

Eagle Ridge Park
In
Orland Park, IL
PlayShaper Specifications

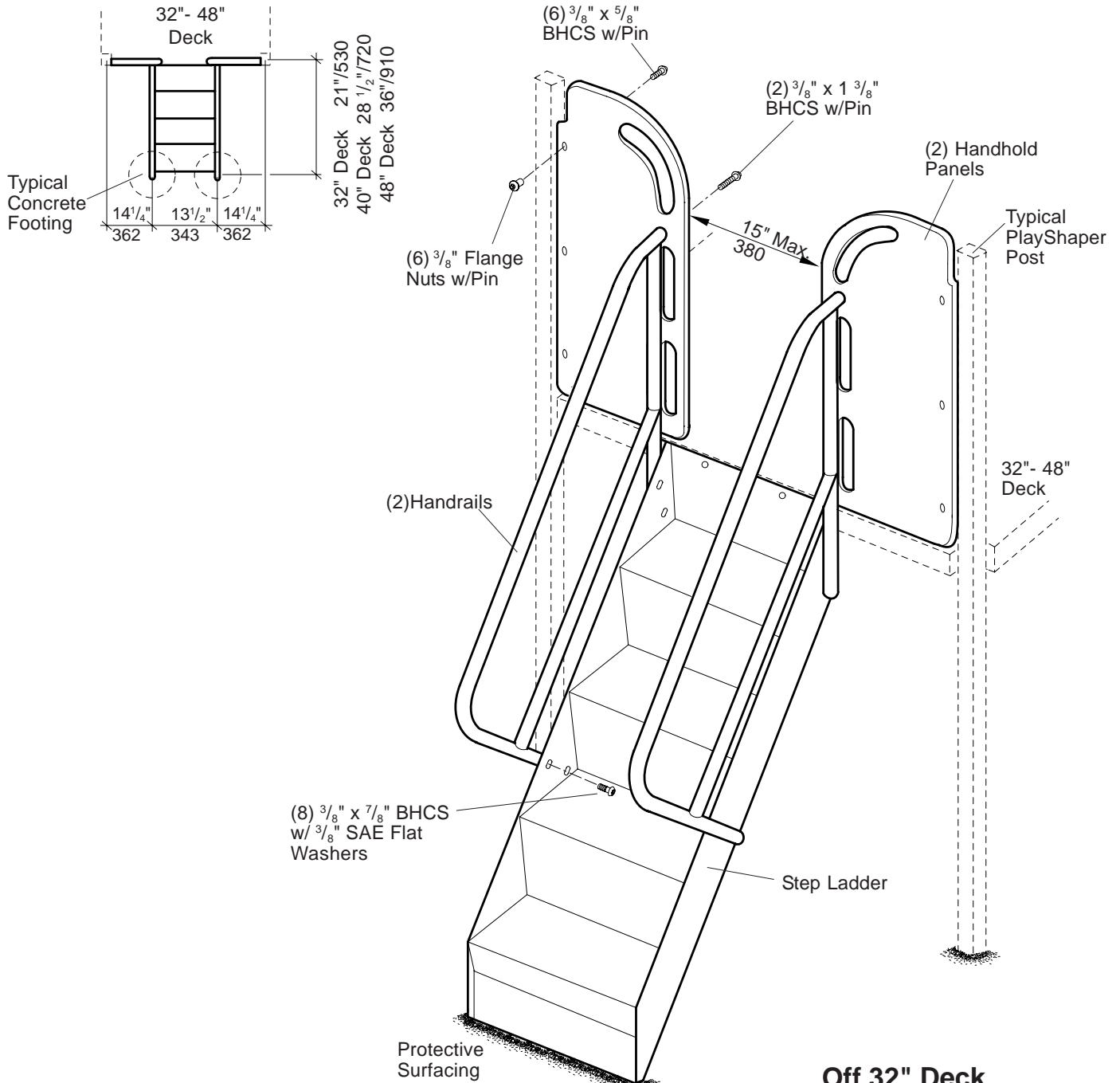
Please Note:

Specifications are for *Reference Only!* Not to be used for installation. Design and installation instructions will be provided with order.



nUTOYS
Leisure Products
Box 2121 • LaGrange, IL 60525
(708) 579-9055 • 1-800-526-6197
e-mail: play@nutoys4fun.com
Website: www.nutoys4fun.com

PLAN VIEW/FOOTING LAYOUT



Off 32" Deck
Off 40" Deck - Shown
Off 48" Deck



J:\SPECS\181\18157700.P65

PlayShaper® 111327 Step Ladder, 32"- 48"

Parts List

Part#	Description	Qty.
180688-00	Support - Step Ladder, (DB), Specify Color	1
108534-00	32" Step Ladder, Specify Color	1
108563-00	40" Step Ladder, Specify Color	1
124455-00	48" Step Ladder, Specify Color	1
126039-00	Handrail 32" Deck RH, Specify Color	1
126036-00	Handrail 32" Deck LH, Specify Color	1
126045-00	Handrail 40" Deck RH, Specify Color	1
126044-00	Handrail 40" Deck LH, Specify Color	1
129792-00	Handrail 48" Deck RH, Specify Color	1
129793-00	Handrail 48" Deck LH, Specify Color	1
145466-00	Handhold Panel, Specify Color	2
100263-00	3/8" x 2 3/4" Expansion Anchor	2
126048-00	Step Ladder Hardware Package	1
100196-00	3/8" x 7/8" BHCS w/Pin, SST	12
100327-00	3/8" Standard Hex Nut, SST	4
100365-00	3/8" SAE Flat Washer, SST	14
113027-00	3/8" x 1 3/8" BHCS w/Pin, SST	2
106480-00	Panel Hardware Package	1
100195-00	3/8" x 5/8" BHCS w/Pin, SST	6
100353-00	3/8" Flange Nut w/Pin, SST	6

DB = Direct Bury
SM = Surface Mount
RH = Right Hand
LH = Left Hand

Specifications

Ladder: Fabricated and formed from 14 GA (.075") HRPO sheet steel with 5/16" perforated holes for steps and welded 12 GA (.105") HRPO sheet steel for sides. Finish: TenderTuff™, color specified.

Handrail: Formed from 1.125" O.D. 11 GA (.120") galvanized steel tubing. Finish: TenderTuff color specified.

Permalene® Panel: Solid color, color specified.

Footer: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 2" zinc plated steel strap. 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 1/4 man hours
DB - Approx. 2 man hours
Concrete Req.: **DB** - Approx. 1.4 cu. ft.
Area Req.: 6'-3" (1,90 m) minimum use zone
Weight: 32" **SM** - 100 lbs.
 32" **DB** - 109 lbs.
 40" **SM** - 118 lbs.
 40" **DB** - 127 lbs.
 48" **SM** - 145 lbs.
 48" **DB** - 154 lbs.
Fall Height: Deck Height

Installation Instructions

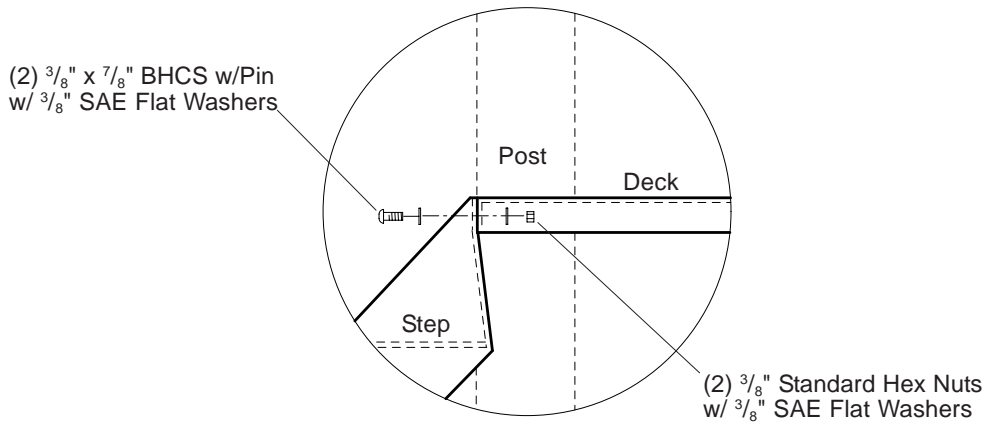
Direct Bury

- 1) Dig footings spaced as shown.
- 2) Attach support to step ladder using 3/8" x 7/8" BHCS w/pin and 3/8" SAE flat washers with 3/8" standard hex nuts.
- 3) Set step ladder in footing holes and attach to face of deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts. See Step to Deck Detail.
- 4) Attach handrails to sides of step ladder using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers, as shown.
- 5) Attach handhold panels to post flanges using 3/8" x 5/8" BHCS w/pin with 3/8" flange nuts w/pin.
- 6) Using a 7/16" drill bit, drill out the two upper 1/8" pilot holes in each handhold panel for attaching handrails.
- 7) Attach handrails to handhold panels using 3/8" x 1 3/8" BHCS w/pin, as shown.
- 8) With step ladder plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- 9) Install protective surfacing before users are allowed to play on the structure.

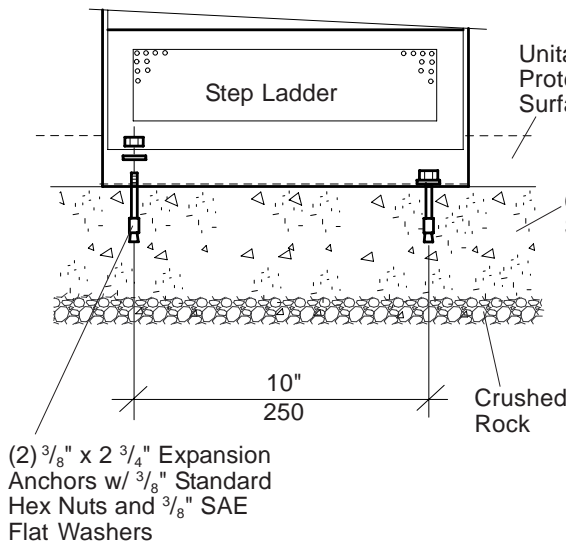
Surface Mount

- 1) Position step ladder against face of deck and temporarily fasten to deck using 3/8" x 7/8" BHCS w/pin.
- 2) Mark anchor bolt locations on concrete slab through holes in base of step ladder.
- 3) Remove step ladder. Drill 3/8" x 3" deep holes on marks into concrete using 3/8" masonry bit and hammer drill. Tap expansion anchors into drilled holes.
- 4) Reposition step ladder and attach to face of deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts. See Step to Deck Detail. Fasten base of step to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers.
- 5) Attach handrails and handhold panels as in Direct Bury Steps 4, 5, 6, 7.
- 6) Install protective surfacing before users are allowed to play on the structure.

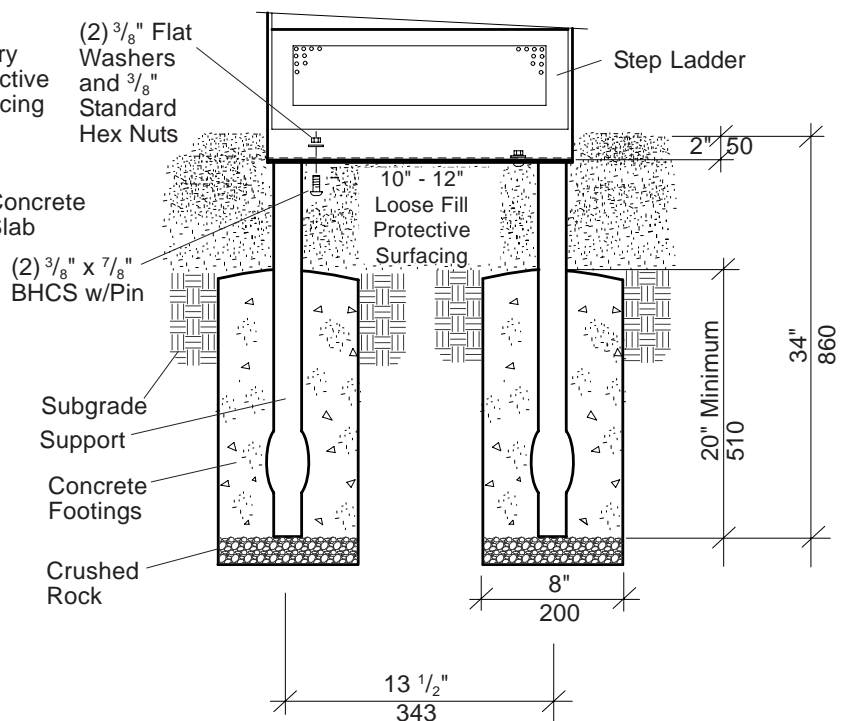
**DETAIL
 STEP TO DECK**



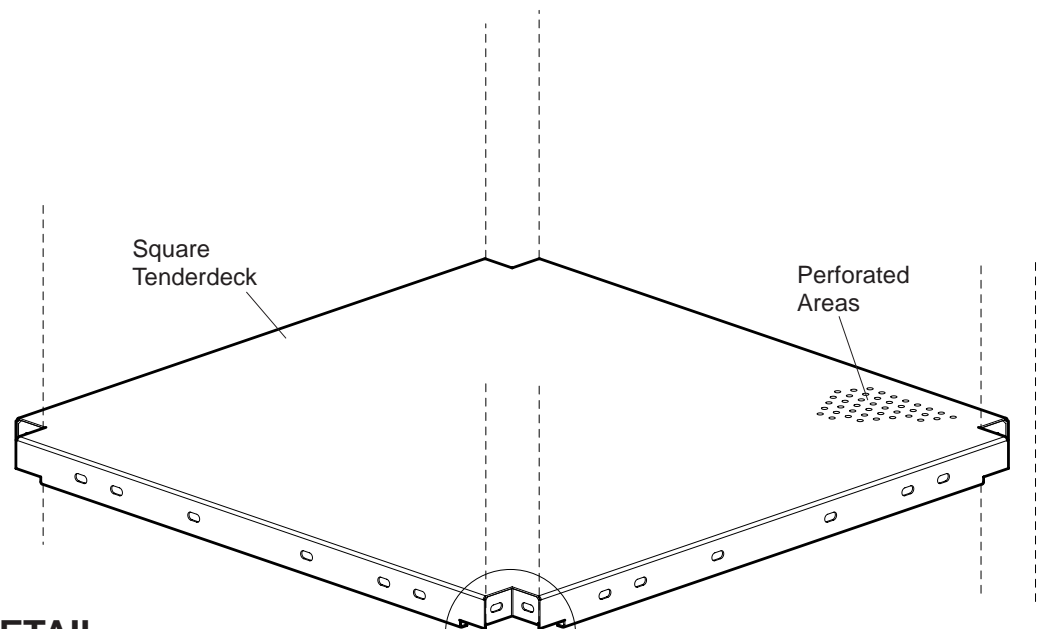
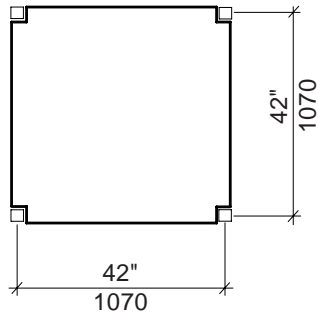
**DETAIL
 SURFACE MOUNT**



**DETAIL
 DIRECT BURY**

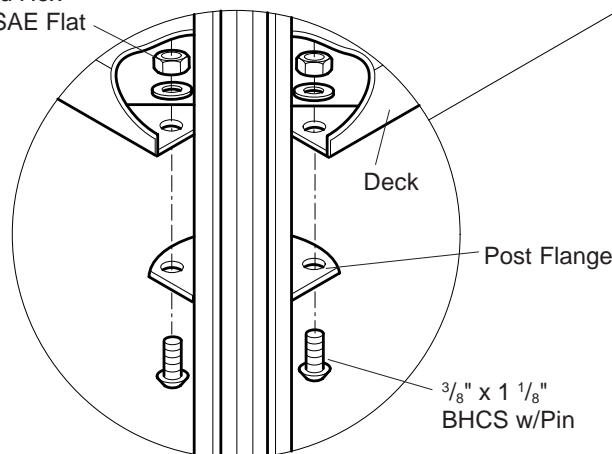


**PLAN VIEW
FOOTING LAYOUT**



**DETAIL
DECK ATTACHMENT**

$\frac{3}{8}$ " Standard Hex
 Nut w/ $\frac{3}{8}$ " SAE Flat
 Washer



See Detail

Typical Posts



J:\SPEC\153\15330400.P65

PlayShaper® 111237 Tenderdeck

Parts List

Part#	Description	Qty.
153298-00	Tenderdeck, Specify Color	1
106695-00	Hardware Package	1
100198-00	$\frac{3}{8}$ " x $1 \frac{1}{8}$ " BHCS w/Pin, SST	8
100327-00	$\frac{3}{8}$ " Standard Hex Nut, SST	8
100365-00	$\frac{3}{8}$ " SAE Flat Washer, SST	8

Specifications

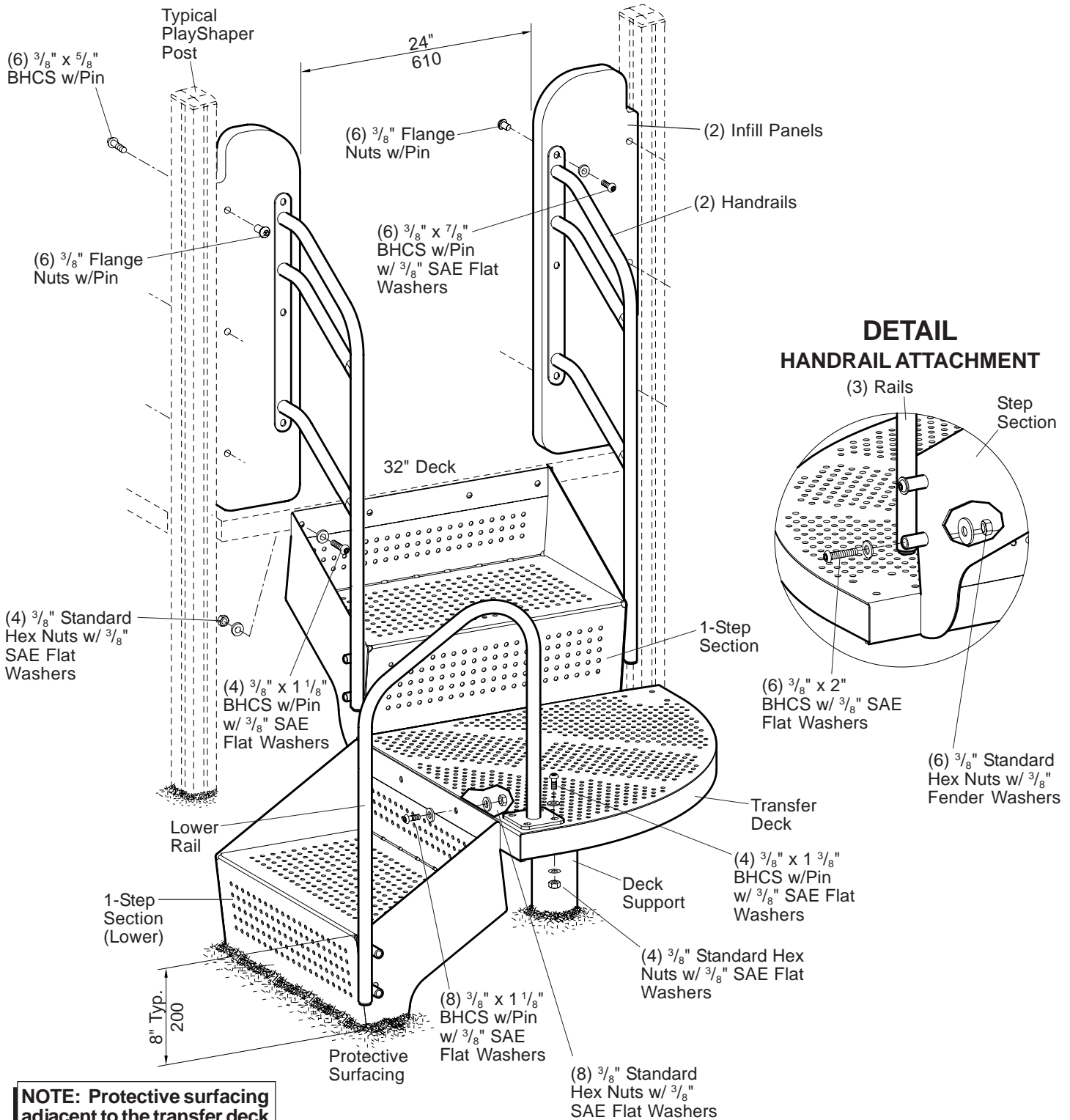
Square Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with $\frac{5}{16}$ " diameter holes. Deck face has (6) slotted holes for face mounting components. The finished size measures $2 \frac{5}{8}$ " x $44 \frac{3}{8}$ " x $44 \frac{3}{8}$ ".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



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

Parts List

Part#	Description	Qty.
144696-00	1-Step Section, Specify Color	2
153398-00	Transfer Deck, Specify Color	1
175516-00	1-Step Handrail, Specify Color	2
152641-00	Lower Rail, Specify Color	1
181371-00	Deck Support (DB), Specify Color	1
181373-00	Deck Support (SM), Specify Color	1
181374-00	Step Support (DB), Specify Color	1
181376-00	Step Support (SM), Specify Color	1
175530-00	Infill Panel, Specify Color	2
177123-00	Transfer Module Hardware Package	1
100173-00	$\frac{3}{8}$ " x 2" BHCS, SST	6
100195-00	$\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/Pin, SST	6
100196-00	$\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/Pin, SST	12
100198-00	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST	12
100327-00	Standard Hex Nut, SST	28
100353-00	Flange Nut w/Pin, SST	12
100365-00	SAE Flat Washer, SST	50
113027-00	$\frac{3}{8}$ " x 1 $\frac{3}{8}$ " BHCS w/Pin, SST	4
100378-00	$\frac{3}{8}$ " Fender Washer, SST	6
111393-00	4-Hole (SM) Hardware Package	1
100263-00	$\frac{3}{8}$ " x 2 $\frac{3}{4}$ " Expansion Anchors	4
100327-00	Standard Hex Nut, SST	4
100365-00	$\frac{3}{8}$ " SAE Flat Washers, SST	4
121256-00	2-Hole (SM) Hardware Package	1
100263-00	$\frac{3}{8}$ " x 2 $\frac{3}{4}$ " Expansion Anchors	2
100327-00	Standard Hex Nut, SST	2
100365-00	$\frac{3}{8}$ " SAE Flat Washers, SST	2

DB=Direct Bury
SM=Surface Mount

Specifications

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

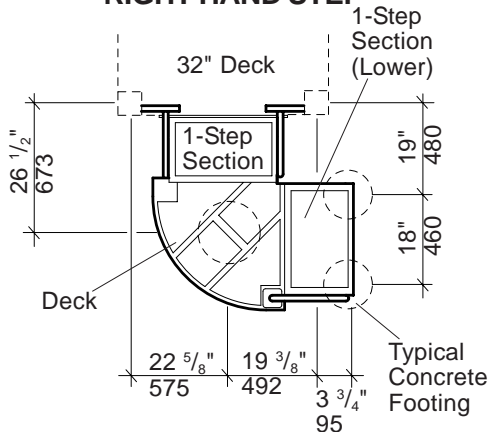
Installation Instructions

- (Direct Bury)** Dig footings as shown. Refer to your Plan View/Footing Layout.
 - Attach the deck support to the transfer deck using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers. **NOTE: Make sure $\frac{3}{8}$ " rod on support is under support strap on deck as shown.** Refer to the Deck Support Attachment Detail.
 - Attach the 1-step section to the transfer deck using $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
 - Attach the 1-step section to the mainstructure deck using $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
 - Attach the step support to the 1-step section (lower) using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts. Refer to the Step Support Attachment Detail.
 - Attach the 1-step section (lower) to the transfer deck using $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
 - Attach infill panels to the posts using $\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flange nuts w/pin.
 - Attach the handrails to the steps using $\frac{3}{8}$ " x 2" BHCS with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " fender washers. Refer to the Handrail Attachment Detail.
 - Attach handrails to the infill panels 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.
 - Attach the lower rail to the transfer deck using $\frac{3}{8}$ " x 1 $\frac{3}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
 - Attach the lower rail to the 1-step section (lower) using $\frac{3}{8}$ " x 2" BHCS with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " 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 $\frac{3}{8}$ " x 3" deep holes on marks using hammer drill and $\frac{3}{8}$ " masonry bit. Reposition module over drilled holes and tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers. Reattach module to structure.

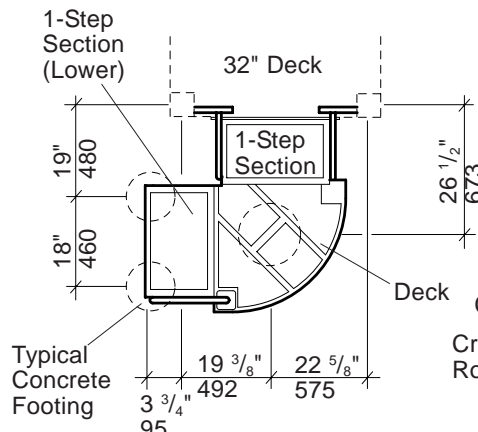
- Install protective surfacing before users are allowed to play on the structure.

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.)

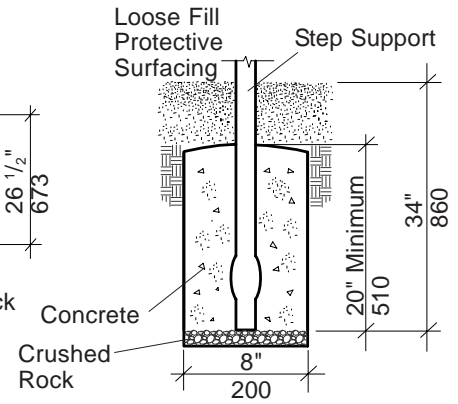
**PLAN VIEW
 FOOTING LAYOUT
 RIGHT HAND STEP**



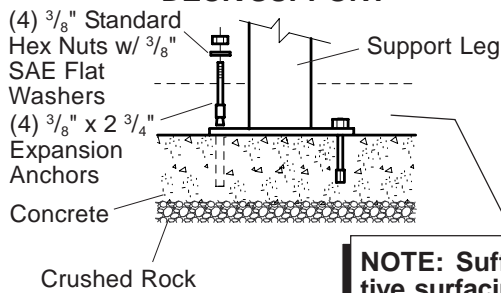
**PLAN VIEW
 FOOTING LAYOUT
 LEFT HAND STEP**



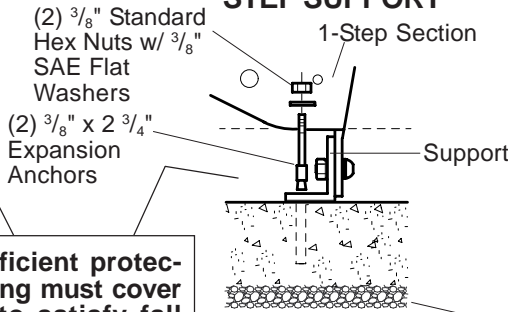
**DETAIL
 STEP SUPPORT BURY**



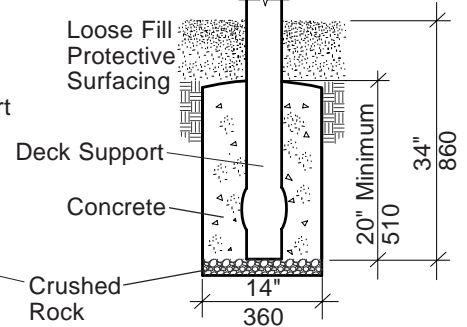
**DETAIL
 SURFACE MOUNT
 DECK SUPPORT**



**DETAIL
 SURFACE MOUNT
 STEP SUPPORT**

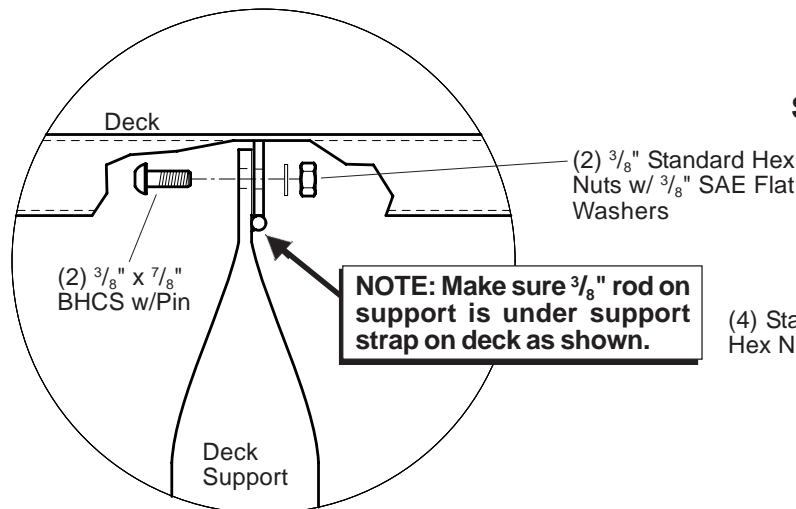


**DETAIL
 DECK SUPPORT BURY**



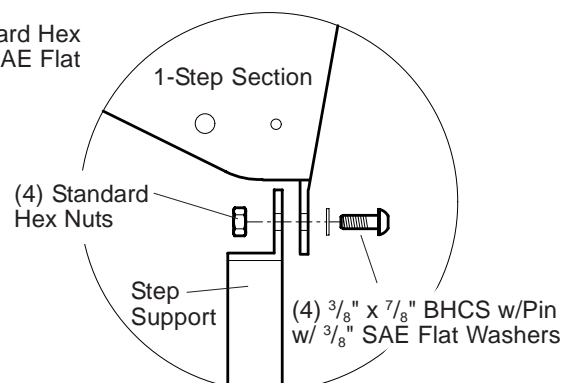
NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

**DETAIL
 DECK SUPPORT ATTACHMENT**

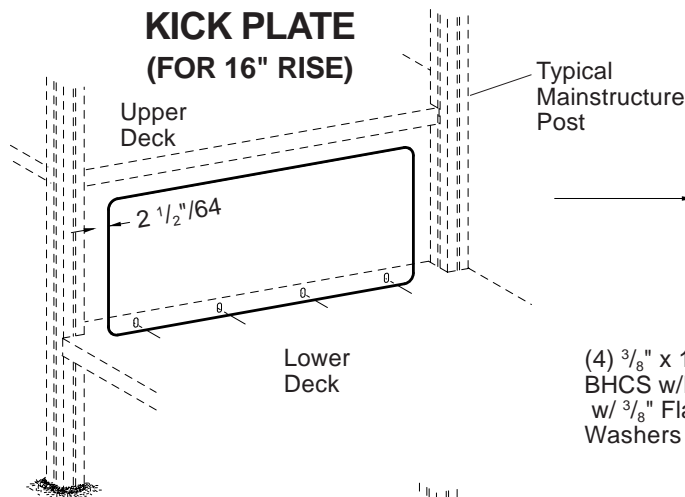
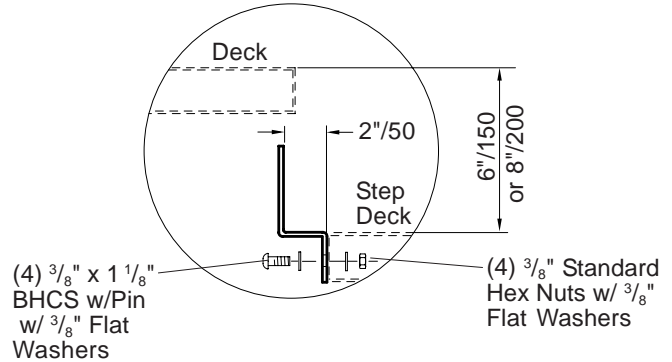


NOTE: Make sure 3/8 inch rod on support is under support strap on deck as shown.

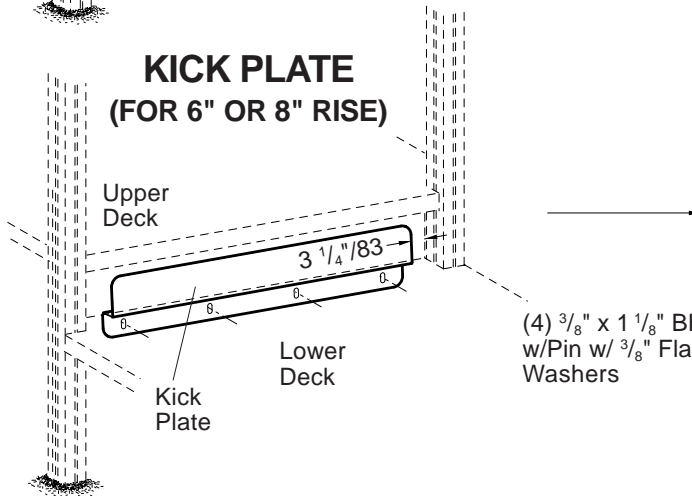
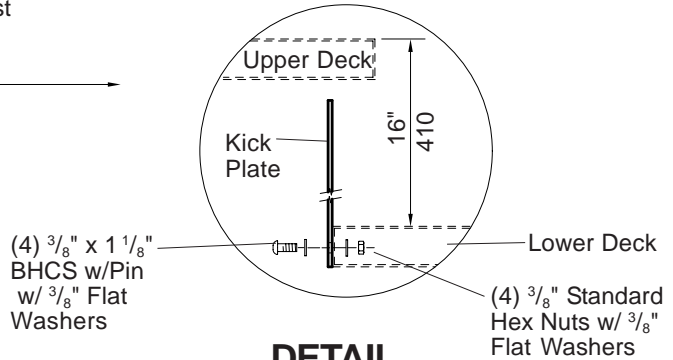
**DETAIL
 STEP SUPPORT ATTACHMENT**



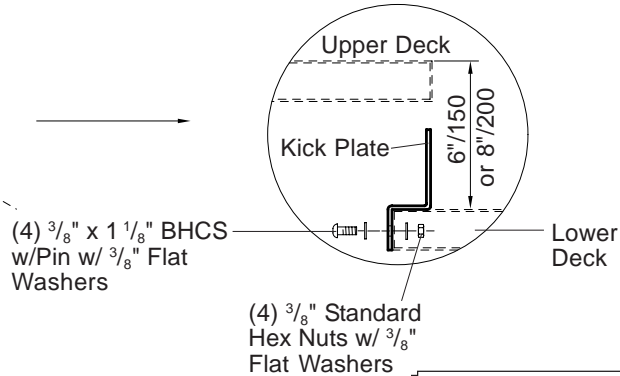
DETAIL
KICK PLATE ATTACHMENT
(FOR 6" OR 8" RISE)



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"

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Parts List

Part#	Description	Qty.
121819-00	Kick Plate (For 6" or 8" Rise), Specify Color	1
121818-00	Kick Plate (For 16" Rise), Specify Color	1
156058-00	Kick Plate Tenderdeck Hardware Package	1
100198-00	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST	4
100327-00	$\frac{3}{8}$ " Standard Hex Nut, SST	4
100362-00	$\frac{3}{8}$ " 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.

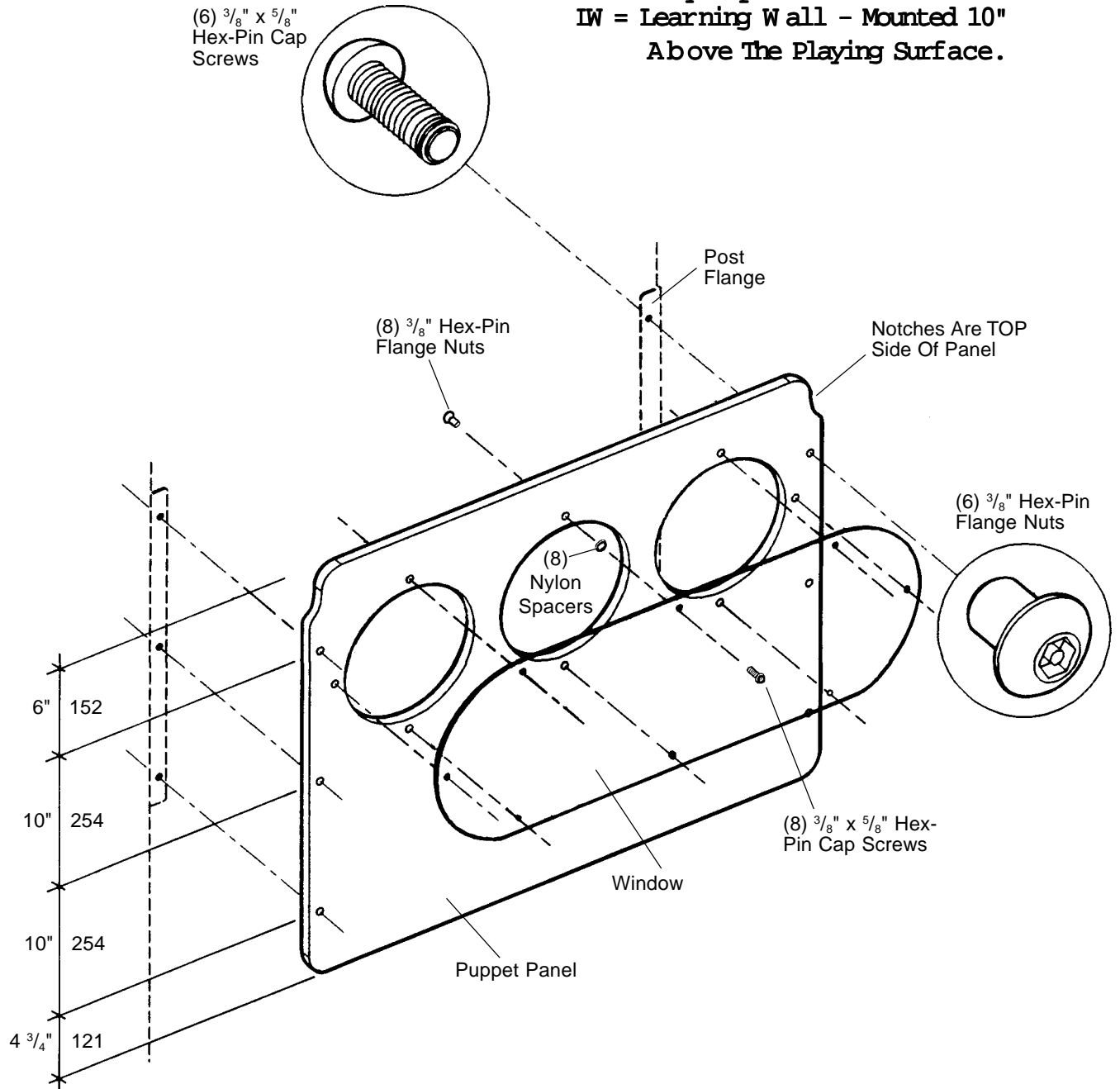
SAFETY NOTE

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.)



11-5-96

PS = Playshaper
IW = Learning Wall - Mounted 10"
Above The Playing Surface.



PS/LW

111286 Puppet Panel, w / Window, Permalene

56/51

601 7TH STREET SOUTH, P.O. BOX 198 DELANO, MINNESOTA 55328 (612) 972-3391 1-800-328-0035 FAX (612) 972-3185

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Document # 120775-00

Parts List

Part#	Description	Qty
108951-01	Puppet Panel, Specify Color	1
109586-00	Window	1
106480-00	Panel, Hardware Package	1
100195-00	3/8" x 5/8" Hex-Pin Cap Screw, SST	6
100353-00	3/8" Hex-Pin Flange Nut	6
106683-00	Puppet Cover, Hardware Package	1
100195-00	3/8" x 5/8" Hex-Pin Cap Screw, SST	8
100353-00	3/8" Hex-Pin Flange Nut	8
112501-00	Nylon Spacer	8

Specifications

Permalene Panel: Compression molded solid color 3/4" thick U.V. stabilized high-density polyethylene with all edges eased. Panel measures 39 3/8" wide x 30 3/4" high. Color specified.

Window: .177" thick clear polycarbonate.

Nylon Spacer: 3/8" I.D. nylon washer.

Hardware: Primary fasteners are socketed and pinned tamperproof in design, either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel (SST).

Installation Time: Approx. 1/2 man hour

Weight: 29 lbs.

Installation Instructions

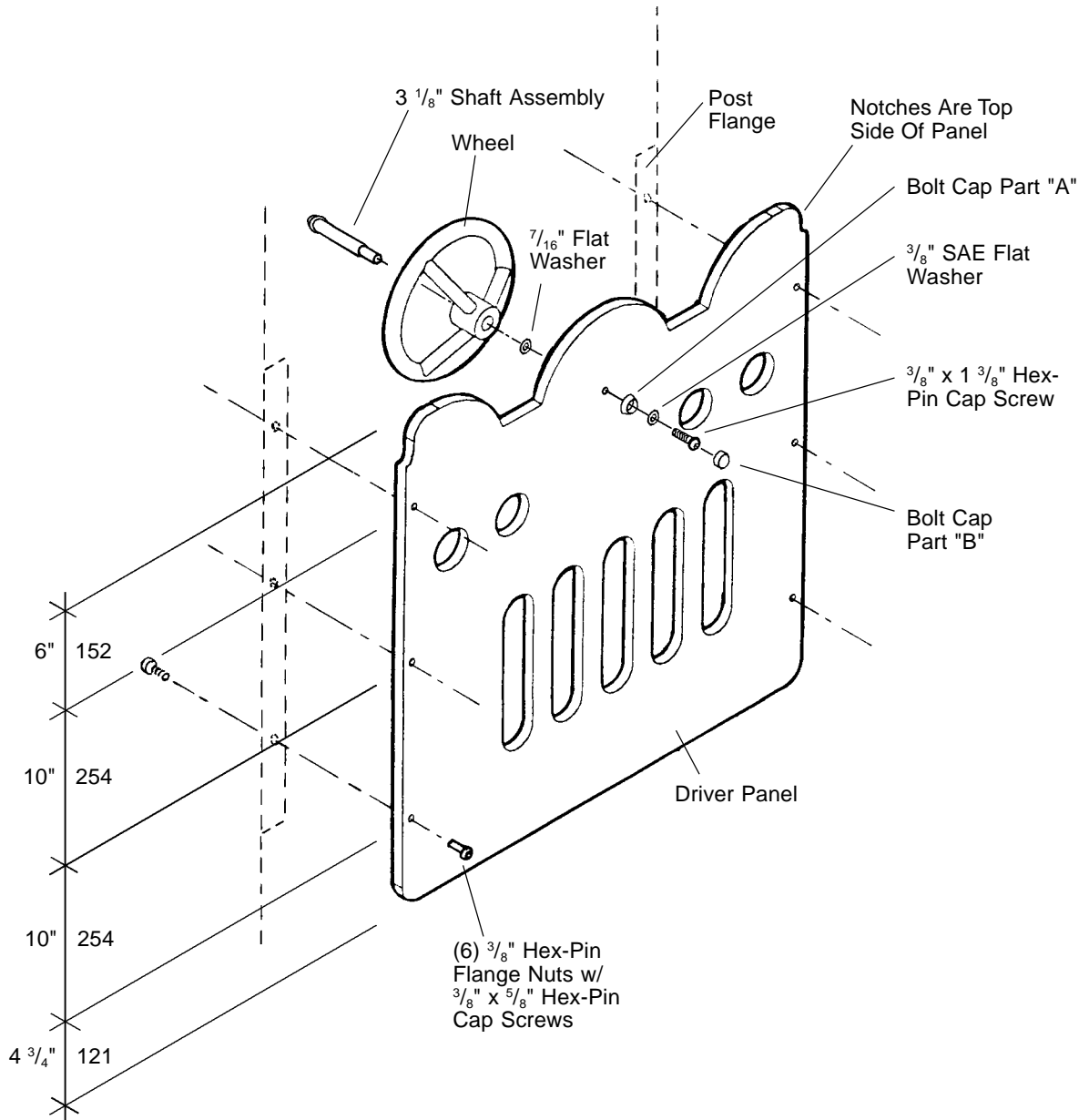
- 1) With nylon spacers between panel and window, attach window to puppet panel using 3/8" x 5/8" hex-pin cap screws with 3/8" hex-pin flange nuts.
- 2) Position window facing outward and attach panel to post flanges using 3/8" x 5/8" hex-pin cap screws with 3/8" hex-pin flange nuts.
- 3) Install protective surfacing before users are allowed to play on the structure.

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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.)

PS = Playshaper
 IW = Learning Wall - Mounted 1"
 Above The Playing Surface.



Parts List

Part#	Description	Qty
108948-01	Driver Panel, Specify Color	1
108432-00	Wheel, Specify Color	1
106480-00	Attachment Hardware Package	1
100195-00	3/8" x 5/8" Hex-Pin Cap Screw	6
100353-00	3/8" Hex-Pin Flange Nut	6
112802-01	Wheel Hardware Package	1
113027-00	3/8" x 1 3/8" Hex-Pin Cap Screw	1
100365-00	3/8" SAE Flat Washer, SST	1
108184-01	Bolt Cap Part "A"	1
108185-01	Bolt Cap Part "B"	1
112793-00	7/16" Flat Washer, SST	1
112797-01	3 1/8" Shaft Assembly	1

Specifications

Wheel: Cast from 319.1 aluminum alloy, TenderTuff coated to a minimum thickness .080", color specified.

Wheel Shaft: .620" diameter 303 stainless steel.

Permalene Panel: Compression molded 3/4" thick U.V. stabilized high density polyethylene with all edges eased. Panel measures 39 1/2" wide x 30 3/4" high. Yellow, tan or red in color.

Hardware: Primary fasteners are socketed and pinned tamper-proof in design, either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel (SST).

Installation Time: Approx. 1/2 man hour

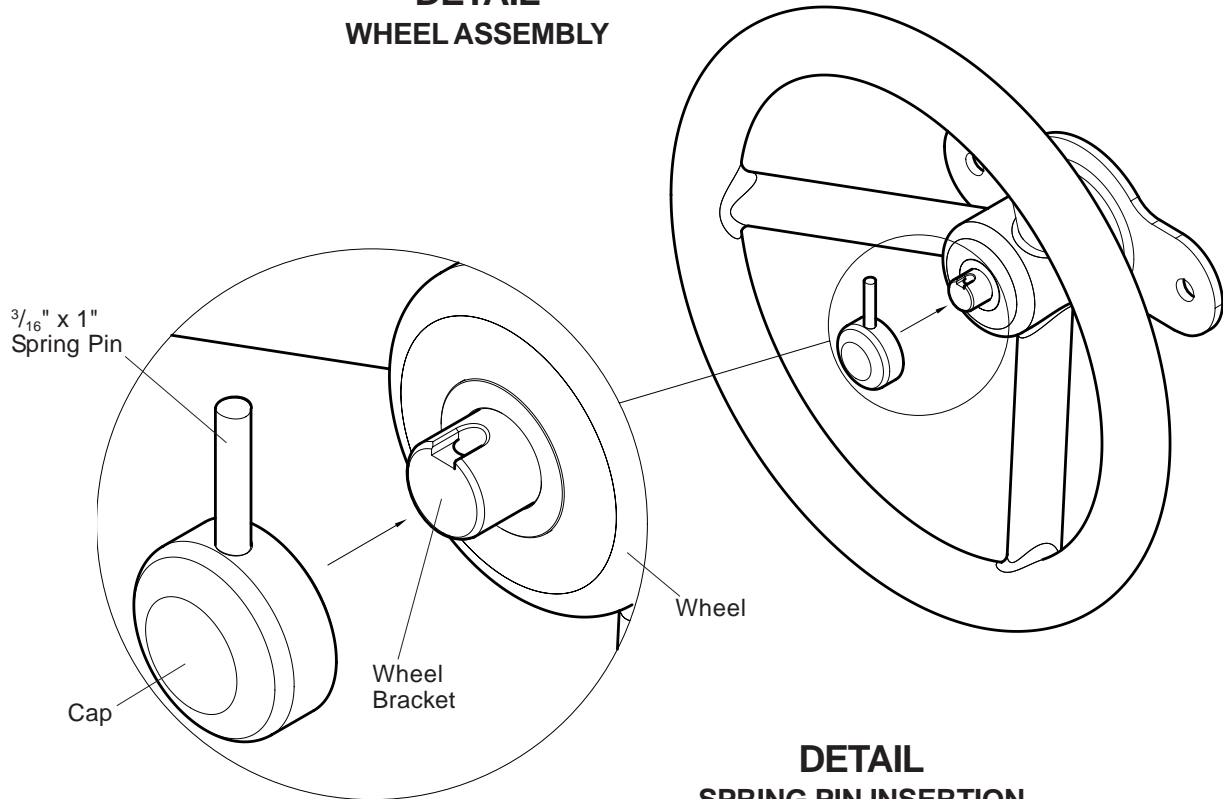
Weight: 32 lbs.

Installation Instructions

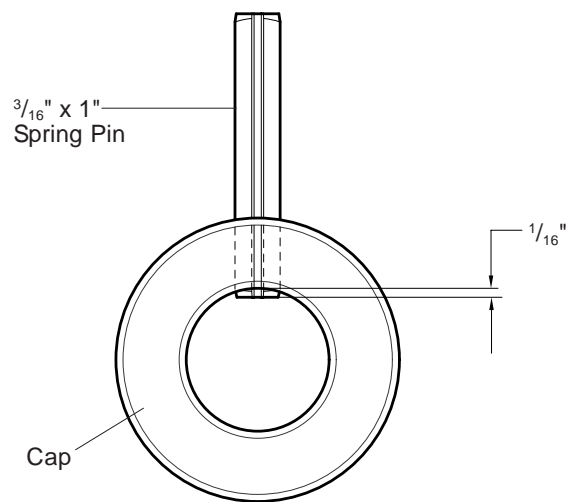
- 1) Insert 3 1/8" shaft assembly through wheel, 7/16" flat washer, panel, bolt cap part "A", and 3/8" SAE flat washer and fasten with 3/8" x 1 3/8" hex-pin cap screw. Snap bolt cap part "B" onto bolt cap part "A".
- 2) Attach panel to post flanges using 3/8" x 5/8" hex-pin cap screws with 3/8" hex-pin flange nuts.
- 3) Install protective surfacing.

4-15-94 Revision-01 Redesigned Wheel Attachment Hardware. (7-5-94) Replaced Driver Panel w/ New Notched Design.
6-1-95 Revision-02 Replaced The 3/8" x 1 1/8" Hex-Pin Cap Screw With A 3/8" x 1 3/8" Hex-Pin Cap Screw, And Eliminated The Bolt Caps Part A & B From The Steering Wheel Side

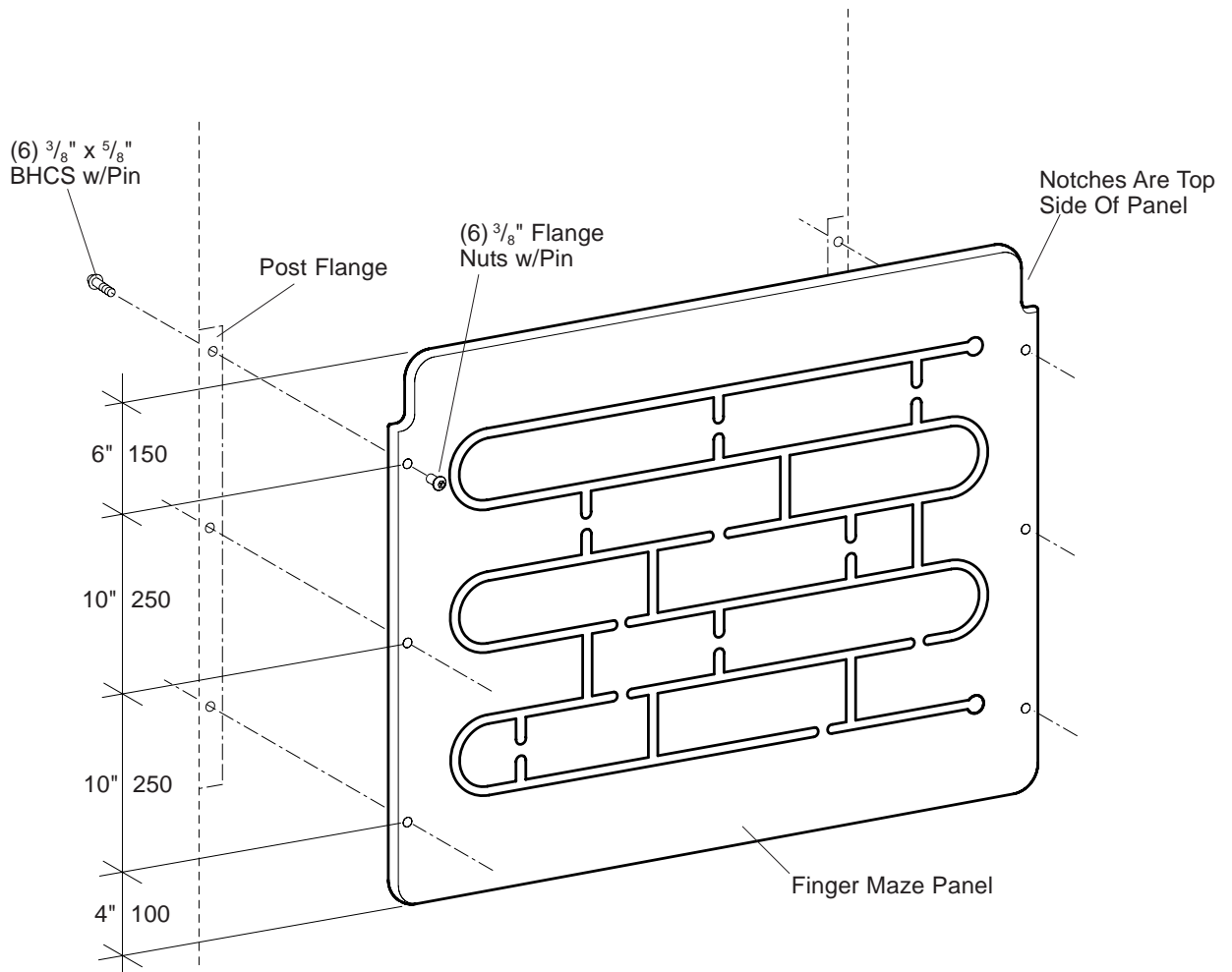
**DETAIL
WHEEL ASSEMBLY**



**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 $\frac{1}{16}$ ". Orient spring pin to groove on wheel bracket shaft. Slide cap in place and tap spring pin through cap and shaft until flush.



PS = Playshaper
LW = Learning Wall - Mounted $10\frac{3}{4}$ " Above The Playing Surface.



PlayShaper® 111289/184859 Finger Maze Panel

J:\SPECS\164\16465200.P65

Parts List

Part#	Description	Qty.
108799-01	Finger Maze Panel, Specify Color	1
106480-00	Panel Hardware Package	1
100195-00	3/8" x 5/8" BHCS w/Pin, SST	6
100353-00	3/8" Flange Nut w/Pin, SST	6

Specifications

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

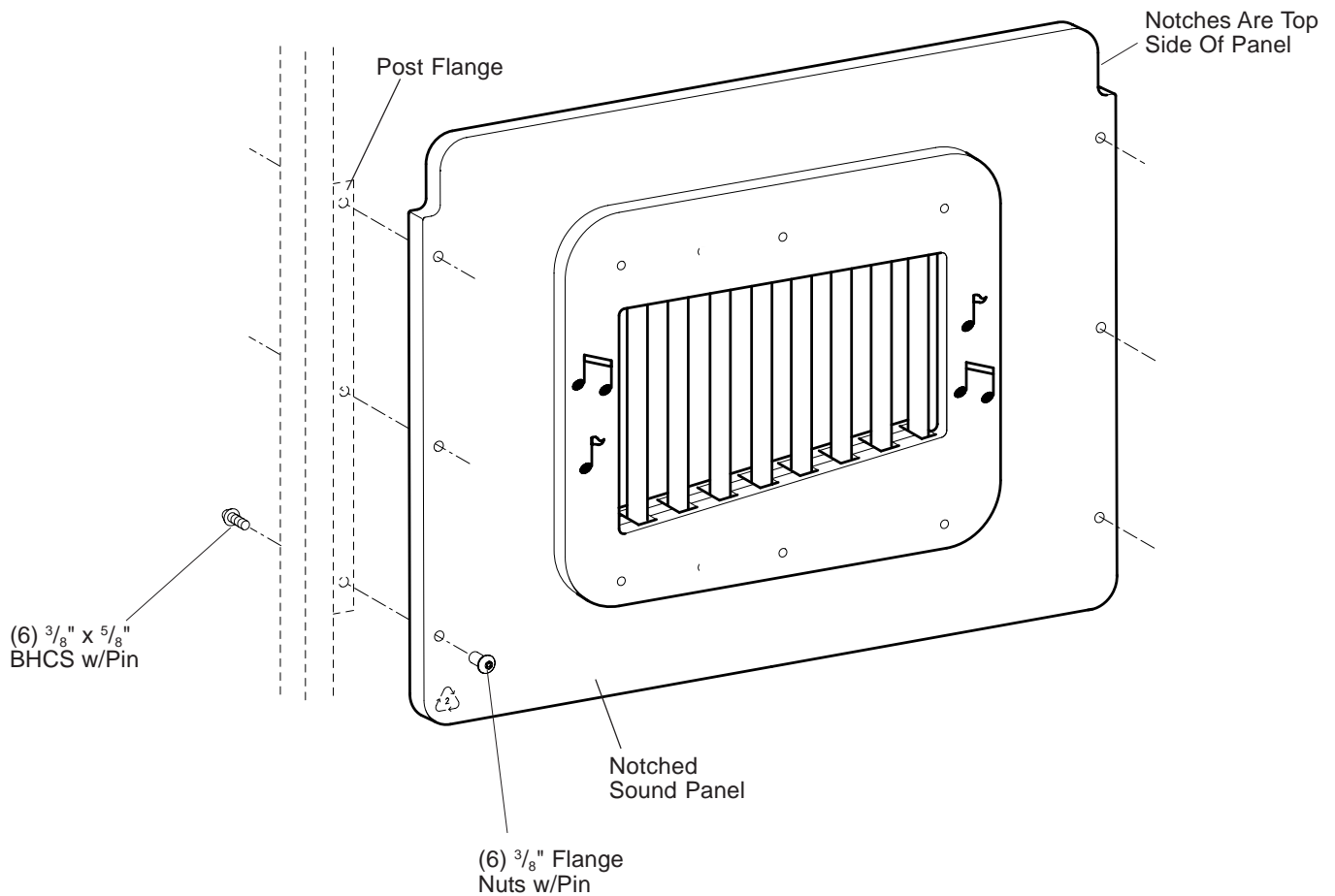
Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 1/4 man hour
Weight: 40 lbs.

Installation Instructions

- 1) Attach panel to post 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 10 3/4" Above The Playing Surface.



NOTE:
The Sound Chimes Panel is preassembled at factory.



J:\SPECS\182\18204500.P65

PlayShaper® 113211/184873 Chimes Panel

Parts List

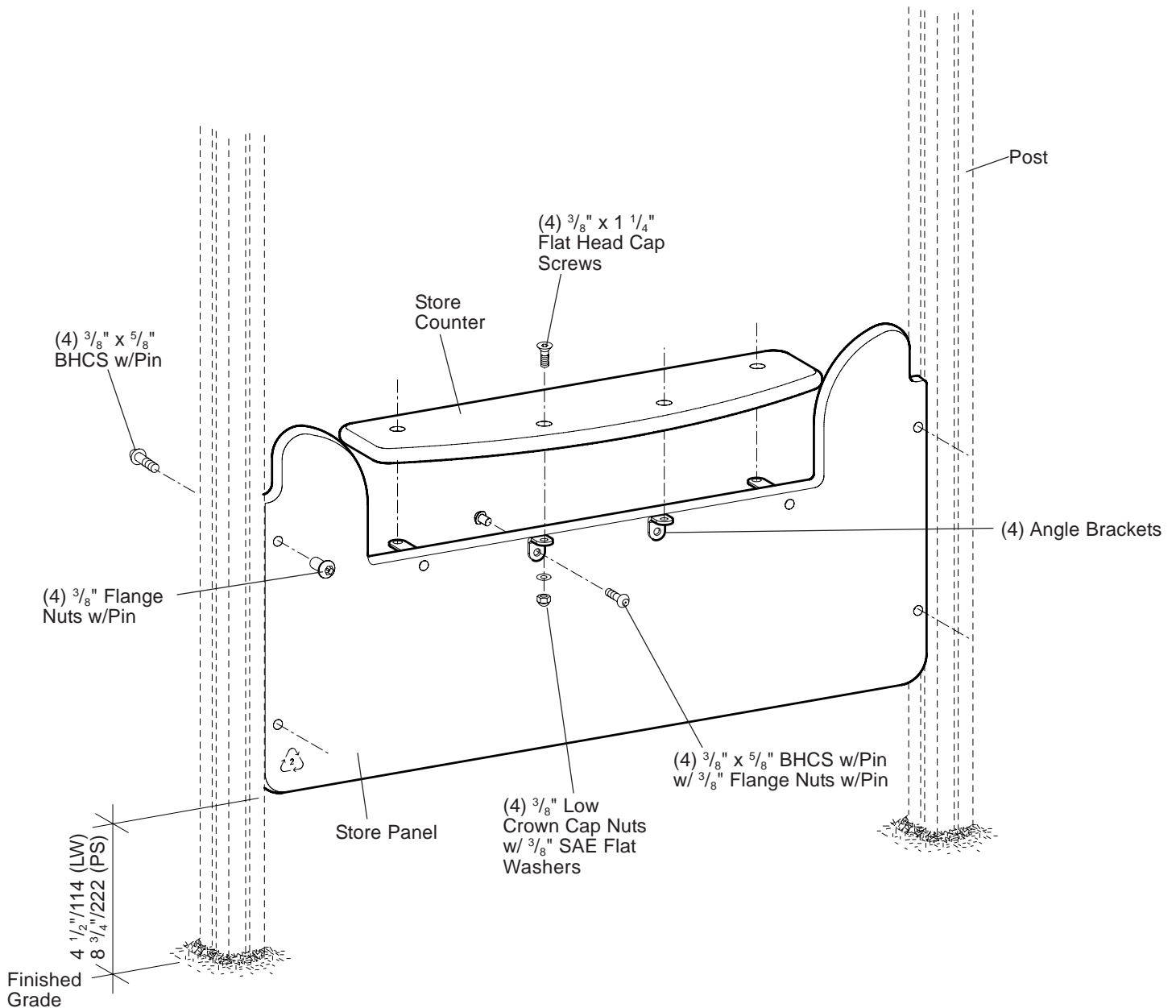
Part#	Description	Qty.
181968-00	Chimes Panel Assy., Specify Color	1
106480-00	Attachment Hardware	1
100195-00	3/8" x 5/8" BHCS w/Pin, SST	6
100353-00	3/8" Flange Nut w/Pin, SST	6

Specifications

- Permalene® Panel:** Solid color panel measures 39 1/2" wide x 30" high, color specified.
- Chimes:** Fabricated from 6063-T832 aluminum. Finish: Anodized per Mil - A - 8625 type 2, class 1.
- 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:** 45 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.



LW = Learning Wall
PS = PlayShaper

NOTE: This Panel is used at ground level only.



PlayShaper® 144984/184887 Storefront Panel

J:\SPECS\188\18868600.P65

Parts List

Part#	Description	Qty.
144981-00	Storefront Panel, Specify Color	1
144580-00	Store Counter, Specify Color	1
188683-00	Store Counter Top Hardware Package	1
100195-00	$\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/Pin, SST	4
100252-00	$\frac{3}{8}$ " x 1 $\frac{1}{4}$ " Flat Head Cap Screw, SST	4
100349-00	$\frac{3}{8}$ " Low Crown Cap Nut, SST	4
100353-00	$\frac{3}{8}$ " Flange Nut w/Pin, SST	4
188664-00	Steel Angle Bracket, Silver	4
100365-00	$\frac{3}{8}$ " SAE Flat Washer, SST	4
112518-00	Panel Hardware Package	1
100195-00	$\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/Pin, SST	4
100353-00	$\frac{3}{8}$ " Flange Nut w/Pin, SST	4

Specifications

Store Panel: Solid color Permalene®, color specified.

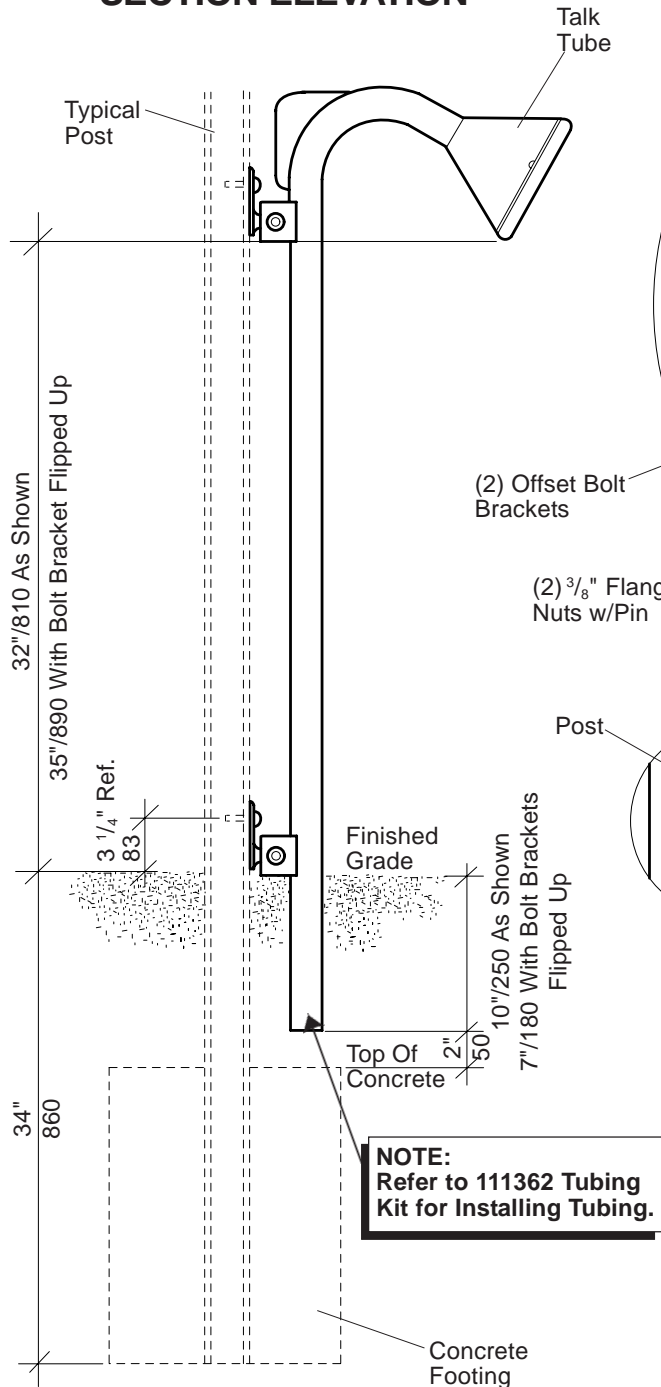
Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. $\frac{1}{2}$ man hour
Weight: 19 lbs.

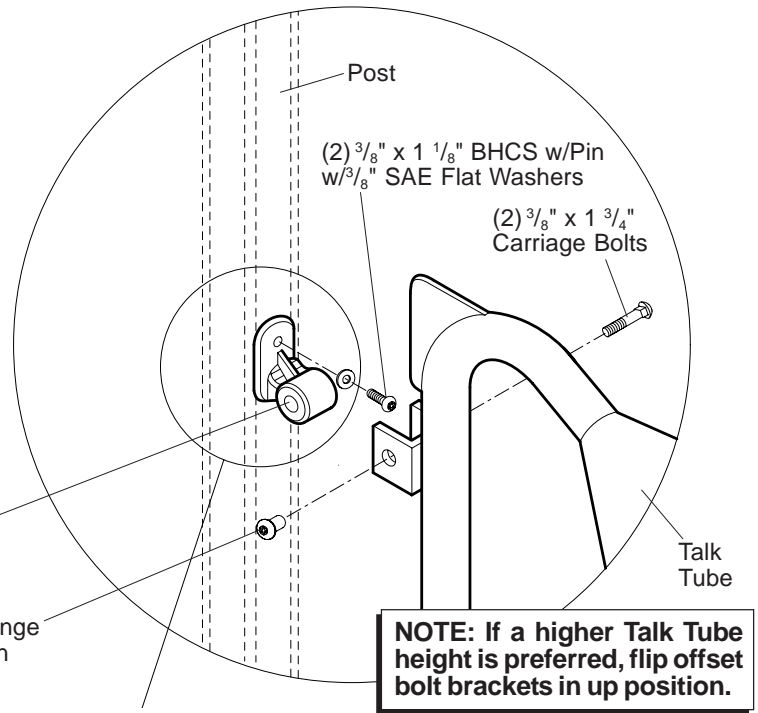
Installation Instructions

- 1) Attach angle brackets to store front panel using $\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/ pin through angles and $\frac{3}{8}$ " flange nuts w/pin through panel. Attach store counter top to angle brackets using $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " flat head cap screws through counter top and $\frac{3}{8}$ " low crown cap nuts with $\frac{3}{8}$ " SAE flat washers underneath angle.
- 2) Attach panel to post flanges using $\frac{3}{8}$ " x $\frac{5}{8}$ " BHCS w/pin and $\frac{3}{8}$ " flange nuts w/pin.
- 3) Install protective surfacing before users are allowed to play on the structure.

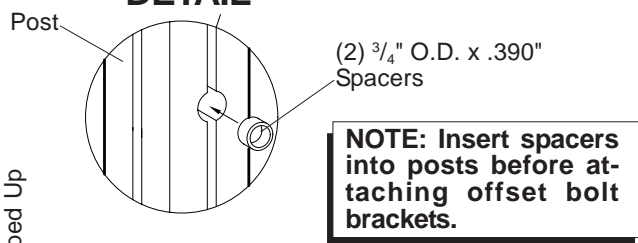
SECTION ELEVATION



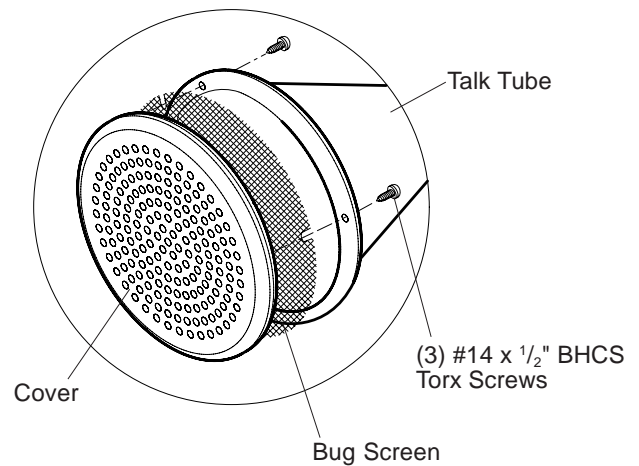
DETAIL ATTACHMENT TO POST



DETAIL



DETAIL COVER ATTACHMENT



Parts List

Part#	Description	Qty.
146344-00	Talk Tube, Ground Level, Specify Color	1
113895-00	Offset Bolt Bracket, Specify Color	2
132388-00	Talk Tube Hardware Package	1
100148-00	3/8" x 1 3/4" Carriage Bolt, SST	2
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	2
100353-00	3/8" Flange Nut w/Pin, SST	2
100365-00	3/8" SAE Flat Washer, SST	2
166868-00	3/4" O.D. x .390" Spacer, Aluminum	2
146168-00	Talk Tube Cover Hardware Package	1
129671-00	#14 x 1/2" BHCS Torx, SST	3
145134-00	Talk Tube Cover, Tan	1
127463-00	Bit Hex TPP T-27 (Torx)	1
146528-00	Bug Screen	1

Specifications

Talk Tube: Weldment comprised of 1.660" O.D. RS20 (.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.

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).

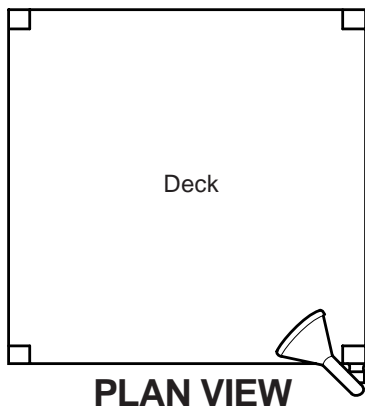
Installation Time: Approx. 1/2 man hour per talk tube

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

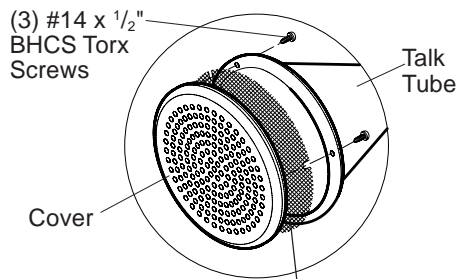
Weight: 15 lbs.

Installation Instructions

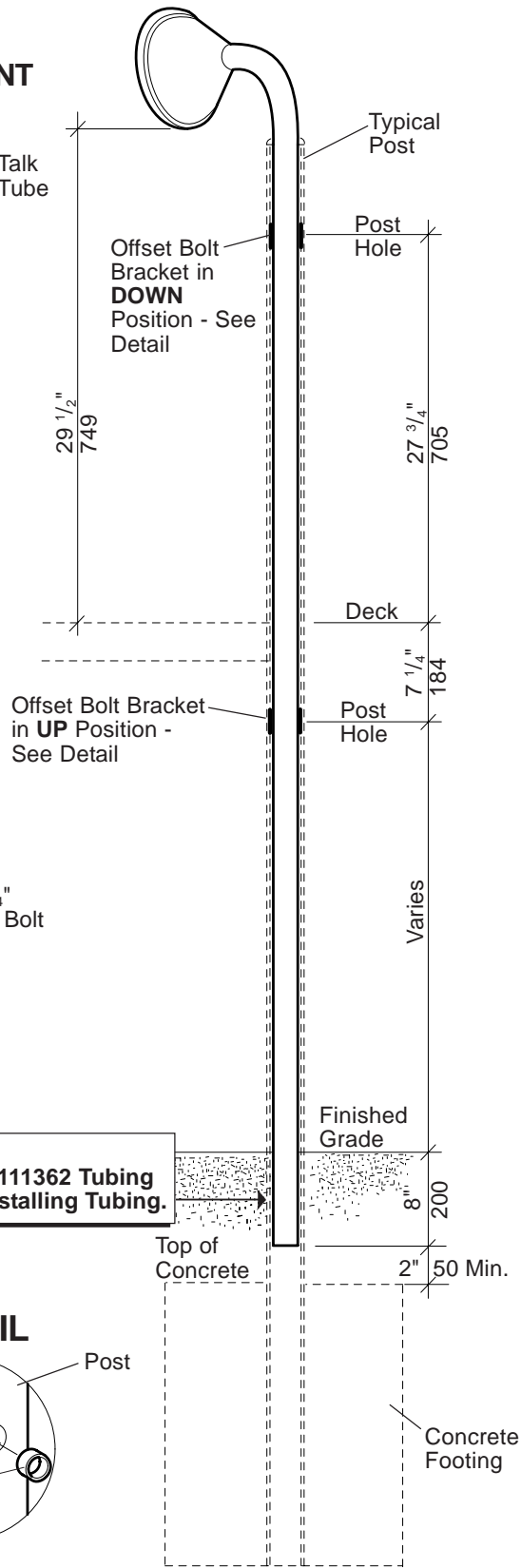
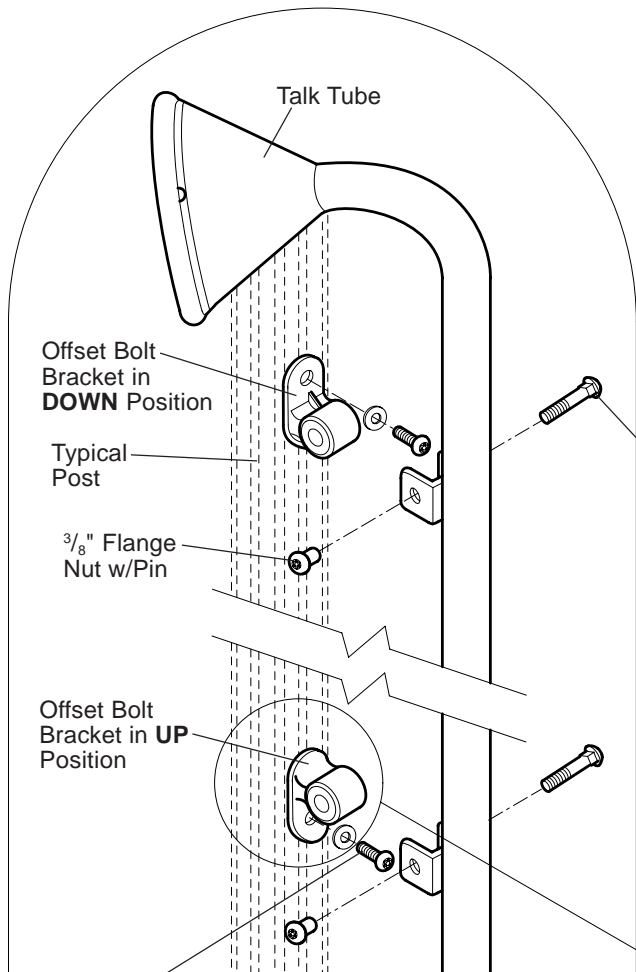
- 1) Determine placement of talk tubes. Refer to your plan drawing. Maximum distance apart is 40 feet.
- 2) Dig a trench into subgrade between the two footings for placement of plastic tubing.
- 3) Attach offset bolt brackets to talk tubes using 3/8" x 1 3/4" carriage bolts and 3/8" flange nuts w/pin. See Attachment To Post Detail.
- 4) Attach talk tube cover and bug screen to talk tube using #14 x 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 3/4" O.D. x .390" spacers and 3/8" x 1 1/8" BHCS w/pin with 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.



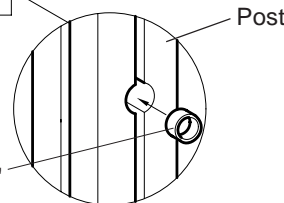
**DETAIL
 COVER ATTACHMENT**



DETAIL



DETAIL



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

3/8" x 1 1/8" BHCS w/Pin w/3/8" SAE Flat Washer



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PlayShaper® 115198 Talk Tubes, Deck Mount

Parts List

Part#	Description	Qty.
113895-00	Offset Bolt Bracket, Specify Color	2
176965-00	Talk Tube, 8" Deck, Specify Color	1
146351-00	Talk Tube, 12" Deck, Specify Color	1
146349-00	Talk Tube, 16" Deck, Specify Color	1
146352-00	Talk Tube, 18" Deck, Specify Color	1
146348-00	Talk Tube, 24" Deck, Specify Color	1
146353-00	Talk Tube, 30" Deck, Specify Color	1
146347-00	Talk Tube, 32" Deck, Specify Color	1
146354-00	Talk Tube, 36" Deck, Specify Color	1
146345-00	Talk Tube, 40" Deck, Specify Color	1
146346-00	Talk Tube, 48" Deck, Specify Color	1
132388-00	Talk Tube Hardware Package	1
100148-00	3/8" x 1 3/4" Carriage Bolt, SST	2
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	2
100353-00	3/8" Flange Nut w/Pin, SST	2
100365-00	3/8" SAE Flat Washer, SST	2
166868-00	3/4" O.D. x .390" Spacer, Aluminum	2
146168-00	Talk Tube Cover Hardware Package	1
129671-00	#14 x 1/2" BHCS Torx, SST	3
145134-00	Talk Tube Cover, Tan	1
127463-00	Bit Hex TPP T-27 (Torx)	1
146528-00	Bug Screen	1

Specifications

Talk Tube: Weldment comprised of 1.600" O.D. RS20 (.085" - .095") galvanized steel tubing, 14 GA. (.079") cold rolled steel sheet zinc plate, and 3/16" HRPO steel sheet. 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 Bolt Brkt: 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. 1/2 man hour per talk tube

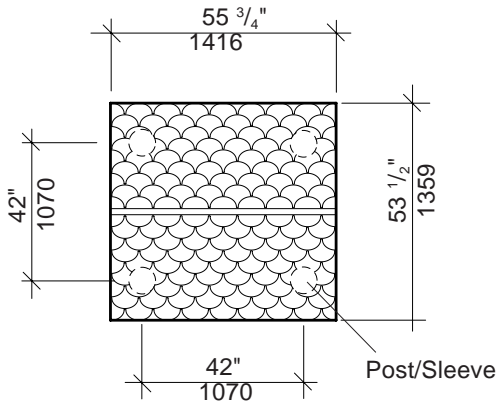
Area Req: 6' (1.83 m) minimum use zone

Weight:
 Talk Tube 8" Deck - 14 lbs.
 Talk Tube 12" Deck - 15 lbs.
 Talk Tube 16" Deck - 16 lbs.
 Talk Tube 18" Deck - 16 lbs.
 Talk Tube 24" Deck - 17 lbs.
 Talk Tube 30" Deck - 18 lbs.
 Talk Tube 32" Deck - 18 lbs.
 Talk Tube 36" Deck - 19 lbs.
 Talk Tube 40" Deck - 19 lbs.
 Talk Tube 48" Deck - 20 lbs.

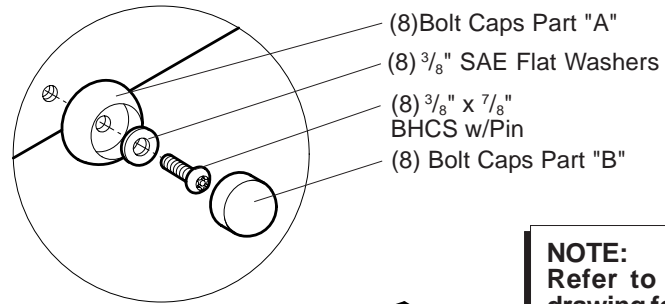
Installation Instructions

- 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 3/8" x 1 3/4" carriage bolts and 3/8" flange nuts w/pin. **NOTE:** Upper attachment uses bolt bracket flipped in **DOWN** position. Lower attachment uses bracket flippen in **UP** position. See Detail.
- 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 offset bolt brackets with talk tube to posts using 3/4" O.D. x .390" spacers and 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers. See Details.
- 7) Backfill trench to top of subgrade.
- 8) Install protective surfacing before users are allowed to play on the structure.

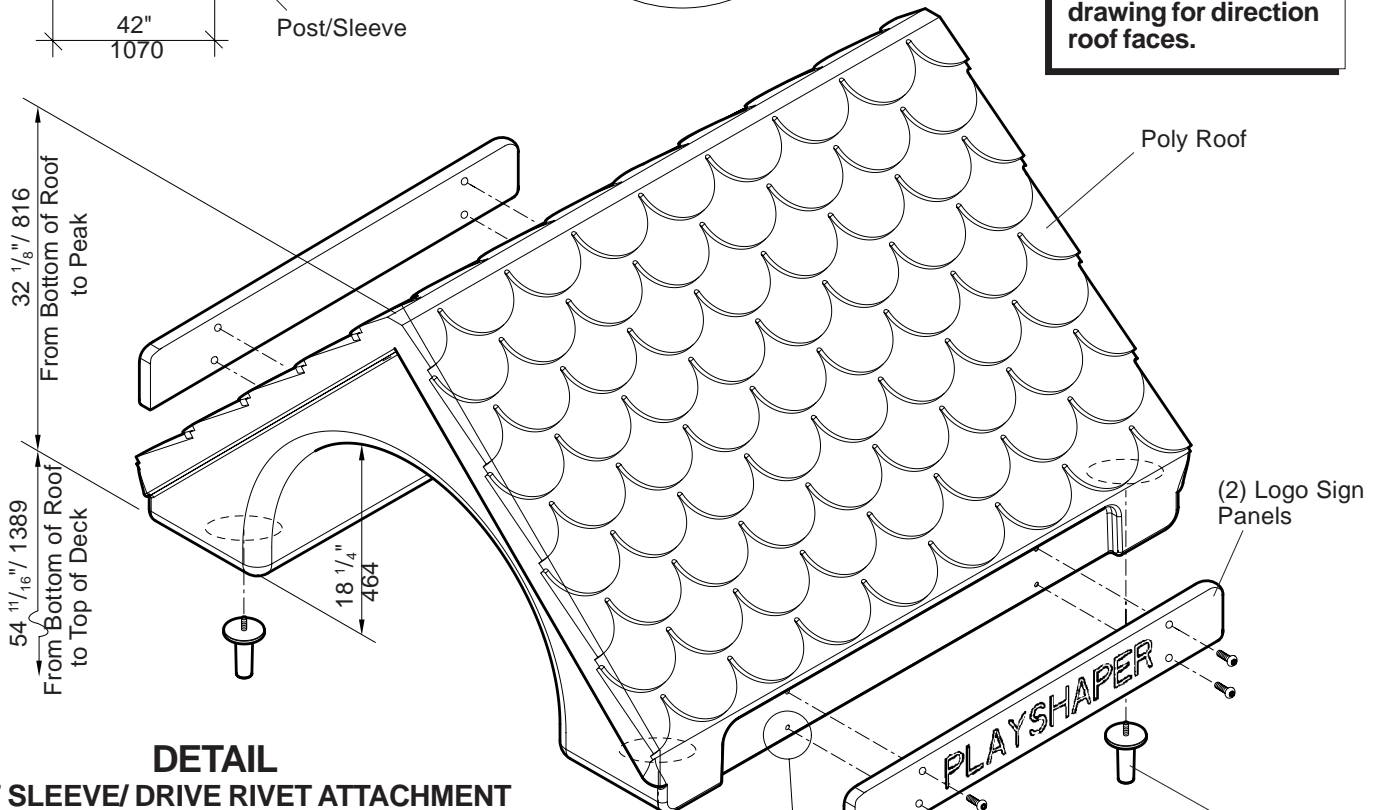
PLAN VIEW



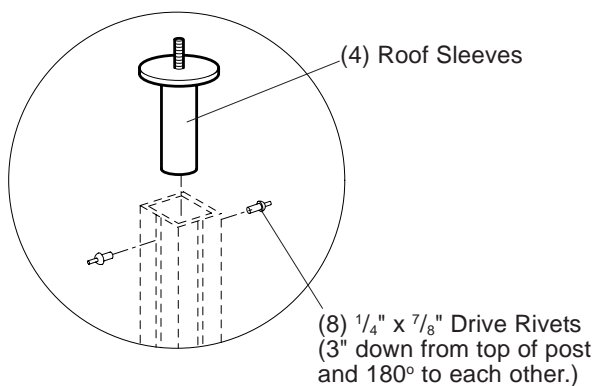
**DETAIL
BOLT CAP ASSEMBLY
(FOR NO LOGO PANEL OPTION)**



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



**DETAIL
ROOF SLEEVE/ DRIVE RIVET ATTACHMENT**



NOTE: Optional logo lettering available. Limit 15 characters including spaces.



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PlayShaper® 179225 Square Poly Roof

Parts List

Part#	Description	Qty.
127765-00	Poly Roof, Specify Color	1
127801-00	Roof Logo, Specify Color	2
118175-00	Roof Sleeve, Specify Color	4
128190-00	Roof Hardware Package	1
100196-00	³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST	8
100365-00	³ / ₈ " SAE Flat Washer, SST	8
100613-00	¹ / ₄ " x ⁷ / ₈ " Drive Rivet, AL	8
108184-01	Bolt Cap Part A	8
108185-01	Bolt Cap Part B	8
128189-00	Roof/Logo Hardware Package	1
100198-00	³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST	8
100613-00	¹ / ₄ " x ⁷ / ₈ " Drive Rivet, AL	8

Specifications

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

Roof Logo: Two color Permalene® logo measures 41" wide x 5 ¹/₈" high, color specified.

Roof Sleeve: Cast from 319 almag. 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: w/Logo - 112 lbs.
w/o Logo - 99 lbs.

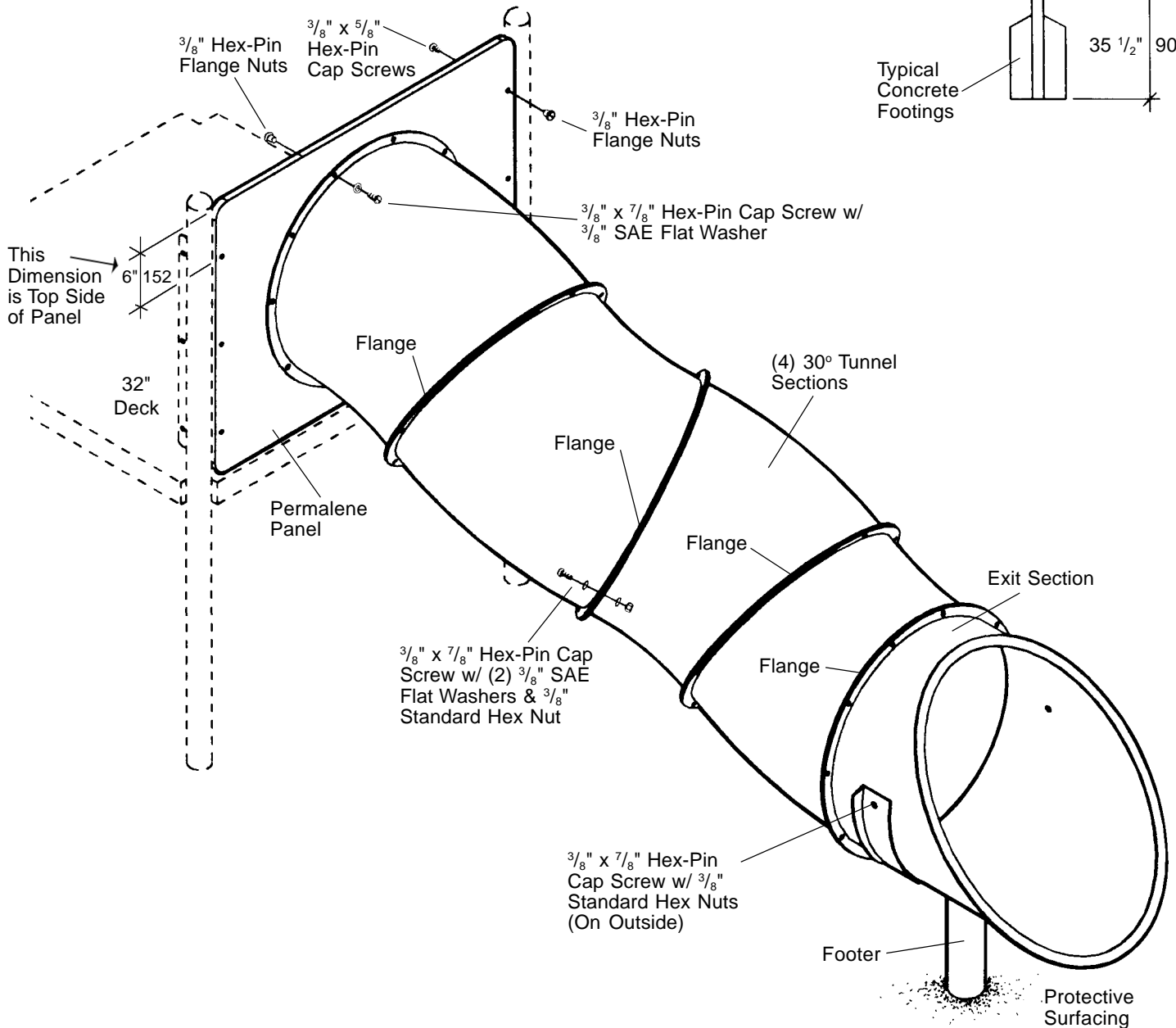
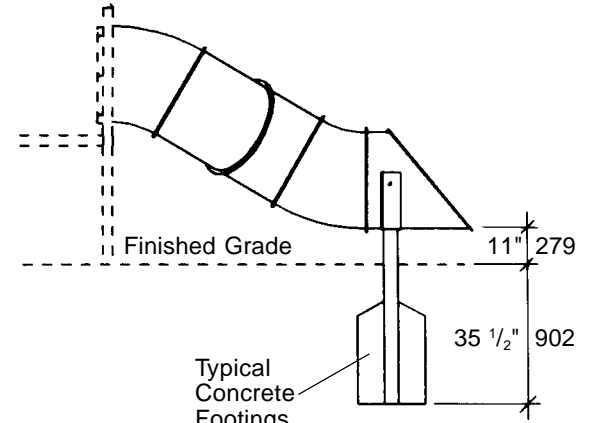
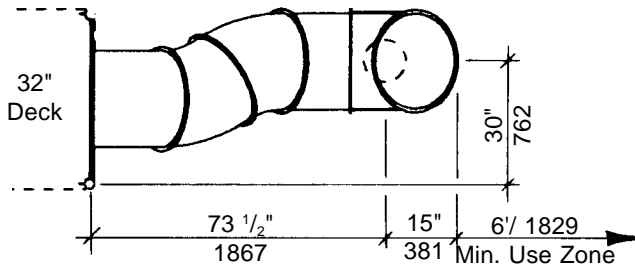
Installation Instructions

- 1) Turn roof sleeves onto roof. Refer to the Roof Sleeve/Drive Rivet Attachment Detail.
- 2) **(With Roof Logo)** Attach roof logo to roof using ³/₈" x 1 ¹/₈" BHCS w/pin, as shown.
(Without Roof Logo) Attach bolt cap assembly to roof using bolt cap part "A", ³/₈" SAE flat washer and fasten with ³/₈" x ⁷/₈" BHCS w/pin. Snap bolt cap part "B" onto bolt cap part "A". Refer to the Bolt Cap Assembly Detail.
- 3) With two people minimum, lift roof into position in the proper direction and insert roof sleeves into posts.
- 4) Drill ¹/₄" holes through roof sleeves using the predrilled ¹/₄" holes in posts as a guide. Insert ¹/₄" x ⁷/₈" drive rivets into drilled holes and tap pin in until flush with rivet head. Refer to the Roof Sleeve/Drive Rivet Attachment Detail.
- 5) Install protective surfacing before users are allowed to play on the structure.

SAFETY NOTE
PLAY EQUIPMENT MUST BE INSTALLED
OVER A FALL ABSORBING SURFACE

PLAN VIEW/ FOOTING LAYOUT

ELEVATION



Parts List

Part#	Description	Qty
108727-00	Tunnel Panel, Specify Color	1
103037-00	Footer, DB, Specify Color	1
103043-00	Footer, SM, Specify Color	1
108033-00	Exit, Tunnel Section, Specify Color	1
108120-00	30° Flanged Tunnel Section, Specify Color	4
100195-00	$\frac{3}{8}$ " x $\frac{5}{8}$ " Hex-Pin Cap Screw	6
100196-00	$\frac{3}{8}$ " x $\frac{7}{8}$ " Hex-Pin Cap Screw	62
100327-00	$\frac{3}{8}$ " Standard Hex Nut	50
100353-00	$\frac{3}{8}$ " Hex-Pin Flange Nut	18
100365-00	$\frac{3}{8}$ " SAE Flat Washer	108
100266-00	$\frac{1}{2}$ " x 2 $\frac{3}{4}$ " Expansion Anchor, SM	4
100322-00	$\frac{1}{2}$ " Standard Hex Nut, SM	4
100363-00	$\frac{1}{2}$ " Flat Washer, SM	4

Specifications

Permalene Panel: Compression molded $\frac{3}{4}$ " thick U.V. stabilized high density polyethylene with all edges eased. Panel measures 39 $\frac{3}{8}$ " wide x 30 $\frac{3}{4}$ " tall. Yellow, tan or red in color.

Tunnel Sections: Rotationally molded linear low density polyethylene, U.V. stabilized, color specified.

Footer: Fabricated from 2 $\frac{3}{8}$ " O.D. RS-20 galvanized steel tubing continuously welded to a formed zinc plated $\frac{3}{16}$ " x 2" x 1 $\frac{1}{4}$ " HRS angle. Coated with a baked on polyester powdercoating, color matched to tunnel sections.

Hardware: Primary fasteners are socketed and pinned tamper-proof in design. Carbon steel plated with zinc/nickel and iridescent chromate finish.

Installation Time: Approx. 2 man hours

Concrete Req.: Approx. 1.2cu. ft.

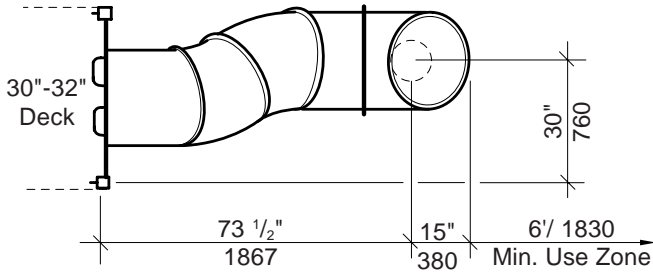
Area Req.: 6' minimum use zone at exit

Weight: 200 lbs.

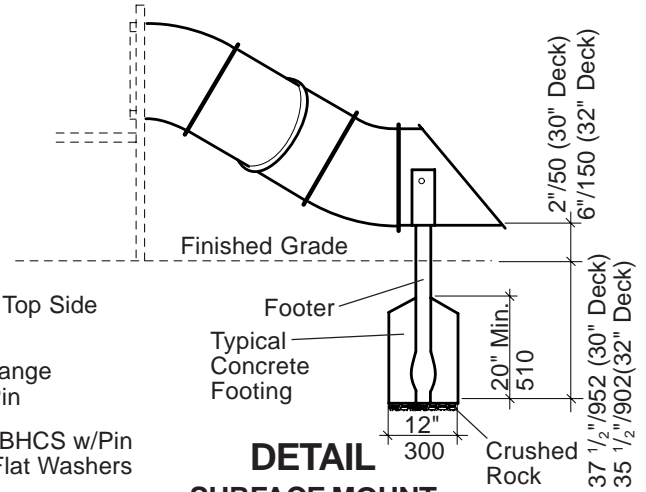
Installation Instructions

- 1) Dig footing hole spaced as shown.
- 2) Attach permalene panel to post flanges using $\frac{3}{8}$ " x $\frac{5}{8}$ " hex-pin cap screws with $\frac{3}{8}$ " hex-pin flange nuts. **NOTE:** Panel dimension of 6" from edge to first hole is top of panel. Bottom of panel should be $\frac{1}{2}$ " above deck.
- 3) Fasten tunnel sections together as shown using $\frac{3}{8}$ " x $\frac{7}{8}$ " hex-pin cap screws with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " standard hex nuts. **NOTE:** The flanged end of tunnel section mates to lip of next section. Rotate sections 90° where curved.
- 4) Lift assembled tunnel into position and fasten to panel with $\frac{3}{8}$ " x $\frac{7}{8}$ " hex-pin cap screws with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " hex-pin flange nuts. Block up end of slide so water will run off of exit section.
- 5) Set support in footing hole and position on the tunnel exit section as shown. With support post plumb, drill through the two holes in support and through tunnel exit section. Fasten with $\frac{3}{8}$ " x $\frac{7}{8}$ " hex-pin cap screws and $\frac{3}{8}$ " hex nuts on outside. Pour concrete footing and let set for 24 hours before proceeding.
- 6) Remove blocking and install protective surfacing.

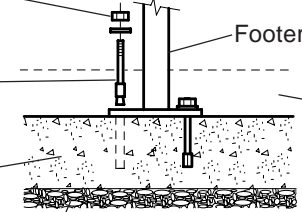
PLAN VIEW/ FOOTING LAYOUT



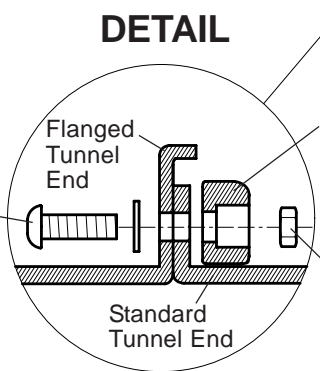
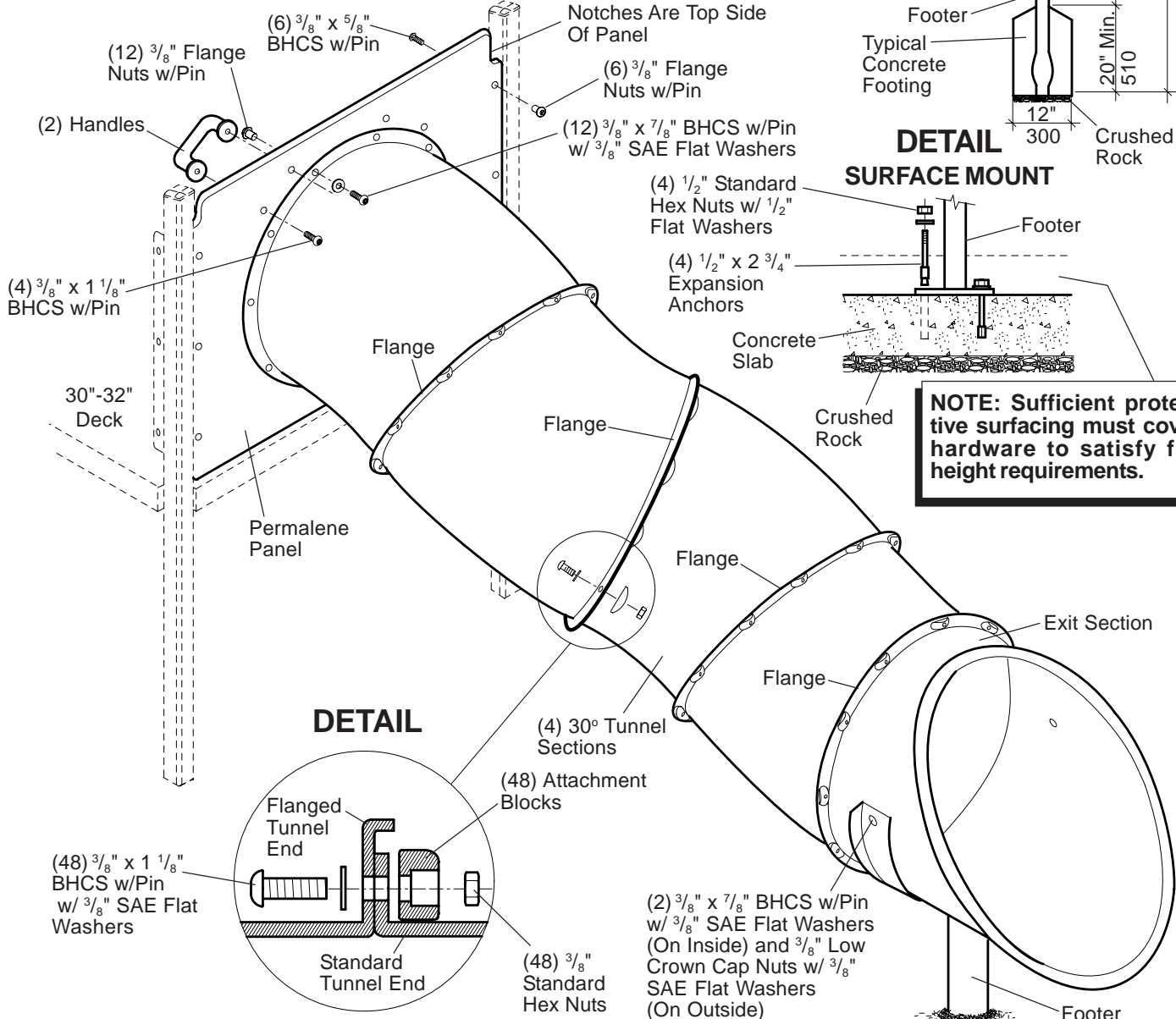
ELEVATION



DETAIL SURFACE MOUNT



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





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Parts List

Part#	Description	Qty.
132907-00	Tunnel Panel, Specify Color	1
129407-00	Footer, DB, Specify Color	1
103043-00	Footer, SM, Specify Color	1
129661-00	Exit, Tunnel Section, Specify Color	1
129664-00	30° Flanged Tunnel Section, Specify Color	4
105752-00	Handles, White	2
133047-00	Attachment Block, Specify Color	48
183588-00	Hardware Package	1
100195-00	3/8" x 5/8" BHCS w/Pin, SST	6
100196-00	3/8" x 7/8" BHCS w/Pin, SST	14
100327-00	3/8" Standard Hex Nut, SST	48
100353-00	3/8" Flange Nut w/Pin, SST	18
100365-00	3/8" SAE Flat Washer, SST	62
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	52
100349-00	3/8" Low Crown Cap Nut, SST	2
121348-00	4-Hole (SM) Hardware Package	1
100266-00	1/2" x 2 3/4" Expansion Anchor, SM	4
100322-00	1/2" Standard Hex Nut, SST, SM	4
100363-00	1/2" Flat Washer, SST, SM	4

DB = Direct Bury

SM = Surface Mount

Specifications

Permalene® Panel:	Solid color panel measures 39 1/2" wide x 30" high, color specified.
Handle:	Cast aluminum. Finish: ProShield®, white in color.
Footer:	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 3/16" x 2" x 1 1/4" HRS angle. Finish: ProShield, color specified.
Tunnel Section:	Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
Attachment Blocks:	U.V. stabilized high-density polyethylene, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 2 man hours
Concrete Req.:	Approx. 1.3 cu. ft.
Area Req.:	6/1830 minimum use zone at exit
Weight:	134 lbs.

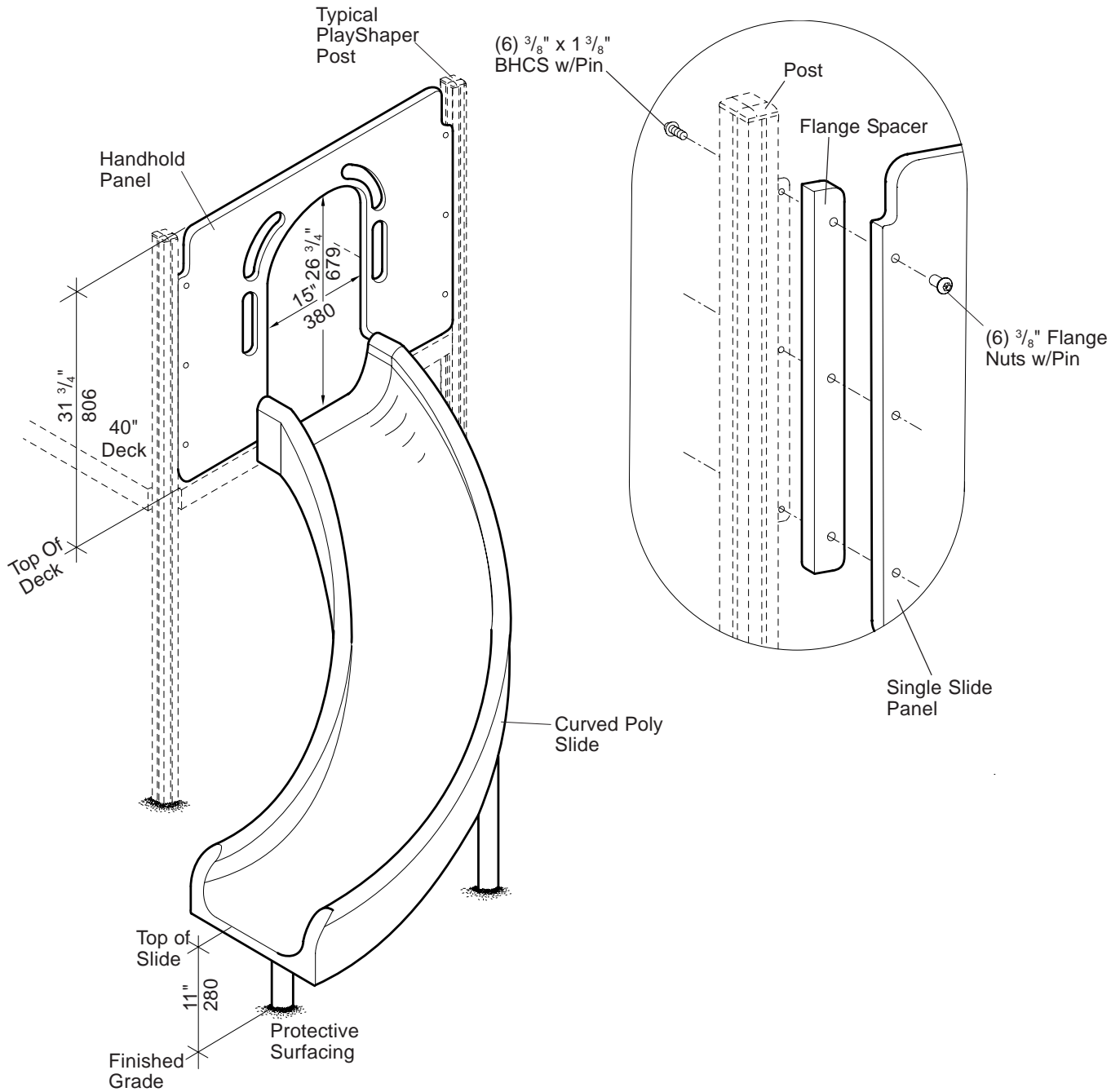
PlayShaper® 111323 El Slide, 30"-32"

Installation Instructions

- 1) Dig footing hole spaced as shown.
- 2) Attach Permalene panel to post flanges using 3/8" x 5/8" BHCS w/pin with 3/8" flange nuts w/pin. **NOTE: Notched end of panel is top of panel.**
- 3) Attach handles to panel using 3/8" x 1 1/8" BHCS w/pin.
- 4) Fasten tunnel sections together using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and attachment blocks with 3/8" standard hex nuts on standard tunnel end. Refer to Tunnel Assembly Detail. **NOTE: Rotate sections 90° where curved.**
- 5) Lift assembled tunnel into position and fasten to panel with 3/8" x 7/8" BHCS w/pin with 3/8" flat washers and 3/8" flange nuts w/pin. Block up end of slide so water will run off of exit section.
- 6) **(Direct Bury)** Set support in footing hole and position on the tunnel exit section as shown. With support post plumb, drill through the two holes in support and through tunnel exit section. Fasten with 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers on inside, and 3/8" low crown cap nuts with 3/8" SAE flat washers on outside. Pour concrete footing and let cure for a minimum of 72 hours before users are allowed to play on the structure.

(Surface Mount) Position footer on the tunnel exit section. Mark anchor bolt locations on concrete slab through holes in anchor plate and remove footer from tunnel exit section. 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. Fasten footer to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers. Position exit section on the footer and drill through the two holes in footer and through tunnel exit section. Fasten with 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers on inside, and 3/8" low crown cap nuts with 3/8" SAE flat washers on outside.
- 7) Remove blocking and install protective surfacing before users are allowed to play on the structure.

**DETAIL
 PANEL ATTACHMENT**





PlayShaper® 123339 Curved Poly Slide, 40"

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Parts List

Part#	Description	Qty.
130740-00	Curved Poly Slide, Specify Color	1
127001-00	Exit Support, (DB), Specify Color	1
127002-00	Mid-Support, (DB), Specify Color	1
127008-00	Exit Support, (SM), Specify Color	1
127011-00	Mid-Support, (SM), Specify Color	1
145467-00	Handhold Panel, Specify Color	1
150436-00	Flange Spacer, Specify Color	2
111507-00	Slide Hardware Package	1
100196-00	$\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/Pin, SST	2
100362-00	$\frac{3}{8}$ " Flat Washer, SST	6
100292-00	$\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/Pin Ltd. Thread Bolt, SST	4
100365-00	$\frac{3}{8}$ " SAE Flat Washer, SST	4
111442-00	Rubber Bushing	4
150558-00	6-Hole Panel Attach. Hardware Package	1
113027-00	$\frac{3}{8}$ " x 1 $\frac{3}{8}$ " BHCS w/Pin, SST	6
100353-00	$\frac{3}{8}$ " Flange Nut w/Pin, SST	6
111394-00	4-Hole (SM) Hardware Package	1
100263-00	$\frac{3}{8}$ " x 2 $\frac{3}{4}$ " Expansion Anchor	4
100327-00	$\frac{3}{8}$ " Standard Hex Nut, SST	4
100362-00	$\frac{3}{8}$ " Flat Washer, SST	4

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 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and $\frac{1}{4}$ " x 1 $\frac{1}{2}$ " x 6" mounting plate. Finish: ProShield®, color specified.

Exit Footer: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and $\frac{1}{4}$ " x 3" mounting plate. Finish: ProShield, color specified.

Flange Spacer & Handhold Panel: Solid color 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: Approx. 1 man hour

Concrete Req.: Approx. 2.4 cu. ft.

Area Req.: Refer To Site Plan

Weight: 90 lbs.

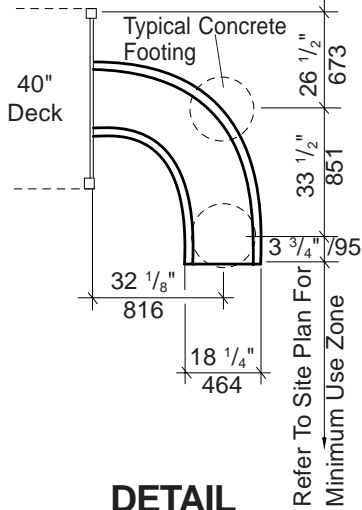
Fall Height: 40" (1,02 m)

Installation Instructions

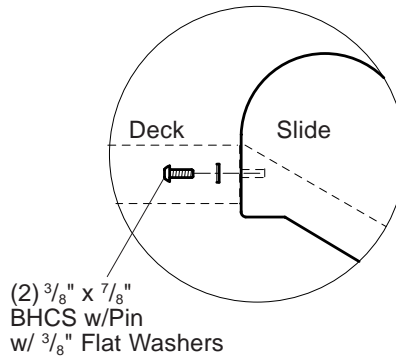
- 1) **(Direct Bury)** Dig footings spaced as shown.
- 2) Attach panel and flange spacers to post flanges using $\frac{3}{8}$ " x 1 $\frac{3}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flange nuts w/pin. Refer to the Panel Attachment Detail.
- 3) Attach exit and mid-supports to slide using $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/pin limited thread bolts, $\frac{3}{8}$ " SAE flat washers, rubber bushings and $\frac{3}{8}$ " flat washers. **NOTE:** Attach bolts in center of the slots to allow for expansion and contraction. Snug bolts down only, do not over-tighten! See Support Attachment Detail.
- 4) Attach slide to the face of the deck using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flat washers. Refer to Deck Connection Detail.
- 5) **(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 plate and remove slide. Drill $\frac{3}{8}$ " x 3" deep holes on marks into concrete using a hammer drill and $\frac{3}{8}$ " masonry bit. Tap expansion anchors into drilled holes. Reposition slide and reattach to the face of the deck following step 4. Fasten support to expansion anchors using $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " flat washers.
- 6) Install protective surfacing before users are allowed to play on the structure.

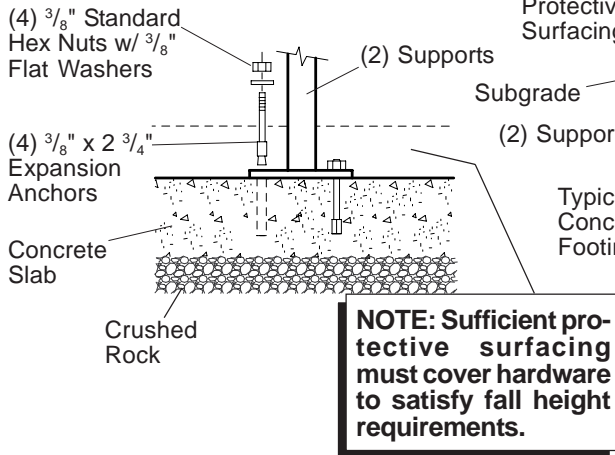
**PLAN VIEW/
 FOOTING LAYOUT**



**DETAIL
 DECK CONNECTION**

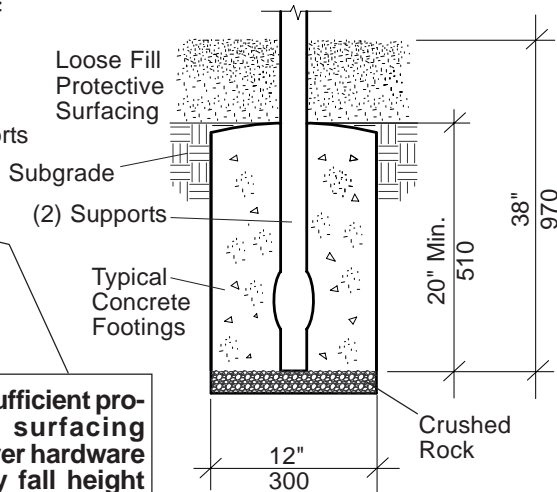


**DETAIL
 SURFACE MOUNT**



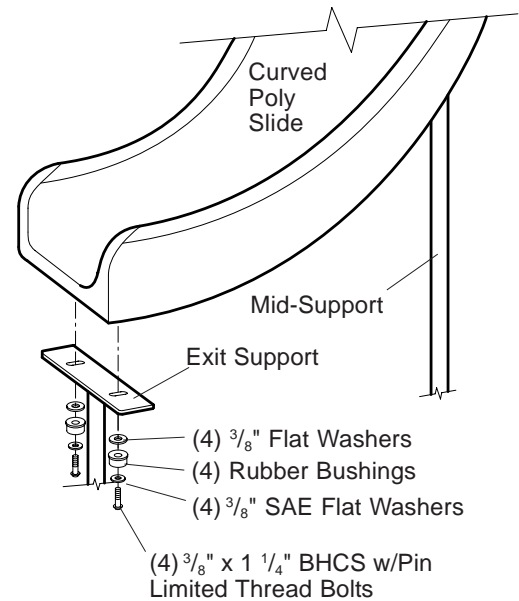
NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

**DETAIL
 DIRECT BURY**



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

**DETAIL
 SUPPORT ATTACHMENT**



Parts List

Part#	Description	Qty.
127447-00	36" - 48" Double Poly Slide, Specify Color	1
126957-00	Hood, Specify Color	1
132443-00	Rail Spacer, Specify Color	2
113468-00	Spacer Tube, Specify Color	2
113895-00	Offset Bolt Bracket, Specify Color	4
150941-00	Support (DB), Specify Color	2
150996-00	Support (SM), 40" Deck, Specify Color	2
151003-00	Support (SM), 48" Deck, Specify Color	2
100583-00	40 7/16" Rail, Aluminum, Specify Color	1
132154-00	Slide Hood Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100200-00	3/8" x 3 1/2" BHCS w/Pin, SST	2
100203-00	5/8" x 2 1/4" BHCS w/Pin, SST	2
100365-00	3/8" SAE Flat Washer, SST	6
166868-00	3/4" O.D. x .390" Spacer, Aluminum	4
111508-00	Slide Hardware Package	1
100196-00	3/8" x 7/8" BHCS w/Pin, SST	4
100362-00	3/8" Flat Washer, SST	8
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST	4
100365-00	3/8" SAE Flat Washer, SST	4
111442-00	Rubber Bushing	4
121348-00	4-Hole SM Hardware Package	2
100266-00	1/2" x 2 3/4" Expansion Anchor	8
100322-00	1/2" Standard Hex Nut, SST	8
100363-00	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.
Hood:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Rail:	Extruded from 1.125" O.D. x .312" W. 6061-T6 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 11/16". Finish: ProShield, color specified.
Exit 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.
Offset Bolt Bracket:	Cast from 356-T6 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:	SM - Approx. 1 1/2 man hours DB - Approx. 2 man hours
Concrete Req.:	Approx. 3.1 cu. ft.
Area Req.:	7' minimum use zone at exit
Weight:	SM - 124 lbs. DB - 131 lbs.
Fall Height:	40" Deck (1,02 m) 48" Deck (1,22 m)

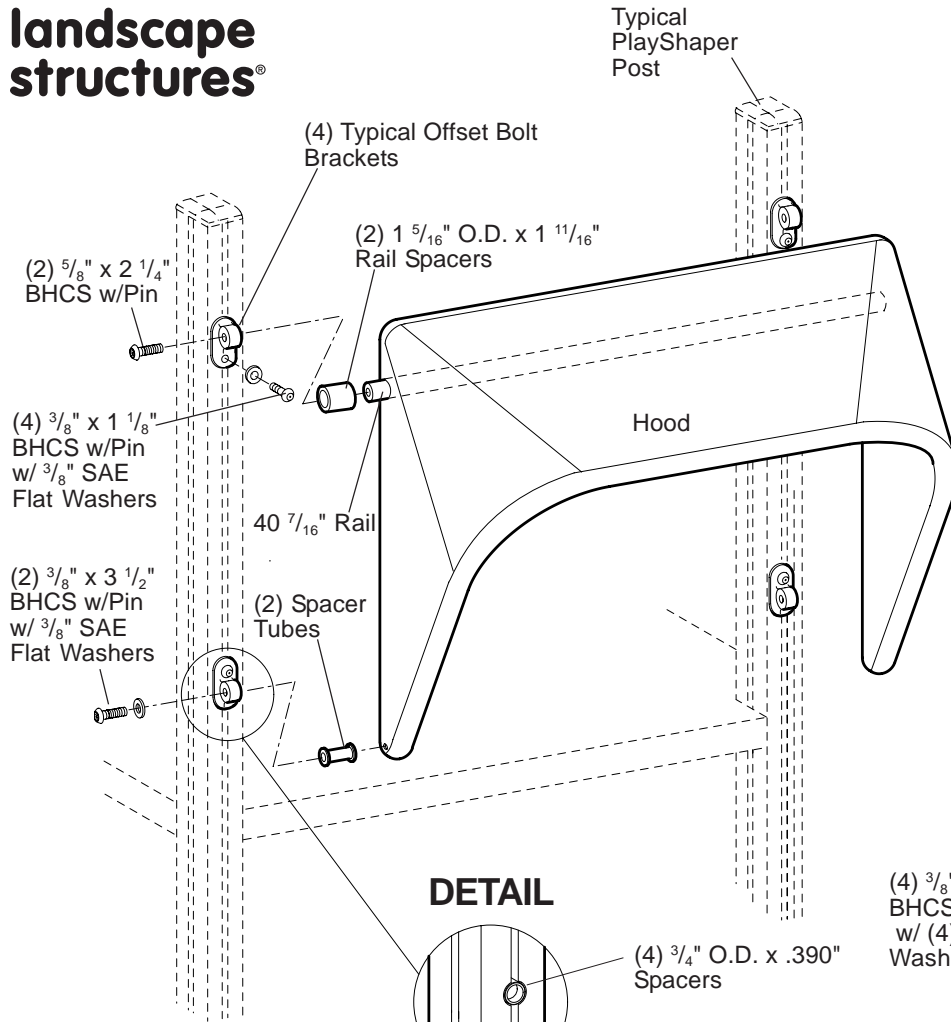
Installation Instructions

- (Direct Bury)** Dig footings spaced as shown.
- Attach offset bolt brackets to posts using 3/4" O.D. x .390" spacers and 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 spacer tubes and 3/8" x 3 1/2" BHCS w/pin with 3/8" SAE flat washers.
- Attach 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 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 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.
- (Direct Bury)** With supports plumb pour concrete footings.

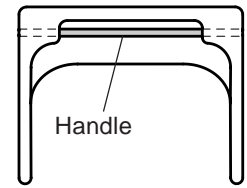
(Surface Mount) Mark anchor bolt locations on concrete slab through holes in the support plates and remove the slide. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition slide and reattach to the face of the deck following step 6. 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.)

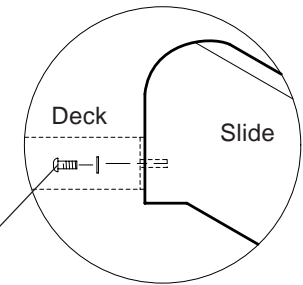
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HOOD - HANDLE DETAIL

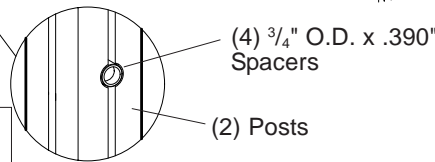


DETAIL SLIDE/DECK CONNECTION



(4) 3/8" x 7/8" BHCS w/Pin w/ (4) 3/8" Flat Washers

DETAIL

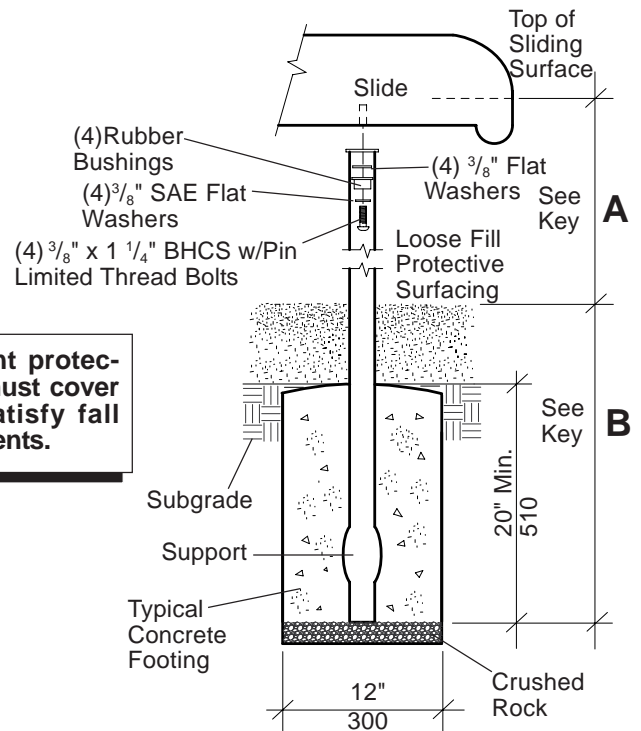


NOTE: Insert spacers into posts before attaching offset bolt brackets.

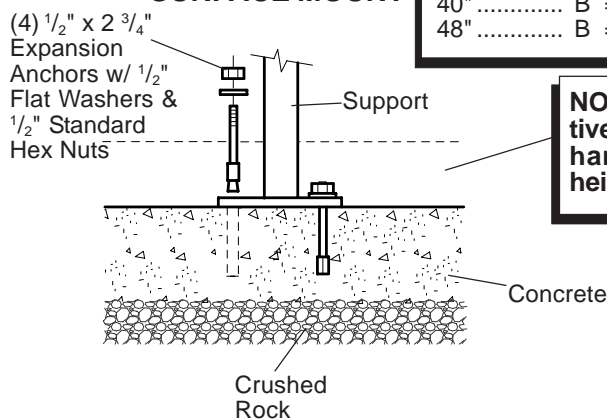
KEY:
Deck Hgts Dimension

36"	A = 3 3/4"/95
40"	A = 6"/150
48"	A = 11"/280
36"	B = 32 1/4"/819
40"	B = 36"/910
48"	B = 31"/790

DETAIL DIRECT BURY

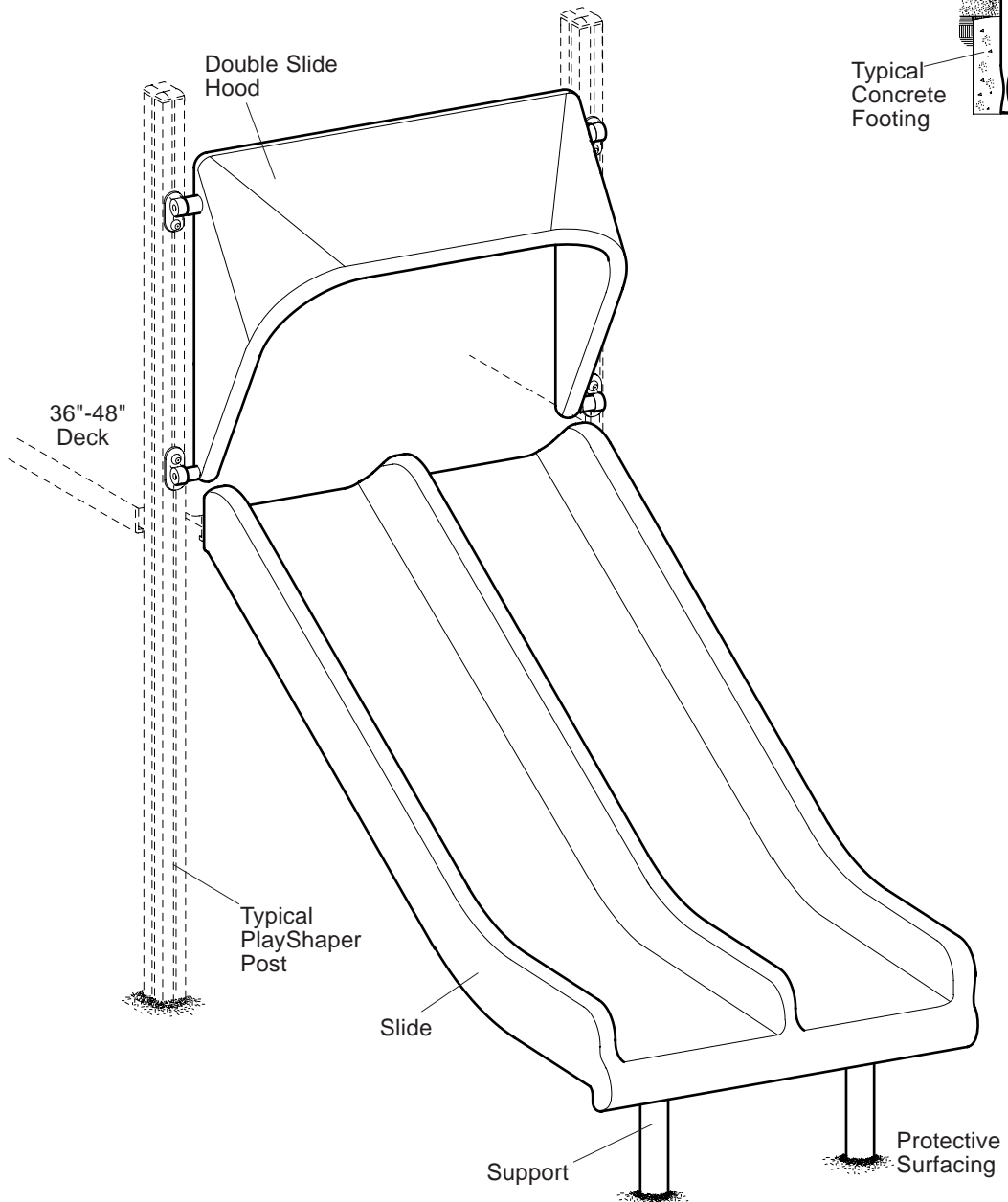
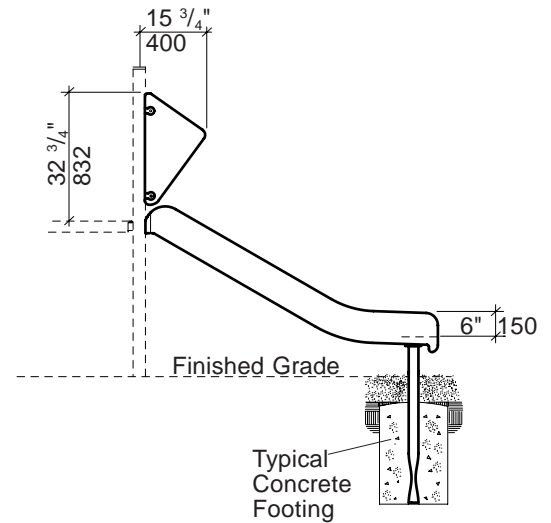
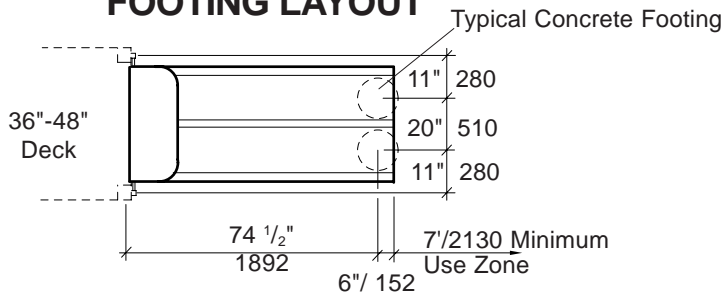


DETAIL SURFACE MOUNT



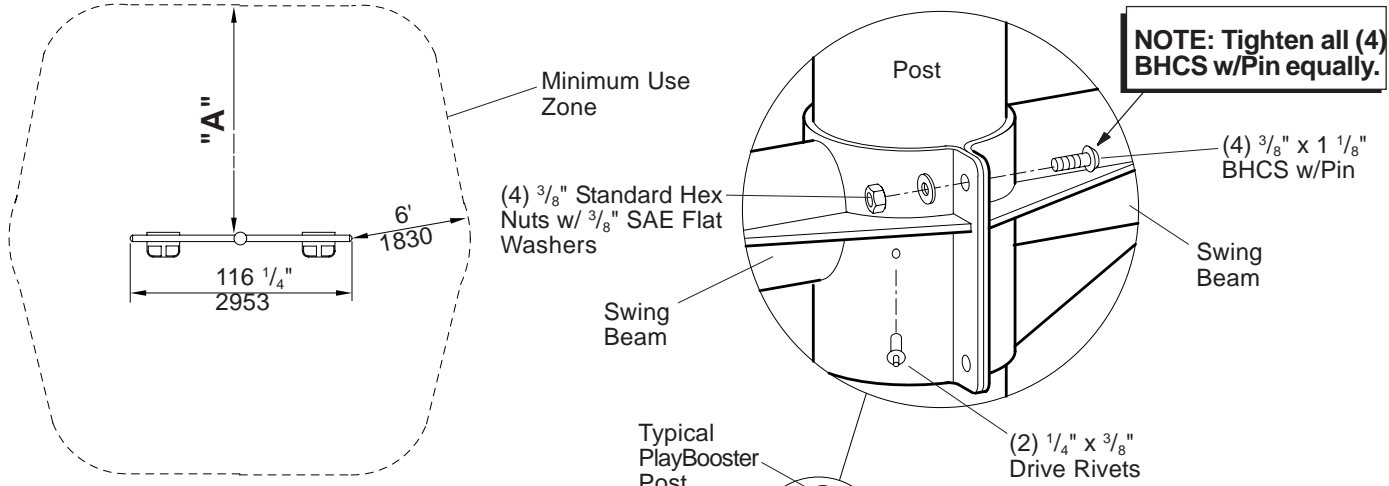
NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

**PLAN VIEW/
FOOTING LAYOUT**

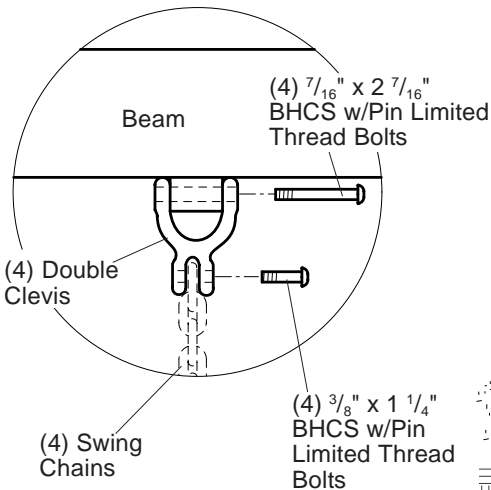


Seat Type	Dimension "A"
Belt	N/A
Flat	N/A
Full Bucket	8'-6" (2,59 m)
Half Bucket	12'-6" (3,81 m)
Molded Bucket	N/A
Molded Bucket/Harness	N/A
Infant Full Bucket	8'-6" (2,59 m)

**DETAIL
SWING BEAM ATTACHMENT**

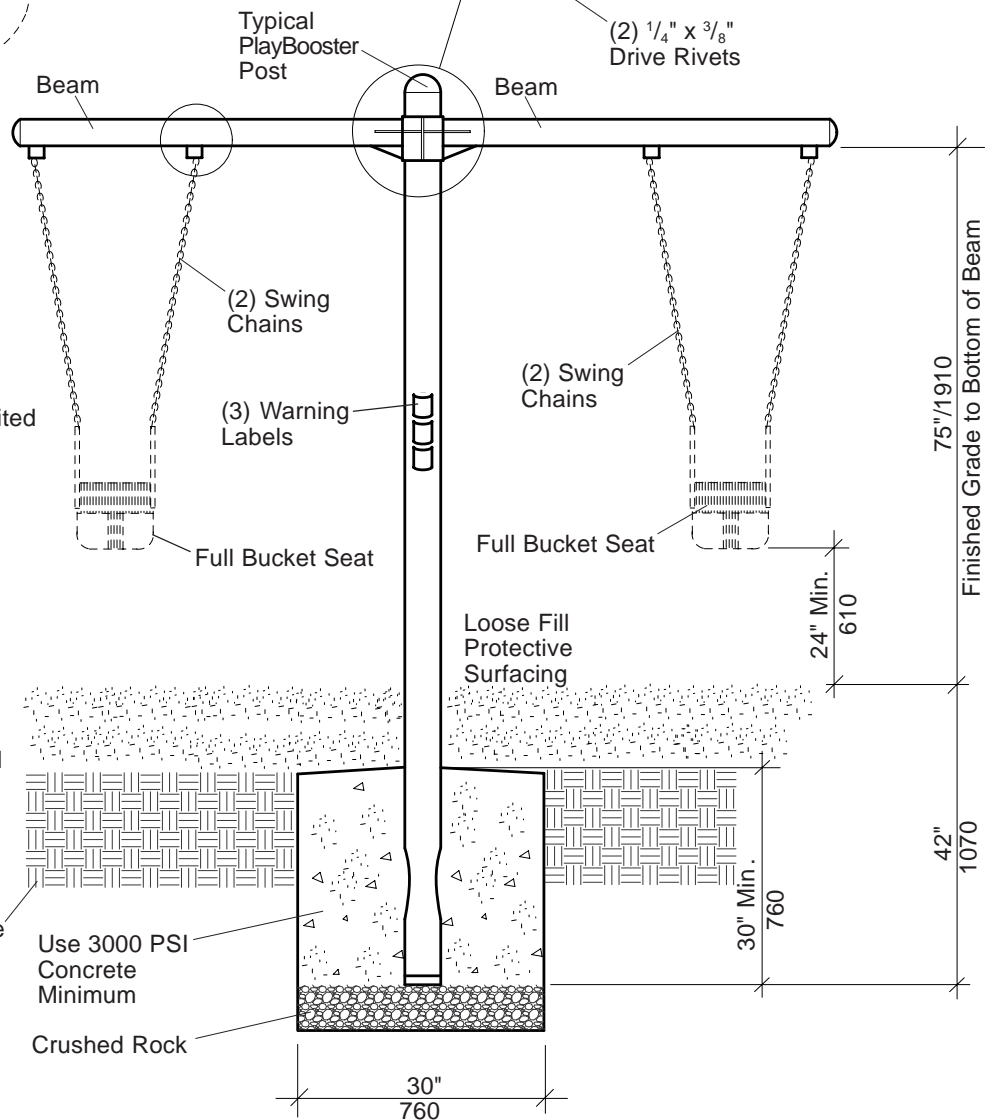


**DETAIL
DOUBLE CLEVIS ATTACHMENT**



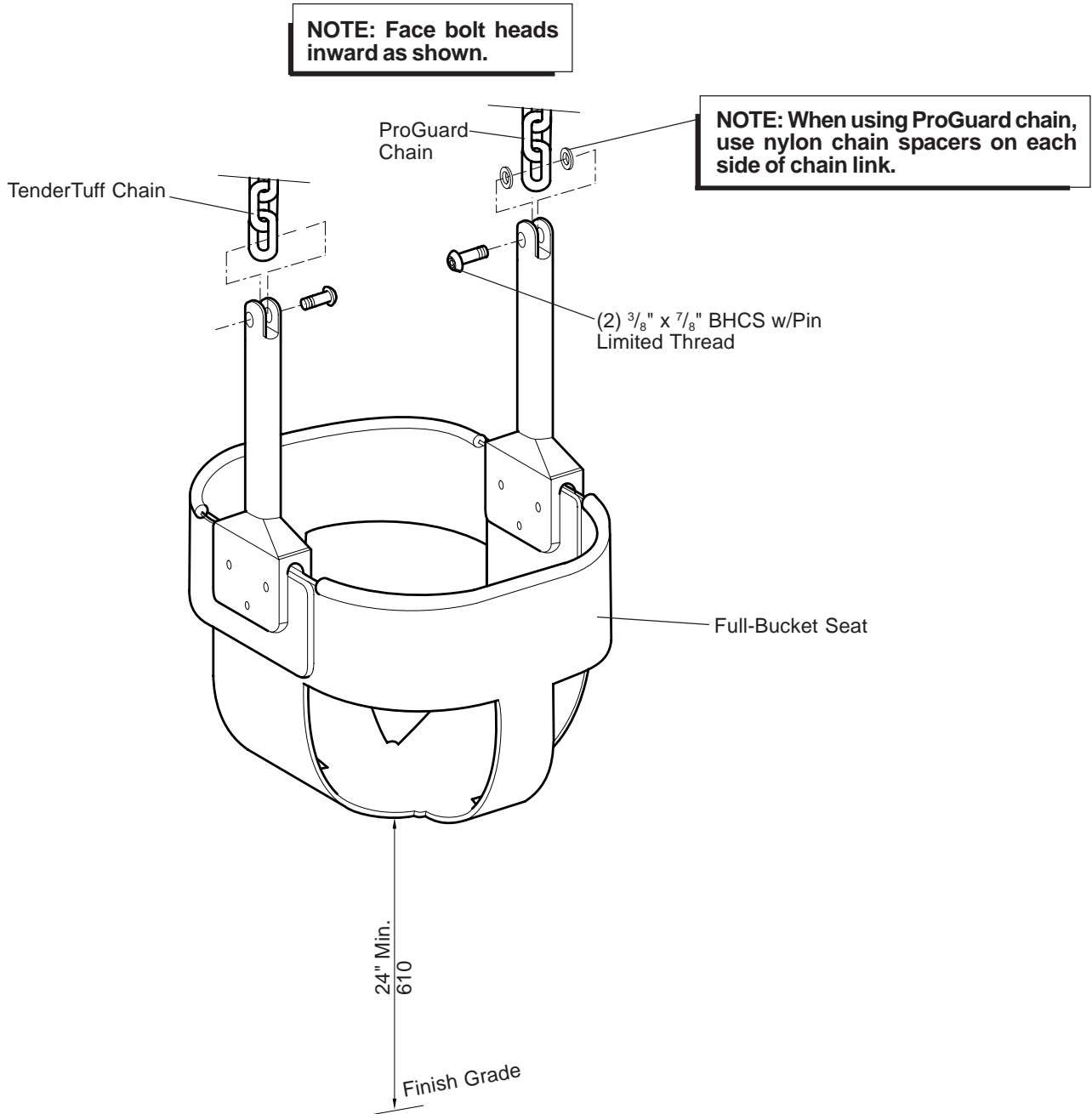
NOTE:
This Swing is designed for users up to 5 years of age.

NOTE: Model number is for swing frame only, order swing seats with chains separately.



Swings

177336 Toddler Swing Frame





Swings 176038 Full-Bucket Seat, w/Chains

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Parts List

Part#	Description	Qty.
8 Ft. High Beam		
186276-00	Full-Bucket Swing Seat, Black	1
160110-00	52 9/16" Chain, TenderTuff, Specify Color	2
174882-00	52 9/16" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4
10 Ft. High Beam		
186276-00	Full-Bucket Swing Seat, Black	1
152051-00	76 7/16" Chain, TenderTuff, Specify Color	2
174883-00	76 7/16" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4
7 Ft. High Beam (Tot)		
186276-00	Full-Bucket Swing Seat, Black	1
152053-00	37 1/2" Chain, TenderTuff, Specify Color	2
175247-00	37 1/2" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4
75" High Beam (Toddler)		
186276-00	Full-Bucket Swing Seat, Black	1
152016-00	29 7/8" Chain, TenderTuff, Specify Color	2
174881-00	29 7/8" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4

Installation Time: 1/4 man hour per seat
Weight: 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.

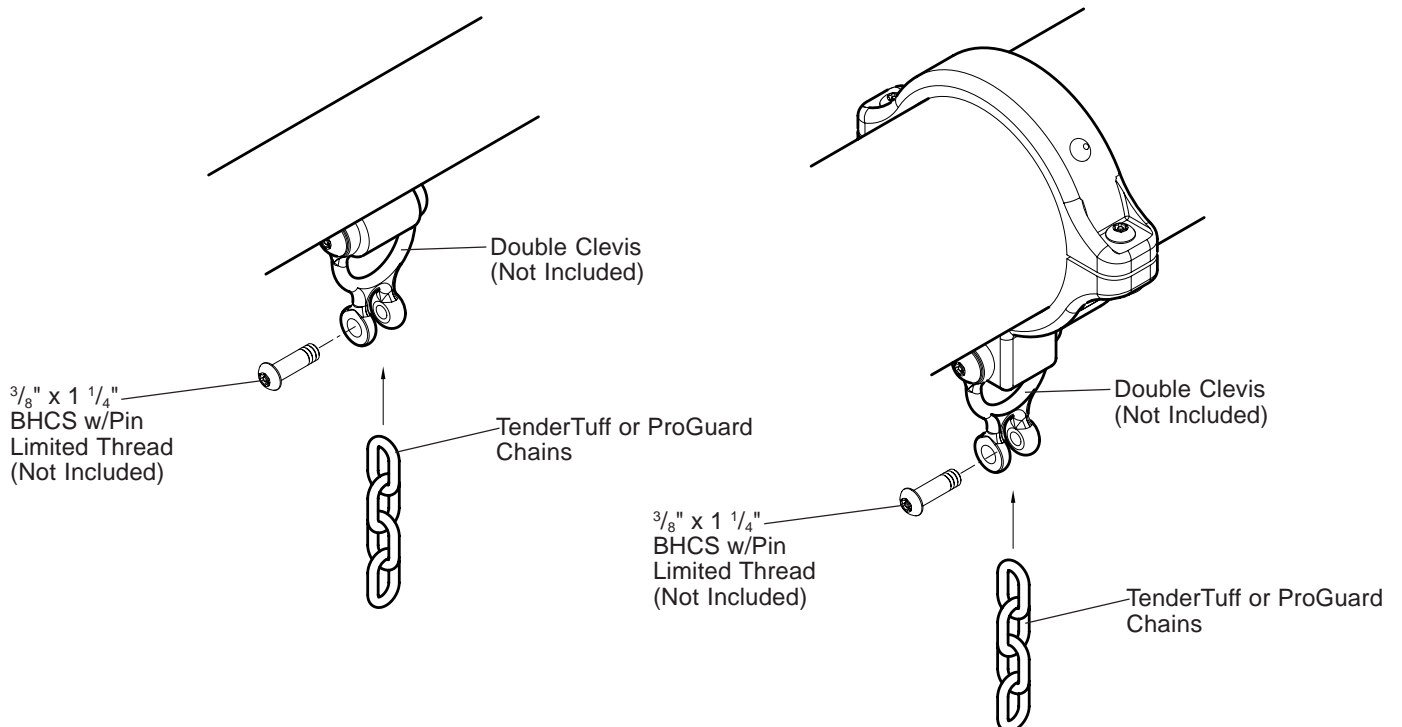
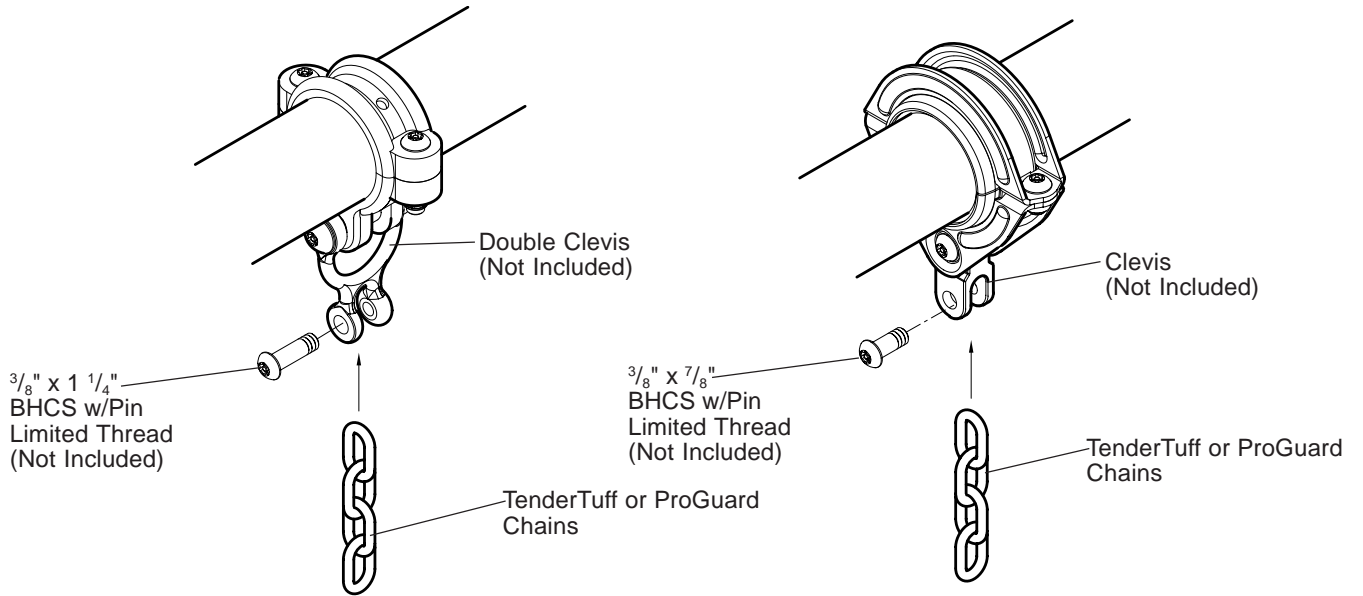
Anti-wrap Swing Hangers

- 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.

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).

SWING HANGER OPTIONS





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Swings 177336 Toddler Swing Frame

Parts List

Part#	Description	Qty.
135548-00	Swing Beam, Specify Color	2
116653-00	Steel 124" (DB) Post, Specify Color	1
185014-00	Beam Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100327-00	3/8" Standard Hex Nut, SST	4
100365-00	3/8" SAE Flat Washer, SST	4
100611-00	1/4" x 3/8" Drive Rivet, AL/SST	2
182213-00	Hot Surface Warning Label	1
182212-00	Entanglement Warning Label	1
115176-00	Hard Surface Warning Label	1
132634-00	Double Clevis Hardware Package	2
127068-00	7/16" x 2 7/16" BHCS w/Pin Ltd. Thread Bolt, SST..	4
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST	4
138917-00	Double Clevis	4

Specifications

Post: See PlayBooster® (PB) General Specifications.

Swing Beam: Weldment comprised of 3.500" O.D. RS-20 (.120" - .130") galvanized steel tubing, 6" wide zinc plated steel clamp, 3.500" pipe cap, and 1 1/4" housings with bronze bushings. 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. 4 man hours

Concrete Req.: Approx. 12.7 cu. ft.

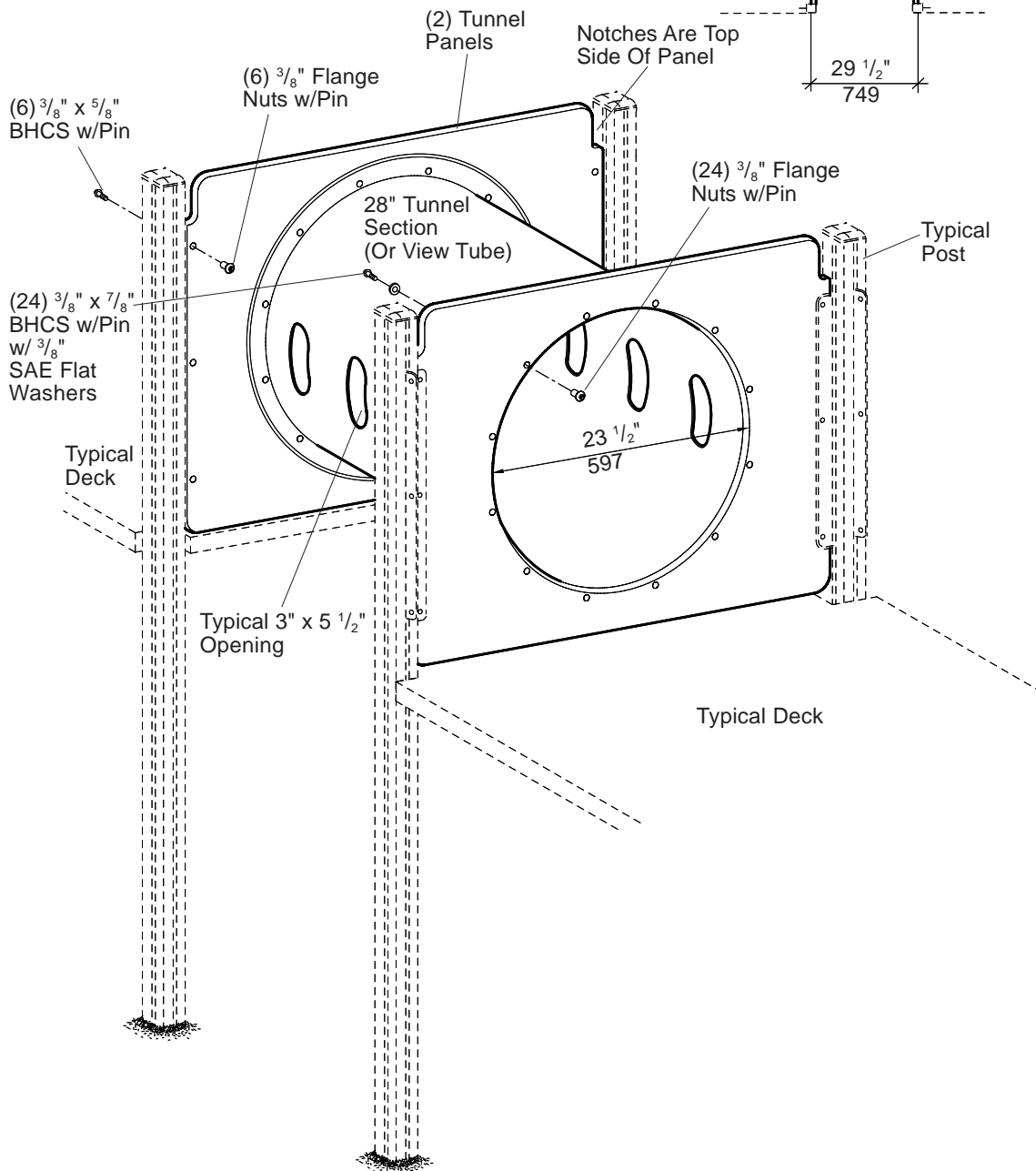
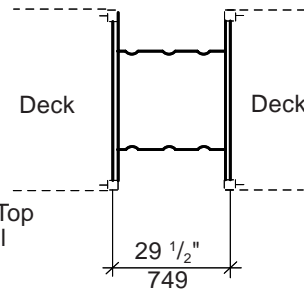
Area Req.: 17' x 21' 9" (5,18 m x 6,63 m)

Weight: 136 lbs.

Installation Instructions

- 1) Dig footing spaced as shown.
- 2) Attach swing beams to post using 3/8" x 1 1/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Swing Beam Attachment Detail. **NOTE:** Tighten all (4) BHCS w/Pin equally.
- 3) Set post with swing beams in footing hole and with post plumb, temporarily prop in position. **NOTE:** Bottom of beam should be 75" above finished grade.
- 4) Pour concrete footing and let cure for 7 days before proceeding. **NOTE:** Use 3000 PSI concrete minimum.
- 5) Attach double clevises to beams using 7/16" x 2 7/16" BHCS w/pin limited thread bolts, and attach swing chains to double clevises using 3/8" x 1 1/4" BHCS w/pin limited thread bolts. Refer to the Double Clevis Attachment Detail.
- 6) Install Swing Bucket Seat per the installation sheet.
- 7) Drill through hole in steel half clamps and into post with a 1/4" or "F" (only) drill bit. Install 1/4" x 3/8" drive rivets. Refer to the Swing Beam Attachment Detail.
- 8) Apply Warning Labels, as shown.
- 9) Install protective surfacing before users are allowed to play on the structure.

**PLAN VIEW/
FOOTING LAYOUT**



• Available With Optional View Tube



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PlayShaper® 128953 Crawl Tunnel, 28" Long

Parts List

Part#	Description	Qty.
108727-01	Tunnel Panel, Specify Color	2
108174-01	Tunnel Section, Specify Color	1
127890-00	View Tube Assy., (Optional)Specify Color	1
107034-00	Tunnel Hardware Package	1
100195-00	3/8" x 5/8" BHCS w/Pin, SST	12
100196-00	3/8" x 7/8" BHCS w/Pin, SST	24
100353-00	3/8" Flange Nut w/Pin, SST	36
100365-00	3/8" SAE Flat Washer, SST	24

Specifications

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

Tunnel Section: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

Clear Cover: Drape formed .177" x 23" x 30 7/8" clear polycarbonate.

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: With View Tube 79 lbs.
Without View Tube 74 lbs.

Fall Height: Deck Height Plus 6"

Installation Instructions

- 1) Attach panels to tunnel assembly using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. **NOTE: The notched side is the top side of panel.**
- 2) Position tunnel assembly with panels against outside faces of post flanges and fasten using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin.
- 3) Install protective surfacing before users are allowed to play on the structure.