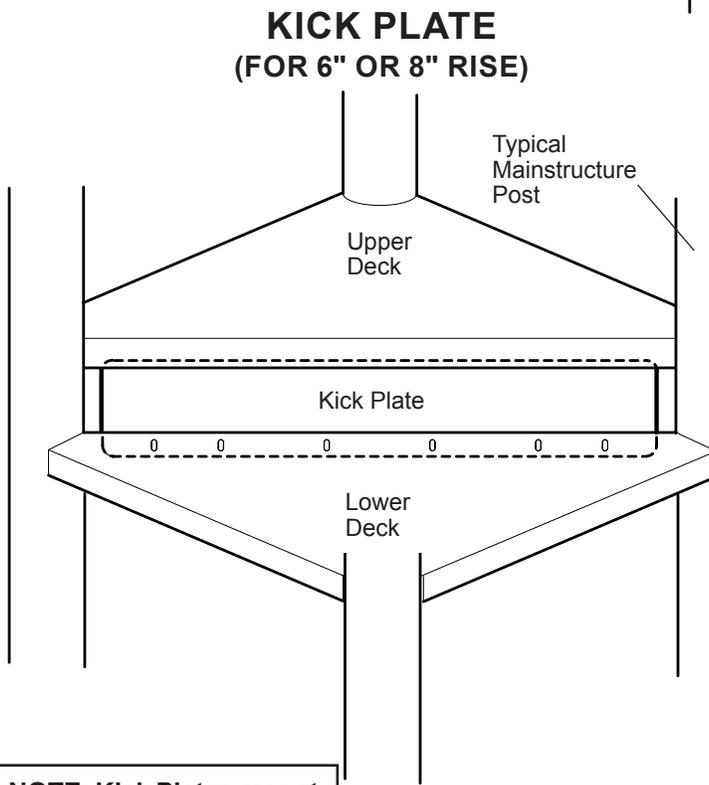
**DETAIL  
KICK PLATE ATTACHMENT  
(FOR 16" RISE)**



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

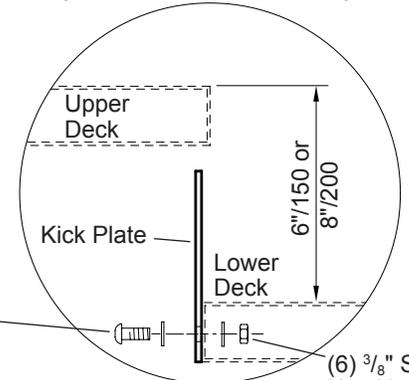
(6)  $\frac{3}{8}$ " Standard Hex Nuts w/  $\frac{3}{8}$ " Flat Washers

**DETAIL  
KICK PLATE ATTACHMENT  
(FOR 6" OR 8" RISE)**



**KICK PLATE  
(FOR 6" OR 8" RISE)**

**NOTE:** Kick Plates mount to face of lower deck.



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

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

**PlayBooster® 121949 Kick Plates, 90° Tri-Decks, 6", 8" & 16"**



# PlayBooster® 121949 Kick Plates, 90° Tri-Decks, 6", 8" & 16"

## Parts List

Part#	Description	Qty.
121820	Kick Plate (For 6" or 8" Rise), Specify Color .....	1
121822	Kick Plate (For 16" Rise), Specify Color .....	1
<b>156059</b>	<b>Kick Plate Tenderdeck Hardware Package</b> .....	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	6
100327	$\frac{3}{8}$ " Standard Hex Nut, SST .....	6
100362	$\frac{3}{8}$ " Flat Washer, SST .....	12

## Specifications

**Kick Plate:** Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff™, color specified.

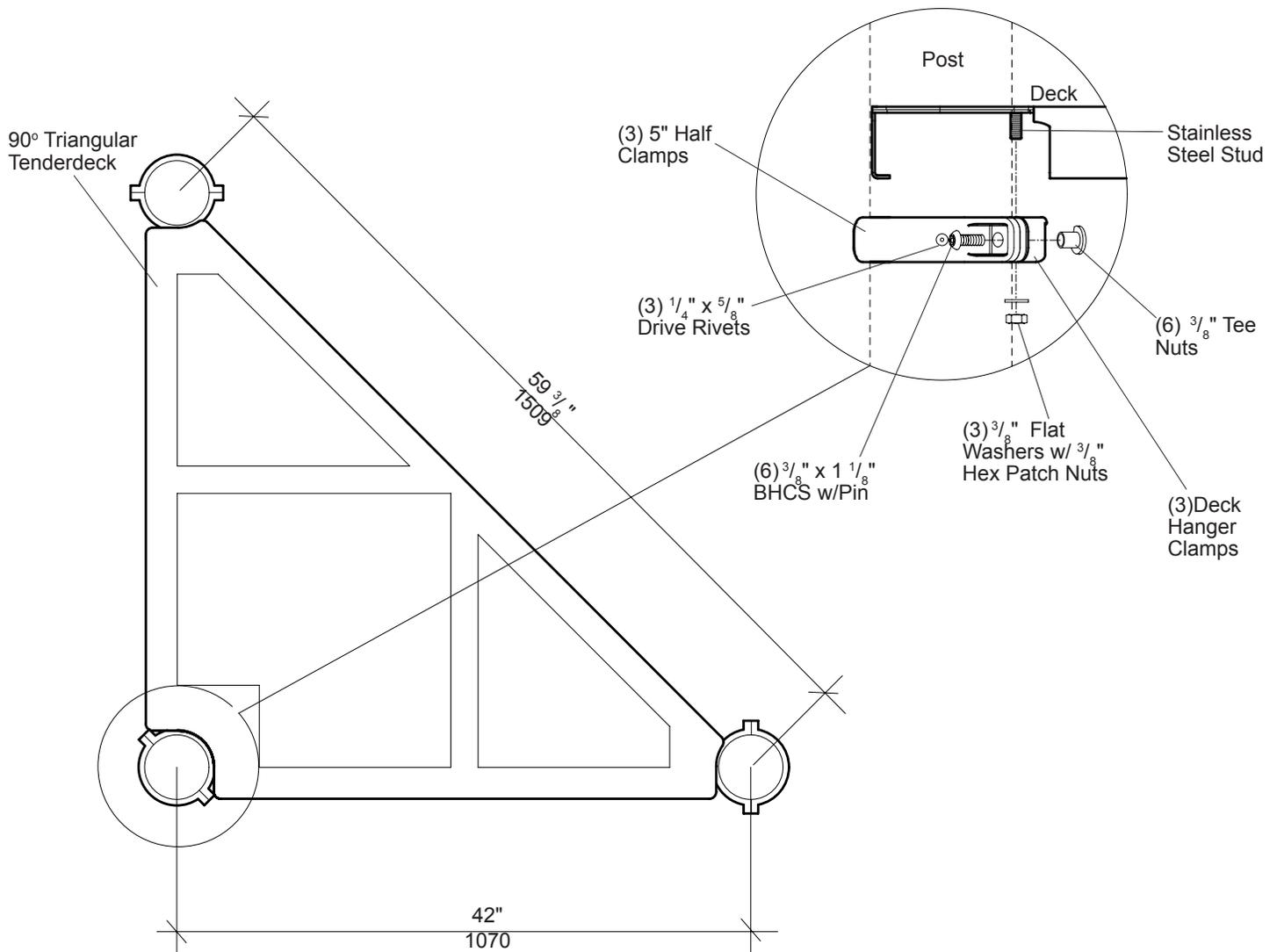
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx.  $\frac{1}{4}$  man hour  
**Weight:** Kick Plate (For 6" or 8" Rise) 13 lbs.  
 Kick Plate (For 16" Rise) 33 lbs.

## Installation Instructions

- 1) Locate kick plates as labeled on your plan drawing.
- 2) Attach kick plate using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " flat washers and  $\frac{3}{8}$ " standard hex nuts with  $\frac{3}{8}$ " flat washers, as shown. **NOTE:** *Kick plates mount to face of lower deck.*
- 3) Install protective surfacing before users are allowed to play on the structure.

**DETAIL  
DECK HANGER CLAMP**



**PlayBooster® 122197 90° Triangular Tenderdeck**



# PlayBooster® 122197 90° Triangular Tenderdeck

## Parts List

Part#	Description	Qty.
145658	90° Tri-Deck, Specify Color .....	1
105327	5" Half Clamp, Specify Color .....	3
106022	Deck Hanger Clamp, Specify Color.....	3
<b>120203</b>	<b>Triangular Deck Hardware Package .....</b>	<b>1</b>
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST .....	6
100321	$\frac{3}{8}$ " Hex Patch Nut, SST.....	3
100351	$\frac{3}{8}$ " Tee Nut, SST.....	6
100362	$\frac{3}{8}$ " Flat Washer, SST .....	3
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST .....	3

## Specifications

**Triangular Deck:** Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with  $\frac{5}{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures  $2\frac{5}{8}$ " x  $37\frac{3}{4}$ ". Finish: TenderTuff™, color specified.

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

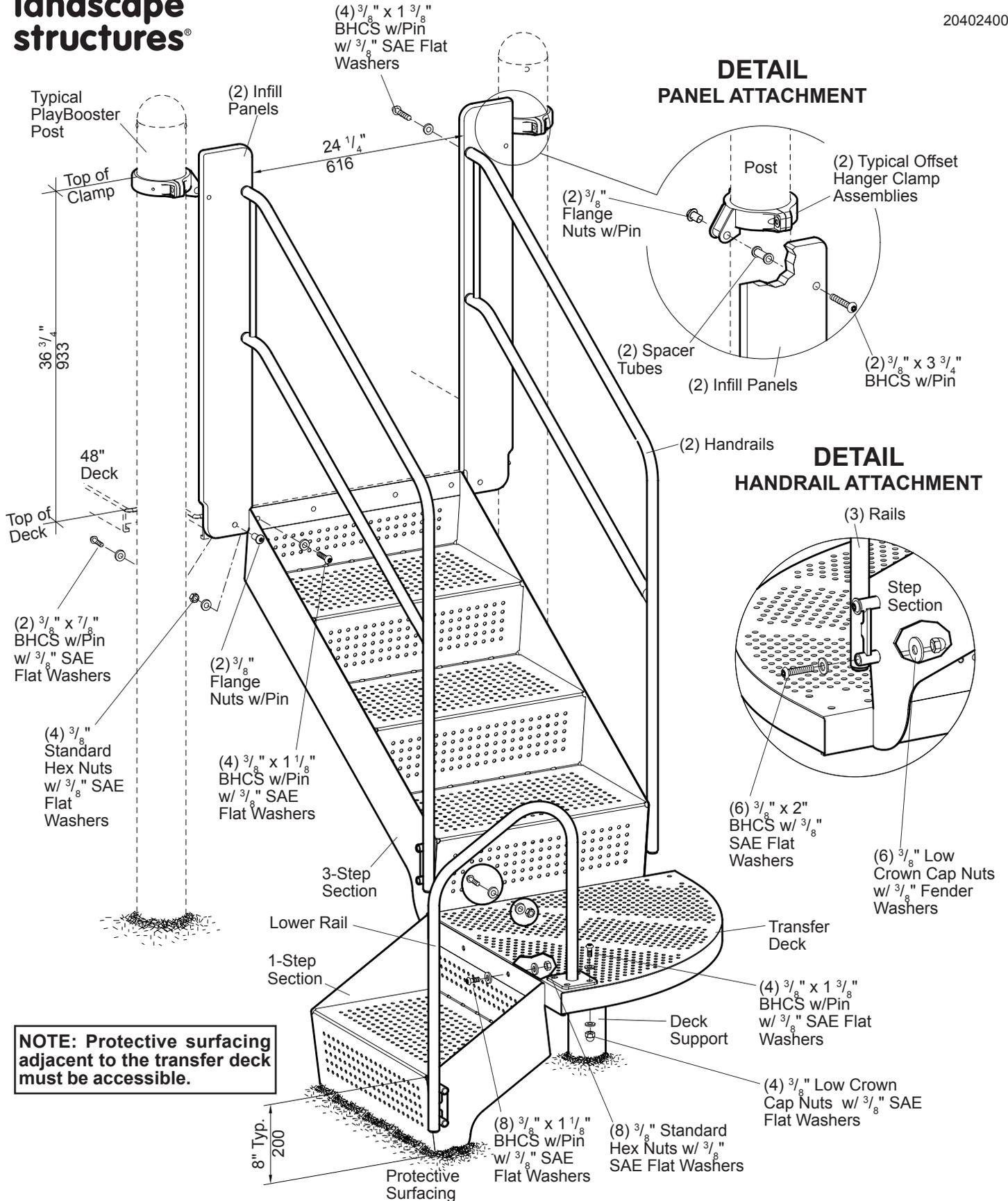
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx.  $\frac{1}{2}$  man hour

**Weight:** 67 lbs.

## Installation Instructions

- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten deck hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck assembly into position, lining up stud underneath deck with deck hanger clamp as shown. Attach using  $\frac{3}{8}$ " hex patch nuts with  $\frac{3}{8}$ " flat washers. With deck level and posts plumb, final tighten all hardware.
- 4) Install  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) After attachment of enclosures and components is complete, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- 6) Install protective surfacing before users are allowed to play on the structure.



**PlayBooster® 152911 Transfer Module, 48", w/Handrails**



# PlayBooster® 152911 Transfer Module, 48", w/Handrails

## Parts List

Part#	Description	Qty.
100610	1/2" x 5/8" Drive Rivet, AL/SST	2
105327	5" Half Clamp, Specify Color	2
113468	7/8" O.D. x 1 1/8" Spacer Tube, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
181371	Deck Support (DB), Specify Color	1
181373	Deck Support (SM), Specify Color	1
181374	Step Support (DB), Specify Color	1
181376	Step Support (SM), Specify Color	1
144696	1-Step Section, Specify Color	1
144700	3-Step Section, Specify Color	1
152640	3-Step Handrail, Specify Color	2
152641	Lower Rail, Specify Color	1
153398	Transfer Deck, Specify Color	1
153399	Infill Panel, Specify Color	2
<b>204034</b>	<b>Transfer Module Hardware Package</b>	1
100173	3/8" x 2" BHCS, SST	6
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 3/8" BHCS w/Pin, SST	20
100327	3/8" Standard Hex Nut, SST	16
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	4
100365	3/8" SAE Flat Washer, SST	54
113027	3/8" x 1 3/8" BHCS w/Pin, SST	8
124460	3/8" x 3 3/8" BHCS w/Pin, SST	2
100378	3/8" Fender Washer, SST	6
100349	3/8" Low Crown Cap Nut, SST	12
<b>111393</b>	<b>4-Hole (SM) Hardware Package</b>	1
100263	3/8" x 2 3/8" Expansion Anchors	4
100327	3/8" Standard Hex Nut, SST	4
100365	3/8" SAE Flat Washers, SST	4
<b>121256</b>	<b>2-Hole (SM) Hardware Package</b>	1
100263	3/8" x 2 3/8" Expansion Anchors	2
100327	3/8" Standard Hex Nut, SST	2
100365	3/8" SAE Flat Washers, SST	2

DB = Direct Bury  
SM = Surface Mount

## Specifications

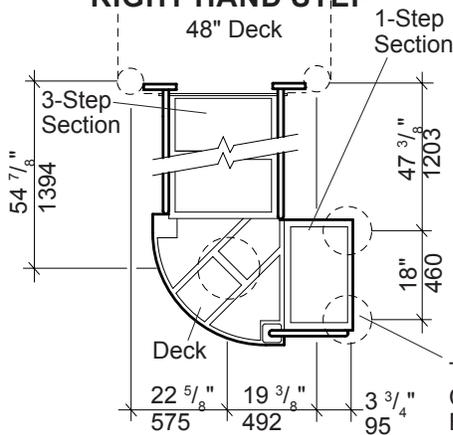
<b>Deck:</b>	Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measures 29" per (2) sides. Finish: TenderTuff™, color specified.
<b>Railings:</b>	Weldment comprised of formed 1 1/8" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts with 3/8" internal threads. Finish: TenderTuff, color specified.
<b>Step Sections:</b>	Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.
<b>Spacer Tube:</b>	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield®, color specified.
<b>Panel:</b>	Solid color Permalene® panel, color specified.
<b>Deck Support:</b>	Weldment comprised of 3 1/2" O.D. RS20 (.125") galvanized steel tubing and 3/8" O.D. x 5" long rod. Finish: ProShield, color specified.
<b>Step Support:</b>	Weldment comprised of 1.660 O.D. RS20 (.080"-.095) and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.
<b>Clamps:</b>	Cast aluminum. Finish: ProShield, color specified.
<b>Fasteners:</b>	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:** SM - Approx. 3 man hours  
DB - Approx. 4 man hours  
**Concrete Req.:** Approx. 3.4 cu. ft.  
**Weight:** SM - 264 lbs.  
DB - 279 lbs.  
**Fall Height:** Deck Height

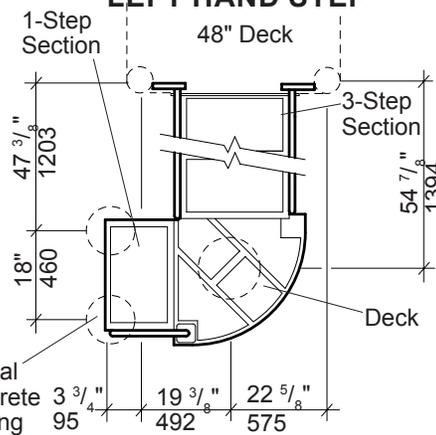
## Installation Instructions

- (Direct Bury)** Dig footings as shown. Refer to your Plan View/Footing Layout.
  - Attach the deck support to the transfer deck using 3/8" x 7/8" BHCS w/pin and 3/8" low crown cap nuts with 3/8" SAE flat washers. **NOTE: Make sure 3/8" rod on support is under support strap on deck as shown.** Refer to the Deck Support Attachment Detail.
  - Attach the 3-step section to the transfer deck 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.
  - Attach the 3-step section to the face of the mainstructure deck 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.
  - Attach the step support to the 1 step section 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 Step Support Attachment Detail.
  - Attach the 1-step section to the transfer deck 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.
  - Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
  - Attach infill panels to the face of the mainstructure deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
  - Attach infill panels to offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
  - Attach the handrails to the 3-step section using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.
  - Attach the handrails to the infill panels using 3/8" x 1 3/8" BHCS w/pin and 3/8" SAE flat washers.
  - Attach the lower rail to the transfer deck using 3/8" x 1 3/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" SAE flat washers.
  - Attach the lower rail to the 1-step section using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.
  - (Direct Bury)** With transfer deck and steps level and supports plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- (Surface Mount)** Mark holes for expansion anchors on concrete slab through support plates. Detach the module from the mainstructure and slide module aside, drill 3/8" x 3" deep holes on marks using hammer drill and 3/8" masonry bit. Reposition module over drilled holes and tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers. Reattach module to structure.
- Install 1/2" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
  - Install protective surfacing before users are allowed to play on the structure.

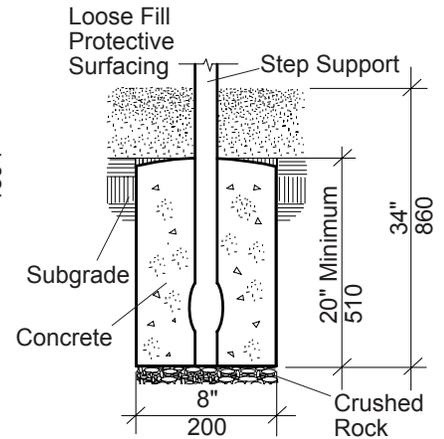
**PLAN VIEW  
FOOTING LAYOUT  
RIGHT HAND STEP**



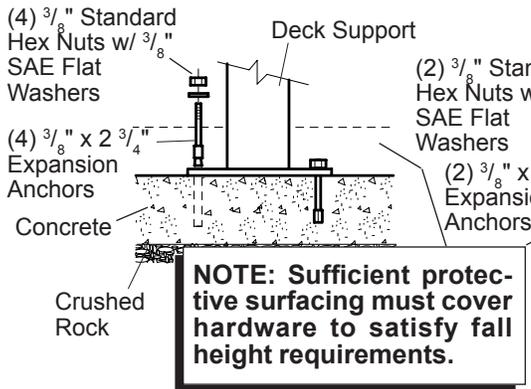
**PLAN VIEW  
FOOTING LAYOUT  
LEFT HAND STEP**



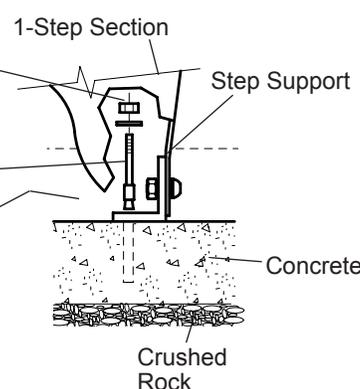
**DETAIL  
STEP SUPPORT BURY**



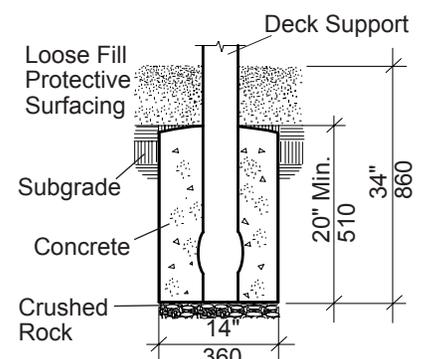
**DETAIL  
SURFACE MOUNT  
DECK SUPPORT**



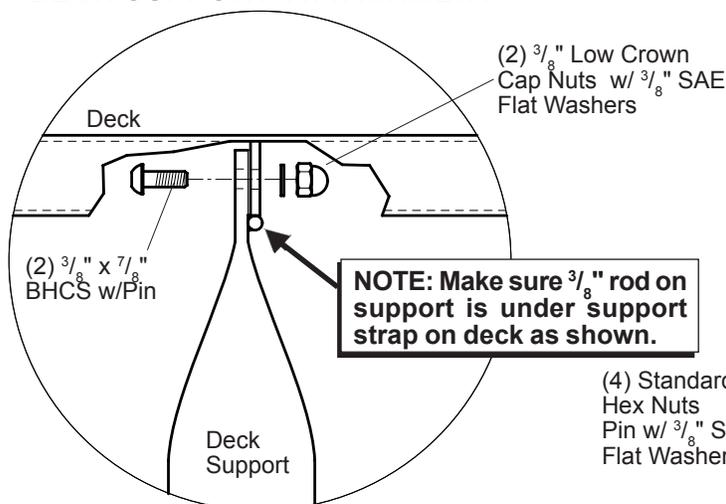
**DETAIL  
SURFACE MOUNT  
STEP SUPPORT**



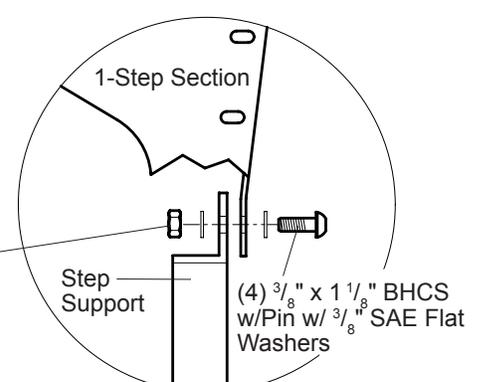
**DETAIL  
DECK SUPPORT BURY**



**DETAIL  
DECK SUPPORT ATTACHMENT**

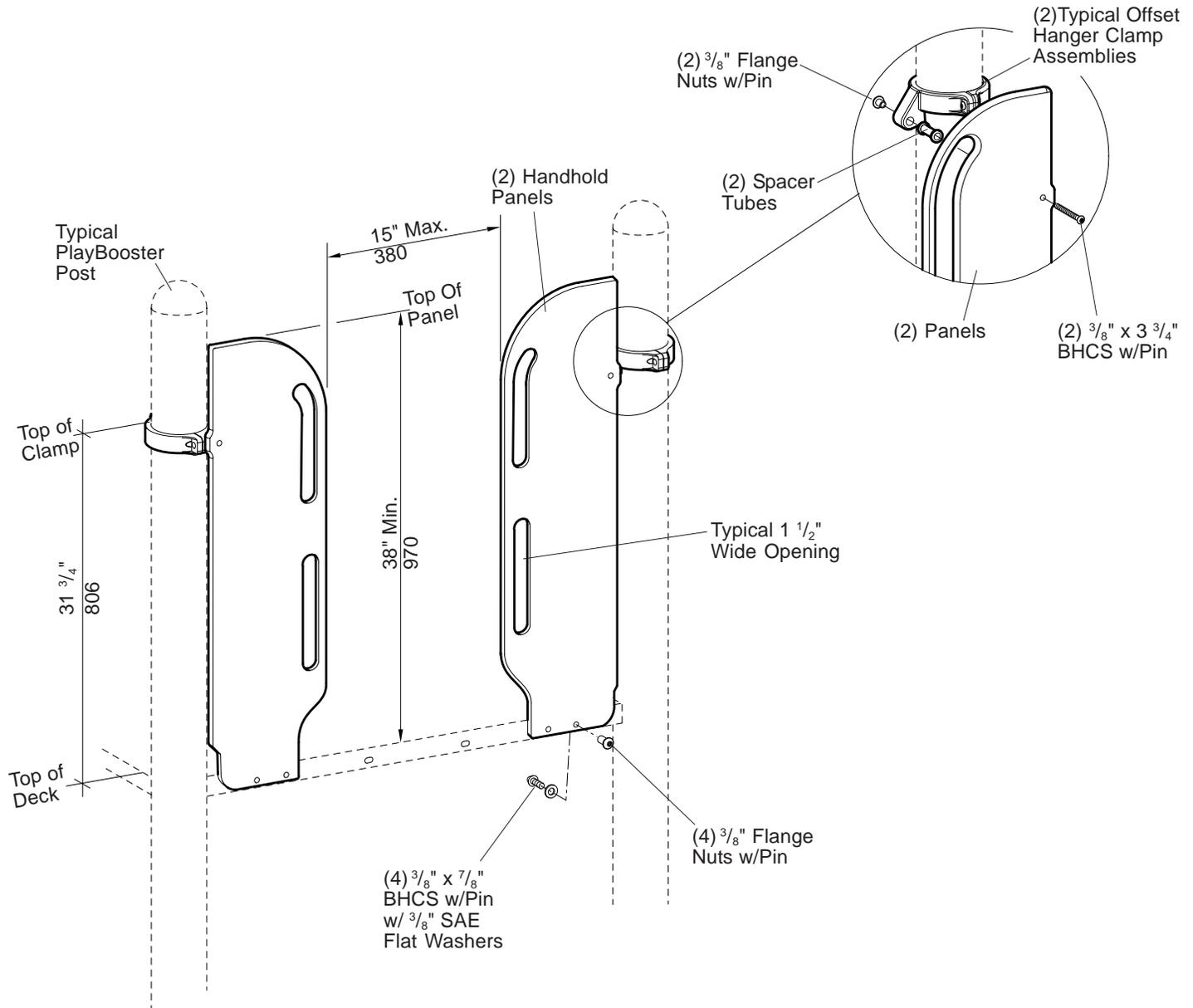


**DETAIL  
STEP SUPPORT ATTACHMENT**





**DETAIL  
PANEL ATTACHMENT**



**NOTE: One handhold panel is recommended for 8", 16" and 24" deck heights. For deck heights of 32" and greater, two handhold panels are required.**



# PlayBooster® 127953 Handhold Panels

## Parts List

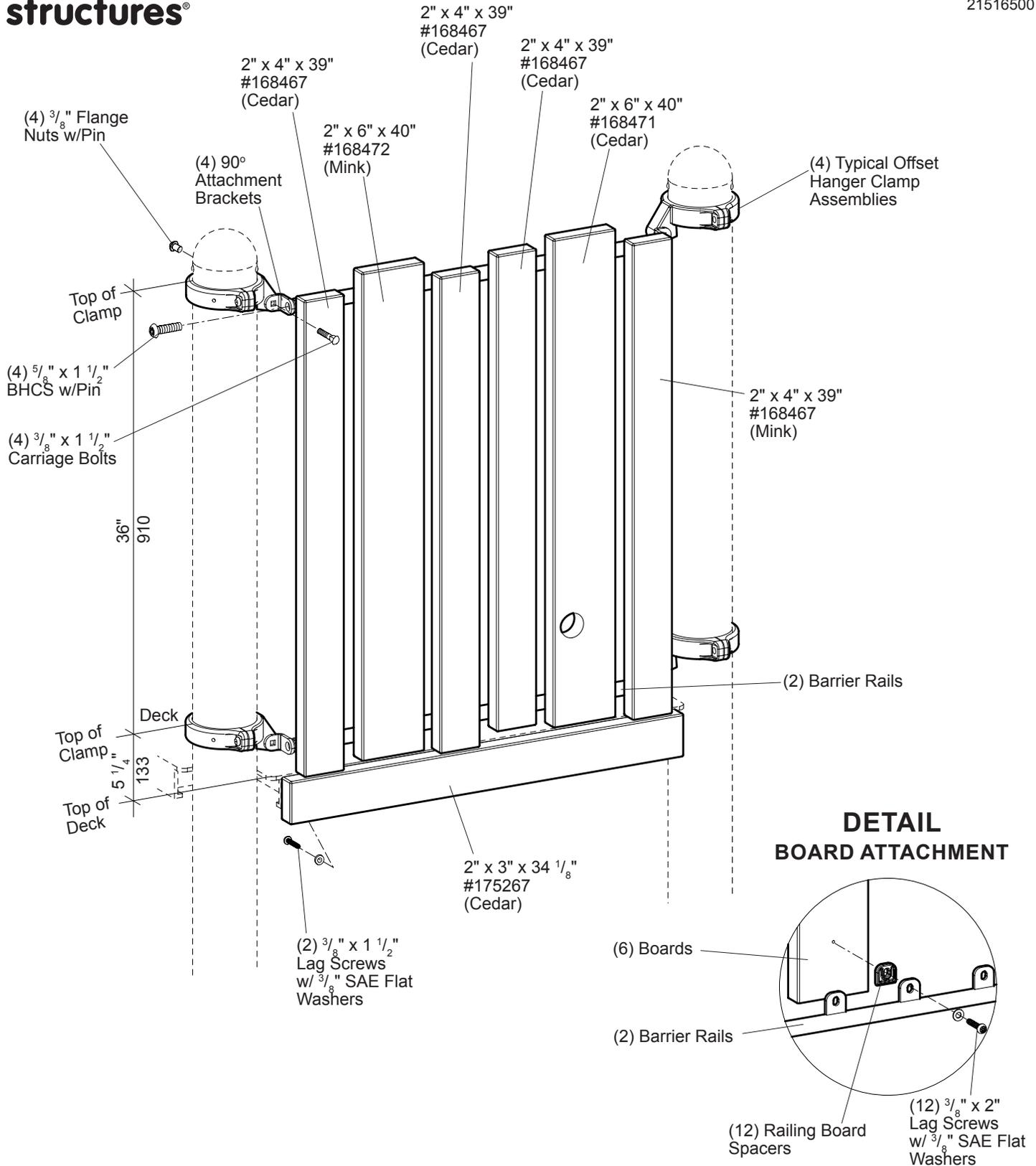
Part#	Description	Qty.
139563	Handhold Panel, Specify Color .....	2
105327	5" Half Clamp, Specify Color .....	2
113729	Offset Hanger Clamp, Specify Color .....	2
113468	Spacer Tube, Specify Color .....	2
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	2
<b>139861</b>	<b>Handhold Hardware Package .....</b>	<b>2</b>
100196	3/8" x 7/8" BHCS w/Pin, SST .....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100351	3/8" Tee Nut, SST .....	4
100353	3/8" Flange Nut w/Pin, SST .....	6
100365	3/8" SAE Flat Washer, SST .....	4
124460	3/8" x 3 3/4" BHCS w/Pin, SST .....	2

## Specifications

- Handhold Panel:** Solid color Permalene®, color specified.
- Spacer Tube:** Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16".  
Finish: ProShield®, color specified.
- Offset 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 Time:** Approx. 1/2 man hour
- Weight:** 22 lbs.

## Installation Instructions

- 1) Attach handhold panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
- 2) Attach offset hanger clamps to post 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.
- 3) Attach panels to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/Pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Install protective surfacing before users are allowed to play on the structure.



Play Naturally™

PlayBooster®

# 169319 Recycled Lumber Panel

## Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
174605	Barrier Rail, Tan	2
168467	2" x 4" x 39" Board, Cedar	3
168467	2" x 4" x 39" Board, Mink	1
168471	2" x 6" x 40" Board, Cedar	1
168472	2" x 6" x 40" Board, Mink	1
175267	2" x 3" x 34 1/8" Deck Face Board, Cedar	1
174606	90° Attachment Bracket, Tan	4
<b>215164</b>	<b>Lumber Hardware Package</b>	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100201	5/8" x 1 1/2" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	8
100365	3/8" SAE Flat Washer, SST	14
139039	3/8" x 2" Lag Screw, SST	12
168198	3/8" x 1 1/2" Lag Screw, SST	2
116017	3/8" x 1 1/2" Carriage Bolt w/Patch, SST	4
100353	3/8" Flange Nuts w/Pin, SST	4
207485	Railing Board Spacer, Tan	12

## Installation Instructions

- 1) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach the 90° attachment brackets to barrier rails, using 5/8" x 1 1/2" BHCS w/pin.
- 3) Attach the 90° attachment brackets to the offset hanger clamps using 3/8" x 1 1/2" carriage bolts and 3/8" flange nuts w/pin.
- 4) Line up pilot holes in barrier boards with spacers and barrier rail tabs, and attach using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- 5) Line up pilot holes in deck face board with slots in deck and attach, using 3/8" x 1 1/2" lag screws with 3/8" SAE flat washers.
- 6) Install protective surfacing before users are allowed to play on the structure.

## Specifications

**Poly Board:** Recycled high-density polyethylene, cedar or mink in color.

**Barrier Rail:** Weldment comprised of 1.125" (28,57 mm) O.D. 11 GA. (.120") (3,05 mm) steel tubing with 203 or 303 stainless steel inserts, with 5/8" (15,87 mm) internal threads and 1/4" (6,57 mm) HRPO steel plate. Finish: ProShield®, tan in color.

**90° Bracket:** Formed from 1/4" (6,57 mm) x 1 1/4" (32,12 mm) HRPO flat steel. Finish: ProShield, tan in color.

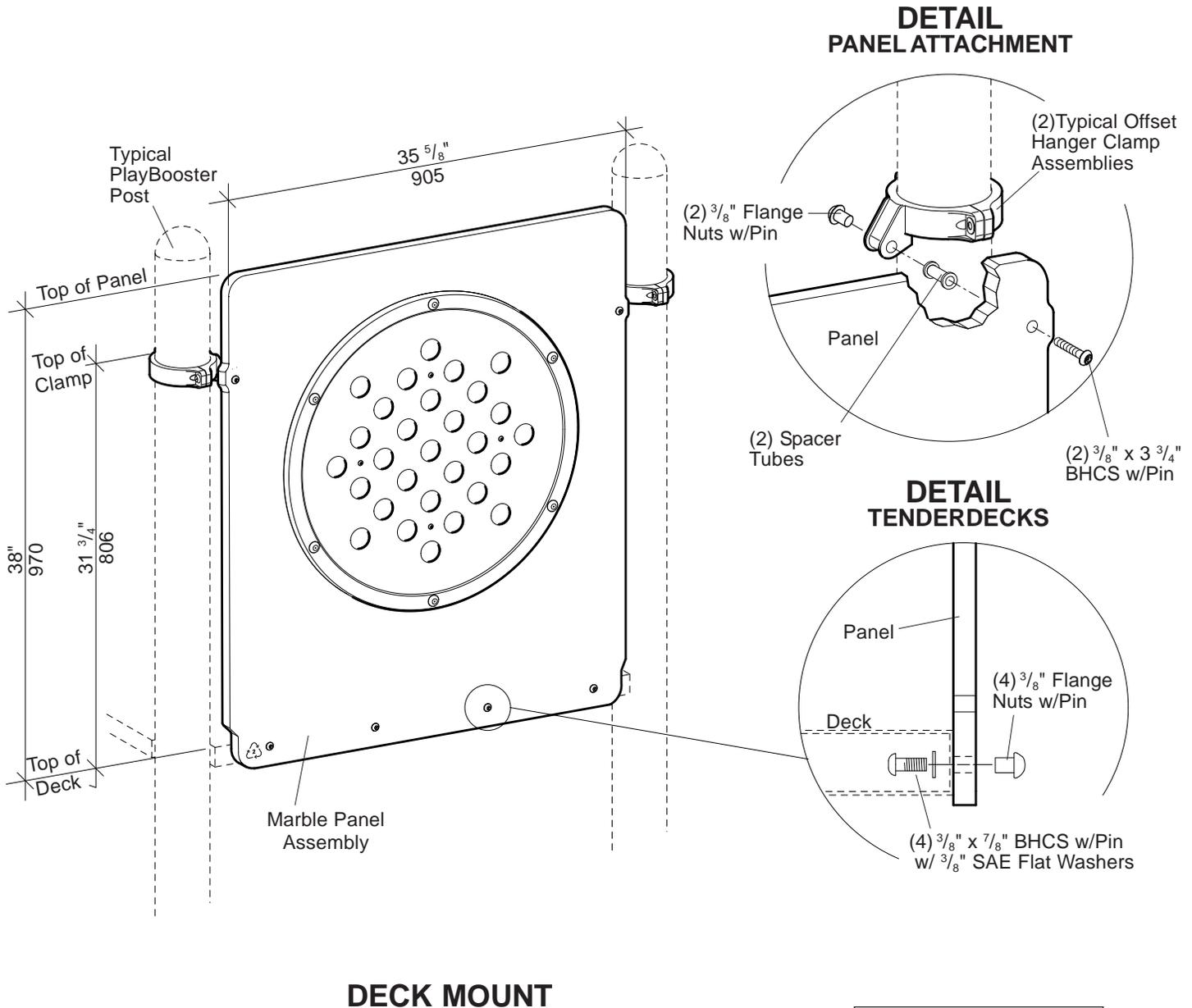
**Clamps:** Cast aluminum. Finish: ProShield, color specified.

**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 Time:** Approx. 1 1/4 man hours

**Weight:** 85 lbs.

**Fall Height:** Deck Height



**NOTE:**  
The Marble Panel is preassembled at the factory.

## Parts List

Part#	Description	Qty.
<b>ABOVE DECK</b>		
105327	5" Half Clamp, Specify Color .....	2
113729	Offset Hanger Clamp, Specify Color .....	2
113468	Spacer Tube, Specify Color .....	2
172698	Marble Panel Assembly, Specify Color .....	1
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	2
<b>124900 Tenderdeck Mounting Hardware Package .....</b>		
124460	3/8" x 3 3/4" BHCS w/Pin, SST .....	2
100196	3/8" x 7/8" BHCS w/Pin, SST .....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100351	3/8" Tee Nut, SST .....	4
100353	3/8" Flange Nut w/Pin, SST .....	6
100365	3/8" SAE Flat Washer, SST .....	4
<b>BELOW DECK</b>		
105327	5" Half Clamp, Specify Color .....	4
113729	Offset Hanger Clamp, Specify Color .....	4
113468	Spacer Tube, Specify Color .....	2
113464	Angled Panel Bracket, Specify Color .....	1
172698	Marble Panel Assembly, Specify Color .....	1
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	4
<b>124947 Below Deck Mounting Hardware Package .....</b>		
124460	3/8" x 3 3/4" BHCS w/Pin, SST .....	2
100195	3/8" x 5/8" BHCS w/Pin, SST .....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST .....	2
100351	3/8" Tee Nut, SST .....	8
100353	3/8" Flange Nut w/Pin, SST .....	6

## Specifications

**Marble Panel Assy.:** (Panels) Two color Permalene®, color specified. (Poly Panel) Fabricated from .236" thick clear polycarbonate. (Marbles) 2" Diameter glass.

**Angled Panel Brkt:** Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield®, color specified.

**Spacer Tube:** Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

**Offset 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 Time:** Above Deck Approx. 3/4 man hour  
Below Deck Approx. 1 man hour

**Weight:** Above Deck 64 lbs.  
Below Deck 70 lbs.

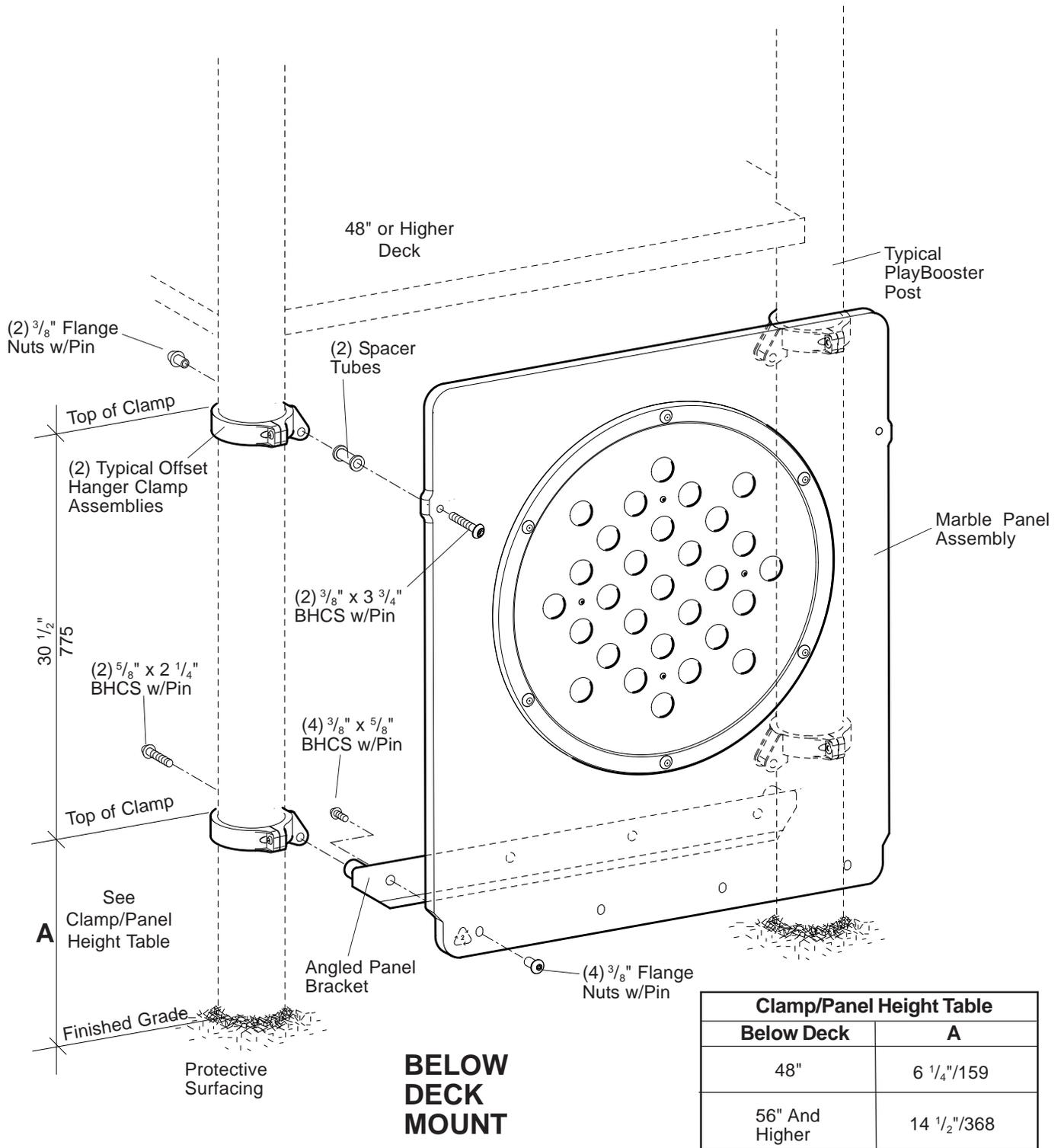
## Installation Instructions

### ABOVE DECK (See Sheet 1 of 2)

- 1) Attach panel to the face of the deck, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. See Detail.
- 2) Attach offset hanger clamp assemblies to posts at height shown, using 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.
- 3) Attach panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Install protective surfacing before users are allowed to play on the structure.

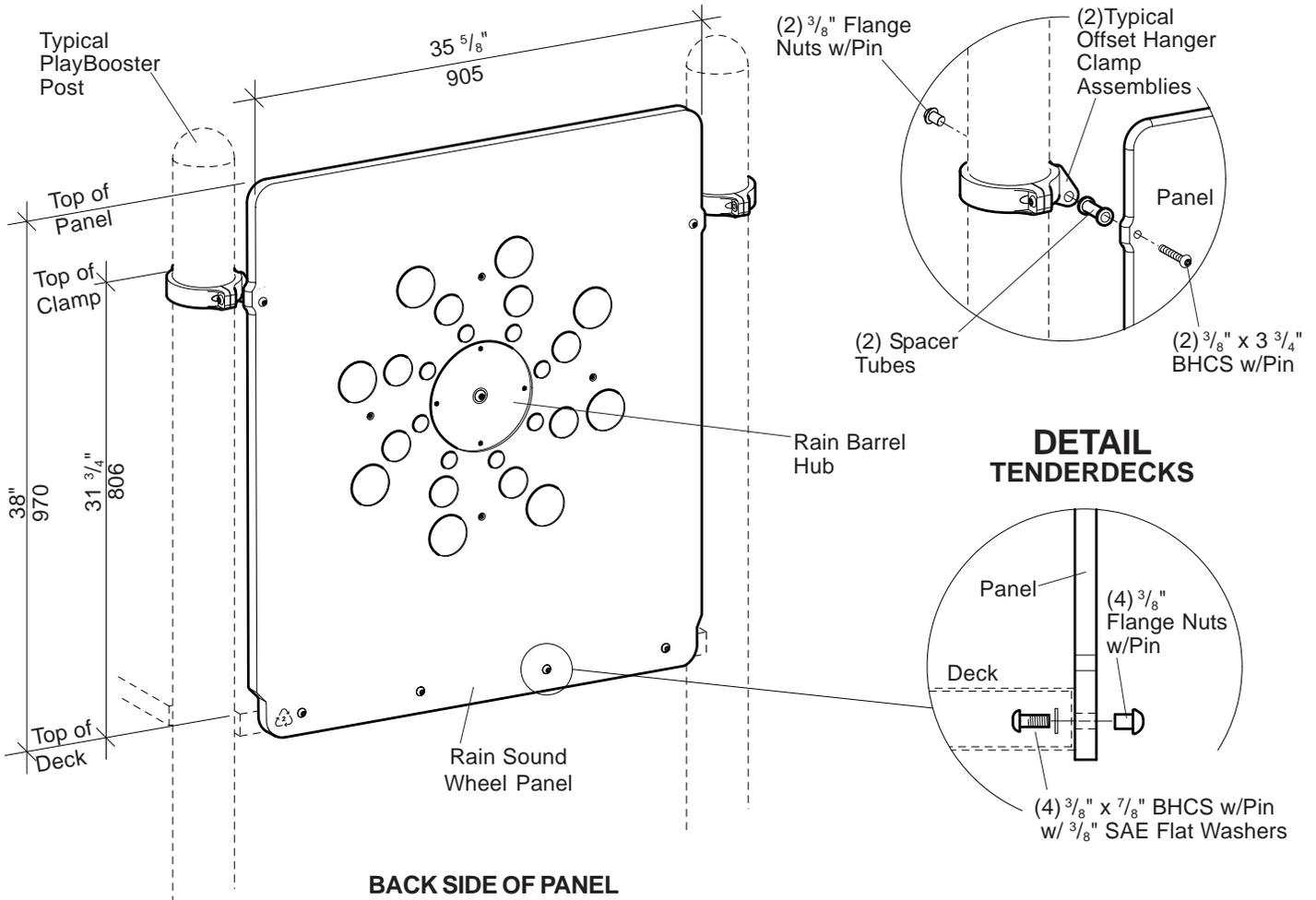
### BELOW DECK (See Sheet 2 of 2)

- 1) Attach offset hanger clamp assemblies to posts at height shown, using 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.
- 2) Attach angled panel bracket to bottom of panel, using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. See Below Deck Mount.
- 3) Attach angled panel bracket with panel to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 4) Attach top of panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Typical Attachment To Post Detail.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Assembly sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

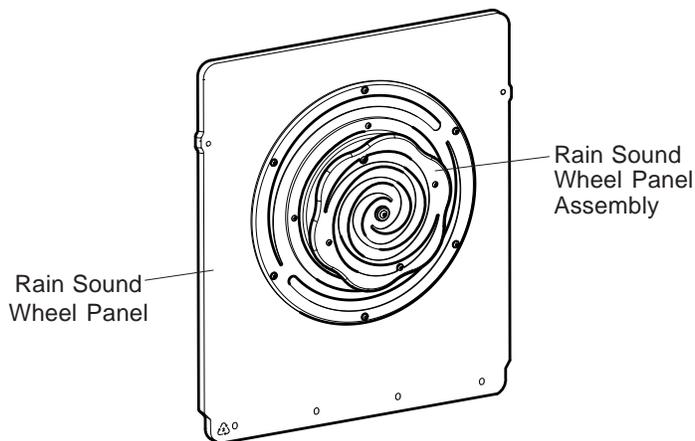




**DETAIL  
PANEL ATTACHMENT**

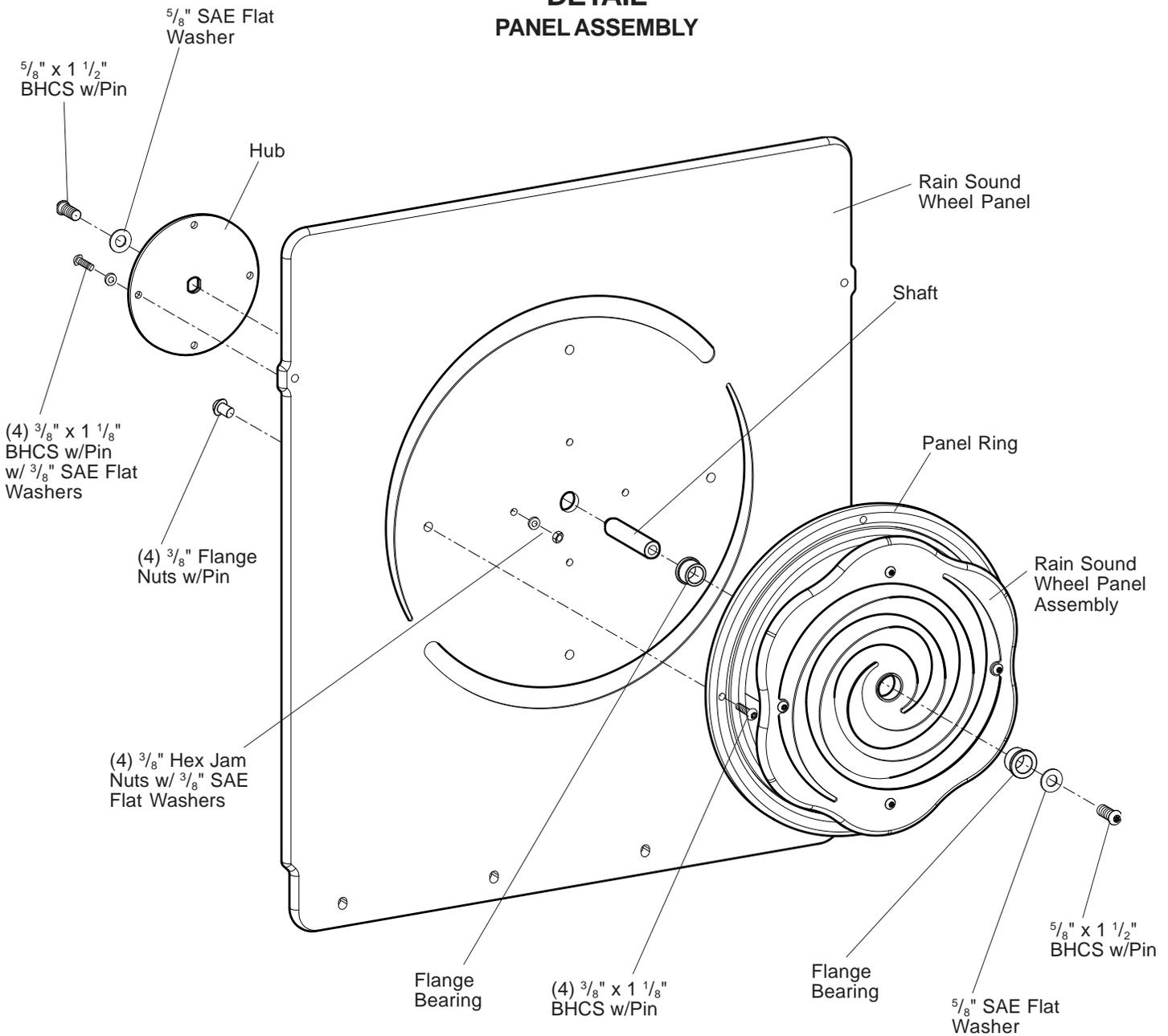


**BACK SIDE OF PANEL**

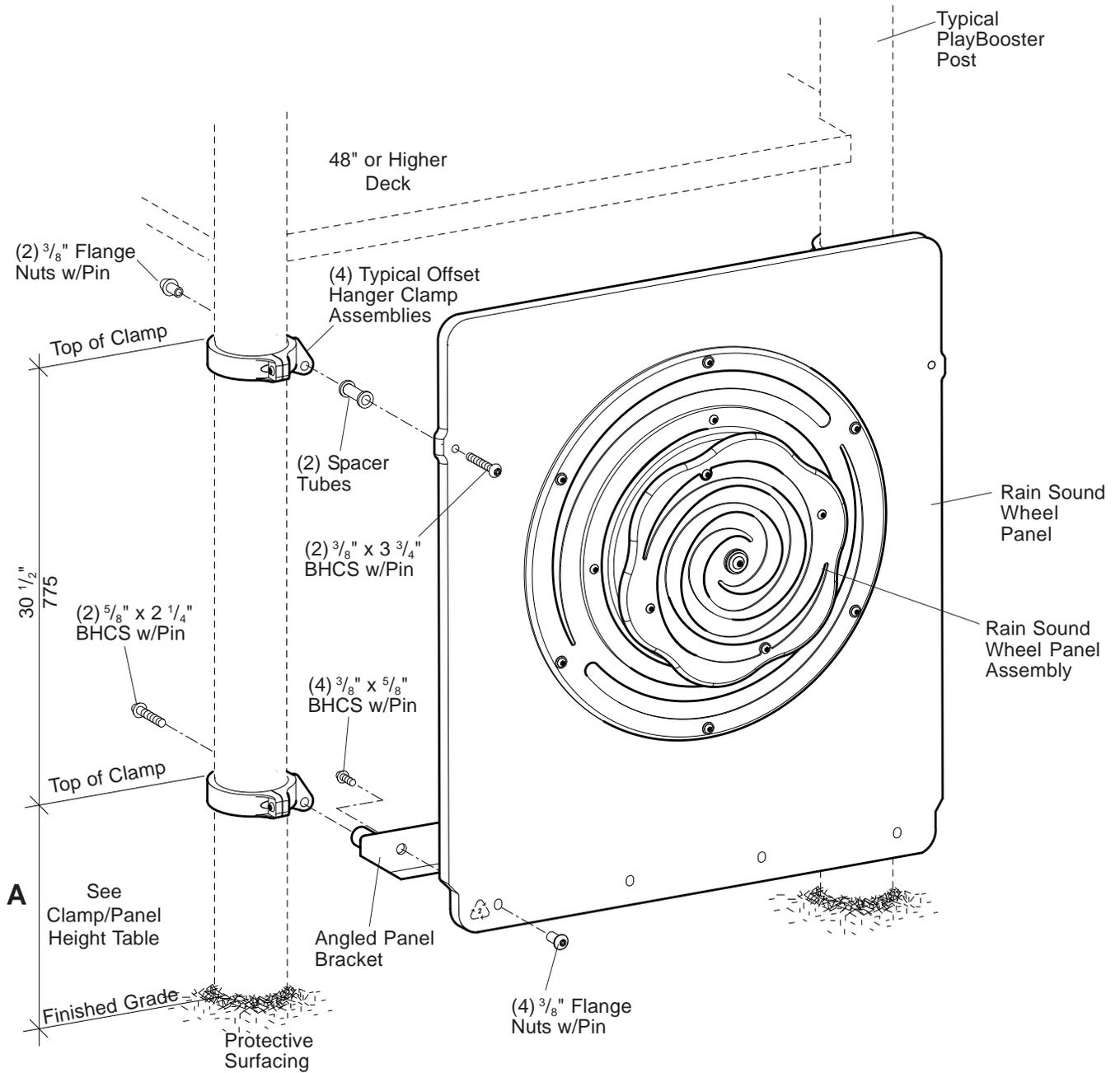


**DECK MOUNT**

**DETAIL**  
**PANEL ASSEMBLY**



**PlayBooster® 177718 Rain Sound Wheel Panel™**



**BELOW DECK MOUNT**

Clamp/Panel Height Table	
Below Deck	A
48"	6 1/4"/159
56" And Higher	14 1/2"/368



# PlayBooster® 177718 Rain Sound Wheel Panel™

## Parts List

Part#	Description	Qty.
<b>ABOVE DECK</b>		
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	2
105327	5" Half Clamp, Specify Color .....	2
113729	Offset Hanger Clamp, Specify Color .....	2
113468	Spacer Tube, Specify Color .....	2
177543	Rain Sound Wheel Panel Assy., Specify Color .....	1
178086	Hub, Specify Color .....	1
177544	Rain Sound Wheel Panel, Specify Color .....	1
<b>124900 Tenderdeck Mounting Hardware Package .....</b>		
124460	3/8" x 3 3/4" BHCS w/Pin, SST .....	2
100196	3/8" x 7/8" BHCS w/Pin, SST .....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100351	3/8" Tee Nut, SST .....	4
100353	3/8" Flange Nut w/Pin, SST .....	6
100365	3/8" SAE Flat Washer, SST .....	4
<b>178112 Rain Sound Wheel Panel Hardware Package ....</b>		
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	8
100201	5/8" x 1 1/2" BHCS w/Pin, SST .....	2
100353	3/8" Flange Nut w/Pin, SST .....	4
128296	3/8" Hex Jam Nut, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	8
129500	5/8" SAE Flat Washer, SST .....	2
176659	Flange Bearing FB-1622-8 .....	2
176782	Shaft .....	1
<b>BELOW DECK</b>		
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	4
105327	5" Half Clamp, Specify Color .....	4
113729	Offset Hanger Clamp, Specify Color .....	4
113468	Spacer Tube, Specify Color .....	2
113464	Angled Panel Bracket, Specify Color .....	1
177543	Rain Sound Wheel Panel Assy., Specify Color .....	1
178086	Hub, Specify Color .....	1
177544	Rain Sound Wheel Panel, Specify Color .....	1
<b>124947 Below Deck Mounting Hardware Package .....</b>		
124460	3/8" x 3 3/4" BHCS w/Pin, SST .....	2
100195	3/8" x 5/8" BHCS w/Pin, SST .....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST .....	2
100351	3/8" Tee Nut, SST .....	8
100353	3/8" Flange Nut w/Pin, SST .....	6
<b>178112 Rain Sound Wheel Panel Hardware Package ....</b>		
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	8
100201	5/8" x 1 1/2" BHCS w/Pin, SST .....	2
100353	3/8" Flange Nut w/Pin, SST .....	4
128296	3/8" Hex Jam Nut, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	8
129500	5/8" SAE Flat Washer, SST .....	2
176659	Flange Bearing FB-1622-8 .....	2
176782	Shaft .....	1

## Specifications

<b>Rain Sound Wheel Panel:</b>	Permalene® panel measures 35 5/8" (904,87 mm) wide x 41" (1041 mm), color specified.
<b>Angled Panel Brkt:</b>	Weldment comprised of .190" (4,82 mm) thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" (28,58 mm) O.D. x 1 1/2" (38,1 mm) long. Finish: ProShield®, color specified.
<b>Hub:</b>	Fabricated from 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified.
<b>Clamp:</b>	Cast aluminum. Finish: ProShield, color specified.
<b>Rain Sound Wheel Panel Assy.:</b>	Assembly comprised of (Permalene Panels), color specified. (Shaft) 1" (25 mm) diameter x 4 3/4" (120,65 mm) long stainless steel. (Inner & Outer Rings) 16 GA. (.059") (1,50 mm) HRPO sheet steel. Finish: ProShield, color specified. (Brackets) 16 GA. (.059") (1,50 mm) HRPO sheet steel. Finish: Zinc plate with clear chromate finish. (Spacer) 3/4" (19,05 mm) diameter x 2 1/8" (53,98 mm) long stainless steel. (Flange Oilite Bearing) 1.625" (41,28 mm) diameter x 1.000" (25 mm) long.
<b>Spacer Tube:</b>	Made from 6061-T6 aluminum 7/8" (22,22 mm) O.D. x 1 11/16" (42,85 mm) long. Finish: ProShield, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Above Deck Approx. 3/4 man hour Below Deck Approx. 1 man hour
<b>Weight:</b>	Above Deck 78 lbs. Below Deck 84 lbs.

## Installation Instructions

### ABOVE DECK (See Sheet 1 of 2)

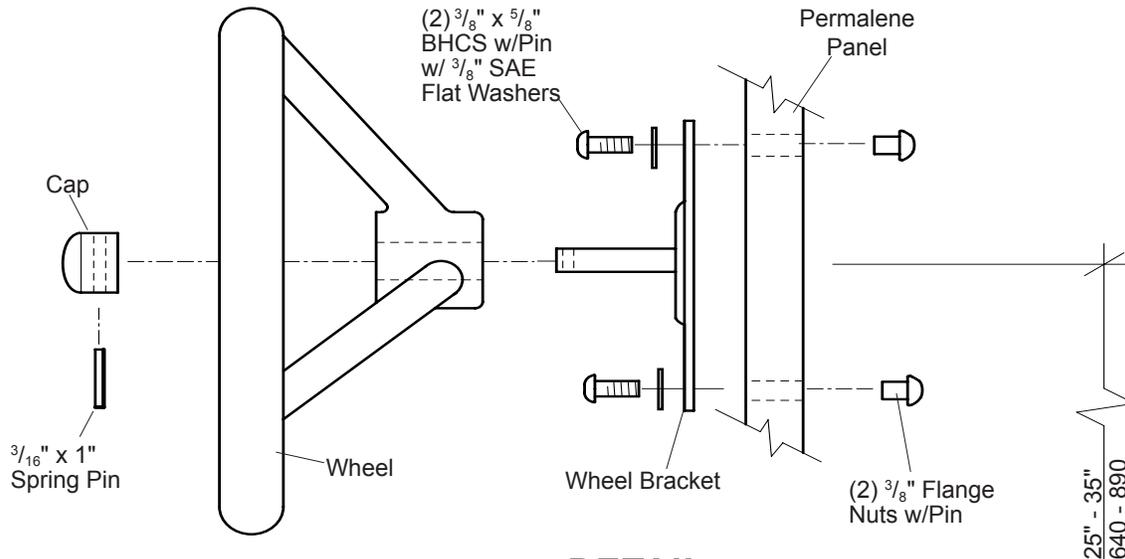
- 1) Attach hub to rain sound wheel panel, using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " SAE flat washers and  $\frac{3}{8}$ " hex jam nuts with  $\frac{3}{8}$ " SAE flat washers. Refer to Panel Assembly Detail.
- 2) Attach shaft to hub, using  $\frac{5}{8}$ " x  $1\frac{1}{2}$ " BHCS w/pin and  $\frac{5}{8}$ " SAE flat washer.
- 3) Attach panel ring to rain sound wheel panel, using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " flange nuts w/pin.
- 4) Insert flange bearings into front and back of rain sound wheel panel assembly. Slide rain sound wheel panel assembly onto shaft. Fasten assembly to shaft, using  $\frac{5}{8}$ " x  $1\frac{1}{2}$ " BHCS w/pin and  $\frac{5}{8}$ " SAE flat washer.
- 5) Attach panel to the face of the deck, using  $\frac{3}{8}$ " x  $\frac{7}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " SAE flat washers and  $\frac{3}{8}$ " flange nuts w/pin. See Detail.
- 6) Attach offset hanger clamp assemblies to posts at height shown, using 5" half clamps and  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 7) Attach panel to offset hanger clamp assemblies, using  $\frac{3}{8}$ " x  $3\frac{3}{4}$ " BHCS w/pin, spacer tubes and  $\frac{3}{8}$ " flange nuts w/pin. See Panel Attachment Detail.
- 8) Install protective surfacing before users are allowed to play on the structure.

### BELOW DECK (See Sheet 2 of 2)

- 1) Attach hub to rain sound wheel panel, using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " SAE flat washers and  $\frac{3}{8}$ " hex jam nuts with  $\frac{3}{8}$ " SAE flat washers. Refer to Panel Assembly Detail.
- 2) Attach shaft to hub, using  $\frac{5}{8}$ " x  $1\frac{1}{2}$ " BHCS w/pin and  $\frac{5}{8}$ " SAE flat washer.
- 3) Attach panel ring to rain sound wheel panel, using  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " flange nuts w/pin.
- 4) Insert flange bearings into front and back of rain sound wheel panel assembly. Slide rain sound wheel panel assembly onto shaft. Fasten assembly to shaft, using  $\frac{5}{8}$ " x  $1\frac{1}{2}$ " BHCS w/pin and  $\frac{5}{8}$ " SAE flat washer.
- 5) Attach offset hanger clamp assemblies to posts at height shown, using 5" half clamps and  $\frac{3}{8}$ " x  $1\frac{1}{8}$ " BHCS w/pin with  $\frac{3}{8}$ " tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 6) Attach angled panel bracket to bottom of panel, using  $\frac{3}{8}$ " x  $\frac{5}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " flange nuts w/pin. See Panel Attachment Detail.
- 7) Attach angled panel bracket with panel to offset hanger clamp assemblies, using  $\frac{5}{8}$ " x  $2\frac{1}{4}$ " BHCS w/pin. See Below Deck Mount.
- 8) Attach top of panel to offset hanger clamp assemblies, using  $\frac{3}{8}$ " x  $3\frac{3}{4}$ " BHCS w/pin, spacer tubes and  $\frac{3}{8}$ " flange nuts w/pin. See Typical Attachment To Post Detail.
- 9) Install  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 10) Install protective surfacing before users are allowed to play on the structure.

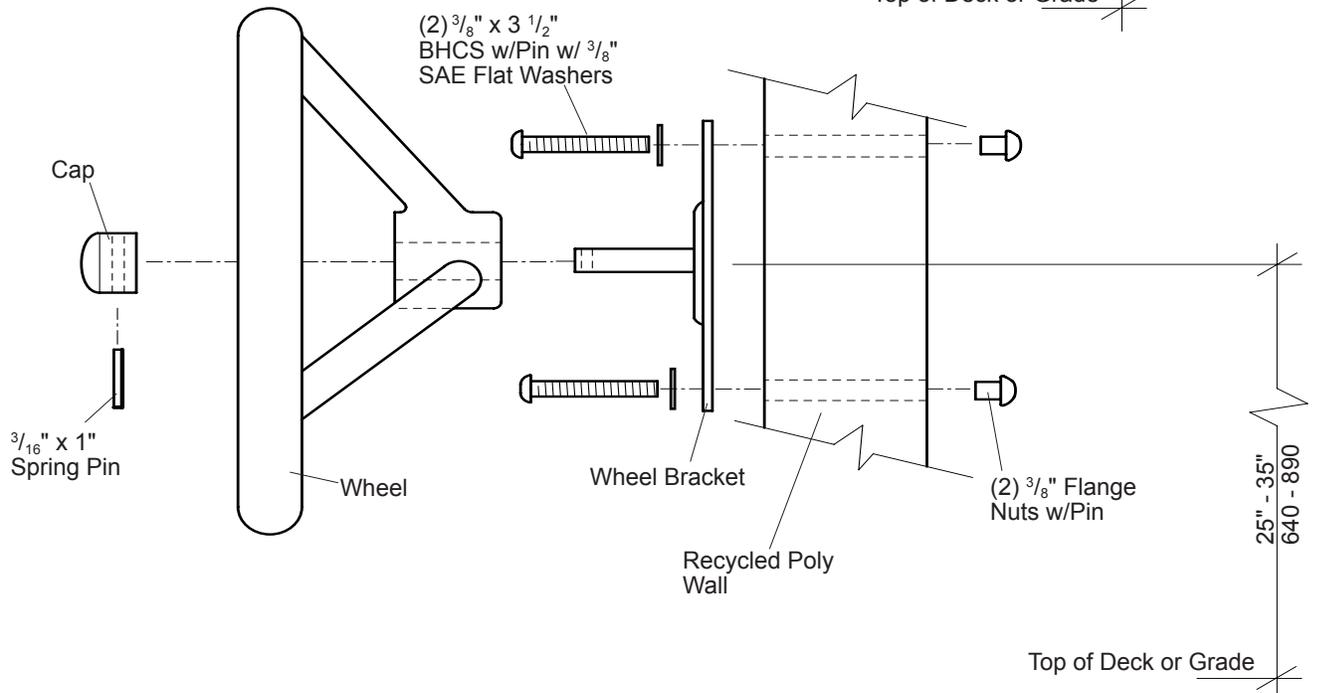


**DETAIL**  
**WHEEL ASSEMBLY**  
**PERMALENE PANEL**



Refer to Wheel Assembly Details on back of sheet 2.

**DETAIL**  
**WHEEL ASSEMBLY**  
**RECYCLED POLY WALL**



## Parts List

Part#	Description	Qty.
108432	Wheel, Specify Color .....	1
127242	Steering Wheel Bracket, Specify Color.....	1
127249	Steering Wheel Infill Bracket, Specify Color.....	1
135131	Wheel Block, Tan .....	1
127207	Wheel Clamp, Specify Color.....	1
128573	Steering Infill Panel, Specify Color.....	1
<b>223232</b>	<b>Permalene Panel Hardware Package .....</b>	<b>1</b>
100195	3/8" x 5/8" BHCS w/Pin, SST .....	2
100353	3/8" Flange Nut w/Pin, SST.....	2
118452	3/16" x 1" Spring Pin, SST .....	1
148623	Cap, White .....	1
100365	3/8" SAE Flat Washer, SST.....	2
<b>223229</b>	<b>Recycled Poly Wall Hardware Package .....</b>	<b>1</b>
100200	3/8" x 3 1/2" BHCS w/Pin, SST .....	2
100353	3/8" Flange Nut w/Pin, SST.....	2
118452	3/16" x 1" Spring Pin, SST .....	1
148623	Cap, White.....	1
100365	3/8" SAE Flat Washer, SST.....	2
<b>223581</b>	<b>Wire/Pipe Barrier Hardware Package .....</b>	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST .....	2
100353	3/8" Flange Nut w/Pin, SST.....	2
118452	3/16" x 1" Spring Pin, SST .....	1
148623	Cap, White.....	1
100365	3/8" SAE Flat Washer, SST.....	2

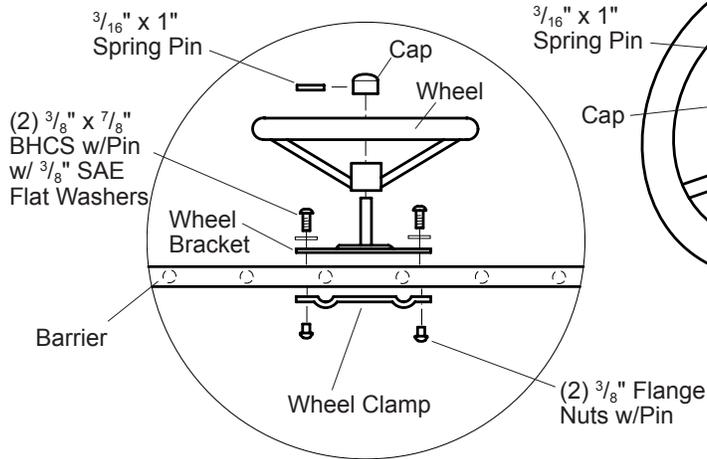
## Specifications

<b>Wheel:</b>	12" diameter cast A356 aluminum alloy. Finish: TenderTuff™, color specified.
<b>Wheel Bracket:</b>	Weldment comprised of formed 3/16" plate and 5/8" O.D. stainless steel shaft. Finish: ProShield®, color specified.
<b>Wheel Block:</b>	Permalene®, tan in color.
<b>Wheel Clamp:</b>	Formed from 3/16" x 2" HRPO zinc-plated. Finish: ProShield, color specified.
<b>Steering Infill Panel:</b>	Two color Permalene.
<b>Steering Wheel Cap:</b>	Aluminum alloy 6061-T6. Finish: ProShield, white in color.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	Approx. 1/4 man hour
<b>Actual Size:</b>	12"
<b>Weight:</b>	Steering Wheel - 6 lbs. Steering Wheel w/Infill - 8 lbs.

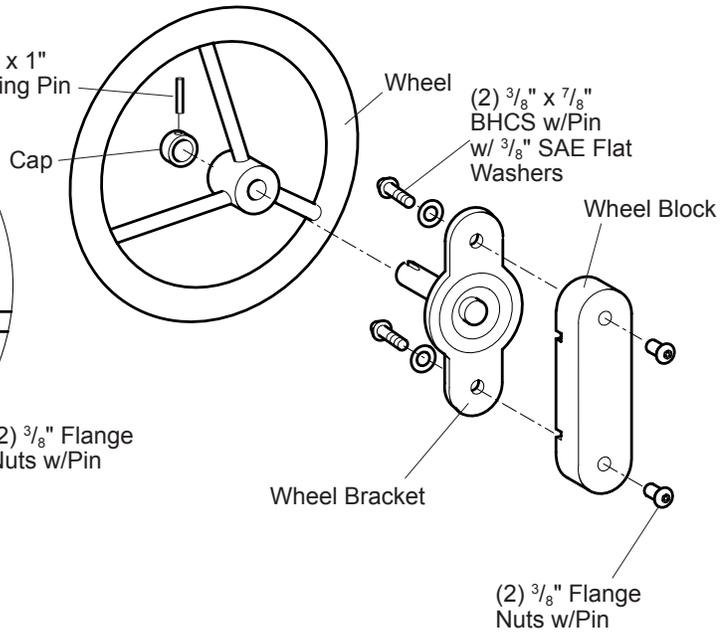
## Installation Instructions

- 1) Assemble as shown. Refer to the appropriate detail. **NOTE:** Drill (2) 9/16" holes using the steering wheel bracket as a guide, in the desired location for recycled poly wall.
- 2) Install protective surfacing before users are allowed to play on the structure.

**DETAIL  
WHEEL ASSEMBLY FOR  
PIPE BARRIER ONLY**

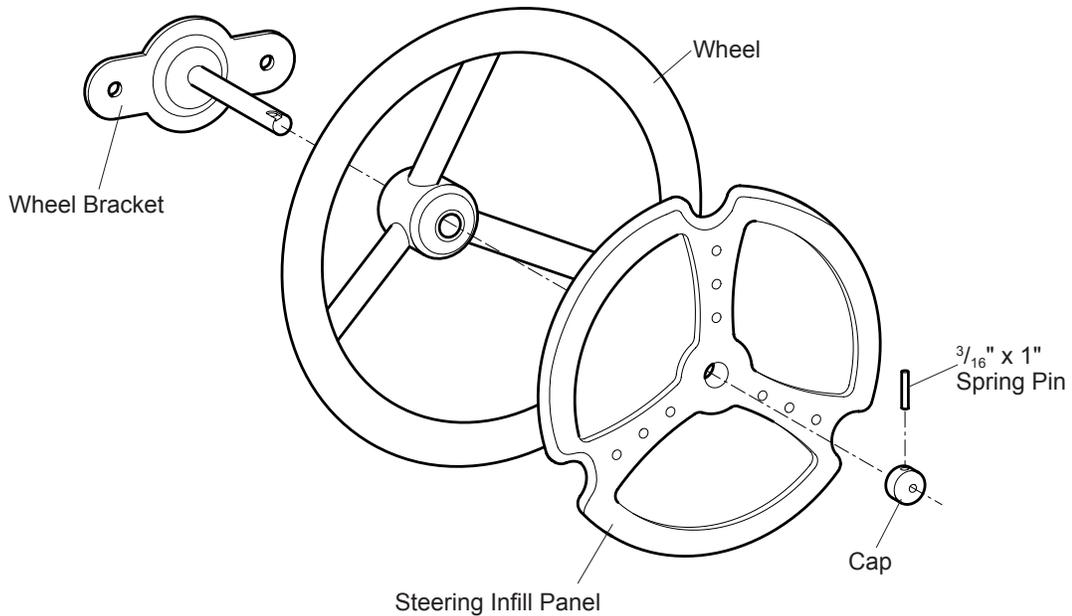


**DETAIL  
WHEEL ASSEMBLY FOR  
WIRE BARRIER ONLY**

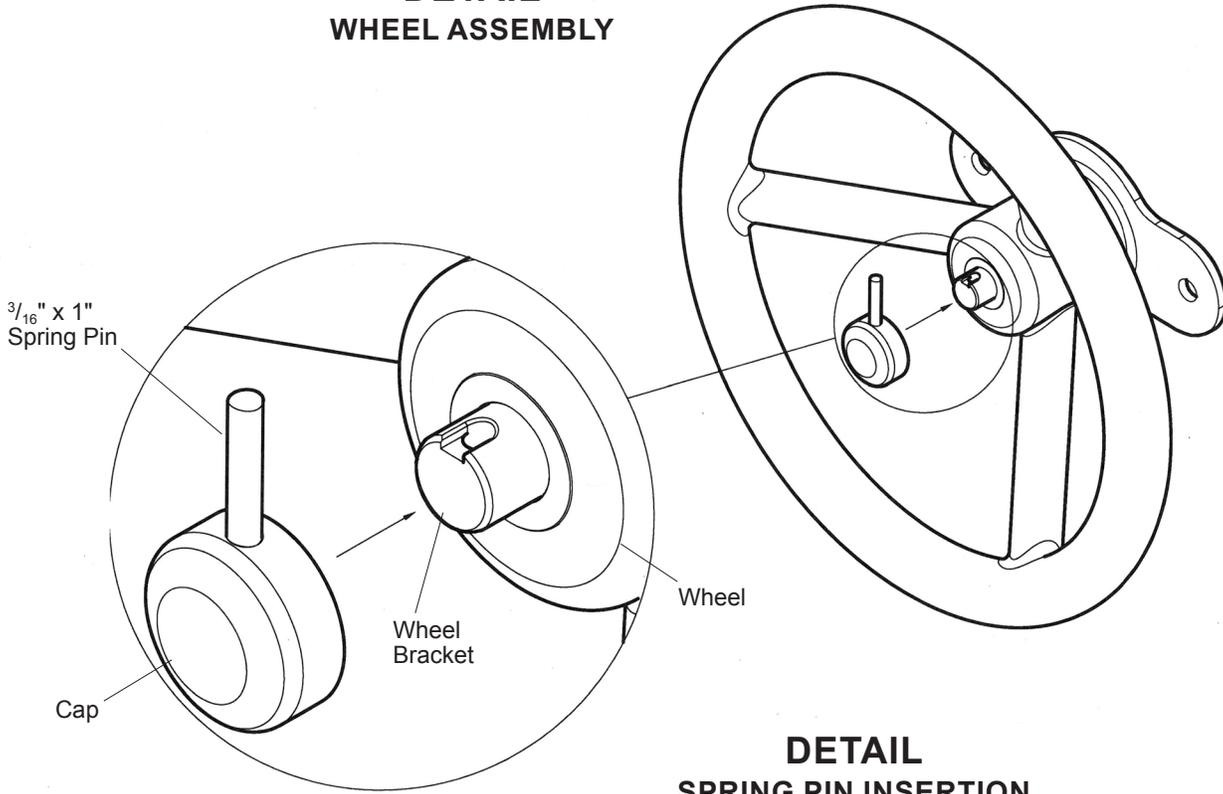


**DETAIL  
WHEEL ASSEMBLY  
STEERING INFILL PANEL**

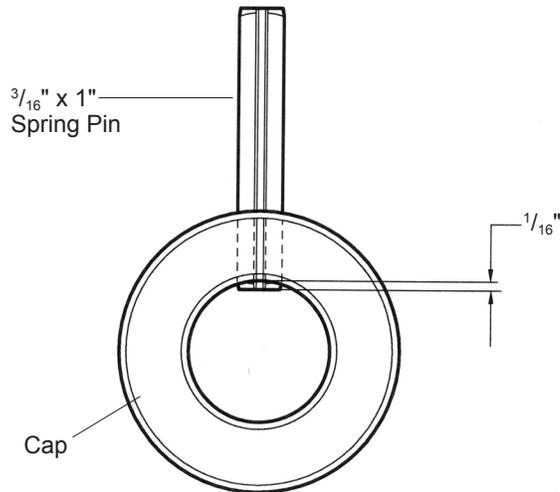
Refer to Wheel Assembly  
Details on back of sheet 2.



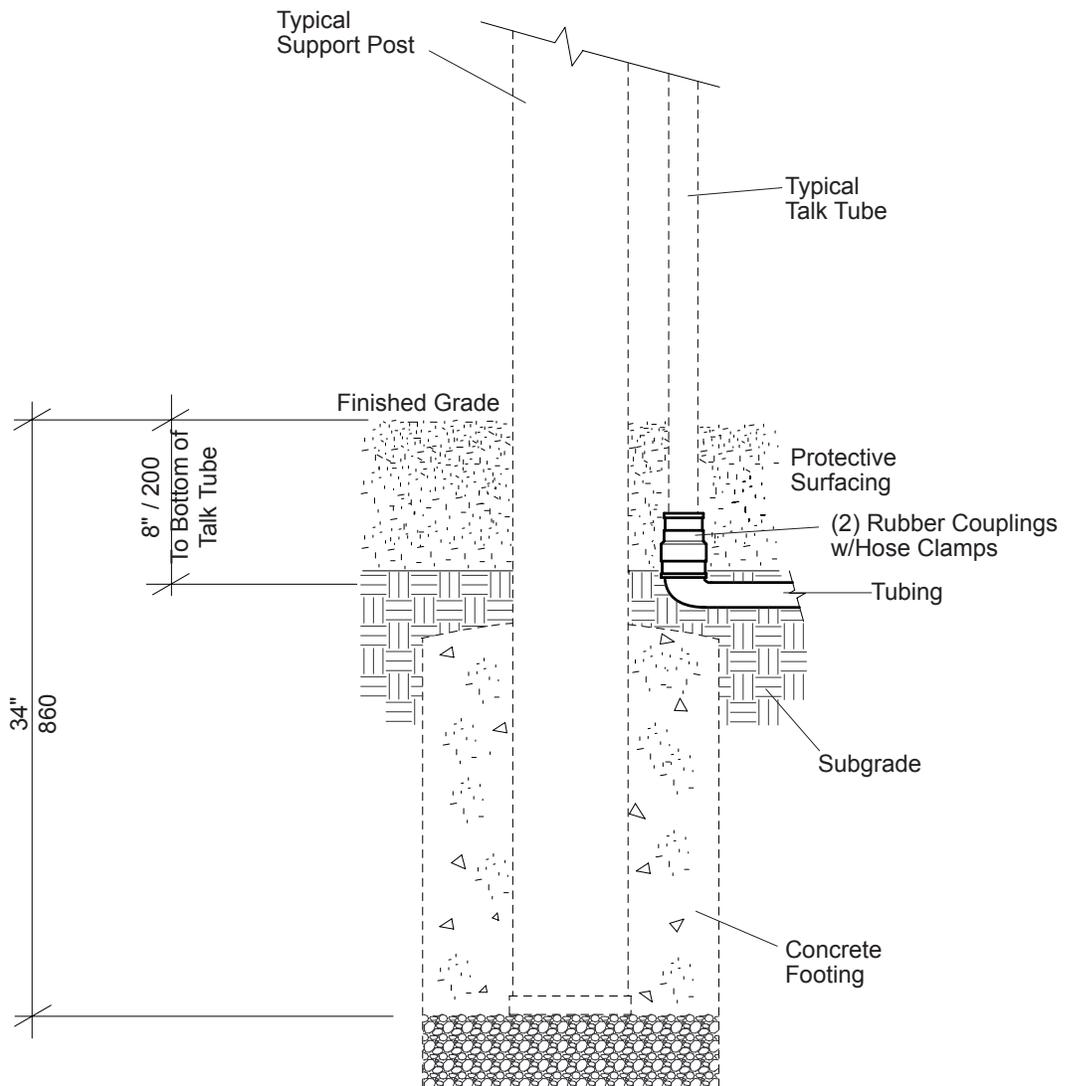
**DETAIL  
 WHEEL ASSEMBLY**



**DETAIL  
 SPRING PIN INSERTION  
 (CAP BACK VIEW)**



**NOTE:** To assist in the alignment of the cap to the wheel bracket shaft, tap spring pin through cap approximately 1/16". Orient spring pin to groove on wheel bracket shaft. Slide cap in place and tap spring pin through cap and shaft until flush.





# PB/PS 111362 Talk Tube Tubing Kit

## Parts List

Part#	Description	Qty
173612	1.75" O.D. Plastic Tube.....	50 Ft.
<b>173622-00</b>	<b>Hardware Package</b> .....	1
173611-00	Rubber Coupling w/SST Hose Clamps .....	2

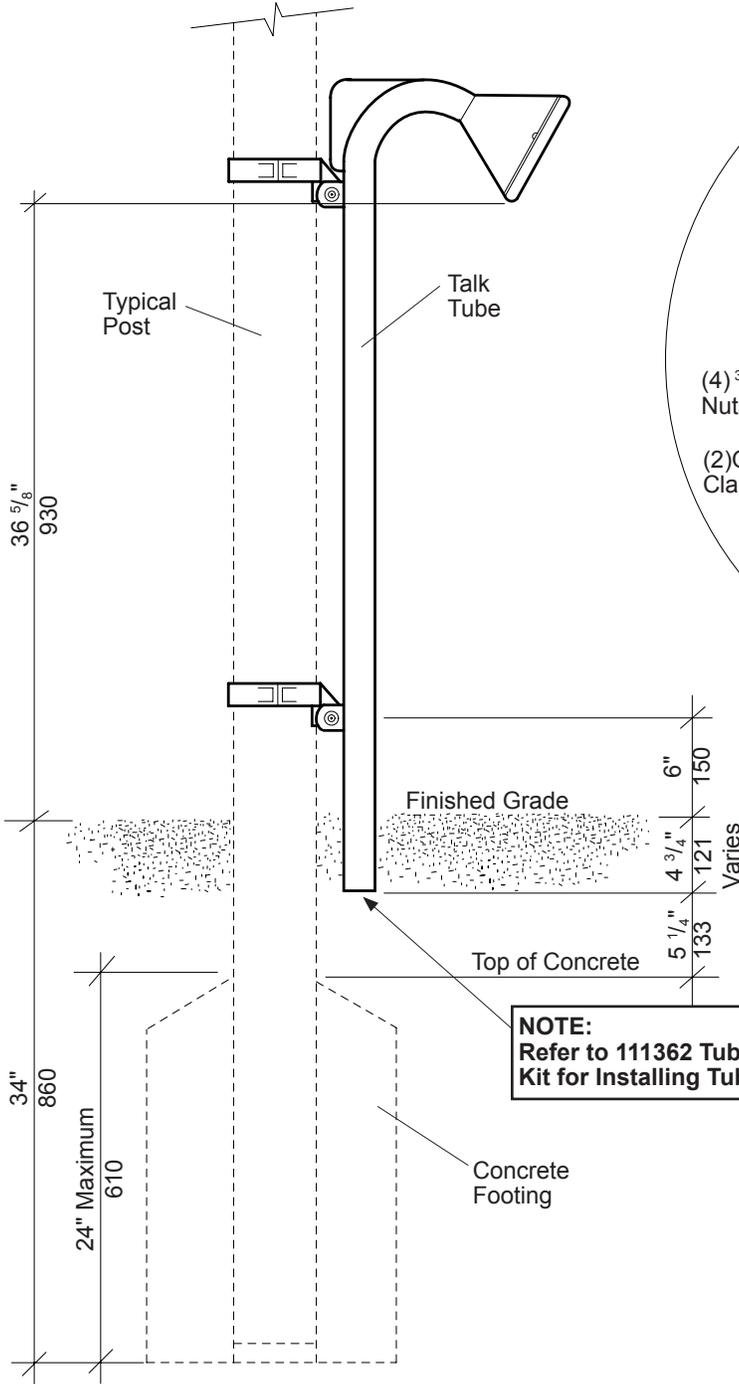
## Specifications

- Talk Tube Hose:** Made from HDPE conduit.
- 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. 1-3 man hours
- Weight:** 14 lbs.

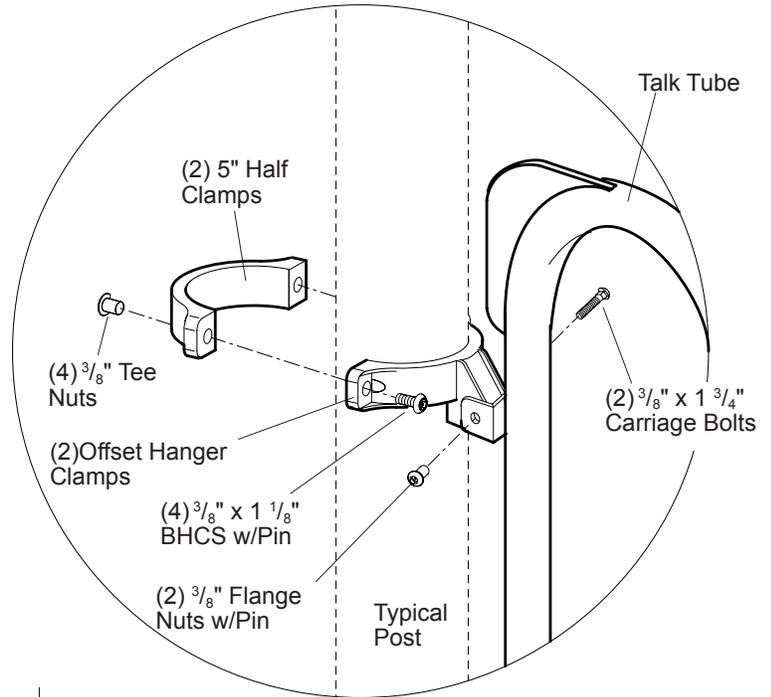
## Installation Instructions

- 1) Dig a trench into subgrade between the two footings for placement of plastic tubing.
- 2) Cut plastic tubing to correct length for your installation, lay plastic tubing flat in trench.
- 3) Connect plastic tubing to talk tubes with rubber couplings with hose clamps, as shown.
- 4) Backfill trench to top of subgrade.
- 5) Install protective surfacing before users are allowed to play on the structure.

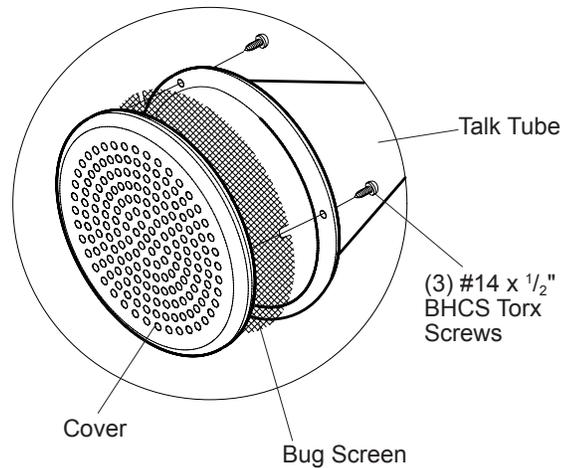
**SECTION / ELEVATION**



**DETAIL ATTACHMENT TO POST**



**DETAIL COVER ATTACHMENT**





# PlayBooster® 111363 Talk Tubes, Ground Level

## Parts List

Part#	Description	Qty.
146344	Talk Tube, Specify Color.....	1
105327	5" Half Clamp, Specify Color .....	2
113729	Offset Hanger Clamp, Specify Color .....	2
<b>121372</b>	<b>Hardware Package</b> .....	1
100148	3/8" x 1 3/4" Carriage Bolt, SST .....	2
100353	3/8" Flange Nut w/Pin, SST .....	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100351	3/8" Tee Nut, SST.....	4
<b>146168</b>	<b>Talk Tube Cover Hardware Package</b> .....	1
129671	#14 x 1/2" BHCS Torx, SST .....	3
145134	Talk Tube Cover, Tan.....	1
127463	Bit Hex TPP T-27 (Torx) .....	1
146528	Bug Screen .....	1

## Specifications

**Talk Tube:** Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") and 3/16" HRPO bracket. Finish: ProShield®, color specified.

**Talk Tube Cover:** Solid color Permalene®, Tan in color.

**Bug Screen:** 18 x 16 Weave .011 Ga. charcoal fiberglass screen.

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

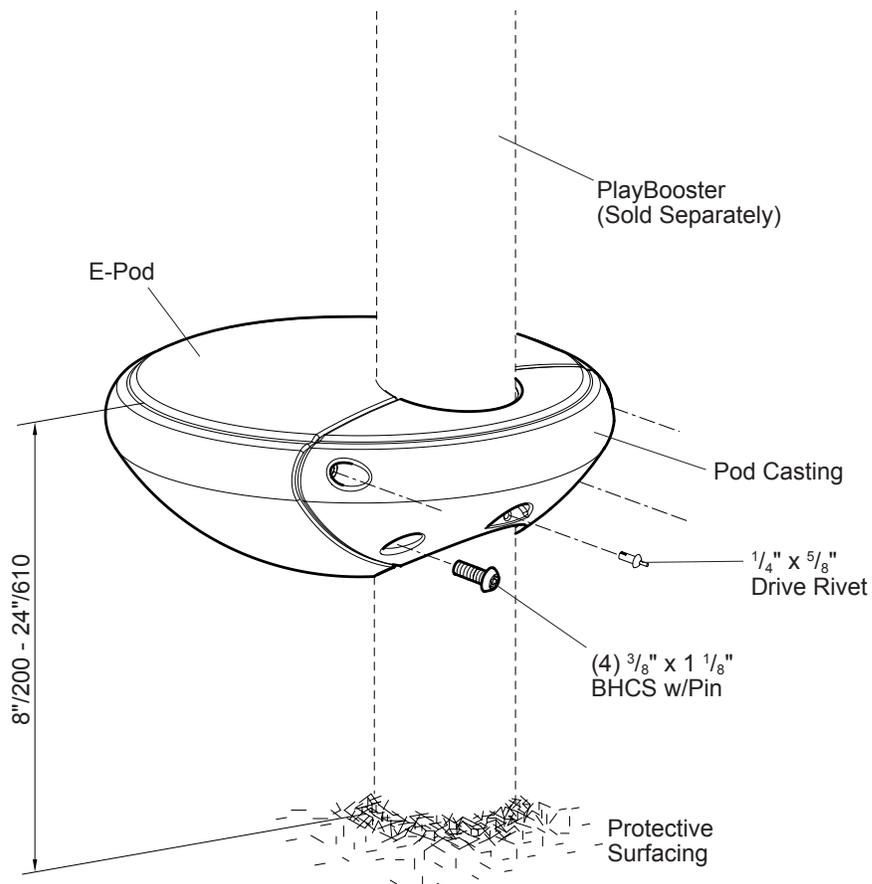
**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**Installation Time:** Approx. 1/2 man hour per talk tube

**Weight:** 18 lbs.

## Installation Instructions

- 1) Determine placement of talk tubes, refer to your plan drawing. Maximum distance apart is 40 feet.
- 2) Dig a trench into subgrade between the two footings for placement of plastic tubing.
- 3) Fasten offset hanger clamps to talk tubes using 3/8" x 1 3/4" carriage bolt and 3/8" flange nut w/pin.
- 4) Attach talk tube cover and bug screen to talk tube using #14 x 1/2" torx screws. Refer to the Cover Attachment Detail.
- 5) **Refer to 111362 tubing kit** for connecting tubing.
- 6) Fasten talk tubes to support posts at height shown using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Lay plastic tubing flat in trench.
- 7) Backfill trench to top of subgrade.
- 8) Install protective surfacing before users are allowed to play on the structure.





# PlayBooster® 166809 E-pod® Step

## Parts List

Part#	Description	Qty.
154461	E-Pod, Specify Color.....	1
156806	Pod Casting, Specify Color .....	1
<b>156968</b>	<b>Pod Hardware Package</b> .....	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100610	1/4" x 5/8" Drive Rivet, AL/SST .....	1

## Specifications

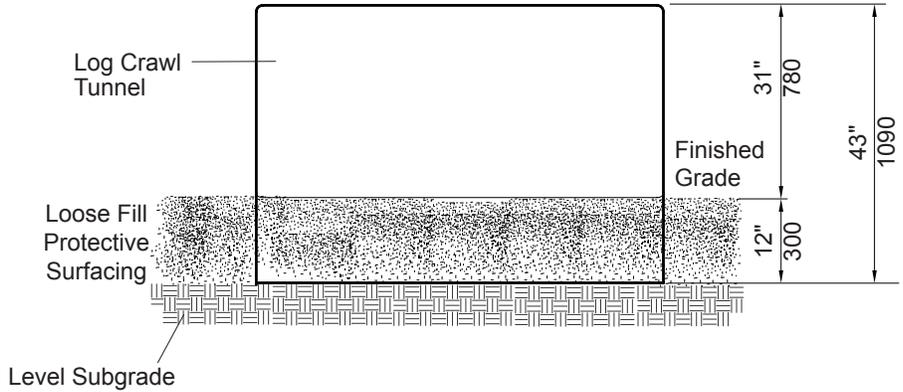
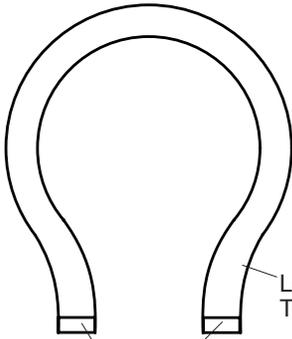
- E-Pod:** Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
- Pod Casting:** Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield®, color specified.
- Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- Installation Time:** Approx. 1/4 man hour
- Weight:** 11 lbs.
- Fall Height:** Pod Height

## Installation Instructions

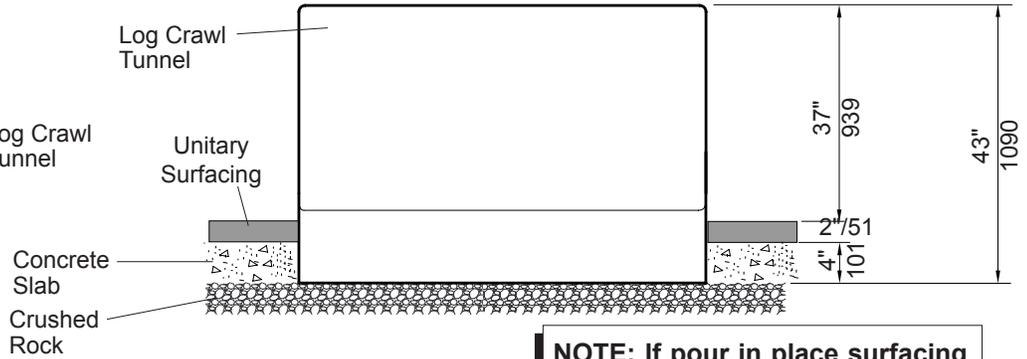
- 1) Attach e-pod and pod casting to post as shown, using 3/8" x 1 1/8" BHCS w/pin.
- 2) Drill through hole in pod casting and into post with a 1/4" or "F" (only) drill bit. Insert 1/4" x 5/8" rivet in hole and hammer rivet pin in until it is flush with head.
- 3) Install protective surfacing before users are allowed to play on the structure.

**Loose Fill Protective Surfacing**

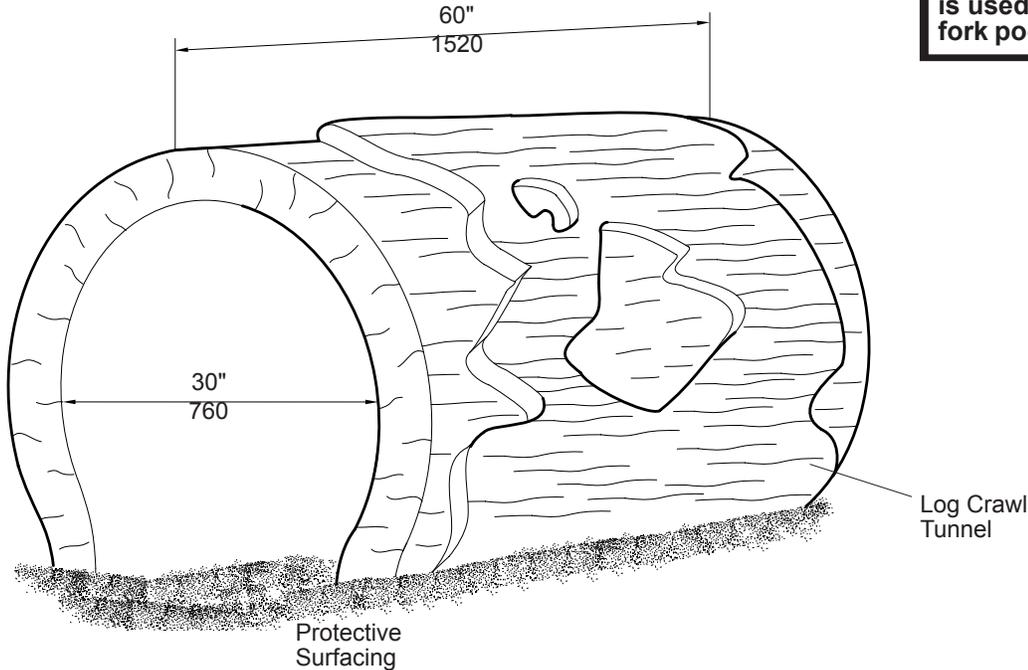
**DETAIL  
END VIEW**



**Unitary Surfacing**



**NOTE: If pour in place surfacing is used, blend surfacing to cover fork pockets.**



**Play Naturally™**

**More Fun**

**173594 Log Crawl Tunnel**

## Parts List

Part#	Description	Qty.
175710	Log Crawl Tunnel.....	1

## Specifications

**Log Crawl Tunnel Assembly:** Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,29 mm-2,54 mm) wall galvanized steel tubing, <sup>3</sup>/<sub>16</sub>" HRPO steel plate and 7" x 3" x <sup>3</sup>/<sub>16</sub>" (178 mm x 76 mm x 4,75 mm) wall rectangular tube. **(Log Crawl Tunnel assembled)** Glass reinforced wet cast solid pour concrete product. Finish: Latex paint made for concrete, natural colors.

**Installation Time:** Approx. 1/4 man hour

**Weight:** 2000 lbs.

**Min. Use Zone:** 6' (1830 mm)

**Actual Size:** Log measures 60" long x 43" high (1520 mm x 1090 mm high)

**Fall Height:** 41" (1040 mm) Max.

## Installation Instructions

1) The log crawl tunnel must be installed over an area of firm stable soil.

**Warning: Never crawl under any part of The Log Crawl Tunnel especially when it is only supported by a forklift.**

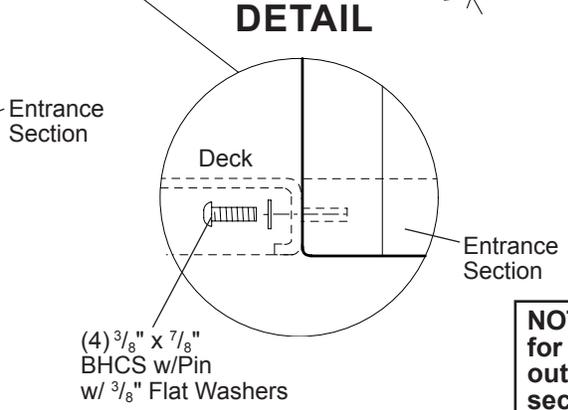
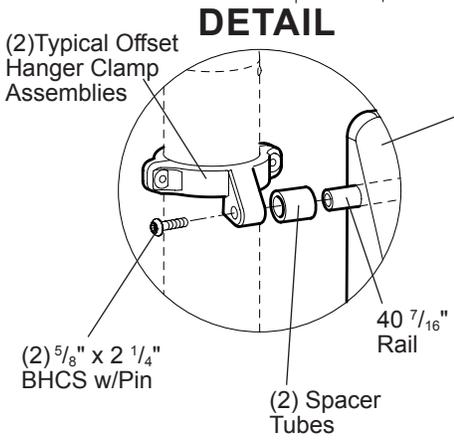
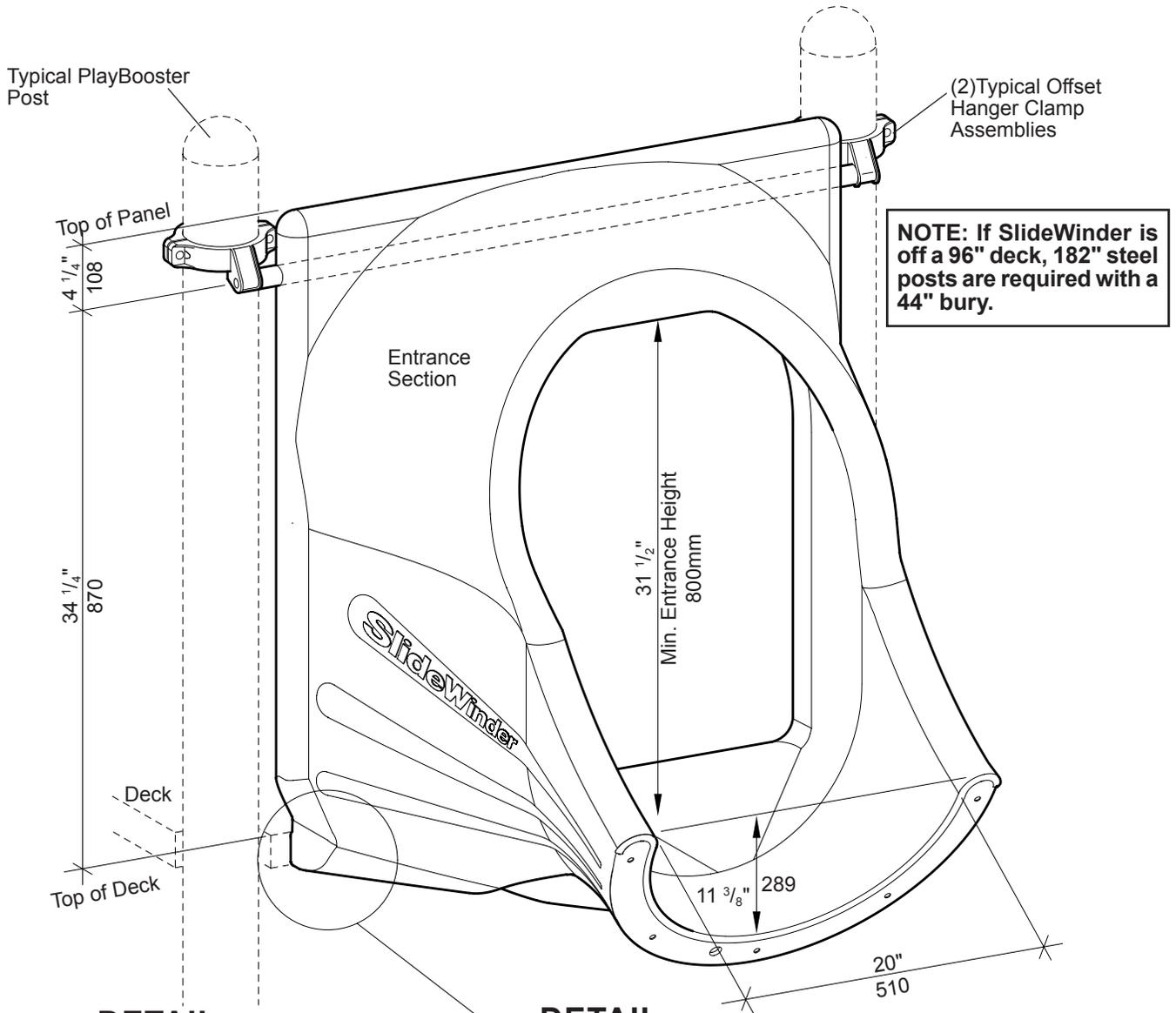
2) To unload the log crawl tunnel, a "Lull" type material handler with at least an 4,000 lb. capacity is recommended. Maximum fork extension size is 2 1/2" high x 6 1/2" wide with no maximum length. **NOTE: At least 2 people are recommended for the log crawl tunnel installation. One person to operate the material handling equipment and one person to spot for the operator.**

3) The log crawl tunnel should be placed on firm stable soil. Pick up the log crawl tunnel by inserting the material handling forks into the forklift pockets. Be very careful to keep the log crawl tunnel level to the ground when raising or lowering. Do not contact the concrete face of the log crawl tunnel with material handler forks, chipping can occur.

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

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

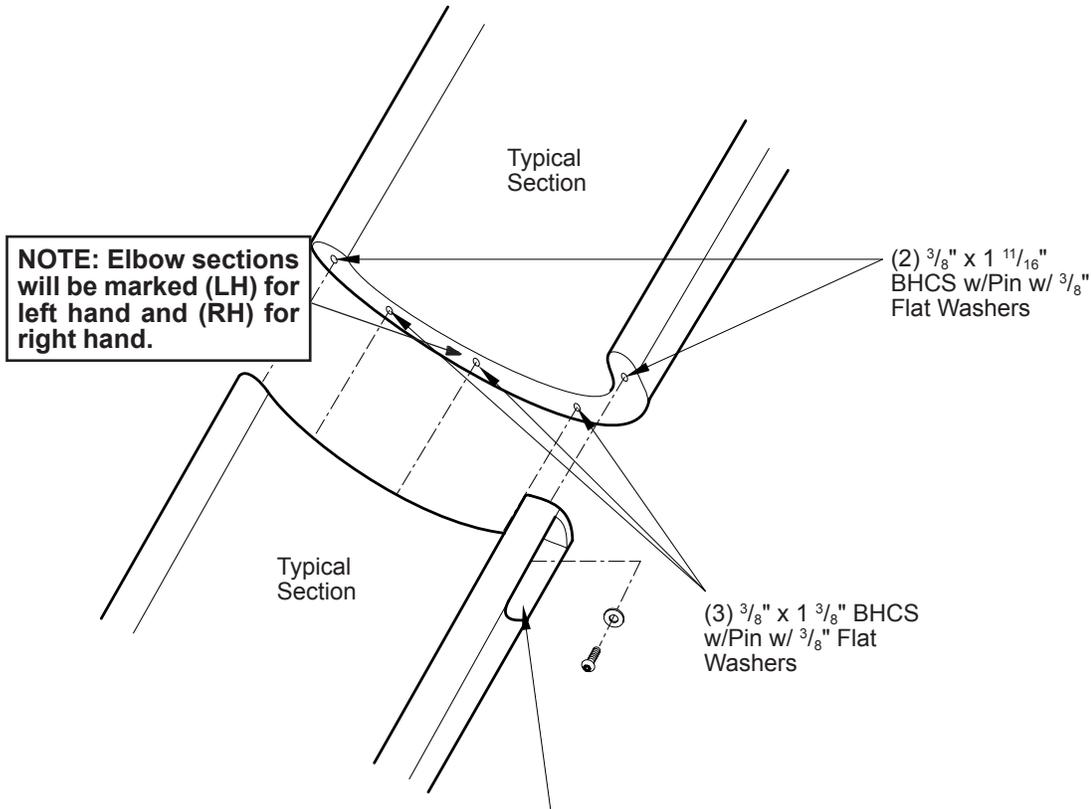
**ENTRANCE SECTION ATTACHMENT**



**NOTE: Refer to your plan drawing for location of footings and layout and direction of SlideWinder sections.**

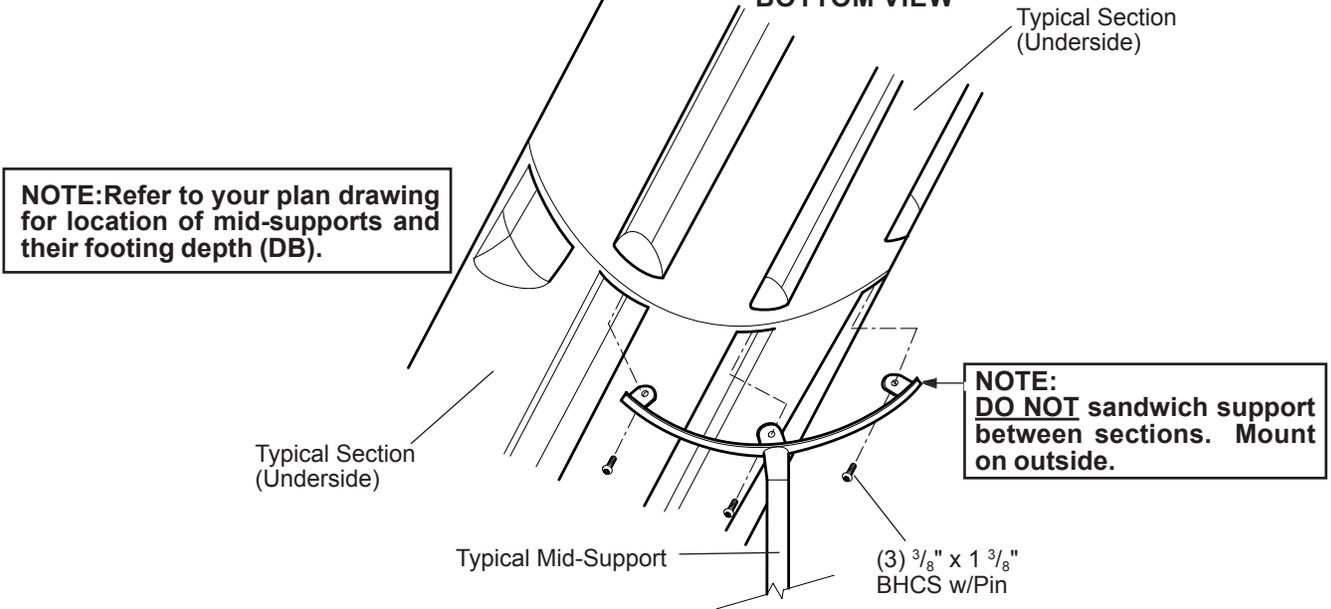
**PlayBooster® 124863 SlideWinder2, 32"-96"**

**DETAIL  
TYPICAL SLIDE SECTION**

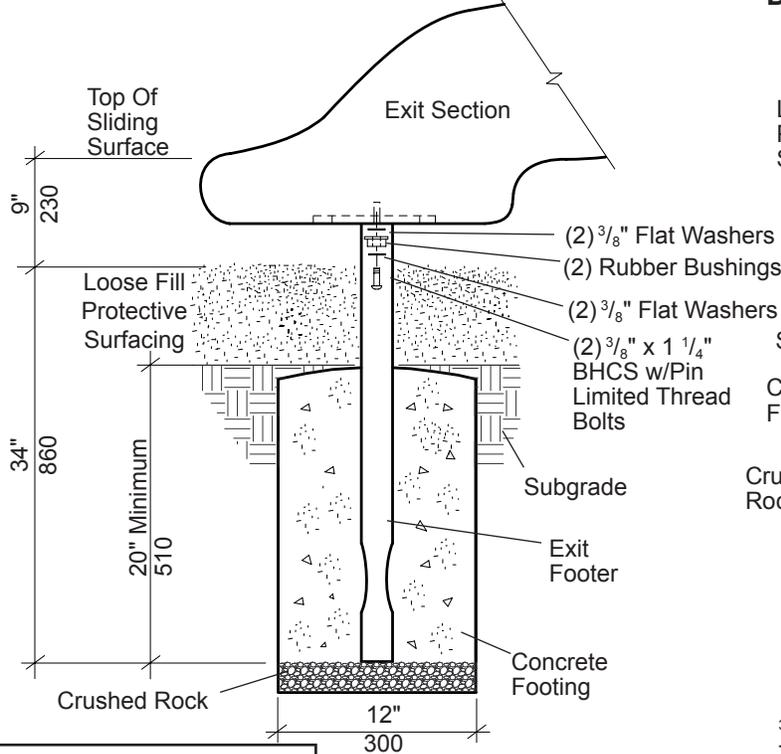


**NOTE: Fasten top of slide section with pockets to bottom of slide section without pockets.**

**DETAIL  
TYPICAL MID-SUPPORT  
(48" - 96" SLIDES ONLY)  
BOTTOM VIEW**

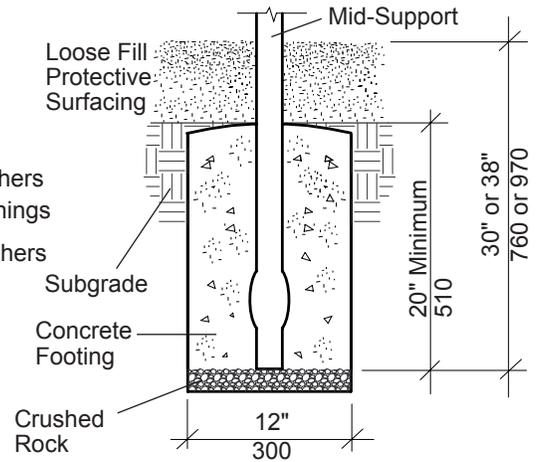


**DETAIL  
DIRECT BURY / EXIT SECTION**

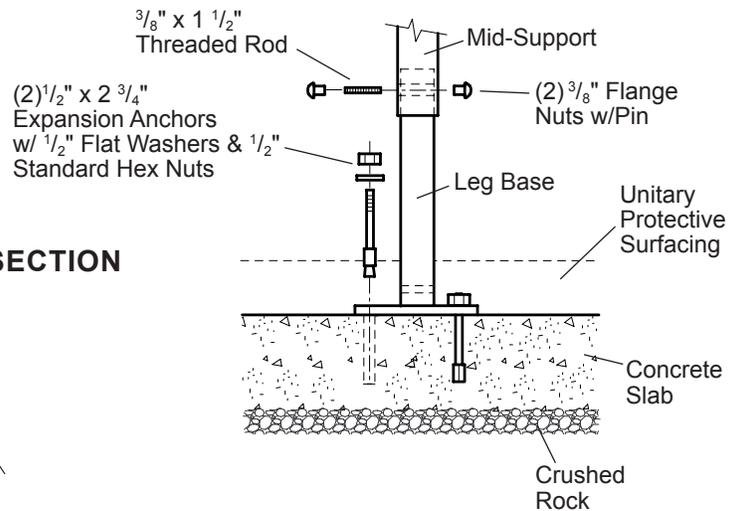


**NOTE:**  
Attach bolts in the center of the footer slots to allow for expansion and contraction. Snug bolts down only, do not overtighten!

**DETAIL  
DIRECT BURY / MID-SUPPORTS**

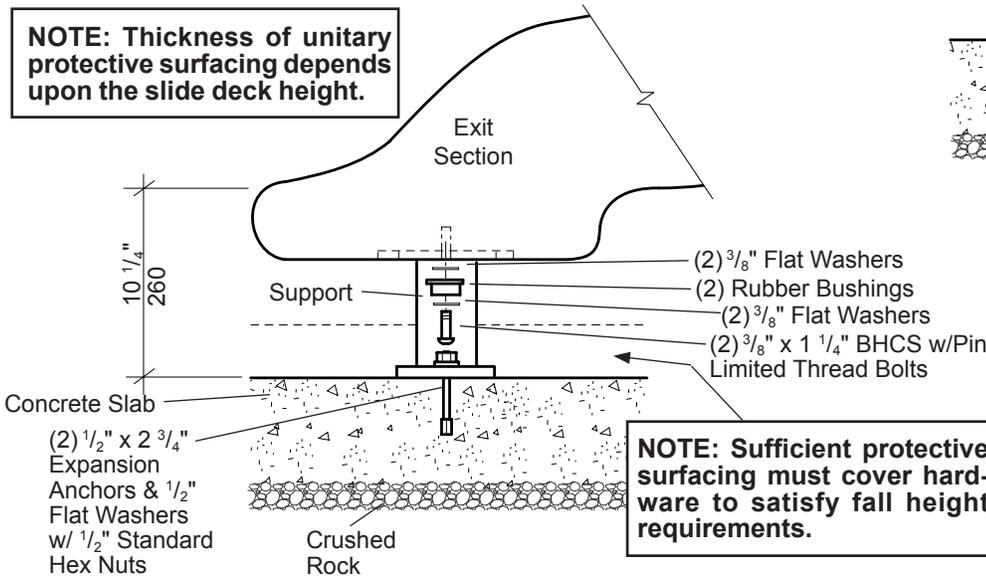


**DETAIL  
SURFACE MOUNT / MID-SUPPORTS**



**NOTE:**  
Exit Heights may vary if the protective surfacing is not level. Do not put pressure/tension on the entrance section when adjusting the exit height.

**DETAIL  
SURFACE MOUNT / EXIT SECTION**



**NOTE:** Thickness of unitary protective surfacing depends upon the slide deck height.

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

## Parts List

Part#	Description	Qty.
124867	Right Elbow Section, Specify Color	*
124868	Left Elbow Section, Specify Color	*
125655	Straight Section (15 1/4" Long), Specify Color	*
124864	Straight Section (30 1/2" Long), Specify Color	*
100583	40 7/16" Rail, Specify Color	1
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
125562	Support Base (SM), Specify Color	*
128434	66" Mid-Support (DB), Specify Color	*
128077	82" Mid-Support (DB), Specify Color	*
128078	106" Mid-Support (DB), Specify Color	*
128079	20 3/4" Mid-Support (SM), Specify Color	*
128080	29" Mid-Support (SM), Specify Color	*
128081	37 1/8" Mid-Support (SM), Specify Color	*
128082	45 1/4" Mid-Support (SM), Specify Color	*
128261	Exit Footer (DB), Specify Color	1
128262	Exit Footer (SM), Specify Color	1
124876	Entrance Section, Specify Color	1
124877	Exit Section, Specify Color	1
132443	Spacer Tube, Specify Color	2
121371	<b>Entrance/Deck Mounting Hardware Package</b>	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100362	3/8" Flat Washer, SST	4
154942	<b>SlideWinder Section Hardware Package</b>	*
100362	3/8" Flat Washer, SST	*
113027	3/8" x 1 3/8" BHCS w/Pin, SST	*
123224	3/8" x 1 11/16" BHCS w/Pin, SST	*
124342	<b>Rail Hardware Package</b>	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	4
125670	<b>Mid-Support Hardware Package (SM)</b>	*
100266	1/2" x 2 3/4" Expansion Anchor	*
100322	1/2" Standard Hex Nut, SST	*
100353	3/8" Flange Nut w/Pin, SST	*
100363	1/2" Flat Washer, SST	*
115813	3/8" x 1 1/2" Threaded Rod, SST	*
128373	<b>Exit Support Hardware Package (DB)</b>	1
100290	3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST	2
100362	3/8" Flat Washer, SST	4
111442	Rubber Bushing	2
128343	<b>Exit Support Hardware Package (SM)</b>	1
100266	1/2" x 2 3/4" Expansion Anchor	2
100292	3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST	2
100322	1/2" Standard Hex Nut, SST	2
100362	3/8" Flat Washer, SST	4
100363	1/2" Flat Washer, SST	2
111442	Rubber Bushing	2

DB = Direct Bury  
 SM = Surface Mount  
 \* = Quantity Varies Per Deck Height

## Specifications

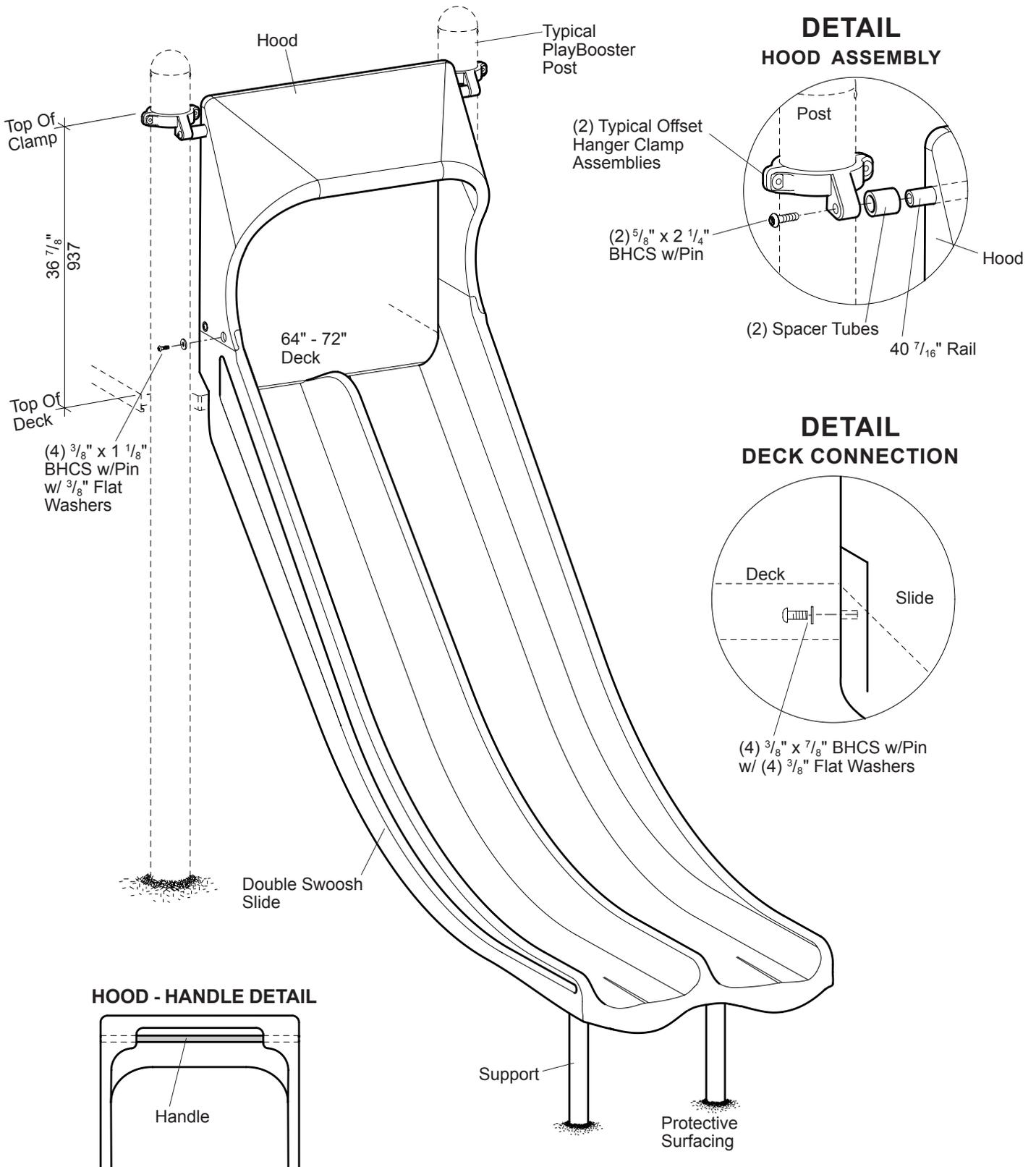
<b>Slide Sections:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
<b>Rail:</b>	1 1/8" O.D. 6005-T5 aluminum extrusion with 5/16" walls. Finish: ProShield®, color specified.
<b>Mid-Support:</b>	Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and 3/16" x 1 1/4" zinc plated steel strap. Finish: ProShield, color specified.
<b>Support Base (SM):</b>	Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" x 8" mounting plate. Finish: ProShield, color specified.
<b>Spacer Tube:</b>	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.
<b>Exit Footer:</b>	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" x 7 1/2" mounting plate. Finish: ProShield, color specified.
<b>Offset Hanger Clamp Assy.:</b>	Cast aluminum. Finish: ProShield, color specified.

Specifications are subject to change without notice.

<b>Fasteners:</b>	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).
<b>Installation Time:</b>	32" - 48" Approx. 3 man hours 56" - 72" Approx. 4 man hours 96" Approx. 5 man hours
<b>Concrete Req.:</b>	30" Depth - Approx. 1.3 cu. ft. 34" Depth - Approx. 1.5 cu. ft. 38" Depth - Approx. 1.8 cu. ft.
<b>Weight:</b>	32" - 134 lbs. 40" - 146 lbs. 48" - 172 lbs. 56" - 184 lbs. 64" - 197 lbs. 72" - 247 lbs. 96" - 265 lbs.
<b>Fall Height:</b>	Deck Height

## Installation Instructions

- 1) Refer to your plan drawing for location of footings and direction of SlideWinder sections.
- 2) **(Direct Bury)** Dig footing holes spaced as shown, depending upon slide. Refer to the Direct Bury Exit Section and Direct Bury Mid-Support Details.
- 3) Place 40 7/16" rail in entrance section, place spacer tubes over each end of the 40 7/16" rail, attach offset hanger clamps using 5/8" x 2 1/4" BHCS w/Pin.
- 4) Fasten SlideWinder sections together loosely starting in the middle and working your way to the outside of each section, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers on the 3 inside holes and 3/8" x 1 11/16" BHCS w/pin with 3/8" flat washers on the 2 outside holes. When all bolts are started, pull the tops flush with each other and tighten. The left elbow section reads (LH) and the right elbow section reads (RH). Attach entrance and exit section last. Refer to the Typical Slide Section Detail.
- 5) **(Direct Bury)** If required attach mid-supports, refer to your plan drawing for locations. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/Pin. Refer to the Typical Mid-Support Detail.  
**(Surface Mount)** If required attach mid-supports, refer to your plan drawing for locations. Assemble mid-supports by placing support base inside mid-support and attach using 3/8" x 1 1/2" threaded rod and 3/8" flange nuts w/pin. Refer to the Surface Mount/Mid-Support Detail. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/Pin. Refer to the Typical Mid-Support Detail.
- 6) Attach exit footer to base of slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. **NOTE: Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not overtighten. See Direct Bury/Exit Section Detail.**
- 7) With SlideWinder fully assembled, attach entrance section to the face of the deck using 3/8" x 7/8" BHCS w/Pin and 3/8" flat washers.
- 8) Attach offset hanger clamps to posts using 5" half clamps, 3/8" x 1 1/8" BHCS w/Pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 9) **(Direct Bury)** With supports 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 anchor plates. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap 1/2" x 2 3/4" expansion anchors into drilled holes and fasten using 1/2" standard hex nuts with 1/2" flat washers.
- 10) Install protective surfacing before users are allowed to play on the structure.



**PlayBooster® 130390 Double Swoosh™ Slide, 64"-72"**



# PlayBooster® 130390 Double Swoosh™ Slide, 64"-72"

## Parts List

Part#	Description	Qty.
128823	Double Swoosh Slide, 64"/72", Specify Color.....	1
128777	Slide Hood, Specify Color.....	1
100583	40 7/16" Aluminum Rail, Specify Color.....	1
132443	Spacer Tube, Specify Color.....	2
105327	5" Half Clamp, Specify Color.....	2
113729	Offset Hanger Clamp, Specify Color.....	2
100610	1/4" x 5/8" Drive Rivet AL/SST.....	2
150941	Support (DB), Specify Color.....	2
151021	Support 64" Deck (SM), Specify Color.....	2
151022	Support 72" Deck (SM), Specify Color.....	2
<b>130391</b>	<b>Double Swoosh Slide Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST.....	2
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST.....	4
100351	3/8" Tee Nut, SST.....	4
100362	3/8" Flat Washer, SST.....	16
111442	Rubber Bushing.....	4
<b>121348</b>	<b>4 Hole (SM) Hardware Package</b> .....	<b>1</b>
100266	1/2" x 2 3/4" Expansion Anchor.....	4
100322	1/2" Standard Hex Nut, SST.....	4
100363	1/2" Flat Washer, SST.....	4

DB = Direct Bury  
SM = Surface Mount

## Specifications

<b>Slide:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
<b>Spacer Tube:</b>	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield®, color specified.
<b>Hood:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
<b>Rail:</b>	Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield, color specified.
<b>Support:</b>	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.
<b>Offset Hanger Clamp Assembly:</b>	Cast aluminum. Finish: ProShield, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	SM - Approx. 2 man hours DB - Approx. 3 man hours
<b>Concrete Req.:</b>	Approx. 2.6 cu. ft.
<b>Area Req.:</b>	6' (1,83 m) minimum use zone at exit
<b>Weight:</b>	179 lbs.
<b>Fall Height:</b>	64" (1,63 m) Deck Height 6' (1,83 m) Deck Height

## Installation Instructions

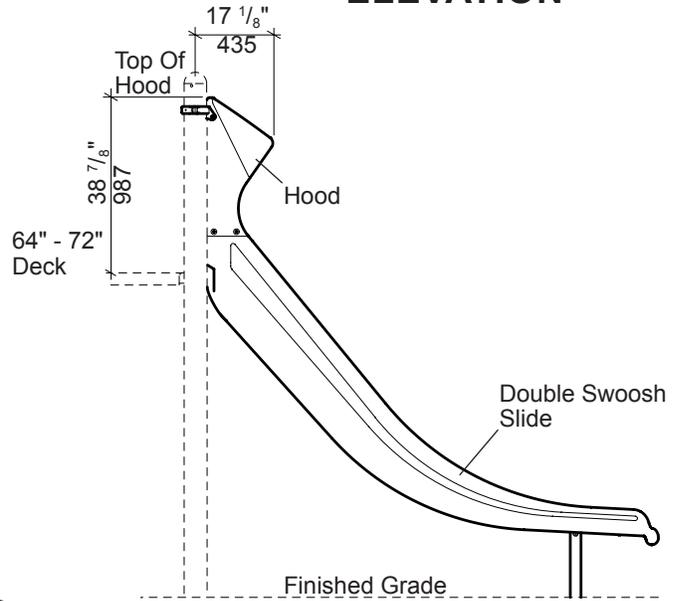
### Direct Bury

- 1) Dig footings spaced as shown.
- 2) Attach the supports to the slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Attachment Detail.
- 3) Attach the slide to the face of the deck using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Deck Connection Detail.
- 4) Attach the slide hood to the slide using 3/8" x 1 1/8" BHCS w/Pin with 3/8" flat washers.
- 5) Insert 40 7/16" rail through top of hood, place spacer tubes over each end of the 40 7/16" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Prop the end of the slide according to the proper deck height. With support plumb pour concrete footings. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 7) Install protective surfacing before users are allowed to play on the structure.

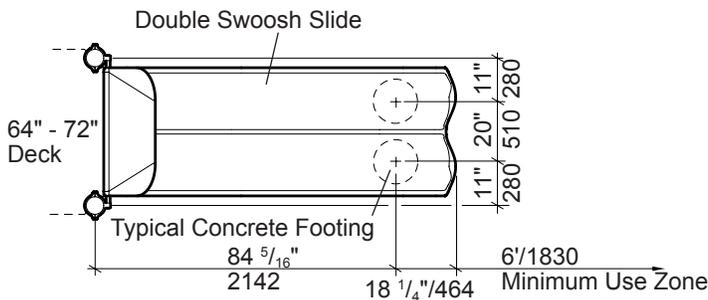
### Surface Mount

- 1) Attach the supports to the slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Detail.
- 2) Attach the slide to the face of the deck using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Deck Connection Detail.
- 3) Mark anchor bolt locations on concrete slab through holes in anchor plates and disconnect slide from the face of the deck. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition slide and reattach to the face of the deck following step 2. Fasten support to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- 4) Attach the slide hood to the slide using 3/8" x 1 1/8" BHCS w/Pin with 3/8" flat washers.
- 5) Insert 40 7/16" rail through top of hood, place spacer tubes over each end of the 40 7/16" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

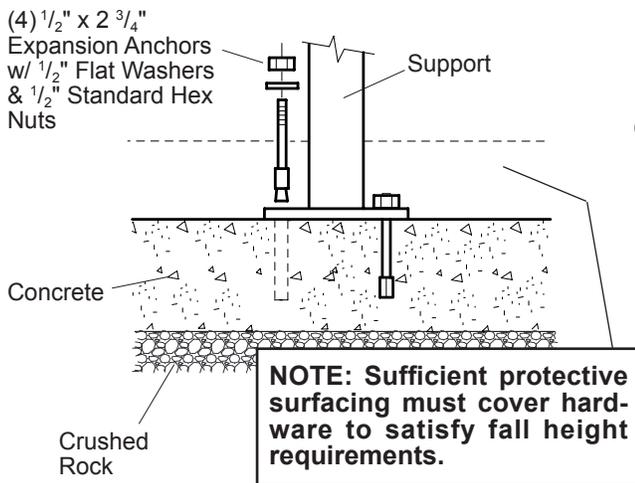
**ELEVATION**



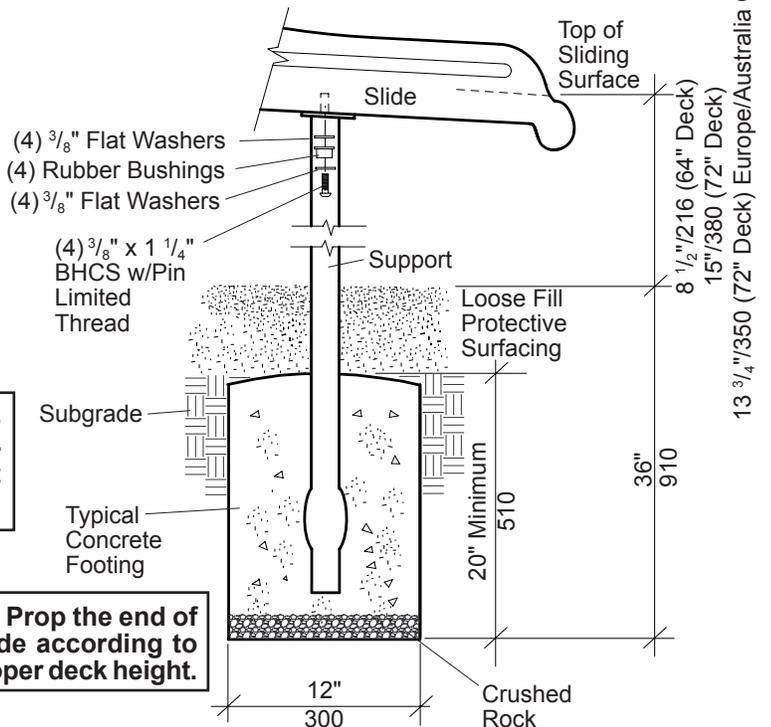
**PLAN VIEW/FOOTING LAYOUT**



**DETAIL SURFACE MOUNT**



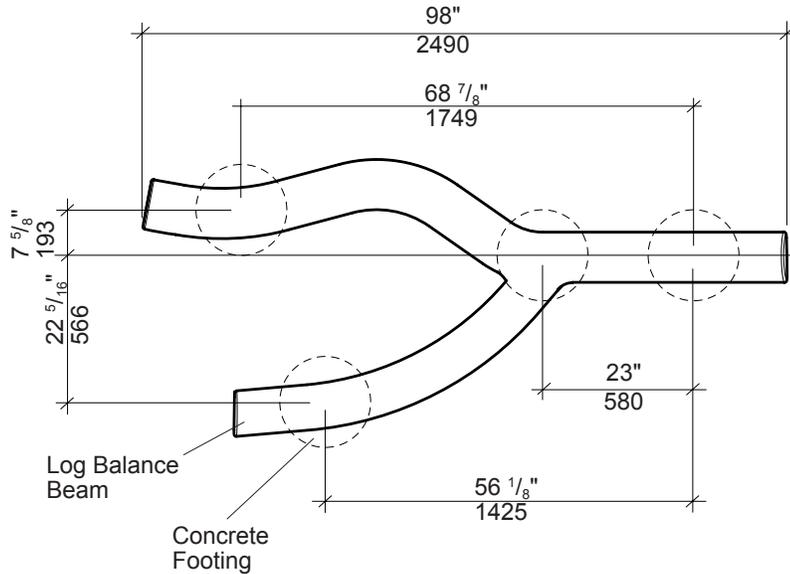
**DETAIL SUPPORT ATTACHMENT**



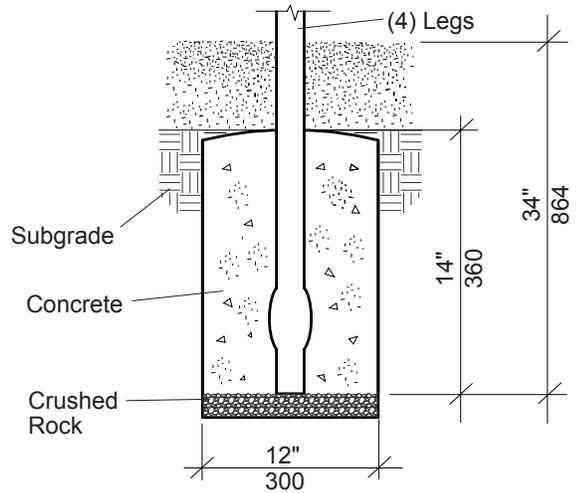
**NOTE: Prop the end of the slide according to the proper deck height.**



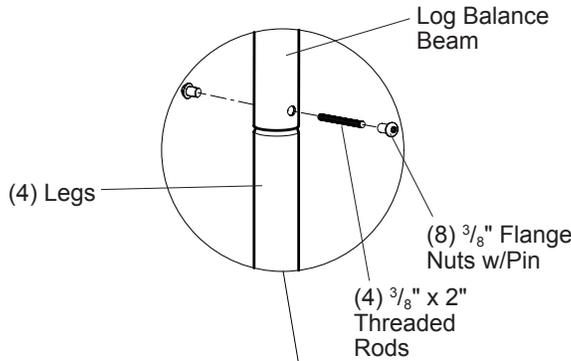
**PLAN VIEW/FOOTING LAYOUT**



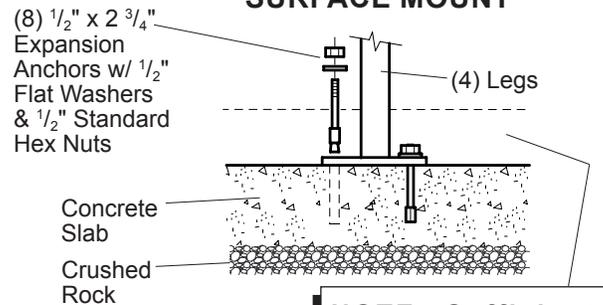
**DETAIL  
DIRECT BURY**



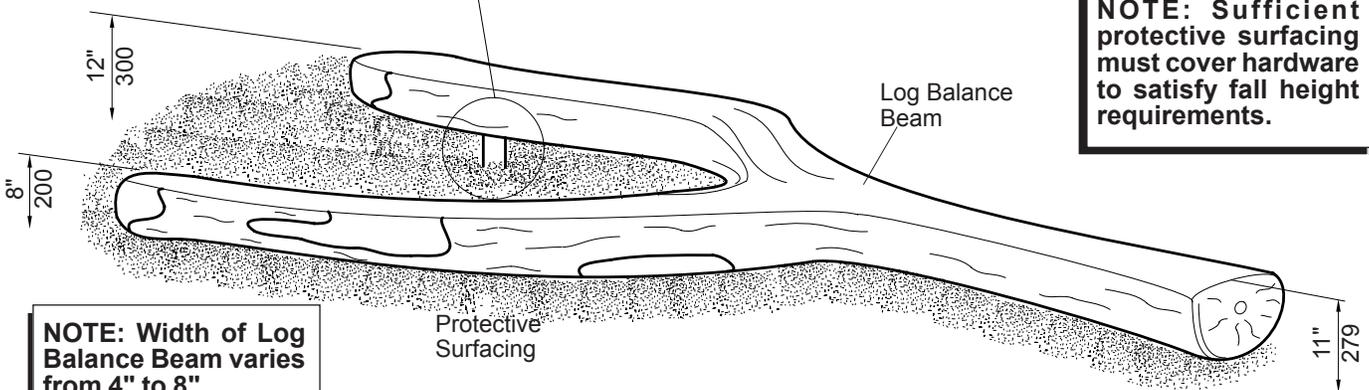
**DETAIL  
LEG ATTACHMENT**



**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**



# 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
<b>175717</b>	<b>Log Balance Beam Hardware Package</b> .....	<b>1</b>
100353	3/8" Flange Nut w/Pin, SST .....	8
116942	3/8" x 2" Threaded Rod, SST .....	4
<b>111392</b>	<b>2-Hole (SM) Hardware Package</b> .....	<b>4</b>
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

### 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:** 387 lbs.

**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)

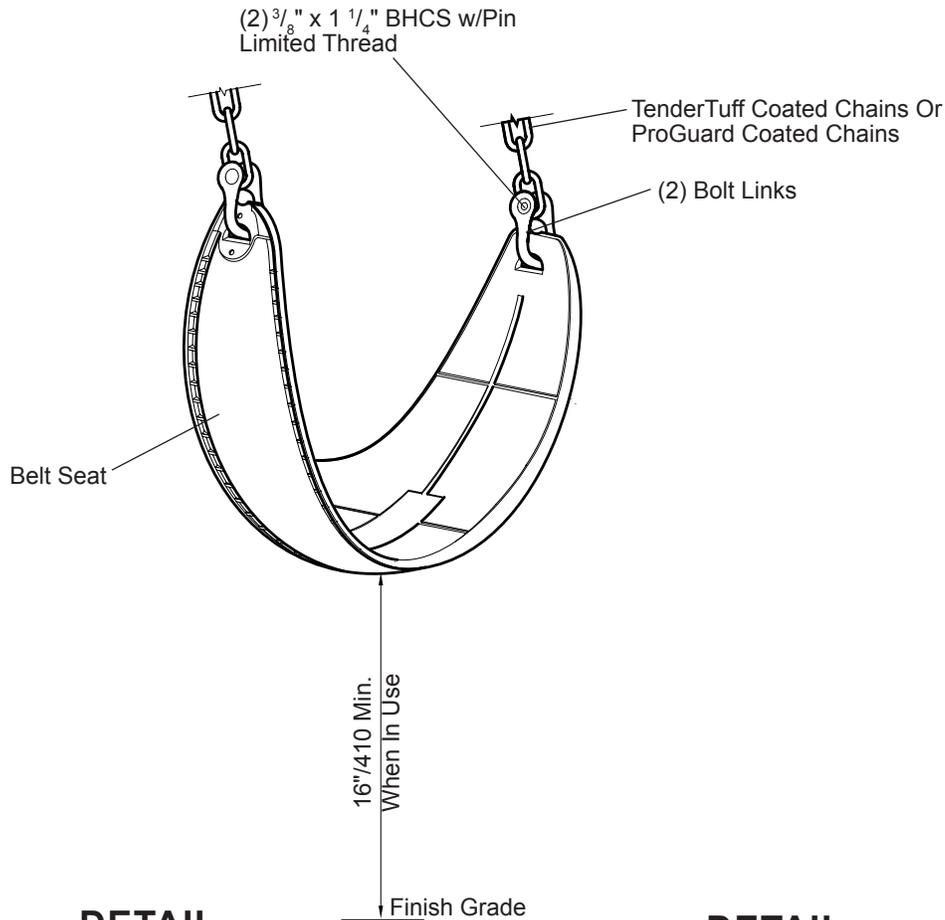
## Installation Instructions

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.

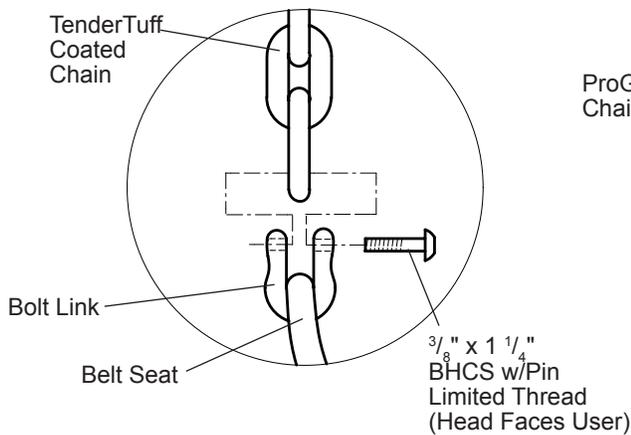
**(Surface Mount)** - Attach legs to log balance beam, using 3/8" x 2" threaded rods and 3/8" flange nuts with pin. Set log balance beam in proper position and mark anchor bolt locations on concrete slab through holes in anchor plates. Move log balance beam aside and drill 1/2" x 3" deep holes in marked 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) Install protective surfacing before users are allowed to play on the structure.

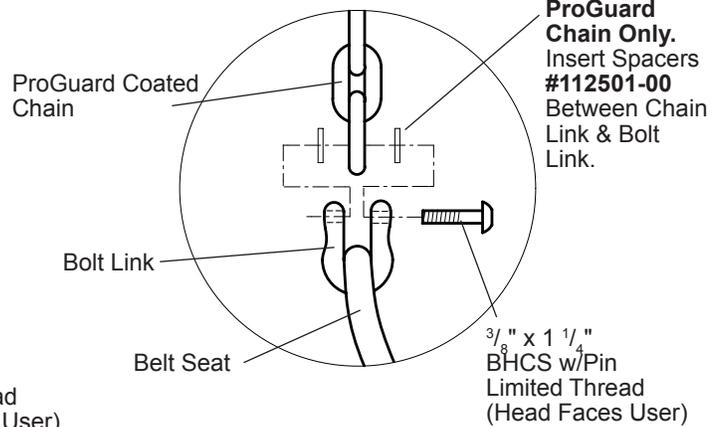
3) **NOTE: After installation if Touch-up/Repairs are needed, contact Landscape Structures at 1-888-574-4678.**



**DETAIL BOLT LINK**



**DETAIL BOLT LINK**



**Swings**

**174018 Belt Seat**

## Parts List

Part #	Description	Qty.
<b>7 Ft. High Beam</b>		
128842	Belt Swing Seat, Black.....	1
178679	57 7/16" Chain, TenderTuff, Specify Color.....	2
175251	57 7/16" Chain, ProGuard.....	2
<b>132672</b>	<b>Bolt Link w/Bolt &amp; Spacers</b> .....	1
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST .....	2
138915	Bolt Link, SST.....	2
112501	Chain Spacer.....	4
<b>132635</b>	<b>Bolt Link w/Bolt Hardware Package</b> .....	1
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST .....	2
138915	Bolt Link, SST.....	2
<b>8 Ft. High Beam</b>		
128842	Belt Swing Seat, Black.....	1
152050	67 7/8" Chain, TenderTuff, Specify Color .....	2
174404	67 7/8" Chain, ProGuard.....	2
<b>132672</b>	<b>Bolt Link w/Bolt &amp; Spacers</b> .....	1
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST .....	2
138915	Bolt Link, SST.....	2
112501	Chain Spacer.....	4
<b>132635</b>	<b>Bolt Link w/Bolt Hardware Package</b> .....	1
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST .....	2
138915	Bolt Link, SST.....	2
<b>10 Ft. High Beam</b>		
128842	Belt Swing Seat, Black.....	1
152052	90 11/16" Chain, TenderTuff, Specify Color.....	2
174884	90 11/16" Chain, ProGuard.....	2
<b>132672</b>	<b>Bolt Link w/Bolt &amp; Spacers</b> .....	1
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST .....	2
138915	Bolt Link, SST.....	2
112501	Chain Spacer.....	4
<b>132635</b>	<b>Bolt Link w/Bolt Hardware Package</b> .....	1
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST .....	2
138915	Bolt Link, SST.....	2

## Specifications

**Chain Spacer:** Made from white nylon measuring .080" x .785" O.D.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff®, color specified.

**Belt Seats:** Molded from U.V. stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") spring stainless steel sheet, and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" wide x 26" long x .700" thick.

**Bolt Link:** Stainless Steel.

**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:** 1/4 man hour per seat

**Weight:** 8 lbs. (7 Ft. Beam w/ProGuard Chains)  
9 lbs. (7 Ft. Beam w/TenderTuff Chains)  
8 lbs. (8 Ft. Beam w/ProGuard Chains)  
9 lbs. (8 Ft. Beam w/TenderTuff Chains)  
10 lbs. (10 Ft. Beam w/ProGuard Chains)  
11 lbs. (10 Ft. Beam w/TenderTuff Chains)

## Installation

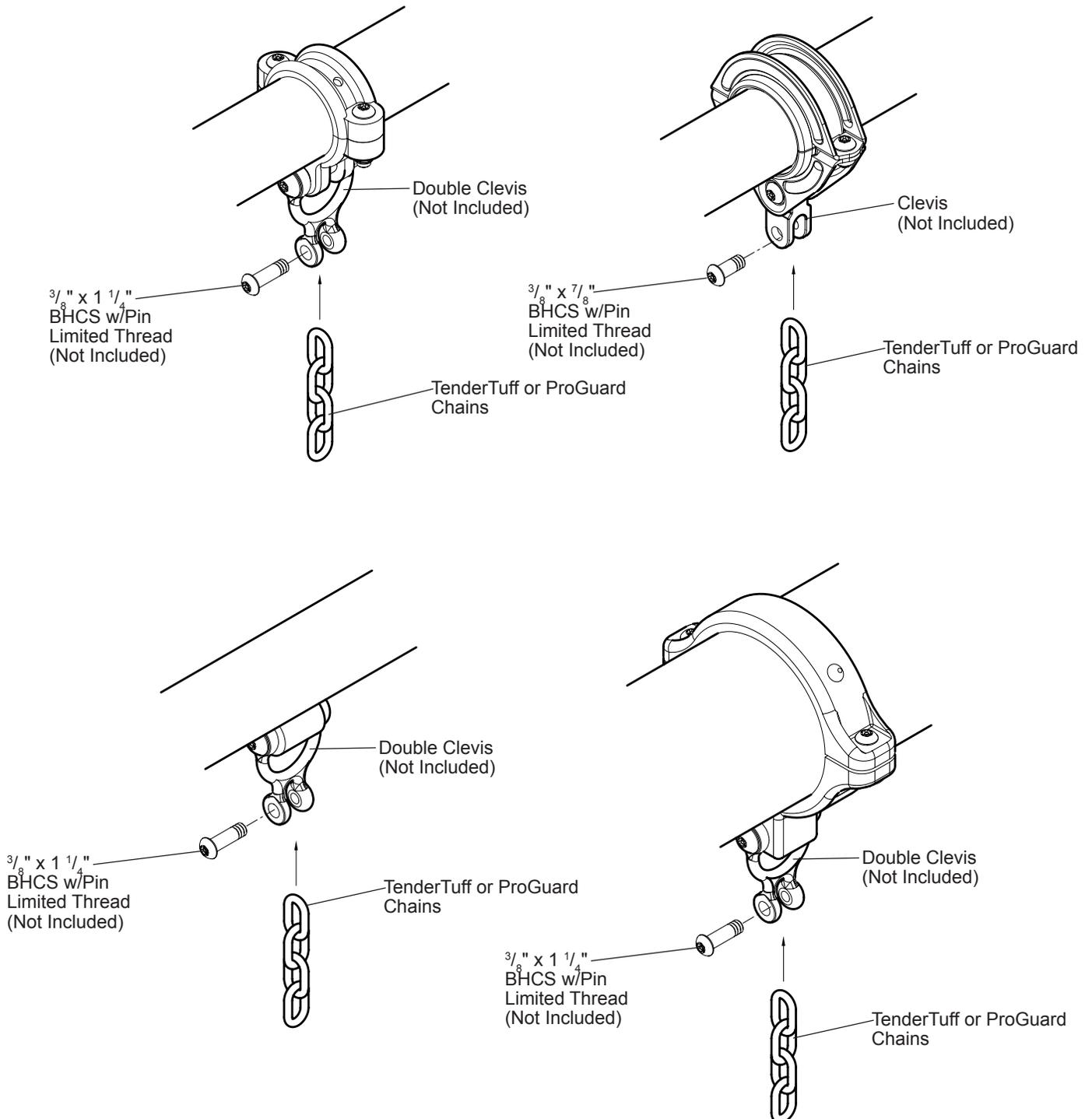
### Swing Hangers With Double Clevis

- 1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread, as shown.
- 2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** Use chain spacers as shown when installing ProGuard chains.
- 3) Install protective surfacing before users are allowed to play on the structure.

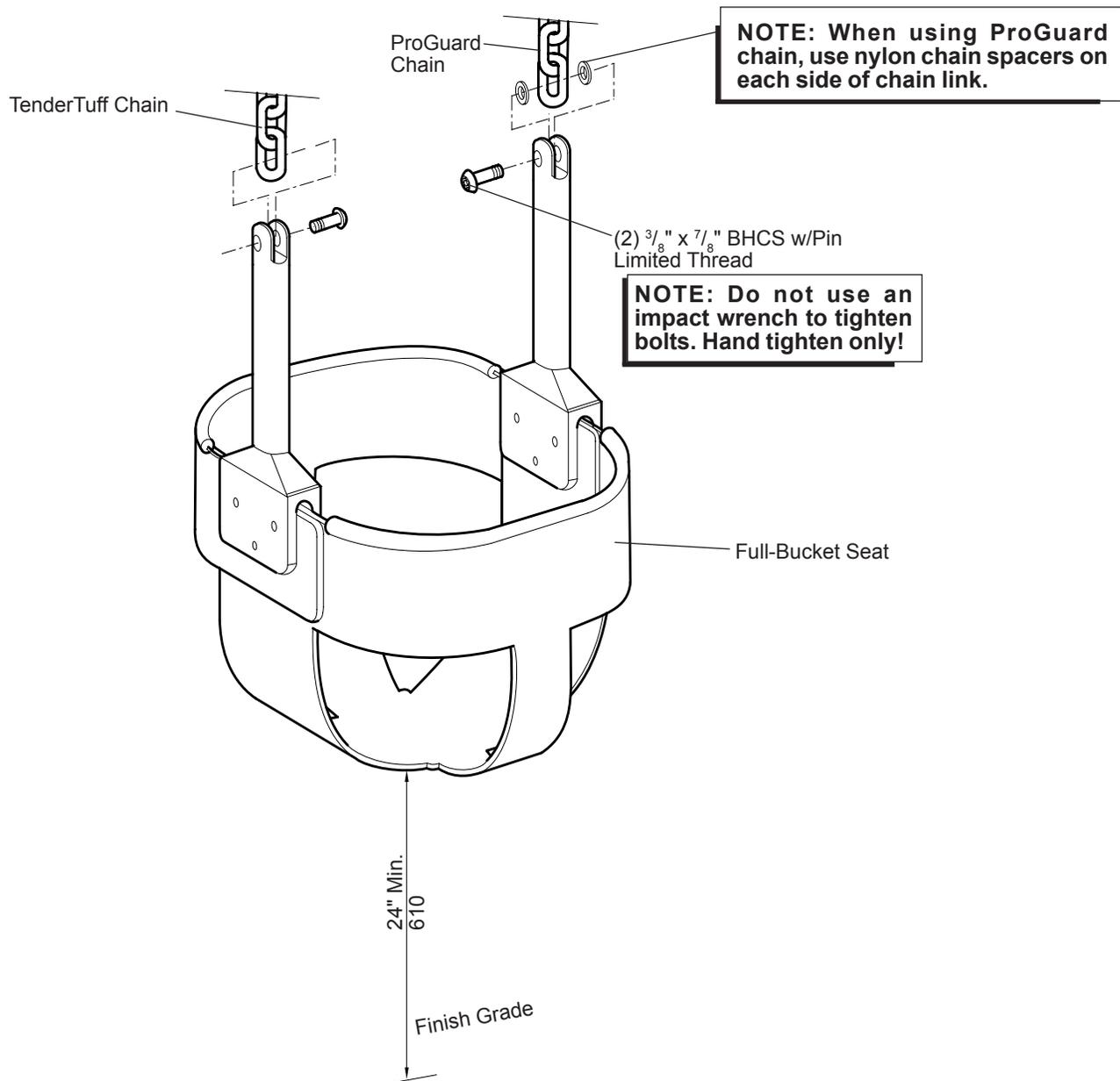
### Anti-wrap Swing Hangers

- 1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread, as shown.
- 2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE:** Use chain spacers as shown when installing ProGuard chains.
- 3) Install protective surfacing before users are allowed to play on the structure.

**SWING HANGER OPTIONS**







Swings

176038 Full-Bucket Seat, w/Chains



# Swings 176038 Full-Bucket Seat, w/Chains

## Parts List

Part#	Description	Qty.
<b>7 Ft. High Beam (5" Dia. Beam)</b>		
186276	Full-Bucket Swing Seat, Black .....	1
141739	43 3/16" Chain, TenderTuff, Specify Color .....	2
175248	43 3/16" Chain, ProGuard .....	2
<b>138414</b>	<b>Bucket Seat Hardware Package</b> .....	1
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST .....	2
112501	Chain Spacer (For ProGuard Chains Only) .....	4
<b>8 Ft. High Beam</b>		
186276	Full-Bucket Swing Seat, Black .....	1
160110	52 9/16" Chain, TenderTuff, Specify Color .....	2
174882	52 9/16" Chain, ProGuard .....	2
<b>138414</b>	<b>Bucket Seat Hardware Package</b> .....	1
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST .....	2
112501	Chain Spacer (For ProGuard Chains Only) .....	4
<b>10 Ft. High Beam</b>		
186276	Full-Bucket Swing Seat, Black .....	1
152051	76 7/16" Chain, TenderTuff, Specify Color .....	2
174883	76 7/16" Chain, ProGuard .....	2
<b>138414</b>	<b>Bucket Seat Hardware Package</b> .....	1
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST .....	2
112501	Chain Spacer (For ProGuard Chains Only) .....	4
<b>7 Ft. High Beam (Tot)</b>		
186276	Full-Bucket Swing Seat, Black .....	1
152053	37 1/2" Chain, TenderTuff, Specify Color .....	2
175247	37 1/2" Chain, ProGuard .....	2
<b>138414</b>	<b>Bucket Seat Hardware Package</b> .....	1
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST .....	2
112501	Chain Spacer (For ProGuard Chains Only) .....	4
<b>75" High Beam (Toddler)</b>		
186276	Full-Bucket Swing Seat, Black .....	1
152016	29 7/8" Chain, TenderTuff, Specify Color .....	2
174881	29 7/8" Chain, ProGuard .....	2
<b>138414</b>	<b>Bucket Seat Hardware Package</b> .....	1
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST .....	2
112501	Chain Spacer (For ProGuard Chains Only) .....	4

## Specifications

**Full-Bucket Seat:** Seat shall be molded of U.V. stabilized, high quality, black rubber, encapsulating a 24 gauge stainless steel reinforcement plate. Handle cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handle attaches to seat with (3) 1/4" x 1 5/16" long stainless steel rivets. The finished size of the full bucket shall be 9" deep x 10 1/2" wide.

**Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

**Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

**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:** 1/4 man hour per seat

**Weight:**  
 14 lbs. (7 FT. Beam 5" Dia. w/TenderTuff Chain)  
 13 lbs. (7 FT. Beam 5" Dia. w/ProGuard Chain)  
 14 lbs. (8 FT. Beam w/TenderTuff Chain)  
 14 lbs. (8 FT. Beam w/ProGuard Chain)  
 17 lbs. (10 FT. Beam w/TenderTuff Chain)  
 16 lbs. (10 FT. Beam w/ProGuard Chain)  
 12 lbs. (7 FT. Beam w/TenderTuff Chain)  
 12 lbs. (7 FT. Beam w/ProGuard Chain)  
 11 lbs. (75" Beam w/TenderTuff Chain)  
 11 lbs. (75" Beam w/ProGuard Chain)

## Installation Instructions

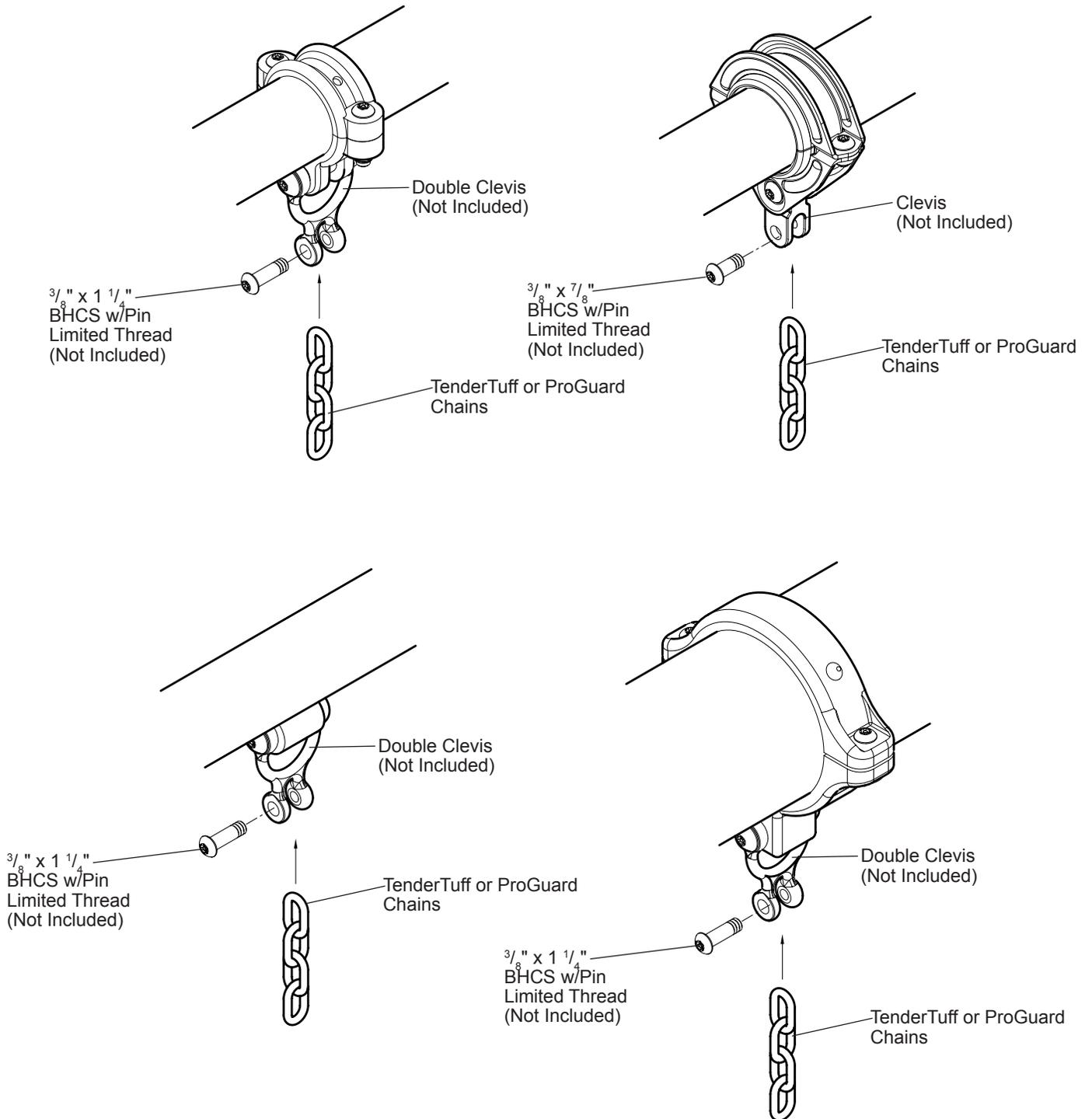
### Swing Hangers with Double Clevis

- 1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown.
- 2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** Use chain spacers as shown when installing ProGuard chains.
- 3) Install protective surfacing before users are allowed to play on the structure.

### Anti-wrap Swing Hangers

- 1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.
- 2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** Use chain spacers as shown when installing ProGuard chains.
- 3) Install protective surfacing before users are allowed to play on the structure.

**SWING HANGER OPTIONS**

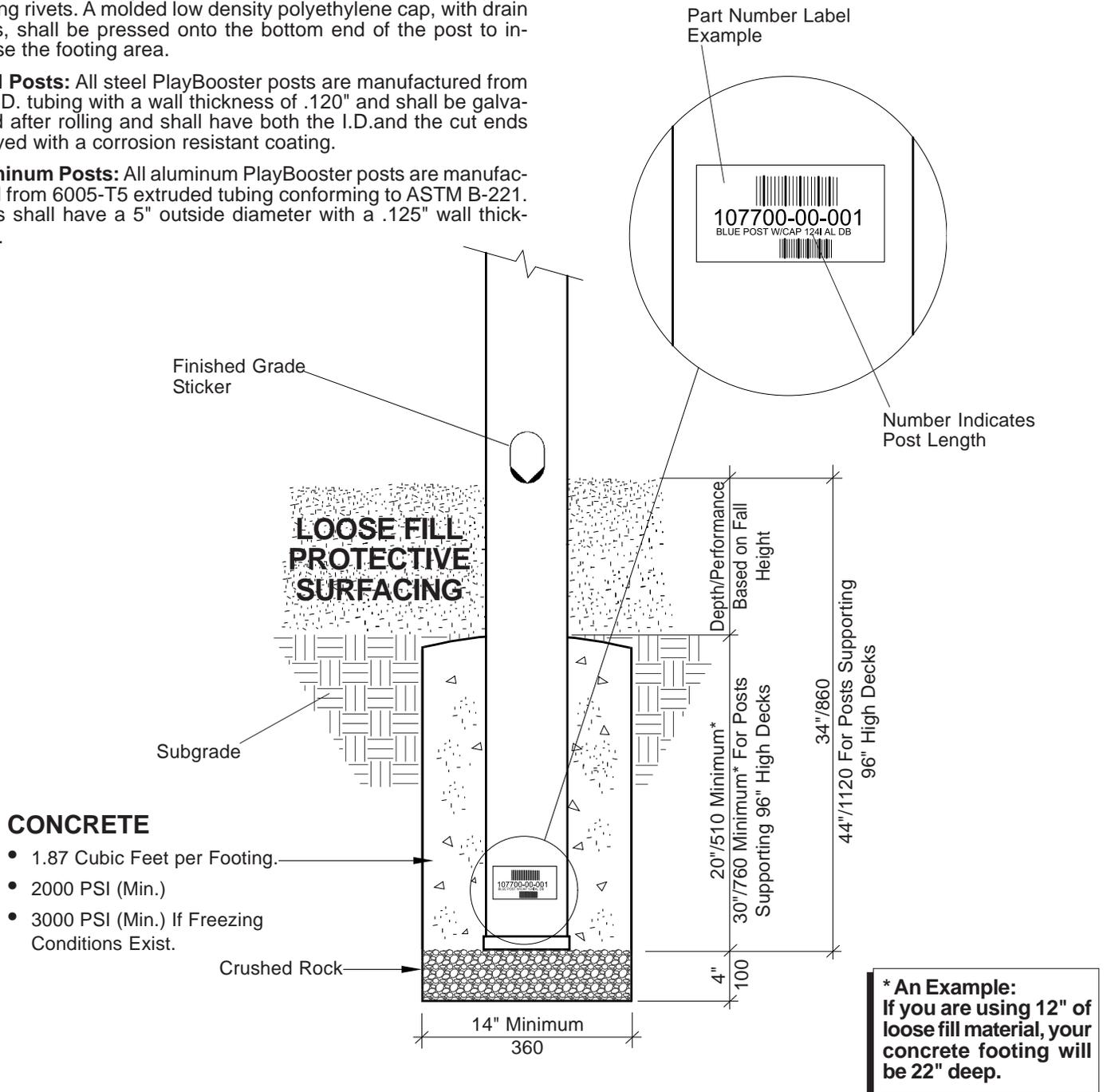




**Post Specifications:** Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

**Steel Posts:** All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

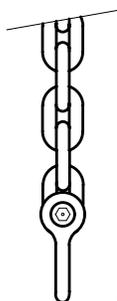
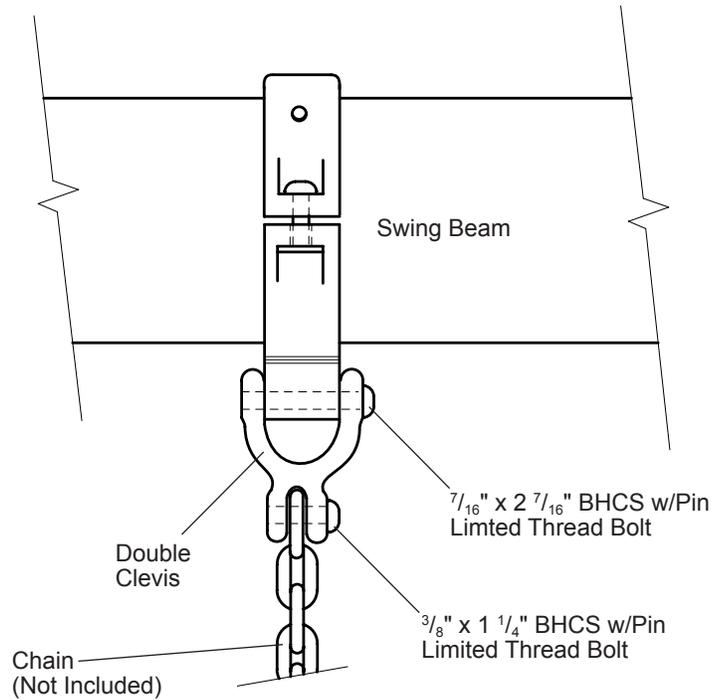
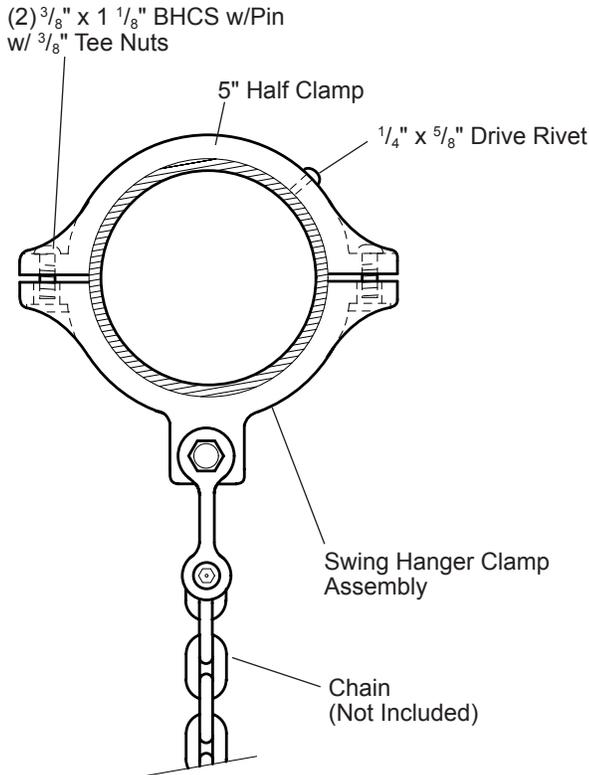
**Aluminum Posts:** All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.



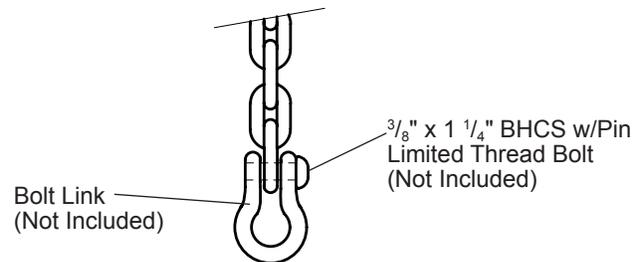
**\* An Example:**  
If you are using 12" of loose fill material, your concrete footing will be 22" deep.

## PlayBooster® Concrete Footings, 5" Posts





**NOTE:**  
 Do Not Over-Tighten Limited Thread Bolt! Threads Should Not Protude Past Bolt Link.



**NOTE:**  
 Position Bolt Head Inward Facing User.

**Swings**

**111418 Swing Hanger, Belt Swing**

## Parts List

Part#	Description	Qty.
105327-01	5" Half Clamp, Specify Color .....	1
100198-00	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST .....	2
100351-00	$\frac{3}{8}$ " Tee Nut, SST.....	2
100610-00	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST .....	1
100292-00	$\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/Pin Ltd. Thread Bolt, SST.....	1
<b>121291-00</b>	<b>Swing Hanger Clamp Assy. Specify Color .....</b>	<b>1</b>
121289-00	Swing Hanger Clamp, Specify Color .....	1
127068-00	$\frac{7}{16}$ " x 2 $\frac{7}{16}$ " BHCS w/Pin Ltd. Thread Bolt, SST .....	1
138917-00	Swing Hanger Double Clevis SST .....	1
100667-00	Oilite Bushing.....	1

## Specifications

### Hanger Clamp

**Assembly:** Cast aluminum. Finish: ProShield®, color specified.

**Double Clevis:** Stainless Steel.

**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).

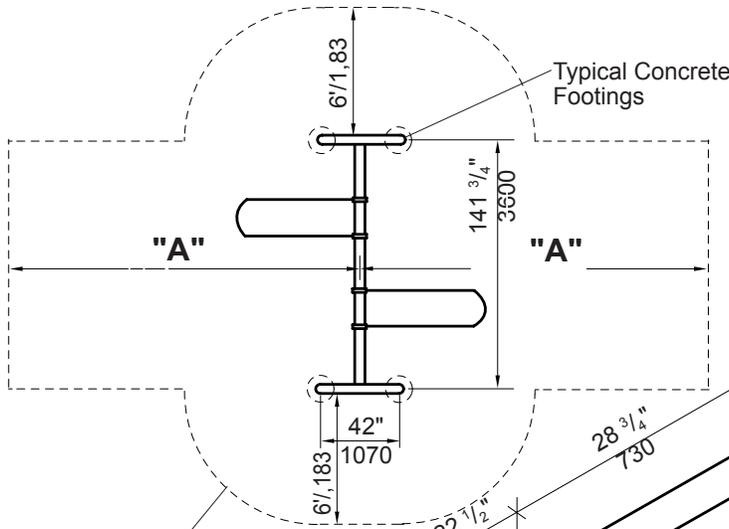
**Installation Time:** Approx.  $\frac{1}{2}$  man hour

**Weight:** 6 lbs.

## Installation Instructions

- 1) Locate and mark location of clamp on beam.
- 2) Attach 5" half clamp and swing hanger clamp to beam using  $\frac{3}{8}$ " x 1  $\frac{1}{8}$ " BHCS w/pin and  $\frac{3}{8}$ " tee nuts. *Tighten evenly.*
- 3) **IMPORTANT:** *Drill through holes in 5" half clamps and into 5" pipe with a  $\frac{1}{4}$ " or "F" (only) drill bit, tap  $\frac{1}{4}$ " x  $\frac{5}{8}$ " drive rivets through 5" half clamps and into pipe, to ensure that clamps remain secure.*
- 4) Attach swing chain to double clevis using  $\frac{3}{8}$ " x 1  $\frac{1}{4}$ " BHCS w/pin limited thread bolts.
- 5) Attach swing seat to chains using bolt links with  $\frac{3}{8}$ " x 1  $\frac{1}{4}$ " BHCS w/pin limited thread bolts. **NOTE:** *Do not over-tighten limited thread bolt. Threads should not protrude past bolt link. Position bolt head inward facing user.*

**PLAN VIEW/FOOTING LAYOUT**



KEY	Dimension "A"
Seat Type	
Belt	16'-0" (4,88 m)
Flat	16'-0" (4,88 m)
Full Bucket	12'-0" (3,66 m)
Half Bucket	16'-0" (4,88 m)
Molded Bucket	16'-0" (4,88 m)
Molded Bucket/Harness	13'-0" (3,96 m)
Infant Full Bucket	N/A

Minimum Use Zone

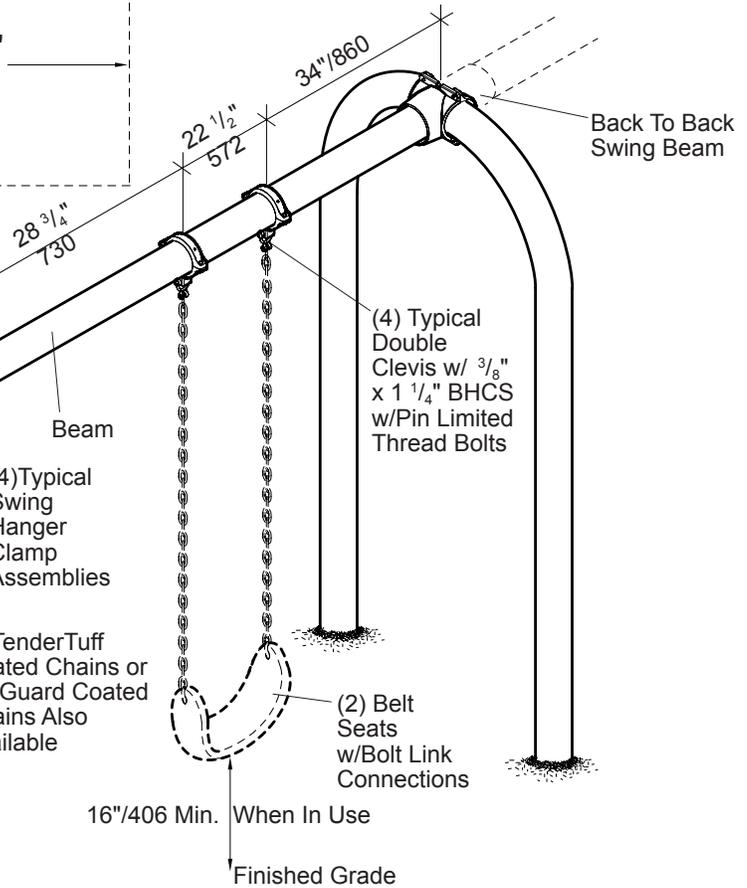
(2) Typical Tee Clamps-Center Beam In Middle Of Arch

From Top of Surfacing to Center of Beam  
99 3/4" / 2534

(2) Arches

(4) Labels

Protective Surfacing



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

Model #177331 Additional Bay

**Swings**

**177330/177331 Arch Swing Frame**

Sheet 1 of 2



# Swings 177330/177331 Arch Swing Frame

## 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*
146160	141 3/4" Swing Beam, Specify Color.....	1	1
<b>121291</b>	<b>Swing Hanger Clamp Assy. Specify Color</b> .....	<b>4</b>	<b>4</b>
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
<b>184227</b>	<b>Arch Swing 5" O.D. Beam Hardware Pkg.</b> .....	<b>1</b>	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8	8
113027	3/8" x 1 3/8" BHCS w/Pin, SST.....	8	8
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST.....	4	4
100351	3/8" Tee Nut, SST.....	16	16
156846	Play Safe Label, 2-12 Yrs.....	1	1
128296	3/8" Hex Jam Nut, SST.....	8	8
182213	Hot Surface Warning Label.....	2	1
182212	Entanglement Warning Label.....	2	1
115176	Hard Surface Warning Label.....	2	1

\* = 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" W. Finish: ProShield®, color specified.

### 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 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'-9 3/4" x 32' (3,60 m x 9,75 m)

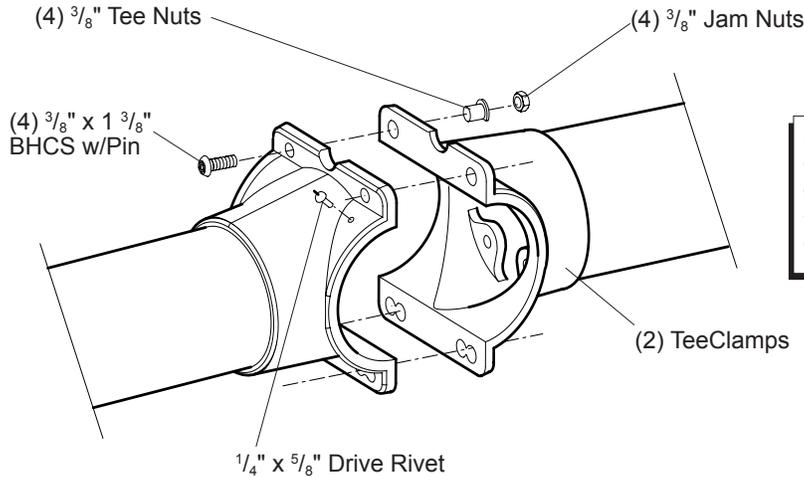
**Weight:** 204 lbs.  
Additional Bay 124 lbs.

**Fall Height:** 96" (2,43 m)

## Installation Instructions

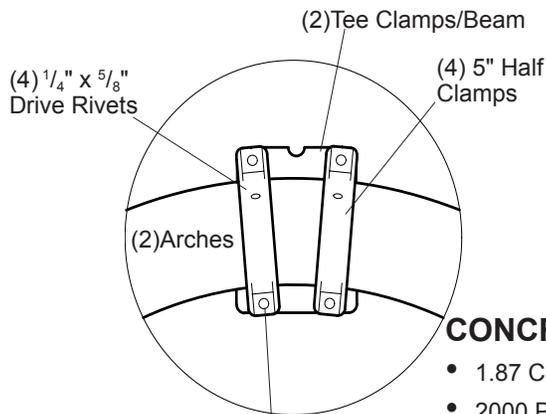
- 1) Dig footings, spaced as shown. Refer to the Concrete Footing Detail.
- 2) Set arches in footing holes and attach swing beam to center of arches using 5" half clamps with 3/8" x 1 3/8" BHCS w/pin and 3/8" tee nuts with 3/8" jam nuts. Refer to the Tee Clamp Position Detail. Center of beam should be 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**



**NOTE: Drill 1/4\"**

**DETAIL  
TEE CLAMP POSITION**

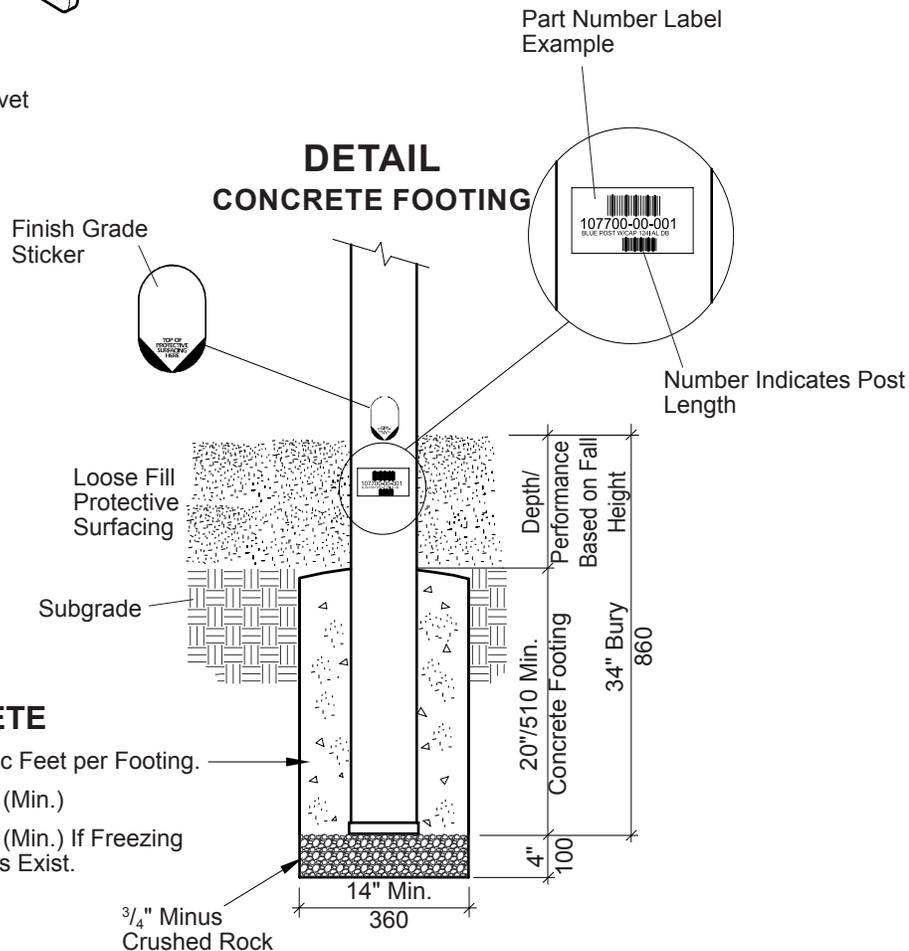


**NOTE: Use Inside Holes For (4) 3/8\"**

**CONCRETE**

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

**DETAIL  
CONCRETE FOOTING**



Part Number Label Example



Number Indicates Post Length





# Installation Specifications

13+ Year Installation Spec



115176 is a hard  
surface label

Not an Install doc.



120688 is a danger  
keep off sign

Not an Install doc.



## "How to distribute your hardware *Headache Free*"



We have received feedback from you, our customers, that the most common delay in completing your playground installation is lost or misplaced hardware.

Some of our most successful installations have used a "*check-out*" system with one person appointed to distribute the various hardware packages. Installation sheets are provided for each component that indicate hardware packages/items required to assemble that component. Refer to these sheets to determine which hardware items to request from the designated "*check-out*" person.

### HELPFUL HINTS:

Read installation sheets.

Be sure to use the correct length hardware as specified on the installation sheets.

Be sure to use clamps in the correct location as indicated on the installation sheets.



# Warning

**Your playground may include equipment containing moving parts. Moving parts are more vulnerable to wear, mis-use and abuse than other non-moving parts. It is critical these parts be inspected and maintained according to our recommendations.**

**As the owner, it is your responsibility to perform preventative maintenance and record your findings. Failure to do so may create a hazard and cause serious injury or death.**



# ***IMPORTANT SAFETY NOTES!***

According to the U.S. Consumer Product Safety Commission (CPSC) nearly 70% of all playground injuries are caused by falls to the surface.

## **PLEASE INSTALL AND MAINTAIN ADEQUATE PROTECTIVE SURFACING UNDER AND AROUND YOUR PLAYSTRUCTURE!**

Never let children play on the equipment before protective surfacing is installed.

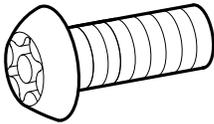
Consult the CPSC's Handbook for Public Playground Safety, the ASTM F1487 Standard or your Landscape Structures representative for more information.





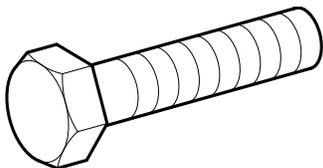
## Common Parts & Fasteners

### Button Head Cap Screws BHCS w/Pin



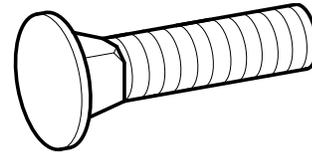
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
137277-00	1/4" x 3/8"	(6,4 x 9,5)	SST-PAT	10	1,4
131849-00	5/16" x 1/2"	(7,9 x 12,7)	SST-PAT	10	1,4
132626-00	5/16" x 7/8"	(7,9 x 22,2)	SST-PAT	10	1,4
192071-00		M8x24mm	SST-PAT	10	1,4
100195-00	3/8" x 5/8"	(9,5 x 15,9)	SST-PAT	15	2
100196-00	3/8" x 7/8"	(9,5 x 22,2)	SST-PAT	15	2
100198-00	3/8" x 1 1/8"	(9,5 x 28,6)	SST-PAT	15	2
113027-00	3/8" x 1 3/8"	(9,5 x 34,9)	SST-PAT	15	2
100171-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
123224-00	3/8" x 1 11/16"	(9,5 x 42,9)	SST-PAT	15	2
100173-00	3/8" x 2"	(9,5 x 50,8)	SST-PAT	15	2
100199-00	3/8" x 2 1/4"	(9,5 x 57,2)	SST-PAT	15	2
100174-00	3/8" x 2 1/2"	(9,5 x 63,5)	SST-PAT	15	2
100175-00	3/8" x 2 3/4"	(9,5 x 69,9)	SST-PAT	15	2
100176-00	3/8" x 3"	(9,5 x 76,2)	SST-PAT	15	2
100168-00	3/8" x 3 1/8"	(9,5 x 82,6)	SST-PAT	15	2
100200-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	15	2
124460-00	3/8" x 3 3/4"	(9,5 x 95,2)	SST-PAT	15	2
100201-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST-PAT	50	7
127551-00	5/8" x 1 1/2"	(15,9 x 38,1)	SST	50	7
			ANTI-SIEZE		
100203-00	5/8" x 2 1/4"	(15,9 x 57,2)	SST-PAT	50	7

### Hex Cap Screws



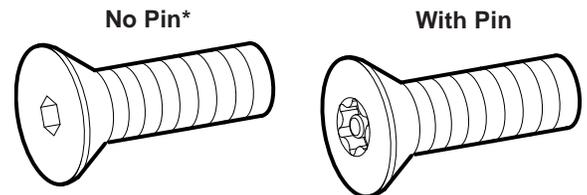
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100206-00	3/8" x 1"	(9,5 x 25,4)	SST-PAT	15	2
100208-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100209-00	3/8" x 1 3/4"	(9,5 x 44,4)	SST-PAT	15	2
135682-00	3/8" x 3 1/8"	(9,5 x 79,3)	SST-PAT	15	2
135683-00	3/8" x 4 5/8"	(9,5 x 117,5)	SST	15	2
100214-00	3/8" x 5"	(9,5 x 127)	SST-PAT	15	2
121499-00	7/16" x 1 3/4"	(11,1 x 114,3)	SST-PAT	15	2
100216-00	1/2" x 1 1/4"	(12,7 x 31,7)	SST	15	2
131862-00	1/2" x 2 1/4"	(12,7 x 57,1)	SST-PAT	20	2,8

### Carriage Bolts



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100135-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST-PAT	5	0,7
100147-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	15	2
116017-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	15	2
100148-00	3/8" x 1 3/4"	(9,5 x 44,5)	SST-PAT	15	2

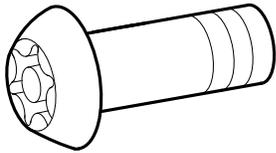
### Flat Head Cap Screws (FHCS)



Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
148686-00	3/8" x 3/4"	(9,5 x 19,05)	SST-PAT	13	1,8
100252-00*	3/8" x 1 1/4"	(9,5 x 31,8)	SST-PAT	13	1,8
151421-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST-PAT	13	1,8
148765-00	3/8" x 3 1/2"	(9,5 x 88,9)	SST-PAT	13	1,8
130824-00*	1/2" x 2 1/4"	(12,5 x 57,2)	SST	20	2,8

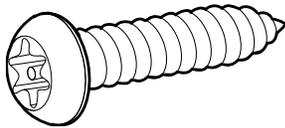
**NOTE:** These are recommended torque applications per fastener size. When fasteners are used with plastic or wood products, the torque specifications will be excessive and we recommend that the installer apply some caution when tightening the fasteners. Plastic or wood products should begin to deform slightly. Fasteners indicated with -"Pat" includes a locking patch type material and should cure for 72 hours for maximum strength.

## BHCS w/Pin Limited Thread Bolts



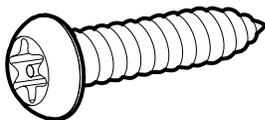
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100290-00	3/8" x 7/8"	(9,5 x 22,2)	SST/PAT	21	3
100292-00	3/8" x 1 1/4"	(9,5 x 31,8)	SST/PAT	21	3
157704-00	7/16" x 2"	(11,11 x 51)	SST/PAT	40	5.5
127068-00	7/16" x 2 7/16"	(11,11 x 61,91)	SST/PAT	40	5.5

## Lag Screws



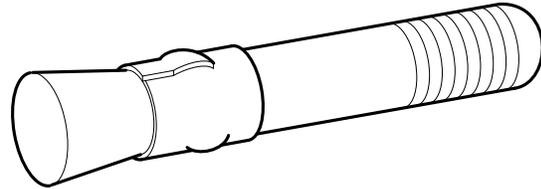
Part #	Sizes		Mat'l or Grade	Head Type
	Inches	mm		
100127-00	5/16" x 1 1/4"	(7,9 x 31,8)	SST	Hex Head
168198-00	3/8" x 1 1/2"	(9,5 x 38,1)	SST	Button Head (Shown)
139039-00	3/8" x 2"	(9,5 x 50,8)	SST	Button Head (Shown)

## Screw, Type AB Thread BHCS w/Pin



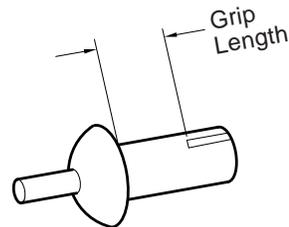
Part #	Size	Mat'l or Grade
129671-00	#14 x 1/2"	SST
127872-00	#14 x 3/4"	SST
136232-00	#14 x 1"	SST
129672-00	#14 x 1 1/4"	SST

## Expansion Anchors (Used To Secure Components To Concrete Slabs)



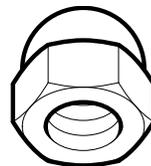
Part #	Sizes		Mat'l or Grade	Recommended Torque	
	Inches	mm		Ft./lbs	Kgm
100263-00	3/8" x 2 3/4"	(9,5 x 69,9)	Alloy Steel	15	2
100266-00	1/2" x 2 3/4"	(12,7 x 69,9)	Alloy Steel	20	2.8

## Drive Rivets



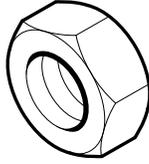
Part #	Sizes		Mat'l
	Inches	mm	
100609-00	1/4" x 3/16"	(6,4 x 4,8)	Alum Rivet/Alum Pin
100611-00	1/4" x 3/8"	(6,4 x 9,5)	Alum Rivet/SST Pin
113300-00	1/4" x 1/2"	(6,4 x 12,7)	Alum Rivet/Alum Pin
100610-00	1/4" x 5/8"	(6,4 x 15,9)	Alum Rivet/SST Pin
139152-00	1/4" x 3/4"	(6,4 x 19,05)	Alum Rivet/Alum Pin
100613-00	1/4" x 7/8"	(6,4 x 22,2)	Alum Rivet/Alum Pin
118158-00	1/4" x 1"	(6,4 x 25,4)	Alum Rivet/Alum Pin

## Low Crown Cap Nut



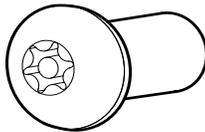
Part #	Size Inches	Mat'l
100349-00	3/8" -16UNC	SST

## Standard Hex Nuts



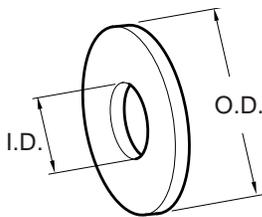
Part #	Sizes Inches	Mat'l or Grade
100326-00	5/16"-18 UNC	SST
100321-00	3/8"-16 UNC	SST-Pat
100327-00	3/8"-16 UNC	SST
128296-00	3/8"-16 UNC (Jam Nut)	SST
100328-00	7/16"-14 UNC	SST
145021-00	7/16"-14 UNC (Jam Nut)	SST
100322-00	1/2"-13 UNC	SST-Pat
129692-00	1/2"-13 UNC	SST-Pat
129693-00	1/2"-13 UNC (Jam Nut)	SST
100323-00	5/8"-11 UNC	SST

## Flange Nut w/Pin



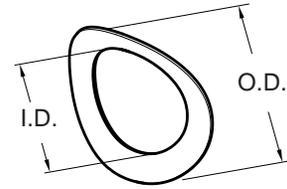
Part #	Sizes Inches	Mat'l or Grade
192064-00	M8 x 24 mm	SST
100353-00	3/8"-16 UNC	SST

## Flat Washers



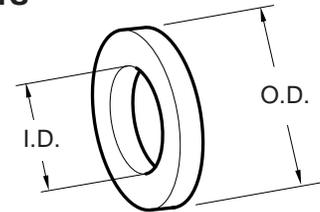
Part #	Sizes		or Grade	I.D.	O.D.
	Inches	mm			
122039-00	1/4"	(6,3)	SST	0.312	.734
100362-00	3/8"	(9,5)	SST	0.406	1.002
112793-00	7/16"	(11,1)	SST	0.505	1.262
100363-00	1/2"	(12,7)	SST	0.536	1.262
100366-00	5/8"	(15,9)	SST	0.688	1.750
123737-00	1 1/8"	(28,6)	SST	1.140	1.750

## Curved Spring Washer



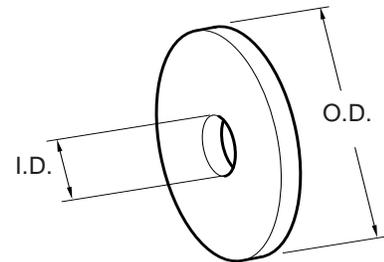
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100380-00	1/2"	(12,7)	SST	0.531	0.795

## SAE Flat Washers



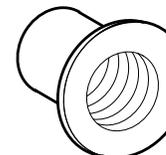
Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100364-00	1/4"	(6,35)	SST	0.281	0.625
100365-00	3/8"	(9,5)	SST	0.411	0.816
113550-00	1/2"	(12,7)	SST	0.531	1.062
129500-00	5/8"	(15,9)	SST	0.686	1.342

## Fender Washers



Part #	Sizes		Mat'l or Grade	I.D.	O.D.
	Inches	mm			
100378-00	3/8" x 1 1/2"	(9,53 x 38,1)	SST	0.406	1.500
100379-00	1/2" x 2"	(12,7 x 50,8)	SST	0.531	2.000

## Tee Nut (PlayBooster Clamps)



Part #	Sizes Inches	Mat'l or Grade
100351-00	3/8"-16 UNC	SST

**Set Screw**



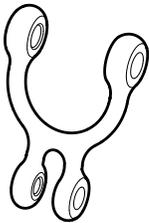
Part #	Sizes		Mat'l or Grade
	Inches	mm	
100298-00	3/8" x 7/16"	(9,5x11,1)	SST

**Bolt Link**



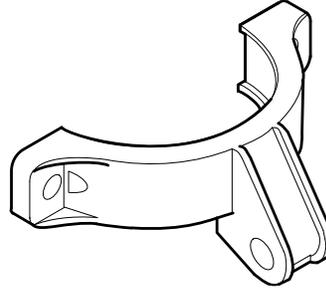
Part #	Mat'l or Grade
138915-00	SST

**Double Clevis**



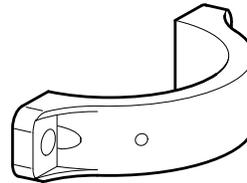
Part #	Mat'l or Grade
138917-00	SST

**Offset Hanger Clamp (PlayBooster)**



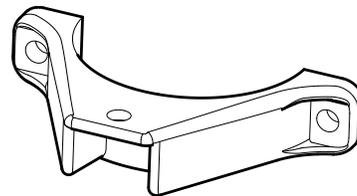
Part #	Mat'l
113729-00	CastAluminum

**Half Clamp (PlayBooster)**



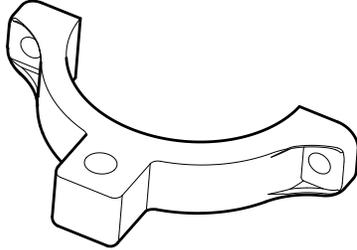
Part #	Mat'l
105327-01	CastAluminum

**Deck Hanger Clamp (PlayBooster)**



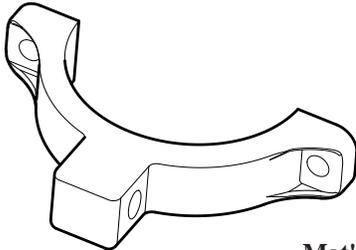
Part #	Mat'l
106022-00	CastAluminum

### Swing Hanger Clamp



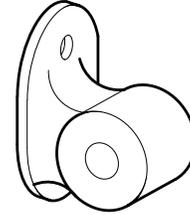
Part #	Mat'l
121289-00	CastAluminum

### Ring/Rail Hanger Clamp (PlayBooster)



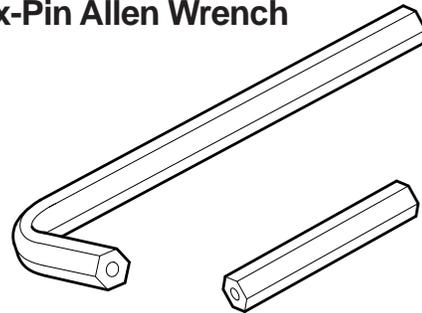
Part #	Mat'l
105330-00	CastAluminum

### Offset Bolt Bracket (PlayShaper)



Part #	Mat'l
113895-00	CastAluminum

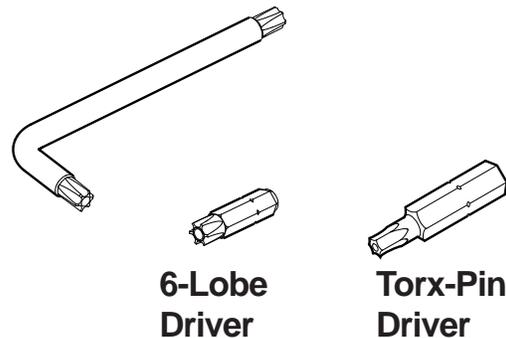
### Hex-Pin Allen Wrench



### Hex-Pin Driver

Part #	Description
100685-00	Hex-Pin Allen Wrench
100686-00	Hex-Pin Driver (Used With A <sup>5</sup> / <sub>16</sub> " Socket)

### 6-Lobe Wrench

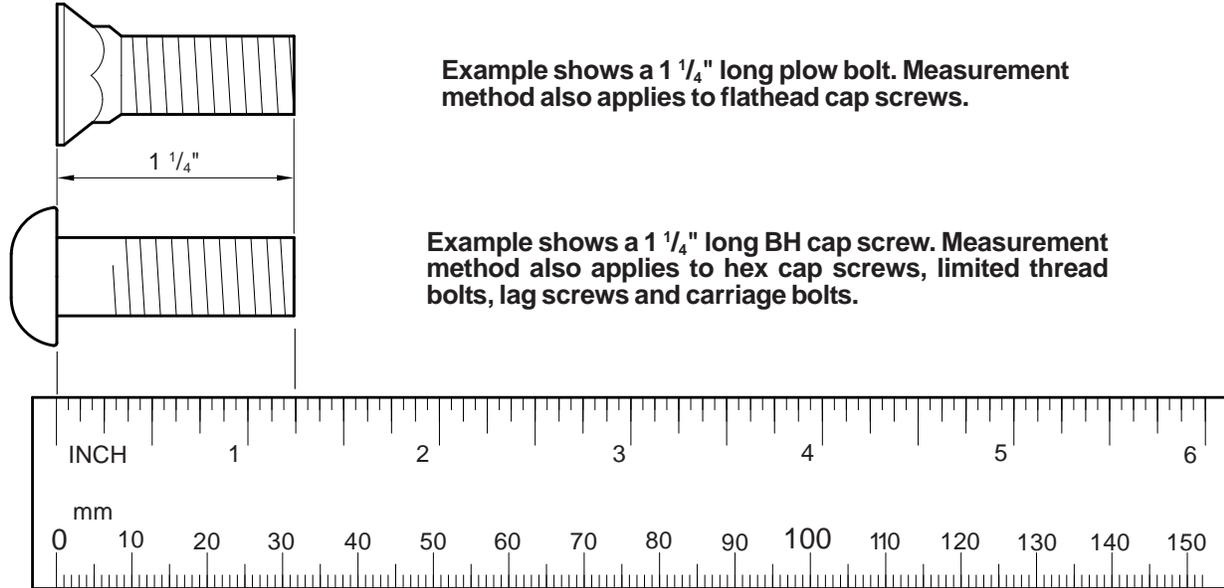


### 6-Lobe Driver

### Torx-Pin Driver

Part #	Description
146017-00	6-Lobe Wrench (T-45)
146007-00	6-Lobe Driver (T-45) (Used With A <sup>5</sup> / <sub>16</sub> " Socket)
127463-00	Torx-Pin Driver (T-27) (Used With A <sup>1</sup> / <sub>4</sub> " Socket)

## HOW TO DETERMINE BOLT LENGTHS



**Rule: Measurements should be based on the part of the screw that penetrates the surface.**

182212 is an  
entanglement label

Not an Install doc.



182213 is a hot surface  
label

Not an Install doc.





Look for compliance to the following guidelines and standards whenever you install playground equipment. It's your assurance that the products you install meet the most rigorous safety and quality assurance standards.

Landscape Structures is a member in good standing of **IPEMA**, the **International Play Equipment Manufacturers Association**. IPEMA is a member-driven, international trade organization that represents and promotes an open market for manufacturers of play equipment.



In the interest of playground safety, IPEMA provides a Third Party Certification Service whereby a designated independent laboratory validates a participant's certification of conformance to ASTM F1487, Standard Consumer Safety Performance Specification for Playground Equipment for Public Use, except sections 7.1.1, 10 and 12.6.1; CAN/CSA Z614, Children's Playspaces and Equipment Standards, except clauses 9.8, 10 and 11; or both. The use of the corresponding logo in the Landscape Structures Inc. catalog signifies that Landscape Structures Inc. has received written validation from the independent laboratory that the product(s) associated with the use of the logo conforms with the requirements of the indicated standards. Check the IPEMA website ([www.ipema.org](http://www.ipema.org)) to confirm product certification. The use zone and fall height requirements in this publication are shown to ASTM standards. The requirements for other standards may be different. According to the CSA, playground maintenance and inspection is a continuous and integral part of budgetary costs. The cost of inspection and maintenance shall be considered and incorporated into the budget at the time of design, purchase equipment and installation (11.1.1 Budgeting).

#### International Play Equipment Manufacturers Association

4305 N. Sixth St. Suite A  
Harrisburg, PA 17110  
[www.ipema.org](http://www.ipema.org)



**The Consumer Product Safety Commission (CPSC)** is a governmental organization that provides technical safety guidelines for designing, constructing, operating and maintaining public playgrounds.

#### U.S. Consumer Product Safety Commission

4330 East West Hwy.  
Bethesda, MD 20814  
[www.cpsc.gov](http://www.cpsc.gov)

**The American Society for Testing and Materials (ASTM)** is a scientific and technical organization that is a major developer of standards for testing different types of materials. In 1993, the ASTM published "Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use," designation F1487-93. ASTM is more technical than the CPSC. ASTM revised its old standard and published a new standard in 1995, 1998, 2001, 2005, 2007 and again in 2011.

#### American Society for Testing and Materials

100 Barr Harbor Dr.  
P.O. Box C700  
West Conshohocken, PA 19428  
[www.astm.org](http://www.astm.org)



#### The Canadian Standards Association

Nearly all equipment developed by Landscape Structures is certified to meet CAN/CSA-Z614-07, the Children's Playspaces and Equipment Standard, through IPEMA.

**The European Standard** was developed by the European Committee for Standardization. The majority of Landscape Structures products have been designed to be TUV certified by a third-party validator to EN 1176: 2008, the European Standard for Playground Equipment.



**ISO 9001:2008** has a process-orientated structure, is customer focused and emphasizes continuous improvement in quality.



**ISO 14001:2004** drives us toward operating in a manner that is environmentally conscious.



## PS/PB/FP/Evos/Weevos Guidelines & Standards

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 (763) 972-3391 1-888-LSI-INST (1-888-574-4678) FAX (763) 972-3185

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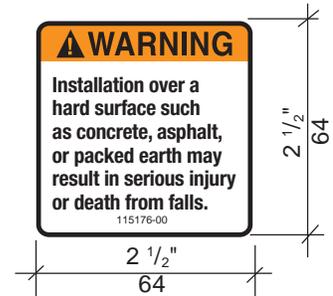




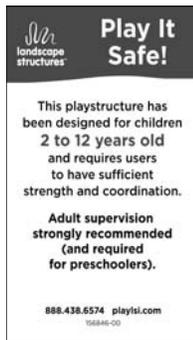
Part No. 156844-00-000



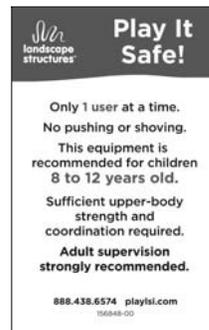
Part No. 182213-00-000



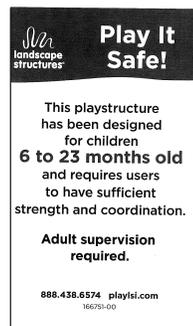
Part No. 115176-00-000



Part No. 156846-00-000



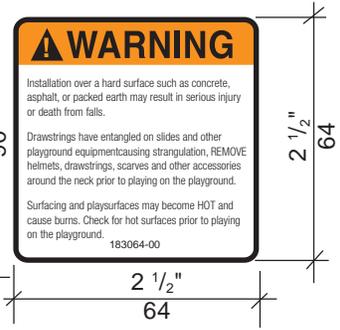
Part No. 156848-00-000



Part No. 166751-00-000



Part No. 182212-00-000



Part No. 183064-00-000



Part No. 156850-00-000



Part No. 166815-00-000



Part No. 200331-00-000

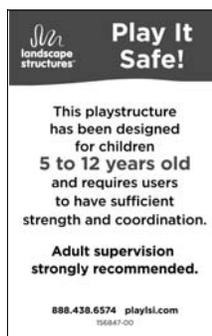


Part No. 200332-00-000



Part No. 200333-00-000

**NOTE: The Playstructure design will determine which Play It Safe sticker will be supplied.**



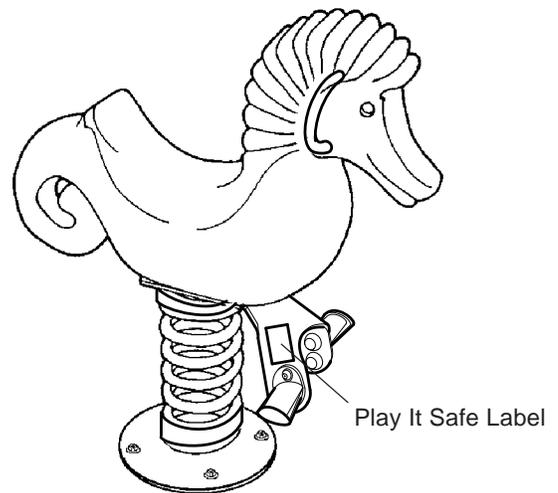
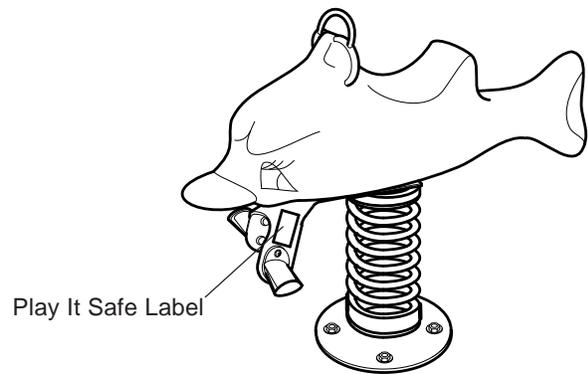
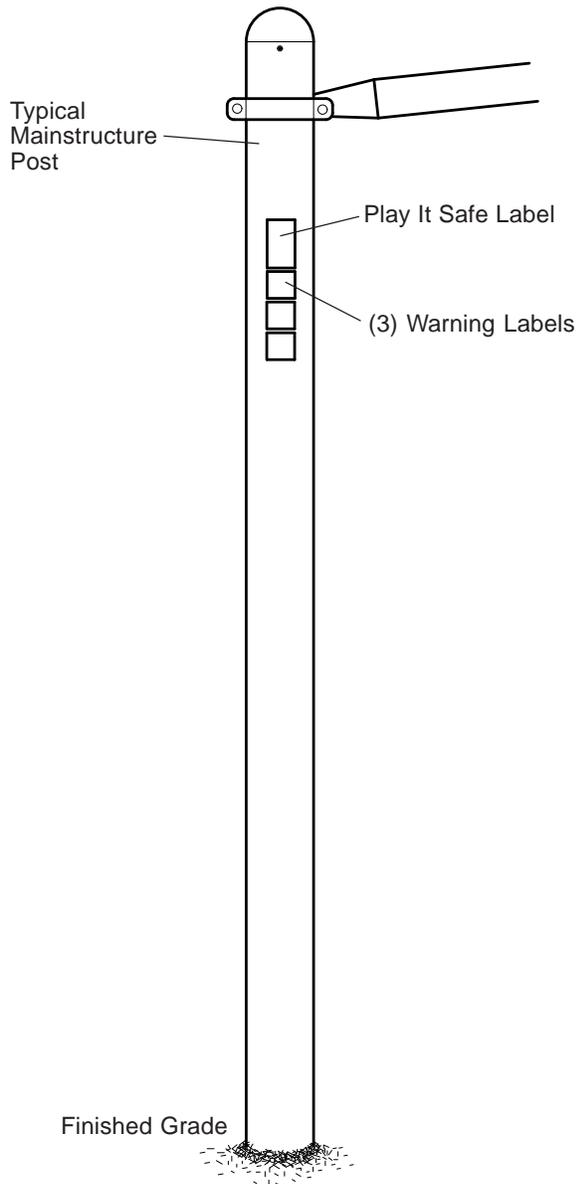
Part No. 156847-00-000



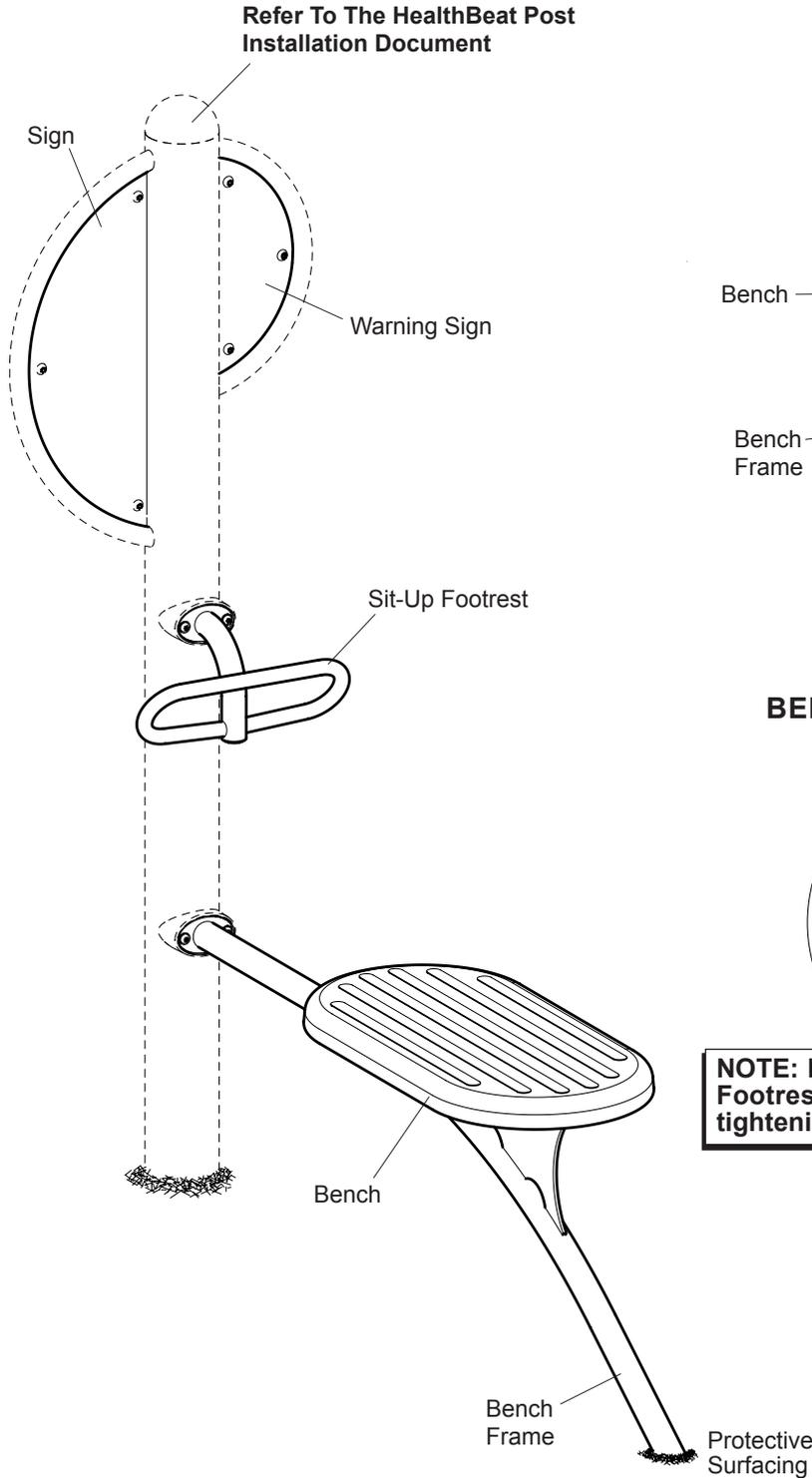
Part No. 156845-00-000

## INSTRUCTIONS:

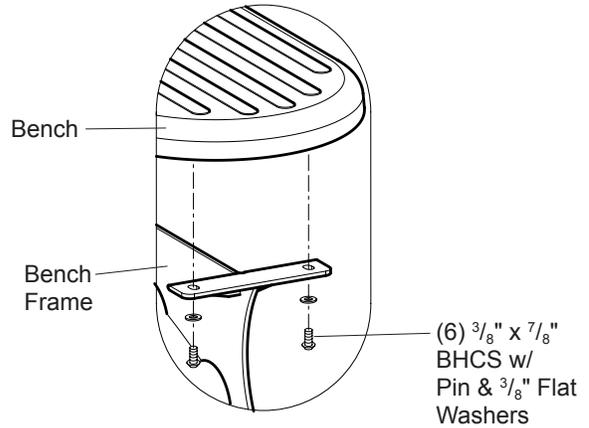
Surface must be clean and dry prior to applying sticker. Peel backing sheet away from back of sticker and place sticker in position. Using backing sheet, rub over face of sticker to burnish down into place. Choose a location visible to adults in a conspicuous location on product. Stickers work best on painted parts. Where possible, avoid placing on rotationally-molded plastic parts, TenderTuff-coated parts or where children may step and wear off sticker. This applies to both Freestanding Play items and Composite Playstructures. Apply sticker adjacent to or visible from the primary entrance to the structure. Apply 4'-5' above the surface. Apply at least (1) one to every structure and (2) two to large Composite Playstructures.



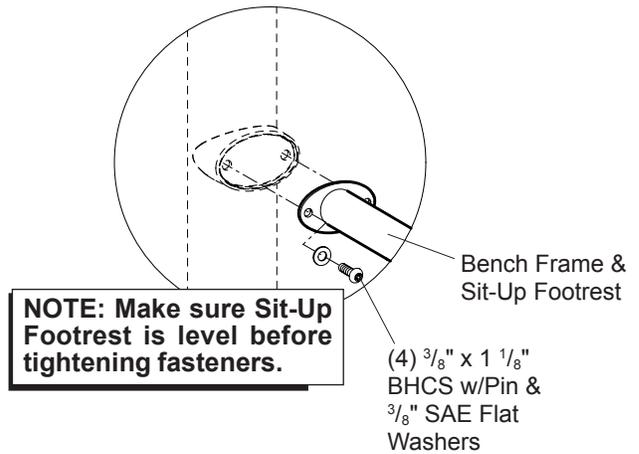
## PB/PS/FP/Evos®/Weevos® Warning Labels



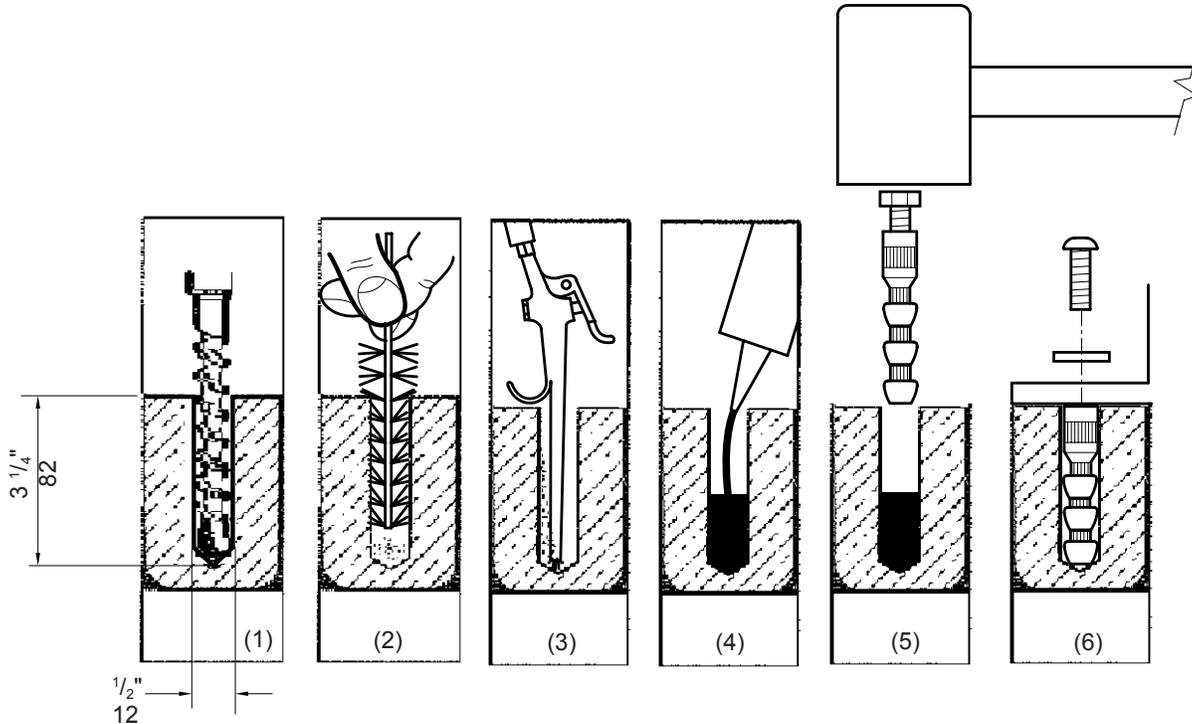
**DETAIL  
BENCH ATTACHMENT**



**DETAIL  
BENCH FRAME/FOOT REST ATTACHMENT**



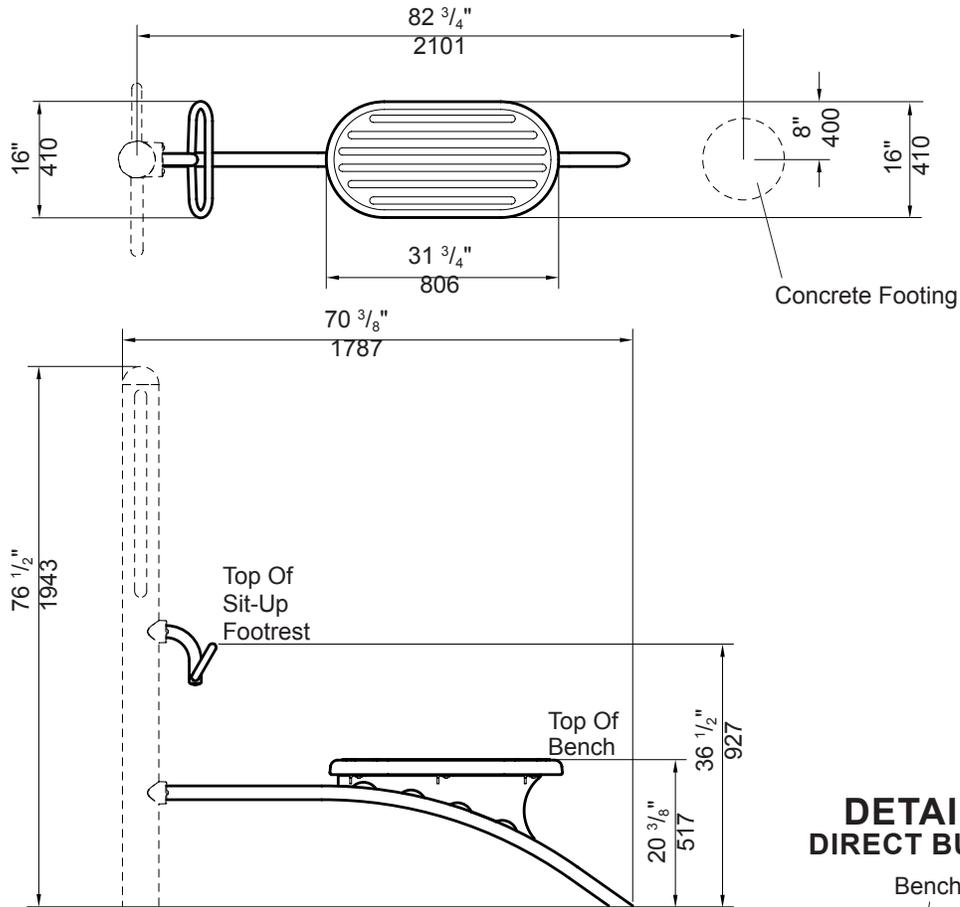
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



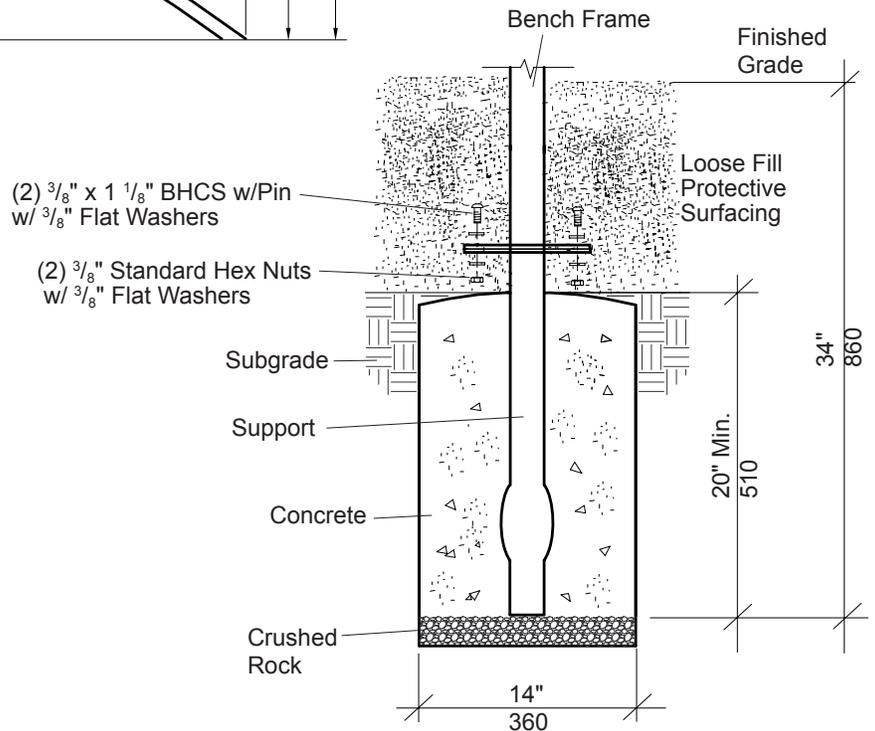
- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With Ab Crunch/Leg Lift in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plates.
- 3) Move bench frame aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Re-attach bench frame. Attach surface mount plate to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

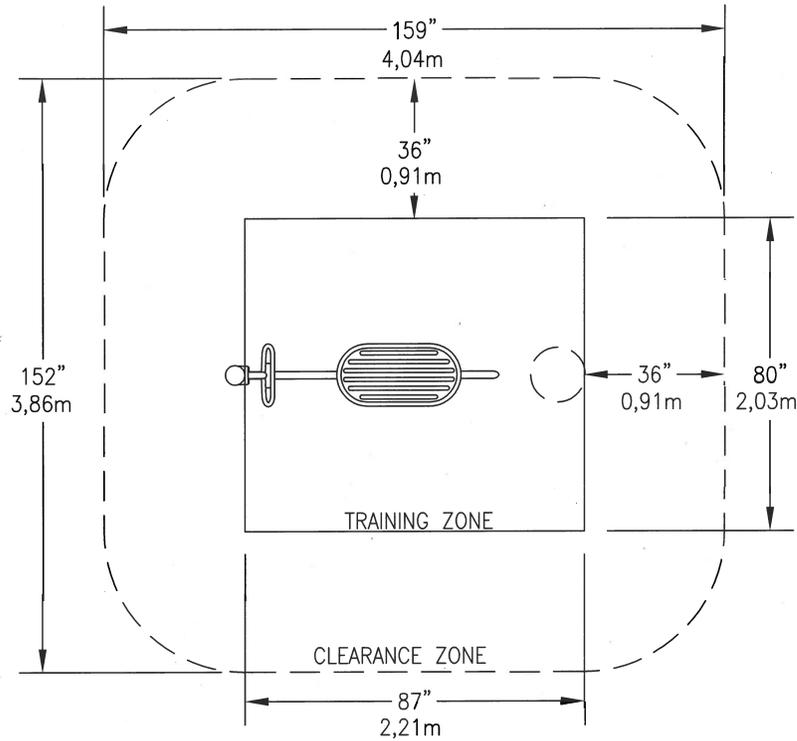
**PLAN VIEW/FOOTING LAYOUT**



**DETAIL DIRECT BURY**

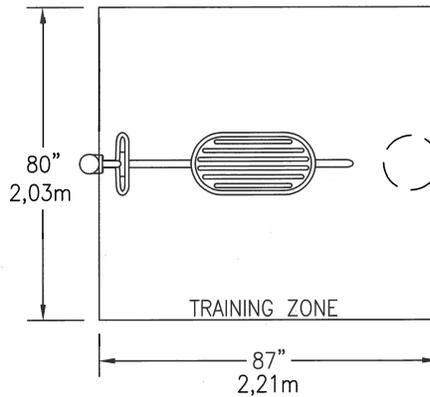


**TRAINING/CLEARANCE SPACE**



**ASTM F3101**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.



**EN 16630**



# HealthBeat® 192451 Ab Crunch/Leg Lift

## Parts List

Part #	Description	Qty.
206494	Ab Bench Frame (DB), Specify Color .....	1
206616	Ab Bench Support, (DB), Specify Color.....	1
191045	Ab Bench Frame (SM), Specify Color.....	1
191044	Footrest, Specify Color.....	1
160716	Bench, Black.....	1
220079	HealthBeat® Sign Ab Crunch/Leg Lift.....	1
220208	HealthBeat Sign Warning .....	*
220105	HealthBeat Sign Warning (EN).....	*
<b>161668</b>	<b>Ab-Crunch/Leg Lift Hardware Package .....</b>	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	6
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	4
100362	3/8" Flat Washers, SST.....	6
100365	3/8" SAE Flat Washer, SST.....	4
<b>207263</b>	<b>Support (DB) Hardware Package .....</b>	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	2
100362	3/8" Flat Washers, SST.....	4
100327	3/8" Standard Hex Nuts, SST.....	2
<b>207261</b>	<b>Power-Ser Anchor 2-Hole (SM) Hardware Pkg . ....</b>	<b>1</b>
206892	Anchor Wej-It 3/8-16 , SST.....	2
100362	3/8" Flat Washer, SST .....	2
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	2
100209	3/8" x 1 3/4" Hex Head Bolt, SST.....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Bench Frame:** Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130")(3,04 mm-3,30 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO sheet steel and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**Bench Support:** Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130")(3,04 mm-3,30 mm) wall galvanized steel tube, and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield®, color specified.

**Sit-Up/Footrest:** Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-.095")(92,15 mm-2,41 mm) wall galvanized steel tube, 1.029" (26,13 mm) O.D. RS20 (.070"-.080")(1,77 mm-2,03 mm) wall, and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield, color specified.

**Bench:** Rotationally molded from U.V. stabilized linear low density polyethylene, 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:** (DB) 1 man hour  
(SM) 3/4 man hour

**Area Required:** See Training/Clearance Space

**Weight:** (DB) 53 lbs.  
(SM) 45 lbs.

**Concrete:** (DB) Approx. 1.78 cu.ft.

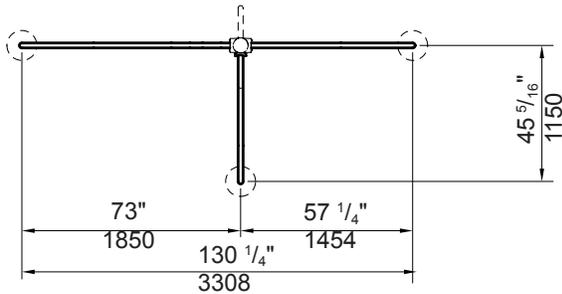
**Fall Height:** 21" (530 mm) Bench

## Installation Instructions

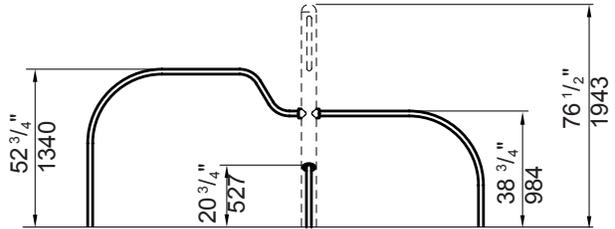
- 1) **(Direct Bury)** Dig footing spaced as shown. Refer to the Plan View/Footing Layout & Direct Bury Detail.
- 2) **(Direct Bury)** Attach bench support to bench frame. Refer to the Direct Bury Detail.
- 3) Attach bench frame and sit-up footrest to Ab Crunch post. Refer to the Bench Frame/Foot Rest Attachment Detail. **NOTE: Make sure Sit-Up Footrest is level before tightening fasteners.**
- 4) Attach bench to bench frame. Refer to the Bench Attachment Detail.
- 5) **(Direct Bury)** With bench frame in plumb position. Pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on the back of sheet 1.
- 6) Install protective surfacing before users are allowed to play on the component.



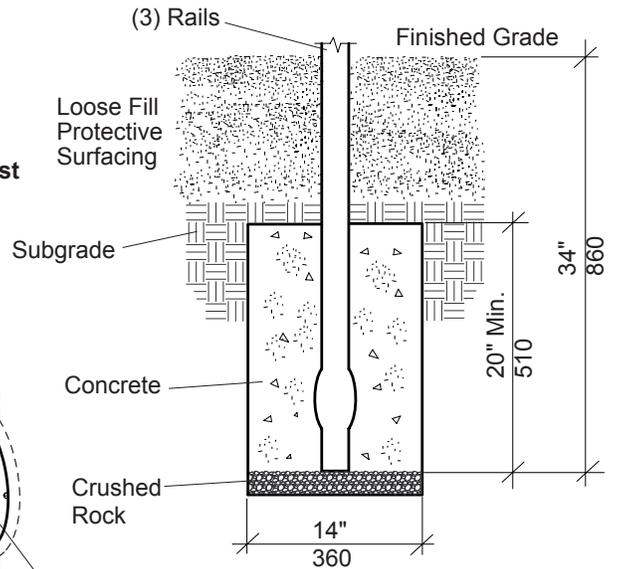
**PLAN VIEW/FOOTING LAYOUT**



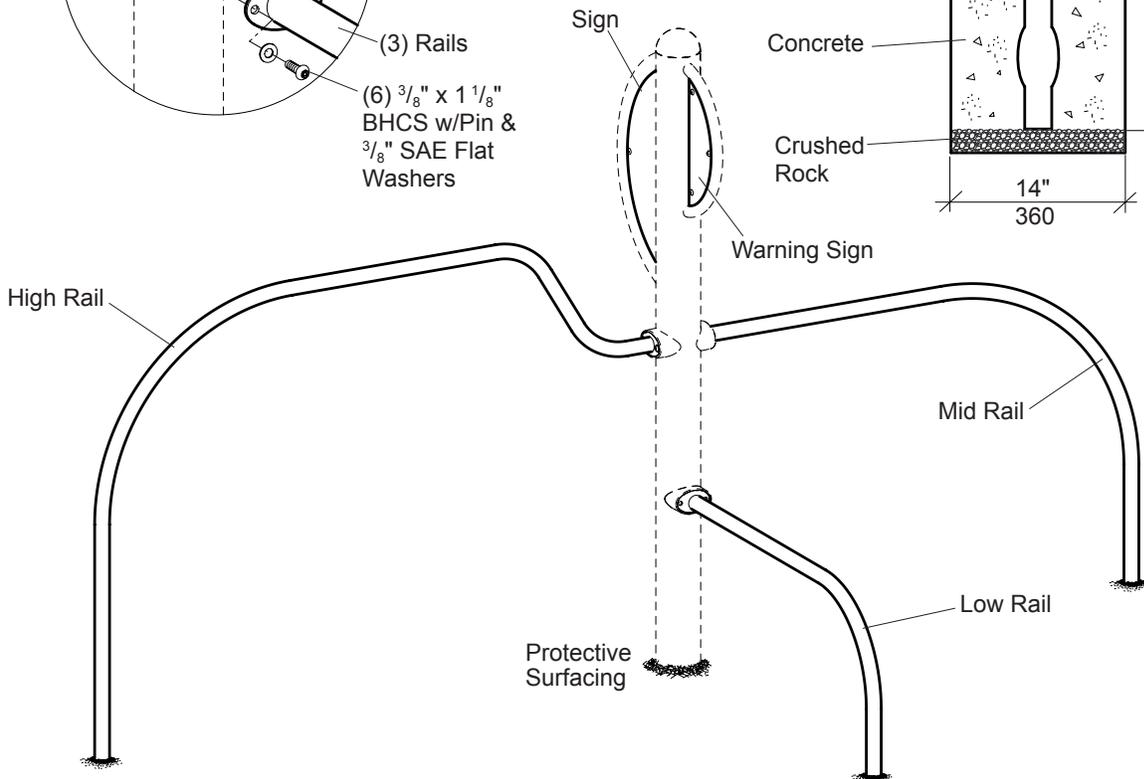
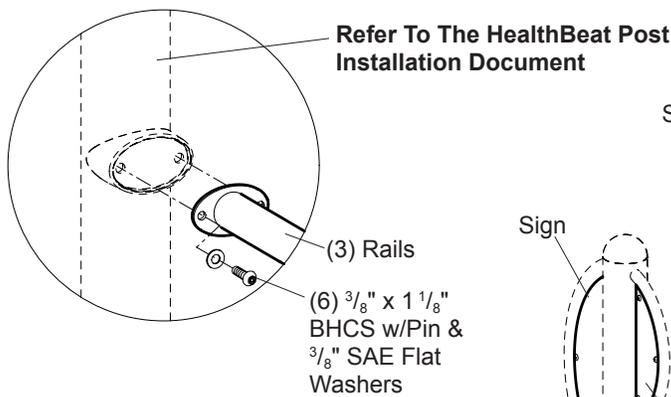
**ELEVATION**



**DETAIL  
DIRECT BURY**



**DETAIL  
RAIL ATTACHMENT**





# HealthBeat® 192452 Assisted Row/Push-Up

## Parts List

Part #	Description	Qty.
210048	Low Rail, (DB), Specify Color.....	1
190851	Low Rail, (SM), Specify Color .....	1
210050	Mid Rail, (DB), Specify Color .....	1
190850	Mid Rail, (SM), Specify Color .....	1
210051	High Rail, (DB), Specify Color.....	1
190849	High Rail, (SM), Specify Color.....	1
220080	HealthBeat® Sign Assisted Row/Push-Up.....	2
220208	HealthBeat Sign Warning .....	*
220105	HealthBeat Sign Warning (EN).....	*
<b>161672</b>	<b>Assisted Row Hardware Package .....</b>	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	6
100365	3/8" SAE Flat Washers, SST .....	6
<b>207273</b>	<b>Power-Ser Anchor 12-Hole (SM) Hdw. Pkg. ....</b>	<b>1</b>
206892	Anchor Wej-It 3/8-16 , SST.....	12
100362	3/8" Flat Washer, SST .....	12
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	12
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Rail:** Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085"-0.095")(2,15 mm-2,41 mm) wall galvanized steel tube, and 3/16" (4,75 mm) HRPO sheet steel Finish: ProShield®, color specified.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**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) 2 man hours  
(SM) 1 1/2 man hours

**Area Required:** See Training/Clearance Space

**Concrete:** (DB) Approx. 5.34 cu.ft.

**Weight:** (DB) 55 lbs.

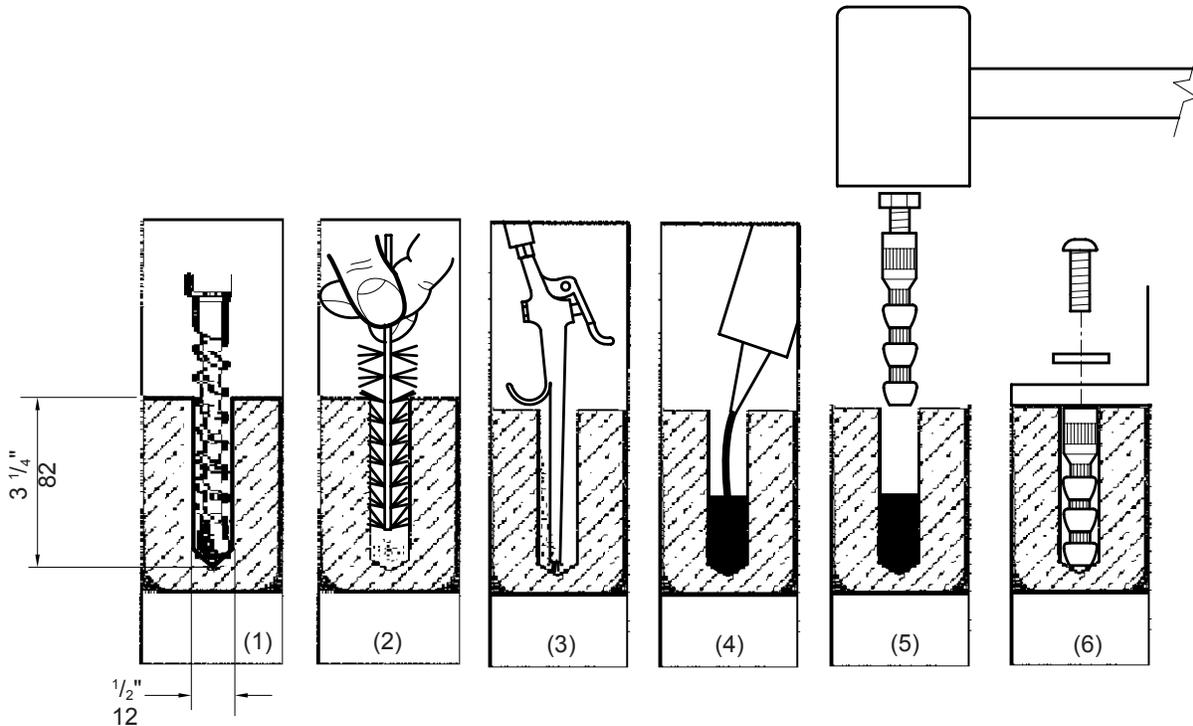
(SM) 62 lbs.

**Fall Height:** 53" (1350 mm)

## Installation Instructions

- 1) **(Direct Bury)** Dig footings spaced as shown. Refer to the Plan View/Footing Layout.
- 2) Attach rails to HealthBeat post. Refer to the Rail Attachment Detail.
- 3) **(Direct Bury)** With rails in plumb position. Pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 4) Install protective surfacing before users are allowed to use the component.

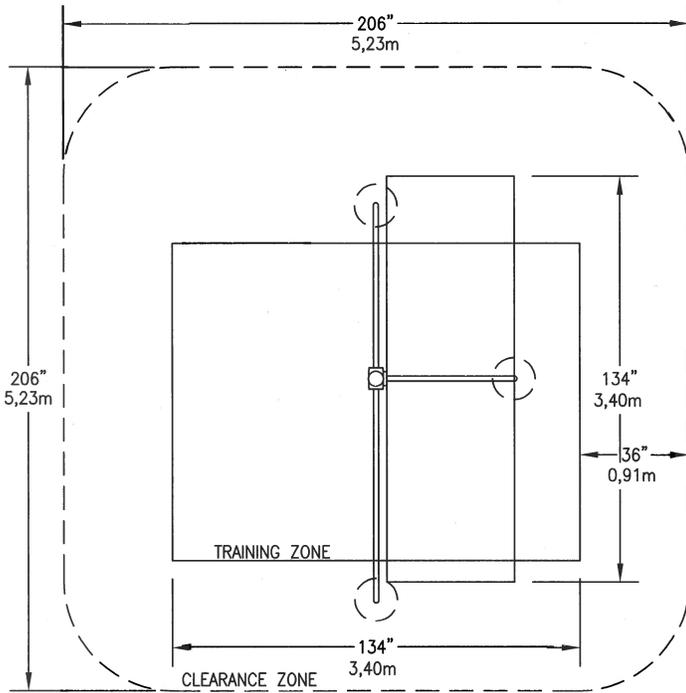
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



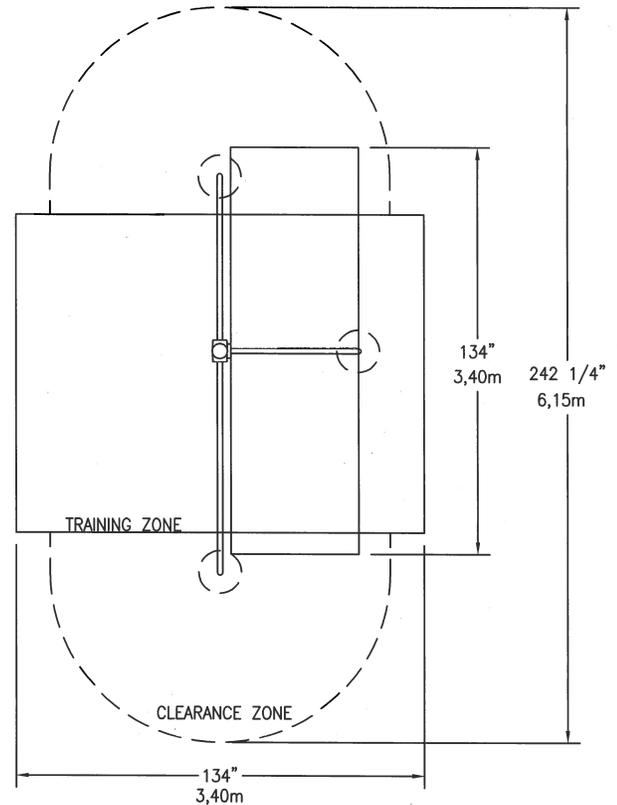
- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With Assisted Row/Push-Up in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plate.
- 3) Move rails aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Re-attach rails. Attach surface mount plates to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

## TRAINING/CLEARANCE SPACE



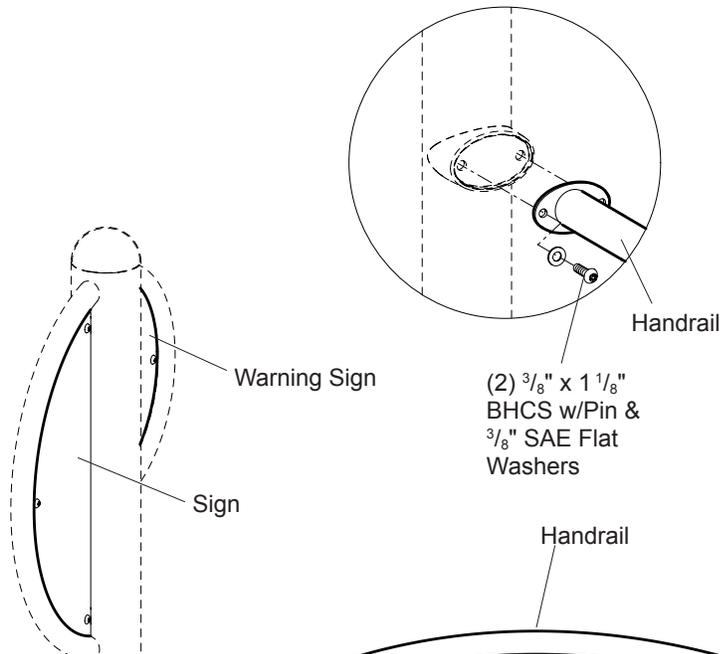
**ASTM F3101**



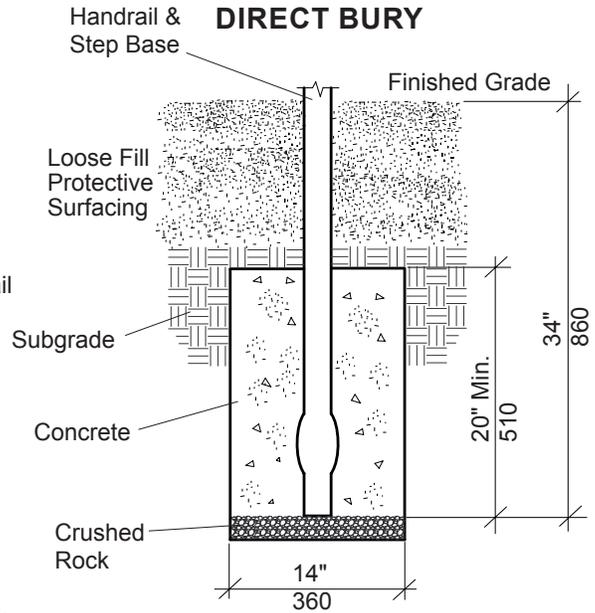
**EN 16630**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

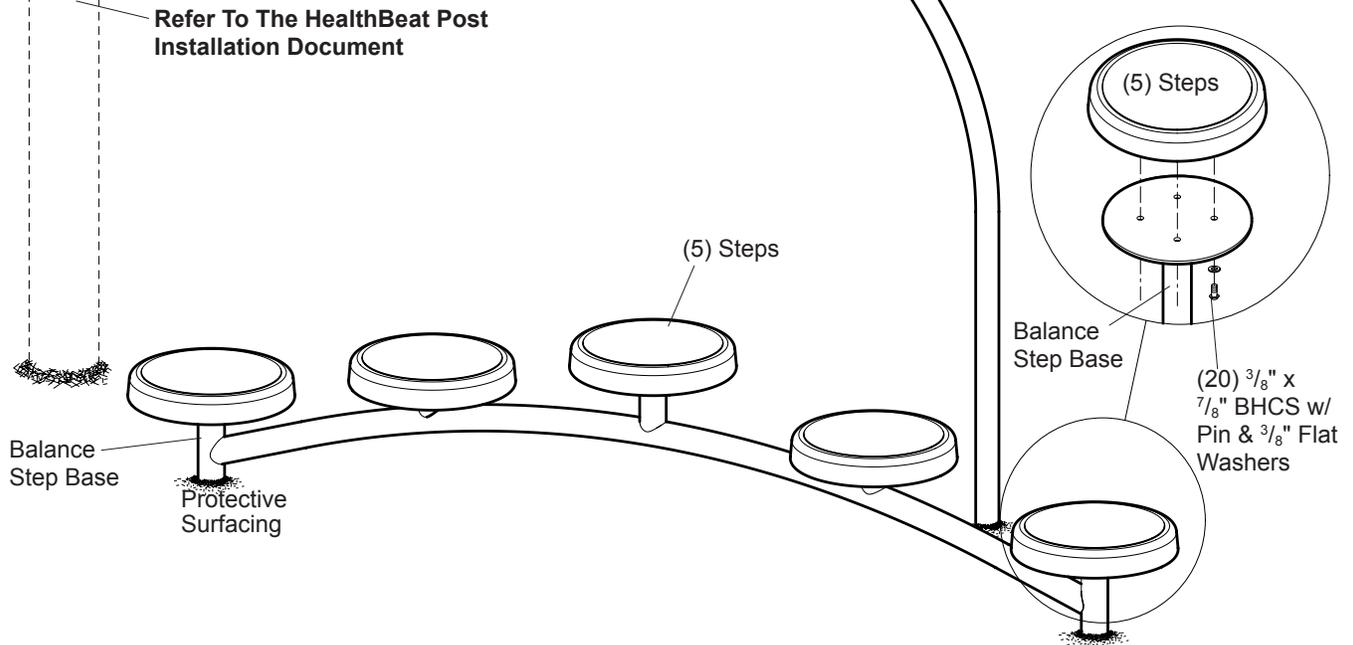
**DETAIL  
HANDRAIL ATTACHMENT**



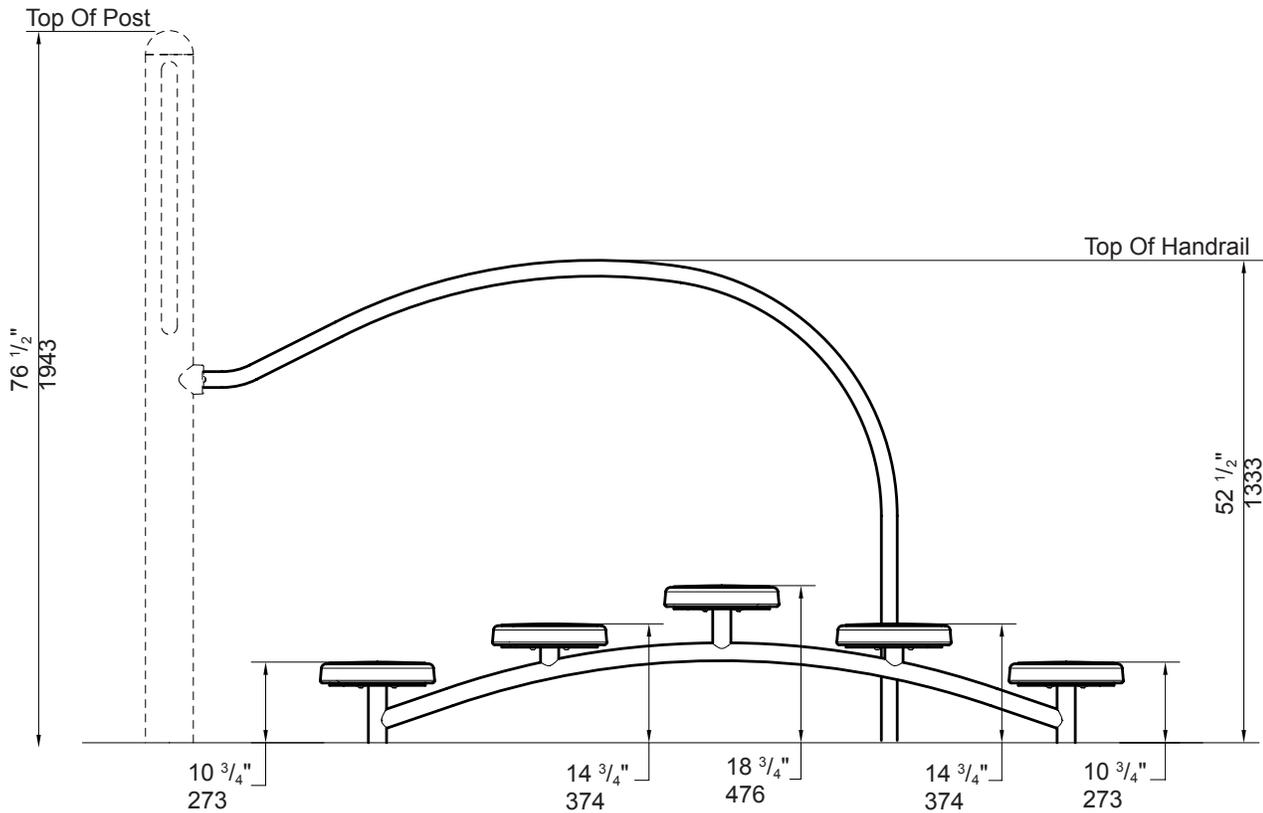
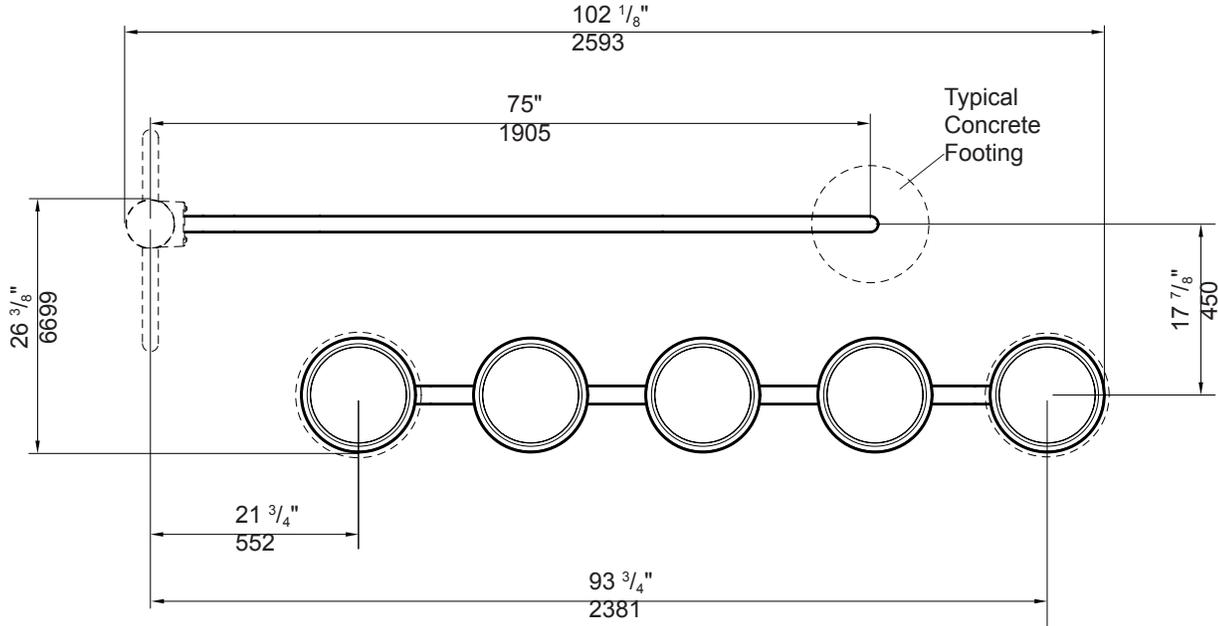
**DETAIL  
DIRECT BURY**



**DETAIL  
STEP ATTACHMENT**



**PLAN VIEW/FOOTING LAYOUT**



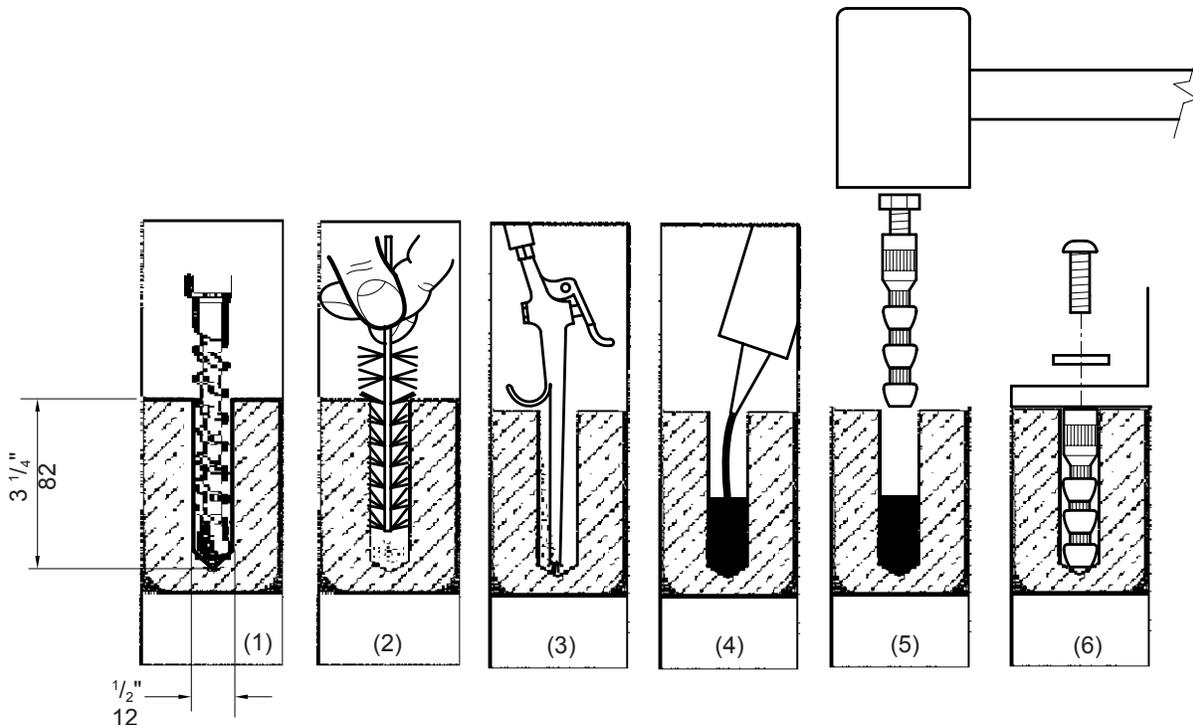
**HealthBeat®**

**192454 Balance Steps**

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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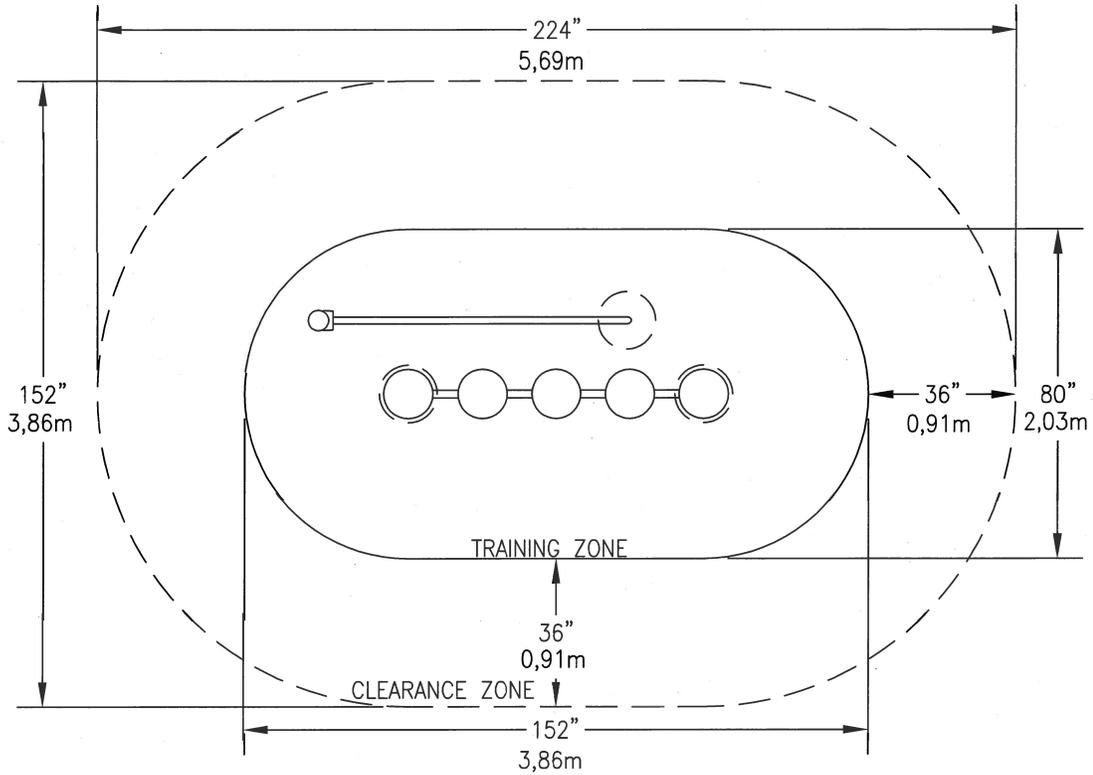
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



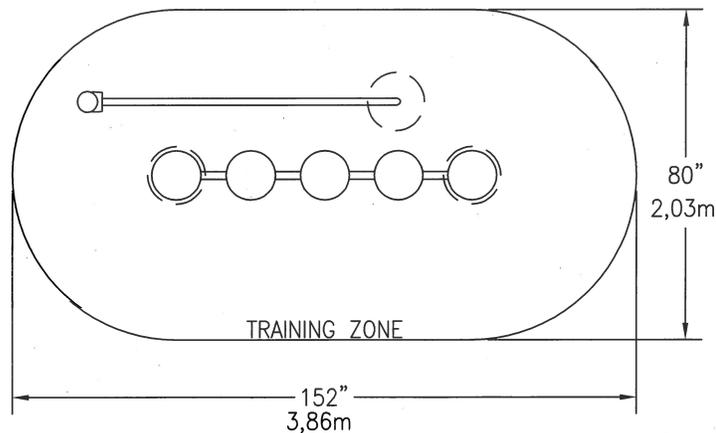
- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With handrail and step base in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plates.
- 3) Move step base and handrail aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Reposition handrail and step base. Attach surface mount plates to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

**TRAINING/CLEARANCE SPACE**



**ASTM F3101**



**EN 16630**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

**HealthBeat®**

**192454 Balance Steps**



# HealthBeat® 192454 Balance Steps

## Parts List

Part #	Description	Qty.
206483	Balance Step Base, (DB), Specify Color.....	1
191071	Balance Step Base, (SM), Specify Color.....	1
206482	Balance Step Handrail, (DB), Specify Color.....	1
191070	Balance Step Handrail, (SM), Specify Color.....	1
160586	Step/Seat, Black.....	5
220081	HealthBeat® Sign Balance Steps.....	1
220208	HealthBeat Sign Warning.....	*
220105	HealthBeat Sign Warning (EN).....	*
<b>161669</b>	<b>Balance/Steps Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	20
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	2
100362	3/8" Flat Washers, SST.....	20
100365	3/8" SAE Flat Washers, SST.....	2
<b>207273</b>	<b>Power-Ser Anchor 12-Hole (SM) Hdw. Pkg.</b> .....	<b>1</b>
206892	Anchor Wej-It 3/8-16, SST.....	12
100362	3/8" Flat Washer, SST.....	12
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST.....	12
100209	3/8" x 1 3/4" Hex Head Bolt, SST.....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

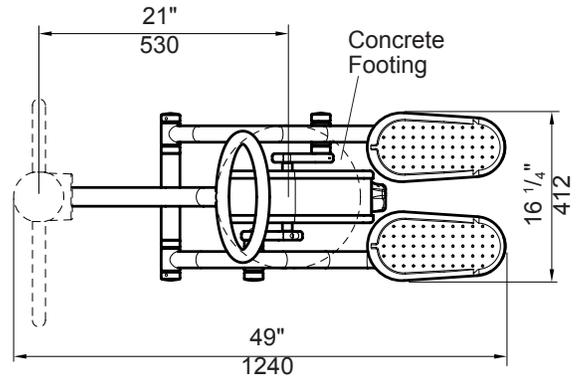
<b>Handrail:</b>	Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121")(2,81 mm-3,07 mm) wall galvanized steel tube, and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.
<b>Sign Panel:</b>	Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. <b>(Sign)</b> Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.
<b>Step:</b>	Rotationally molded from U.V. stabilized linear low density polyethylene, black in color.
<b>Balance Step Base:</b>	Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130") (3,04 mm-3,30 mm) wall galvanized steel tube, and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield®, color specified.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	<b>(DB)</b> 2 man hours <b>(SM)</b> 1 3/4 man hours
<b>Area Required:</b>	See Training/Clearance Space
<b>Weight:</b>	<b>(DB)</b> 98 lbs. <b>(SM)</b> 116 lbs.
<b>Concrete:</b>	<b>(DB)</b> Approx. 5.34 cu.ft.
<b>Fall Height:</b>	16" (410 mm)

## Installation Instructions

- 1) **(Direct Bury)** Dig footings spaced as shown. Refer to the Plan View/Footing Layout.
- 2) Attach handrail to HealthBeat post. Refer to the Handrail Attachment Detail.
- 3) Attach steps to balance step base. Refer to the Step Attachment Detail.
- 4) **(Direct Bury)** Place balance step base, and handrail into footing holes, and prop in plumb position. Pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 5) Install protective surfacing before users are allowed to play on the component.

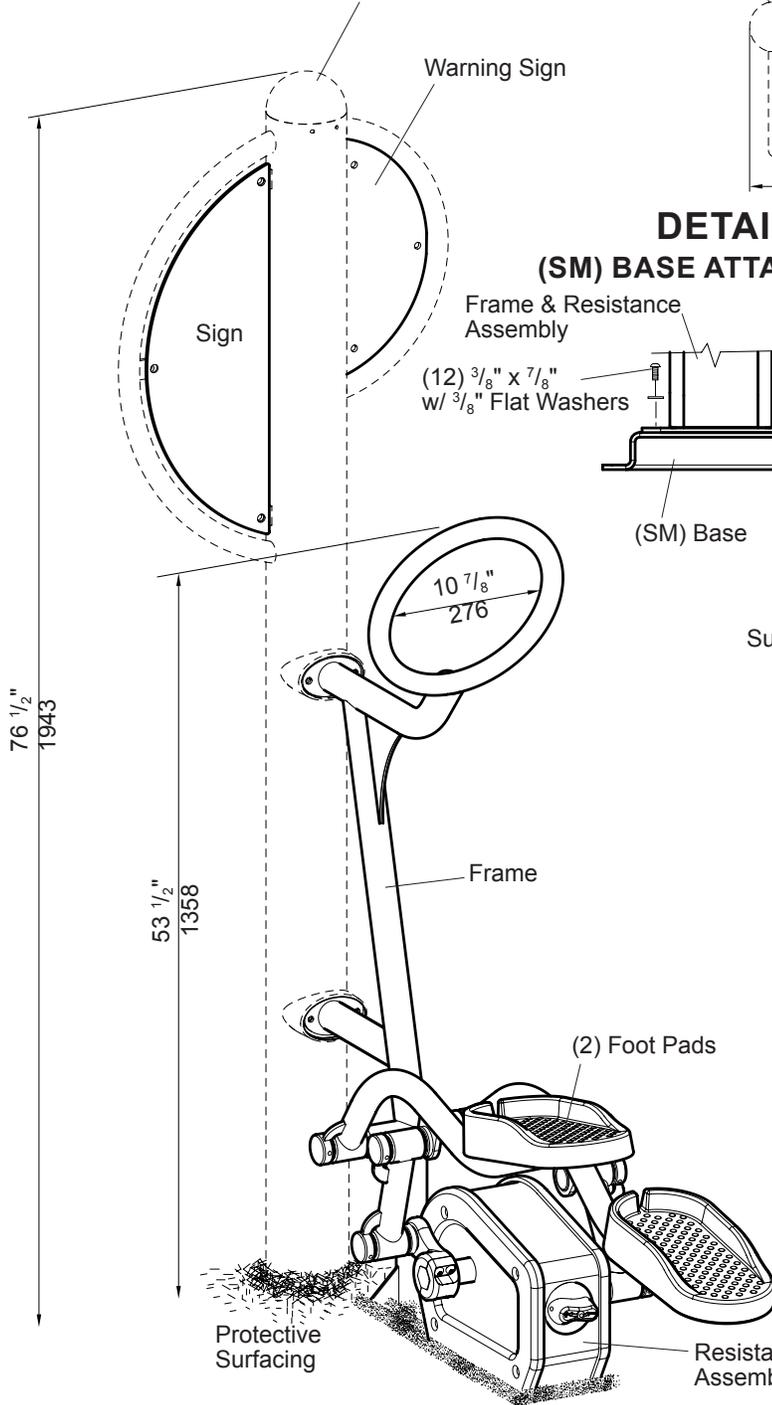


PLAN VIEW/FOOTING LAYOUT



Refer To The HealthBeat Post Installation Document

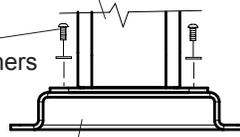
Warning Sign



DETAIL (SM) BASE ATTACHMENT

Frame & Resistance Assembly

(12) 3/8" x 7/8" w/ 3/8" Flat Washers



(SM) Base

DETAIL DIRECT BURY

(12) 3/8" x 7/8" w/ 3/8" Flat Washers

Frame & Resistance Assembly

Finished Grade

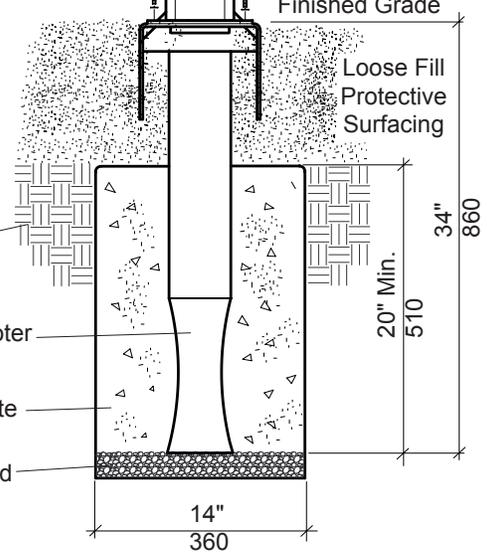
Loose Fill Protective Surfacing

Subgrade

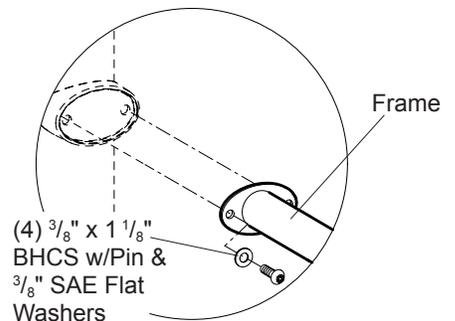
Stepper Footer

Concrete

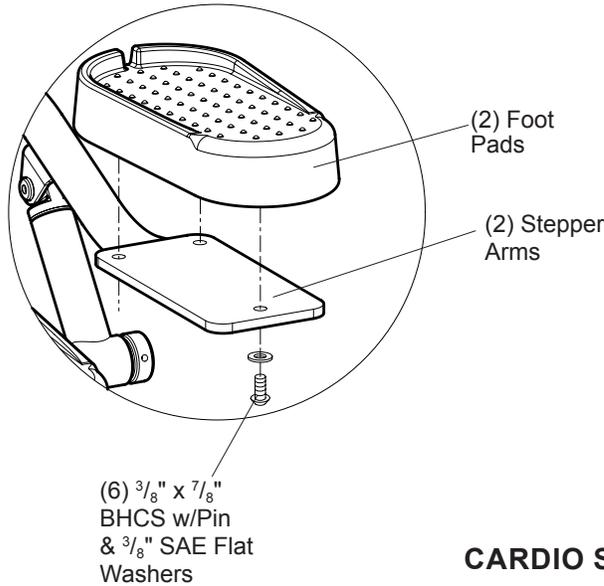
Crushed Rock



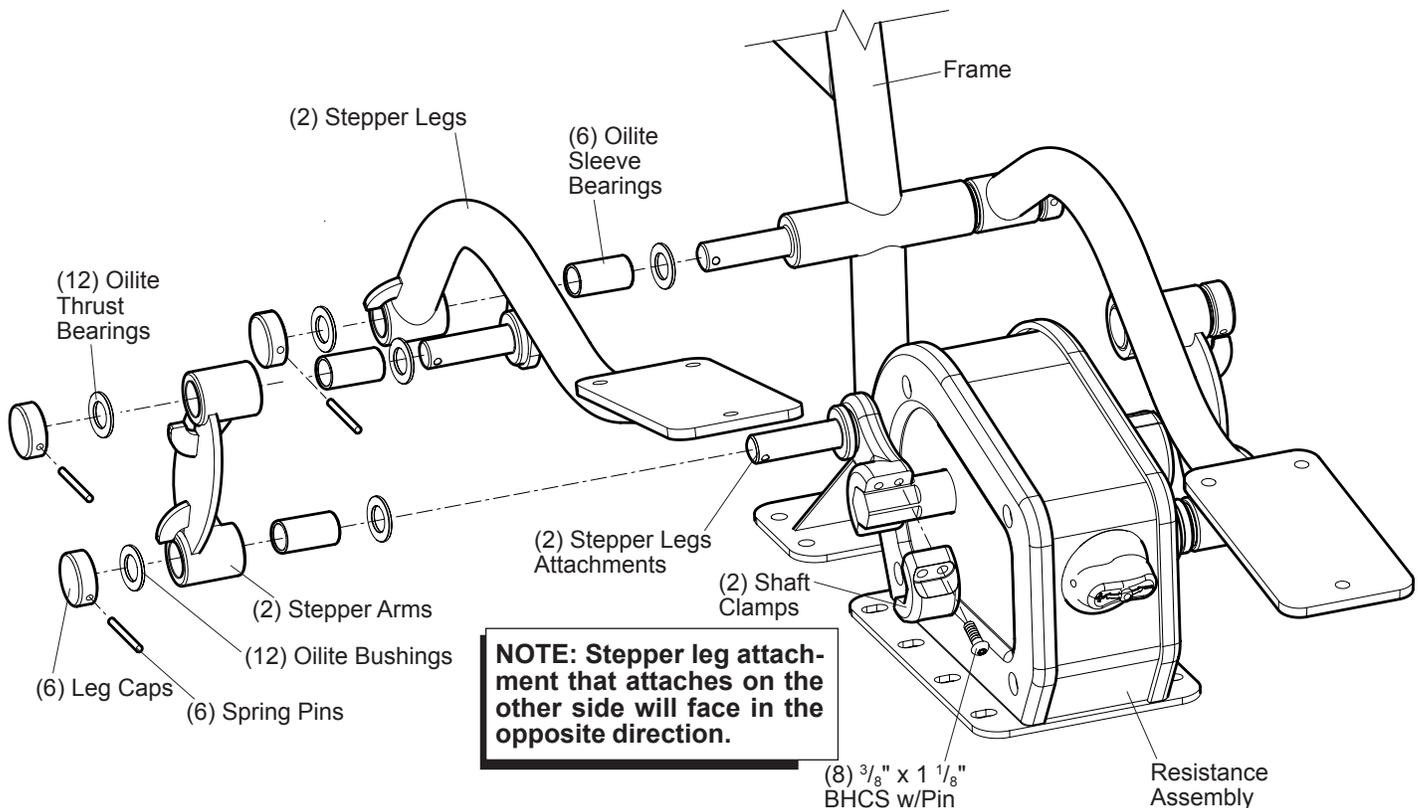
DETAIL FRAME ATTACHMENT



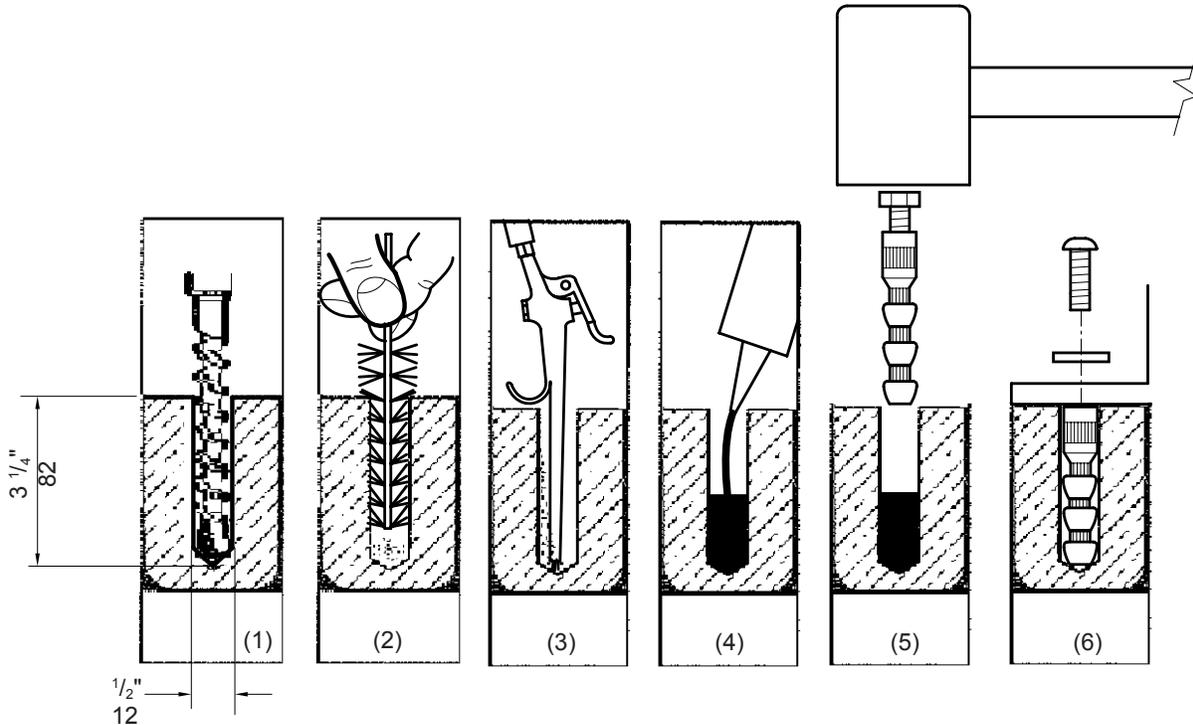
**DETAIL  
FOOT PAD ATTACHMENT**



**DETAIL  
CARDIO STEPPER ASSEMBLY**



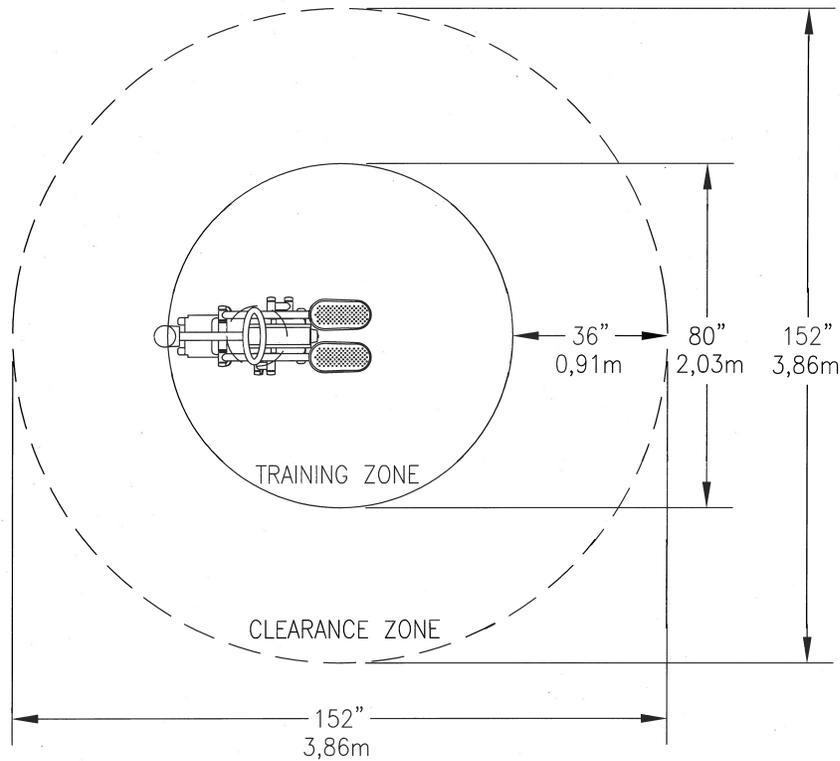
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



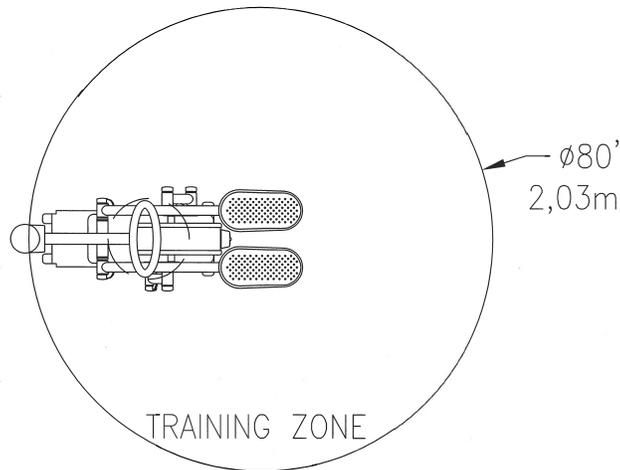
- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With Cardio Stepper in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount base.
- 3) Move cardio stepper aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Re-attach Cardio Stepper. Attach surface mount base to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

**TRAINING/CLEARANCE SPACE**



**ASTM F3101**



**EN 16630**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

## Parts List

Part #	Description	Qty.
220099	HealthBeat Sign Cardio Stepper.....	1
220208	HealthBeat Sign Warning .....	*
220105	HealthBeat Sign Warning (EN) .....	*
195143	Frame, Specify Color.....	1
208989	Base, (SM), Specify Color .....	1
207775	Cardio Stepper Resistance Assy., Specify Color.....	1
202933	Leg, Right, Specify Color.....	1
202932	Leg, Left, Specify Color.....	1
210423	Arm, Specify Color .....	2
206670	Foot Pad, Black .....	2
201739	Leg Attachment, Specify Color .....	2
180379	Leg Cap, Aluminum .....	6
209378	Oilite Thrust Bearing TT-1709 .....	12
209377	Oilite Sleeve Bearing AA-1204-5 .....	6
207062	Shaft Clamp, Specify Color.....	2
207117	Footer, (DB), Specify Color .....	1
<b>209134</b>	<b>Cardio Stepper Hardware Package .....</b>	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST .....	18
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	12
100362	3/8" Flat Washers, SST.....	12
100365	3/8" SAE Flat Washers, SST.....	10
180395	1/4" x 1.900 Spring Pin, SST .....	6
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hardware Pkg . ....</b>	<b>1</b>
206892	Anchor Wej-It 3/8-16, SST.....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Resistance Assy.:** Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

**Stepper Footer (DB):** Weldment comprised of 5.000" (127 mm) O.D. x .120" (3,05 mm) wall galvanized steel tube, and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

**Shaft Clamp:** Fabricated from stainless steel. Finish: ProShield, color specified.

**Foot Pad:** Rotationally molded from U.V. stabilized linear low density polyethylene, black in color.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**Stepper Frame:** Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.120"-.130") (3,05 mm-3,30 mm) wall galvanized steel tube, 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,28 mm-2,54 mm) wall galvanized steel tube, 1/4" (6,35 mm) thick HRPO sheet steel, 1" (25,4 mm) O.D. steel and 3/16" (4,75 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

**Leg Attachment:** Weldment comprised of 1" (25 mm) O.D. steel shaft and 3/4" (19,05 mm) thick stainless steel plate. Finish: ProShield, color specified.

**Stepper Leg:** Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111" - .121") (2,81 mm-3,07 mm) wall galvanized steel tube, 3/8" (9,52 mm) HRPO steel plate, 1.900" (48,26 mm) O.D. x 1.253" (31,83 mm) I.D. steel tube, 1" (25 mm) O.D. steel shaft and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

**Stepper Arm:** Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.085" - .095") (2,15 mm-2,41 mm) wall galvanized steel tube, 1.900" (48,26 mm) O.D. x 1.253" (31,83 mm) I.D. steel tube, and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield®, color specified.

**Stepper Base (SM):** Fabricated from 1/4" (6,35 mm) thick 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:** **(DB)** 2 1/2 man hours  
**(SM)** 2 1/4 man hours

**Area Required:** See Training/Clearance Space

**Weight:** **(DB)** 280 lbs.

**(SM)** 218 lbs.

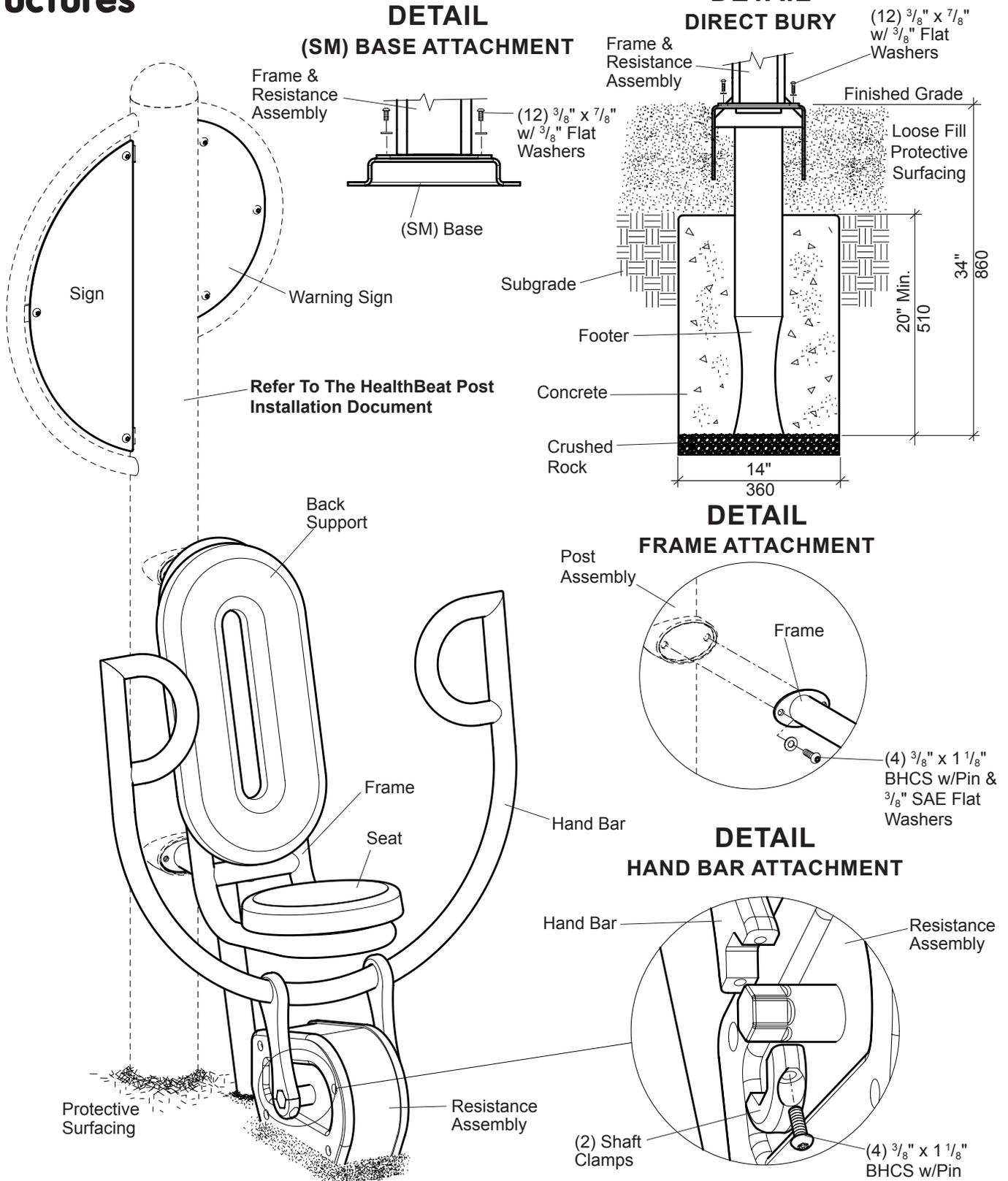
**Concrete:** **(DB)** Approx. 1.78 cu.ft.

**Fall Height:** 22" (560 mm)

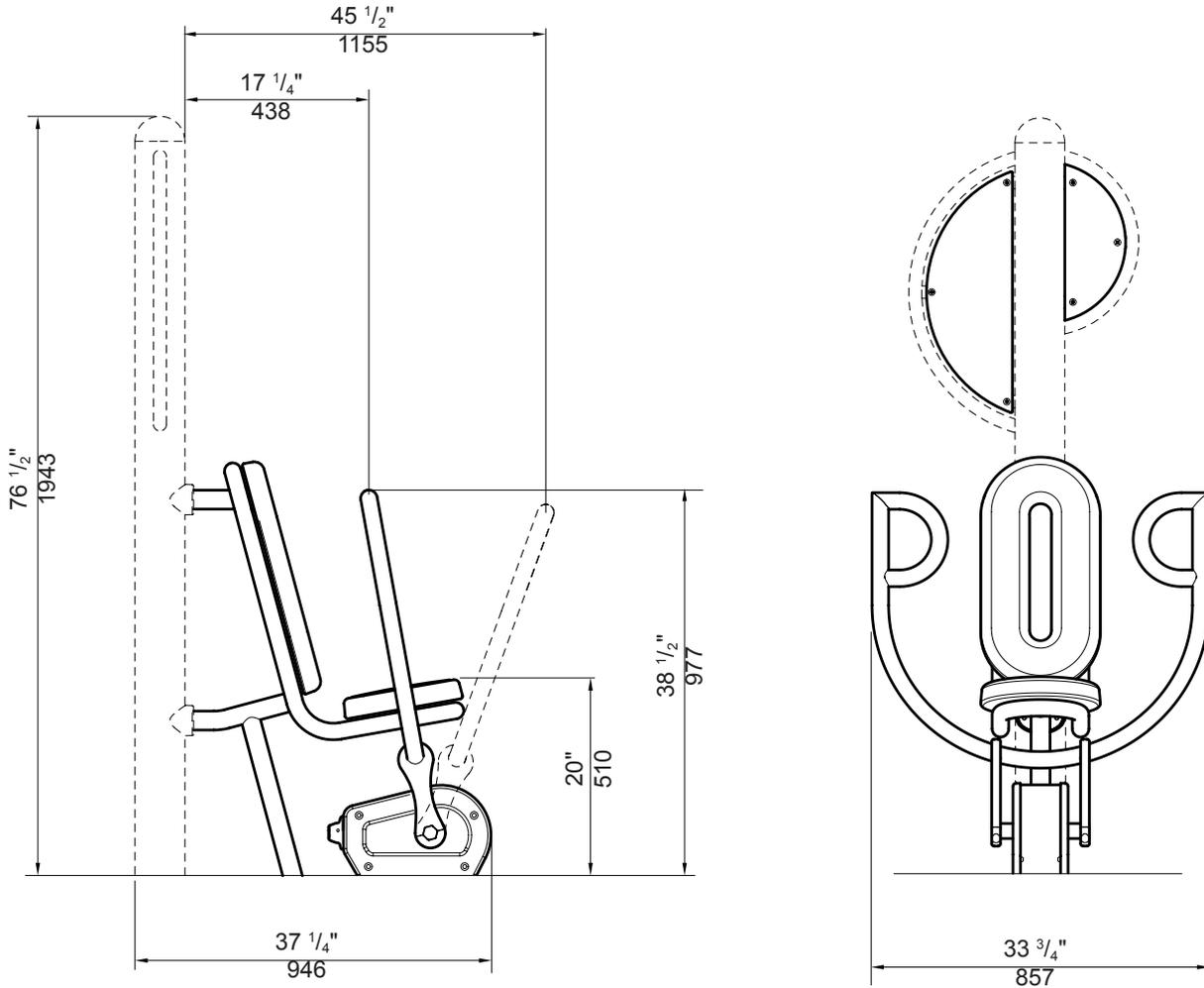
## Installation Instructions

- (Direct Bury)** Dig footing spaced as shown. Refer to the Plan View/Footing Layout.
- Attach stepper legs to stepper frame. Refer to the Cardio Stepper Assembly Detail.
- Attach stepper arms to stepper legs. Refer to the Cardio Stepper Assembly Detail.
- Attach stepper leg attachments to resistance assembly shafts. Refer to the Cardio Stepper Assembly Detail.
- Attach stepper arms to stepper leg attachment shafts. Refer to the Cardio Stepper Assembly Detail.
- Attach frame and resistance assembly to stepper footer (DB)/base (SM). Refer to the Direct Bury & Base Attachment Details.
- Attach frame to HealthBeat post. Refer to the Frame Attachment Detail.
- Attach foot pads to stepper arms. Refer to the Foot Pad Attachment Detail.
- (Direct Bury)** With frame in proper position and plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- Install protective surfacing before users are allowed to play on the component.

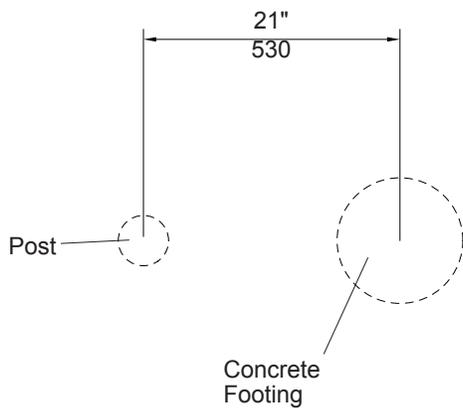




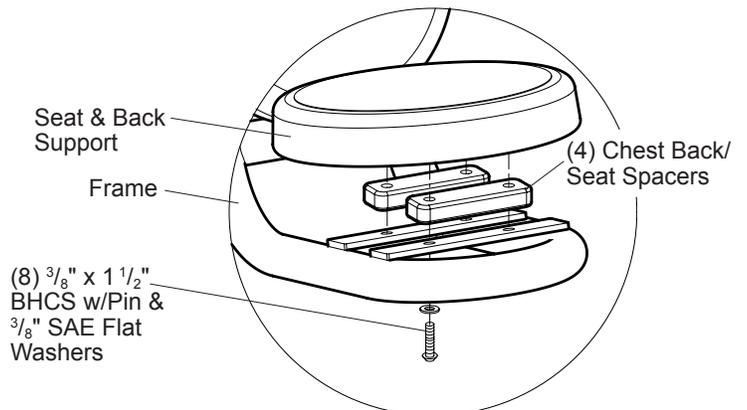
**PLAN VIEW**



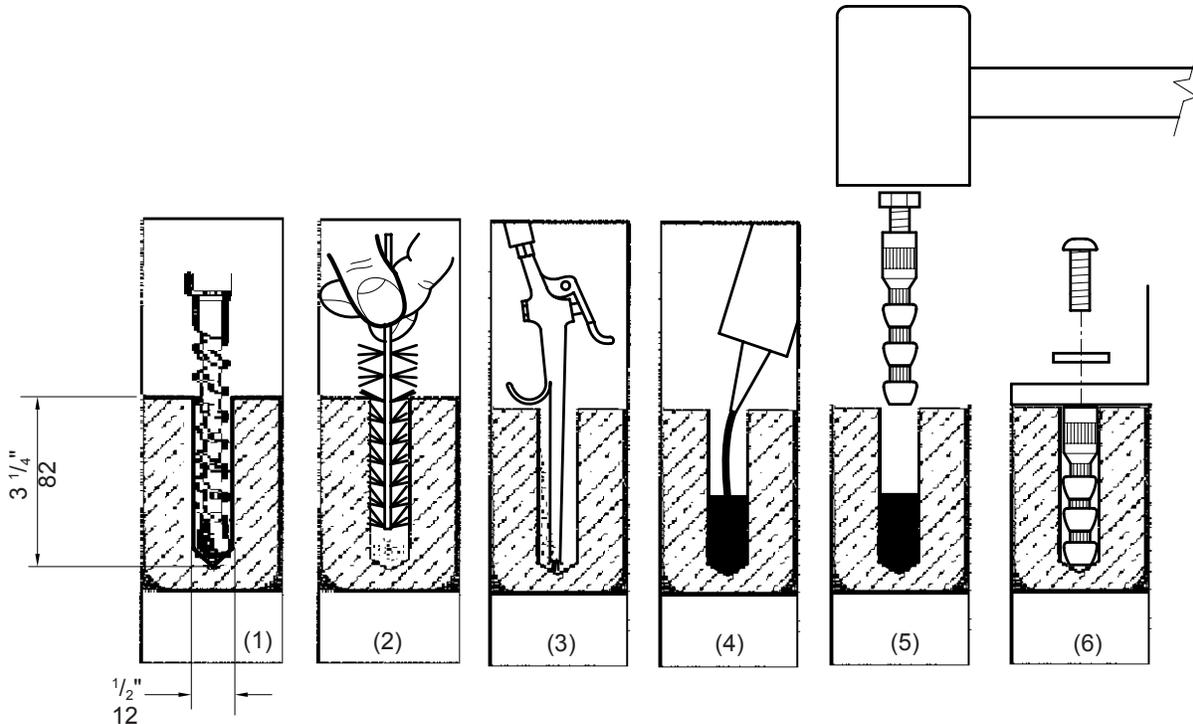
**FOOTING LAYOUT**



**DETAIL SEAT & BACK SUPPORT ATTACHMENT**



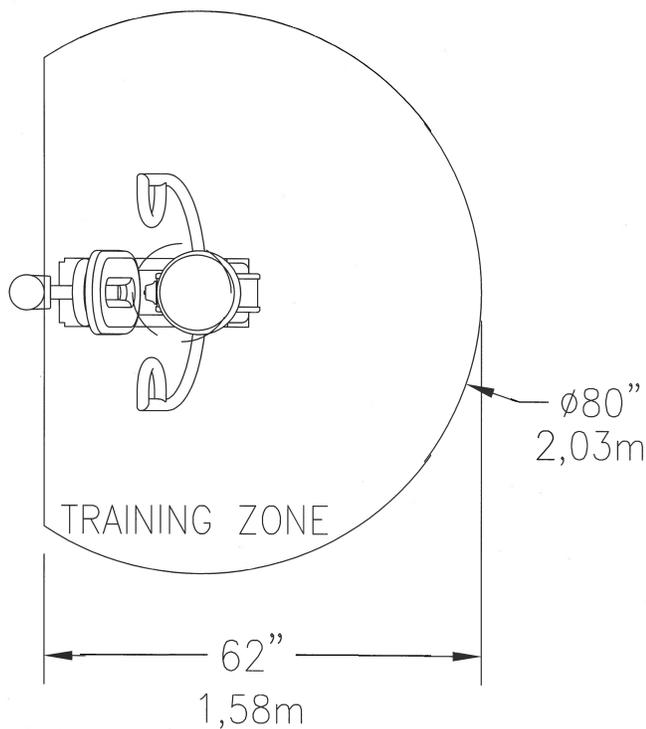
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With Chest/Back Press in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in Chest/Back base.
- 3) Move Chest/Back Press aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Re-attach Chest/Back Press. Attach Chest/Back base to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

**TRAINING/CLEARANCE SPACE**



**ASTM F3101 & EN 16630**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

## Parts List

Part #	Description	Qty.
220107	HealthBeat Sign Chest/Back Press.....	1
202379	Frame, Specify Color.....	1
160591	Back Support, Black.....	1
160586	Seat, Black.....	1
202893	Hand Bar, Specify Color.....	1
207413	Shaft Clamp, Specify Color.....	2
207774	Chest Back Press Resistance Assy. Specify Color.....	1
207117	Footer, (DB), Specify Color.....	1
208989	Chest/Back Base, (SM), Specify Color.....	1
220208	HealthBeat Sign Warning.....	*
217476	HealthBeat Sign Warning (EN).....	*
209625	Chest Back/Seat Spacer, Specify Color.....	4
<b>210647</b>	<b>Chest/Back Press Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	12
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8
100362	3/8" Flat Washers, SST.....	12
100365	3/8" SAE Flat Washers, SST.....	12
100171	3/8" x 1 1/2" BHCS w/Pin, SST.....	8
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	<b>1</b>
206892	Anchor Wej-It 3/8-16, SST.....	4
100362	3/8" Flat Washer, SST.....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST.....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST.....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Resistance Assy.:** Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

**Back Support/Seat:** Rotationally molded from U.V. stabilized linear low density polyethylene, black in color.

**Frame:** Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, 7 GA. (.179") (4,54 mm) thick HRPO steel sheet and 1/4" (6,35 mm) thick HRPO sheet steel. Finish: ProShield, color specified.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. (**Sign**) Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**Hand Bar:** Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, and .875" (22,22 mm) thick stainless steel. Finish: ProShield®, color specified.

**Shaft Clamp:** Stainless steel. Finish: ProShield®, color specified.

**Back/Seat Spacer:** Recycled Permalene, 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).

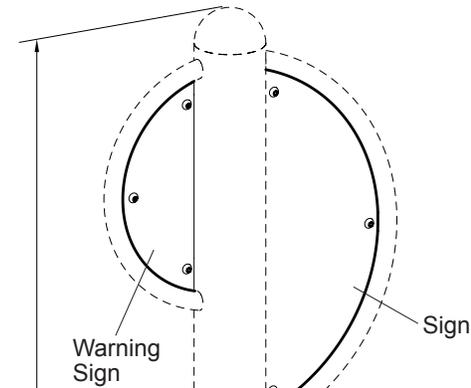
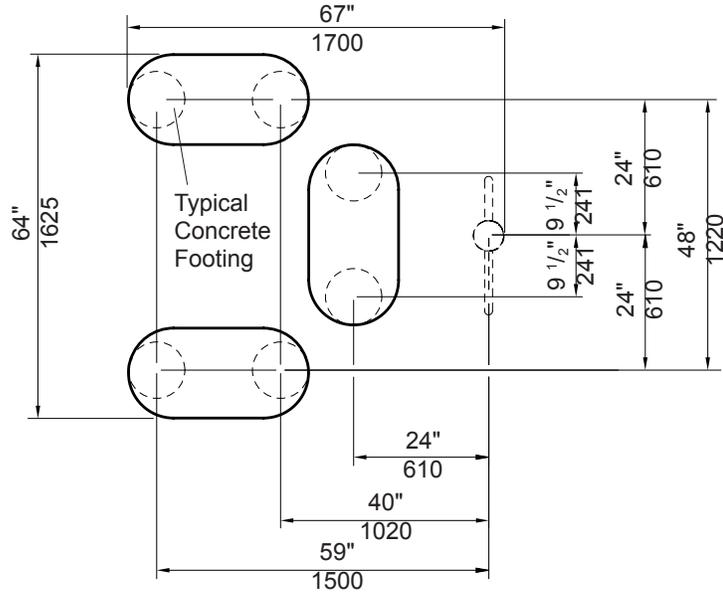
**Installation Time:** (DB) 2 man hours  
(SM) 1 3/4 man hours  
**Area Required:** See Training/Clearance Space  
**Weight:** (DB) 258 lbs.  
(SM) 196 lbs.  
**Concrete:** (DB) Approx. 1.78 cu.ft.

## Installation Instructions

- 1) **(Direct Bury)** Dig footing as shown. Refer to the Direct Bury Detail.
- 2) Attach frame and resistance assembly to footer (DB)/base (SM). Refer to the Direct Bury & Base Attachment Details.
- 3) Attach hand bar to resistance assembly shafts. Refer to the Hand Bar Attachment Detail.
- 4) Attach frame to post. Refer to the Frame Attachment Detail.
- 5) Attach seat and back support to frame. Refer to the Seat & Back Support Attachment Detail.
- 6) **(Direct Bury)** With frame in plumb and proper position, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 7) Install protective surfacing before users are allowed to play on the component.

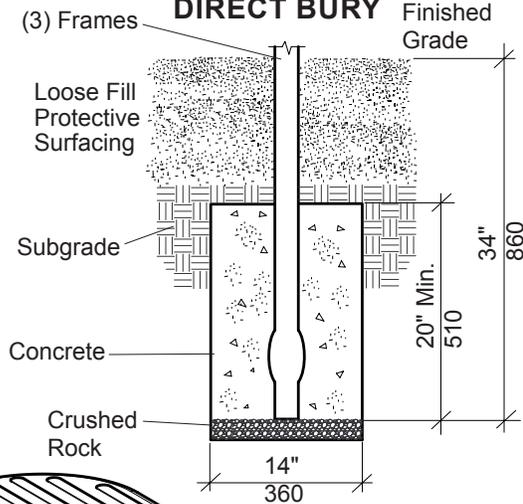


**PLAN VIEW/FOOTING LAYOUT**

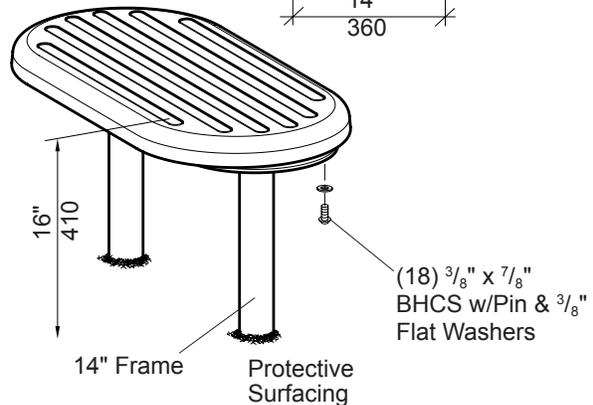
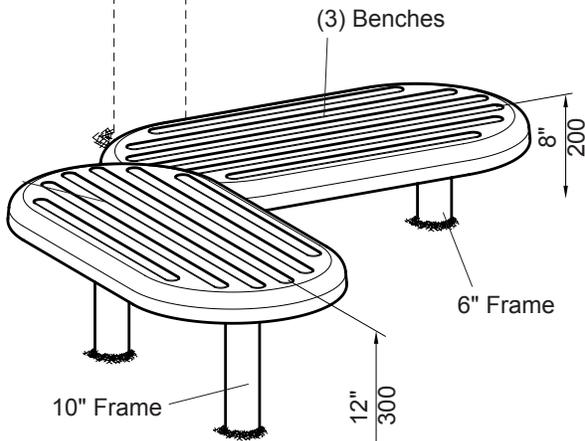


Refer To The HealthBeat Post Installation Document

**DETAIL  
DIRECT BURY**



78 1/2" 1993





# HealthBeat® 192459 Plyometrics

## Parts List

Part #	Description	Qty.
160716	Bench, Black.....	3
161447	6" Plyometrics Frame, (DB), Specify Color.....	1
161446	10" Plyometrics Frame, (DB), Specify Color.....	1
161445	14" Plyometrics Frame, (DB), Specify Color.....	1
206264	8" Plyometrics Frame, (SM), Specify Color.....	1
206263	12" Plyometrics Frame, (SM), Specify Color.....	1
206261	16" Plyometrics Frame, (SM), Specify Color.....	1
220085	HealthBeat® Sign Plyometrics.....	1
220208	HealthBeat Sign Warning.....	*
220105	HealthBeat Sign Warning (EN).....	*
<b>161674</b>	<b>Plyometrics Hardware Package</b> .....	<b>1</b>
100196	3/8" x 7/8" BHCS w/Pin, SST.....	18
100362	3/8" Flat Washers, SST.....	18
<b>207273</b>	<b>Power-Ser Anchor 6-Hole (SM) Hdw. Pkg.</b> .....	<b>1</b>
206892	Anchor Wej-It 3/8-16, SST.....	6
100362	3/8" Flat Washer, SST.....	6
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST.....	6
100209	3/8" x 1 3/4" Hex Head Bolt, SST.....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Frame:** Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-1.05")(2,41 mm-2,66 mm) wall galvanized steel tube and 1/4" (6,35 mm) HRPO sheet steel. Finish: ProShield®, color specified.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**Bench:** Rotationally molded from U.V. stabilized linear low density polyethylene, 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:** **(DB)** 2 1/2 man hours  
**(SM)** 2 man hours

**Area Required:** See Training/Clearance Space

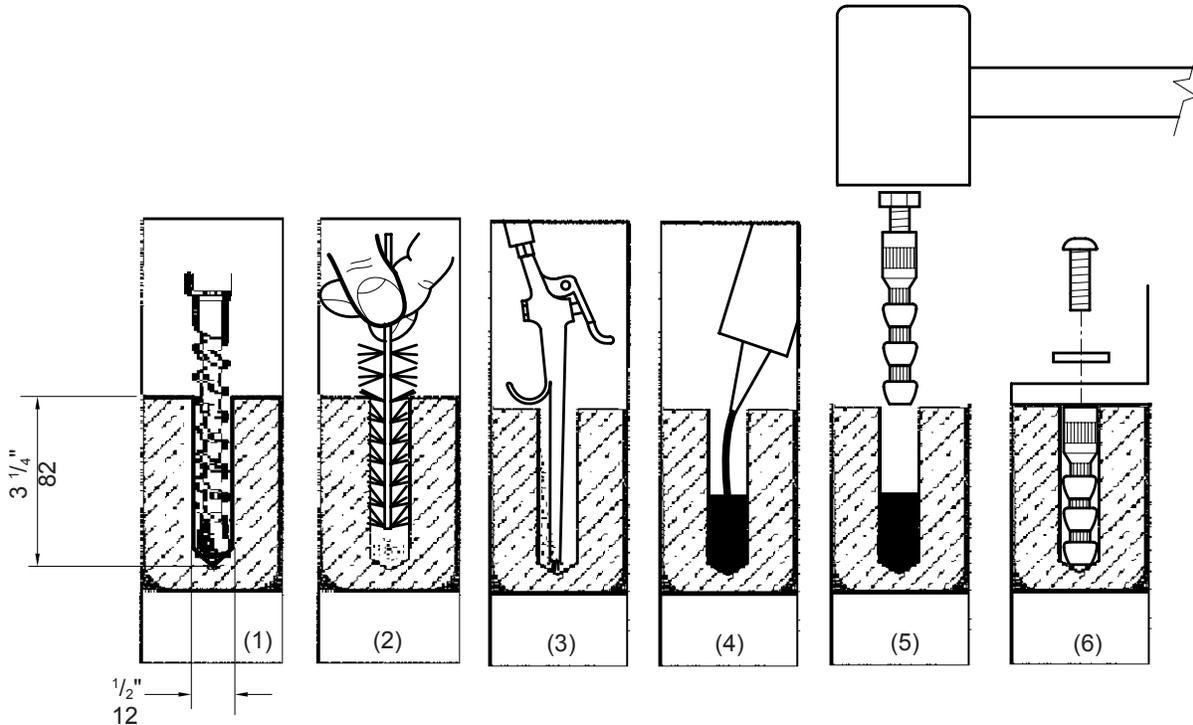
**Weight:** **(DB)** 154 lbs.  
**(SM)** 126 lbs.

**Concrete:** **(DB)** Approx. 10.68 cu.ft.  
**Fall Height:** 16" (410 mm)

## Installation Instructions

- 1) **(Direct Bury)** Dig footings spaced as shown. Refer to the Plan View/Footing Layout.
- 2) Attach benches to plyometrics frames, using 3/8" x 7/8" BHCS w/pin & 3/8" flat washers, as shown.
- 3) **(Direct Bury)** Prop plyometrics frames in plumb position. Pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 4) Install protective surfacing before users are allowed to play on the component.

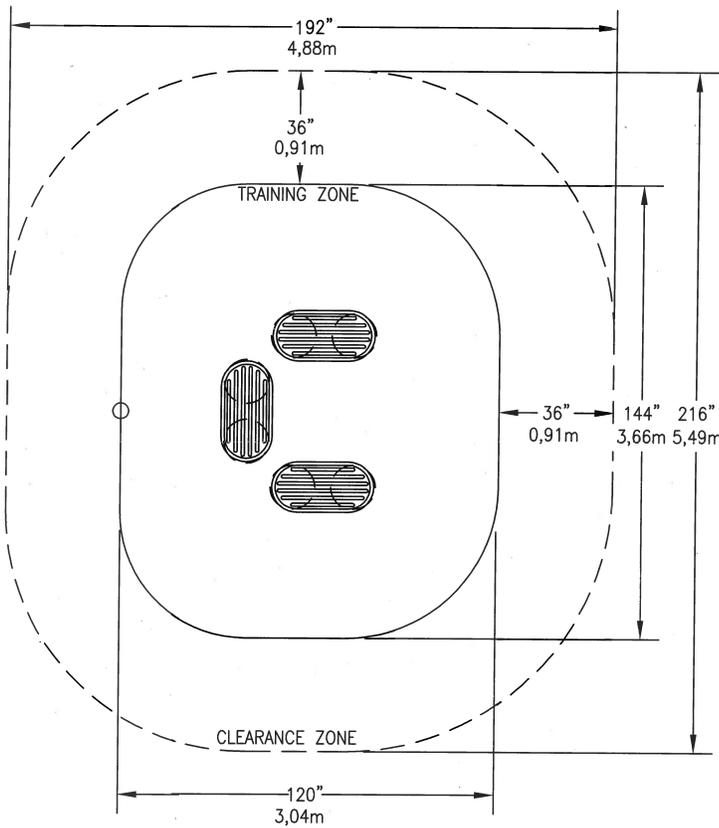
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



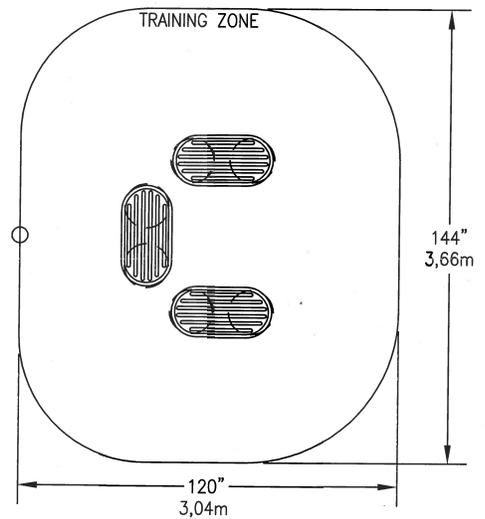
- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With benches in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plates.
- 3) Move frames aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Reposition frames. Attach surface mount plates to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

**TRAINING/CLEARANCE SPACE**



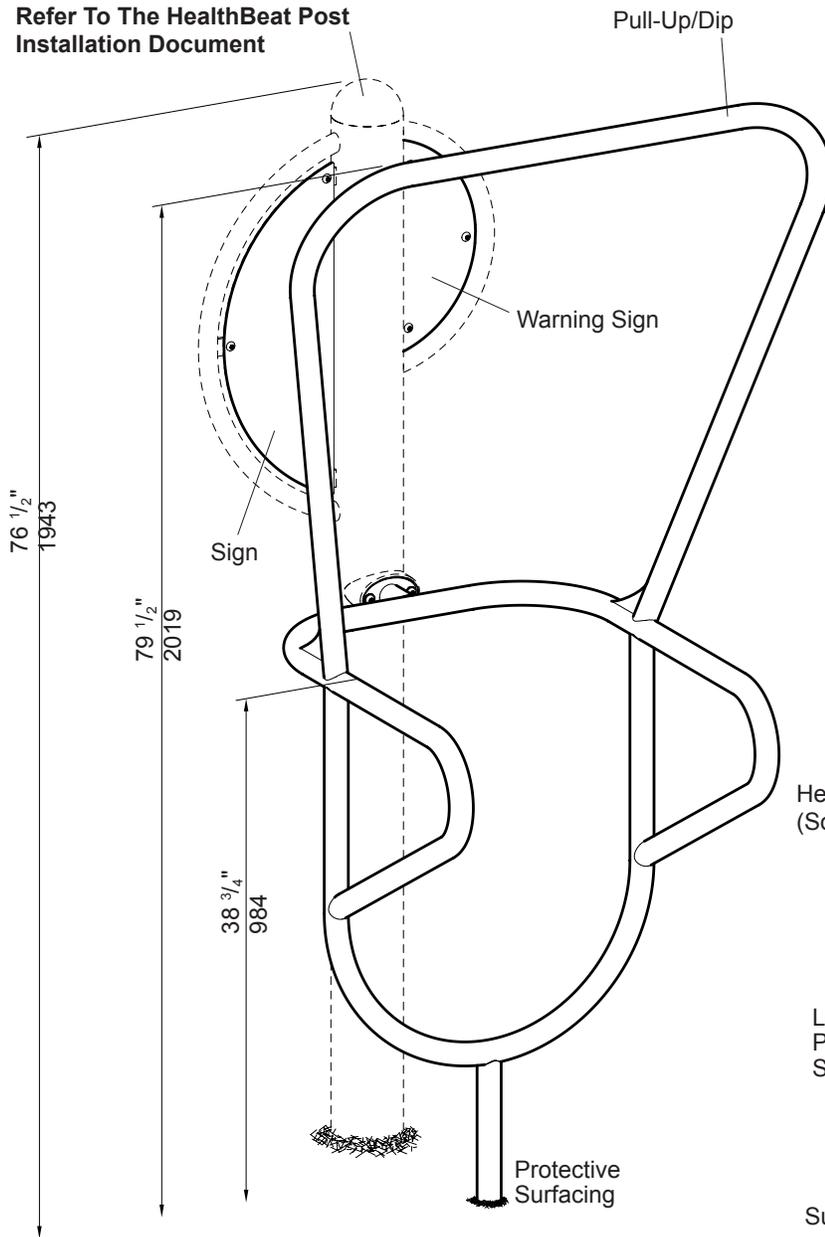
**ASTM F3101**



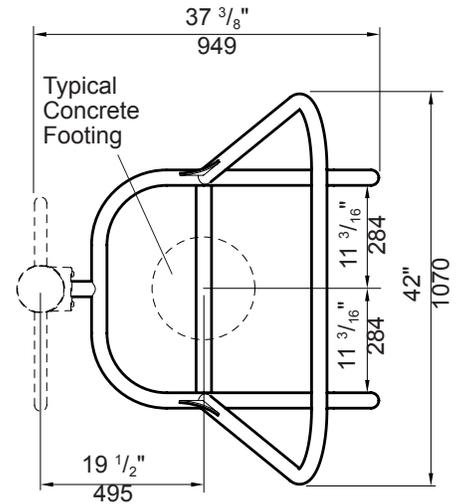
**EN 16630**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

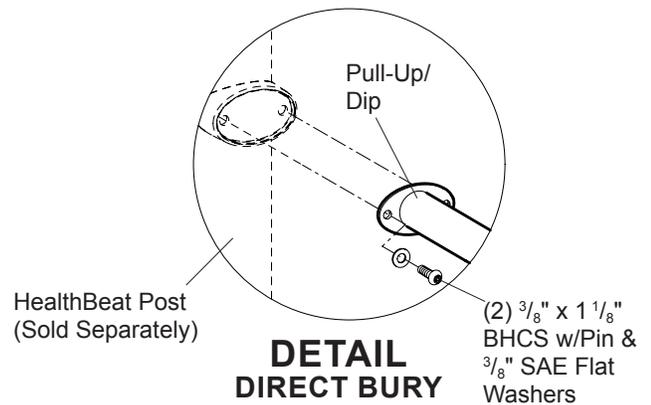
Refer To The HealthBeat Post Installation Document



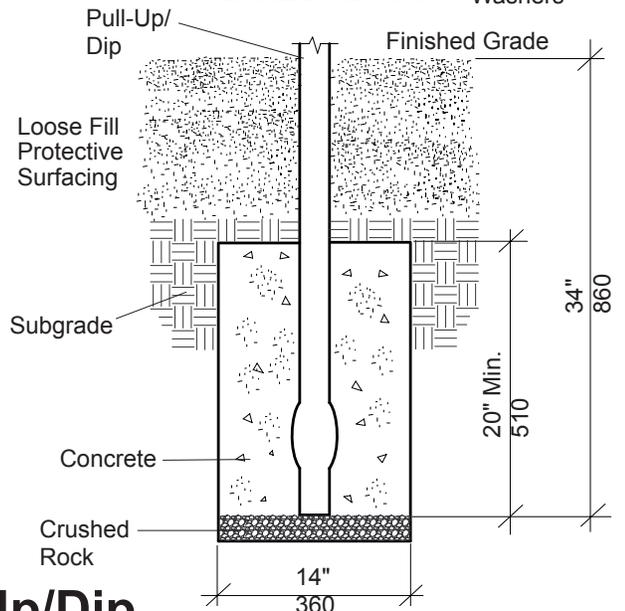
**DETAIL  
PLAN VIEW**



**DETAIL  
PULL-UP/DIP  
ATTACHMENT**



**DETAIL  
DIRECT BURY**





# HealthBeat® 192460 Pull-Up/Dip

## Parts List

Part #	Description	Qty.
206591	Pull-Up/ Dip, (DB), Specify Color.....	1
191088	Pull-Up/ Dip, (SM), Specify Color .....	1
220096	HealthBeat® Sign Pull-Up/Dip.....	1
220208	HealthBeat Sign Warning .....	*
220105	HealthBeat Sign Warning (EN).....	*
<b>206313</b>	<b>Pull-Up Bar Hardware Package</b> .....	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	2
100365	3/8" SAE Flat Washers, SST.....	2
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hardware Pkg .</b> ....	<b>1</b>
206892	Anchor Wej-It 3/8-16 , SST.....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Pull-Up/Dip:** Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,81 mm-3,07 mm) wall galvanized steel tube, 1/4" (6,35 mm) HRPO sheet steel and 3/16" (4,75 mm) HRPO sheet steel. Finish: ProShield®, color specified.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**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)** 1 man hour  
**(SM)** 3/4 man hour

**Area Required:** See Site Plan

**Weight:** **(DB)** 64 lbs.  
**(SM)** 66 lbs.

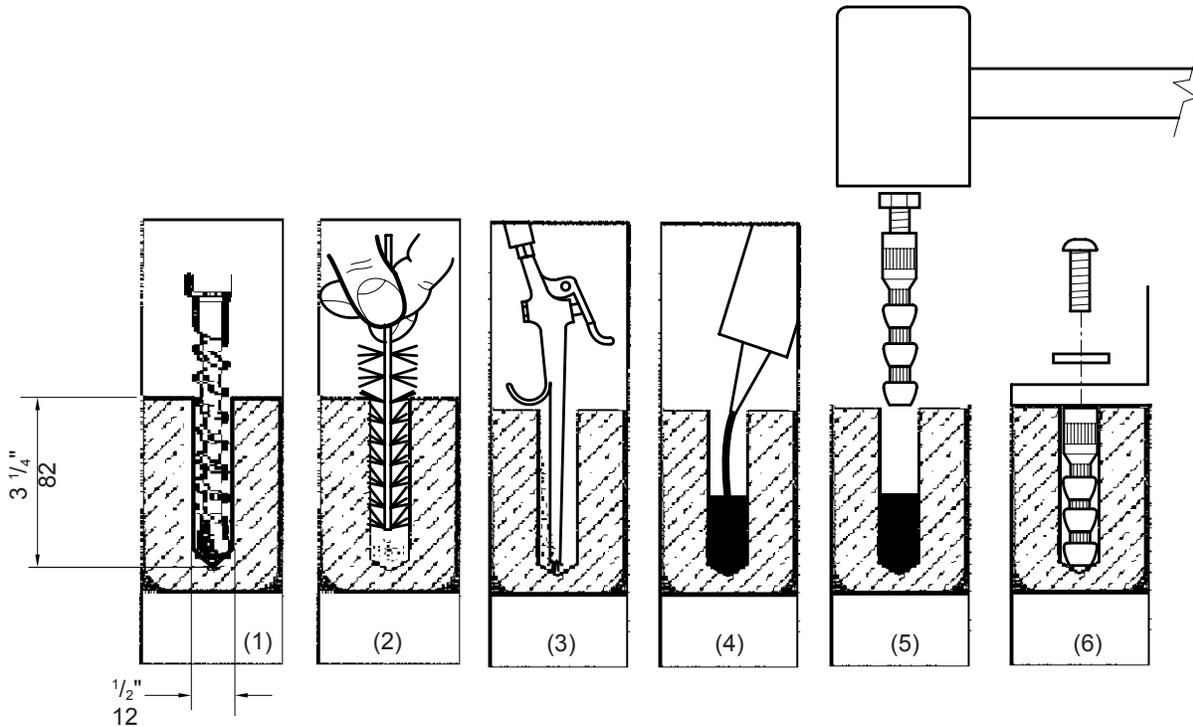
**Concrete:** **(DB)** Approx. 1.78 cu.ft.

**Fall Height:** 81" (2,05 m)

## Installation Instructions

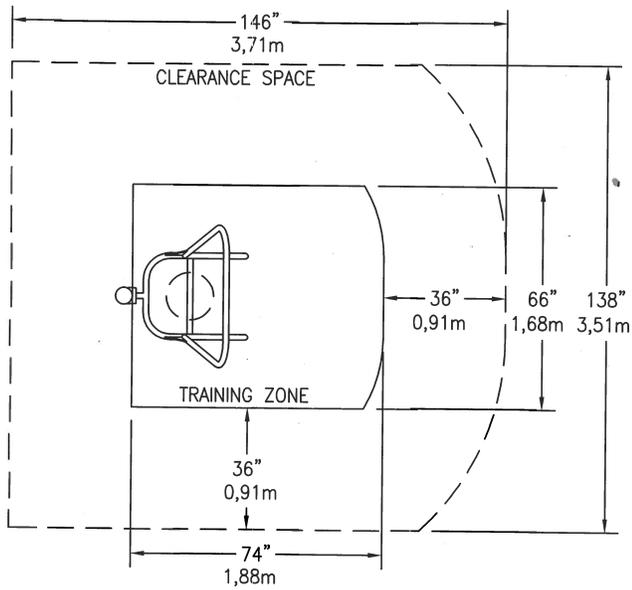
- 1) **(Direct Bury)** Dig footing as shown. Refer to the Plan View.
- 2) Attach Pull-Up/Dip to HeathBeat post. Refer to the Pull-Up Dip Attachment Detail.
- 3) **(Direct Bury)** With Pull-Up/Dip in plumb position. Pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to use fitness equipment.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 4) Install protective surfacing before users are allowed to play on the component.

## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION

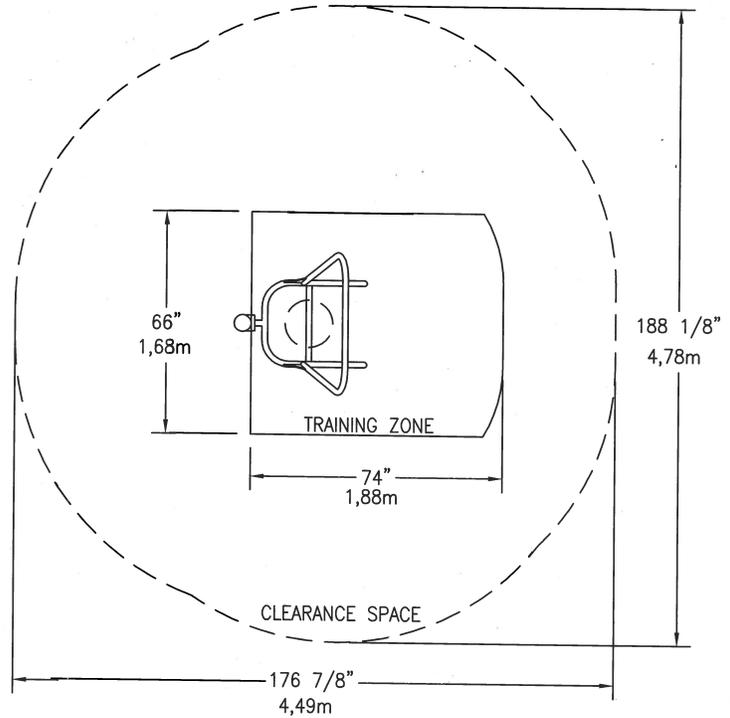


- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With Pull-Up/Dip in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plates.
- 3) Move Pull-Up/Dip aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Re-attach Pull-Up/Dip. Attach surface mount plate to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours



**ASTM F3101**

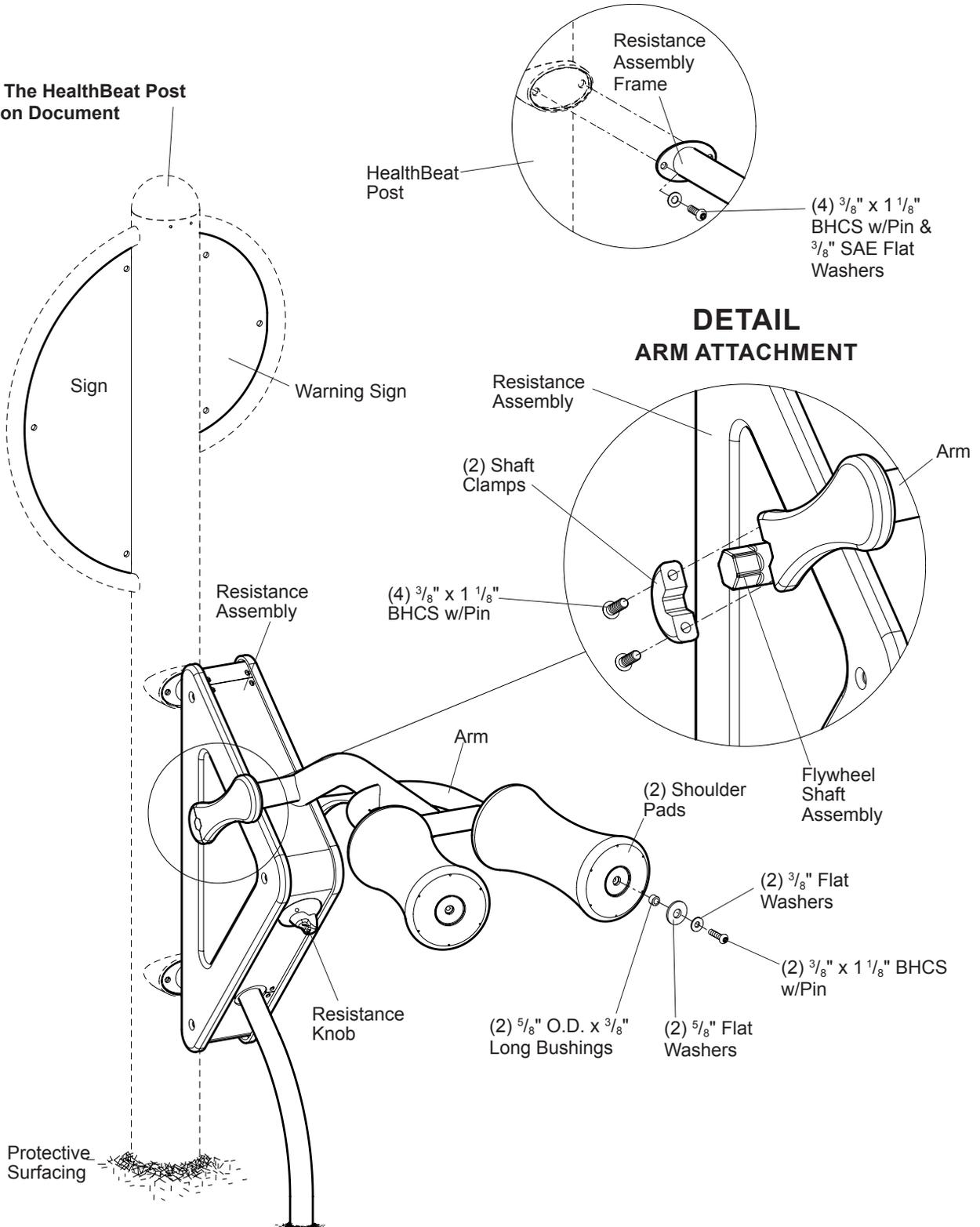


**EN 16630**

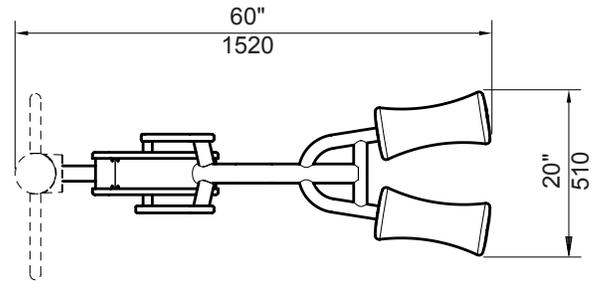
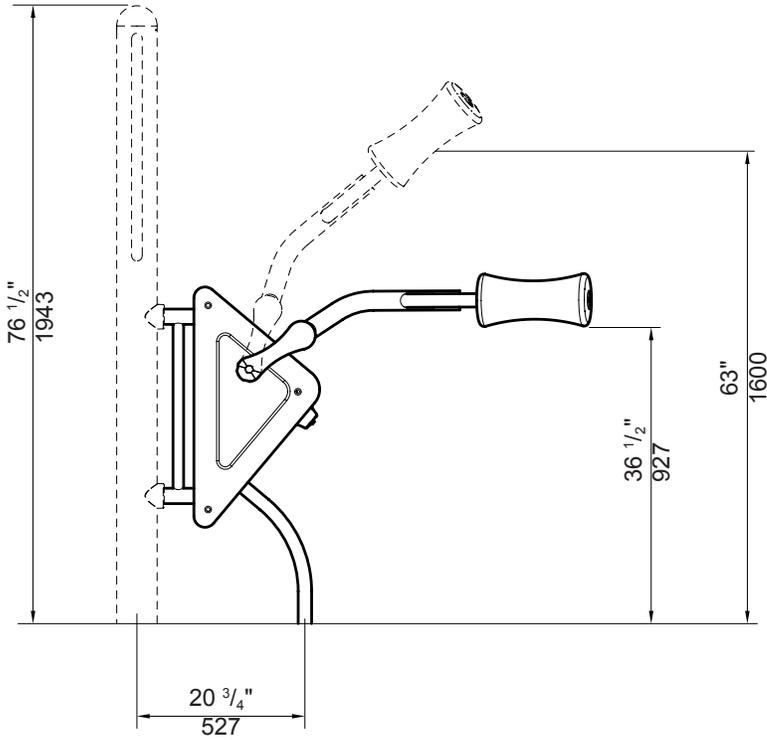
The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

**DETAIL  
RESISTANCE ASSEMBLY  
ATTACHMENT**

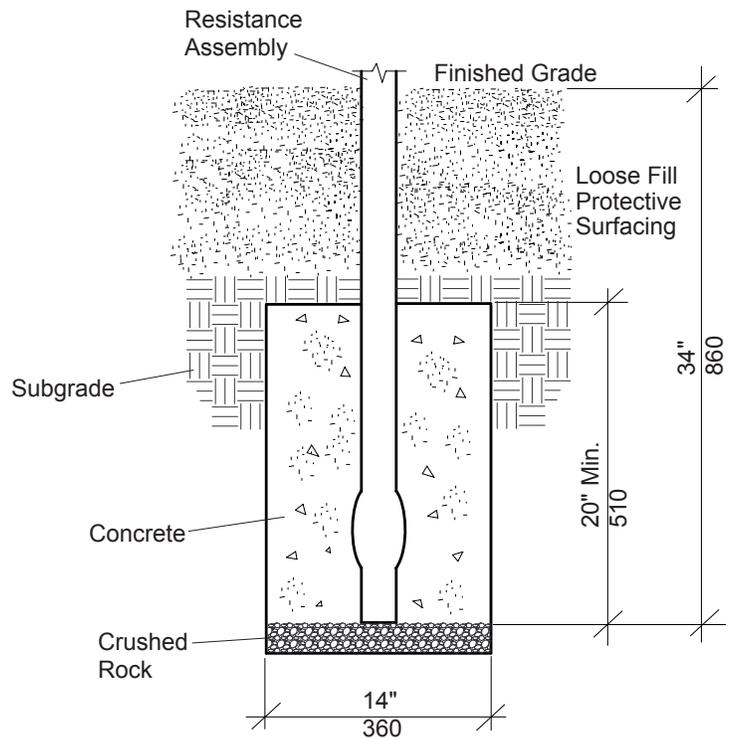
Refer To The HealthBeat Post Installation Document



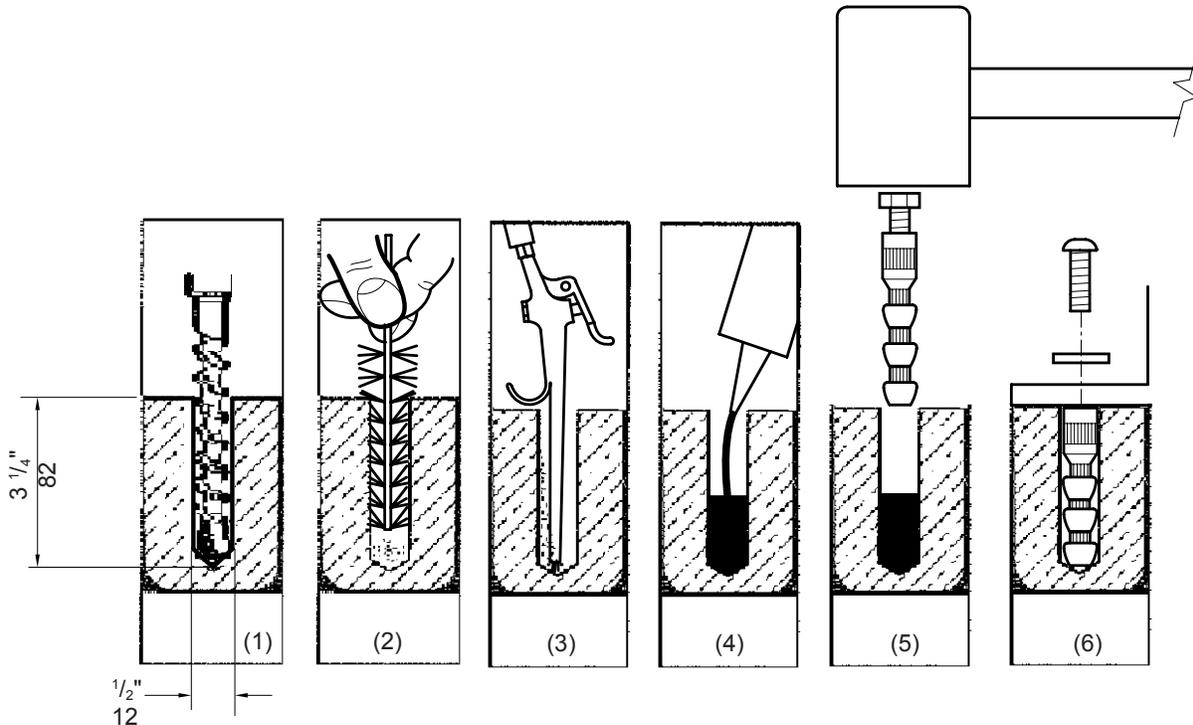
**PLAN VIEW**



**DETAIL  
DIRECT BURY**



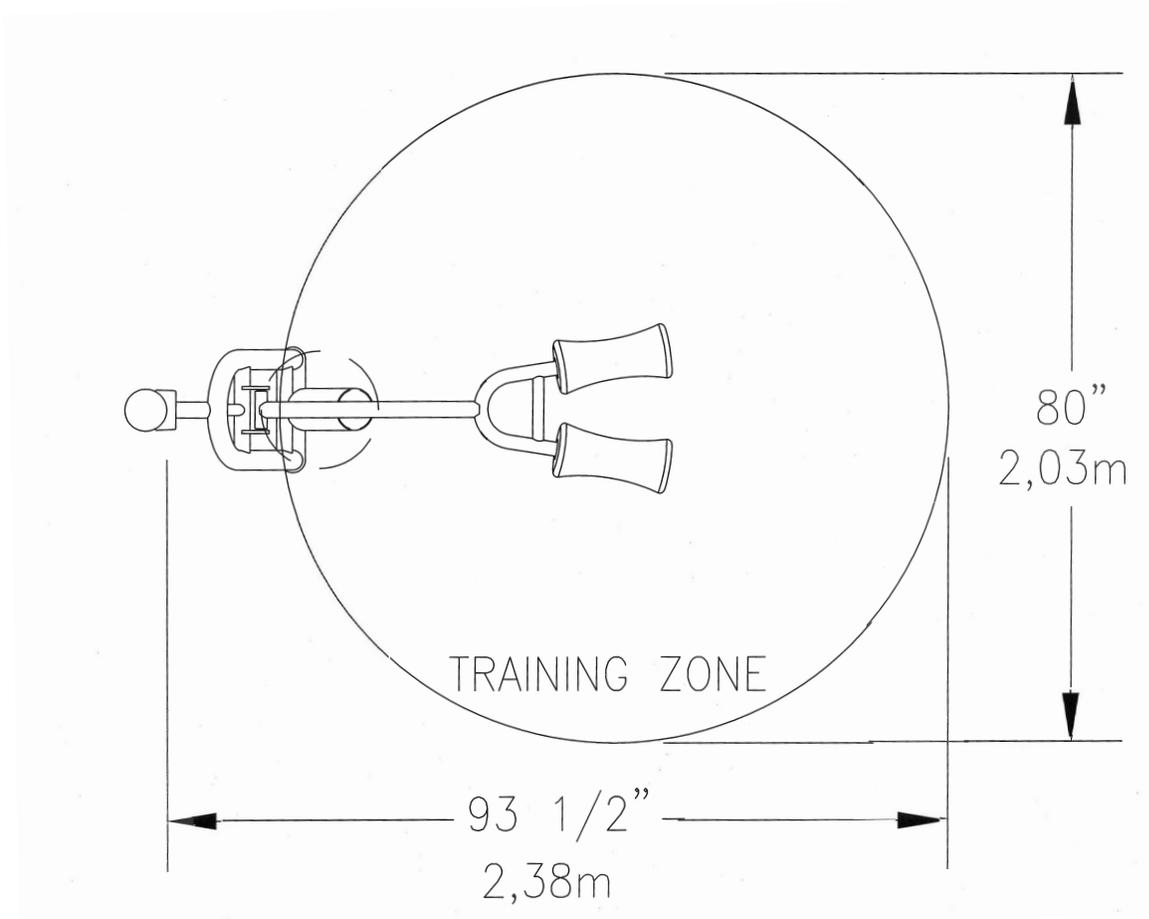
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With squat press in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plate.
- 3) Move squat press aside. Using a  $\frac{1}{2}$ " diameter drill bit, drill holes to a depth of  $3\frac{1}{4}$ ". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread  $\frac{3}{8}$ " x  $1\frac{3}{4}$ " hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove  $\frac{3}{8}$ " x  $1\frac{3}{4}$ " hex head bolt from anchor. (5) **NOTE:** A 2  $\frac{1}{2}$  pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Reposition squat press. Attach surface mount plate to anchors, using  $\frac{3}{8}$ " x  $1\frac{1}{4}$ " BHCS w/Pin limited thread with  $\frac{3}{8}$ " flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

**TRAINING/CLEARANCE SPACE**



The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.



## Parts List

Part #	Description	Qty.
220101	HealthBeat Sign Squat Press .....	1
220208	HealthBeat Sign Warning .....	*
220105	HealthBeat Sign Warning (EN) .....	*
209034	Squat Press Resistance Assy., (DB), Specify Color .....	1
207773	Squat Press Resistance Assy., (SM), Specify Color .....	1
202788	Arm, Specify Color .....	1
207413	Flywheel Shaft Clamp, Specify Color .....	2
160614	Shoulder Pad, Black .....	2
<b>209033</b>	<b>Squat Press Hardware Package .....</b>	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	10
100362	3/8" Flat Washer, SST .....	2
100365	3/8" SAE Flat Washer, SST .....	4
100366	5/8" Flat Washer, SST .....	2
127179	5/8" O.D. x 3/8" Long Bushing, SST .....	2
<b>207261</b>	<b>Power-Ser Anchor 2-Hole (SM) Hardware Pkg . .....</b>	<b>1</b>
206892	Anchor Wej-It 3/8-16, SST .....	2
100362	3/8" Flat Washer, SST .....	2
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	2
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Resistance Assy.:** Resistance mechanism features wear-resistant composites that provide bi-directional resistance. Mechanism is mounted in a housing comprised of 3/4" (19,05 mm) thick steel plate and 11 GA. (.120") (3,05 mm) thick steel cover. Finish: ProShield®, color specified.

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**Frame:** Weldment comprised of 1.900" (48,26 mm) O.D. 12 GA. (.105")(2,66 mm) wall black steel tube, 1.315" (33,40 mm) O.D. (.098"- .120")(2,48 mm-3,05 mm) wall black steel tube, 1.660" (42,16 mm) O.D. RS40 (.111"- .121")(2,81 mm-3,07 mm) wall black steel tube, 7 GA. (.179") (4,54 mm) thick HRPO steel sheet, 1/4" (6,35 mm) HRPO sheet steel, and 3/8" (9,53 mm) HRPO steel plate. Finish: ProShield®, color specified.

**Shoulder Pad:** Rotationally molded from U.V. stabilized EVA (ethyl vinyl acetate) and high density polyethylene, black in color.

**Arm:** Weldment comprised of 1.660" (42,16 mm) O.D. RS40 (.111"- .121") (2,81 mm-3,07 mm) wall galvanized steel tube, 2.375" (60,32 mm) O.D. RS40 (.130"- .140") (3,30 mm-3,55 mm) wall galvanized steel tube, 1.900" (48,26 mm) O.D. RS40 (.090"- .100") (2,28 mm-2,54 mm) wall galvanized steel tube and .875" (22,22 mm) thick HRPO sheet plate. Finish: ProShield®, color specified.

**Shaft Clamp:** Stainless steel. Finish: ProShield®, color specified.

# HealthBeat® 192461 Squat Press

**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) 1 man hour

(SM) 3/4 man hour

**Area Required:** See Training/Clearance Space

**Concrete:** (DB) Approx. 1.78 cu ft.

**Weight:** (DB) 162 lbs.

(SM) 160 lbs.

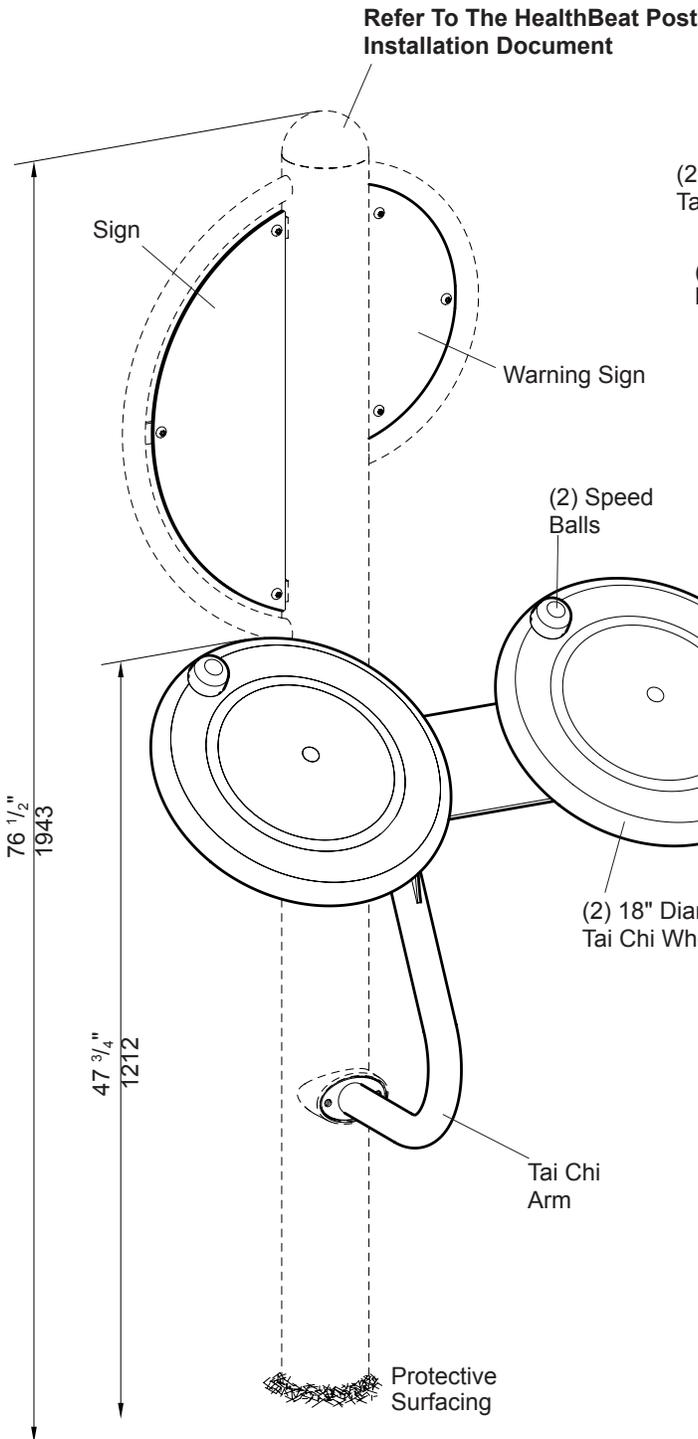
## Installation Instructions

- 1) **(Direct Bury)** Dig footing spaced as shown.
- 2) Attach resistance assembly to post. Refer to the Resistance Assembly Attachment Detail.
- 3) Attach arm to resistance assembly. Refer to the Arm Attachment Detail.
- 4) Attach shoulder pads to arm.
- 5) **(Direct Bury)** With squat press in plumb and proper position, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the fitness equipment.

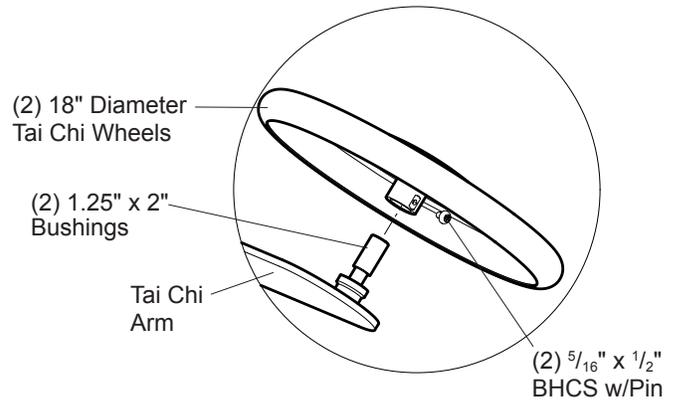
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation Instructions on sheet 2.

- 6) Install protective surfacing before users are allowed to use the component.

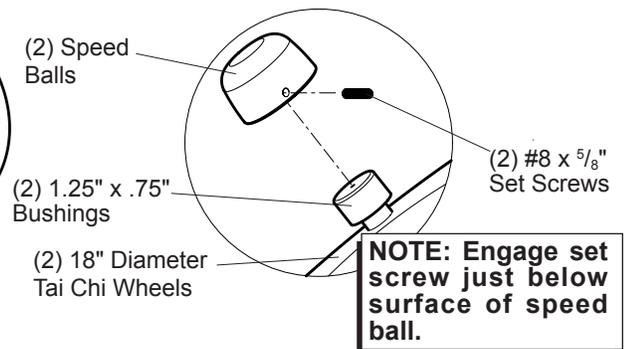




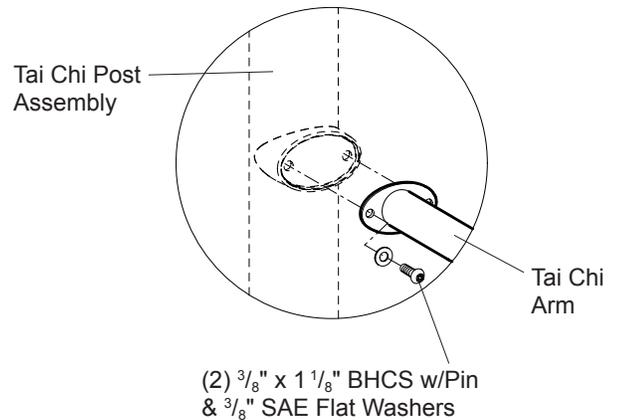
**DETAIL  
WHEEL ATTACHMENT**



**DETAIL  
SPEED BALL ATTACHMENT**



**DETAIL  
ARM ATTACHMENT**





# HealthBeat® 192463 Tai Chi Wheels

## Parts List

Part #	Description	Qty.
203123	Tai Chi Wheel, Specify Color.....	2
191188	Tai Chi Arm, Specify Color.....	1
221508	HealthBeat® Sign Tai Chi Wheels .....	1
220208	HealthBeat Sign Warning .....	*
220105	HealthBeat Sign Warning (EN) .....	*
<b>216299</b>	<b>Tai Chi Wheels Hardware Package .....</b>	<b>1</b>
202081	Speed Ball, Aluminum .....	2
202080	1.25" O.D. x .75" Bushing.....	2
160680	1.25" O.D. x 2" Bushing.....	2
131849	<sup>5</sup> / <sub>16</sub> " x <sup>1</sup> / <sub>2</sub> " BHCS w/Pin, SST .....	2
216293	#8 x <sup>5</sup> / <sub>8</sub> " Set Screw w/Patch, SST .....	2
100365	<sup>3</sup> / <sub>8</sub> " SAE Flat Washers, SST .....	4

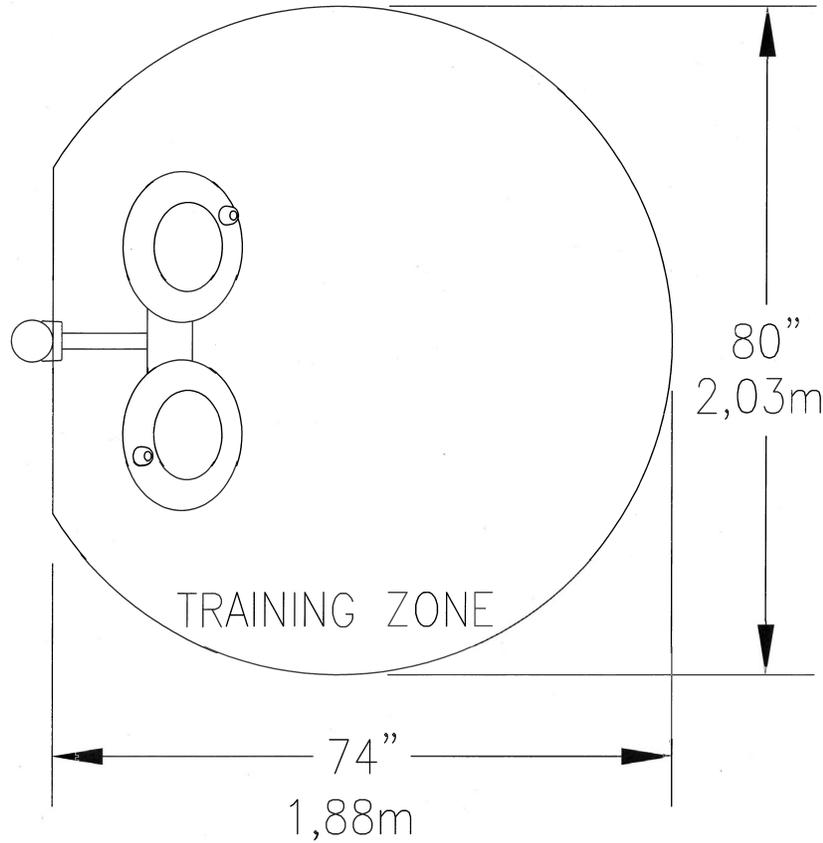
## Specifications

<b>Tai Chi Wheel:</b>	Weldment comprised of .125" (3,18 mm) thick aluminum alloy 6061, aluminum round hub and aluminum shaft. Finish: ProShield®, color specified.
<b>Sign Panel:</b>	Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. <b>(Sign)</b> Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.
<b>Tai Chi Arm:</b>	Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-1.00") (2,28 mm-2,54 mm) wall galvanized steel tube, <sup>3</sup> / <sub>16</sub> " (4,74 mm) HRPO sheet steel, <sup>3</sup> / <sub>8</sub> " (9,52 mm) HRPO steel sheet and stainless steel shaft. Finish: ProShield, color specified.
<b>Speed Ball:</b>	Fabricated from 6061-T6 aluminum. Finish: Clear anodize.
<b>Fasteners:</b>	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).
<b>Installation Time:</b>	1/2 man hour
<b>Area Required:</b>	See Training/Clearance Space
<b>Weight:</b>	42 lbs.

## Installation Instructions

- 1) Attach arm to post assembly. Refer to the Arm Attachment Detail.
- 2) Place 1.25" O.D. x 2" bushings and wheels onto arm shafts and fasten using <sup>5</sup>/<sub>16</sub>" x <sup>1</sup>/<sub>2</sub>" BHCS w/pin. Refer to the Wheel Attachment Detail.
- 3) Place 1.25" O.D. x .75" bushings and speed balls onto wheel shafts. Turn #8 x <sup>5</sup>/<sub>8</sub>" set screw into hole in speed balls. Refer to the Speed Ball Attachment Detail.
- 4) Install protective surfacing before users are allowed to play on the component.

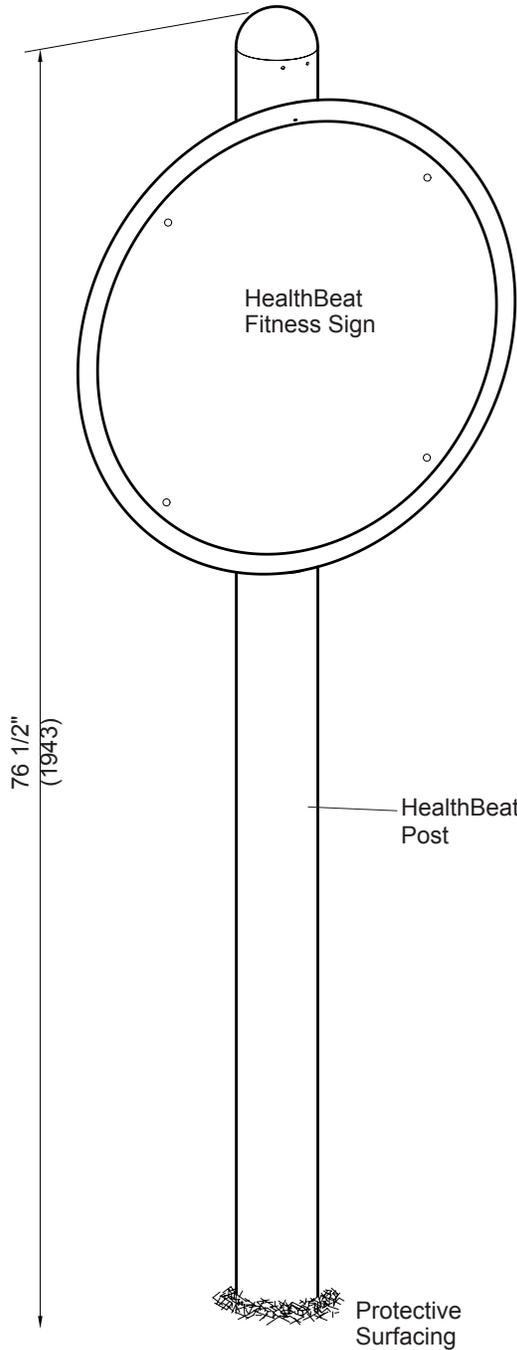
**TRAINING/CLEARANCE SPACE**



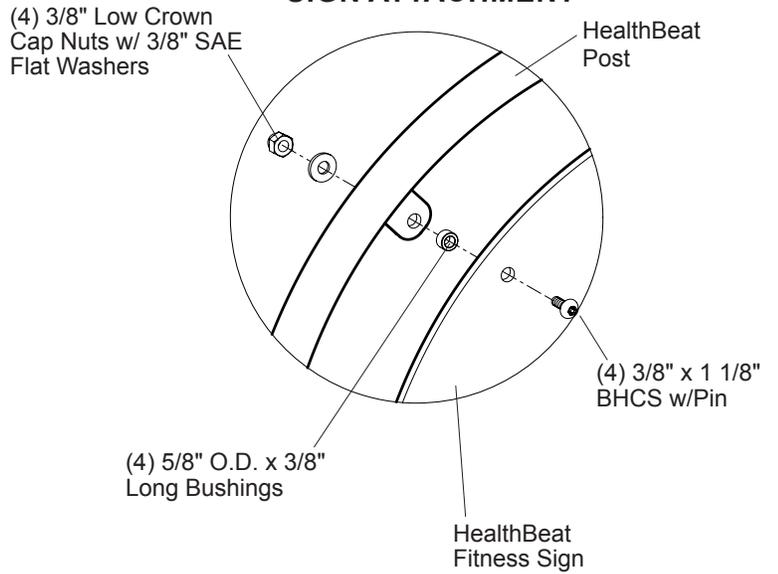
**ASTM F3101 & EN 16630**

The clearance space shall reflect the recognized standard for the area. Typically, ASTM for U.S.A. and EN for European installation. The clearance space shall have a protective surface that has a critical height value for the fall height of the equipment.

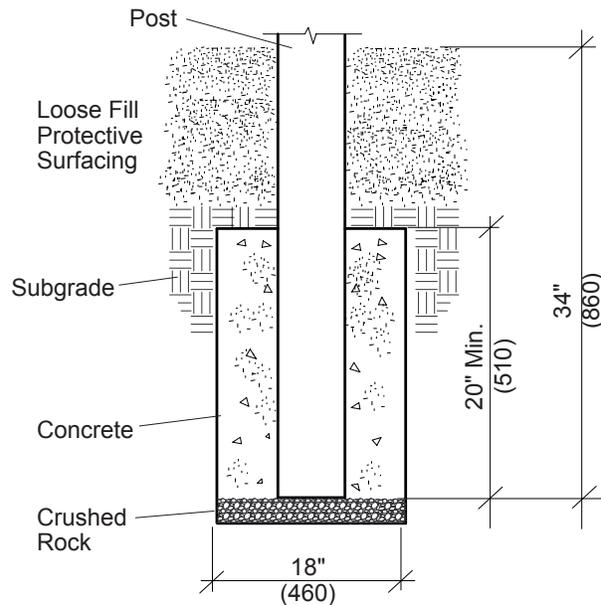




**DETAIL  
SIGN ATTACHMENT**



**DETAIL  
DIRECT BURY**





# HealthBeat® 192464 HealthBeat® Fitness Sign

## Parts List

Part #	Description	Qty.
220076	HealthBeat® Sign Fitness 13+ .....	*
220106	HealthBeat® Sign Fitness 14+ .....	*
204274	HealthBeat Welcome Post, (SM).....	1
206931	HealthBeat Welcome Post, (DB).....	1
<b>222495</b>	<b>Fitness Sign Hardware Package .....</b>	<b>1</b>
100198	3/8" x 1 1/8" BHCS w/Pin, SST .....	4
100365	3/8" SAE Flat Washer, SST .....	4
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	4
100349	3/8" Low Crown Cap Nut, SST.....	4
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hardware Pkg . ....</b>	<b>1</b>
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST.....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST.....	1

SM = Surface Mount

DB = Direct Bury

\* = Quantity Determined By Your Order

## Specifications

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**Post:** Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon 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:** **(DB)** 1 man hour  
**(SM)** 3/4 man hour

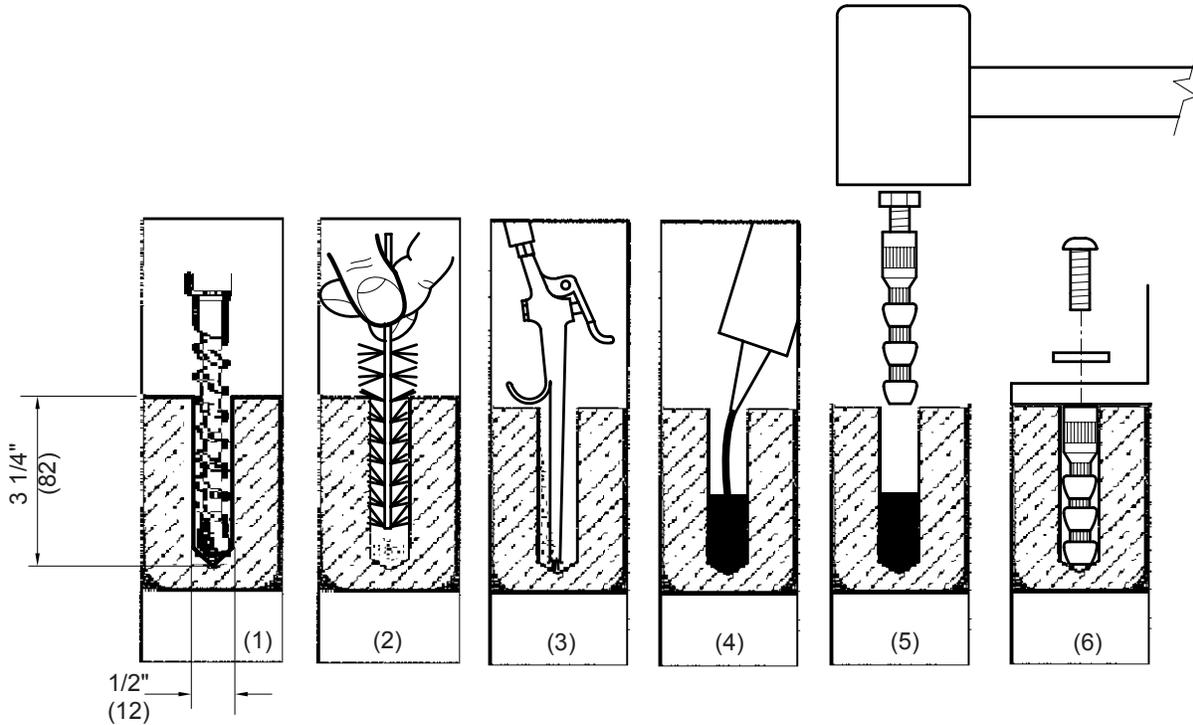
**Weight:** **(DB)** 77 lbs.  
**(SM)** 76 lbs.

**Concrete:** **(DB)** Approx 2.94 cu.ft.

## Installation Instructions

- 1) **(Direct Bury)** Dig footing as shown. Refer to the Site Plan for footing location.
- 2) Attach sign to post. Refer to the Sign Attachment Detail.
- 3) **(Direct Bury)** With post propped in plumb position, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours.  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 4) Install protective surfacing before users are allowed to play on the component.

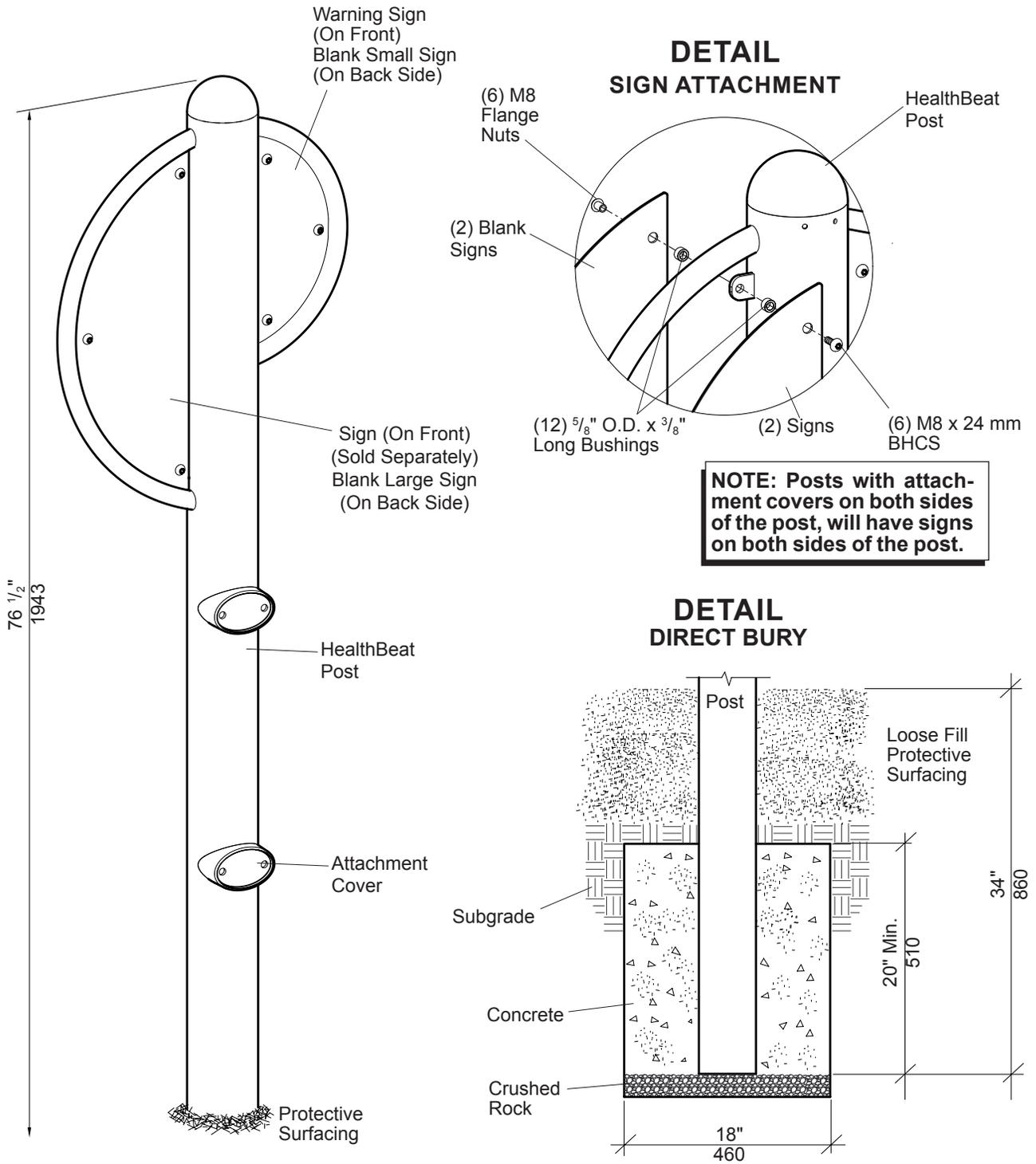
## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With post in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plate.
- 3) Move post aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) **NOTE:** A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Reposition post. Attach surfac mount plate to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

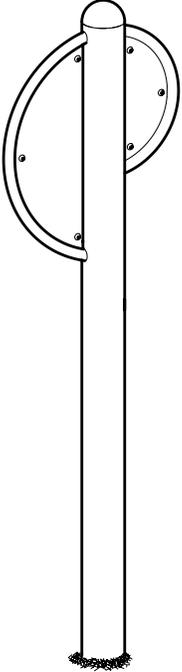
Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours



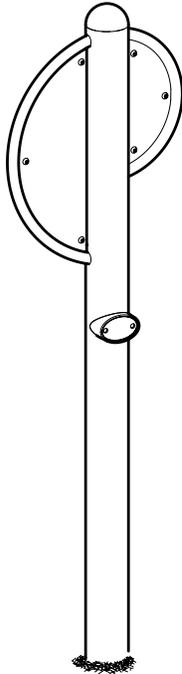


Model #205944 Shown.

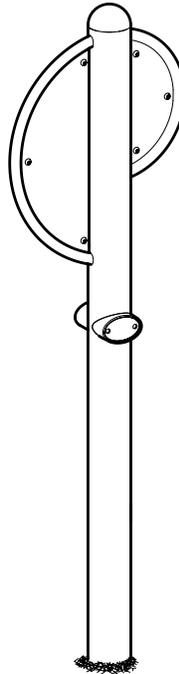
Model #205941  
 ( Post w/ No Connectors)



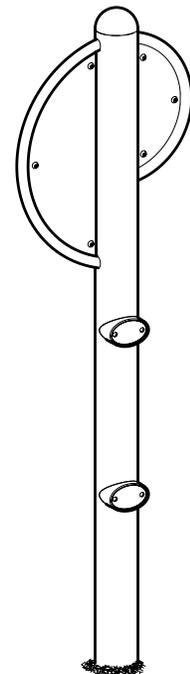
Model #205942  
 ( Post w/ 1 Connector On Top)



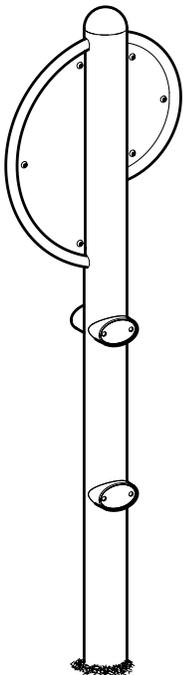
Model #205943  
 ( Post w/ 2 Connectors On Top) ( Post w/ 1 Connector Top & Bottom)



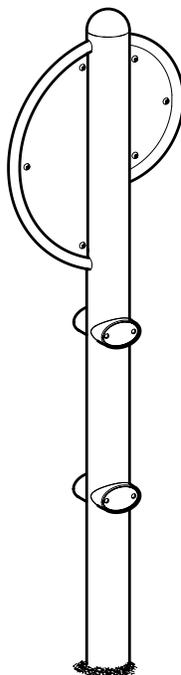
Model #205944  
 ( Post w/ 1 Connector Top & Bottom)



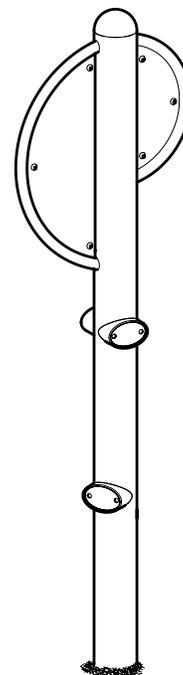
Model #205945  
 ( Post w/ 2 Connectors Top & 1 Bottom)



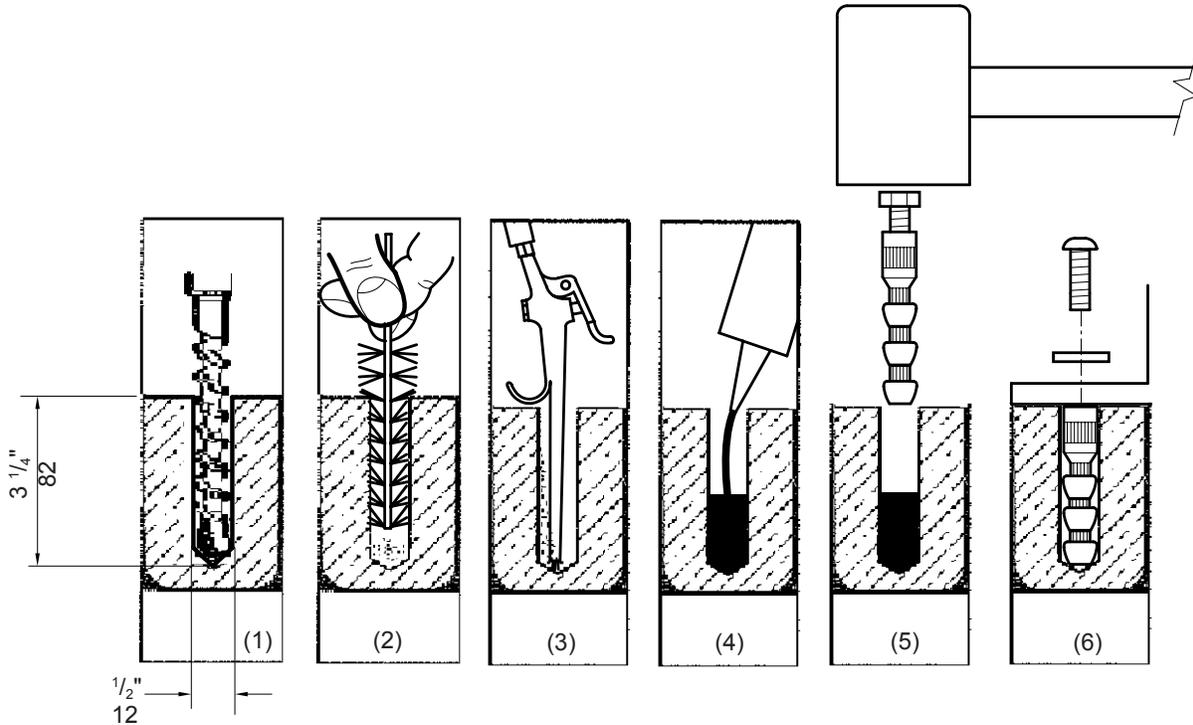
Model #205946  
 ( Post w/ 2 Connectors Top & Bottom)



Model #205947  
 ( Post w/ 2 Connectors Top & 1 Bottom 90\*)



## INSTRUCTIONS FOR CHEMICAL ANCHOR INSTALLATION



- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) With post in final position, use a center punch to mark chemical anchor locations on concrete slab through holes in surface mount plate.
- 3) Move post aside. Using a 1/2" diameter drill bit, drill holes to a depth of 3 1/4". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Insert resin into hole. Hole should be approximately half full of resin. (4)
- 6) Thread 3/8" x 1 3/4" hex head bolt into anchor. Hammer anchor into hole until flush with concrete surface. Remove 3/8" x 1 3/4" hex head bolt from anchor. (5) NOTE: A 2 1/2 pound mallet may be needed.
- 7) Allow resin to cure for the specified time. See chart for cure time.
- 8) Reposition post. Attach surface mount plate to anchors, using 3/8" x 1 1/4" BHCS w/Pin limited thread with 3/8" flat washers. (6)
- 9) Always wear safety glasses. Use only solid carbide tipped drill bits.

Minimum Cure Times Based On Ground Temperature.	
Temperature (°F)	Minimum Cure Time
68 and over	20 minutes
50-68	40 minutes
32-50	2 hours
23-32	24 hours

## Parts List

Part #	Description	Qty.
<b>Model #205941</b>		
206405	HealthBeat® Blank Sign, Large .....	1
206406	HealthBeat® Blank Sign, Small .....	1
206418	HealthBeat Post w/Cap, (DB), Carbon .....	1
194587	HealthBeat Post w/Cap, (SM), Carbon .....	1
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, SST .....	6
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1
<b>Model #205942</b>		
206405	HealthBeat® Blank Sign, Large .....	1
206406	HealthBeat® Blank Sign, Small .....	1
206419	HealthBeat Post w/Cap, (DB), Carbon .....	1
194588	HealthBeat Post w/Cap, (SM), Carbon .....	1
206303	Attachment Cover, Carbon .....	1
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, SST .....	6
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1
<b>Model #205943</b>		
206420	HealthBeat Post w/Cap, (DB), Carbon .....	1
194589	HealthBeat Post w/Cap, (SM), Carbon .....	1
206303	Attachment Cover, Carbon .....	2
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, SST .....	6
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1
<b>Model #205944</b>		
206405	HealthBeat® Blank Sign, Large .....	1
206406	HealthBeat® Blank Sign, Small .....	1
206421	HealthBeat Post w/Cap, (DB), Carbon .....	1
194590	HealthBeat Post w/Cap, (SM), Carbon .....	1
206303	Attachment Cover, Carbon .....	2
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, SST .....	6
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1

## Parts List

Part #	Description	Qty.
<b>Model #205945</b>		
206422	HealthBeat Post w/Cap, (DB), Carbon .....	1
194591	HealthBeat Post w/Cap, (SM), Carbon .....	1
206303	Attachment Cover, Carbon .....	3
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, Nylon .....	6
214297	5/8" O.D. x 3/8" Long Bushing, SST .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1
<b>Model #205946</b>		
206423	HealthBeat Post w/Cap, (DB), Carbon .....	1
194592	HealthBeat Post w/Cap, (SM), Carbon .....	1
206303	Attachment Cover, Carbon .....	4
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, SST .....	6
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1
<b>Model #205947</b>		
206424	HealthBeat Post w/Cap, (DB), Carbon .....	1
194593	HealthBeat Post w/Cap, (SM), Carbon .....	1
206303	Attachment Cover, Carbon .....	3
<b>214493</b>	<b>HealthBeat Sign Hardware Package</b> .....	1
192064	M8 6 LP Flange Nut w/Pin, SST .....	6
192071	M8 x 24 mm 6LP BHCS w/Pin, SST .....	6
214297	5/8" O.D. x 3/8" Long Bushing, Nylon .....	12
<b>207241</b>	<b>Power-Ser Anchor 4-Hole (SM) Hdw. Pkg.</b> .....	1
206892	Anchor Wej-It 3/8-16 , SST .....	4
100362	3/8" Flat Washer, SST .....	4
208324	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST .....	4
100209	3/8" x 1 3/4" Hex Head Bolt, SST .....	1

## Specifications

**Post:** Weldment comprised of 5.000" (127 mm) O.D. 11 GA. (.120") (3,05 mm) wall galvanized steel tubing, 1.315" (33,4 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,28 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 5" (127 mm) O.D. aluminum post cap. Finish: ProShield®, carbon in color.

**Attachment Cover:** Fabricated from A356 sand casted aluminum. Finish: ProShield, carbon in color

**Sign Panel:** Panel is fabricated from 11 GA. (.120") (3,05 mm) aluminum. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a .120" (3,05 mm) thick ProShield coated aluminum plate, then infused into the ProShield.

**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)** 1 man hour  
**(SM)** 3/4 man hour

**Weight:** **(DB)** 70 lbs.  
**(SM)** 63 lbs.

**Concrete:** **(DB)** Approx. 2.94 cu.ft. per post

## Installation Instructions

- 1) **(Direct Bury)** Dig footing. Refer to the Site Plan for footing location.
- 2) Attach signs. Refer to the Sign Attachment Detail
- 3) **(Direct Bury)** With post propped in plumb position, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours. **NOTE:** *Do not pour concrete footings for posts with connectors until fitness structure has been fully assembled.*  
**(Surface Mount)** Refer to the Instructions For Chemical Anchor Installation on sheet 2.
- 4) Install protective surfacing before users are allowed to play on the component.

