

landscape structures



The play components identified on this plan are IPEMA 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.ipema.org

THIS PLAY AREA & PLAY EQUIPMENT IS DESIGNED FOR AGES 5-12 YEARS UNLESS OTHERWISE NOTED ON PLAN.

IT IS THE MANUFACTURERS OPINION THAT THIS PLAY AREA DOES NOT CONFORM TO THE A.D.A. ACCESSIBILITY STANDARDS

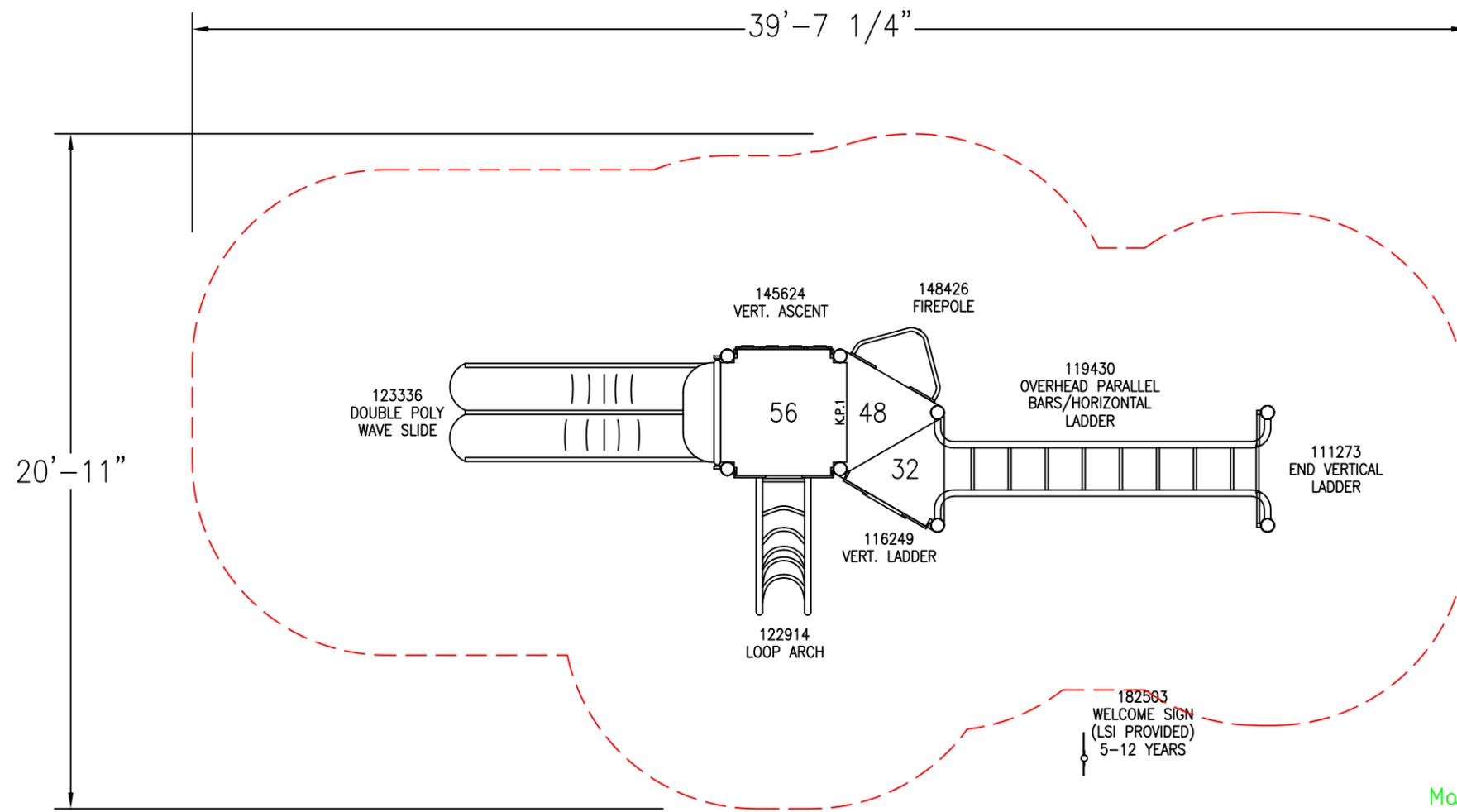
THIS CONCEPTUAL PLAN WAS BASED ON INFORMATION AVAILABLE TO US. PRIOR TO CONSTRUCTION, DETAILED SITE INFORMATION INCLUDING SITE DIMENSIONS, TOPOGRAPHY, EXISTING UTILITIES, SOIL CONDITIONS, AND DRAINAGE SOLUTIONS SHOULD BE OBTAINED, EVALUATED, & UTILIZED IN THE FINAL DESIGN. PLEASE VERIFY ALL DIMENSIONS OF PLAY AREA, SIZE, ORIENTATION, AND LOCATION OF ALL EXISTING UTILITIES, EQUIPMENT, AND SITE FURNISHINGS 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 CONSUMER SAFETY PERFORMANCE SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE, SECTION 8 CURRENT REVISION). THE SUBSURFACE MUST BE WELL DRAINED. IF THE SOIL DOES NOT DRAIN NATURALLY IT MUST BE TILED OR SLOPED 1/8" TO 1/4" PER FOOT TO A STORM SEWER OR A "FRENCH DRAIN".

DESIGNED BY:

COPYRIGHT: 11/12/19
 LANDSCAPE STRUCTURES, INC.
 601 7th STREET SOUTH - P.O. BOX 198
 DELANO, MINNESOTA 55328
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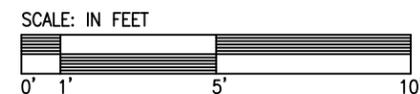
Date	Previous Drawing #	Initials



PlayBooster®
 (5-12 years)
 Max Fall Height: 79 inches
 TOTAL SQUARE FOOTAGE
 630 SQ.FT.

TOTAL ELEVATED PLAY COMPONENTS	6		
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY RAMP	0	REQUIRED	0
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY TRANSFER	0	REQUIRED	3
TOTAL ACCESSIBLE GROUND LEVEL COMPONENTS SHOWN	0	REQUIRED	2
TOTAL DIFFERENT TYPES OF GROUND LEVEL COMPONENTS	0	REQUIRED	2

6 7/8" RISE KICKPLATE
 (K.P.1) QTY. (1)



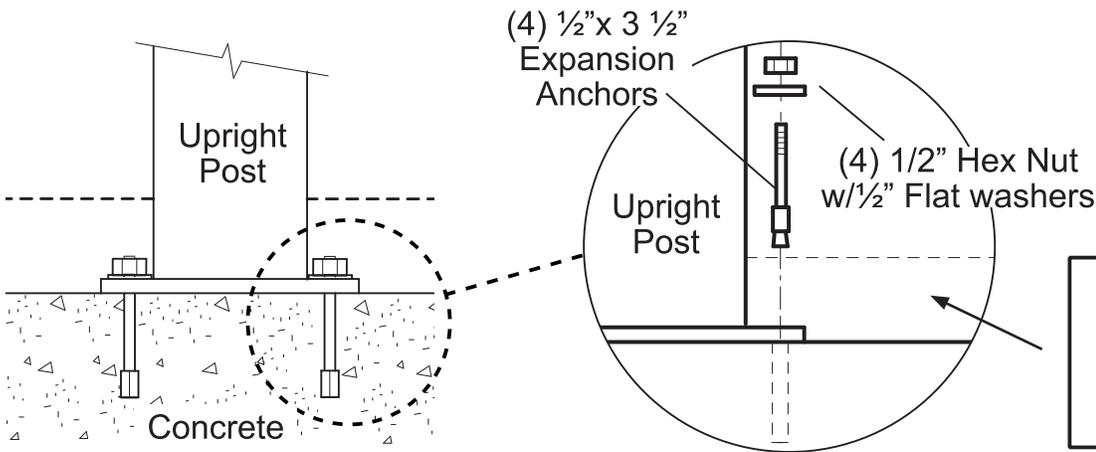
Design
 4202

Landscape
 Structures

SYSTEM TYPE:
 Playbooster

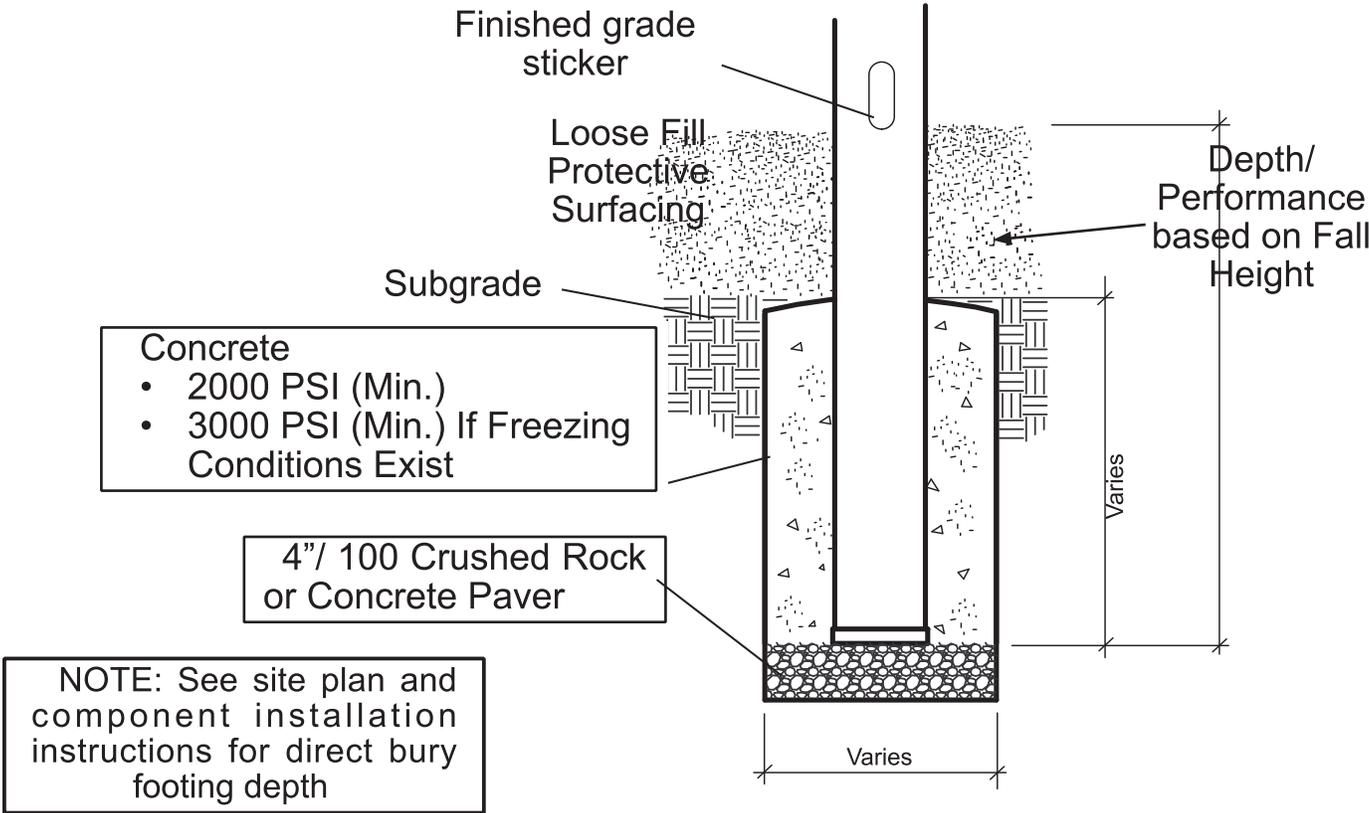
DRAWING #:
 4202





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

NOTE: Drill hole using a hammer drill deeper than anchor length with a masonry bit of the same diameter of the expansion anchor. For example, a 1/2" x 3 1/2" expansion anchor will use a 1/2" masonry bit drilled to a 4" minimum depth. Anchors to be a minimum of 4 1/2" from concrete pad edges and seams. Other anchoring details, such as chemical anchors, may be found on individual installation instructions



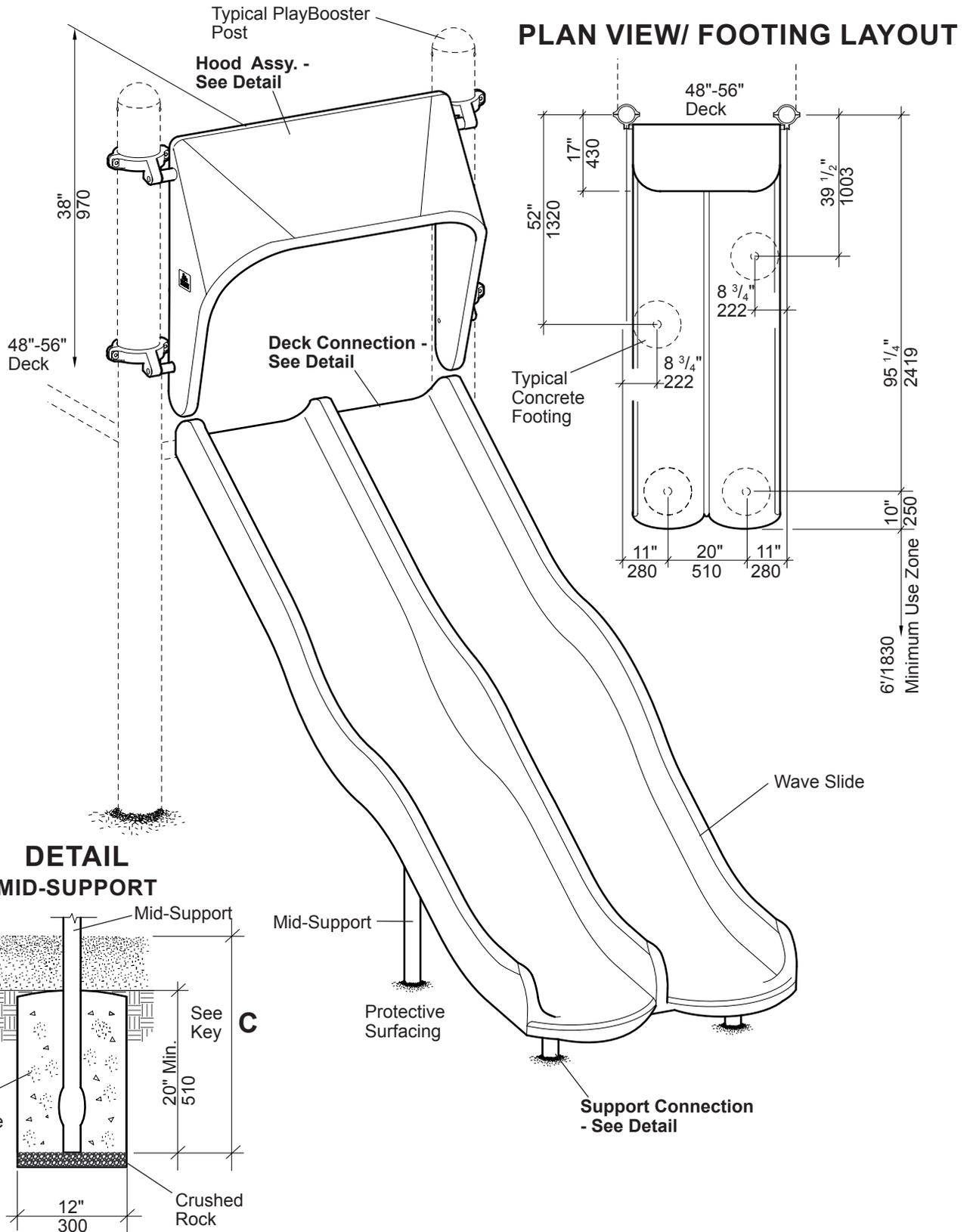
Concrete

- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist

4" / 100 Crushed Rock or Concrete Paver

NOTE: See site plan and component installation instructions for direct bury footing depth

Concrete Specs



PlayBooster® 123336 Double Wave Slide, 48"-56"



PlayBooster® 123336 Double Wave Slide, 48"-56"

Parts List

Part#	Description	Qty.
130716	48" - 56" Double Wave Slide, Specify Color	1
131987	Hood, Specify Color.....	1
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
100583	40 7/16" Aluminum Rail, Specify Color.....	1
113468	Spacer Tube, Specify Color.....	2
116908	64" Mid-Support (DB), Specify Color	1
116917	54" Mid-Support (DB), Specify Color	1
134565	28 1/2" Mid-Support, 48" Deck(SM),Specify Color	1
134567	18 1/2" Mid-Support, 48" Deck(SM),Specify Color	1
116920	36" Mid-Support, 56" Deck (SM), Specify Color.....	1
116921	26" Mid-Support, 56" Deck (SM), Specify Color.....	1
150941	Support (DB), Specify Color.....	2
151013	Support 48" Deck (SM), Specify Color.....	2
151003	Support 56" Deck (SM), Specify Color.....	2
132443	Rail Spacer, Specify Color	2
116943	Slide Hardware Package	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.....	8
100362	3/8" Flat Washer, SST	12
100365	3/8" SAE Flat Washer, SST.....	8
111442	Rubber Bushing.....	8
106577	Hood Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100200	3/8" x 3 1/2" BHCS w/Pin, SST	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST.....	8
100362	3/8" Flat Washer, SST	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
121348	4 Hole (SM) Hardware Package	2
100266	1/2" x 2 3/4" Expansion Anchor	8
100322	1/2" Standard Hex Nut, SST	8
100363	1/2" Flat Washer, SST	8

DB = Direct Bury
SM = Surface Mount

Specifications

Slide:	Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
Mid-Support:	Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" flat steel. Finish: ProShield®, color specified.
Support:	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.
Hood:	Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
Rail:	Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield, color specified.
Rail Spacer:	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 1/16". Finish: ProShield, color specified.

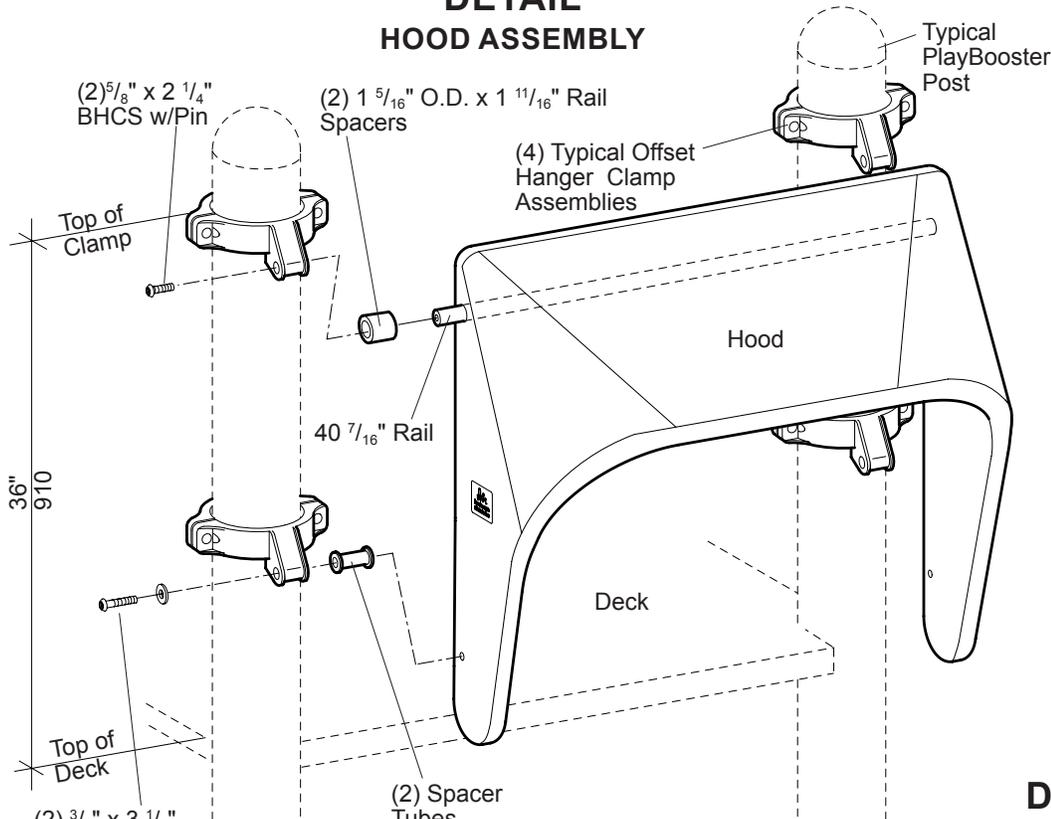
Offset Hanger Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	(DB) - 3 man hours (SM) - 2 man hours
Concrete Req.:	Approx. 5.2 cu. ft.
Area Req.:	6' (1,82 m) minimum use zone at exit.
Weight:	(DB) - 174 lbs. (SM) - 158 lbs.
Fall Height:	Deck Height

Installation Instructions

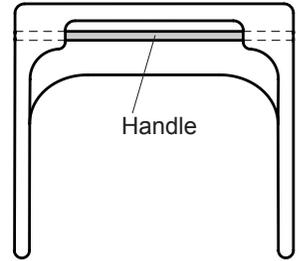
- (Direct Bury)** Dig footings spaced as shown. Refer to the Key for the exit support and mid-support depths of bury.
- Insert 40 7/16" rail through top of hood, place rail spacer tube on each end of the 40 7/16" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet. Fasten bottom of hood using 3/8" x 3 1/2" BHCS w/Pin with 3/8" flat washers through clamps, spacer tubes and into threaded inserts in hood. Refer to the Hood Assembly Detail.
- Attach mid-supports and exit supports to slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" SAE flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Detail and the Mid-Support Detail. **NOTE: Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not over-tighten!**
- Attach 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.
- Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Offset Hanger Clamp Spec Sheet.
- (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 and remove wave slide. 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 wave slide and reattach to the face of the deck following step 4. Fasten supports 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.

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.)

**DETAIL
HOOD ASSEMBLY**

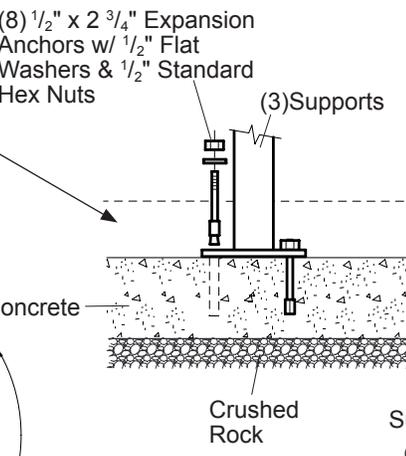


HOOD - HANDLE DETAIL

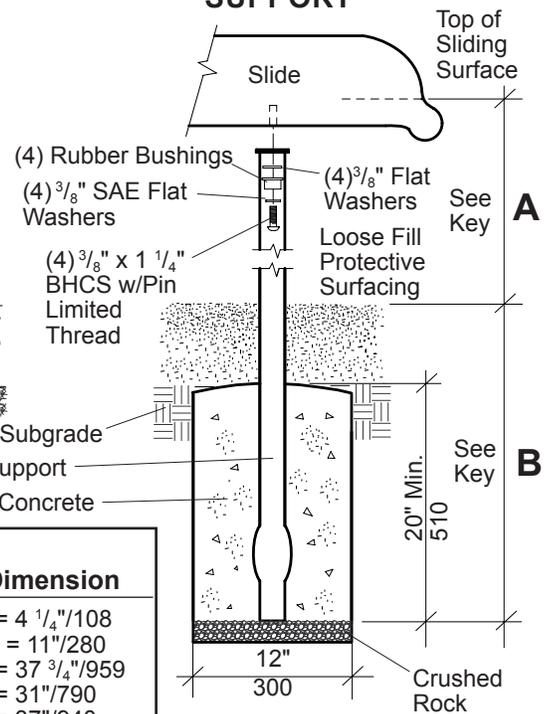


NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

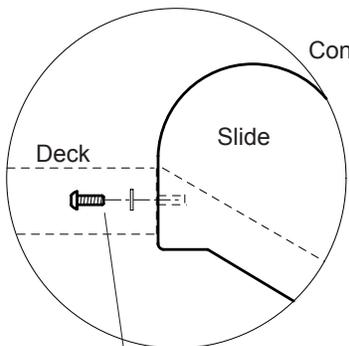
**DETAIL
SURFACE MOUNT**



**DETAIL
SUPPORT**

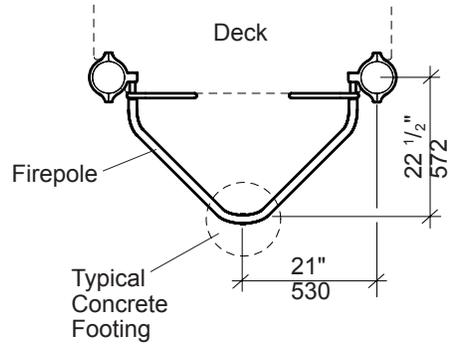


**DETAIL
DECK CONNECTION**

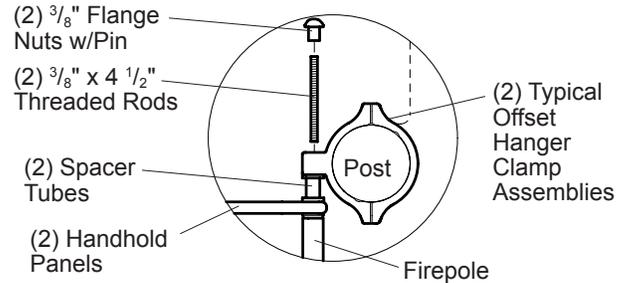


KEY: Deck Hgt.	Dimension
48"	A = 4 1/4"/108
56"	A = 11"/280
48"	B = 37 3/4"/959
56"	B = 31"/790
48"	C = 37"/940
56"	C = 30"/760

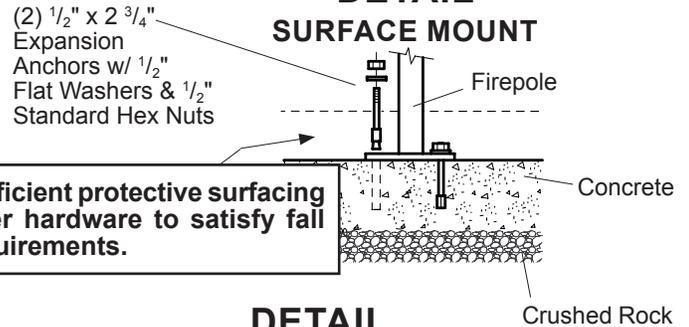
**PLAN VIEW/
FOOTING LAYOUT**



**DETAIL
HANDHOLD PANEL ATTACHMENT**

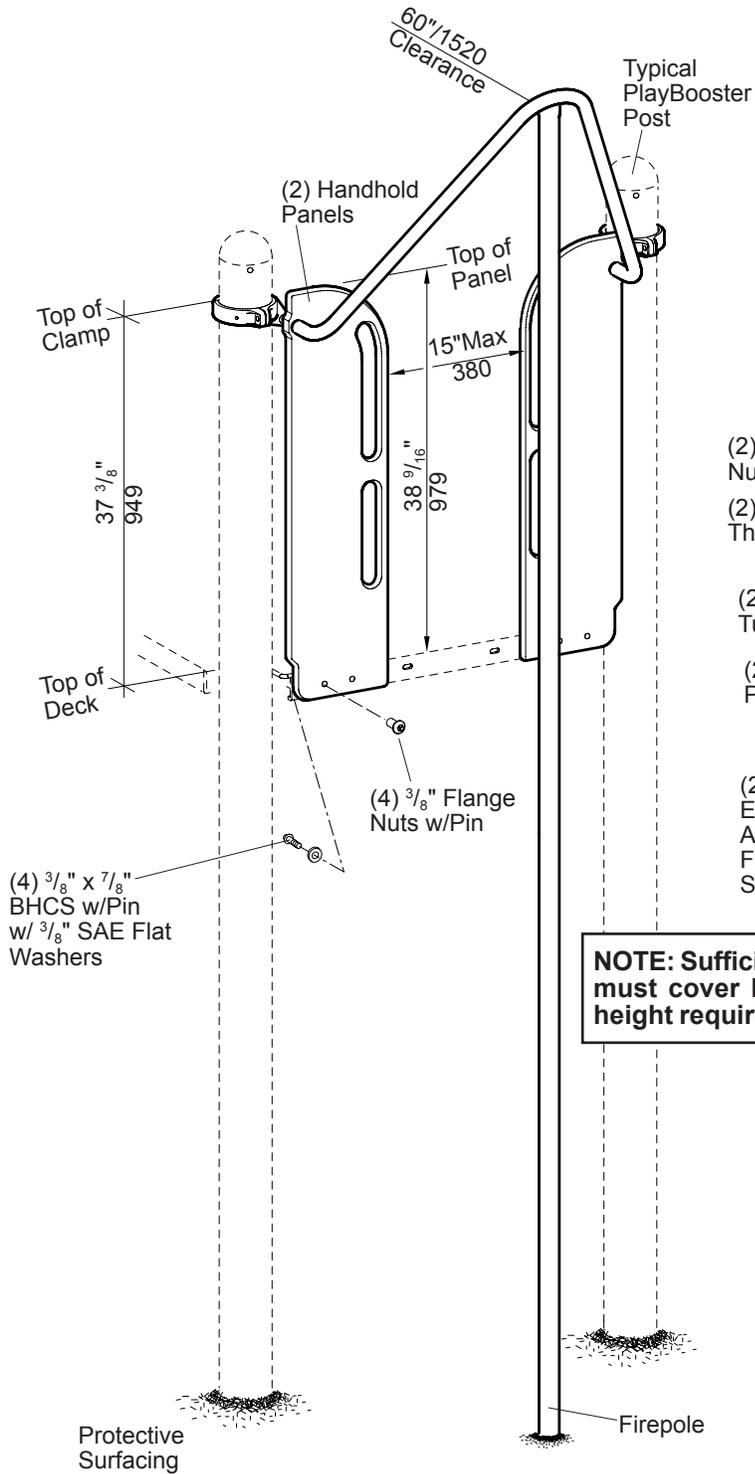
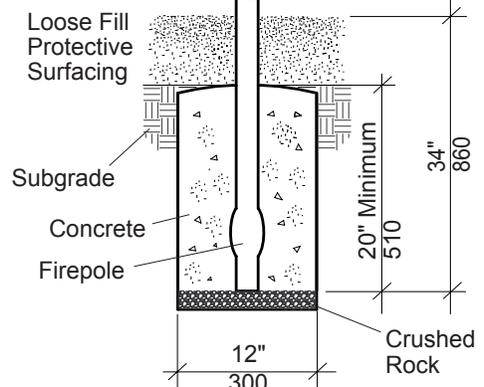


**DETAIL
SURFACE MOUNT**



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

**DETAIL
DIRECT BURY**



72" Deck Height Shown

PlayBooster® 148426 Firepoles, 32"-72" Decks



PlayBooster® 148426 Firepoles, 32"-72" Decks

Parts List

Part#	Description	Qty.
147954	Handhold Panel, Specify Color	2
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
147956	Firepole, 32" Deck (DB), Specify Color	1
147957	Firepole, 40" Deck (DB), Specify Color	1
147958	Firepole, 48" Deck (DB), Specify Color	1
147959	Firepole, 56" Deck (DB), Specify Color	1
147960	Firepole, 64" Deck (DB), Specify Color	1
147961	Firepole, 72" Deck (DB), Specify Color	1
147962	Firepole, 32" Deck (SM), Specify Color	1
147963	Firepole, 40" Deck (SM), Specify Color	1
147964	Firepole, 48" Deck (SM), Specify Color	1
147965	Firepole, 56" Deck (SM), Specify Color	1
147966	Firepole, 64" Deck (SM), Specify Color	1
147967	Firepole, 72" Deck (SM), Specify Color	1
113468	7/8" O.D. x 1 11/16" Spacer Tube, Specify Color	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
148176	Pole Hardware Package	1
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
148081	3/8" x 4 1/2" Threaded Rod, SST	2
111392	2-Hole (SM) Hardware Package	1
100266	1/2" x 2 3/4" Expansion Anchors	2
100322	1/2" Standard Hex Nut, SST	2
100363	1/2" Flat Washer, SST	2

DB = Direct Bury
SM = Surface Mount

Specifications

Firepole: Weldment comprised of 1.900" O.D. RS20 (.090" - .100") galvanized steel tubing, and 1.315" O.D. RS20 (.080" - .090") galvanized steel tubing. Finish: ProShield®, color specified.

Handhold Panel: Solid color Permalene®, color specified.

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

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

Installation Time: **SM** - Approx. 1 1/2 man hours
DB - Approx. 2 man hours

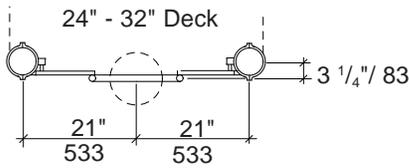
Concrete Req.: Approx. 1.3 cu. ft.
Weight: 55 lbs. (32"-48" Deck)
59 lbs. (56"-72" Deck)

Fall Height: Deck Height

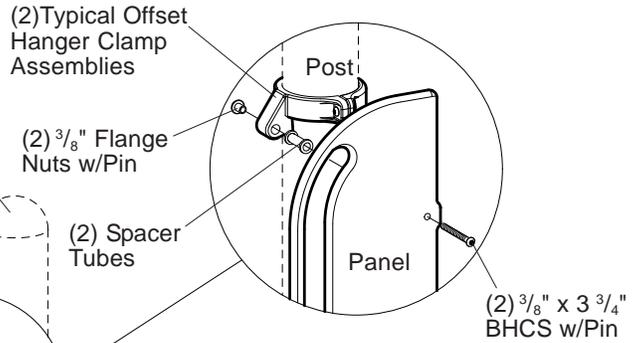
Installation Instructions

- 1) **(Direct Bury)** Dig footing hole as shown. Refer to the Plan View/Footing Layout.
- 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 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.
- 4) Attach firepole to handhold panels and offset hanger clamps using 3/8" flange nuts w/pin, 3/8" x 4 1/2" threaded rods and spacer tubes. Refer to the Handhold Panel Attachment Detail. **NOTE:** Turn 3/8" x 4 1/2" threaded rod into 3/8" flange nut w/pin until it bottoms out, before attaching firepole.
- 5) **(Direct Bury)** With firepole plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.
(Surface Mount) Drill 1/2" x 3" deep holes through support plate using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- 6) Install protective surfacing before users are allowed to play on the structure.

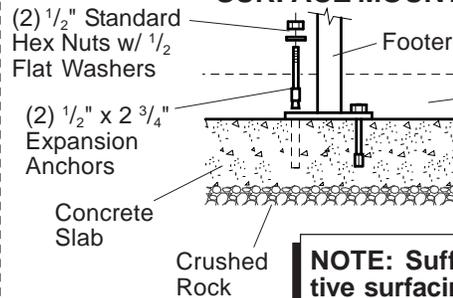
**PLAN VIEW
FOOTING PLAN**



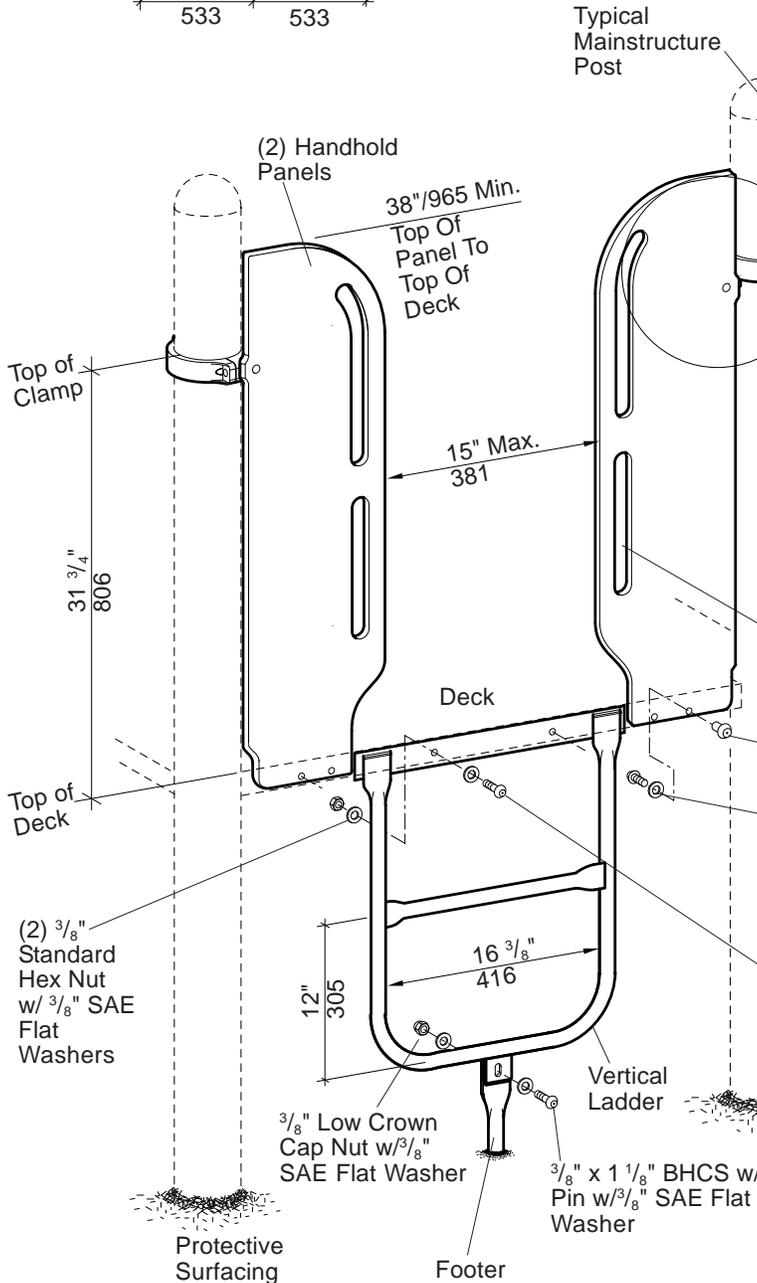
**DETAIL
PANEL ATTACHMENT**



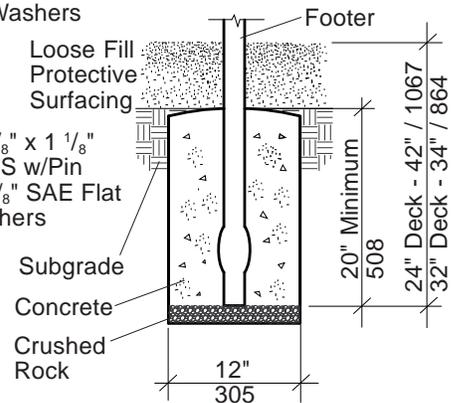
**DETAIL
SURFACE MOUNT**



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



**DETAIL
Direct Bury**





PlayBooster® 116249 Vertical Ladder, 24"-32" Decks

Parts List

Part#	Description	Qty.
115776	Vertical Ladder, 24"/32", Specify Color	1
139563	Handhold Panel, Specify Color	2
180703	Footer (DB), Specify Color	1
180704	Footer (SM), Specify Color	1
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
113468	Spacer Tube, Specify Color	2
190270	Vertical Ladder (Tenderdeck) Hardware Pkg ...	1
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	7
100327	3/8" Standard Hex Nut, SST	2
100349	3/8" Low Crown Cap Nut, SST	1
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	10
111392	2 Hole (SM) Hardware Package	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

Vertical Ladder: Weldment comprised of 1.125" O.D. 11 GA (.120") steel tubing, 1.029" O.D. RS20 (.070" - .080") and 3/16" x 2" wide steel flat plates. Finish: TenderTuff®, color specified.

Footer: Fabricated from 1.315" O.D. RS20 (.080" - .090") galvanized steel tubing. Finish: ProShield®, color specified.

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: DB - Approx. 1 1/2 man hour
SM - Approx. 1 man hour

Concrete Req.: Approx. 1.3 cu. ft.

Weight: DB, 24"/32" - 40 lbs.
SM, 32" - 39 lbs.

Fall Height: Deck Height

Installation Instructions

Direct Bury

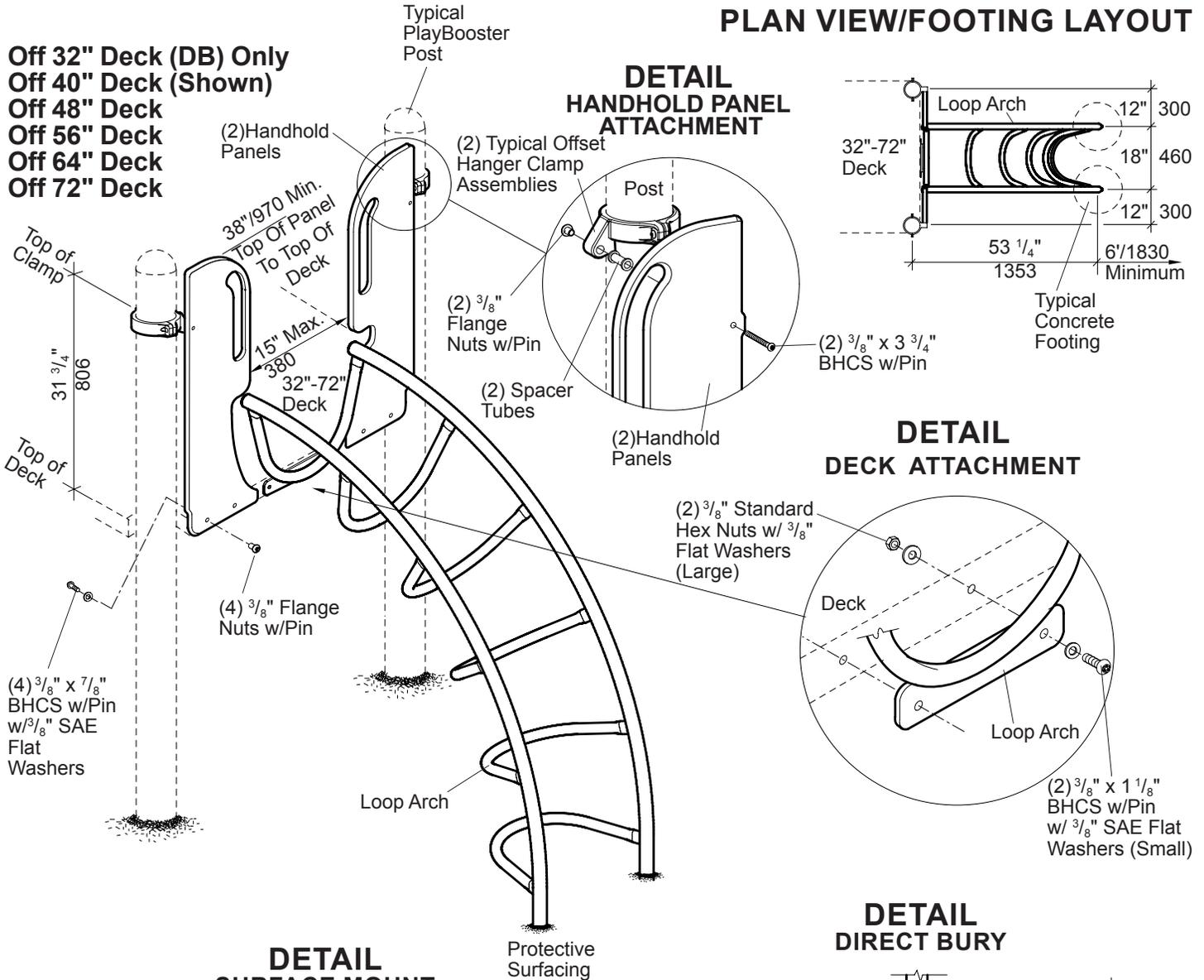
- 1) Dig footing to depth and spacing, as shown.
- 2) Attach footer to ladder, using a 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washer and a 3/8" low crown cap nut with 3/8" SAE flat washer, as shown.
- 3) Attach ladder to deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
- 4) Attach handhold 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. **NOTE: Be sure handhold panels are snug to vertical ladder.**
- 5) 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.
- 6) 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.
- 7) With ladder plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.
- 8) Install protective surfacing before users are allowed to play on the structure.

Surface Mount

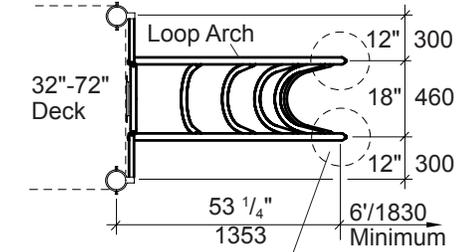
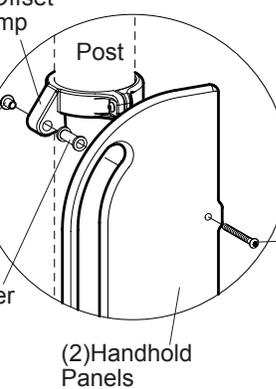
- 1) Attach footer to ladder, using a 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washer and a 3/8" low crown cap nut with 3/8" SAE flat washer, as shown.
- 2) Attach ladder to deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
- 3) Attach handhold 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. **NOTE: Be sure handhold panels are snug to vertical ladder.**
- 4) 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.
- 5) 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.
- 6) Using a 1/2" hammer drill and 1/2" masonry bit, drill anchor bolt holes into concrete slab 3" deep through holes in footer plate, as shown.
- 7) Tap expansion anchors into holes and fasten using 1/2" flat washers and 1/2" standard hex nuts, as shown.
- 8) Install protective surfacing before users are allowed to play on the structure.

Off 32" Deck (DB) Only
Off 40" Deck (Shown)
Off 48" Deck
Off 56" Deck
Off 64" Deck
Off 72" Deck

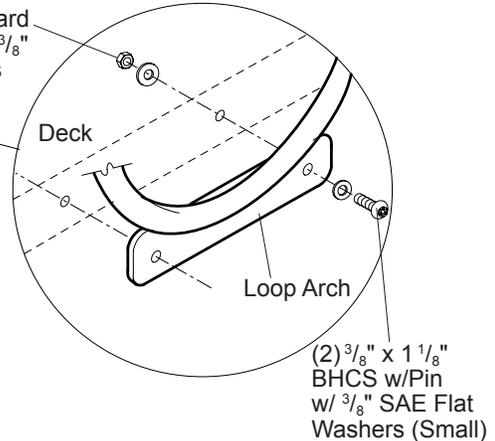
PLAN VIEW/FOOTING LAYOUT



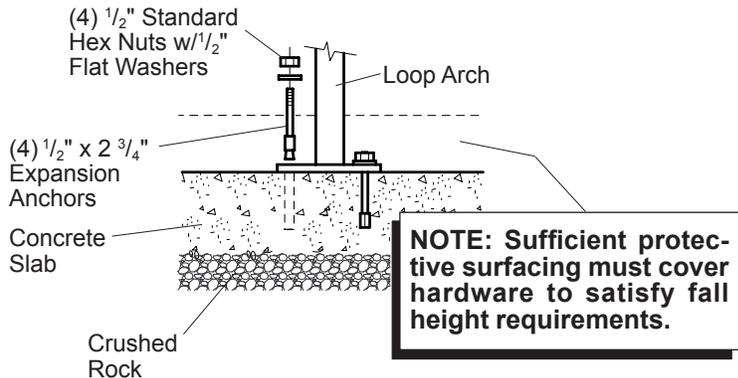
DETAIL HANDHOLD PANEL ATTACHMENT



DETAIL DECK ATTACHMENT

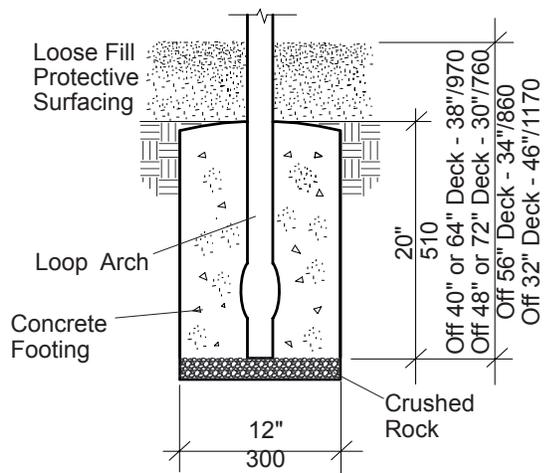


DETAIL SURFACE MOUNT



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

DETAIL DIRECT BURY



Parts List

Part#	Description	Qty.
139561	Handhold Panel, Specify Color	2
111595	32", 40" & 48" Loop Arch (DB), Specify Color	1
111596	56" Loop Arch (DB), Specify Color.....	1
111597	64" & 72" Loop Arch (DB), Specify Color.....	1
111598	40" Loop Arch (SM), Specify Color	1
111599	48" Loop Arch (SM), Specify Color	1
111600	56" Loop Arch (SM), Specify Color	1
111601	64" Loop Arch (SM), Specify Color	1
111602	72" Loop Arch (SM), Specify Color	1
105327	5" Half Clamp, Specify Clamp.....	2
113729	Offset Hanger Clamp, Specify Color	2
113468	Spacer Tube, Specify Color.....	2
211597	Loop Arch (Tenderdeck) Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	2
100327	3/8" Standard Hex Nut, SST	2
100362	3/8" Flat Washer, SST	2
100365	3/8" SAE Flat Washer, SST.....	2
139551	Handhold (Tenderdeck) Hardware Package	1
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
121348	4 Hole (SM) Hardware Package	1
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

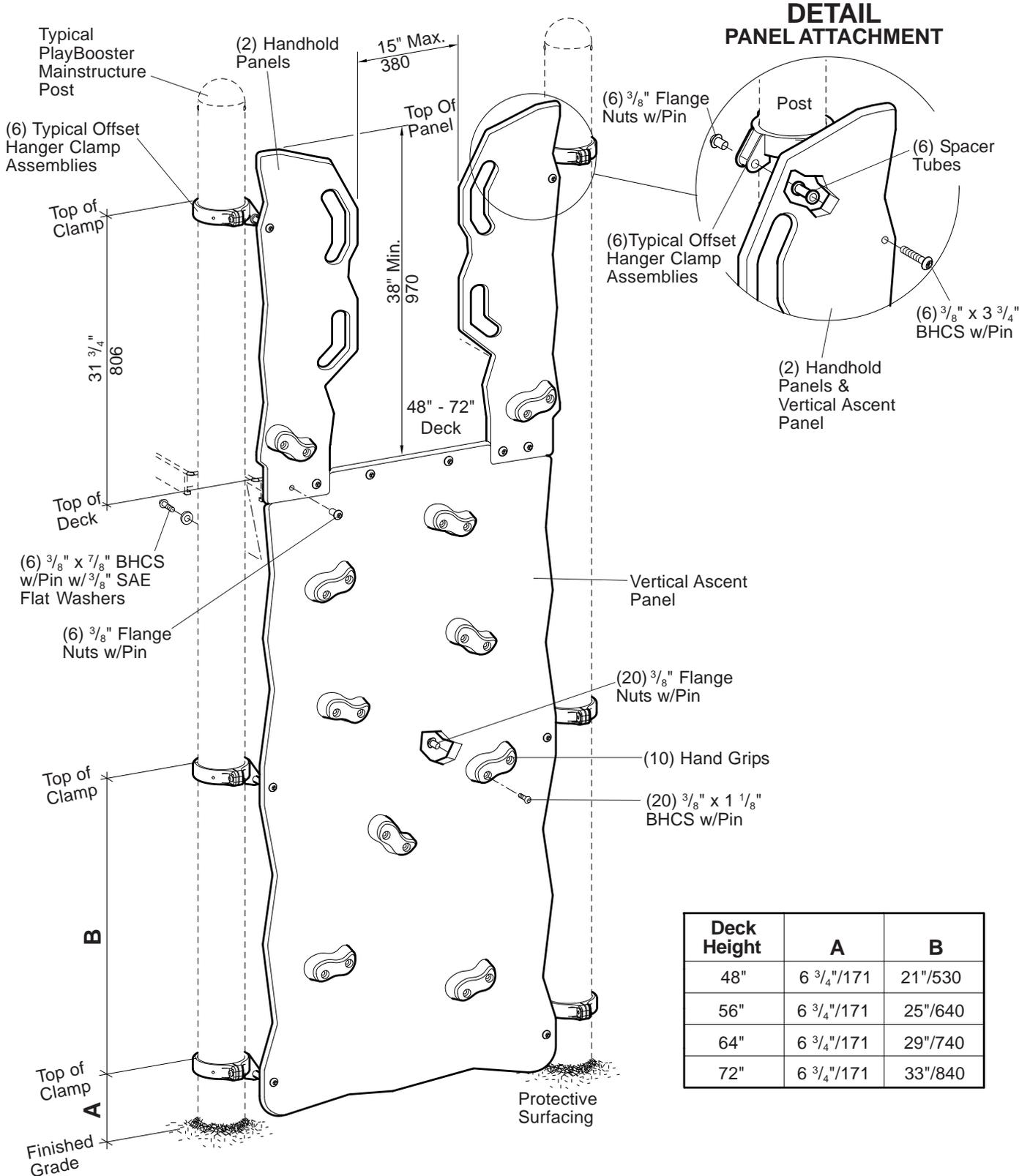
Specifications

Loop Arch:	Weldment comprised of 1.660 O.D. RS-20 (.085" - .095") galvanized steel tubing, 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and 1/4" flat steel. Finish: ProShield®, color specified.
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:	SM - Approx. 1 1/2 man hours DB - Approx. 2 1/2 man hours
Concrete Req.:	Approx. 2.6 cu. ft.
Weight:	32", 40" & 48" - 85 lbs. 56" - 91 lbs. 64" & 72" - 97 lbs.
Fall Height:	Deck Height

Installation Instructions

- 1) **(Direct Bury)** Dig footing holes spaced as shown.
- 2) Attach loop arch to 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).
- 3) 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.
- 4) 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.
- 5) Attach handhold panels to the offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. Refer to the Handhold Panel Attachment Detail.
- 6) **(Direct Bury)** With loop arch in final position, 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 anchor plate and remove loop arch. Drill 1/2" x 3" deep holes on marks into concrete using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition loop arch and reattach to the face of the deck following step 2. Fasten anchor plates to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- 7) Install protective surfacing before users are allowed to play on the structure.



Deck Height	A	B
48"	6 3/4"/171	21"/530
56"	6 3/4"/171	25"/640
64"	6 3/4"/171	29"/740
72"	6 3/4"/171	33"/840

PlayBooster® 145624 Vertical Ascent®, 48"-72"



PlayBooster® 145624 Vertical Ascent®, 48"-72"

Parts List

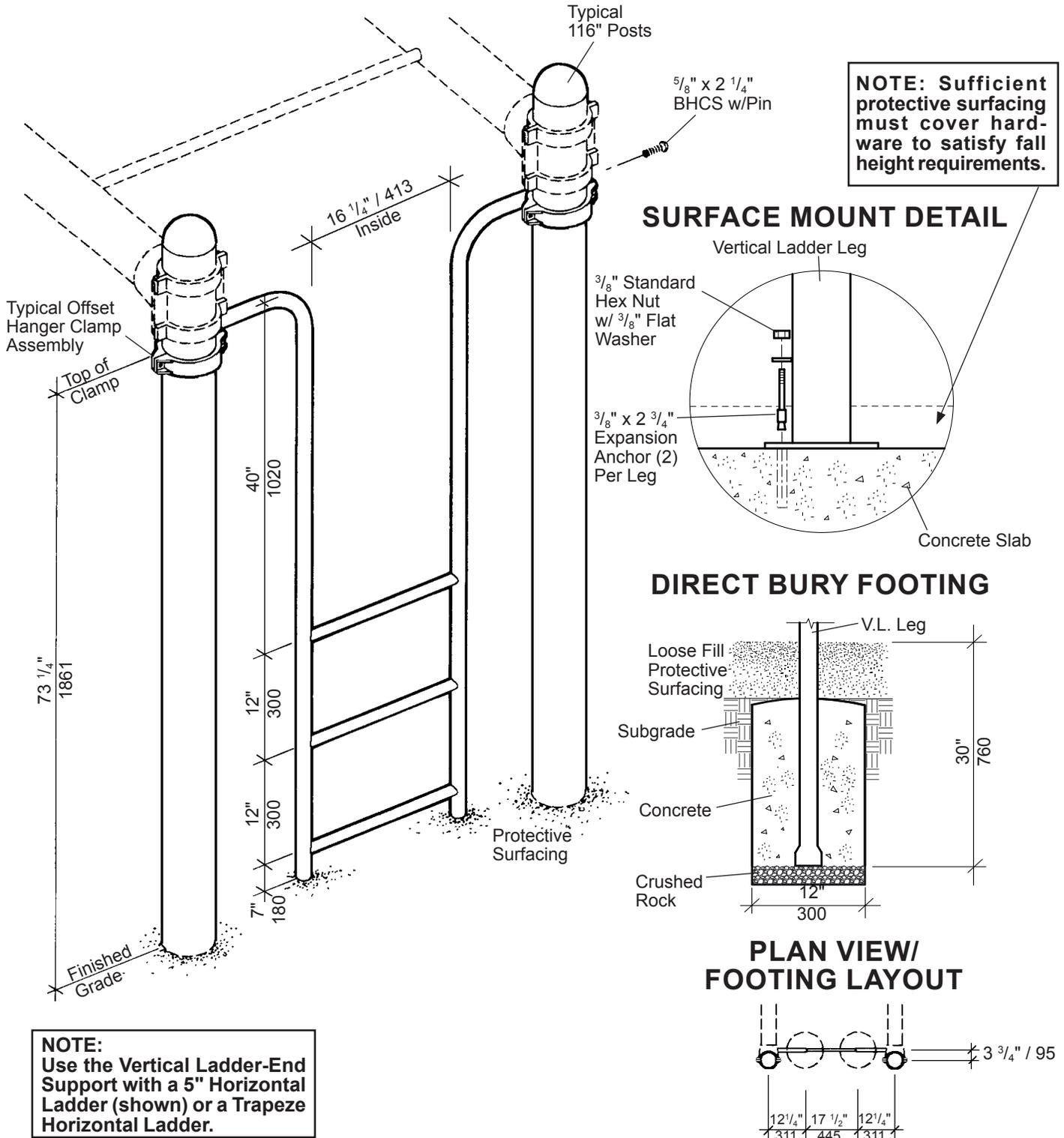
Part#	Description	Qty.
182957	Vertical Ascent Handhold Panel, Specify Color.....	2
145597	Vertical Ascent Panel, 48" Deck, Specify Color	1
145596	Vertical Ascent Panel, 56" Deck, Specify Color	1
145595	Vertical Ascent Panel, 64" Deck, Specify Color	1
145585	Vertical Ascent Panel, 72" Deck, Specify Color	1
105327	5" Half Clamp, Specify Color	6
113729	Offset Hanger Clamp, Specify Color	6
113468	Spacer Tube, Specify Color	6
100610	1/4" x 5/8" Drive Rivet, AL/SST	6
145792	Hand Grip Set	1
143110	Hand Grip, Blue	2
143110	Hand Grip, Yellow	2
143110	Hand Grip, Red	3
143110	Hand Grip, Green	3
145616	Vertical Ascent Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	6
100198	3/8" x 1 1/8" BHCS w/Pin, SST	32
100351	3/8" Tee Nut, SST	12
100353	3/8" Flange Nut w/Pin, SST	32
100365	3/8" SAE Flat Washer, SST	6
124460	3/8" x 3 3/4" BHCS w/Pin, SST	6

Specifications

Hand Grip:	Made from Polyester Resin. Hand Grips measure approx. 5 3/4" long x 2 1/4" wide x 1 3/4" high.
Panels:	Solid color Permalene®, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. 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:	48" Deck Height - 83 lbs. 56" Deck Height - 91 lbs. 64" Deck Height - 99 lbs. 72" Deck Height - 106 lbs.
Fall Height:	53 1/2"/1358 (48" Deck Height) 61 1/2"/1562 (56" Deck Height) 69 1/2"/1765 (64" Deck Height) 77 1/2"/1968 (72" Deck Height)

Installation Instructions

- 1) Attach handhold panels and vertical ascent panel to deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin, as shown.
- 2) Attach handhold panels and vertical ascent panel to offset hanger clamps using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. Refer to the Panel 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 and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Attach hand grips to handhold panels and vertical ascent panel using 3/8" x 1 1/8" BHCS w/pin and 3/8" flange nuts w/pin, as shown.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.





PlayBooster® 111273 Vertical Ladder End Support

Parts List

Part#	Description	Qty.
107470	84" Steel Post Assembly, Specify Color, SM.....	2
107623	84" Alum. Post Assembly, Specify Color, SM.....	2
107520	116" Steel Post Assembly, Specify Color, DB.....	2
107694	116" Aluminum Post Assembly, Specify Color,DB.....	2
108598	Vertical Ladder, Specify Color, DB.....	1
108606	Vertical Ladder, Specify Color, SM.....	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
100610	1/4" x 5/8" Drive Rivet, SST.....	2
105327	5" Half Clamp, Specify Color.....	2
113729	Offset Hanger Clamp, Specify Color.....	2
111394	4 Hole (SM) Hardware Package.....	1
100263	3/8" x 2 3/4" Expansion Anchor.....	4
100327	3/8" Standard Hex Nut, SST.....	4
100362	3/8" Flat Washer, SST.....	4
121348	4 Hole (SM) Hardware Package.....	2
100266	1/2" x 2 3/4" Expansion Anchor.....	8
100322	1/2" Standard Hex Nut, SST.....	8
100363	1/2" Flat Washer, SST.....	8

DB=Direct Bury
SM=Surface Mount

Specifications

Vertical Ladder: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing, 1.029" O.D. RS-20 (.070" - .080") and 3/16" x 2" wide steel flat plates. Finish: TenderTuff, color specified.

Post: See PlayBooster (PB) General Specifications.

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: DB - Approx. 2 man hours
SM - Approx. 1 man hour

Concrete Req.: DB - Approx. 5.6cu. ft.

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

Weight: w/ Aluminum Posts: SM - 83 lbs.
DB - 96 lbs.

w/ Steel Posts: SM - 146 lbs.
DB - 160 lbs.

Installation Instructions

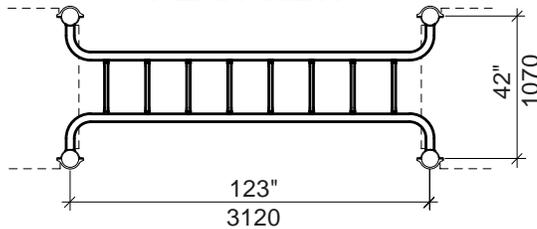
Direct Bury

- 1) Dig footings spaced and to proper depth as shown.
- 2) Attach offset hanger clamp halves to ends of vertical ladder using 5/8" x 2 1/4" BHCS w/pin.
- 3) Set posts in footing holes and attach component per the component installation sheet you are installing.
- 4) Position ladder in footing holes and attach to posts at height shown using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Install drive rivets in half clamps. Refer to the Typical Offset Hanger Clamp Assembly Sheet.
- 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.

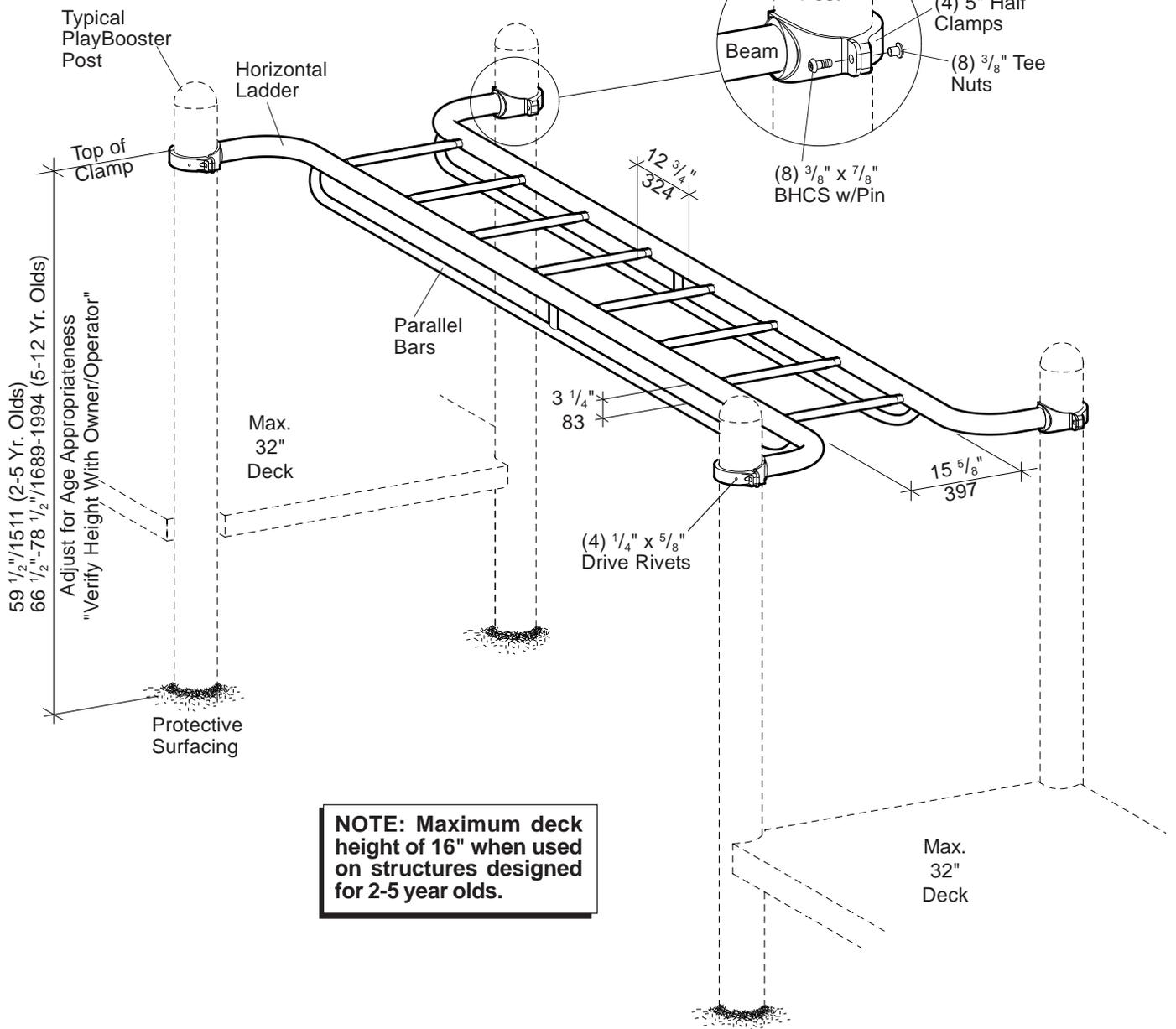
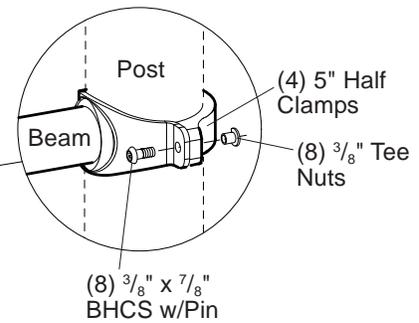
Surface Mount

- 1) Attach offset hanger clamp halves to ends of vertical ladder using 5/8" x 2 1/4" BHCS w/pin.
- 2) Set posts in position and attach component per the component installation sheet you are installing.
- 3) Position ladder with clamps tight against posts and ladder resting on concrete slab. With ladder rails in plumb position, mark anchor bolt locations on concrete slab through holes in bottom mounting plates. Remove ladder and drill 3/8" x 3" deep holes into concrete slab on marks, using 3/8" masonry bit and hammer drill.
- 4) Reposition ladder and attach offset hanger clamps to posts with 5" half clamps and 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Install drive rivets in half clamps. Refer to the Typical Offset Hanger Clamp Assembly sheet. Tap expansion anchors into drilled holes in concrete through plates on bottom of vertical ladder. Secure with 3/8" flat washers and 3/8" standard hex nuts. Secure posts to concrete in same way, except use 1/2" masonry bit with 1/2" anchors and fasteners.
- 5) Install protective surfacing before users are allowed to play on the structure.

PLAN VIEW



DETAIL BEAM ATTACHMENT



NOTE: Maximum deck height of 16" when used on structures designed for 2-5 year olds.

PlayBooster® 119430 Overhead Parallel Bar /H.L.



PlayBooster® 119430 Overhead Parallel Bar/H.L.

Parts List

Part#	Description	Qty.
145939	Overhead Parallel Bars, Specify Color	1
105327	5" Half Clamp, Specify Color	4
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
149233	Horizontal Ladder, Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	8
100351	3/8" Tee Nut, SST	8

Specifications

Overhead

Parallel Bars: Weldment comprised of 2.375" O.D. RS-40 (.130"-.140") galvanized steel tubing 1.315" O.D. x RS-20 (.080"-.090") galvanized steel tubing and 1/4" HRPO flat steel. Finish: ProShield, color specified.

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

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

Installation Time: Approx. 1 man hour

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

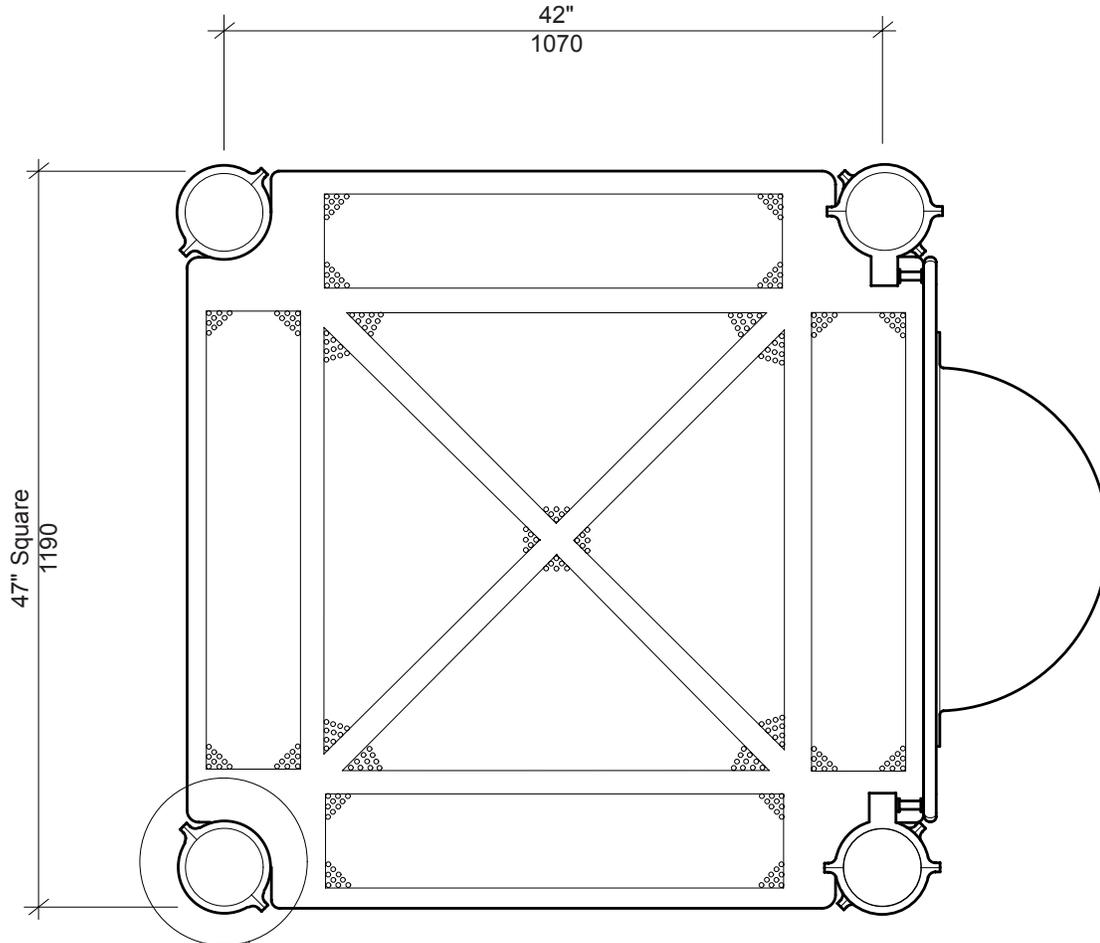
Weight: 115 lbs.

Max. Fall Height: 60" (1,52 m) 2-5 Yr. Olds.

67"-79" (1,70 m - 2,10 m) 5-12 Yr. Olds.

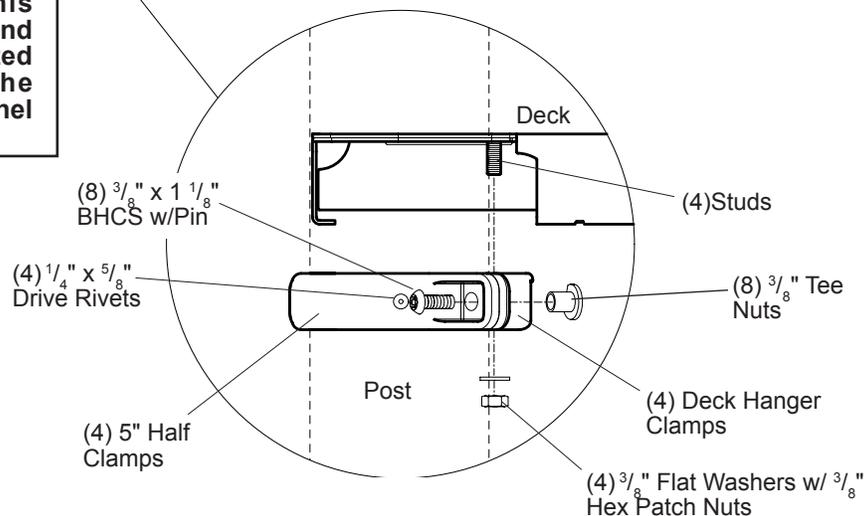
Installation Instructions

- 1) Mark posts for the appropriate height of the overhead parallel bar. Adjust height for age appropriateness.
- 2) Lift overhead parallel bar into position and attach to posts using 5" half clamps with 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts.
- 3) Be sure overhead parallel bar is level, if not, adjust clamps to do so.
- 4) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) Install protective surfacing before users are allowed to play on the structure.



**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
119491	Hardware Package	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.

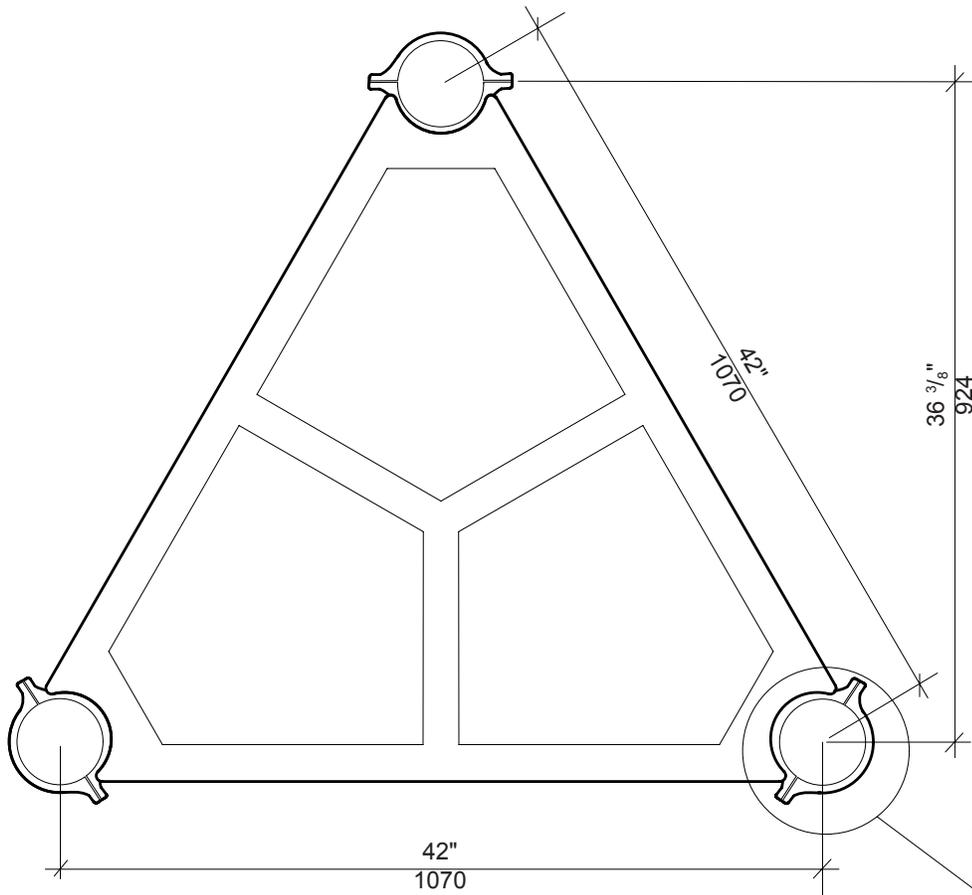
Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 1 man hour

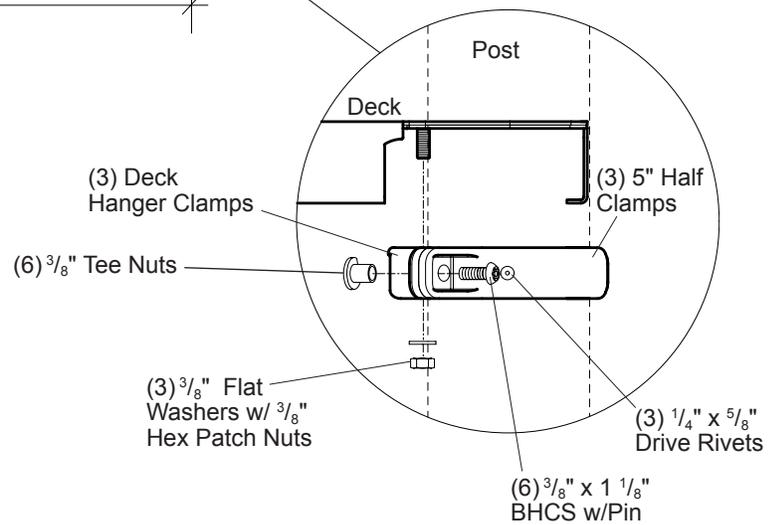
Weight: 119 lbs.

Installation Instructions

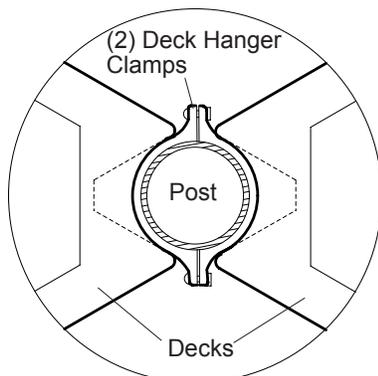
- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck into position, lining up studs underneath deck with deck hanger clamp as shown. Attach with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " 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
120203	Triangular Deck Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	6
100321	3/8" Hex Patch Nut, SST.....	3
100351	3/8" Tee Nut, SST.....	6
100362	3/8" Flat Washer, SST	3
100610	1/4" x 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 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 37 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).

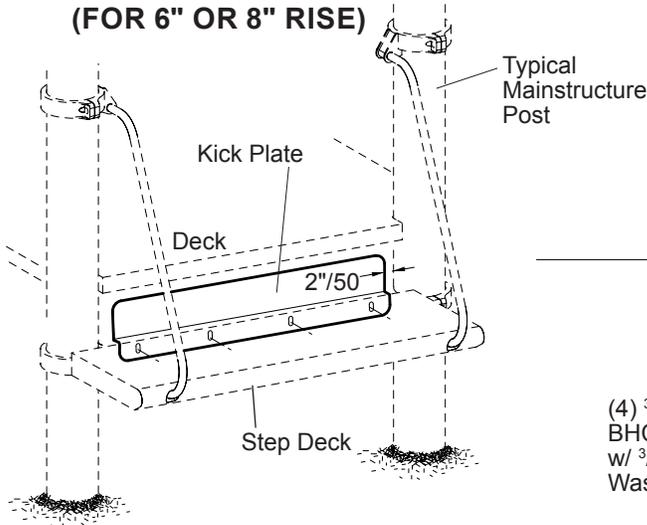
Installation Time: Approx. 1/2 man hour

Weight: 61 lbs.

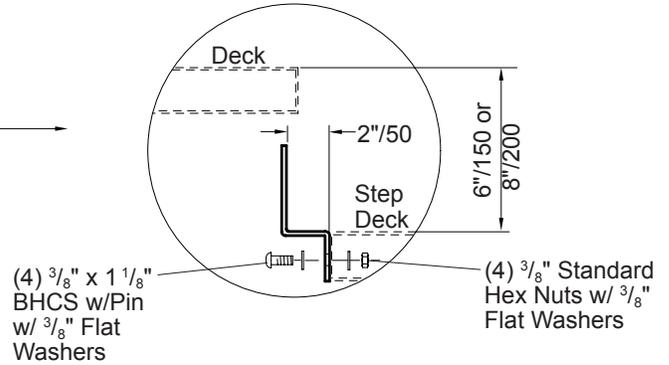
Installation Instructions

- 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 3/8" hex patch nuts with 3/8" flat washers. With deck level and posts plumb, final tighten all hardware.
- 4) Install 1/4" x 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.

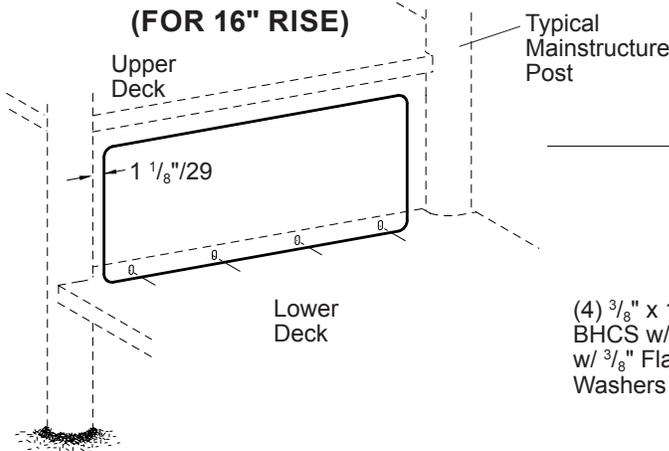
**KICK PLATE
(FOR 6" OR 8" RISE)**



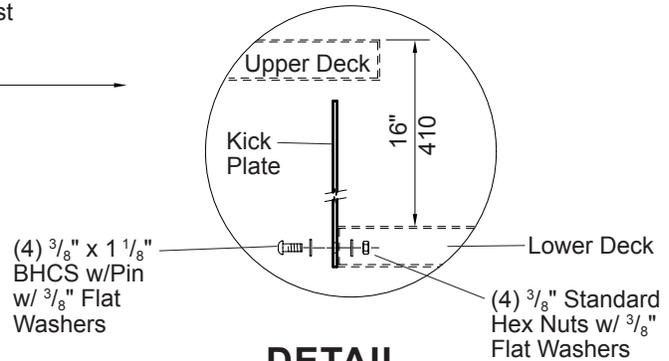
**DETAIL
KICK PLATE ATTACHMENT
(FOR 6" OR 8" RISE)**



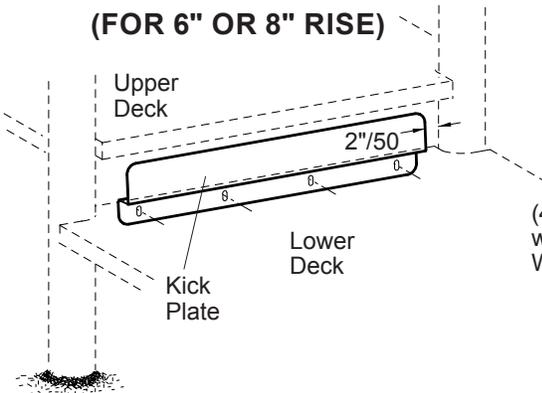
**KICK PLATE
(FOR 16" RISE)**



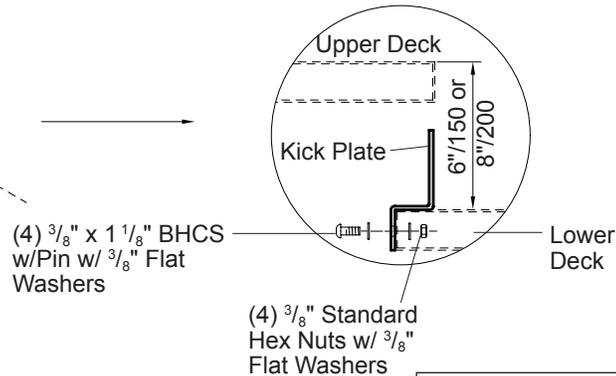
**DETAIL
KICK PLATE ATTACHMENT
(FOR 16" RISE)**



**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
156058	Kick Plate Tenderdeck Hardware Package	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.