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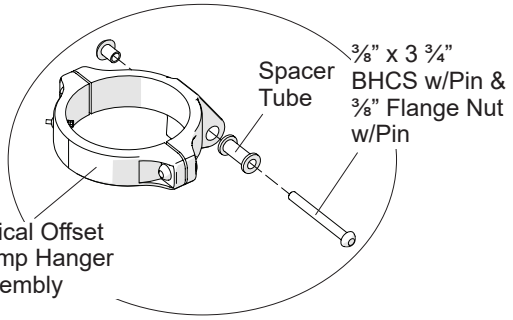
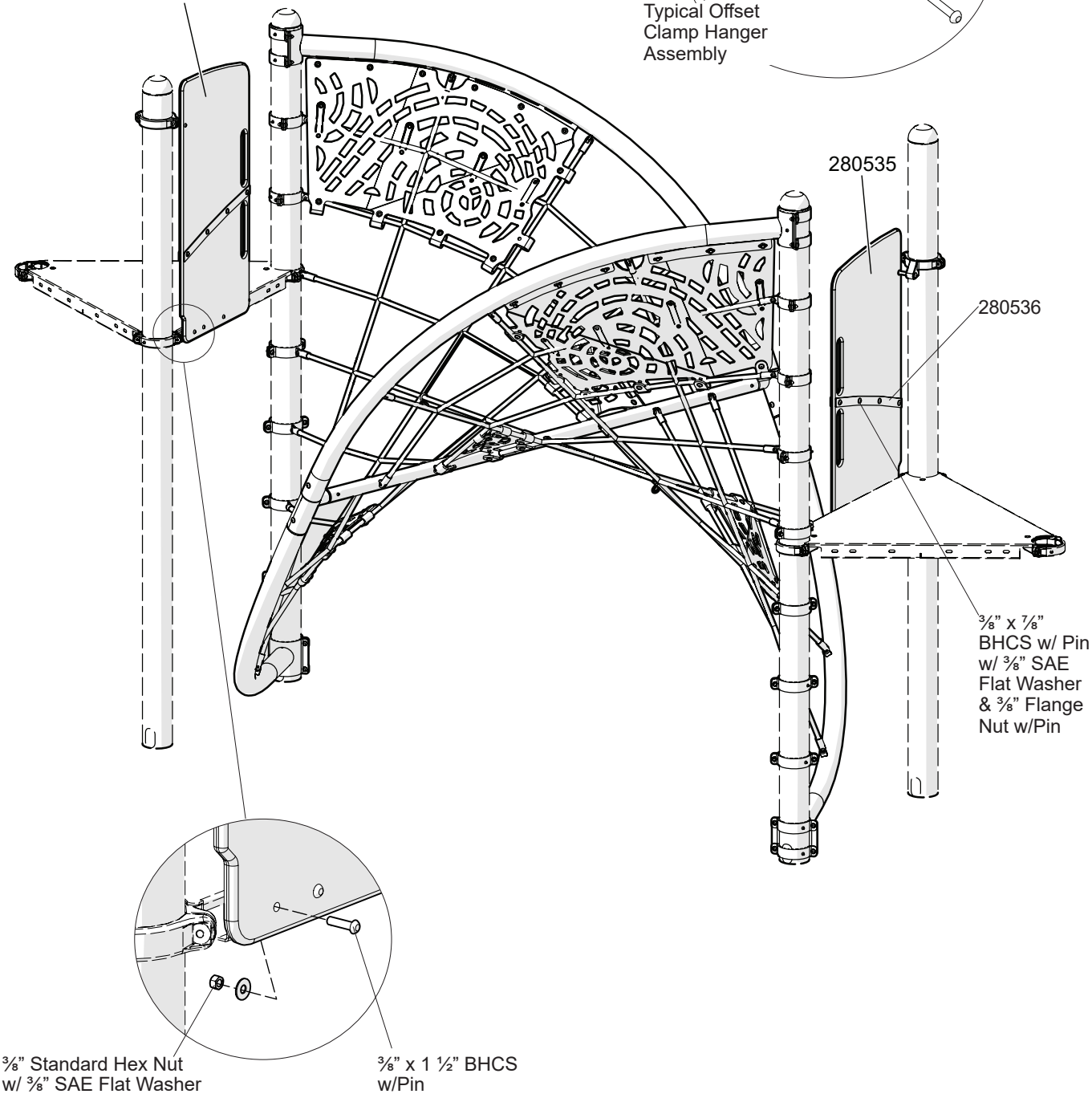
SAFETY NOTE

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*.)

FLEX CLIMBER

DETAIL
CLAMP ATTACHMENT





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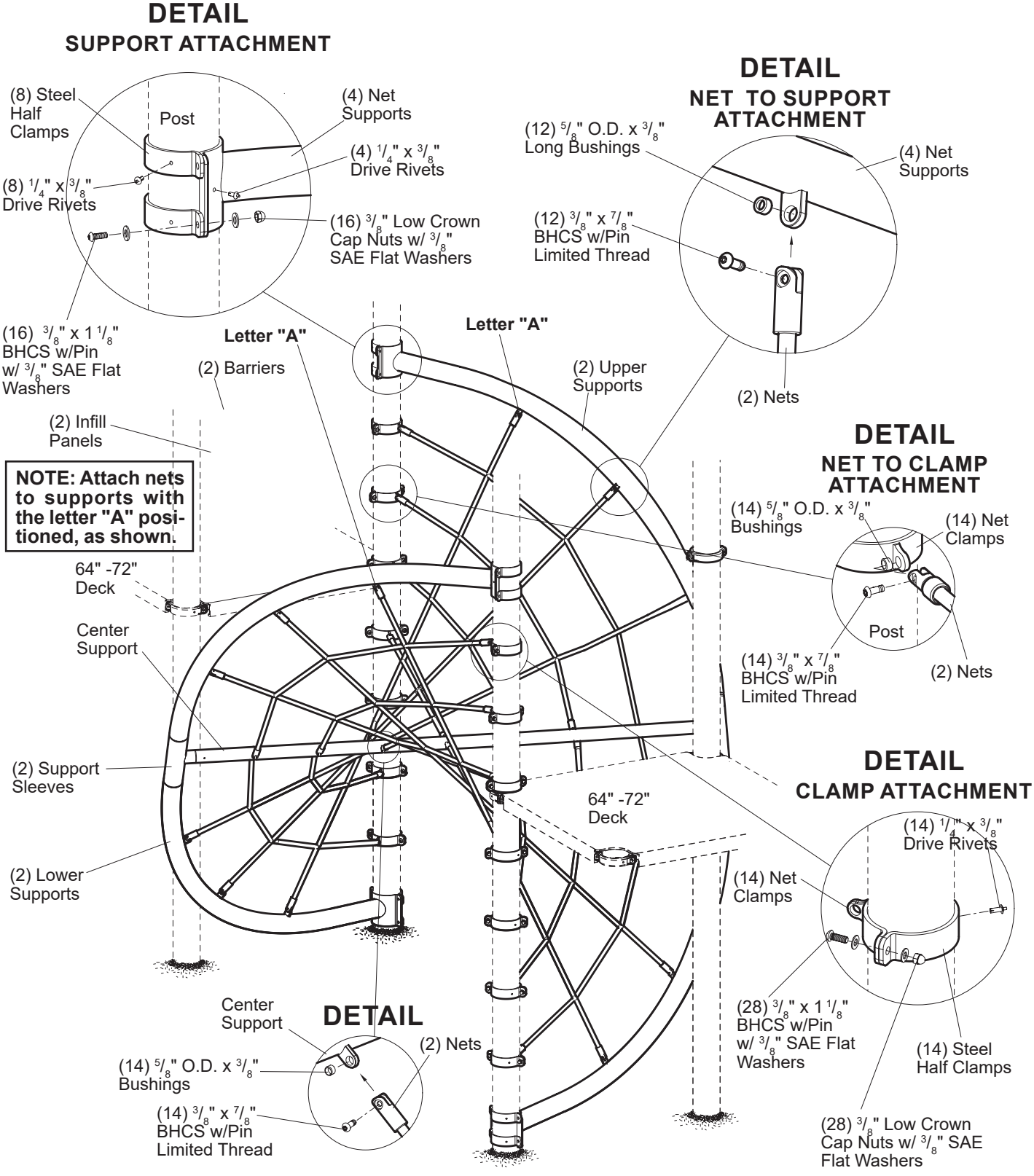

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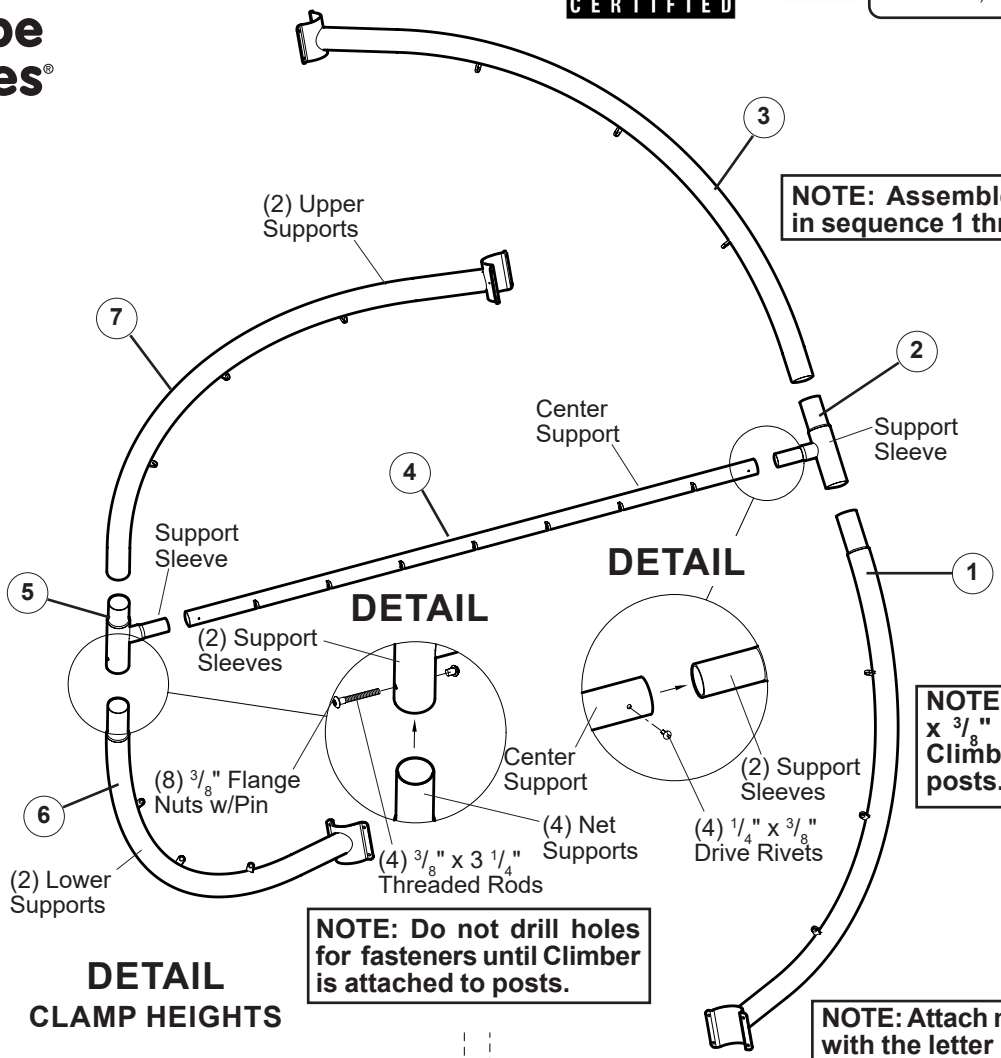
DETAIL
CLIMBER ASSEMBLY



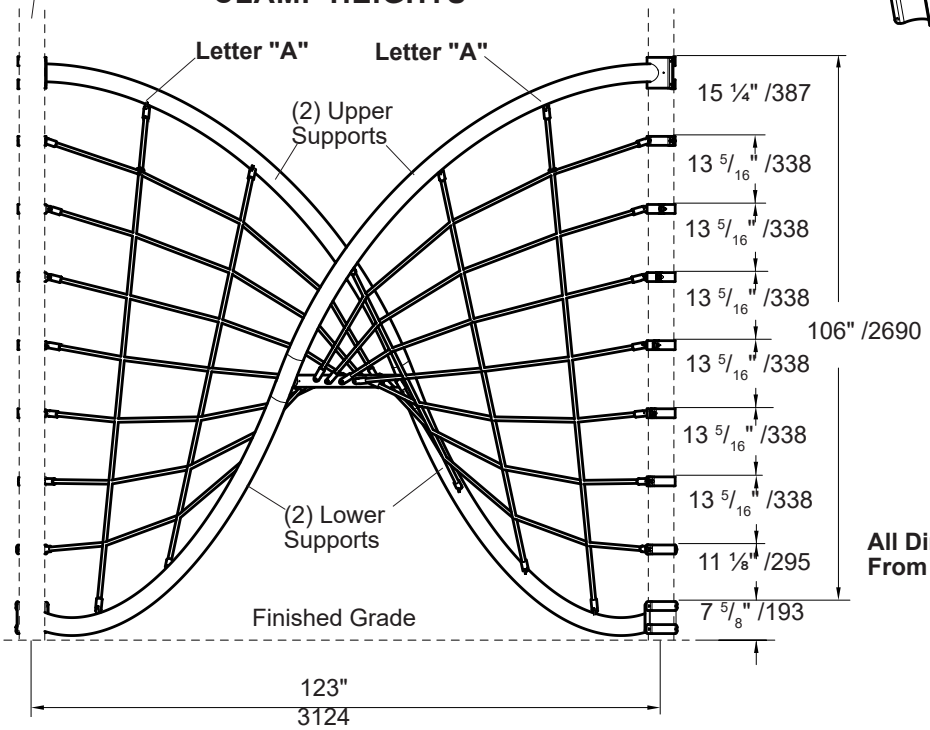
NOTE: Assemble climber in sequence 1 thru 7.

NOTE: Do not install 1/4" x 3/8" drive rivets until Climber is attached to posts.

NOTE: Do not drill holes for fasteners until Climber is attached to posts.

NOTE: Attach nets to supports with the letter "A" positioned, as shown.

DETAIL
CLAMP HEIGHTS



All Dimensions Are From Top Of Clamp

NOTE: Lower all clamps if there is a clamp conflict.

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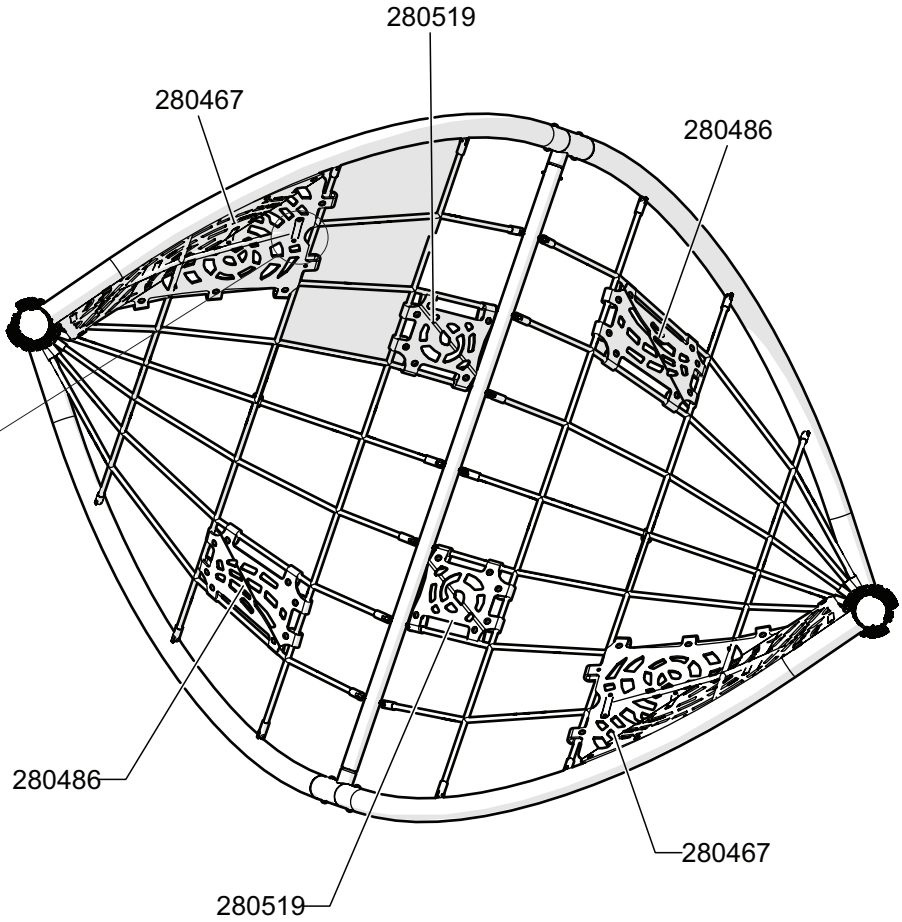
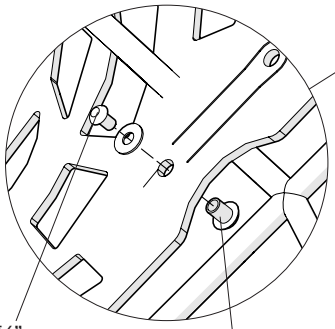
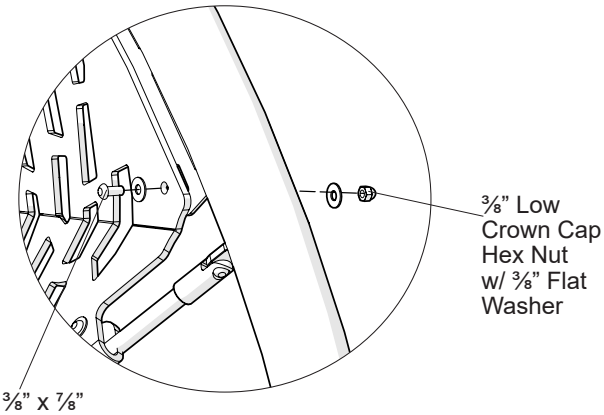


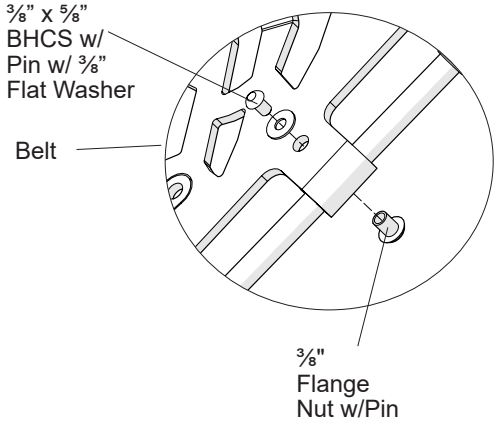
DETAIL
BELT STRAP ATTACHMENT



DETAIL
BELT TO FLANGE ATTACHMENT



DETAIL
BELT ATTACHMENT



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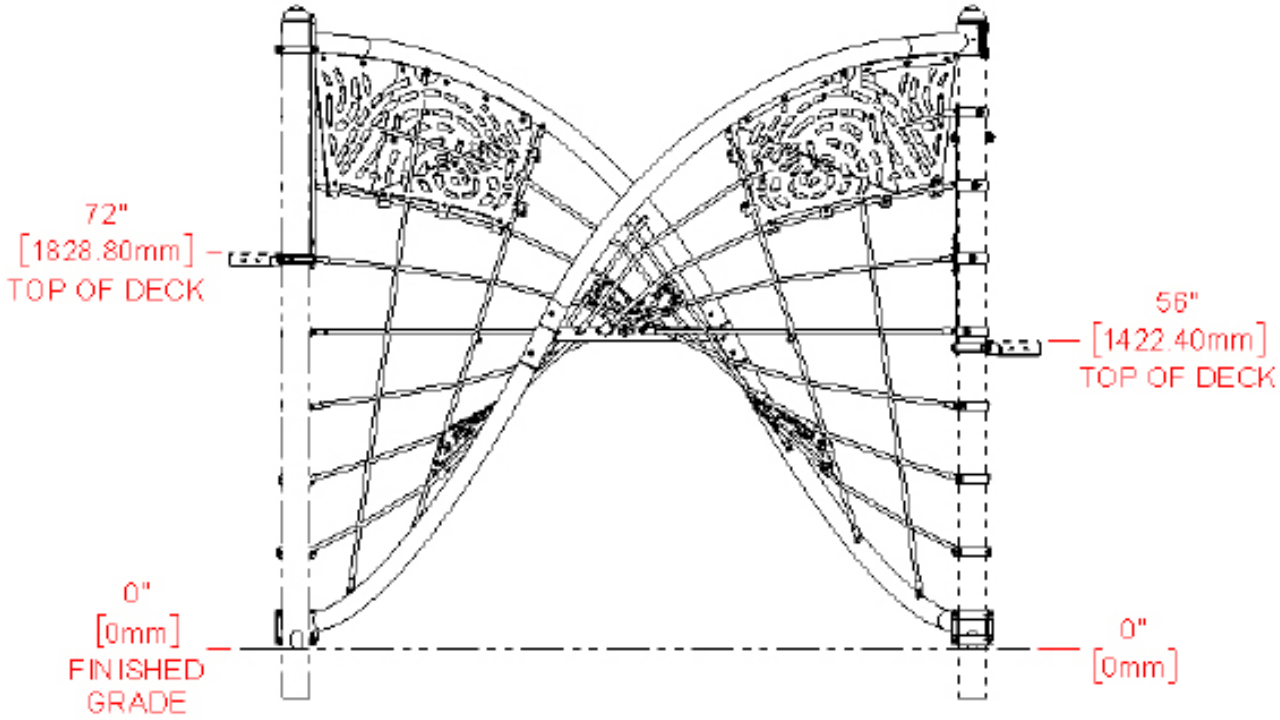

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Parts List

PART NUMBER	DESCRIPTION	QTY.
280536	CUST 3/4 BARRIER ACCENT STRIPE PNT	4
280535	CUST 3/4 BARRIER PERM	2
280519	CUST FLEX CLIMBER IN-FILL 3 BELT	2
280486	CUST FLEX CLIMBER IN-FILL 2 BELT	2
280478	CUST FLEX CLIMBER SPRT FEMALE PNT	2
280467	CUST FLEX CLIMBER IN-FILL 1 BELT	2
202623	BK FLEX CLIMBER NET	2
201311	FLEX CLIMBER SLEEVE PNT	2
201306	DOUBLE HELIX LOWER NET SUPPORT	2
192608	HELIX CENTER SPRT	1
176539	THD ROD 3/8X3-1/4 SST PAT	4
161898	PROPRIETARY NET CLMP	14
127179	BUSH 5/8OD X 3/8 LG SST	40
124460	BHCS 6LP 3/8x3-3/4i SST	2
113729	CLAMP OFFSET 5 RAIL HGR	2
113468	TUBE 7/8OD X 1-11/16 PNT	2
105327	CLMP HALF 5 AL	2
104731	CLMP HALF 1-3/4i STL	22
100611	RVT 1/4X3/8 AS (GRIP=.328/.422)	30
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	2
100365	WASHER FLAT SAE 3/8i SST	96
100362	WASHER FLAT 3/8i SST	82
100353	FLG NUT 6LP 3/8-16 SST	70
100351	MOD T-NUT 3/8-16 SST	4
100349	3/8 HEX NUT L/C CAP	56
100327	HEX NUT STD 3/8-16 SST	6
100290	BHCS 6LP LTHD 3/8X7/8iSST	40
100198	BHCS 6LP 3/8x1-1/8i SST	48
100196	BHCS 6LP 3/8x7/8i SST	20
100195	BHCS 6LP 3/8x5/8i SST	52
100171	BHCS 6LP 3/8x1-1/2iSSTPAT	6

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

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

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Specifications

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

Net Support: Weldment comprised of 3.500" (88,9 mm) O.D. RS20 .125" (3,18 mm) wall galvanized steel tubing, $^{3}/_{8}$" (9,53 mm) thick SST plate, and $^{1}/_{4}$" (6,35 mm) HRPO flat steel. Finish: ProShield®, color specified.

Center Support: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130" - .140") (3,30 mm-3,56 mm) wall galvanized steel tubing and $^{3}/_{8}$" (9,53 mm) thick SST plate. Finish: ProShield, color specified.

Support Sleeve: Weldment comprised of 3.500" (88,9 mm) O.D. RS20 .125" (3,18 mm) wall galvanized steel tubing, and 2.375" (60,33 mm) O.D. RS40 (.130" - .140") (3,30 mm-3,56 mm) wall galvanized steel tubing. Finish: ProShield, color specified.

Infill Panel: Recycled Permalene®, color specified.

Barrier: Weldment comprised of 1.125" (28,58 mm) O.D. 11 Ga. (.120") (3,05 mm) wall steel tube per ASTM A513 with 203 or 303 stainless steel threaded inserts with $^{5}/_{8}$" (15,88 mm) internal threads and $^{1}/_{4}$" (6,35 mm) tabs. Finish: TenderTuff®, color specified.

Steel Half Clamps: Fabricated from of $^{1}/_{4}$" (6,35 mm) HRPO flat steel. Finish: ProShield, color specified.

Net Clamp: Weldment comprised of $^{1}/_{4}$" (6,35 mm) x 1 $^{3}/_{4}$" (44,45 mm) HRPO flat steel and .375" (9,53 mm) stainless steel sheet. Finish: ProShield, color specified.

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

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

Installation Time: Approx. 6 man hours
Weight: 393 lbs.
Fall Height: 99" (2,51 m)

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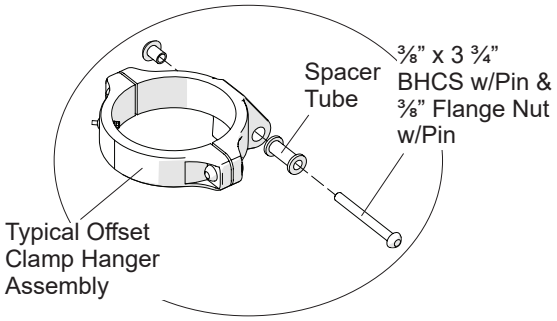
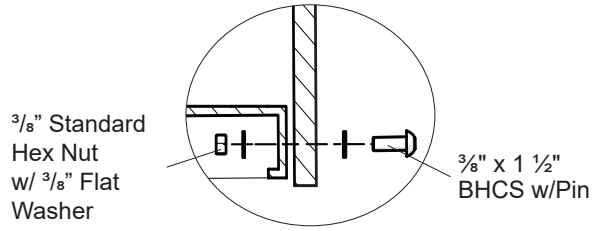
STAR SEEKER

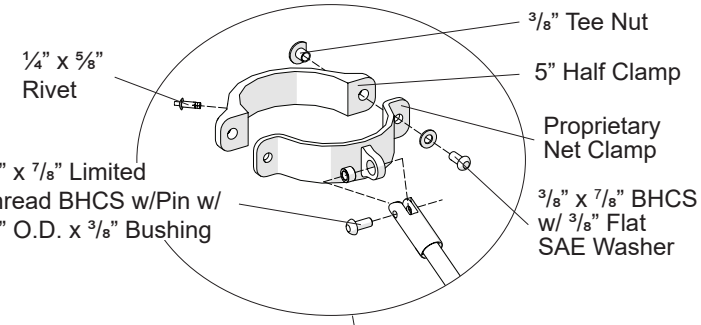
DETAIL
CLAMP/PERM ATTACHMENT



DETAIL
DECK ATTACHMENT



DETAIL
CLAMP ATTACHMENT



NOTE: 280716 has notches on the flap that attaches to the rope with ball knots.

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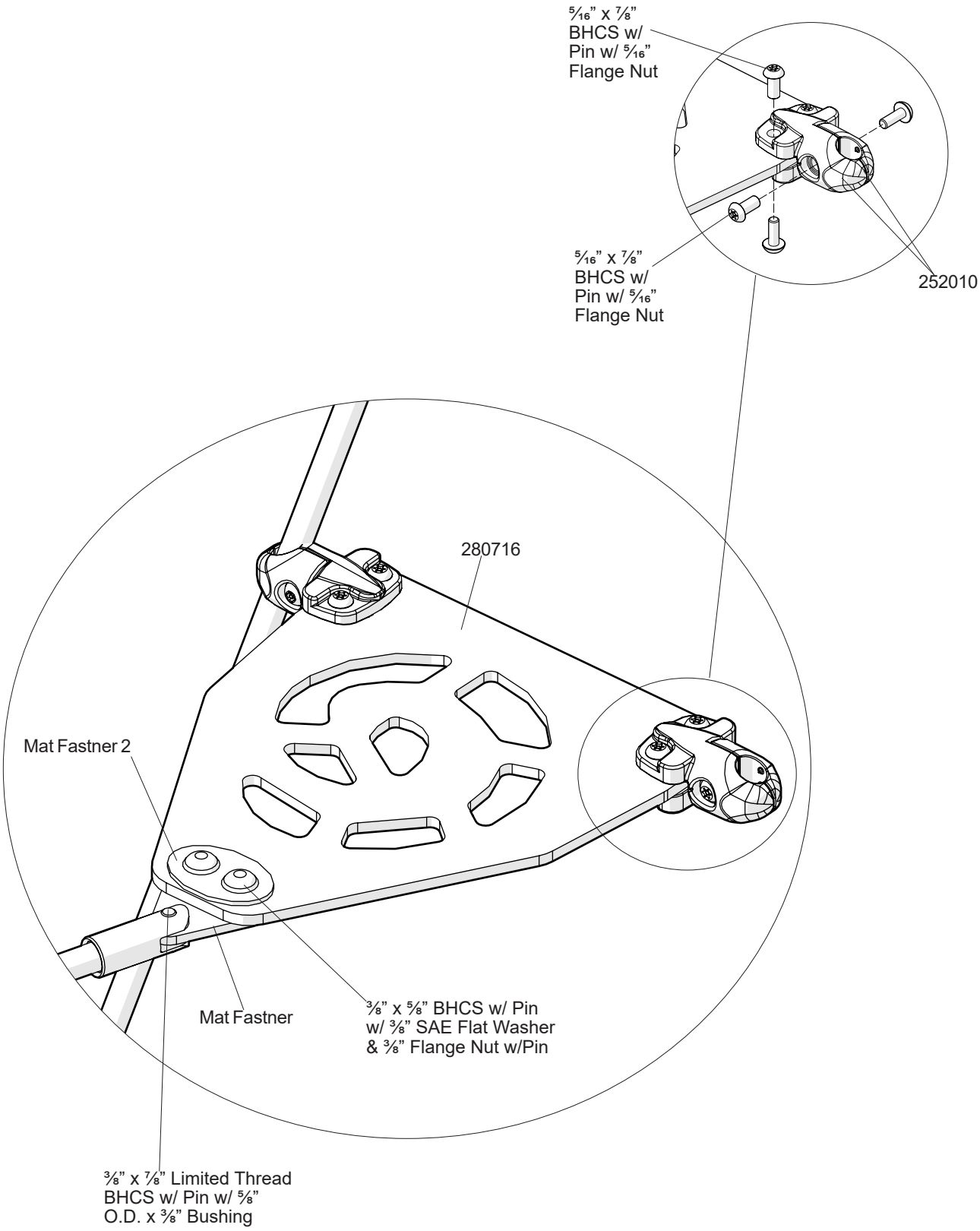

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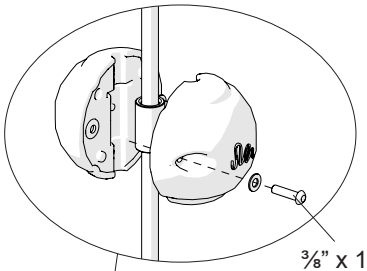
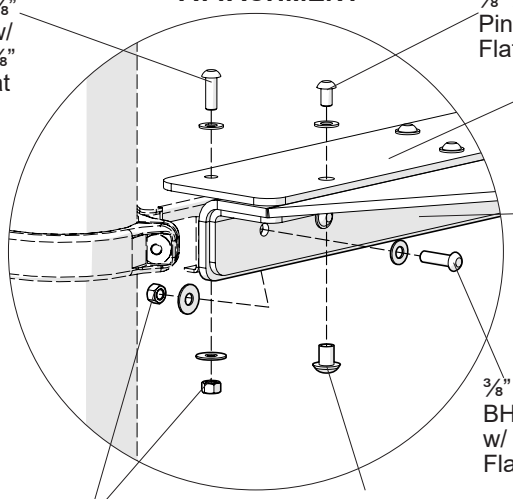
DETAIL
SWIGGLEKNOT ATTACHMENT



⅜" x 1 ½" BHCS w/Pin w/ ⅜" SAE Flat Washer

DETAIL
BELT TO DECK ATTACHMENT



⅜" x 1 ⅛" BHCS w/ Pin w/ ⅜" SAE Flat Washer

⅜" x ⅝" BHCS w/ Pin w/ ⅜" SAE Flat Washer

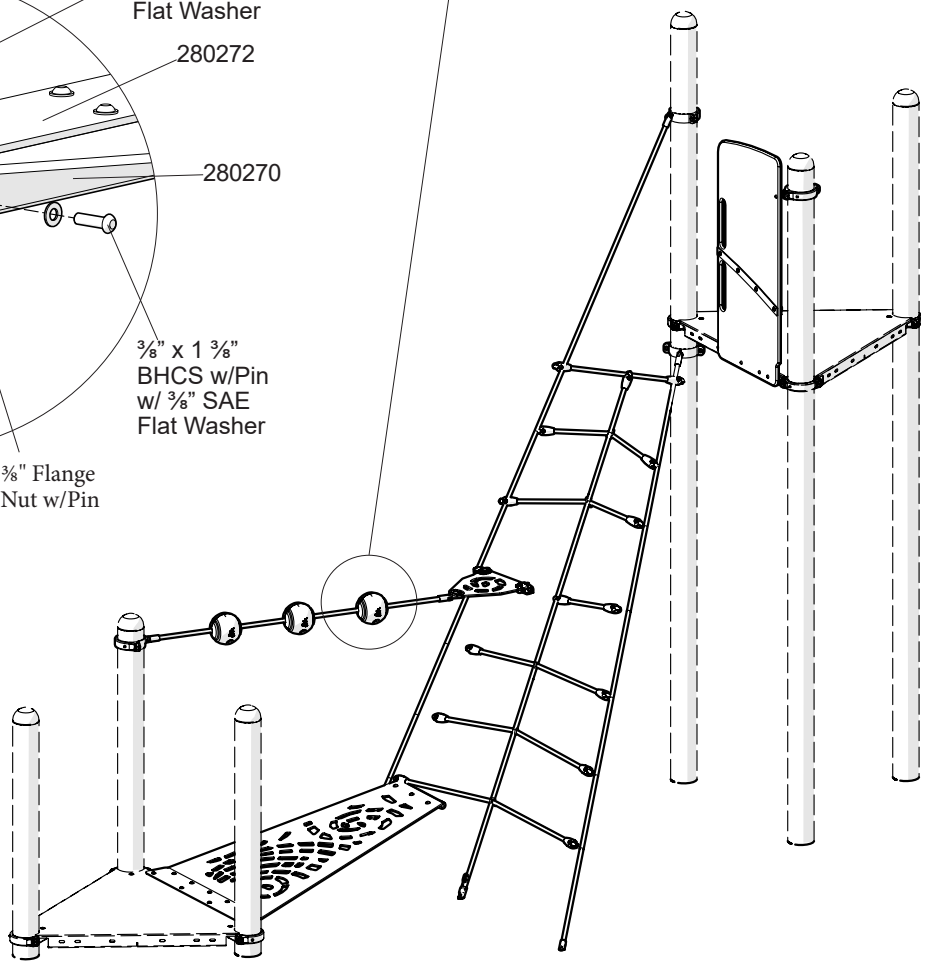
280272

280270

⅜" x 1 ⅜" BHCS w/Pin w/ ⅜" SAE Flat Washer

⅜" Flange Nut w/Pin

⅜" Standard Hex Nut w/ ⅜" Flat Washer



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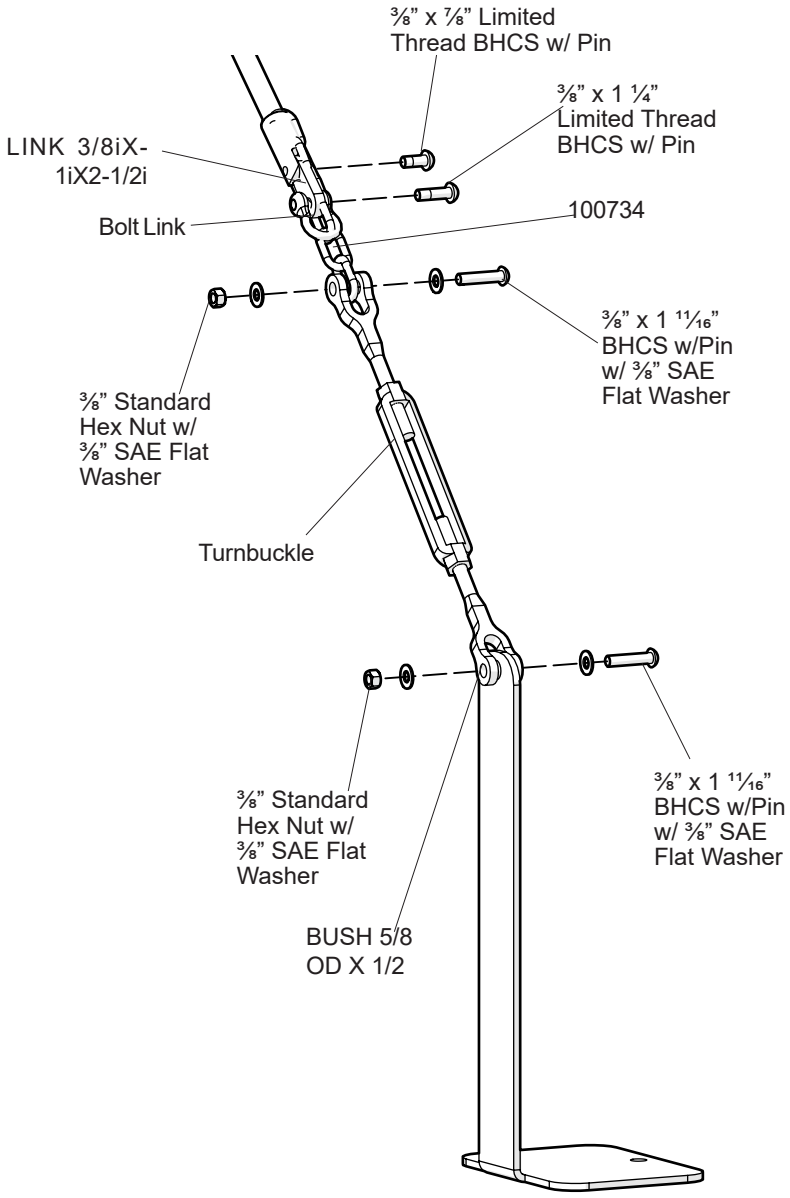

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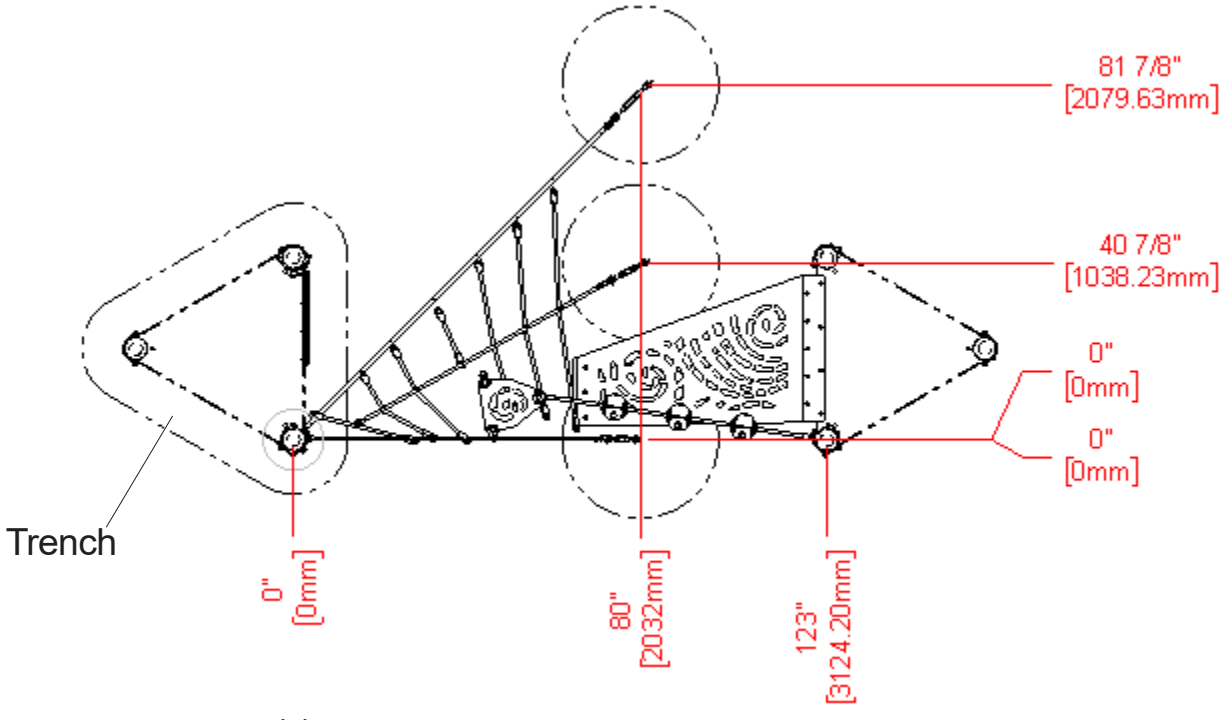

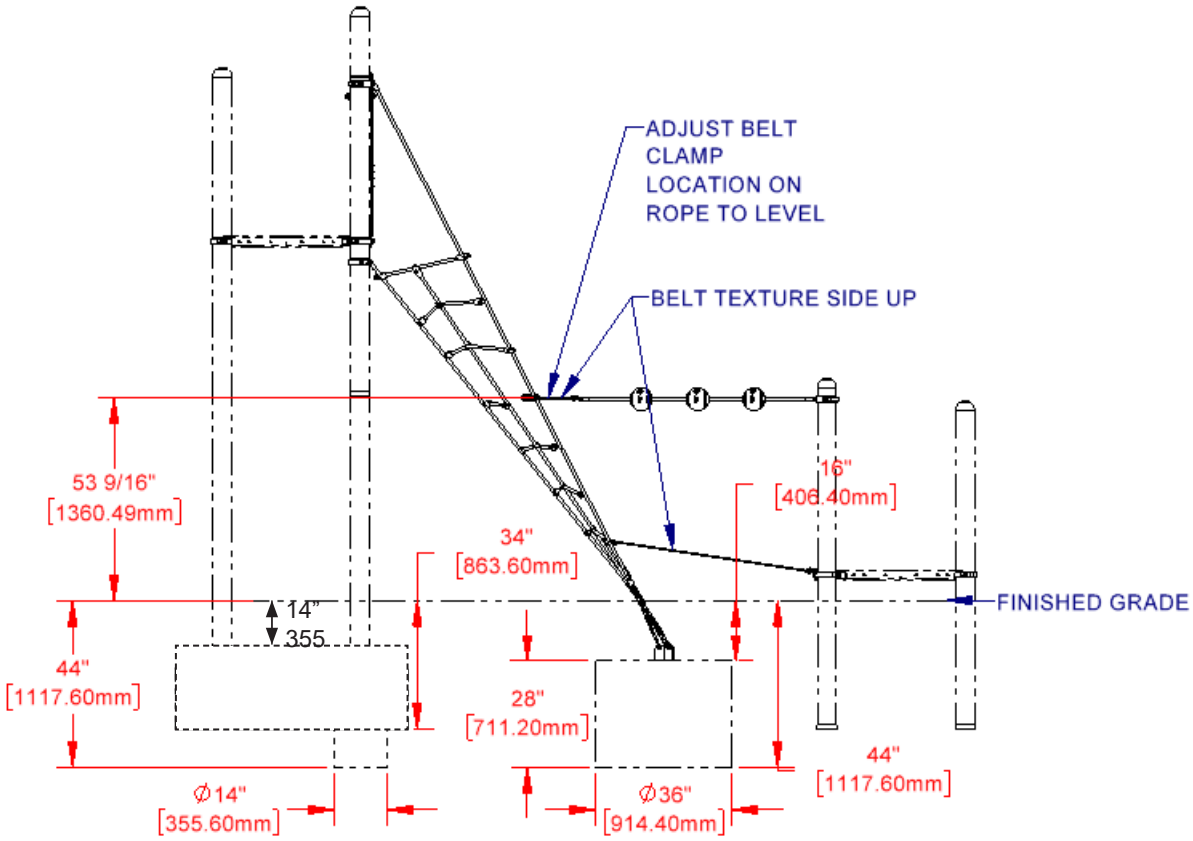

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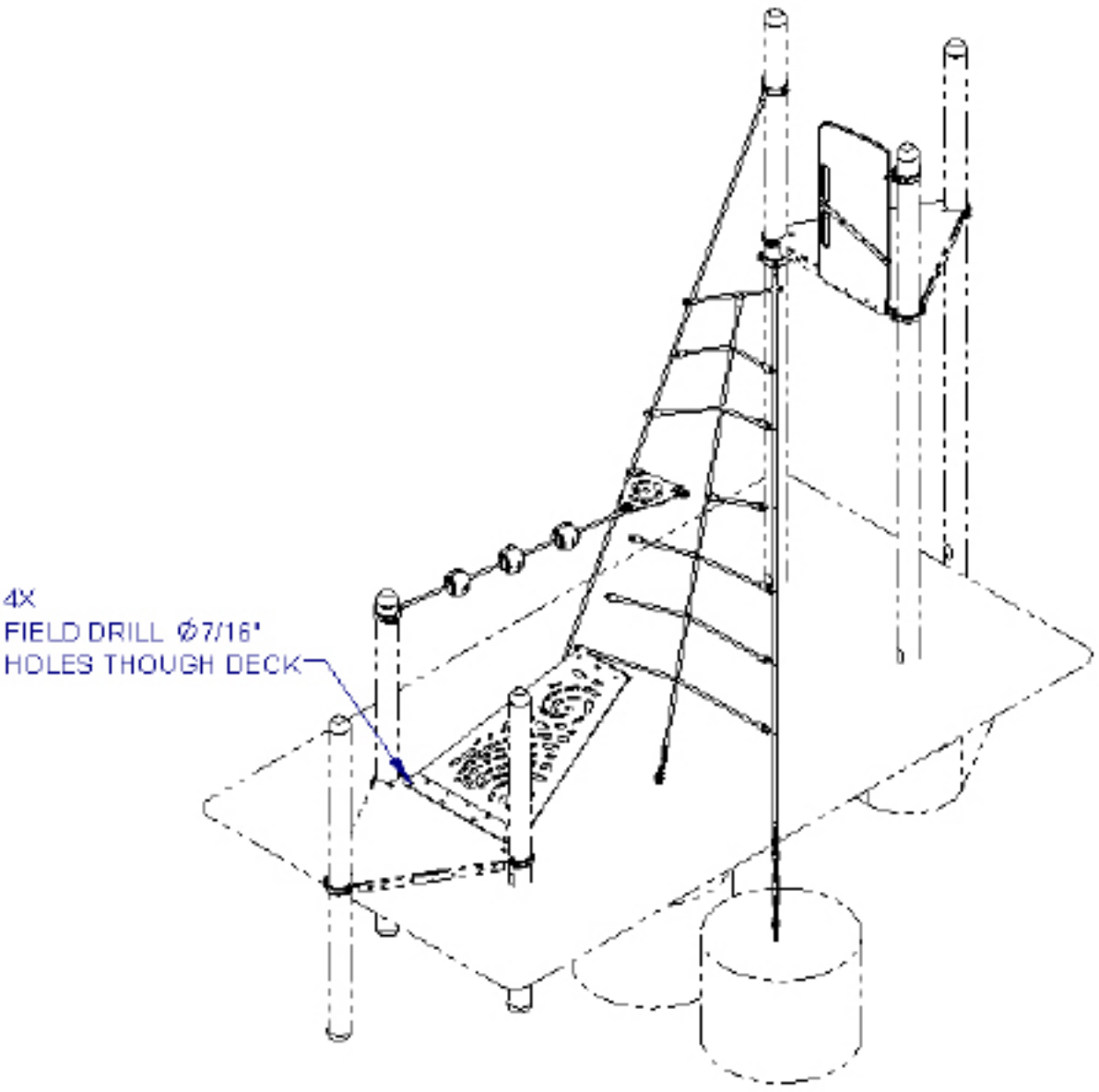

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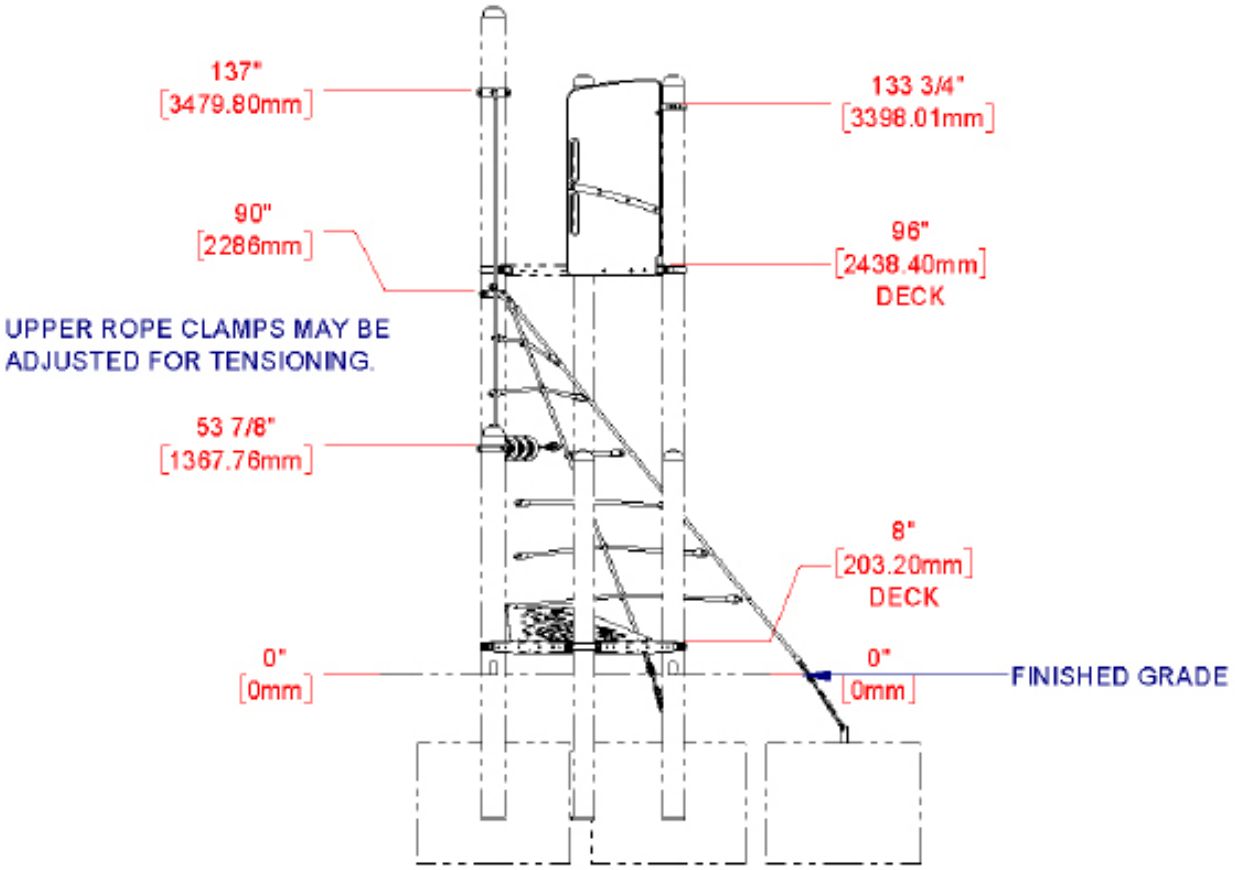

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Parts List

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PART NUMBER	DESCRIPTION	QTY.
283160	CUST 62i 3 KNOTS ROPE	1
280716	CUST TRIANGLE PLATFORM BELT	1
280715	CUST STAR SEEKER BASE BELT	1
280713	CUST 96i STAR SEEKER ROPE	1
280536	CUST 3/4 BARRIER ACCENT STRIPE PNT	2
280535	CUST 3/4 BARRIER PERM	1
280272	CUST BELT BRIDGE 33.5i ATCH PLATE LOWER PNT	1
280270	CUST BELT BRIDGE 33.5i ATCH LOWER ANGLE PNT	1
252010	HELICAL BELT CASTING	4
247871	SINGLE ROPE FOOTER HDG	3
193985	RUBBER MAT FASTENER2	1
193984	RUBBER MAT FASTENER	1
192748	CABLE BALL KNOT HALF	6
175006	FLG NUT 6LP 5/16-18 SST	6
162921	LINK 3/8iX1iX2-1/2i SST	3
161898	PROPRIETARY NET CLMP	3
157002	TURNBUCKLE	3
156962	BUSH 5/8 OD X 1/2 LG SST	3
138915	BOLT LINK SST	3
132626	BHCS HP 5/16 X 7/8i SST	6
127179	BUSH 5/8OD X 3/8 LG SST	7
124460	BHCS 6LP 3/8x3-3/4i SST	1
123224	BHCS 6LP 3/8x1-11/16i SST	6
113729	CLAMP OFFSET 5 RAIL HGR	1
113468	TUBE 7/8OD X 1-11/16 PNT	1
113027	BHCS 6LP 3/8x1-3/8i SST	6
105327	CLMP HALF 5" AL	4
100734	CHAIN 7.5i	3
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	4
100365	WASHER FLAT SAE 3/8i SST	45
100362	WASHER FLAT 3/8i SST	16
100353	FLG NUT 6LP 3/8-16 SST	15
100351	MOD T-NUT 3/8-16 SST	8
100327	HEX NUT STD 3/8-16 SST	19
100292	BHCS 6LP LTHD 3/8X1-1/4i SST W/PATCH (3/8" Thread)	3
100290	BHCS 6LP LTHD 3/8X7/8iSST	7
100198	BHCS 6LP 3/8x1-1/8i SST	6
100196	BHCS 6LP 3/8x7/8i SST	10
100195	BHCS 6LP 3/8x5/8i SST	10
100171	BHCS 6LP 3/8x1-1/2iSSTPAT	9

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

   Direct Bury - With structure square, plumb and level, pour concrete footings. Allow concrete to cure a minimum of 72 hours before users are allowed to play on the structure.

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

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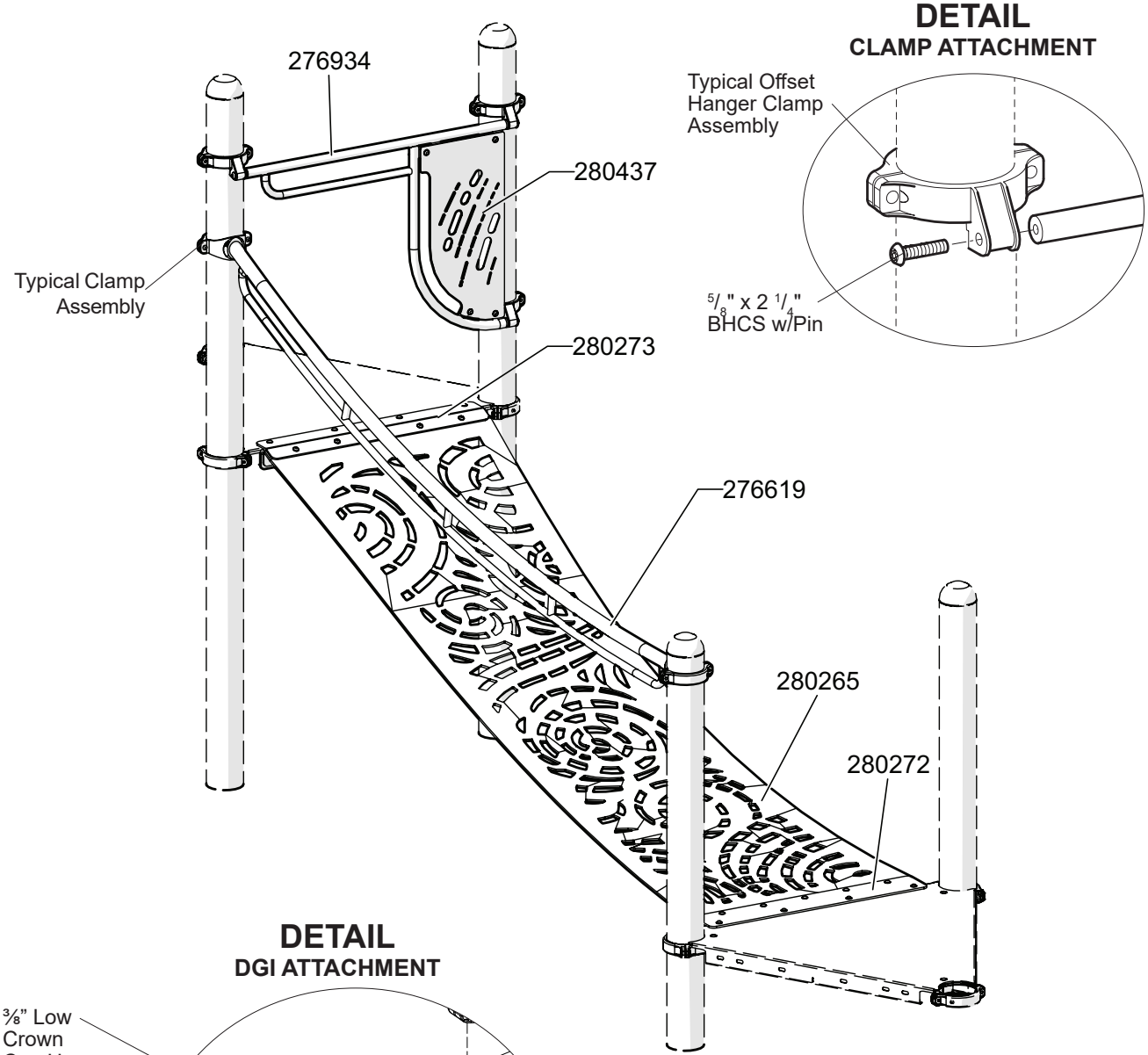
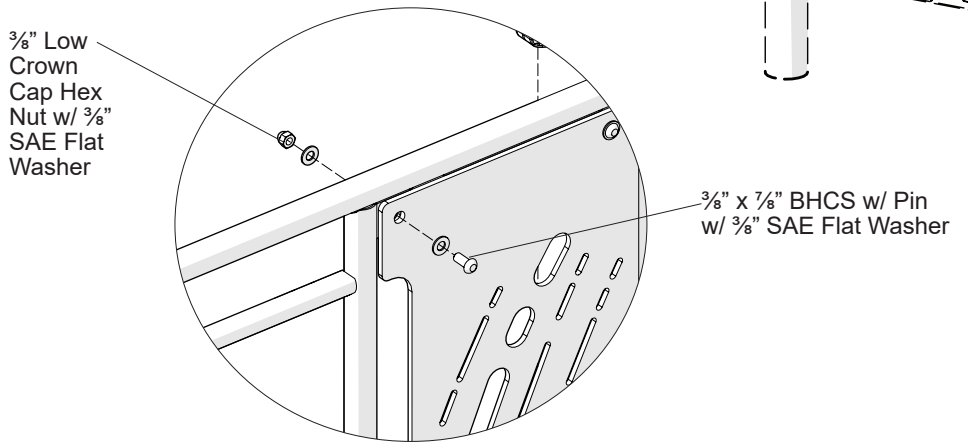
BELT CLIMBER



DETAIL
CLAMP ATTACHMENT

DETAIL
DGI ATTACHMENT



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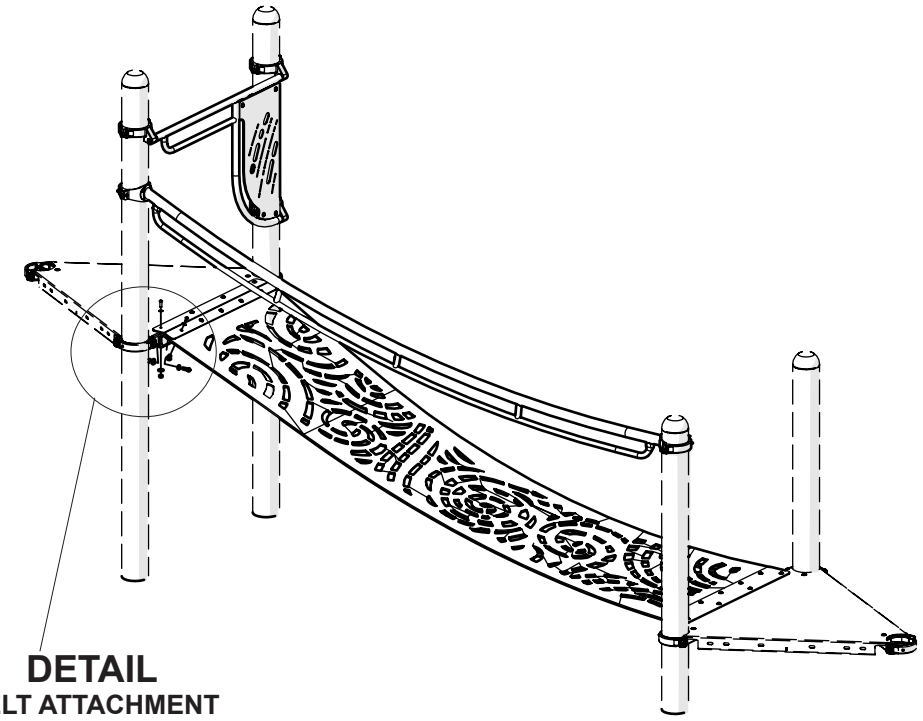
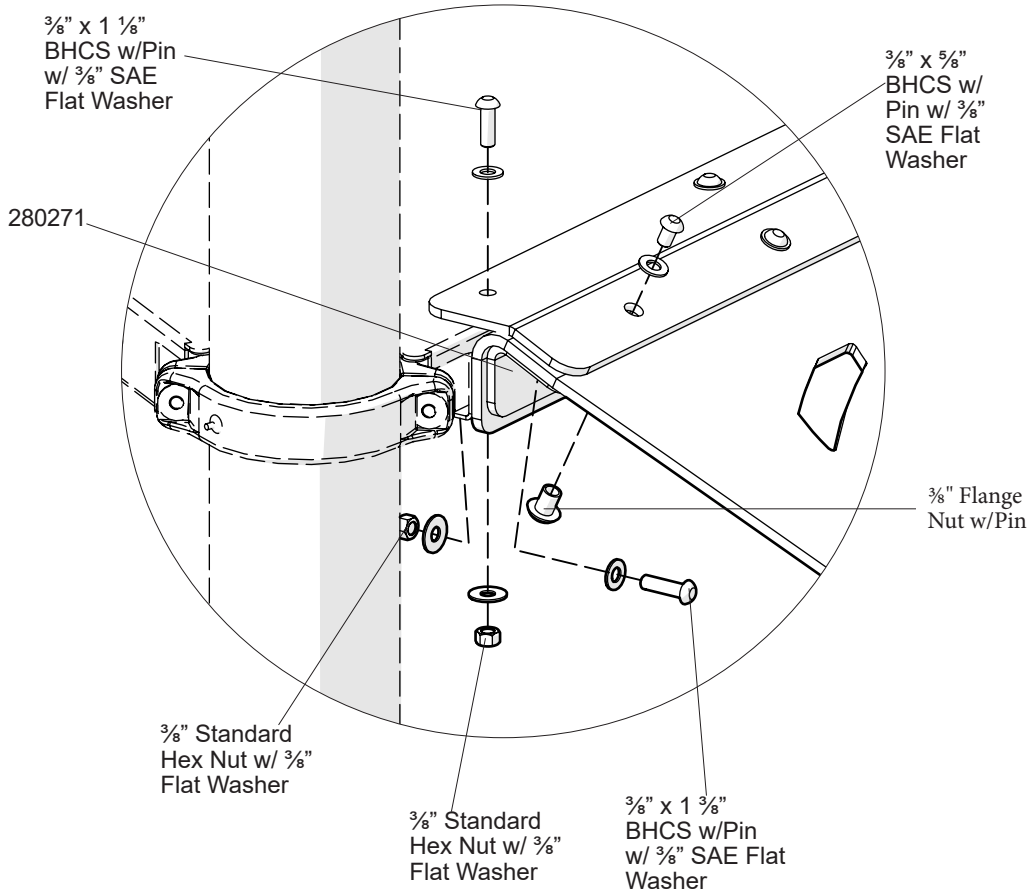


DETAIL
BELT ATTACHMENT



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SAFETY NOTE

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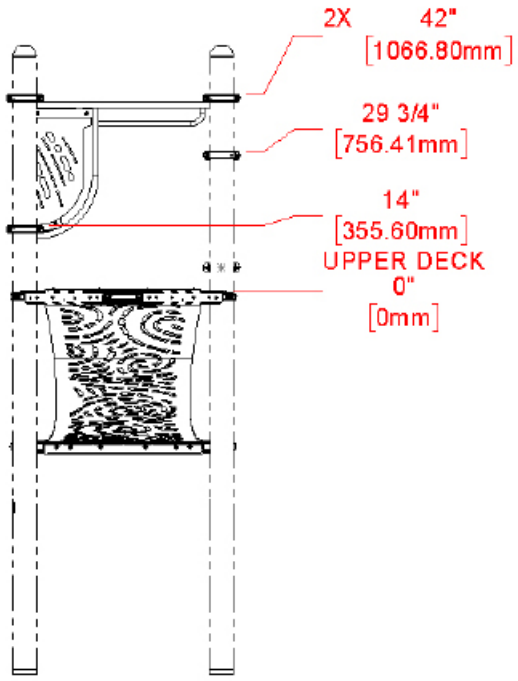

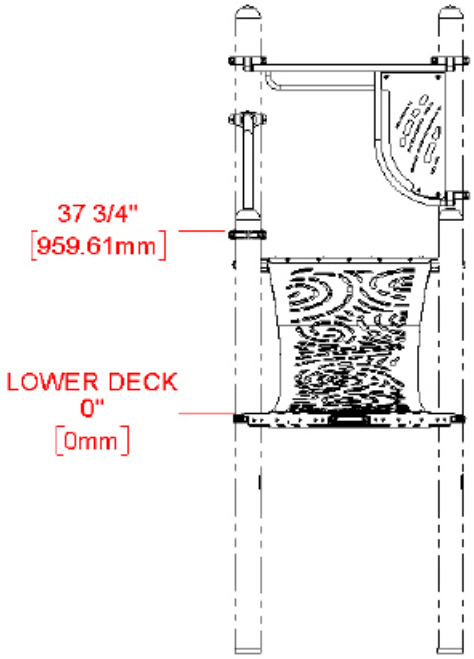

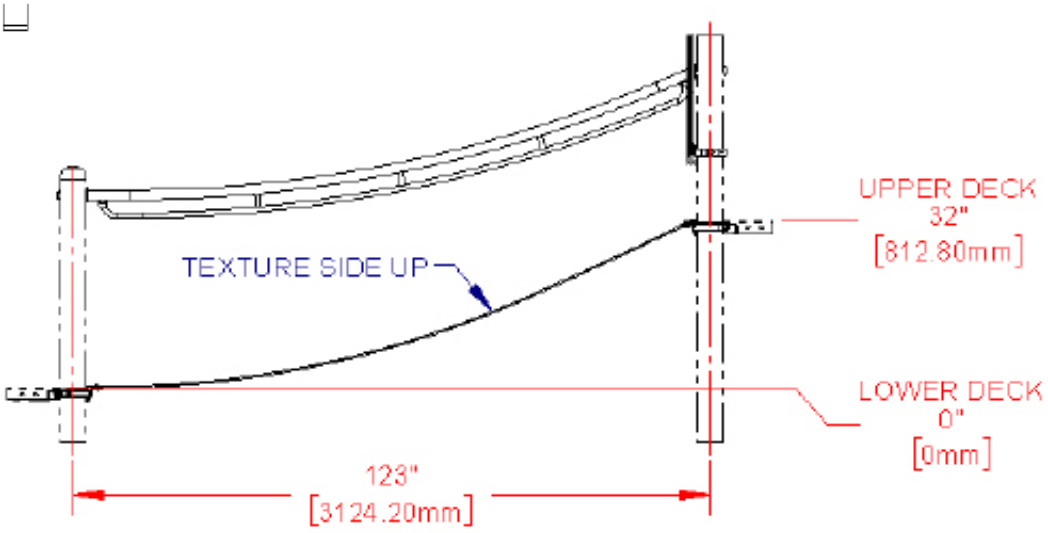

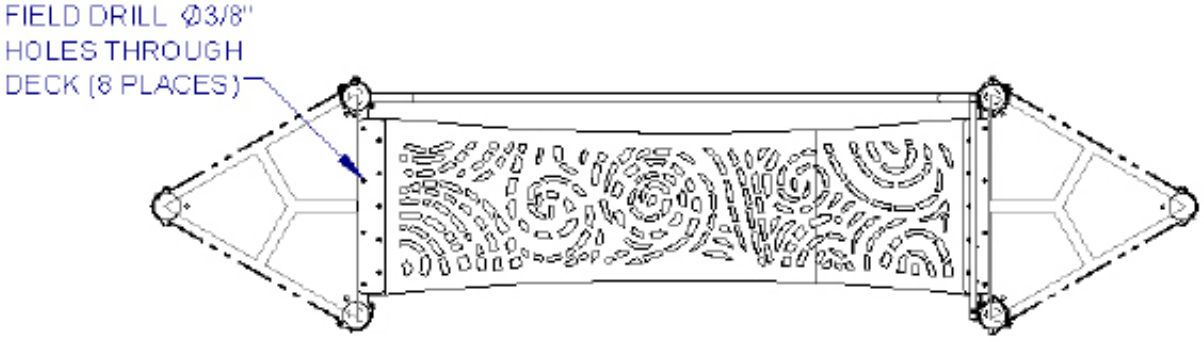

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SAFETY NOTE

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Parts List

PART NUMBER	DESCRIPTION	QTY.
280437	CUST BELT CLIMBER HHOLD DGI	1
280273	CUST BELT BRIDGE 33.5i ATCH PLATE UPPER PNT	1
280272	CUST BELT BRIDGE 33.5i ATCH PLATE LOWER PNT	1
280271	CUST BELT BRIDGE 33.5i ATCH UPPER ANGLE PNT	1
280270	CUST BELT BRIDGE 33.5i ATCH LOWER ANGLE PNT	1
280265	CUST BRIDGE 34i WIDE 123i OC 32i DK BELT	1
276934	CUST GRAB RAIL SIT DOWN BAR PNT	1
276619	CUST HRAIL 123i OC 24i RISE PNT	1
113729	CLAMP OFFSET 5 RAIL HGR	3
113027	BHCS 6LP 3/8x1-3/8i SST	12
105327	CLMP HALF 5 AL	5
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	5
100365	WASHER FLAT SAE 3/8i SST	38
100362	WASHER FLAT 3/8i SST	20
100353	FLG NUT 6LP 3/8-16 SST	10
100351	MOD T-NUT 3/8-16 SST	10
100349	3/8 HEX NUT L/C CAP	4
100327	HEX NUT STD 3/8-16 SST	20
100203	5/8 X 2 1/4 BHCS 6LP SST W/PATCH	3
100198	BHCS 6LP 3/8x1-1/8i SST	18
100196	BHCS 6LP 3/8x7/8i SST	4
100195	BHCS 6LP 3/8x5/8i SST	10

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.
2) Mount belt and attach bent bracket to side face of uppper deck.
3) Mount belt and attach bent bracket to side face of lower deck.
4) Mount attach plates to top side of belt and bolt to bent brackets.
5) Field drill holes in deck top face, and then fasten in place.
6) Install protective surfacing before users are allowed to play on the structure.

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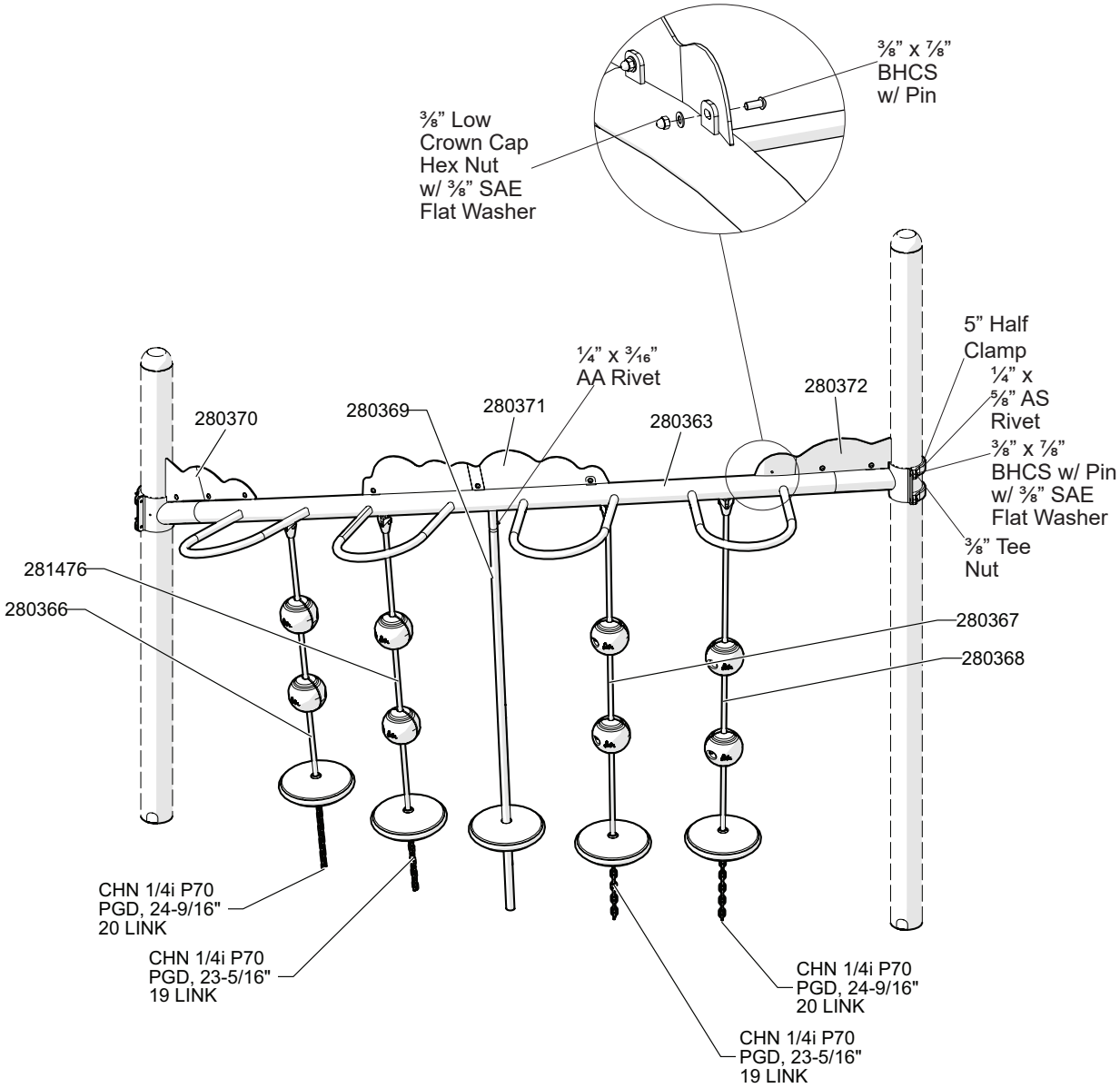
ARCHED OVERHEAD LADDER

INSTALL STEPS:

1. Mount pods to the support post and place in desired location.
2. Attach main beam to posts with support telescoped underneath.
3. Attach ropes to the main beam and to the footer chains.
4. Mount digiuse panels to top of main beam.

DETAIL
DGI ATTACHMENT



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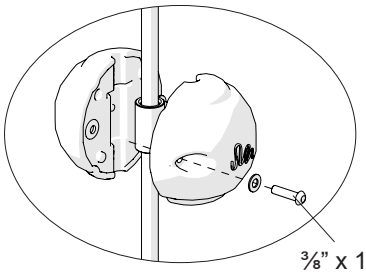
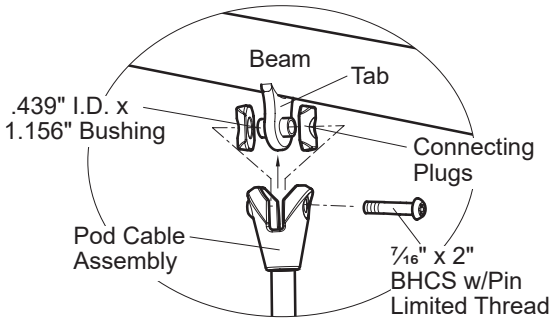
DETAIL
SWIGGLEKNOT ATTACHMENT

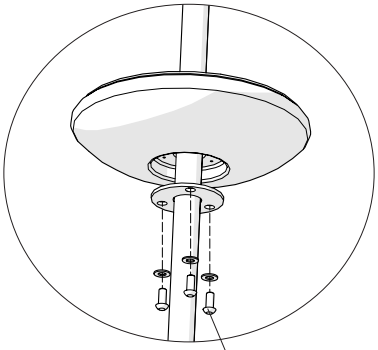


⅜" x 1 ½" BHCS w/Pin w/ ⅜" SAE Flat Washer

DETAIL
CABLE ATTACHMENT

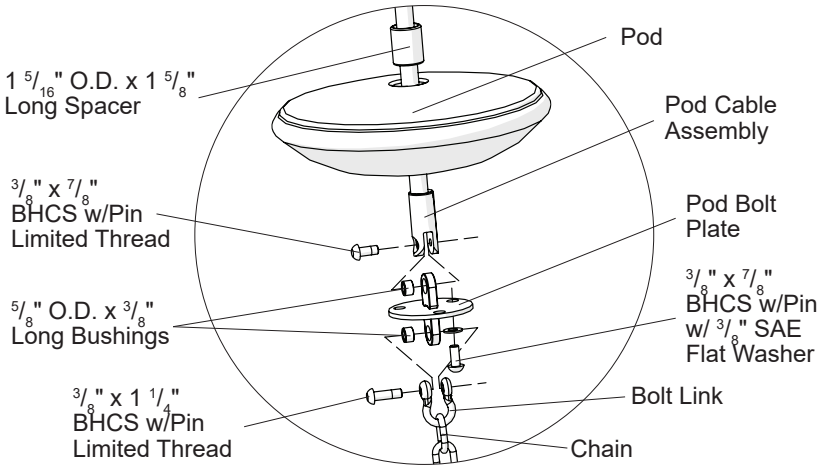


DETAIL
POD ATTACHMENT



⅜" x ⅞" BHCS w/ Pin w/ ⅜" SAE Flat Washer

DETAIL
POD ATTACHMENT



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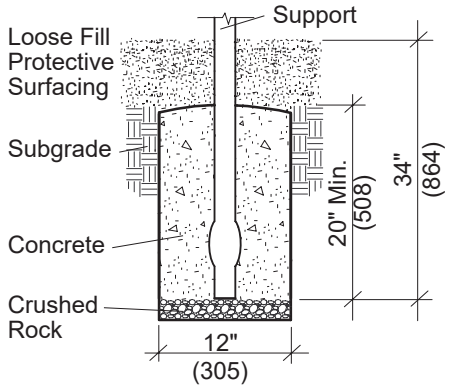
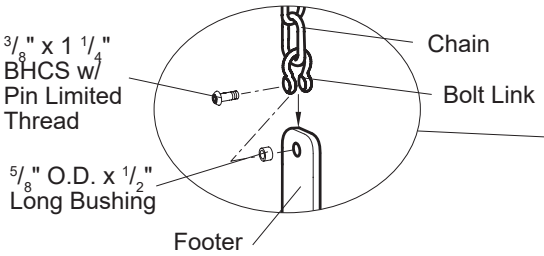
DETAIL
DIRECT BURY



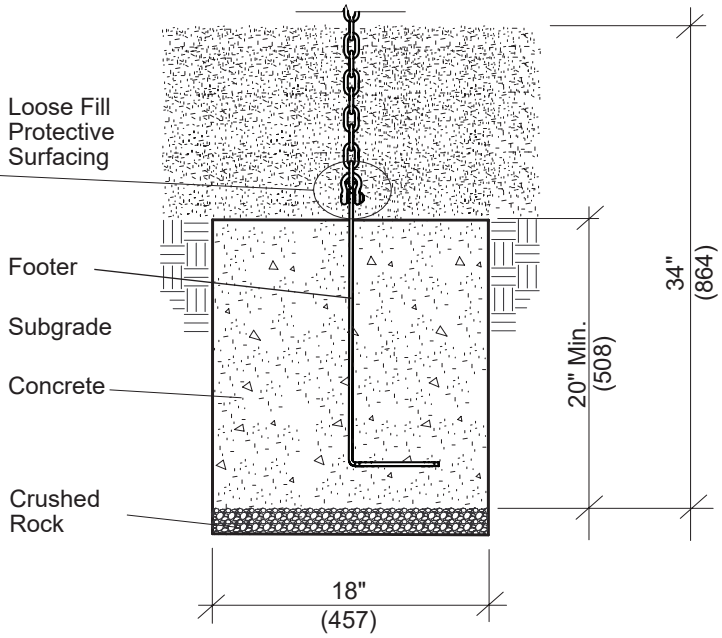
DETAIL
PLATE FOOTER ATTACHMENT



IMPORTANT! Tension ropes/nets before pouring concrete footings.

NOTE: The hole depth for the footer needs to be deep enough, so the footer plate does not contact the bottom of the hole. The weight of the concrete will force the footer plate down, further tightening the cable.

DETAIL
DIRECT BURY



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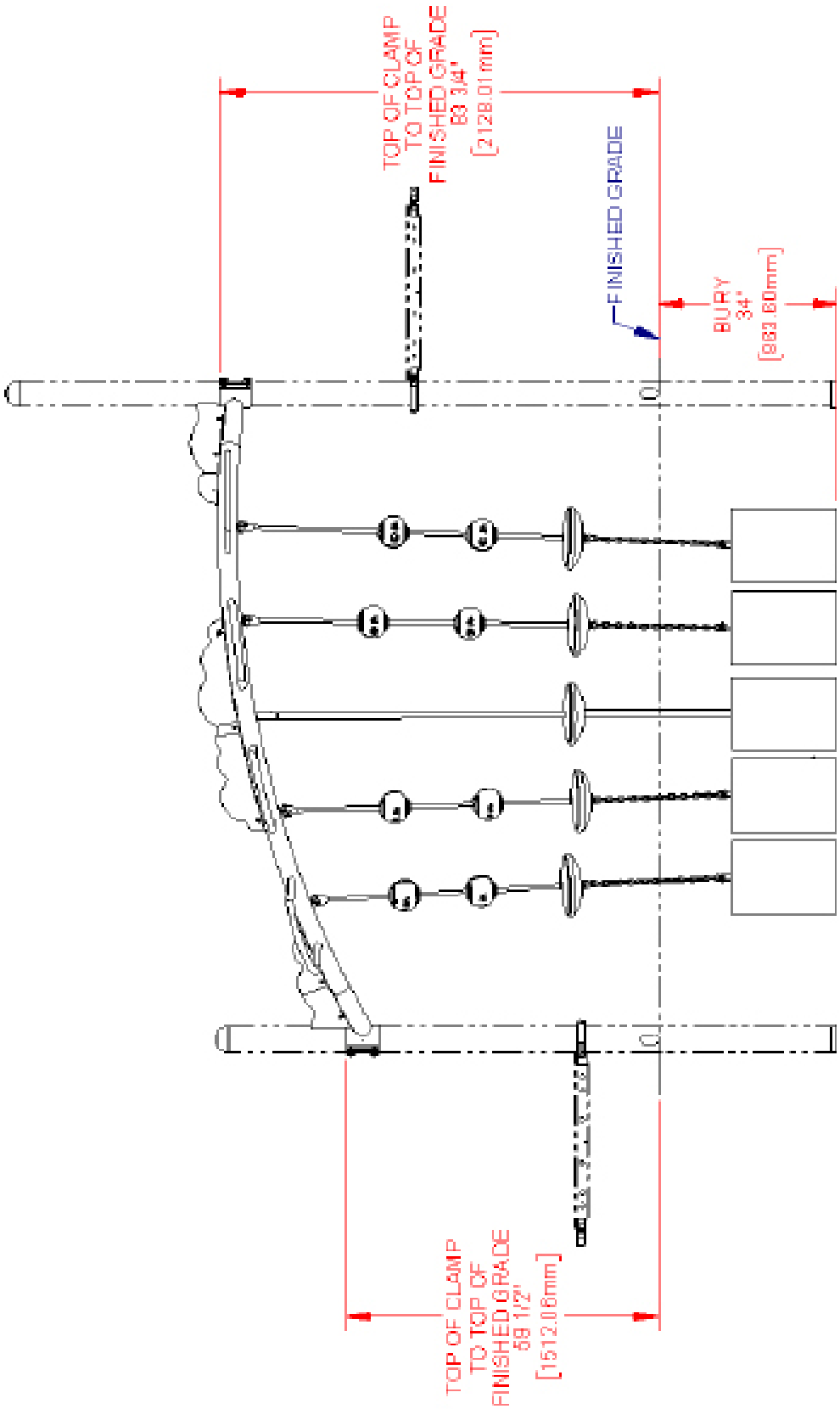

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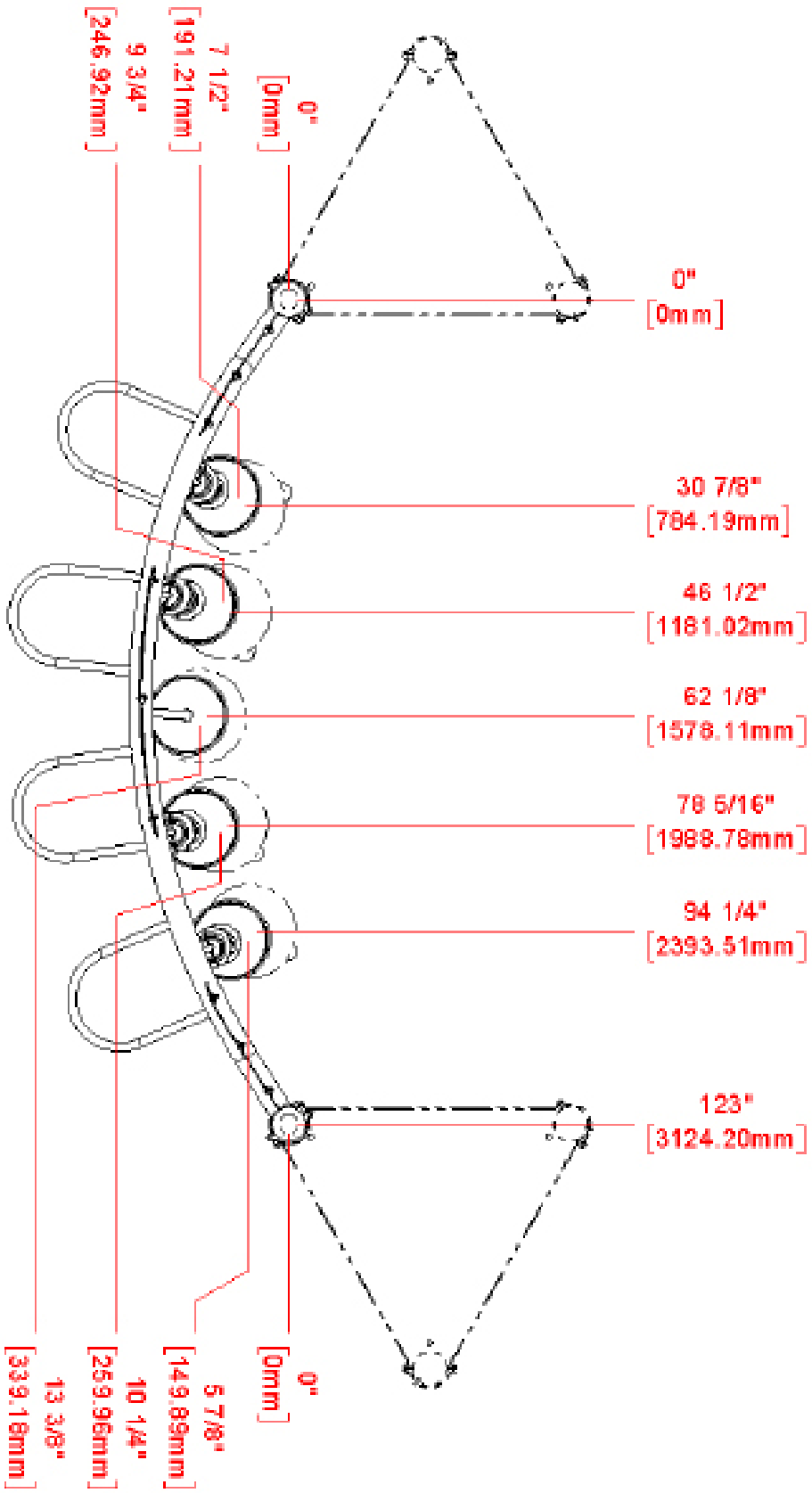

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Parts List

PART NUMBER	DESCRIPTION	QTY.
281476	CUST SWIGGLEKNOT 5 ROPE	1
280372	CUST OVHD LADR 3 DGI	1
280371	CUST OVHD LADR 2 DGI	1
280370	CUST OVHD LADR 1 DGI	1
280369	CUST 123iOC ARCHED OVHD LADR SPRT 2 WELDT PNT	1
280368	CUST SWIGGLEKNOT 4 ROPE	1
280367	CUST SWIGGLEKNOT 3 ROPE	1
280366	CUST SWIGGLEKNOT 2 ROPE	1
280363	CUST 123iOC ARCHED OVHD LADR BM WELDT PNT	1
247871	SINGLE ROPE FOOTER HDG	4
200438	CHN 1/4i P70 PGD, 23-5/16" 19 LINK	2
196890	CHN 1/4i P70 PGD, 24-9/16" 20 LINK	2
192748	CABLE BALL KNOT HALF	16
178586	SWIGGLE STIX SPACER TB	4
177932	POD BOLT PLATE	4
162729	CONN PLUG HALF ABS	8
157704	7/16 X 2 6LP BHCS LTHD	4
157224	BSHG .439i ID X 1.156 SST	4
156962	BUSH 5/8 OD X 1/2 LG SST	4
154460	EVOS CLIMB ACROSS POD	5
138915	BOLT LINK SST	8
127179	BUSH 5/8OD X 3/8 LG SST	8
105327	CLMP HALF 5 AL	4
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	4
100609	RVT 1/4X3/16 AA (GRIP=.141/.234)	1
100365	WASHER FLAT SAE 3/8i SST	57
100351	MOD T-NUT 3/8-16 SST	8
100349	3/8 HEX NUT L/C CAP	9
100292	BHCS 6LP LTHD 3/8X1-1/4i SST	8
100290	BHCS 6LP LTHD 3/8X7/8iSST	4
100196	BHCS 6LP 3/8x7/8i SST	32
100171	BHCS 6LP 3/8x1-1/2iSSTPAT	16

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

   Direct Bury - With structure square, plumb and level, pour concrete footings. Allow concrete to cure a minimum of 72 hours before users are allowed to play on the structure.

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

Specifications

Arched Overhead Ladder: Weldment comprised of Galvanized RS20 steel tube 1.315” OD, 0.25” sheet HRPO steel, Galvanized RS20 steel 3.5” OD

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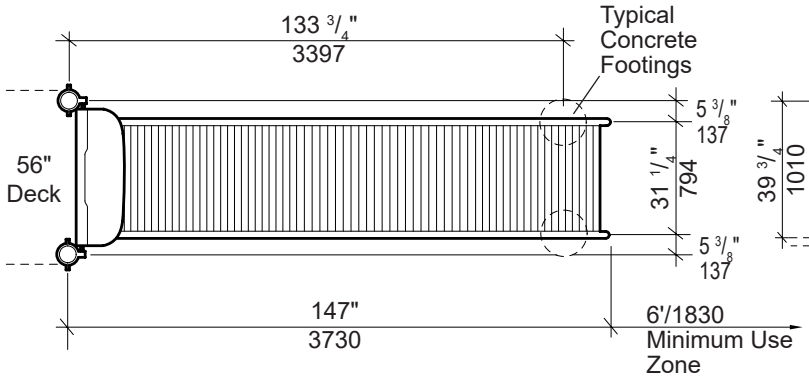
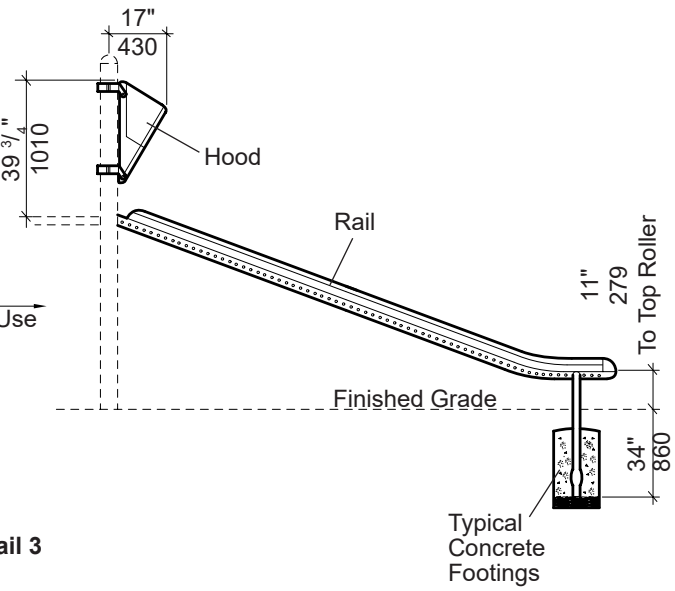
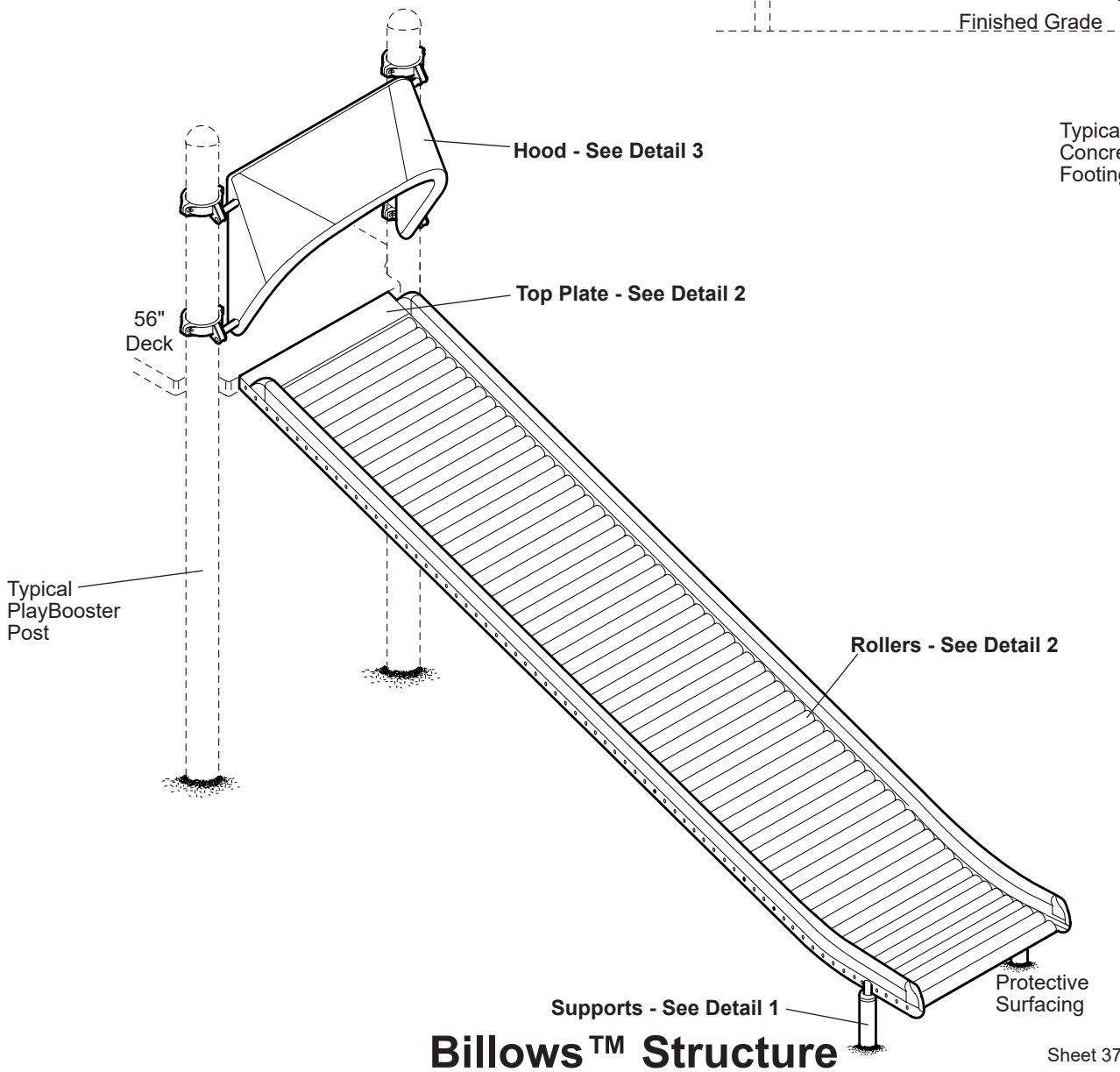
ROLLERSLIDE

PLAN VIEW/FOOTING LAYOUT



ELEVATION





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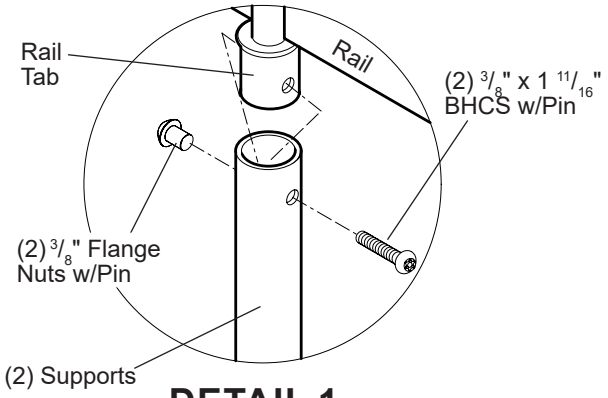
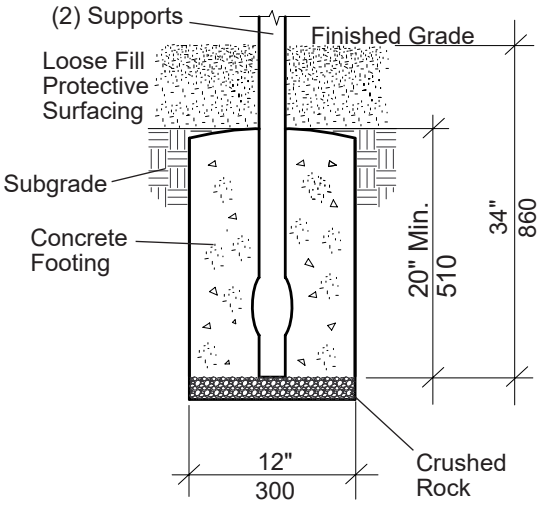
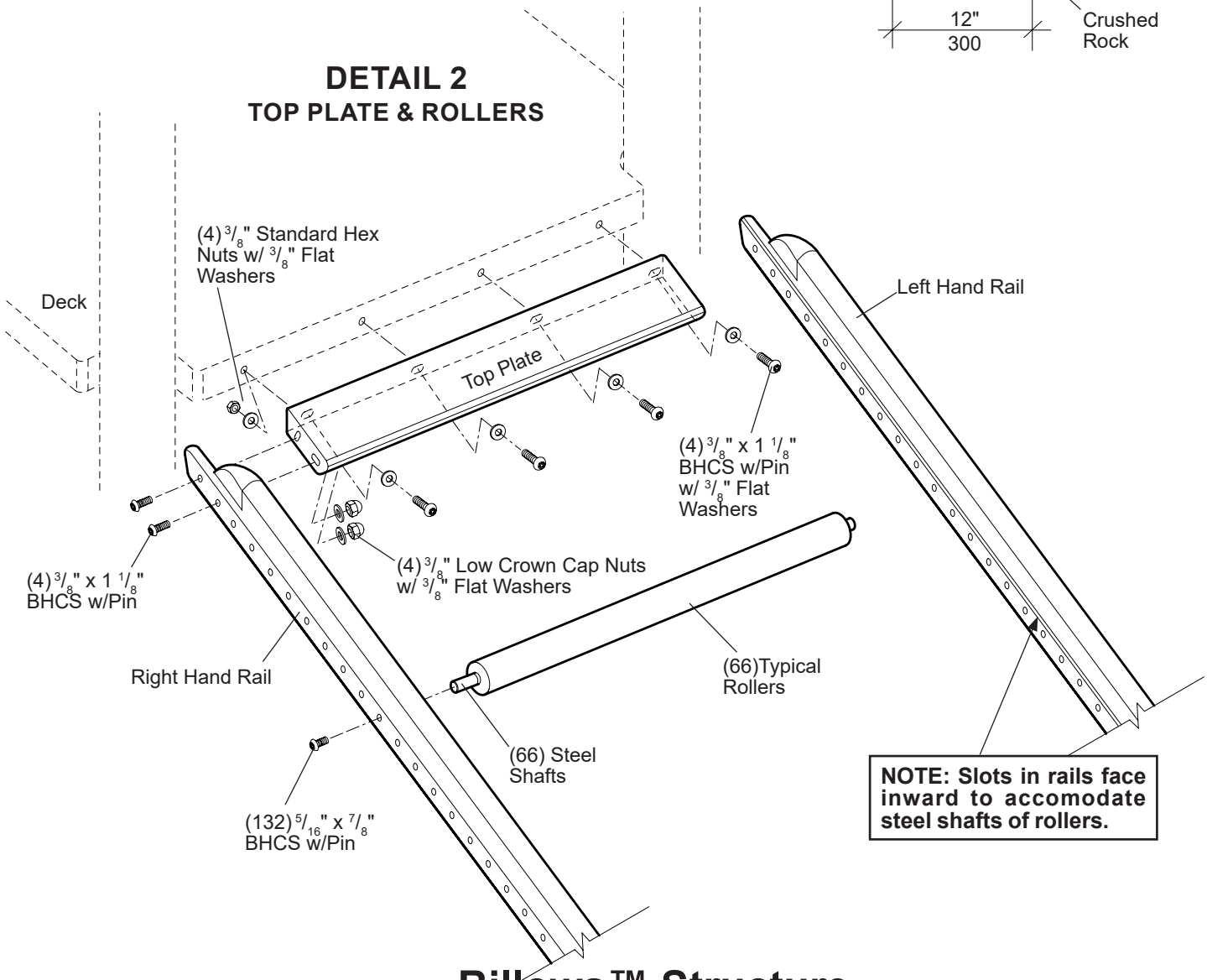


DETAIL 1
SUPPORTS

DETAIL
DIRECT BURY



DETAIL 2
TOP PLATE & ROLLERS



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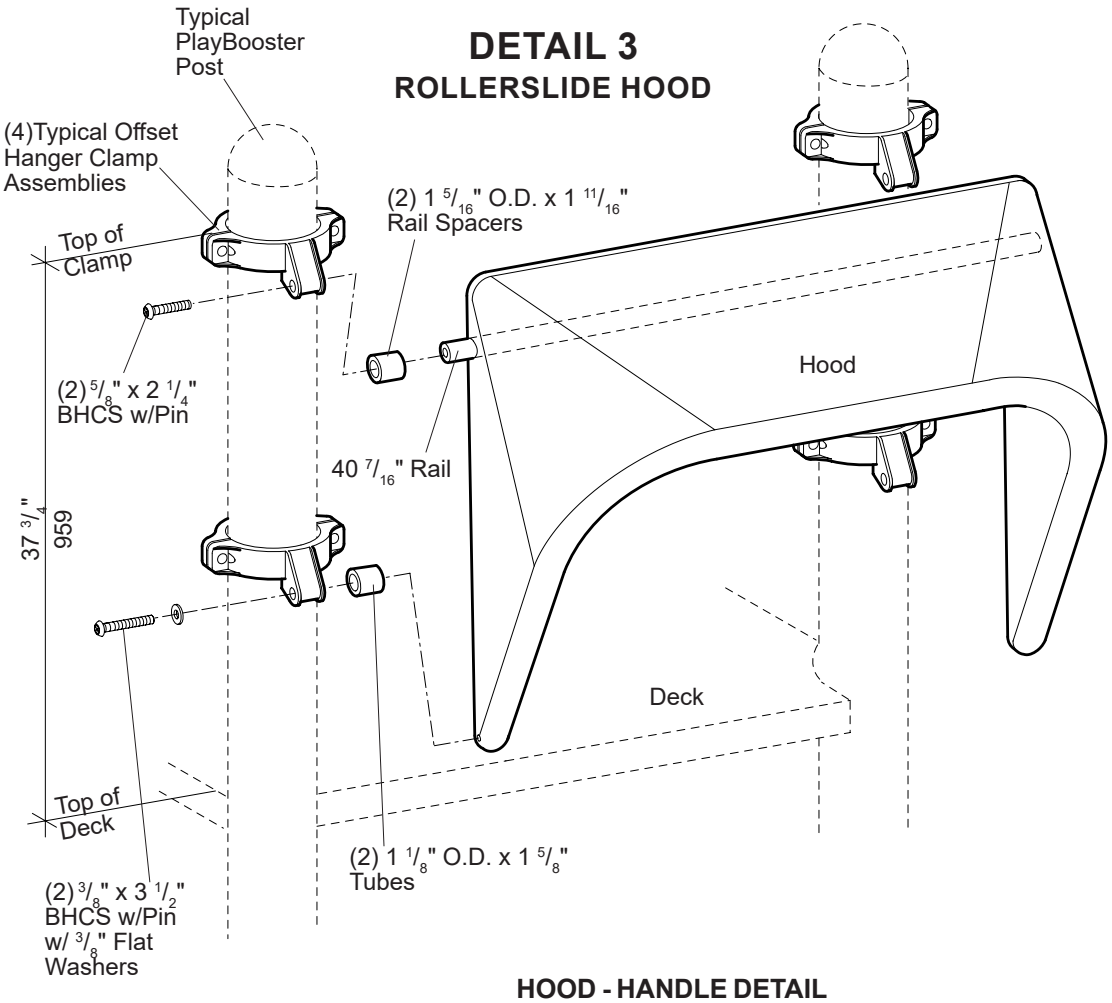
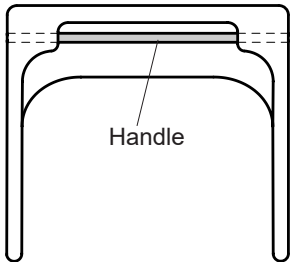
DETAIL 3
ROLLERSLIDE HOOD



HOOD - HANDLE DETAIL



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Parts List

Part#	Description	Qty.
103977	Support, (DB), Specify Color	2
103089	Support, (SM), Specify Color	2
104278	30 3/8" Roller Shaft	66
115347	Roller Assembly, Specify Color	66
135145	Top Plate, Specify Color	1
126957	Double Slide Hood, Specify Color	1
100583	40 7/16" Rail, Specify Color	1
105288	1 1/8" O.D. x 1 5/8" Tube, Specify Color	2
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
167133	Rail 56" Rollerslide (LH), Specify Color	1
167134	Rail 56" Rollerslide (RH), Specify Color	1
132443	Rail Spacer, Specify Color	2
Double Slide 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
Rollerslide 56" Deck Hardware Package		1
123224	3/8" x 1 11/16" BHCS w/Pin, SST	2
132626	5/16" x 7/8" BHCS w/Pin, SST	132
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100327	3/8" Standard Hex Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	2
100362	3/8" Flat Washer, SST	12
100349	3/8" Low Crown Cap Nut, SST	4

DB = Direct Bury

(LH) = Left Hand
(RH) = Right Hand

Specifications

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

Rollers: Fabricated from 1.900" O.D. x 16 GA (.060") galvanized steel tubing. Finish: TenderTuff™, color specified.

Roller Shafts: Fabricated from $^{1}/_{2}$" diameter CRS zinc-plated with yellow chromate finish.

Support Leg: Fabricated from 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing. Finish: ProShield®, color specified.

Rails: Extruded from 6005-T1 aluminum. Finish: ProShield, color specified.

Top Plate: Formed from 10 GA (.135") 304-2B SST. Finish: TenderTuff, color specified.

Rail: 1 $^{1}/_{8}$" O.D. 6005-T5 aluminum extrusion with $^{5}/_{16}$" walls. Finish: ProShield, color specified.

Tube: 1 $^{1}/_{8}$" O.D. x 1 $^{5}/_{8}$" long aluminum tube. Finish: ProShield, color specified.

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

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

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

Installation Time: Approx. 5 $^{1}/_{2}$ man hours
Concrete Req.: Approx. 2.6 cu. ft.
Exit Req.: 6' (1,83 m) minimum use zone at exit
Weight: 522 lbs.
Fall Height: 56" (1,42 m)

Installation Instructions

1) **(Direct Bury)** Dig footing holes spaced as shown.

2) Attach the supports to bottom of rails as shown in Detail 1, using $^{3}/_{8}$" x 1 $^{11}/_{16}$" BHCS w/Pin with $^{3}/_{8}$" flange nuts w/Pin. **NOTE:** *Insert flange nuts w/Pin through side facing deck.*

3) Attach top plate to deck, as shown in Detail 2, using $^{3}/_{8}$" x 1 $^{1}/_{8}$" BHCS w/Pin with $^{3}/_{8}$" flat washers and $^{3}/_{8}$" standard hex nuts with $^{3}/_{8}$" flat washers.

4) Locate left and right rollerslide rails and attach to top plate using $^{3}/_{8}$" x 1 $^{1}/_{8}$" BHCS w/Pin and $^{3}/_{8}$" low crown cap nuts with $^{3}/_{8}$" flat washers, as shown in Detail 2,

5) Insert the 30 $^{3}/_{8}$" steel roller shafts into the rollers. Starting at top, next to the top plate, attach all roller assemblies to rails, as shown in Detail 2, using $^{5}/_{16}$" x $^{7}/_{8}$" BHCS w/Pin.

6) 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 to offset hanger clamp assemblies using $^{3}/_{8}$" x 3 $^{1}/_{2}$" BHCS w/Pin with $^{3}/_{8}$" flat washers through clamp and spacer tubes and into threaded inserts in hood. Refer to Detail 3.

7) **(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.

8) Install $^{1}/_{4}$" x $^{5}/_{8}$" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.

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

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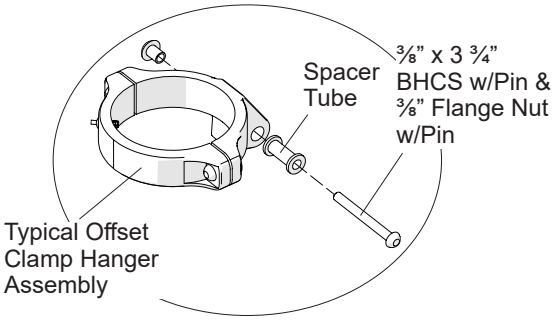
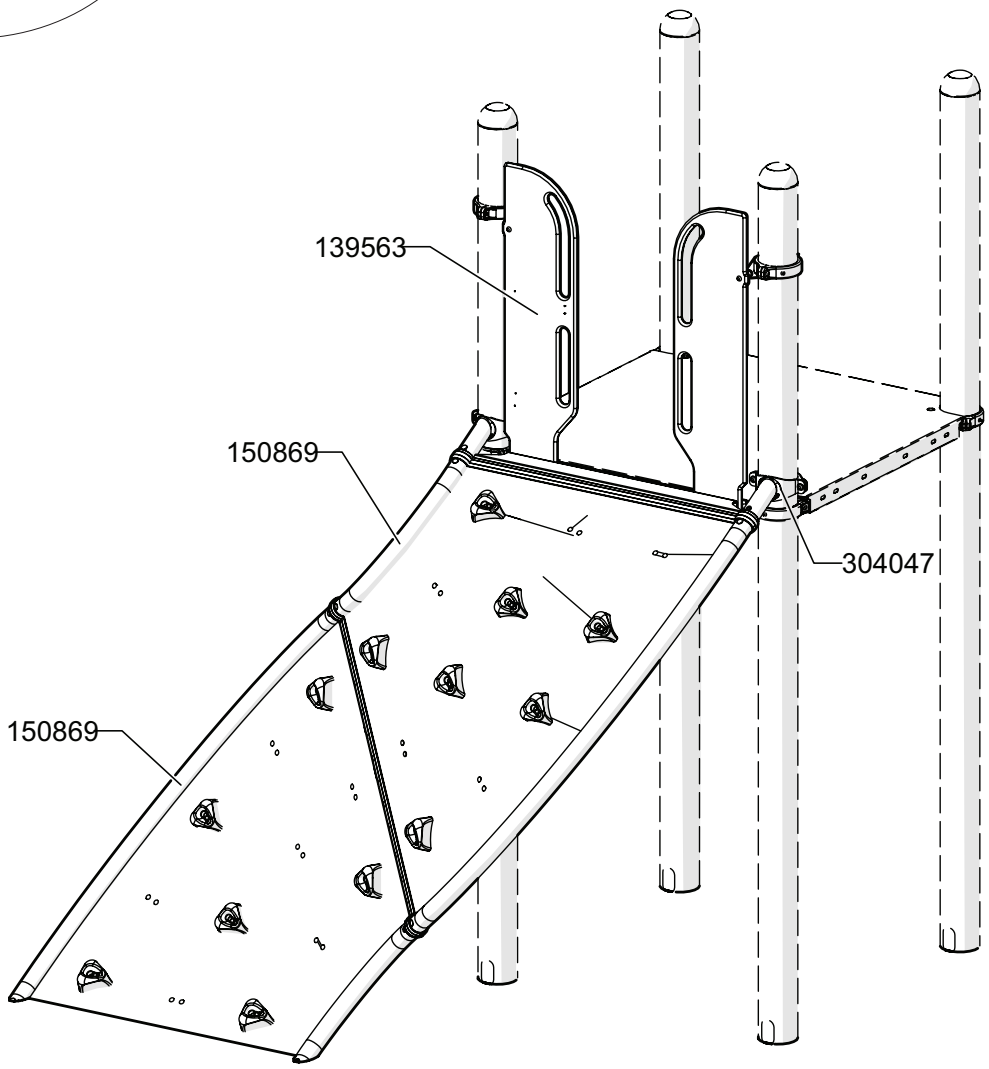
SAFETY NOTE

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*.)

MOBIUS CLIMBER

DETAIL
CLAMP ATTACHMENT





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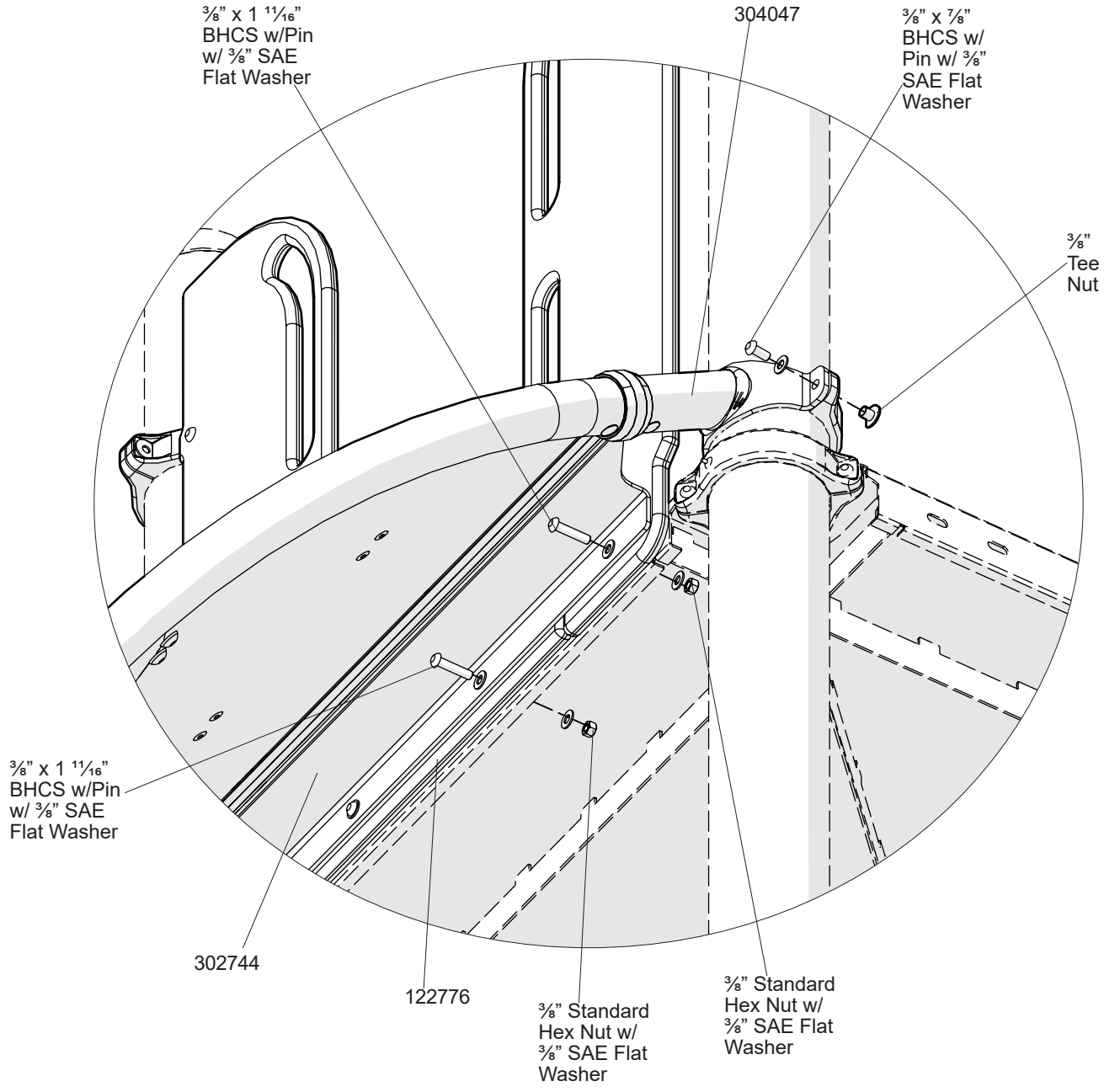

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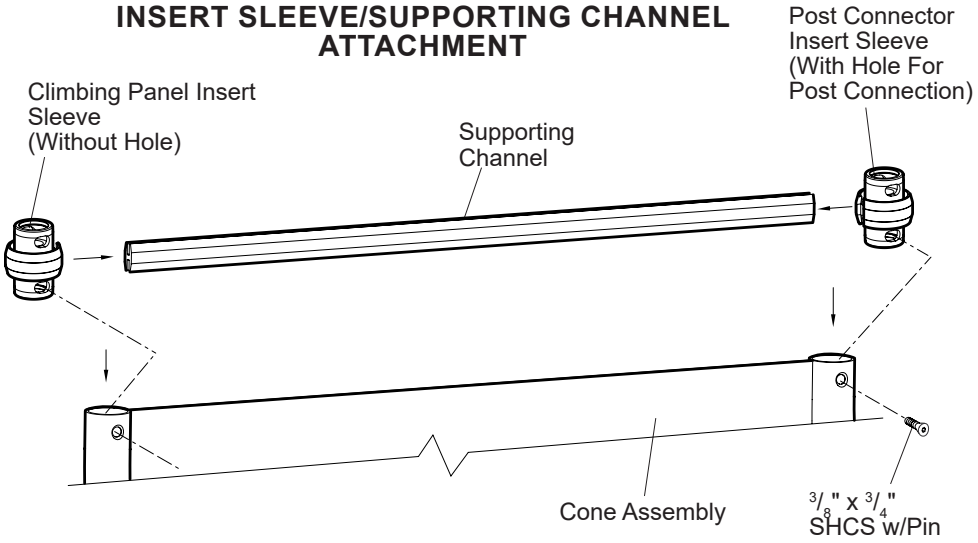
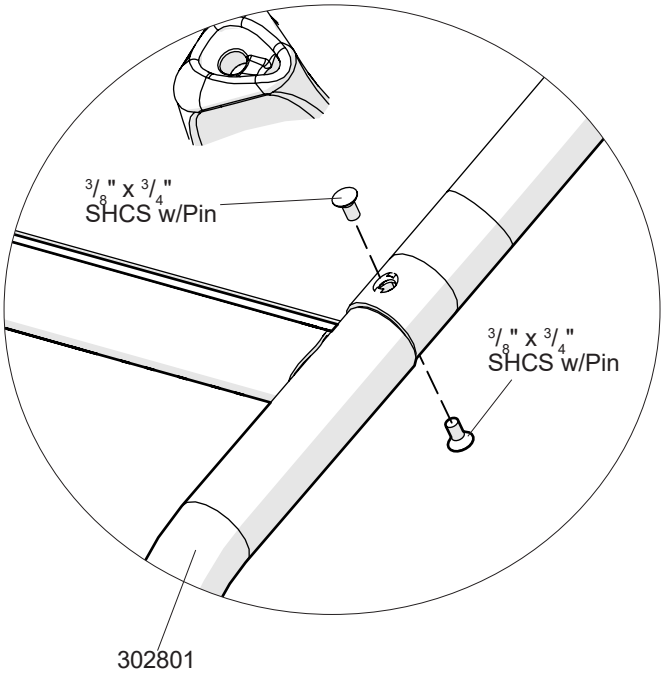
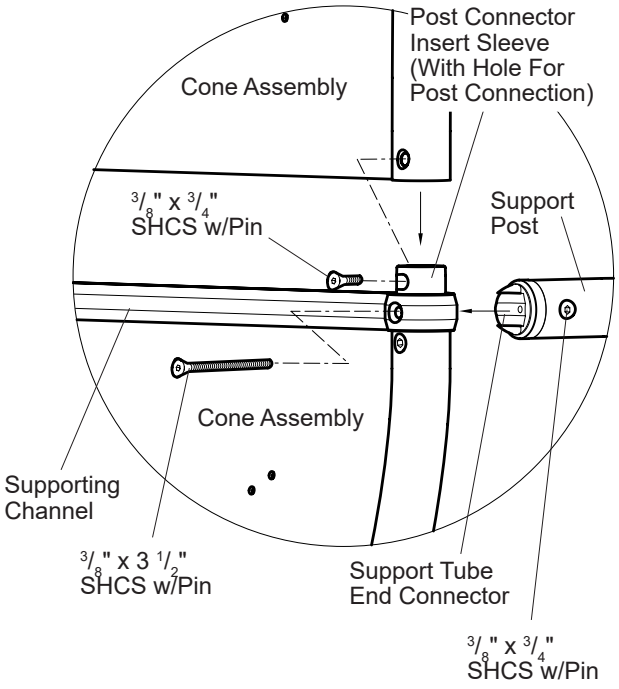
DETAIL
INSERT SLEEVE/SUPPORTING CHANNEL ATTACHMENT



DETAIL
H-FRAME TO CONE ASSEMBLY ATTACHMENT



DETAIL
CONE ASSEMBLY ATTACHMENT



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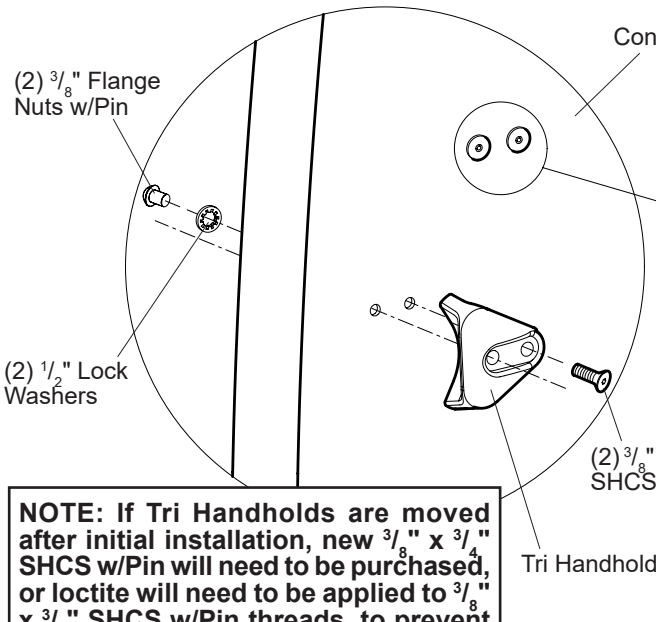
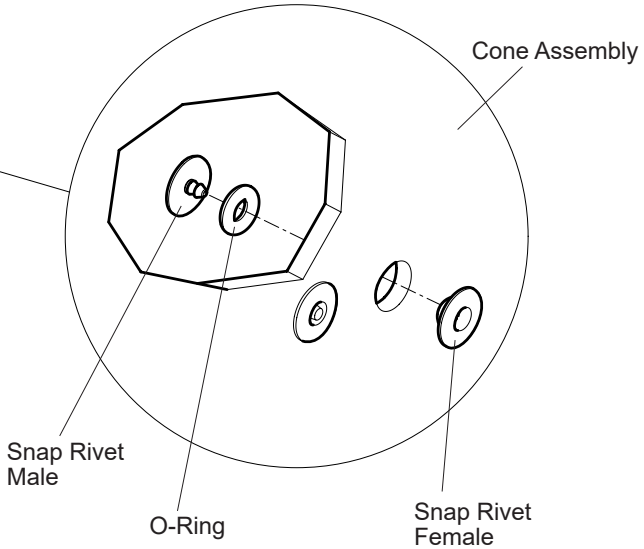
DETAIL
TRI HANDHOLD ATTACHMENT

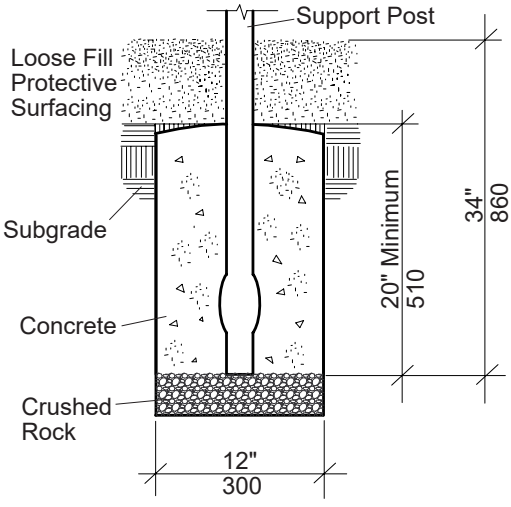


NOTE: If Tri Handholds are moved after initial installation, new 3/8" x 3/4" SHCS w/Pin will need to be purchased, or loctite will need to be applied to 3/8" x 3/4" SHCS w/Pin threads, to prevent bolts from coming loose. Loctite can be purchased from your local hardware store.

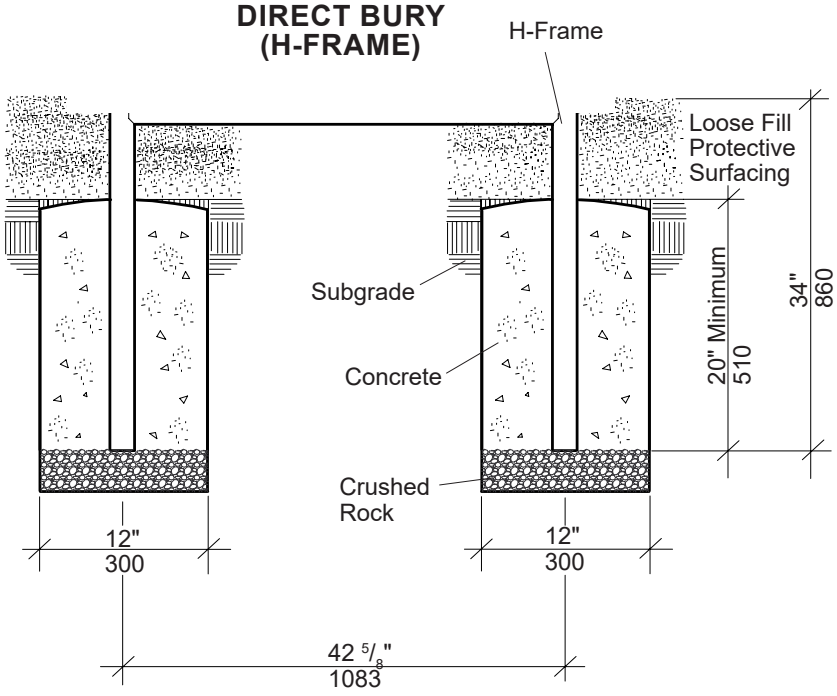
DETAIL
SNAP RIVET ATTACHMENT (FOR FILLING UNUSED HOLES)



DETAIL
DIRECT BURY (SUPPORT POST)



DETAIL
DIRECT BURY (H-FRAME)



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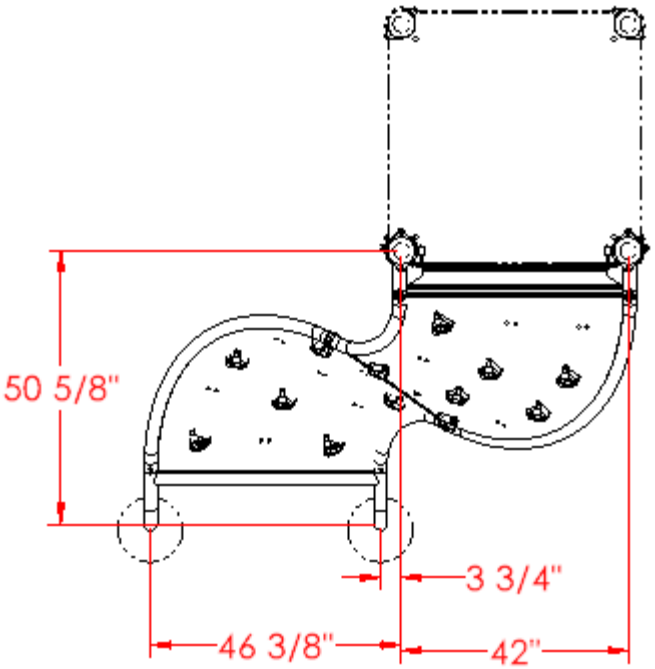

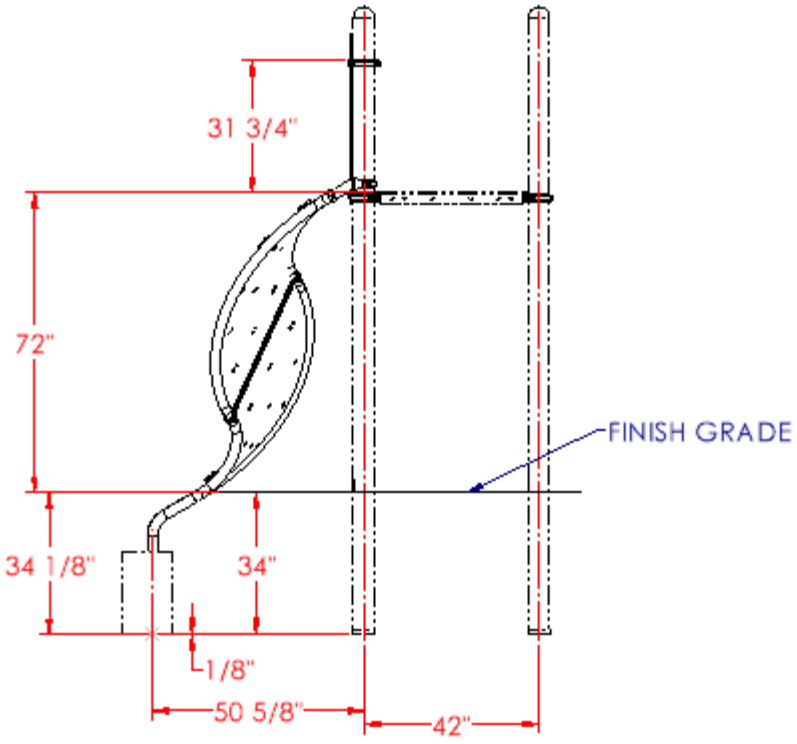

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Parts List

PART NUMBER	DESCRIPTION	QTY.
304047	MOBIUS CLIMBER RH CLAMP	1
304046	MOBIUS CLIMBER LH CLAMP	1
302801	H-FRAME MOBIUS CLIMBER ASM	1
302744	DECK MOUNTING BRACKET MOBIUS CLIMBER	1
160003	O-RING 7/16ODX1/4ID	22
166603	CLMBG PNL INSRT SLV ASY	4
160021	SNAP RIVET FEMALE	22
160020	SNAP RIVET MALE	22
153284	TRI HGRIP	13
152315	WASHER LOCK INT-T 1/2 SST	26
150952	AL SPRTG CHNL ANDZ	2
150869	45 DEG CONE ASY ANDZ	2
148686	3/8 X 3/4 6LP SHCS SST W/PATCH	46
139563	HANDHOLD PNL PB	2
124460	BHCS 6LP 3/8x3-3/4i SST	2
123224	BHCS 6LP 3/8x1-11/16i SST	4
122776	PERM ATCH SPCR CLMRS	1
113729	CLAMP OFFSET 5 RAIL HGR	2
113468	TUBE 7/8OD X 1-11/16 PNT	2
105327	CLMP HALF 5 AL	4
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	4
100365	WASHER FLAT SAE 3/8i SST	12
100353	FLG NUT 6LP 3/8-16 SST	28
100351	MOD T-NUT 3/8-16 SST	8
100327	HEX NUT STD 3/8-16 SST	4
100198	BHCS 6LP 3/8x1-1/8i SST	4
100196	BHCS 6LP 3/8x7/8i SST	4

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

   (Direct Bury) With structure square, plumb and level, pour concrete footings. Allow concrete to cure a minimum of 72 hours before users are allowed to play on the structure.

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

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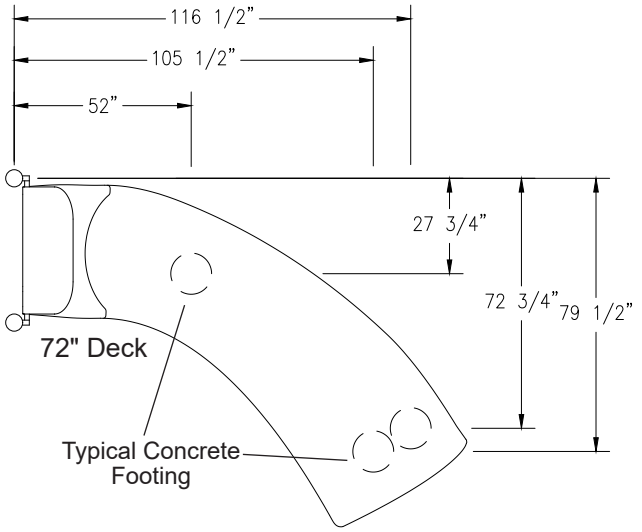
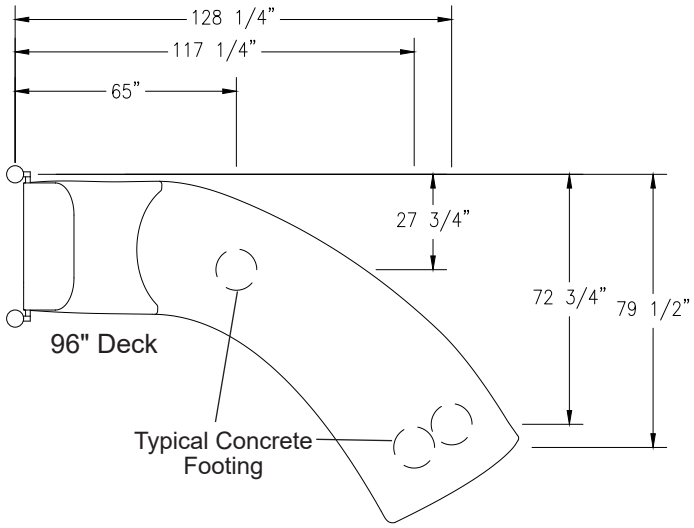
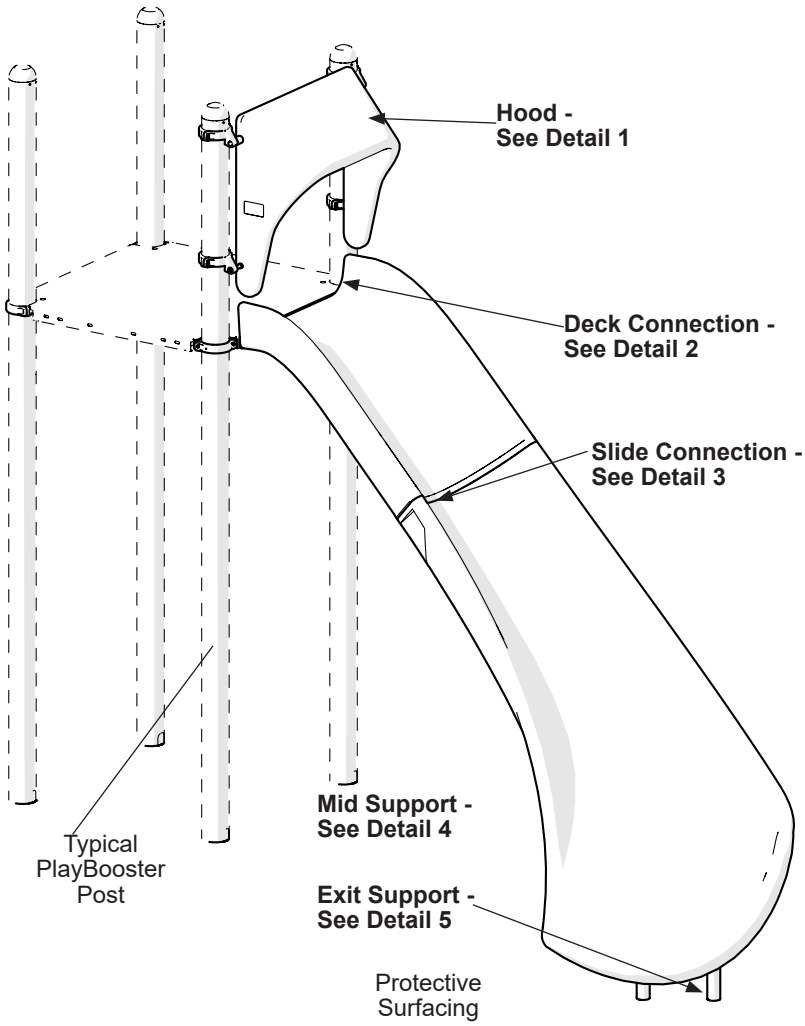
ALPINE SLIDE

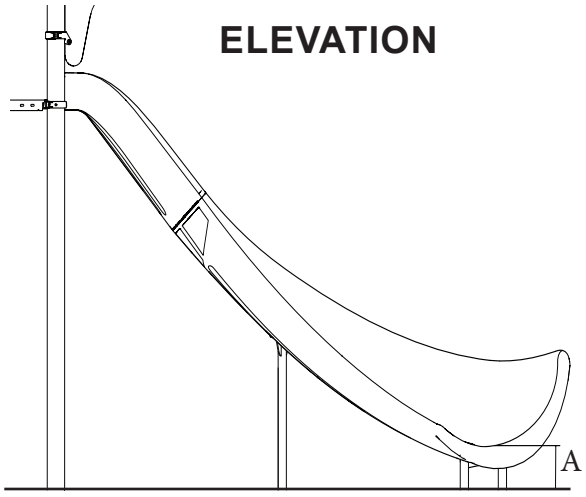
PLAN VIEW/FOOTING LAYOUT







ELEVATION



Dimensions for A

72" Deck	10 ¾"
80" Deck	13 ¼"
88" Deck	11 ¼"
96" Deck	14 ½"

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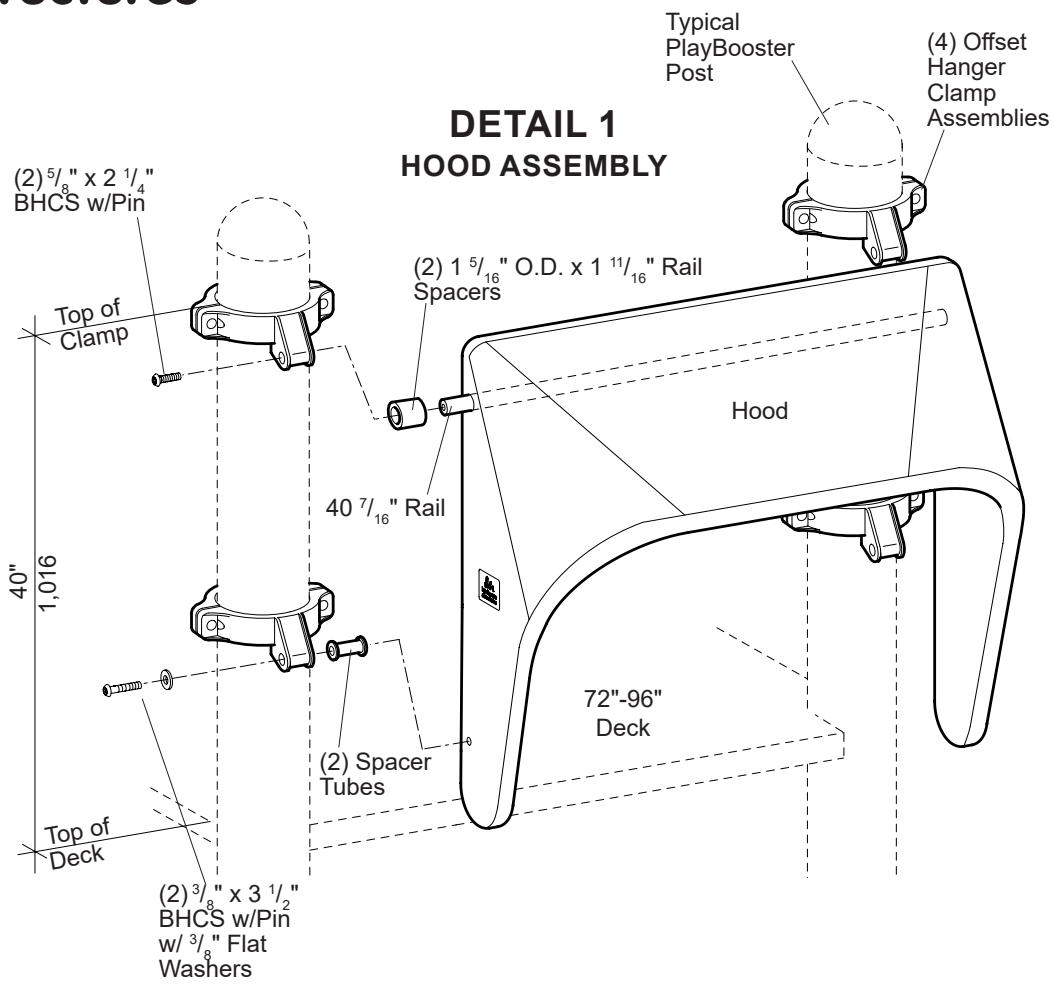
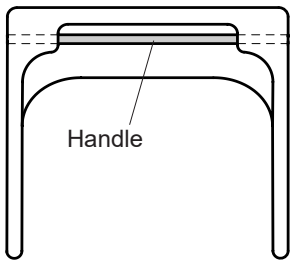
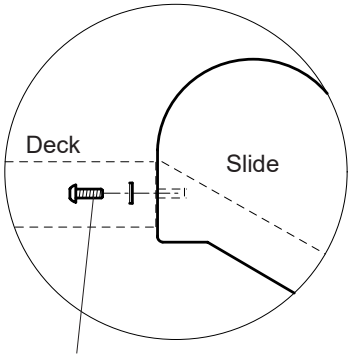
DETAIL 1
HOOD ASSEMBLY



HOOD - HANDLE DETAIL



DETAIL 2
DECK CONNECTION



(4) 3/8" x 1 1/8" BHCS w/ Pin w/ (4) 3/8" Flat Washers

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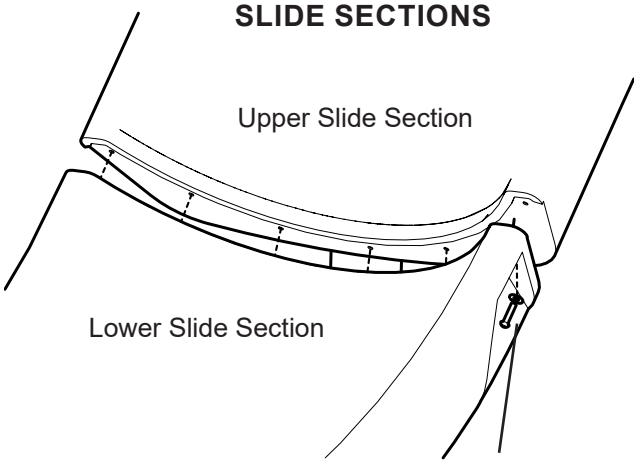
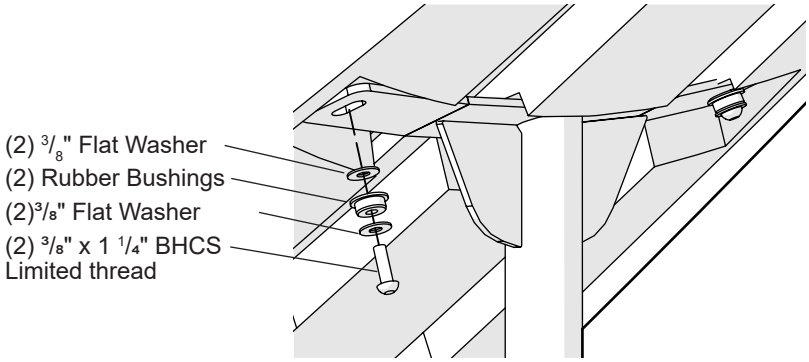
DETAIL 3
SLIDE SECTIONS



DETAIL 4
MID SUPPORT



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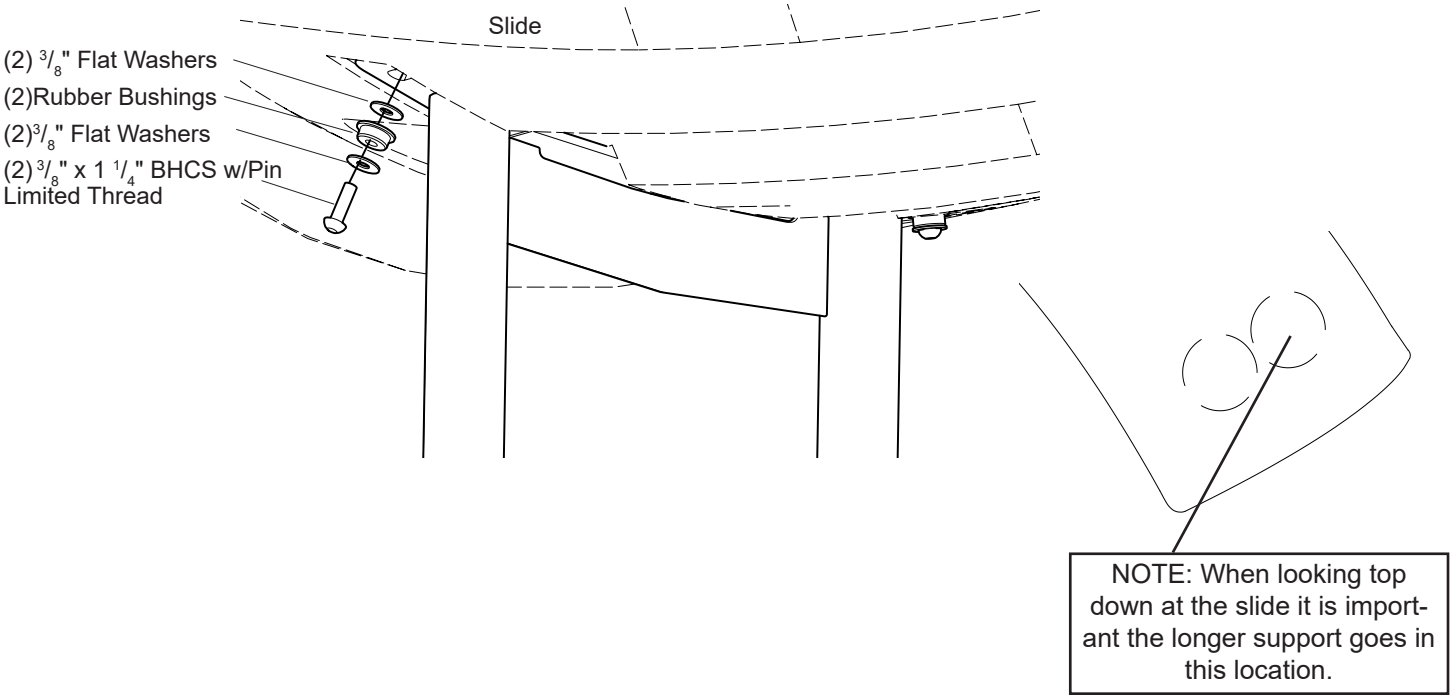
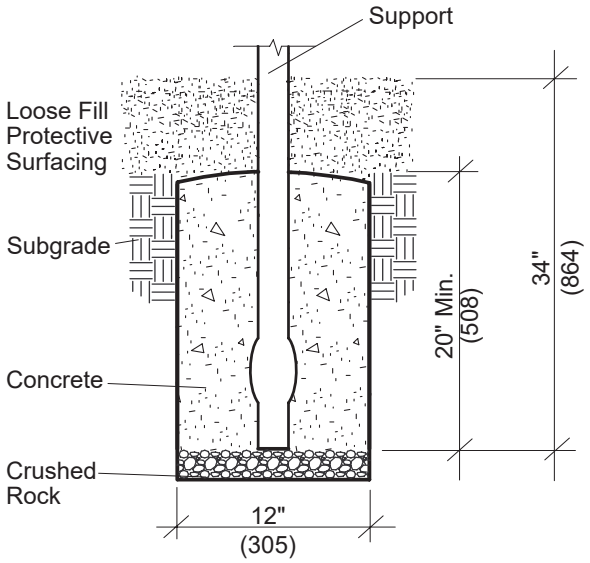
DETAIL 5
EXIT SUPPORT



NOTE: When looking top down at the slide it is important the longer support goes in this location.

DETAIL
DIRECT BURY



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Parts List

Part#	Description	Qty.
264337	Alpine Slide Upper 96” PB, Specify Color	1
266289	Alpine Slide Upper 72” PB, Specify Color	1
264335	Alpine Slide Lower, Specify Color	1
264338	Alpine Slide Exit Support DB, Specify Color	1
264339	Alpine Slide Mid Support DB, Specify Color	1
273409	Alpine Slide Exit Support SM, Specify Color	1
273410	Alpine Slide Mid Support SM, Specify Color	1
100583	PBolt 40 7⁄16” AL PNT, Specify Color	1
105327	Clamp Half 5” AL, Specify Color	4
113729	Clamp Offset 5” Rail Hanger, Specify Color	4
131987	Hood Double Slide 34” x 37”, Specify Color	1
132443	Tube 1 ⅜” OD x 1 11⁄16” PNT, Specify Color	2
113468	Tube ⅞” OD x 1 11⁄16” AL/PNT, Specify Color	2
Alpine Slide Hardware Package		1
100198	BHCS ⅜” x 1 ⅛”, SST	4
100292	BHCS ⅜” x 1 ¼”, SST	4
100362	Washer Flat ⅜”, SST	19
111442	Rubber Bushing	4
123224	BHCS ⅜” x 1 11⁄16”, SST	7
Slide Hood Hardware Package		1
100198	BHCS ⅜” x 1 ⅛”, SST	8
100200	BHCS ⅜” x 3 ½”, SST	2
100203	BHCS ⅜” x 2 ¼”, SST	2
100351	Nut Mod-T ⅜” x 16, SST	8
100362	Flat Washer ⅜”, SST	2
100610	Drive Rivet ¼" x ⅜”	4

DB = Direct Bury

Specifications

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).

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

Exit Support: Weldment comprised of 2.375” (60,32 mm) O.D. x .120” (3,04 mm) black steel tubing and 1/4” (6,35 mm) x 3” (76,2 mm)mounting plate. Finish: ProShield, Color Specified.

Spacer Tube: Fabricated from 1.312 (33,33 mm) O.D. x 16 Ga. (.065) (1,65 mm) steel tubing. Finish: ProShield, Color Specified.

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

Rail: Extruded from 1.125” (28,57 mm) O.D. x .312” (7,92 mm)W. 6005-T5 aluminum. Finish: ProShield, Color Specified.

Specifications are subject to change without notice.

Installation Time: Approx. 4.5 man hours

Concrete Req.: Approx. 4 cu. ft.

Area Req.: 72" Deck 6' (1,82 m) minimum use zone at exit
96" Deck 8' (2,44 m) minimum use zone at exit

Weight: 72" Deck DB 268 lbs.
72" Deck SM 245 lbs.
96" Deck DB 297 lbs.

Fall Height: 72" Deck (1,02 m)
96" Deck (1,22 m)

Installation Instructions

1) **(Direct Bury)** Dig footings spaced as shown.

2) 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 to clamps using 3/8" x 3 1/2" BHCS w/pin, 3/8" flat washers and spacer tubes. Refer to Detail 1.

3) Attach supports to base of 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 Detail 3. **NOTE:** *Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not over-tighten!*

4) Attach upper slide section to lower slide section using 3/8" x 1 11/16" BHCS w/pin and 3/8" flat washers. Refer to Slide Section Detail 3

5) Attach slide to the face of the deck using 3/8" x 1 1/8" BHCS w/ Pin with 3/8" flat washers. Refer To Deck Connection Detail 2.

6) Install 1/4" x 5/8" drive rivets in all 5" half clamps, refer to the Typical Offset Hanger Clamp Spec Sheet.

7) **(Direct Bury)** 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.

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

ECO-0101985 Document 27804000 replaces 27204500. Added elevation view for exit heights.

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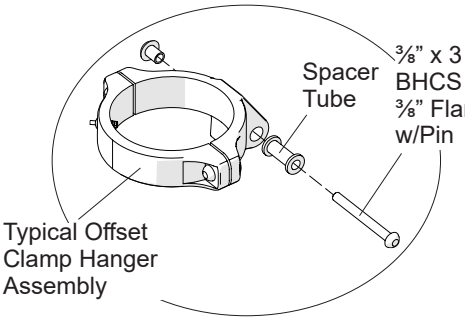
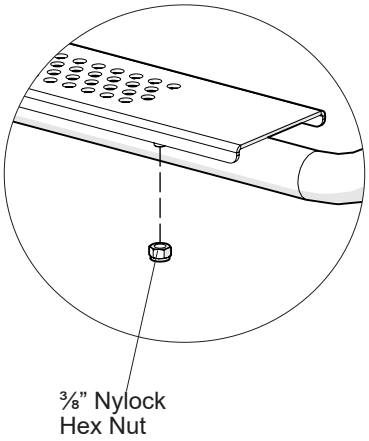
SPIRAL CLIMBER

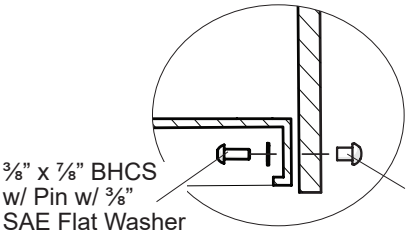
DETAIL
CLAMP ATTACHMENT

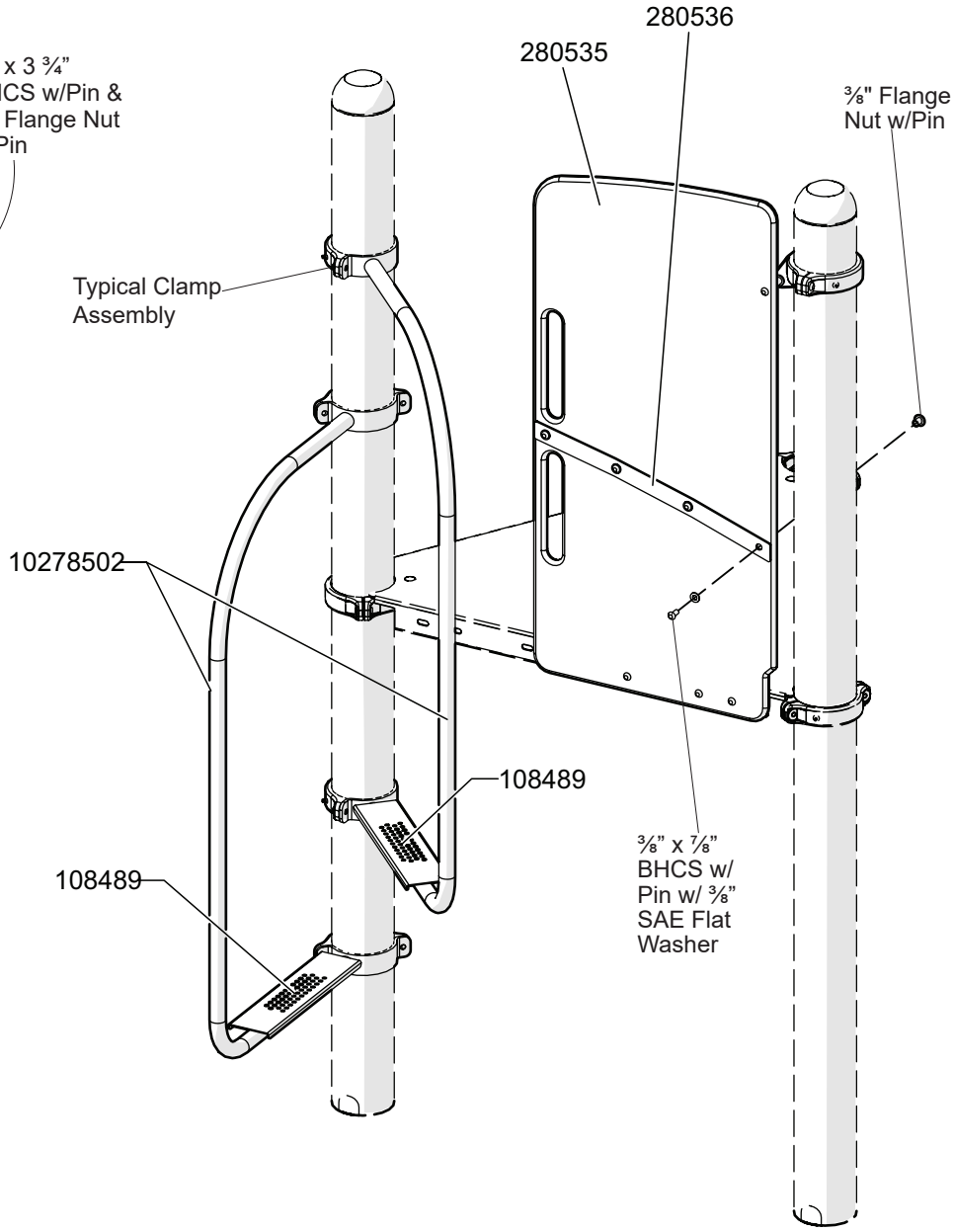


DETAIL
STEP ATTACHMENT



DETAIL
DECK ATTACHMENT





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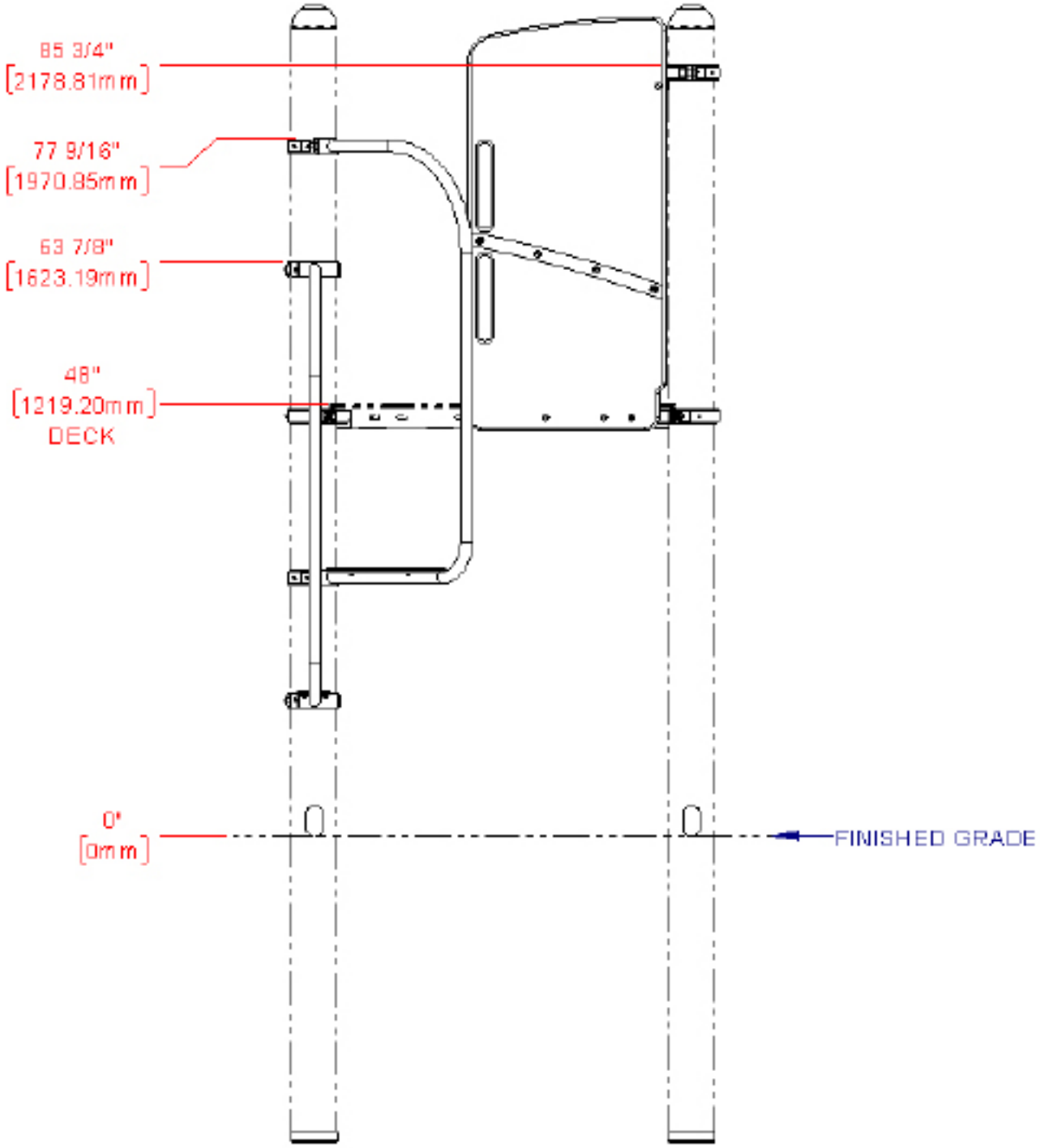

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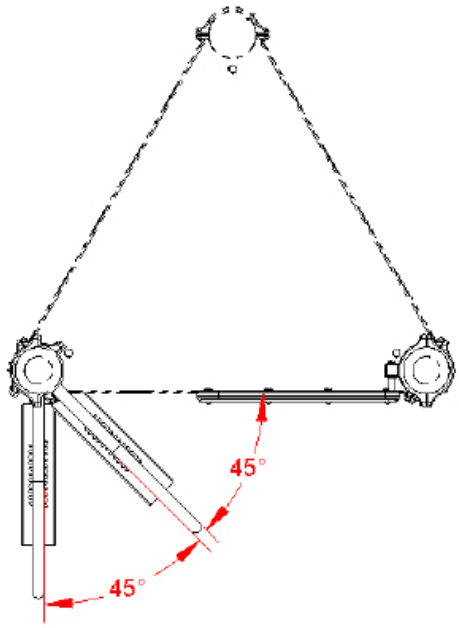

Parts List

PART NUMBER	DESCRIPTION	QTY.
280536	CUST 3/4 BARRIER ACCENT STRIPE PNT	2
280535	CUST 3/4 BARRIER PERM	1
124460	BHCS 6LP 3/8x3-3/4i SST	1
113729	CLAMP OFFSET 5 RAIL HGR	1
113468	TUBE 7/8OD X 1-11/16 PNT	1
108489	TREAD SPIRAL CLMR PVC	2
105327	CLMP HALF 5 AL	5
102785	SPIRAL CLIMBER PNT	2
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	5
100365	WASHER FLAT SAE 3/8i SST	12
100362	WASHER FLAT 3/8i SST	3
100353	FLG NUT 6LP 3/8-16 SST	5
100351	MOD T-NUT 3/8-16 SST	10
100329	5/16-18 HEX NUT NYLOCK	8
100327	HEX NUT STD 3/8-16 SST	3
100198	BHCS 6LP 3/8x1-1/8i SST	2
100196	BHCS 6LP 3/8x7/8i SST	12
100171	BHCS 6LP 3/8x1-1/2iSSTPAT	3

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

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

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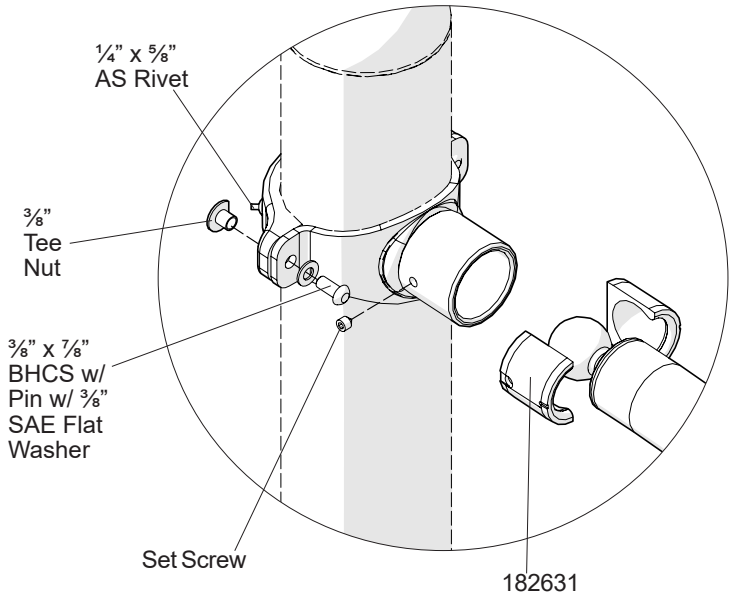
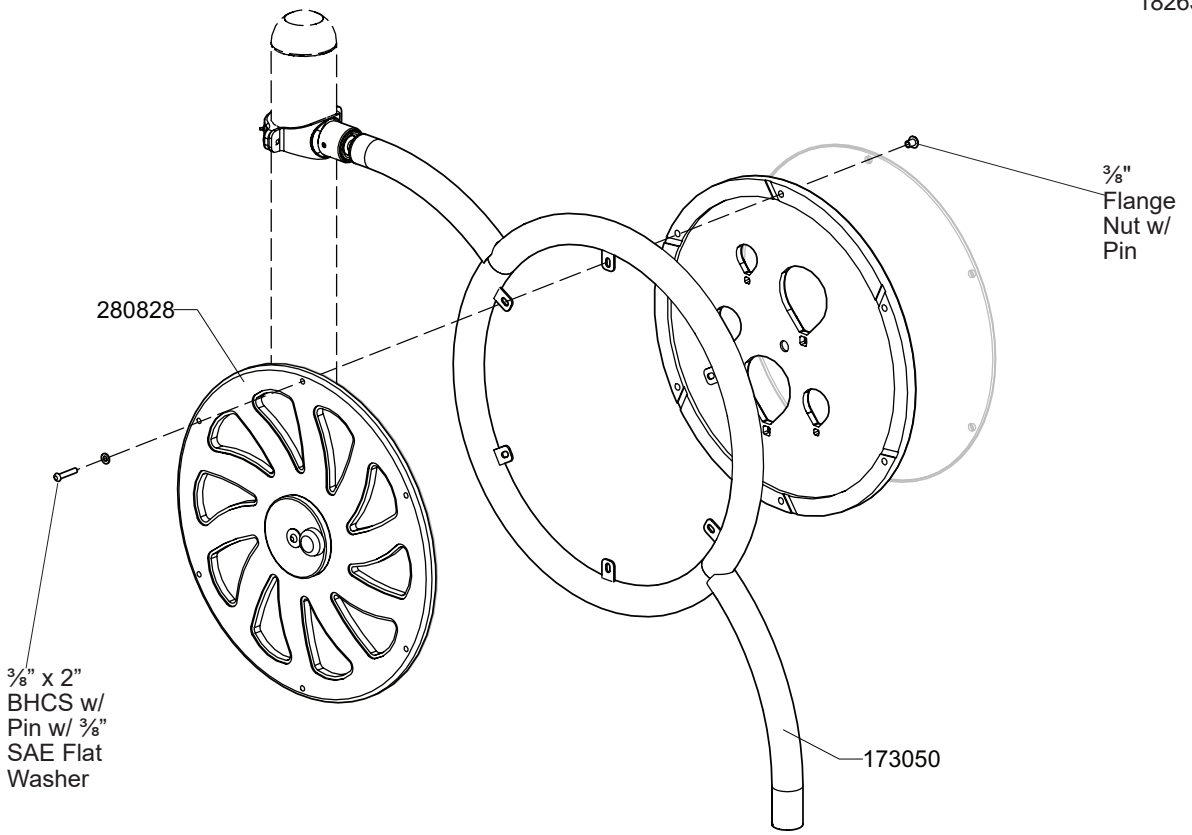
SAFETY NOTE

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*.)

COLOR SPLASH WHEEL

DETAIL
CLAMP ATTACHMENT





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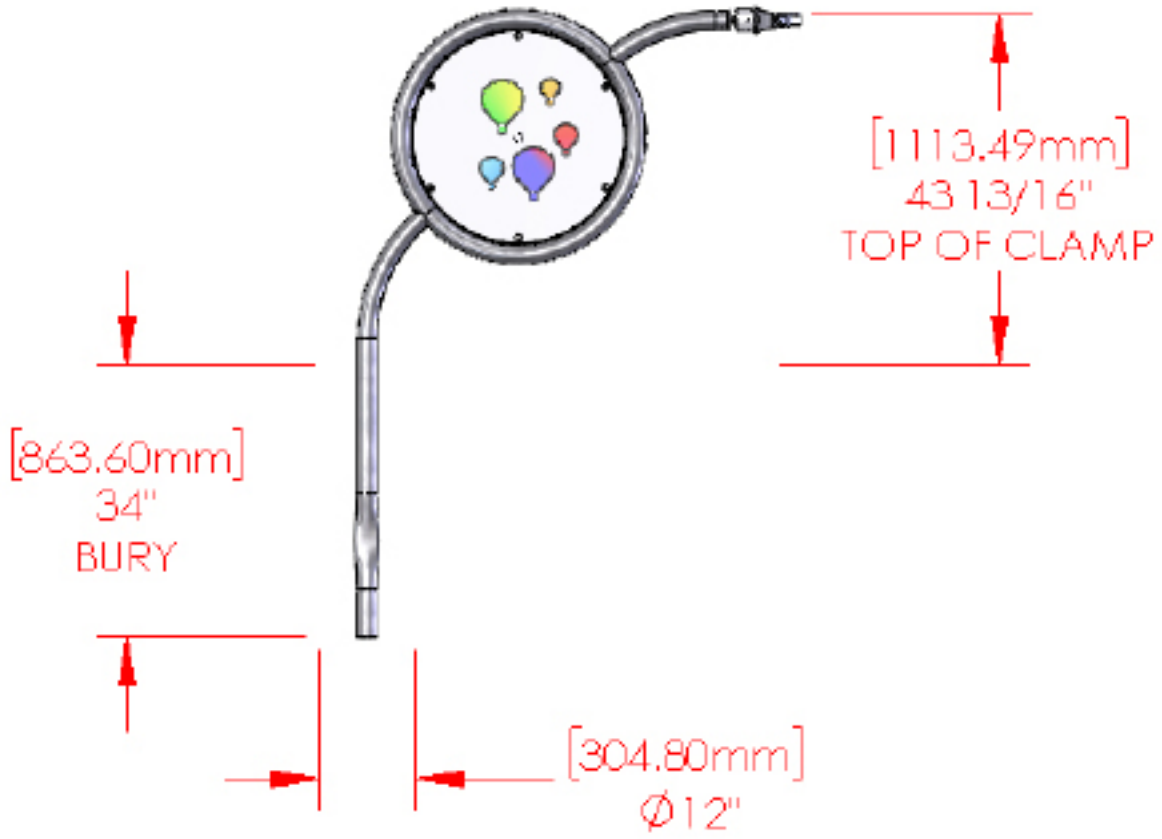

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SAFETY NOTE

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Parts List

PART NUMBER	DESCRIPTION	QTY.
280828	CUST COLOR SPLASH WHEEL ASY	1
182632	PB CLAMP HOUSING PNT	1
182631	PB CLAMP BUSHING AL	2
173050	WEEVOS PANEL FRAME DB	1
105327	CLMP HALF 5 AL	1
100610	RVT 1/4X5/8 AS (GRIP=.578/.672)	1
100365	WASHER FLAT SAE 3/8i SST	8
100353	FLG NUT 6LP 3/8-16 SST	6
100351	MOD T-NUT 3/8-16 SST	2
100298	SET SCR 3/8 X 7/16i SST	2
100196	BHCS 6LP 3/8x7/8i SST	2
100173	BHCS 6LP 3/8x2i SST PAT	6

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

   Direct Bury - With structure square, plumb and level, pour concrete footings. Allow concrete to cure a minimum of 72 hours before users are allowed to play on the structure.

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

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SAFETY NOTE

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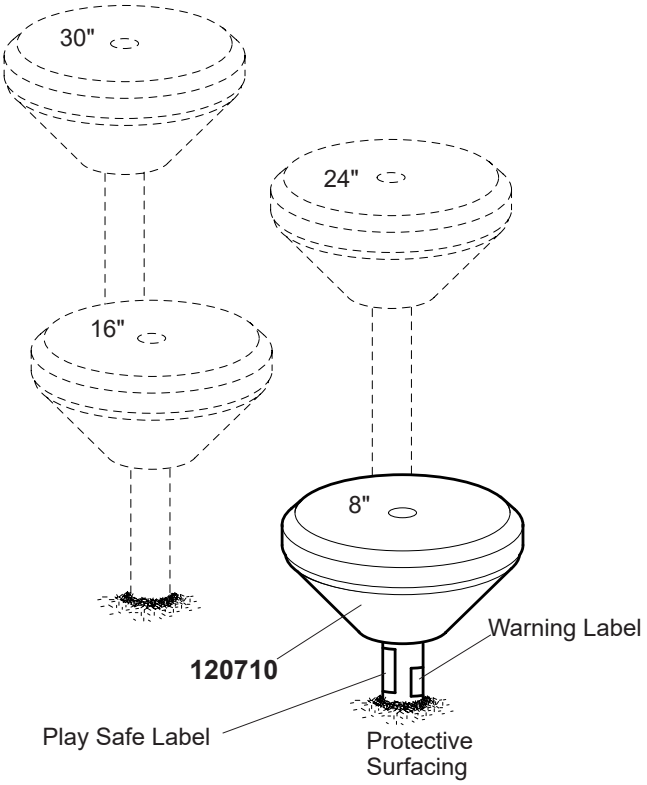
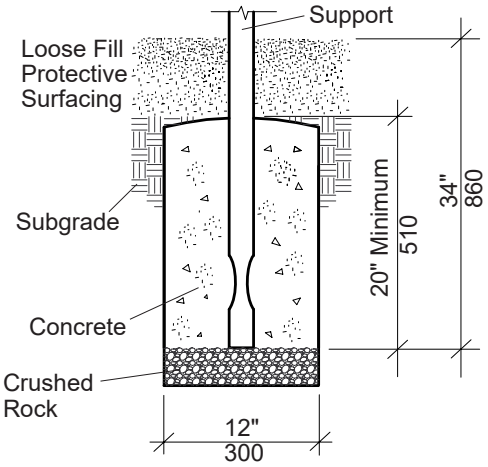
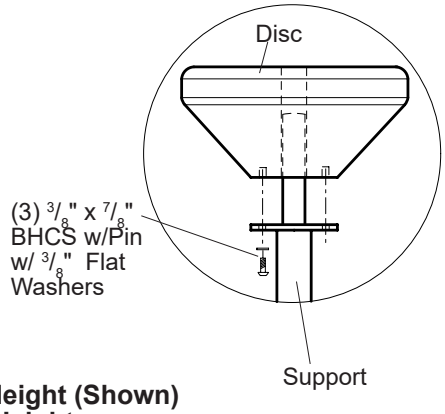
POD CLIMBERS



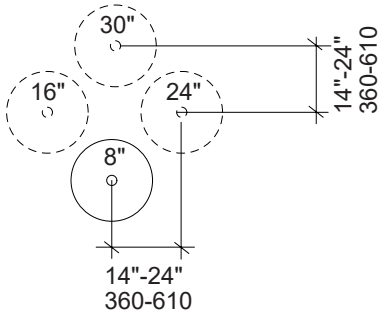
DETAIL
DIRECT BURY



DETAIL
DISC ATTACHMENT



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



120710 8" Height (Shown)
158997 10" Height
120711 16" Height
158998 20" Height
120712 24" Height
120713 30" Height

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Climbers Pod Climbers

Parts List

Part#	Description	Qty.
126956	Disc, Specify Color	*
169340	Support 8" (SM), Specify Color	*
169339	Support 8" (DB), Specify Color	*
169342	Support 10" (SM), Specify Color	*
169341	Support 10" (DB), Specify Color	*
169344	Support 16" (SM), Specify Color	*
169343	Support 16" (DB), Specify Color	*
156625	Support 20" (SM), Specify Color	*
156627	Support 20" (DB), Specify Color	*
120605	Support 24" (SM), Specify Color	*
120601	Support 24" (DB), Specify Color	*
153987	Support 30" (SM), Specify Color	*
153988	Support 30" (DB), Specify Color	*
Disc Climber Hardware Package		1
100196	$^3/_8$" x $^7/_8$" BHCS w/Pin, SST	3
100365	$^3/_8$" Flat Washer, SST	3

*** = Quantity Determined By Your Order**

Specifications

Disc: Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" in diameter x 7" high, color specified.

Support: Weldment comprised of 1.900" O.D. RS20 (.090" - .100" Wall), 1.315" O.D. RS20 (.080" - 090" Wall) and $^3/_{16}$" x 5" diameter plate. Finish: ProShield®, color specified.

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

Installation Time: **DB** - Approx. $^3/_4$ man hour each
Concrete Req.: Approx. 1.31 cu. ft. each
Weight: 8" - 12 lbs.
10" - 13 lbs.
16" - 14 lbs.
20" - 15 lbs.
24" - 15 lbs.
30" - 16 lbs.

Installation Instructions

1) **(Direct Bury)** Dig footing as shown. See your Plan View/Footing Layout.
2) Attach disc to support using $^3/_8$" x $^7/_8$" BHCS w/pin with $^3/_8$" flat washers, as shown.
3) **(Direct Bury)** Position support in footing hole and pour concrete footing. With support post plumb, prop support to hold in position.
4) Apply labels as shown.
5) Install protective surfacing before users are allowed to play on the structure.

Eco #54517 Document #18381300 replaces #16934500. Added warning label to hardware package.

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SAFETY NOTE

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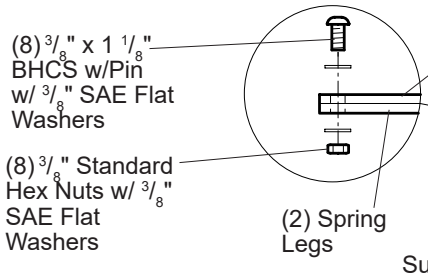
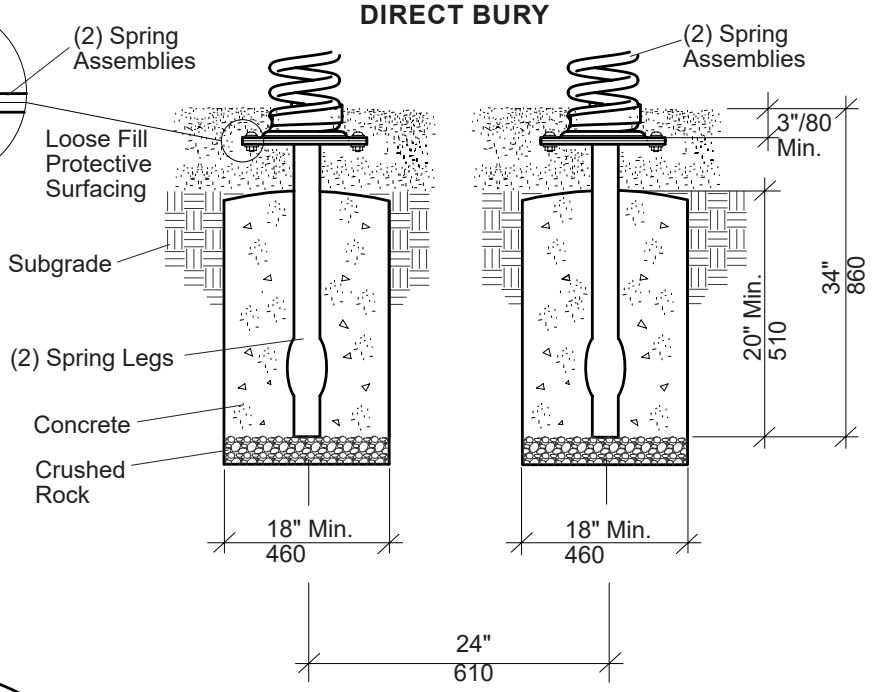
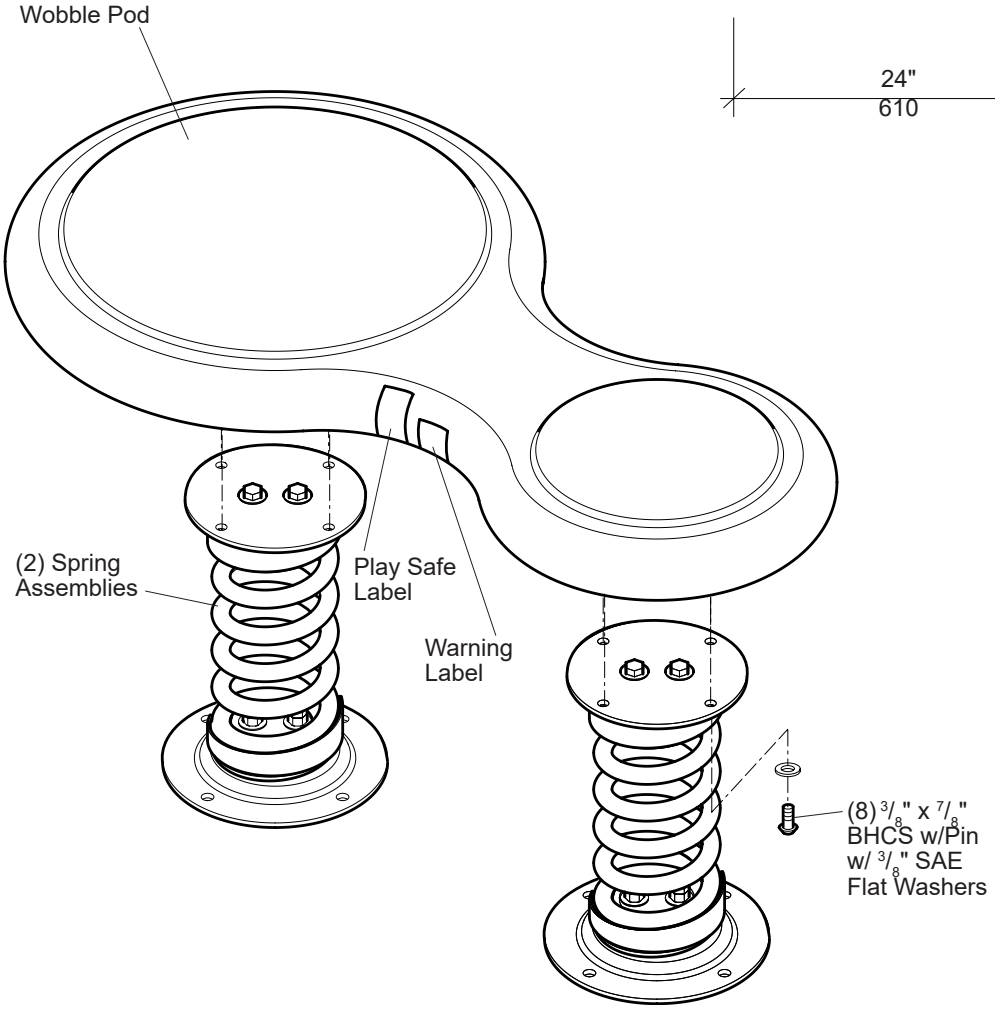
WOBBLE POD

DETAIL
SPRING LEG ATTACHMENT



DETAIL
DIRECT BURY





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Parts List

Part#	Description	Qty.
115154	Spring Leg, Specify Color	2
154631	Wobble Pod, Specify Color	1
156913	Spring Assembly w/Plates, Specify Color	2
	Wobble Pod Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	8
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100327	3/8" Standard Hex Nut, SST	8
100365	3/8" SAE Flat Washer, SST	24

Specifications

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

Spring Assembly: Comprised of 5 5/8" diameter 13/16" tempered alloy steel coil, 1/4" thick HRPO zinc plated steel, 1/4" thick HRPO sheet steel and spring wedge casting made from A-356 T-6 aluminum. Finish: ProShield®, color specified.

Spring Leg: Weldment comprised of 3 1/2" O.D. RS20 (.120" - .130" Wall) galvanized steel tubing and 1/4" x 10" diameter HRPO zinc plated steel mounting plate. 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
Concrete Req.: Approx. 6 cu. ft.
Area Req.: 6' (1,83 m) minimum use zone
Weight: 122 lbs.

Fall Height: 16" (410 mm)

Installation Instructions

1) Dig footing holes as shown. Refer to the Site Plan for proper location of Wobble Pods.
2) Attach spring assemblies to Wobble Pod, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers, as shown.
3) Attach spring legs to spring assemblies, using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers, as shown. Refer to the Spring Leg Attachment Detail.
4) With Wobble Pod propped in plumb position, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
5) Apply labels as shown.
6) Install protective surfacing before users are allowed to play on the component.

Eco #54517 Document 18462900 replaces 15747200. Added labels to hardware package.

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SAFETY NOTE

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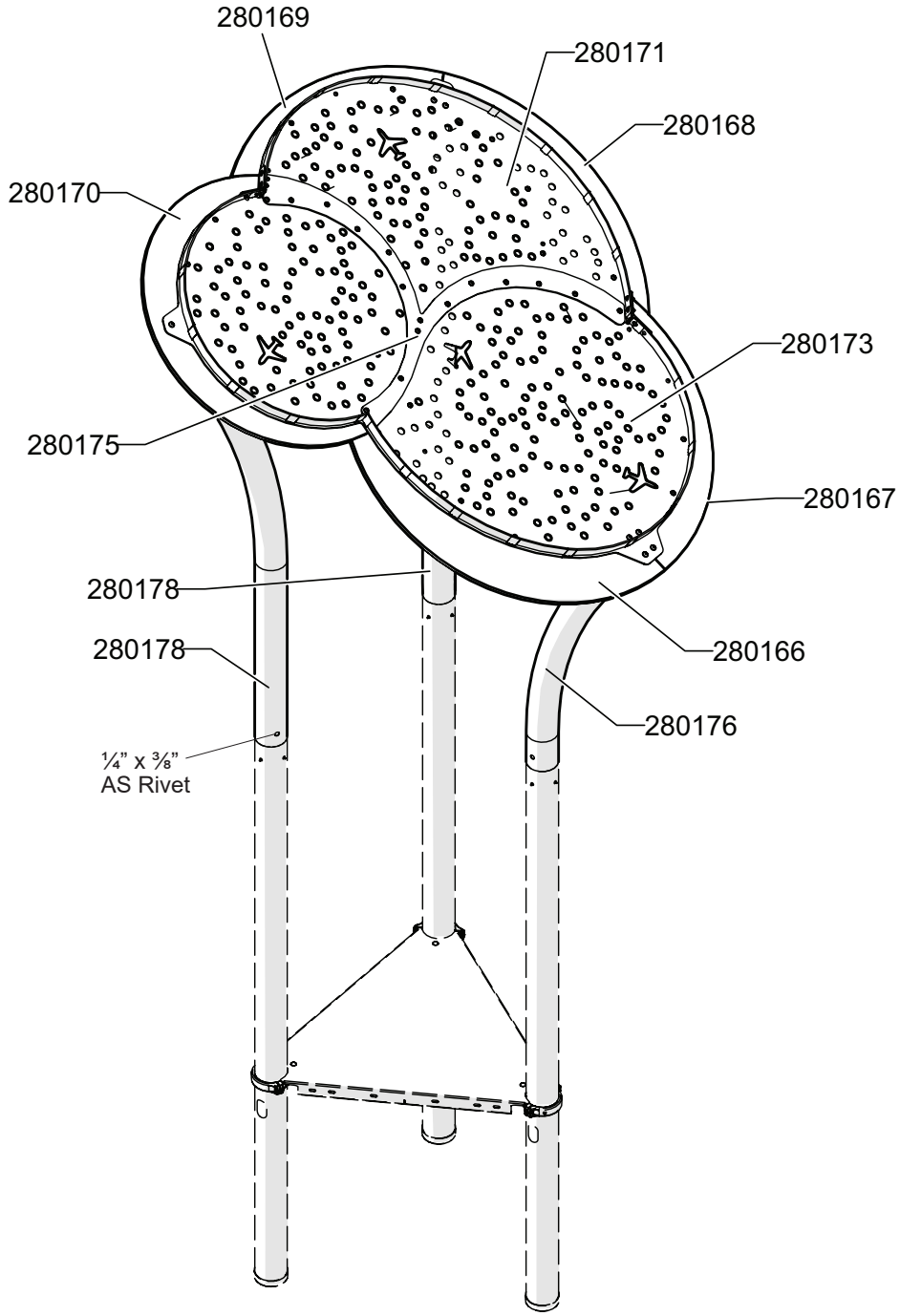
CLOUD ROOF



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SAFETY NOTE

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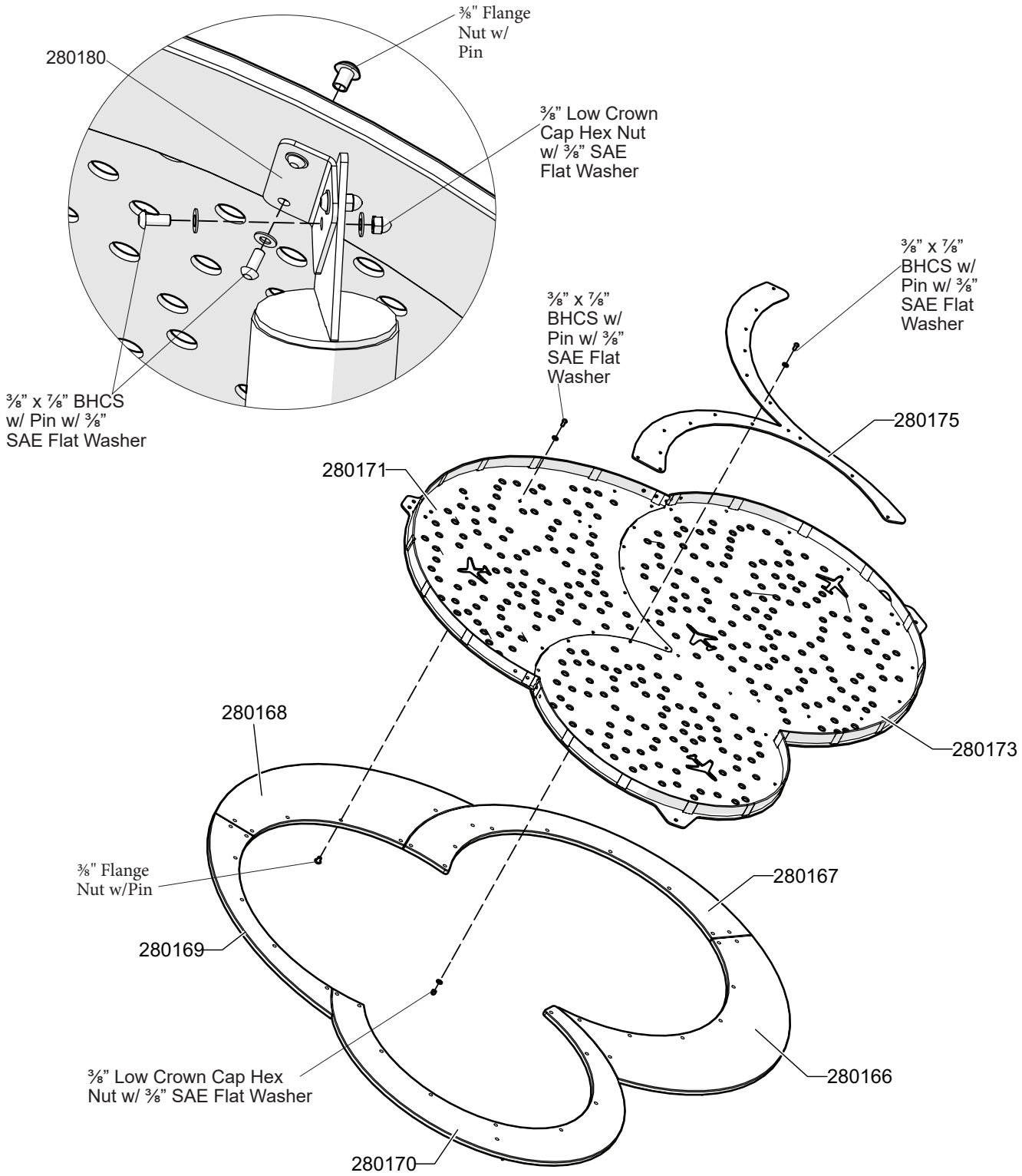
DETAIL
ROOF ATTACHMENT



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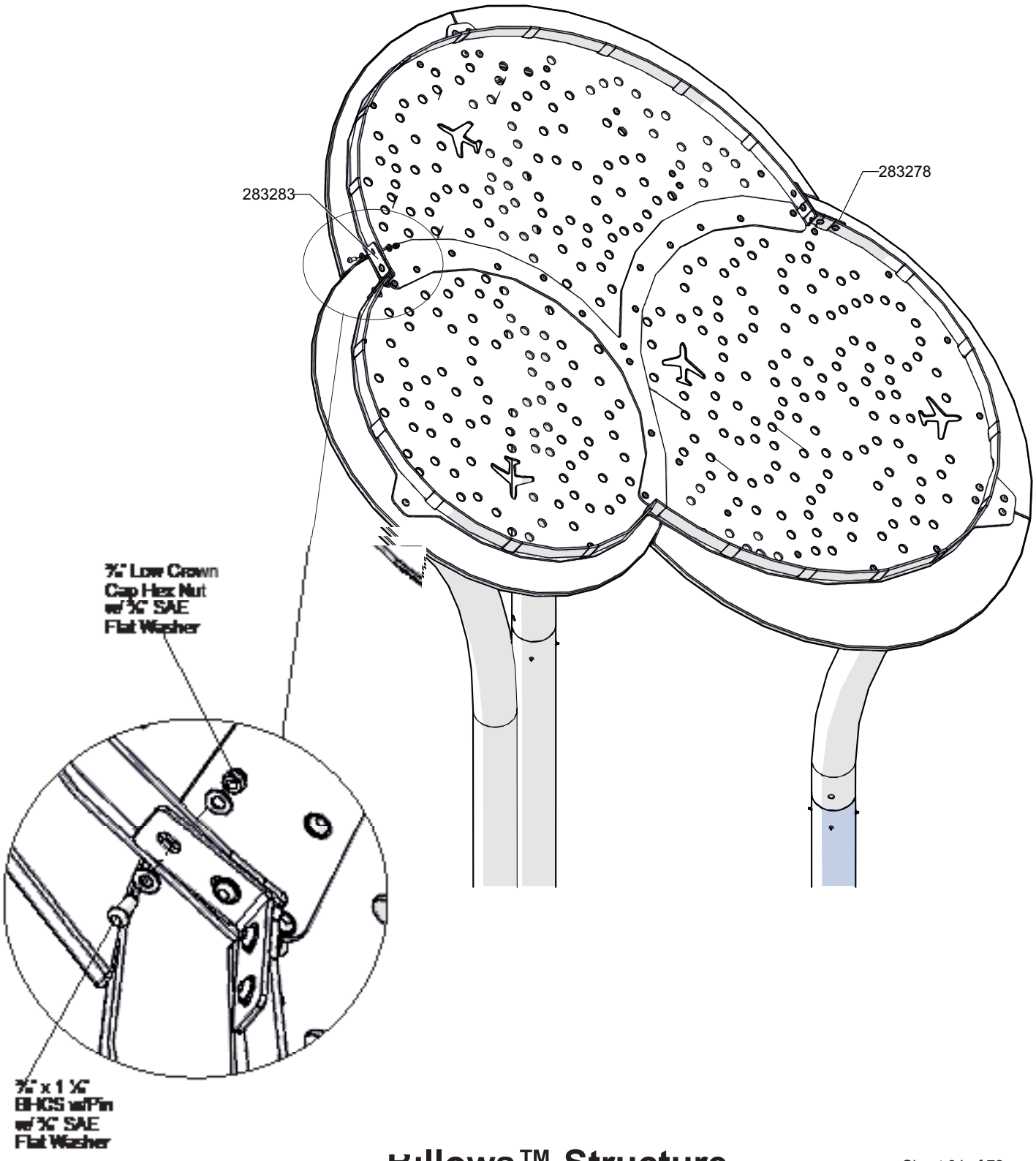

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Parts List

PART NUMBER	DESCRIPTION	QTY.
283283	CUST CLOUD ROOF SPRT ANGLE 2 PNT	1
283278	CUST CLOUD ROOF SPRT ANGLE 1 PNT	1
281869	CUST CLOUD RF BRKT 3 PNT	1
280180	CUST CLOUD RF BRKT 2 PNT	1
280179	CUST CLOUD RF BRKT 1 PNT	1
280178	CUST CLOUD PST EXT 2 WELDT PNT	2
280176	CUST CLOUD PST EXT 1 WELDT PNT	1
280175	CUST CLOUD PLT PNT	1
280173	CUST CLOUD PERF 2 PNT	1
280171	CUST CLOUD PERF 1 PNT	1
280170	CUST CLOUD ARCH 5 PERM	1
280169	CUST CLOUD ARCH 4 PERM	1
280168	CUST CLOUD ARCH 3 PERM	1
280167	CUST CLOUD ARCH 2 PERM	1
280166	CUST CLOUD ARCH 1 PERM	1
100611	RVT 1/4X3/8 AS (GRIP=.328/.422)	12
100365	WASHER FLAT SAE 3/8i SST	88
100353	FLG NUT 6LP 3/8-16 SST	40
100349	3/8 HEX NUT L/C CAP	24
100198	BHCS 6LP 3/8x1-1/8i SST	7
100196	BHCS 6LP 3/8x7/8i SST	57

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

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

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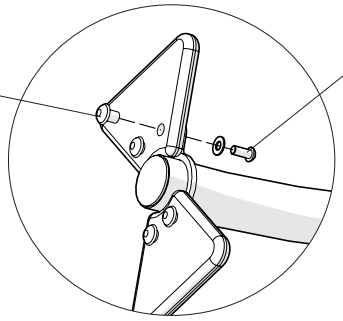
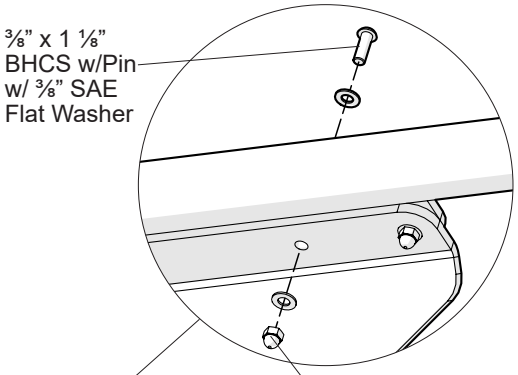
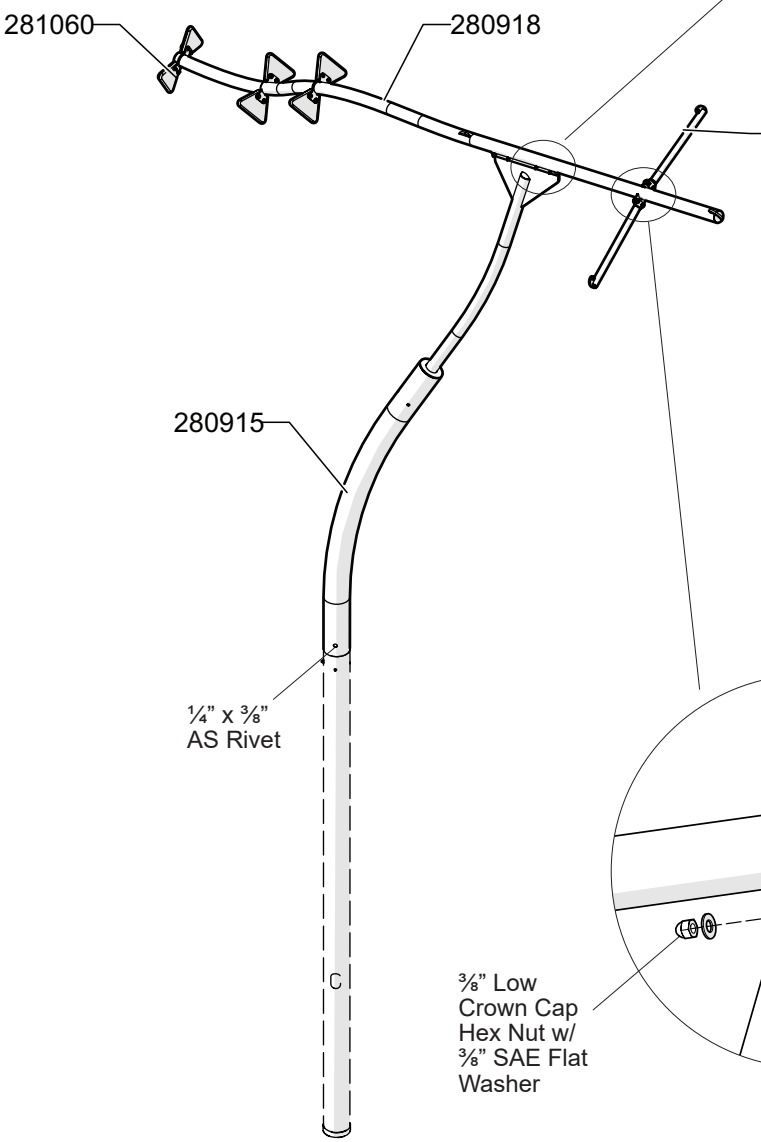
KITE POST TOPPER

DETAIL
PERM ATTACHMENT



DETAIL
KITE POST TOPPER ATTACHMENT





NOTES:

1. **Attach two bolt links (138915) to each of the tabbed corners of the kite frame.**
2. **Run the wire cable (284811) through the kite fabric and each of the shackles.**
3. **Draw the cable taught and secure it over itself using the cable clamps (259028).**

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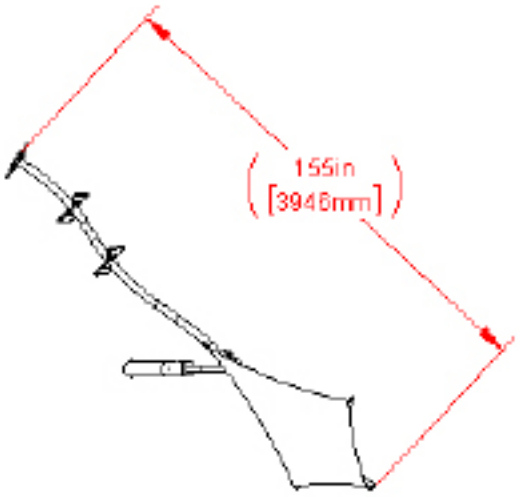
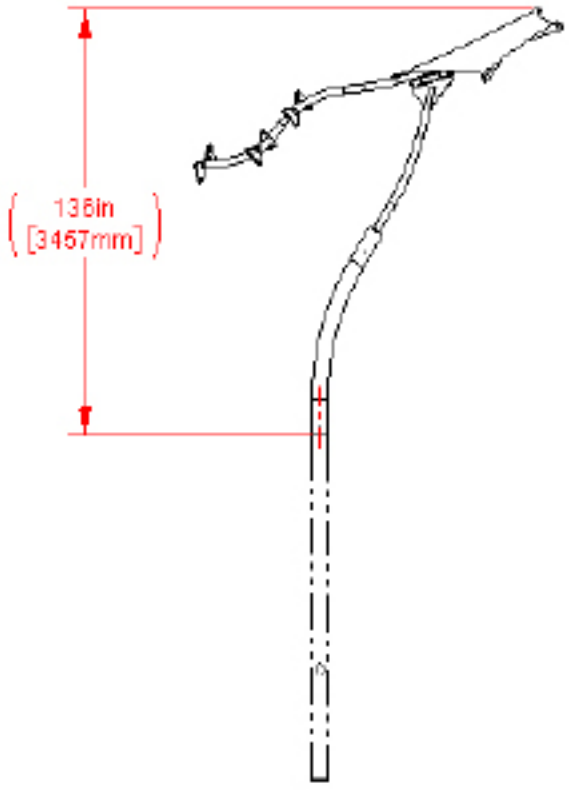
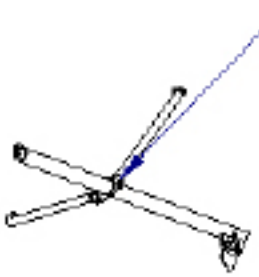
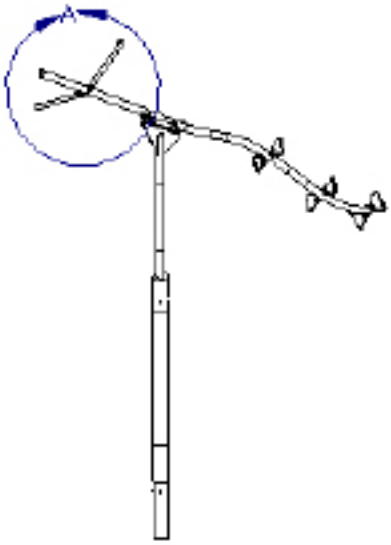






1. INSTALL TOP BOLT ON ARMS.
2. INSTALL SHADE.
3. ROTATE ARMS DOWN INTO PLACE TO TENSION SHADE.
4. INSTALL LOWER BOLT ON ARMS.



DETAIL A
SCALE 1 : 24

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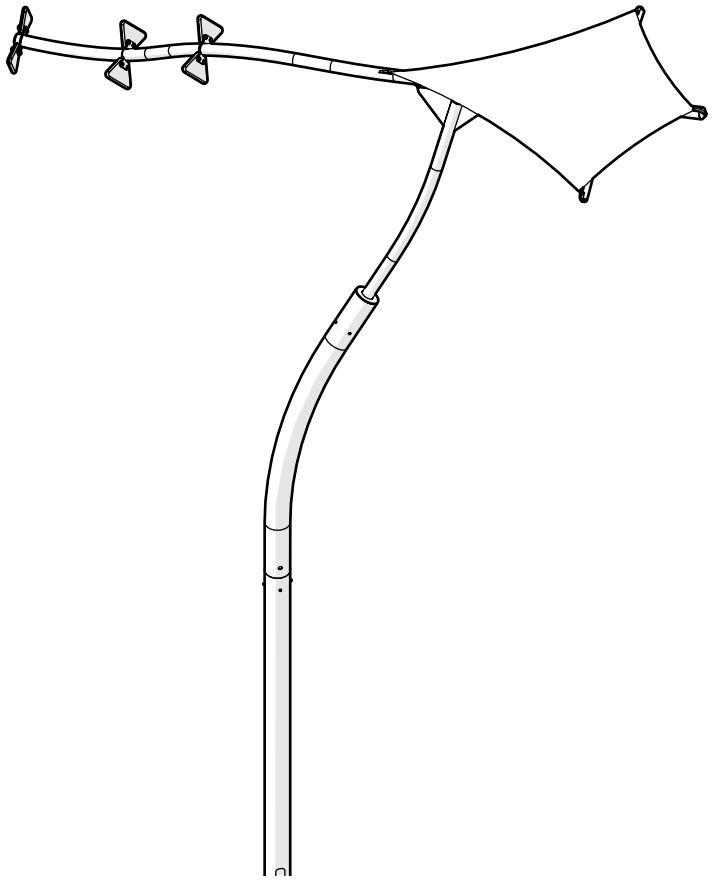

Parts List

PART NUMBER	DESCRIPTION	QTY.
281380	CUST BILLOWS KITE FABRIC KIT	1
281060	CUST KITE TAIL TIE PERM	6
281048	CUST KITE POST TOPPER ARM PNT	2
280918	CUST KITE POST TOPPER SPINE PNT	1
280915	CUST KITE POST TOPPER STEM PNT	1

100611	RVT 1/4X3/8 AS (GRIP=.328/.422)	4
100365	WASHER FLAT SAE 3/8i SST	28
100353	FLG NUT 6LP 3/8-16 SST	12
100349	3/8 HEX NUT L/C CAP	8
100198	BHCS 6LP 3/8x1-1/8i SST	8
100196	BHCS 6LP 3/8x7/8i SST	12

Installation Instructions

1) Assemble structure following steps and details shown. Use 2D layout as a reference.

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

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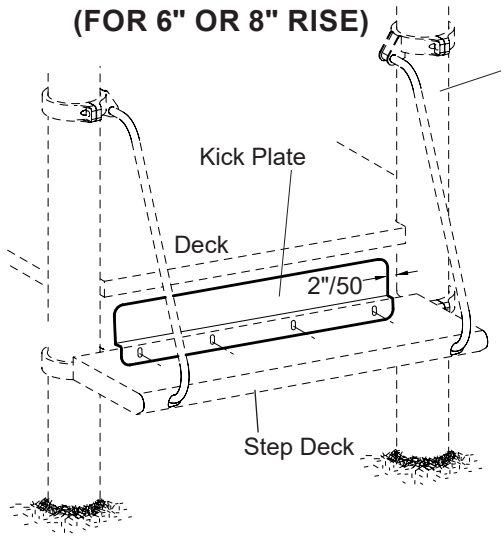
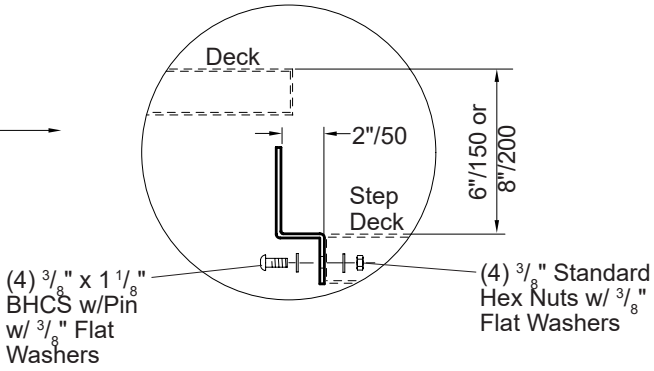
KICKPLATE

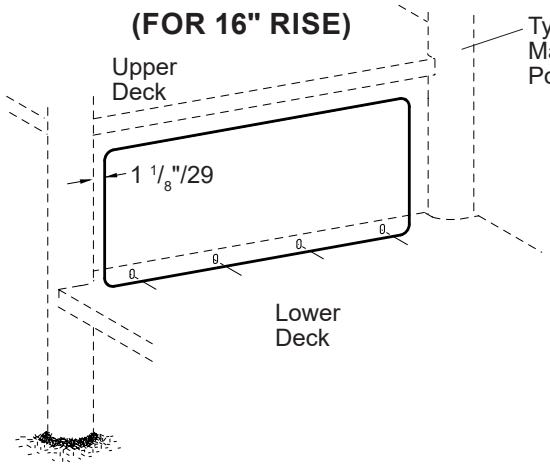
KICK PLATE
(FOR 6" OR 8" RISE)



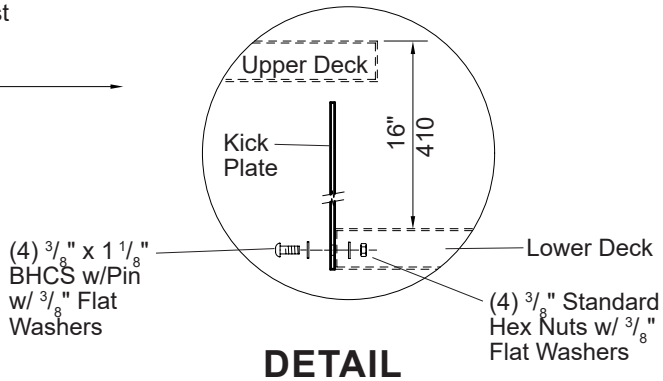
DETAIL
KICK PLATE ATTACHMENT (FOR 6" OR 8" RISE)



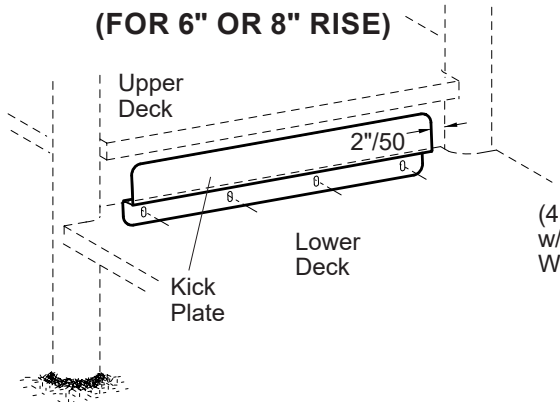
KICK PLATE
(FOR 16" RISE)



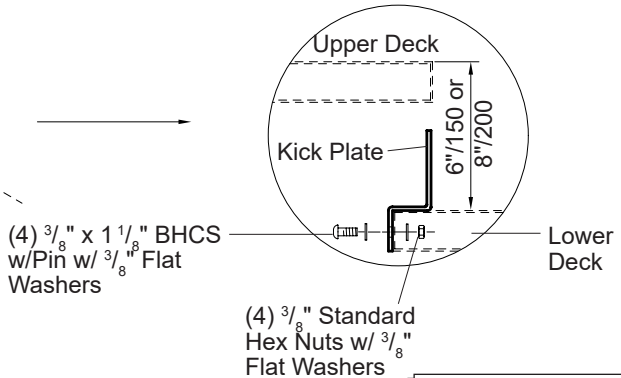
DETAIL
KICK PLATE ATTACHMENT (FOR 16" RISE)



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.

Billows™ Structure

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Document #28332801

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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
	Kick Plate Tenderdeck Hardware Package	1
100198	$^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST	4
100327	$^3/_8$" Standard Hex Nut, SST	4
100362	$^3/_8$" 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. $^1/_4$ 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 $^3/_8$" x 1 $^1/_8$" BHCS w/pin with $^3/_8$" flat washers and $^3/_8$" standard hex nuts with $^3/_8$" flat washers, as shown. **NOTE:** *Kick plates mount to face of lower deck.*

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

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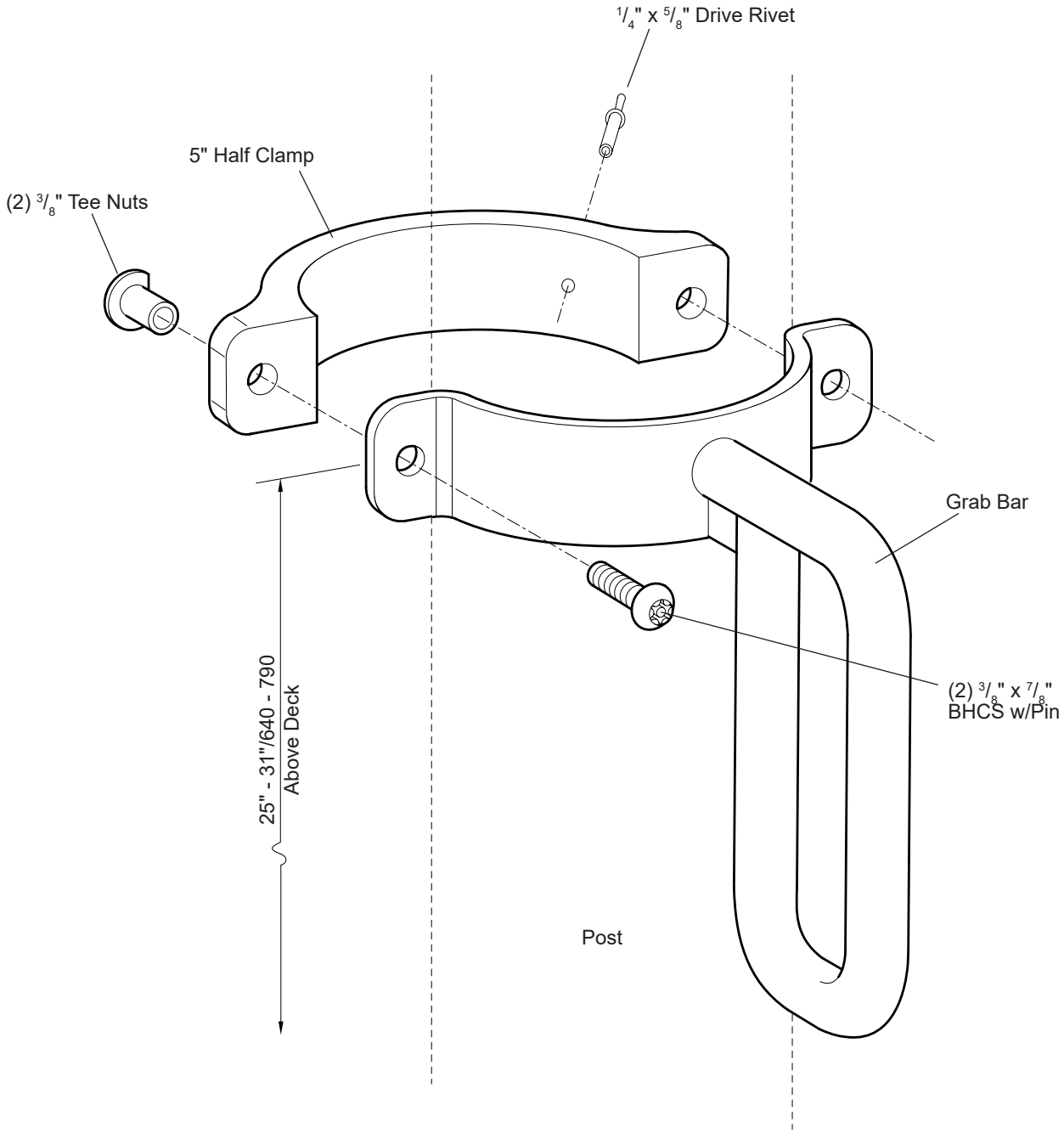
SAFETY NOTE

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*.)

GRAB BAR



Billows™ Structure

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Parts List

Part#	Description	Qty.
105327	5" Half Clamp, Specify Color	1
141541	Grab Bar, Specify Color	1
	Grab Bar Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	1

Specifications

Grab Bar: Weldment comprised of formed 7/8" O.D. 11 GA (.120") and 1/4" x 1 3/4" stainless steel half clamp. Finish: TenderTuff™, color specified.

Half 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. 1/4 man hour

Weight: 5 lbs.

Installation Instructions

1) Attach grab bar to post at height shown, using a 5" half clamp, 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts.

2) Install 1/4" x 5/8" drive rivet in 5" half clamp. Refer to the Offset Hanger Clamp Spec Sheet.

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

ECO #51463 Document #14161500 replaces #13549700. Changed Grab Bar half clamp to stainless steel.

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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*.)

Additional Specifications

Cloud roof - Two color Permalene®, color specified. Perforated weldment comprised of 0.25i AL plates

Steel Half Clamps: Fabricated from of 1 /4" (6,35 mm) HRPO flat steel. Finish: ProShield, color specified.

Decks: Flange formed from 11 GA (.120") 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. Finish: TenderTuff, color specified.

Cable/Net Assemblies: (Cable) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypro¬-pylene core. (Cable Connectors) 6063-T6 aluminum.

Belting: .315" (8,00 mm) Thick mini rough top rubber belting with polyester fabric plys, black in color.

Belt Bridge Handrail: weldment comprised of 1.9" O.D. .095" wall (RS20) and 1.029" O.D. .083 wall (RS20) galvanized steel.

Belt Bridge Brackets: Formed from 0.250" aluminum plate.

DigiFuse Barrier Panels: Assembled from 1/4" (6,35 mm) thick aluminum sheet. Dye sublimation printed digital artwork is fused onto the powdercoated substrate. Solid col¬or Permalene®, color specified,

Permalene® Panels: Two color panel, color specified.

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

5" Clamps: Cast aluminum. Finish: ProShield, Color Specified.

Steel Posts: Cut from 5" O.D. .120" wall (11GA) galvanized steel.

Aluminum Posts: Cut from 5" O.D. .125" wall aluminum.

Post Toppers: Formed from 5" O.D. .120" wall (11GA) galvanized steel. Post caps are Fabricated from sand-cast alloy 356. Finish: Pro- Shield, color specified. Sleeve is cut from 4.69" OD X 24i galvanized steel.

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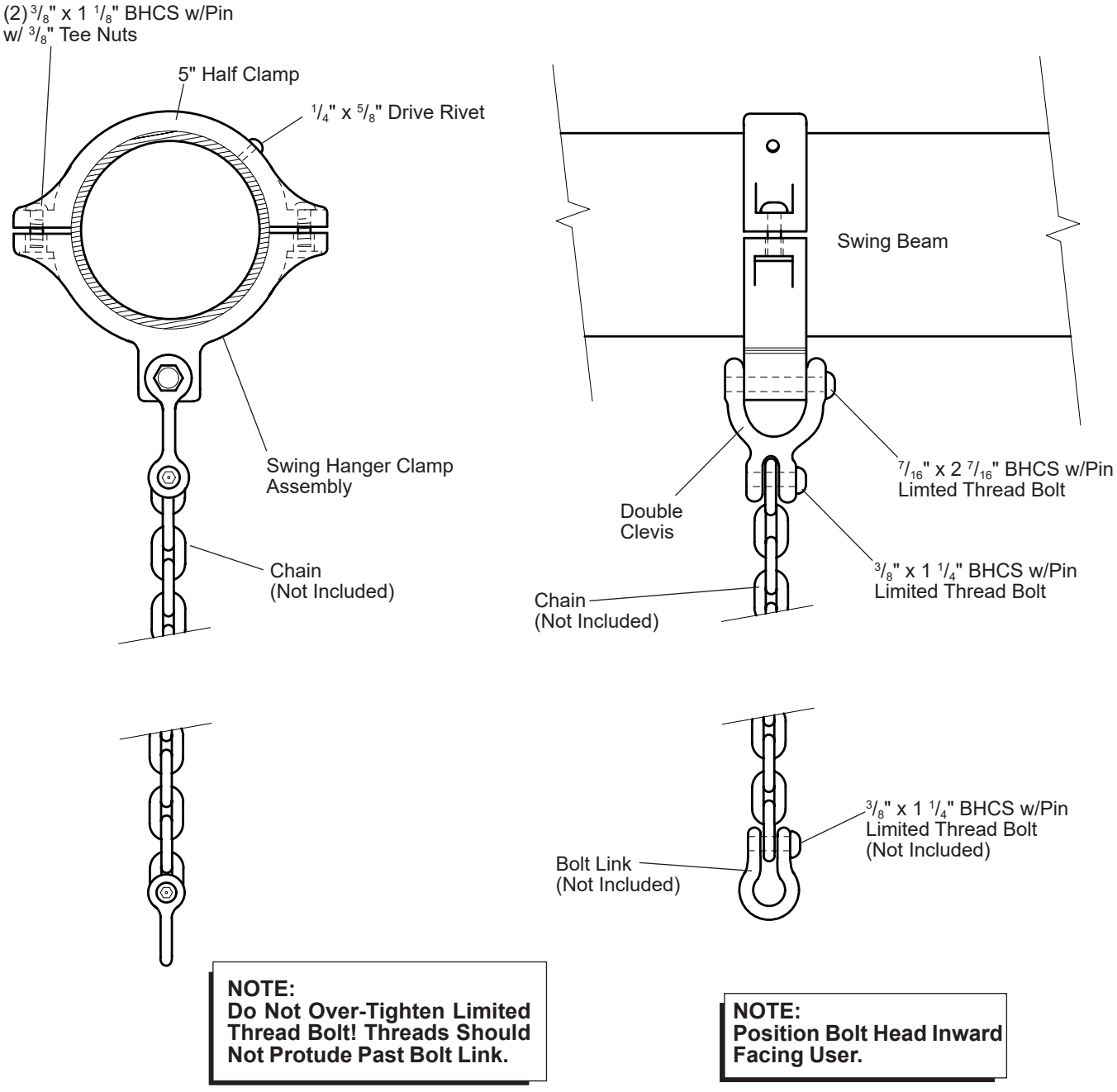
SAFETY NOTE

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.)

13616300



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

NOTE:
Position Bolt Head Inward Facing User.

Swings

111418 Swing Hanger, Belt Swing

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Swings 111418 Swing Hanger, Belt Swing

Parts List

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

Specifications

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

Double Clevis: Stainless Steel.

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

Installation Time: Approx. 1/2 man hour

Weight: 6 lbs.

Installation Instructions

1) Locate and mark location of clamp on beam.

2) Attach 5" half clamp and swing hanger clamp to beam using 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. *Tighten evenly.*

3) ***IMPORTANT:*** *Drill through holes in 5" half clamps and into 5" pipe with a 1/4" or "F" (only) drill bit, tap 1/4" x 5/8" drive rivets through 5" half clamps and into pipe, to ensure that clamps remain secure.*

4) Attach swing chain to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts.

5) Attach swing seat to chains using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread bolts. **NOTE:** *Do not over-tighten limited thread bolt. Threads should not protrude past bolt link. Position bolt head inward facing user.*

ECO #54506 Document #18379700 replaces #13616300. Changed Double Clevis material to Stainless Steel.

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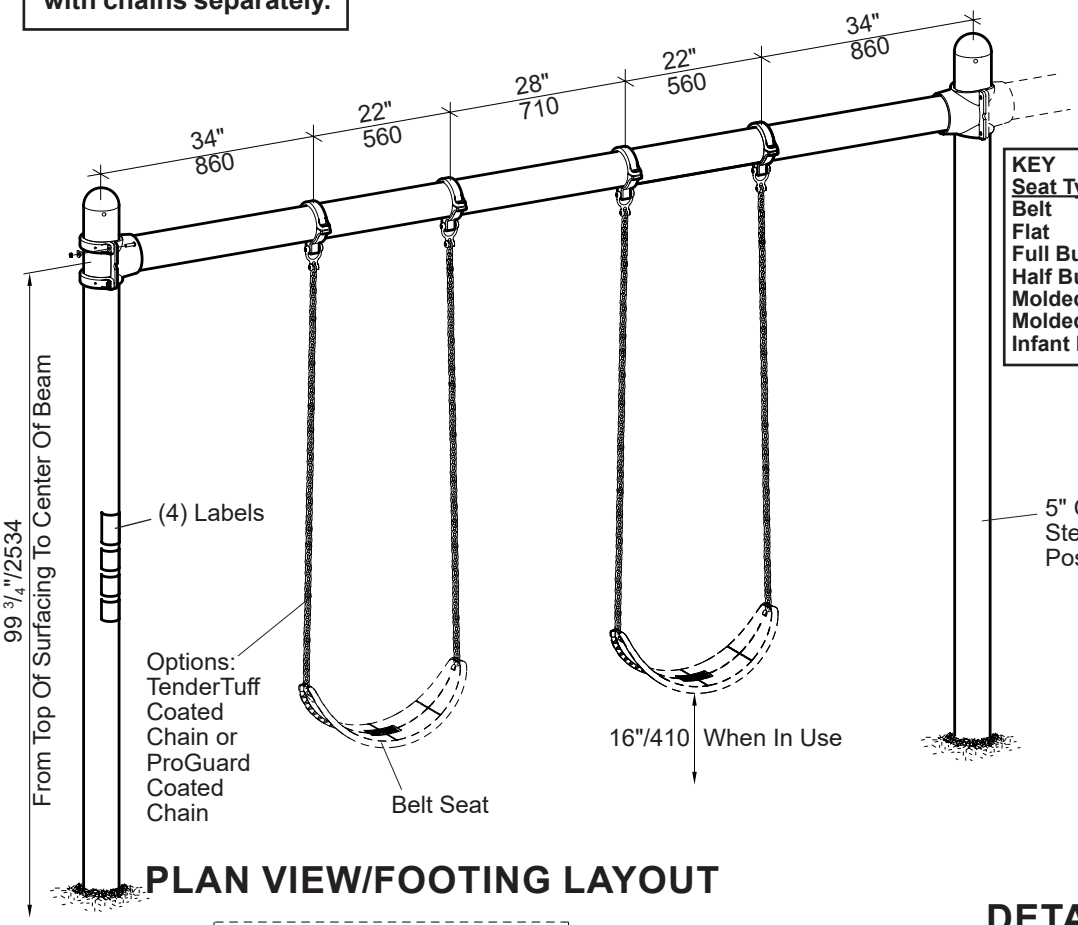
SAFETY NOTE

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.)

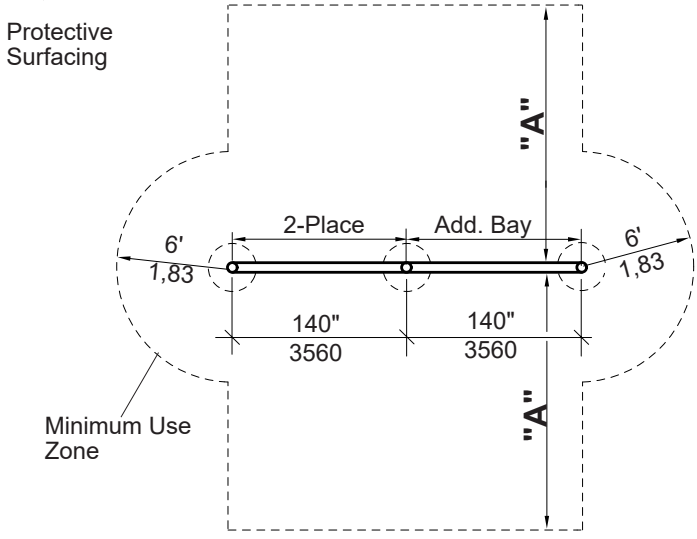
NOTE: Model numbers are for swing frames only, order swing seats with chains separately.



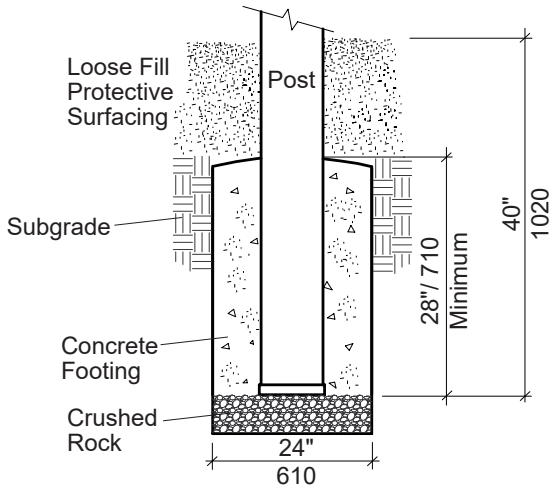
KEY

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

PLAN VIEW/FOOTING LAYOUT



DETAIL
CONCRETE FOOTING



Model #177333 Additional Bay

Swings

177332/177333 Single Post Swing Frame

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Document #30164000

Swings 177332/177333 Single Post Swing Frame

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Parts List

Part#	Description	Qty. 2 Pl	Qty. Add Bay
216492	Swing Beam, Specify Color	1	1
220966	148" Steel Post Assy., Specify Color	2	1
105327	5" Half Clamp, Specify Color	8	4*
100610	1/4X5/8i DRV, Rivet, AS	8	8
121291	**Swing Hanger Clamp Assy. Specify Color**	4	4
121289	Swing Hanger Clamp, Specify Color	4	4
127068	$^{7}/_{16}$" x 2 $^{7}/_{16}$" BHCS w/Pin Ltd. Thread, SST	4	4
138917	Swing Hanger Double Clevis	4	4
100667	Oilite Bushing	4	4
243802	**Hdw Pkg 5iOD Swing Beam.**	1	1
100198	$^{3}/_{8}$" x 1 $^{1}/_{8}$" BHCS w/Pin, SST	8	8
234397	BHCS 6LP LTHD 7/16 x 1 11/16i, SSTST	8	8
100292	$^{3}/_{8}$" x 1 $^{1}/_{4}$"BHCS w/Pin Ltd. Thread, SST	4	4
100351	$^{3}/_{8}$" Tee Nut, SST	8	8
156846	Play Safe Label, 2-12 Yrs.	1	1
234937	$^{7}/_{16}$" D Cut Washer, SST	16	16
182213	Hot Surface Warning Label	1	1
182212	Entanglement Warning Label	1	1
115176	Hard Surface Warning Label	1	1
100330	$^{7}/_{16}$" Nylok Hex Nut	8	8

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

Specifications

Post: See PlayBooster® (PB) General Specifications.

Swing Beam: Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" wall. Finish: ProShield®, color specified.

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

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

Installation Time: **2-Place** - Approx. 6 man hours
Additional Bay - Approx. 3 man hours

Concrete Req.: **2-Place** - Approx. 14 cu. ft.
Additional Bay - Approx. 7 cu. ft.

Area Req: **2-Place** - 24'-1" x 24' (7,3 m x 7,31 m) Full bucket seats.
2-Place - 24'-1" x 32' (7,3 m x 9,75 m) For all other seats.
Additional Bay - 11'-8" x 24' (3,56 m x 7,31 m) Full bucket seats.
Additional Bay - 11'-8" x 32' (3,56 m x 9,75 m) For all other seats.

Weight: **2-Place** - 206 lbs.
Additional Bay - 122 lbs.

Installation Instructions

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

ECO# 0102179 Document 30164000 replaces 24382000 Change to molded seat w/harness use zone

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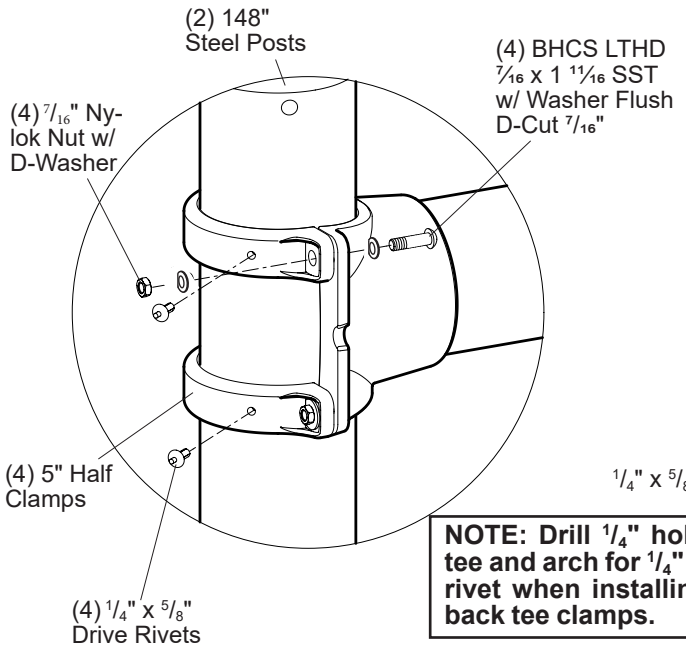
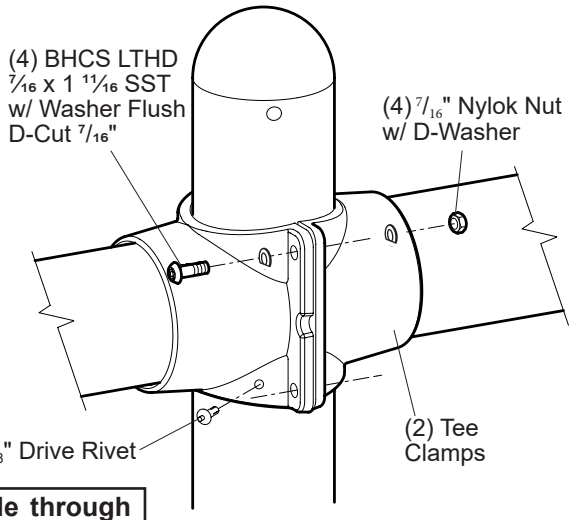
SAFETY NOTE

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.)

DETAIL
BEAM ATTACHMENT



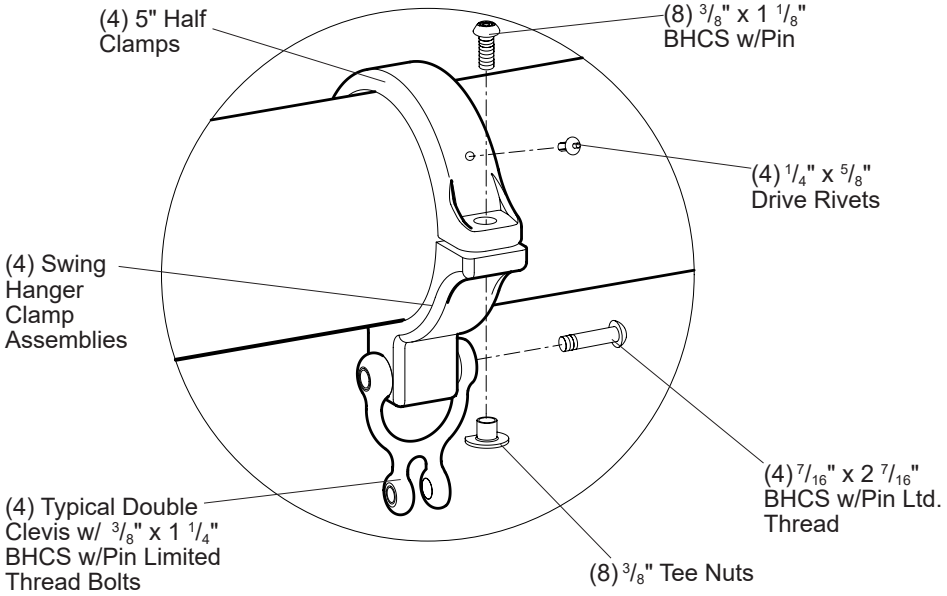
DETAIL
BACK TO BACK TEE CLAMPS



NOTE: Drill 1/4" hole through tee and arch for 1/4" x 5/8" drive rivet when installing back to back tee clamps.

NOTE: Tighten all BHCS w/Pin equally.

DETAIL
SWING HANGER ATTACHMENT



Swings **177332/177333 Single Post Swing Frame**

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Document #30164000

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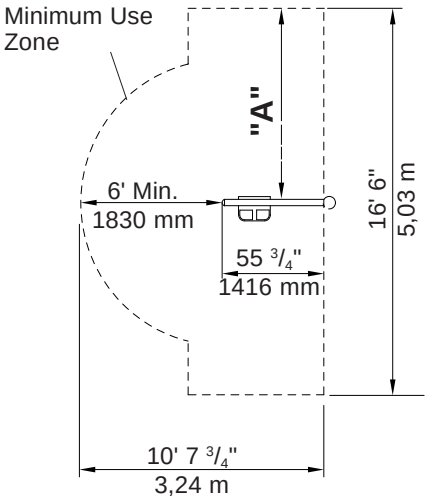
SAFETY NOTE

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*.)

17745000

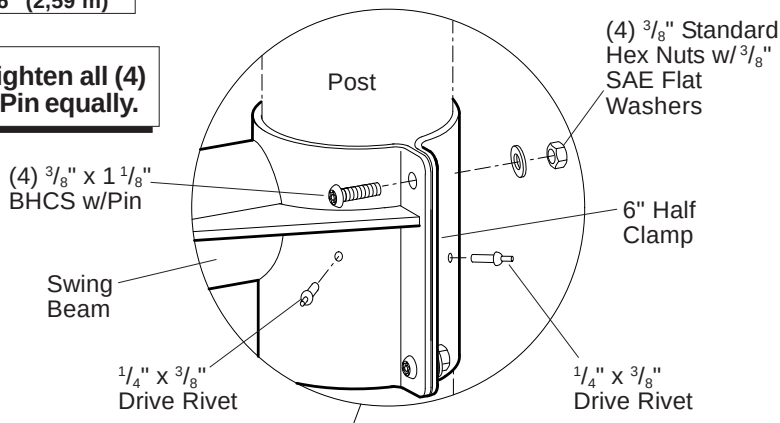
KEY	
Seat Type	**Dimension "A"**
Belt	**N/A**
Flat	**N/A**
Full Bucket	**8'-6" (2,59 m)**
Half Bucket	**12'-6" (3,81 m)**
Molded Bucket	**N/A**
Molded Bucket/Harness	**N/A**
Infant Full Bucket	**8'-6" (2,59 m)**

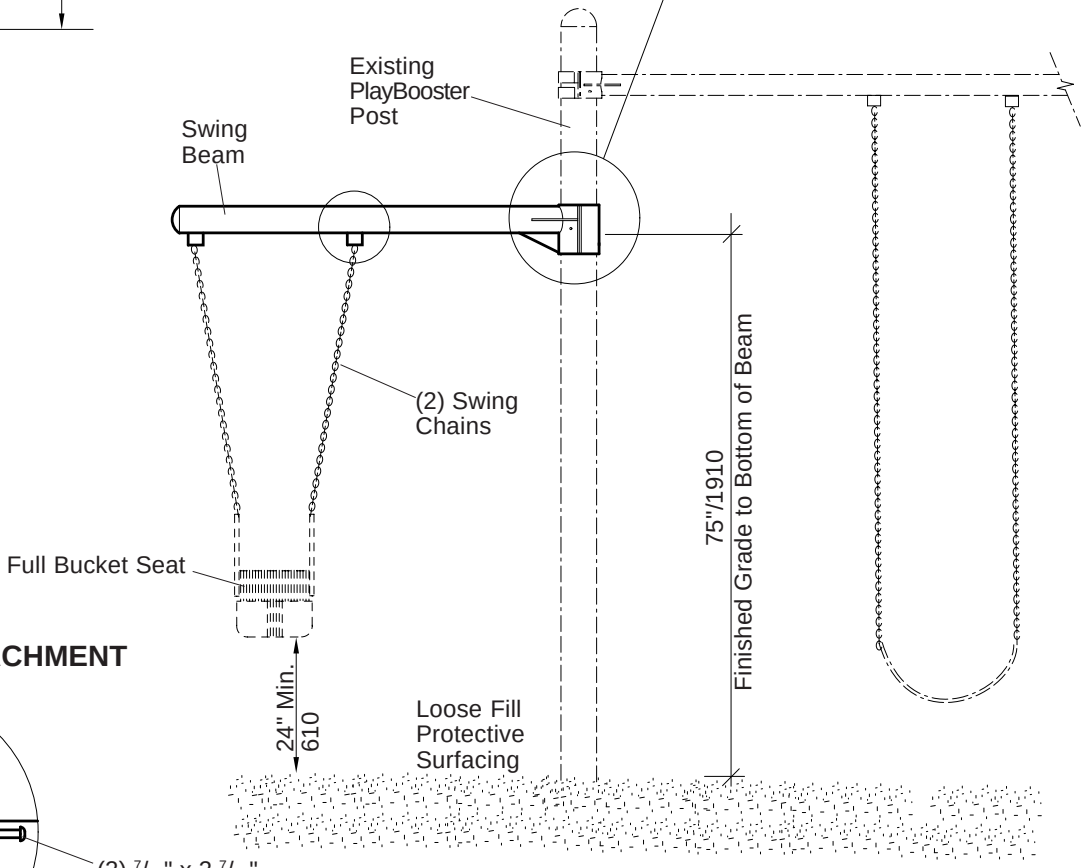
MINIMUM USE ZONE



NOTE: Tighten all (4) BHCS w/Pin equally.

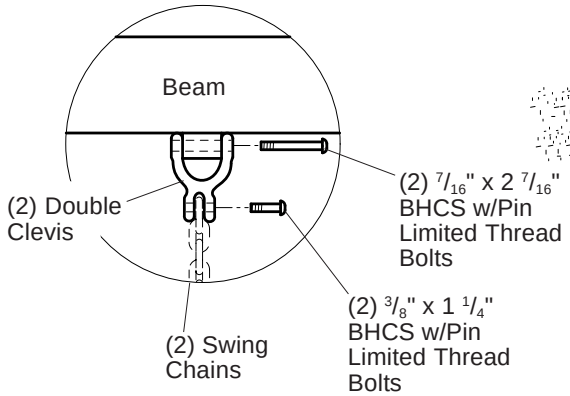
DETAIL
SWING BEAM ATTACHMENT





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

DETAIL
DOUBLE CLEVIS ATTACHMENT



NOTE: Model number is for swing beam only, order swing seat with chains separately.

Swings 177337 Toddler Swing Add-On Beam, No Post

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Swings 177337 Toddler Swing Add-On Beam, No Post

Parts List

Part#	Description	Qty.
135548-00	Swing Beam, Specify Color	1
154322-00	6" Half Clamp, Specify Color	1
116882-00	**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
132634-00	**Double Clevis Hardware Package**	1
127068-00	7/16" x 2 7/16" BHCS w/Pin Ltd. Thread Bolt, SST	2
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST	2
138917-00	Double Clevis	2

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. 1 man hour
Area Req.: 10' 7 3/4" x 17' (3,24 m x 5,18 m)
Weight: 31 lbs.

Installation Instructions

1) Attach swing beam to post using 6" half clamp, 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.*

2) Attach double clevises to beam 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.

3) Install Swing Seat per the installation sheet.

4) Drill through hole in 6" half clamp and into post with a 1/4" or "F" (only) drill bit. Install 1/4" x 3/8" drive rivet. Refer to the Swing Beam Attachment Detail.

5) Drill through hole in swing beam and into post with a 1/4" or "F" (only) drill bit. Install 1/4" x 3/8" drive rivet. Refer to the Swing Beam Attachment Detail.

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

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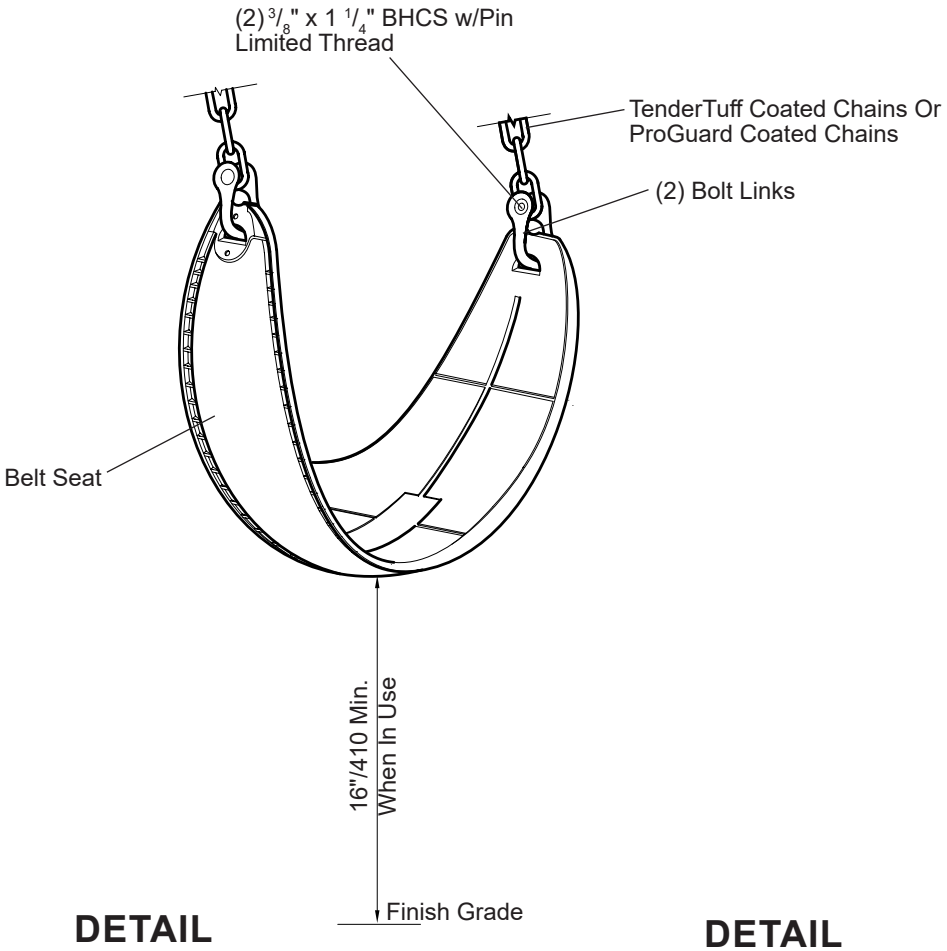
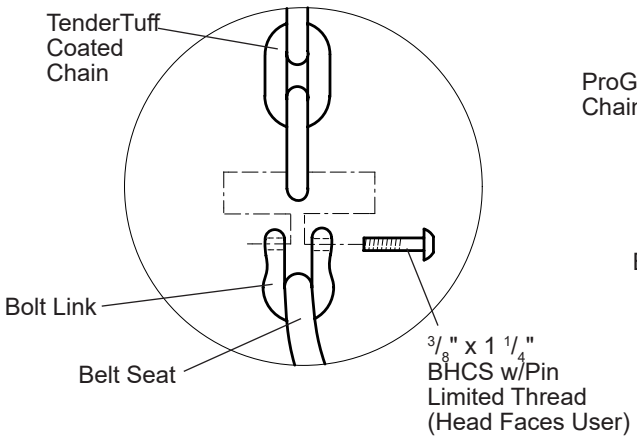
SAFETY NOTE

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*.)

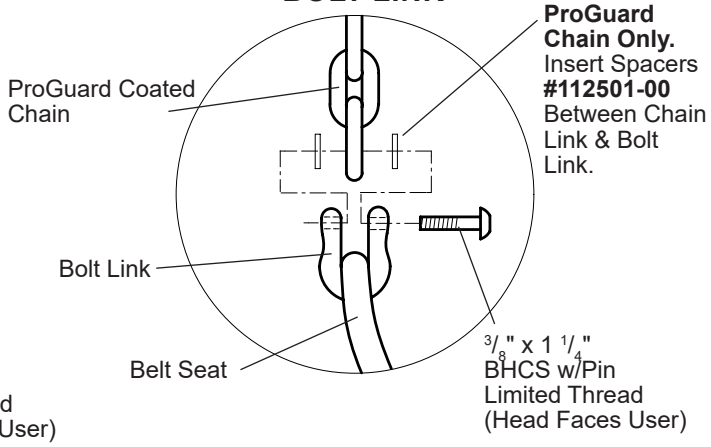
17745700



DETAIL
BOLT LINK



DETAIL
BOLT LINK



Swings

174018 Belt Seat

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Document #21059100

Swings 174018 Belt Seat

Parts List

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

Specifications

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

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

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

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

Bolt Link: Stainless Steel.

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

Installation Time: 1/4 man hour per seat

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

Installation

NOTE: *Refer to Swing Frame assembly for swing hanger type.*

Swing Hangers With Double Clevis

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

Anti-wrap Swing Hangers

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

5/14/25 - Clarification and note added for swing hanger components being part of swing frame assembly.

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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*.)

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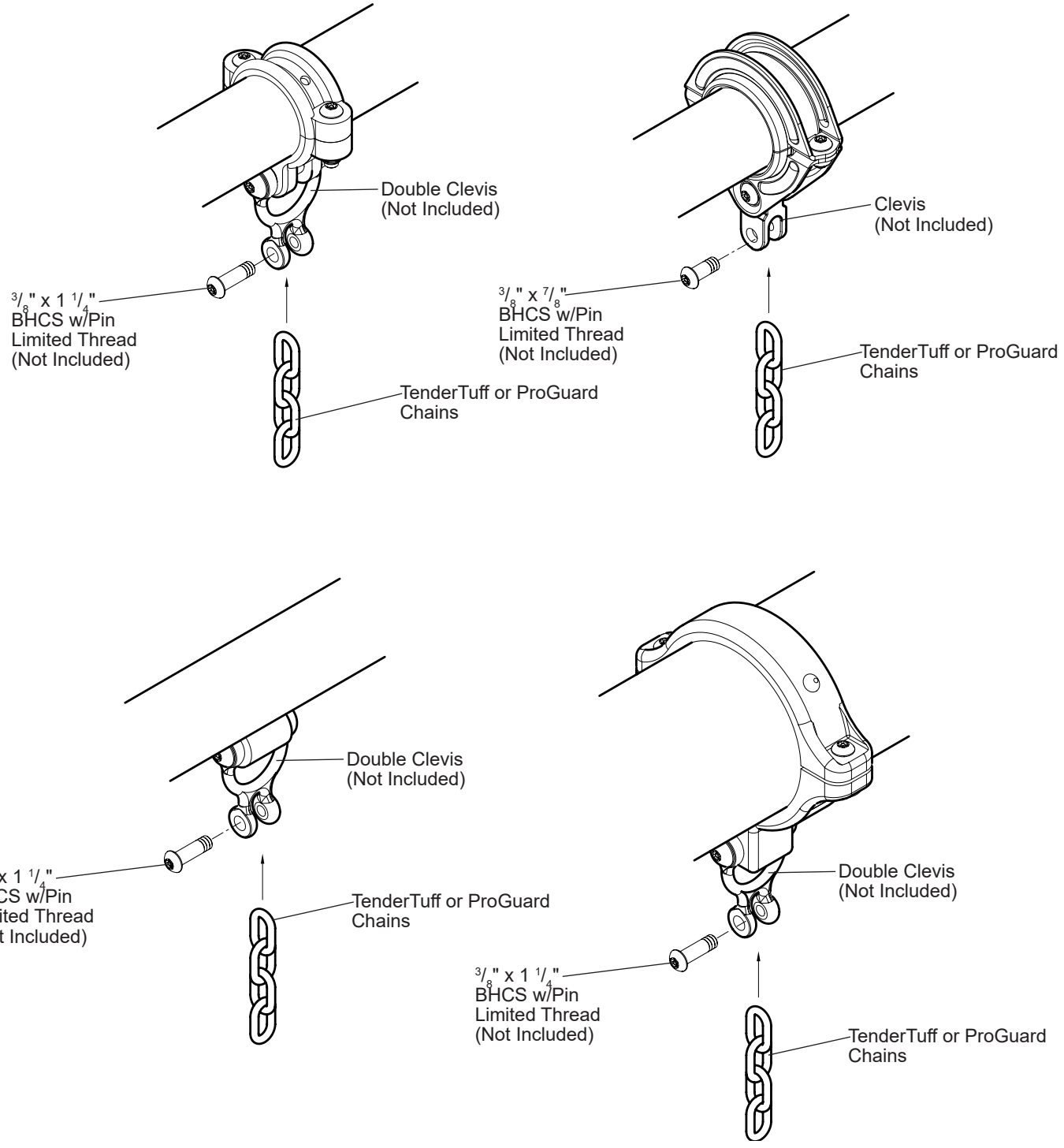
SWING HANGER OPTIONS

Swing Hanger Components included with Swing Frame.



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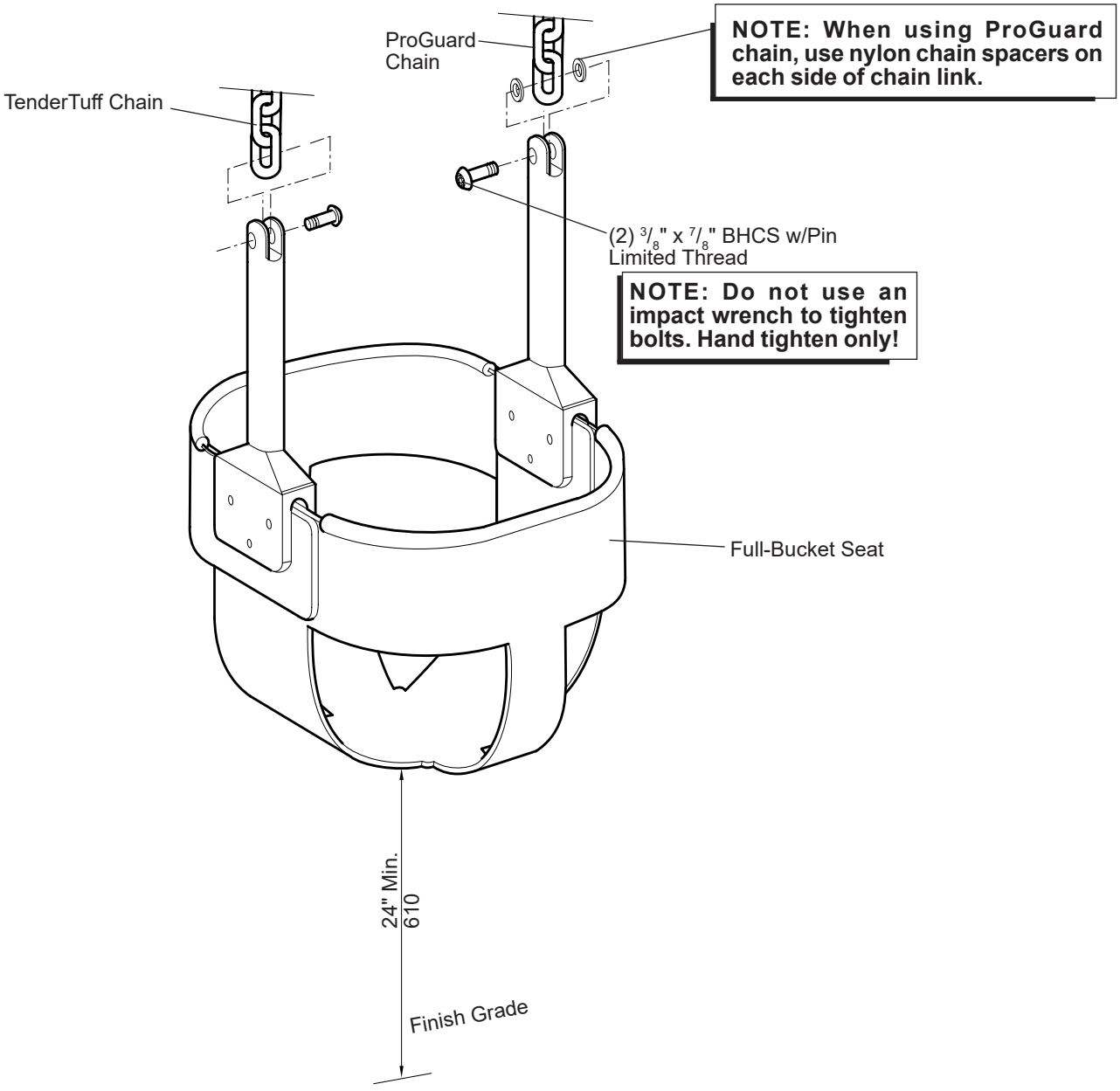

Swings

176038 Full-Bucket Seat, w/Chains

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Swings 176038 Full-Bucket Seat, w/Chains

Parts List

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

Specifications

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

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

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

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

Installation Time: 1/4 man hour per seat

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

Installation Instructions

NOTE: *Refer to Swing Frame assembly for swing hanger type.*

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.

5/14/2025 Clarification and note added to swing hanger components being part of swing frame assembly.
2/10/2016 Added Hand Tighten Only Note.

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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*.)

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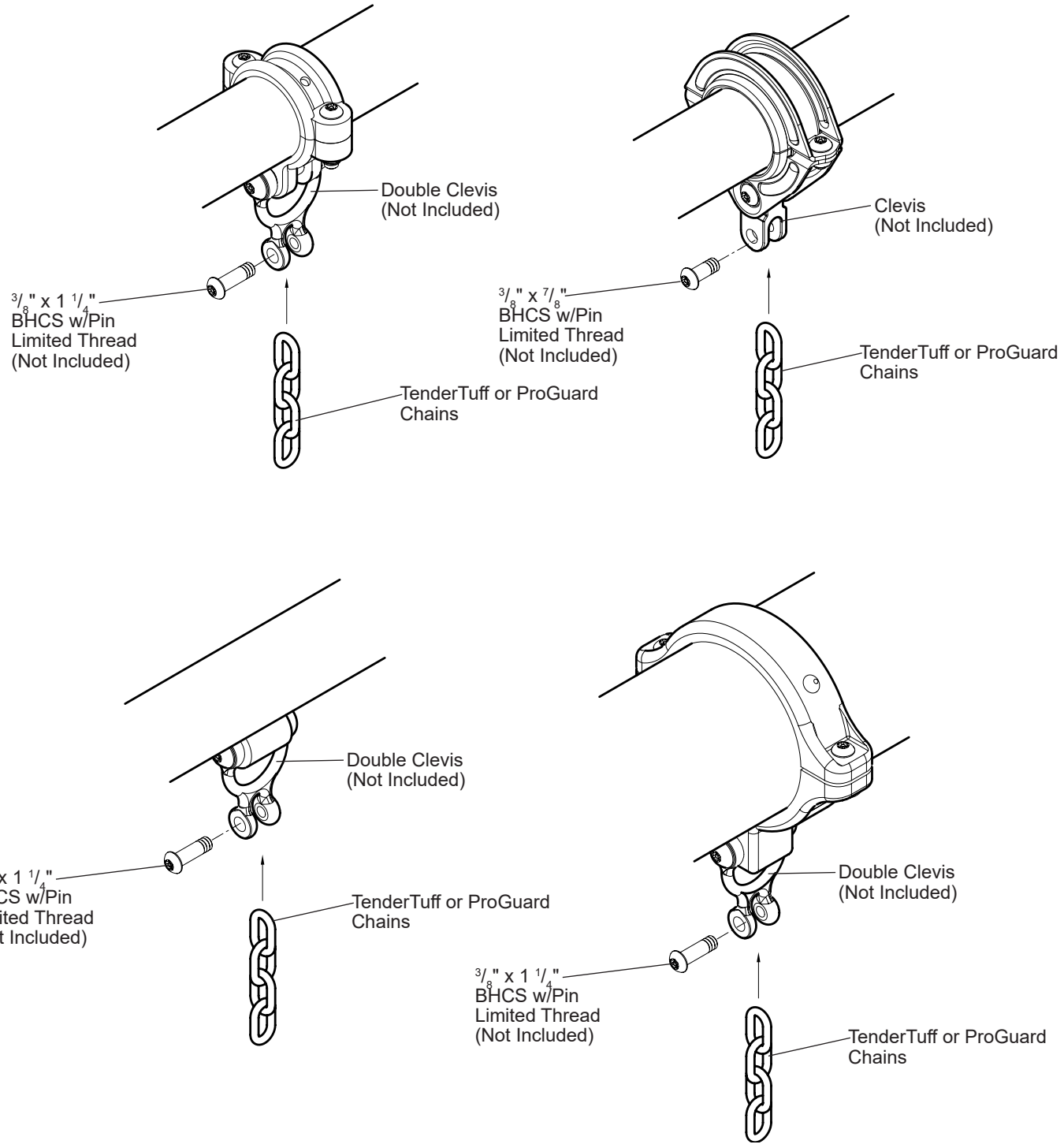
SWING HANGER OPTIONS

Swing Hanger Components included with Swing Frame.



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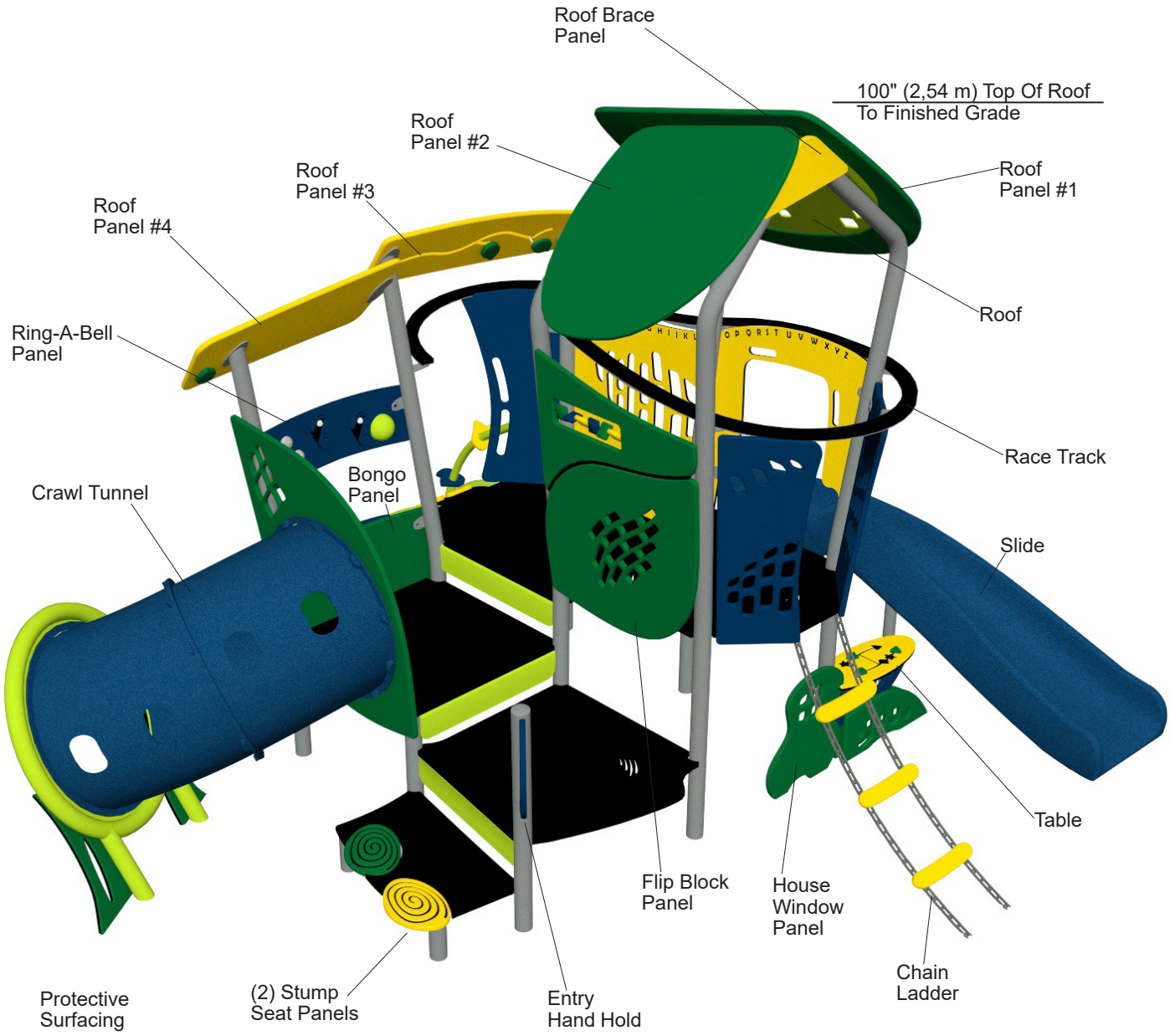

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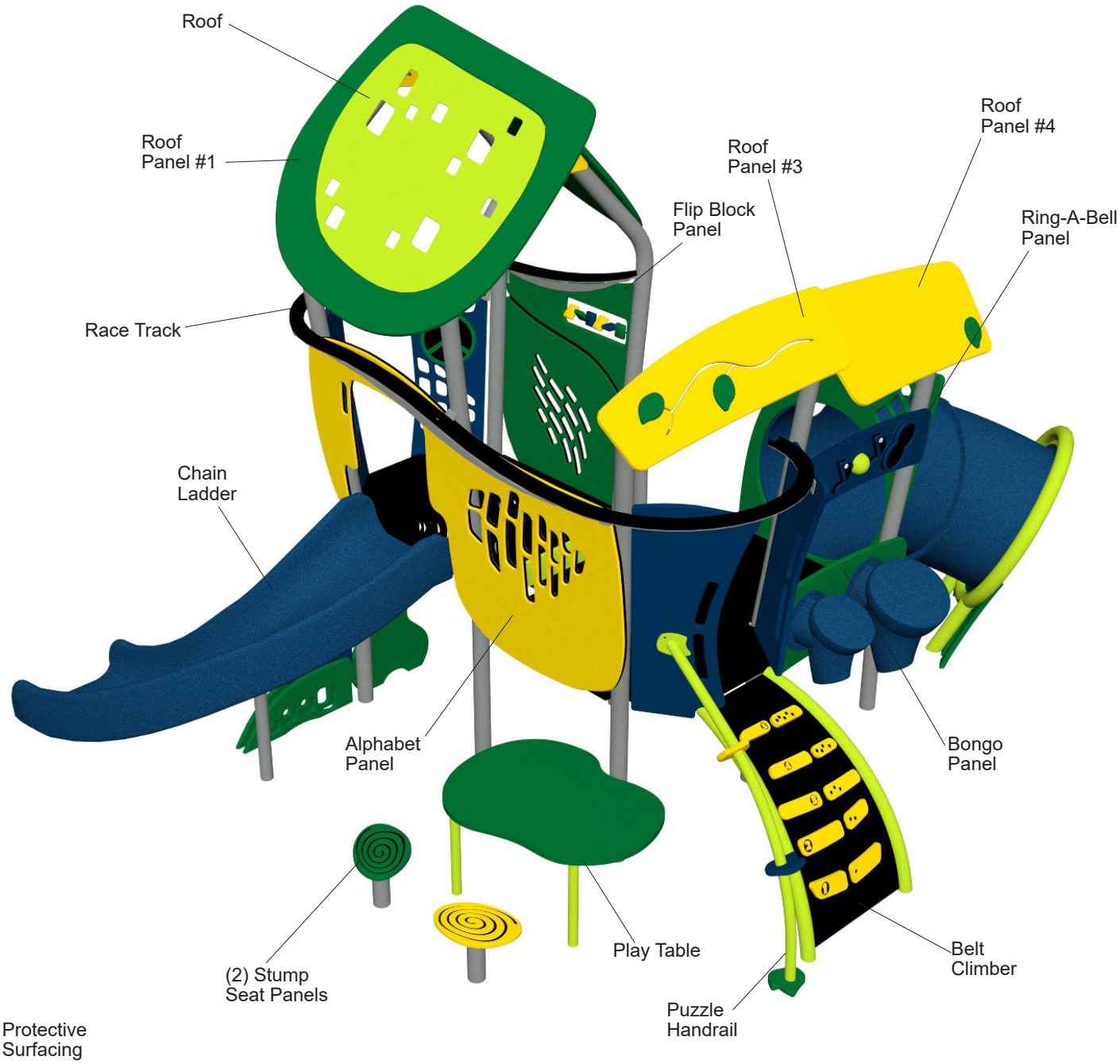

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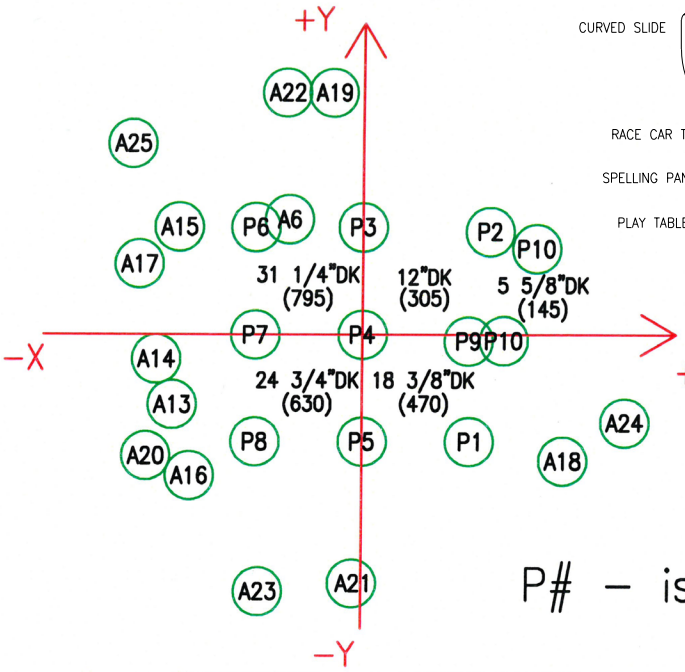
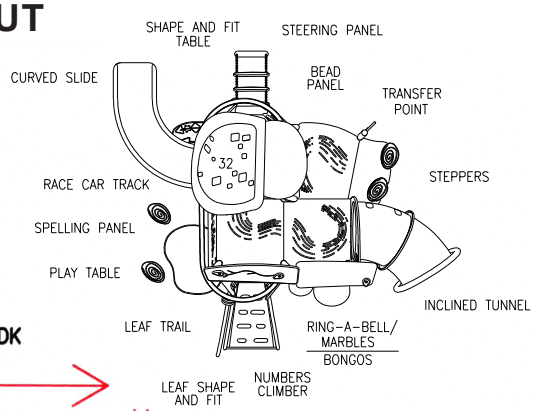
PLAN VIEW /FOOTING LAYOUT





P# – is the POST Number

N.	I.D.	X (cm)	Y (cm)	Dist. to 0	DIA (cm)
1	P4	0	0	0	30
2	P9	67	-4	67	30
3	P5	0	-67	67	30
4	P7	-67	0	67	30
5	P3	0	67	67	30
6	A6	-46	72	86	30
7	P10	89	-4	89	30
8	P8	-67	-67	95	30
9	P1	67	-67	95	30
10	P6	-67	67	95	30
11	P2	80	65	103	30
12	P10	109	54	122	30
13	A13	-119	-44	127	30
14	A14	-130	-15	130	30
15	A15	-115	67	134	30
16	A16	-108	-89	140	30
17	A17	-140	44	147	30
18	A18	126	-79	149	30
19	A19	-19	152	153	30
20	A20	-136	-76	156	30
21	A21	-6	-156	156	30
22	A22	-48	152	159	30
23	A23	-65	-162	174	30
24	A24	165	-55	174	30
25	A25	-145	120	188	30

N.	I.D.	X (ft-in)	Y (ft-in)	Dist. to 0	DIA (in)
1	P4	0"	0"	0"	12
2	P9	2'-2"	-2"	2'-2"	12
3	P5	0"	-2'-3"	2'-3"	12
4	P7	-2'-3"	0"	2'-3"	12
5	P3	0"	2'-3"	2'-3"	12
6	A6	-1'-6"	2'-4"	2'-10"	12
7	P10	2'-11"	-1"	2'-11"	12
8	P8	-2'-3"	-2'-3"	3'-1"	12
9	P1	2'-3"	-2'-3"	3'-1"	12
10	P6	-2'-3"	2'-3"	3'-1"	12
11	P2	2'-8"	2'-1"	3'-4"	12
12	P10	3'-7"	1'-9"	4'	12
13	A13	-3'-11"	-1'-5"	4'-2"	12
14	A14	-4'-3"	-6"	4'-3"	12
15	A15	-3'-9"	2'-3"	4'-5"	12
16	A16	-3'-7"	-2'-11"	4'-7"	12
17	A17	-4'-7"	1'-5"	4'-10"	12
18	A18	4'-2"	-2'-7"	4'-11"	12
19	A19	-8"	5'	5'	12
20	A20	-4'-6"	-2'-6"	5'-1"	12
21	A21	-2"	-5'-2"	5'-2"	12
22	A22	-1'-7"	5'	5'-3"	12
23	A23	-2'-2"	-5'-4"	5'-9"	12
24	A24	5'-5"	-1'-10"	5'-9"	12
25	A25	-4'-9"	3'-11"	6'-2"	12

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SAFETY NOTE

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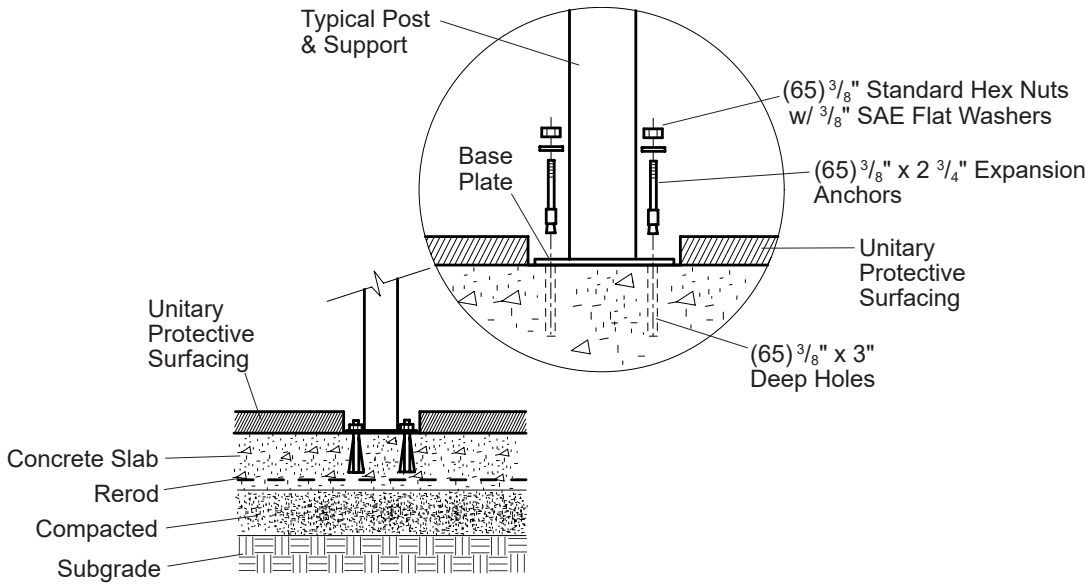
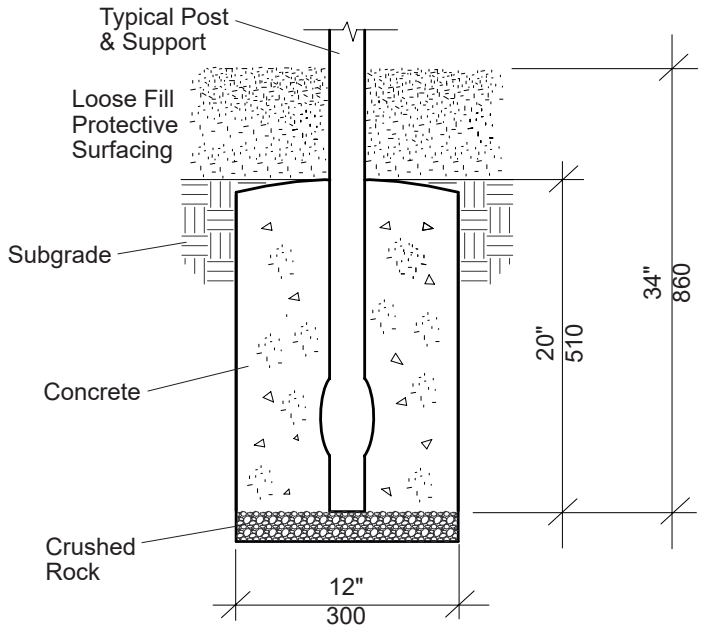
DETAIL
SURFACE MOUNT



DETAIL
DIRECT BURY



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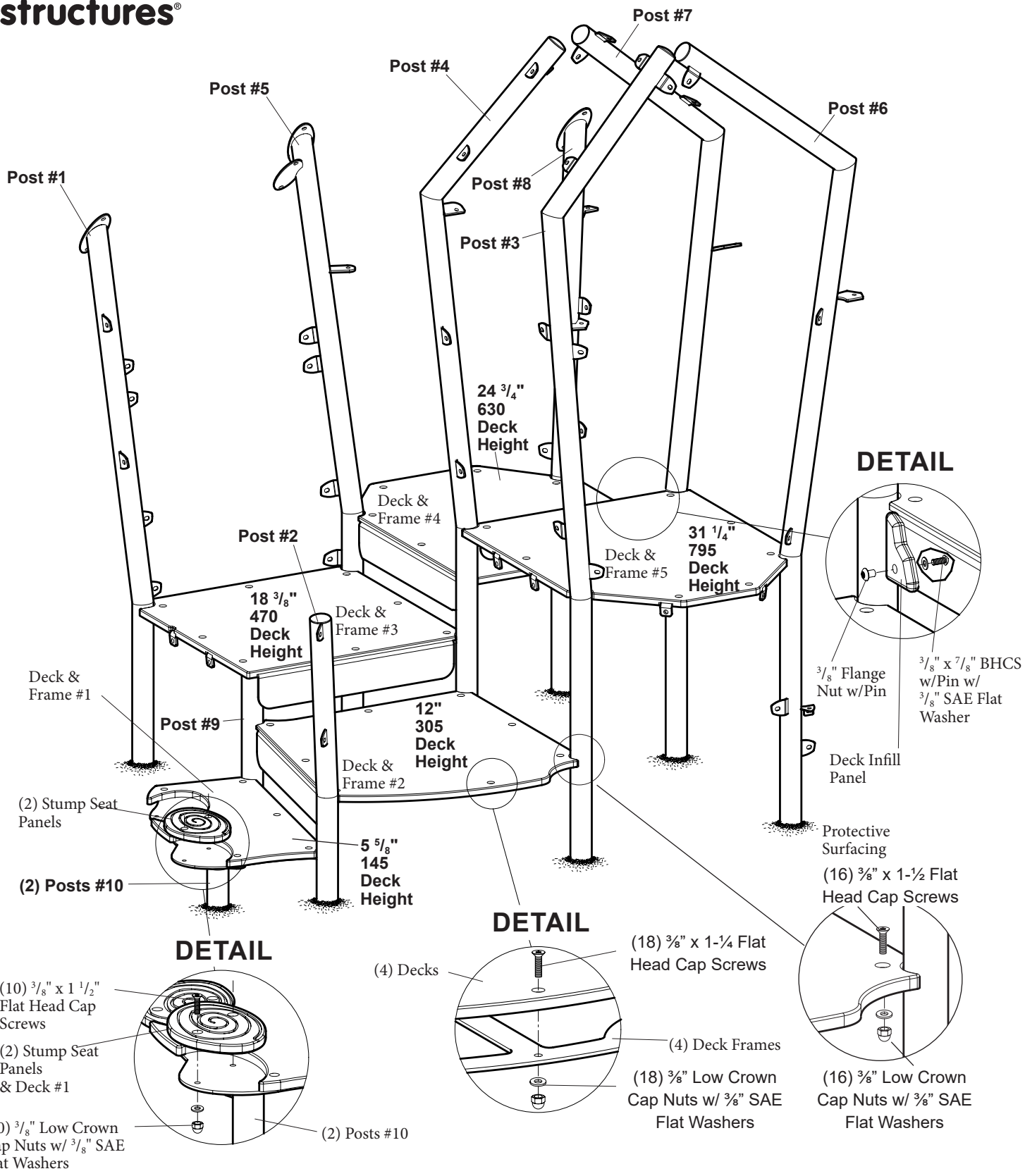

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Posts & Decks

Parts List

Part#	Description	Qty.
196425	Post #1, Specify Color (SM)	1
197094	Post #1, Specify Color (DB)	1
196424	Post #2, Specify Color (SM)	1
197095	Post #2, Specify Color (DB)	1
196426	Post #3, Specify Color (SM)	1
197096	Post #3, Specify Color (DB)	1
196427	Post #4, Specify Color (SM)	1
197097	Post #4, Specify Color (DB)	1
196428	Post #5, Specify Color (SM)	1
197098	Post #5, Specify Color (DB)	1
196429	Post #6, Specify Color (SM)	1
197099	Post #6, Specify Color (DB)	1
196431	Post #7, Specify Color (SM)	1
197100	Post #7, Specify Color (DB)	1
227199	Post #8, Specify Color (SM)	1
227198	Post #8, Specify Color (DB)	1
196524	Post #9, Specify Color (SM)	1
197102	Post #9, Specify Color (DB)	1
197246	Post #10, Specify Color (SM)	2
197272	Post #10, Specify Color (DB)	2
211280	Deck Surface #1, Black	1
211281	Deck Surface #2, Black	1
211282	Deck Surface #3, Black	1
211283	Deck Surface #4, Black	1
211284	Deck Surface #5, Black	1
196582	Deck Frame #1, Specify Color	1
196583	Deck Frame #2, Specify Color	1
196584	Deck Frame #3, Specify Color	1
196506	Deck Frame #4, Specify Color	1
196586	Deck Frame #5, Specify Color	1
197004	Stump Seat #1, Specify Color	1
197050	Stump Seat #2, Specify Color	1
200950	Deck Infill Panel, Specify Color	1
356838	**Mainstructure Hardware Package**	1
100365	3/8" SAE Flat Washer, SST	45
100349	3/8" Low Crown Cap Nut, SST	44
151421	3/8" x 1 1/2" FHCS w/Pin	26
100196	3/8" x 7/8" BHCS w/Pin, SST	1
100353	3/8" Flange Nut w/Pin, SST	1
100252	3/8" x 1 1/4" FHCS w/Pin	18
200978	**Motion Hardware Package (SM)**	1
100327	3/8" Standard Hex Nuts, SST.	65
100365	3/8" SAE Flat Washers, SST.	65
100263	3/8" x 2 3/4" Expansion Anchors	65

DB = Direct Bury
SM = Surface Mount

Specifications

Deck Frame: Fabricated from 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield®, color specified.

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

Panels: Recycled Permalene, color specified.

Post: Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm - 2,67 mm) wall galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 7 GA. (.179") (4,55 mm) HRPO steel sheet. Finish: ProShield, color specified.

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

Installation Time: Approx. 30 man hours for entire structure (DB)
Approx. 25 man hours for entire structure (SM)
Fall Height: 32" (813 mm)
Area Required: 24' x 24' (7,31 m x 7,31 m) minimum
Concrete: Approx. 32.75 cu. ft. for entire structure (DB)
Weight: 1100 lbs. (DB)
950 lbs. (SM)
Height: 100" (2,54 m) Top Of Roof To Finished Grade

Installation Instructions

1) **(Direct Bury)** Dig footings spaced as shown. Orient posts correctly and set in proper footing holes.

2) Starting with the highest deck, attach deck frames and decks to posts. Level decks. Continue until all deck frames and decks are in position.

3) Install stump seat panels to deck frame.

4) Attach deck infill panel.

5) Attach remaining components and panels according to their respective installation sheets.

6) **(Direct Bury)** With structure square, plumb and level, pour concrete footings. Allow concrete to cure a minimum of 72 hours before users are allowed to play on the structure.

   Surface Mount - Drill 3/8" x 3" deep holes through post and footer plates into concrete slab using 3/8" masonry bit and hammer drill. Tap 3/8" x 2 3/4" expansion anchors into drilled holes and fasten with 3/8" standard hex nuts and 3/8" SAE flat washers.

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

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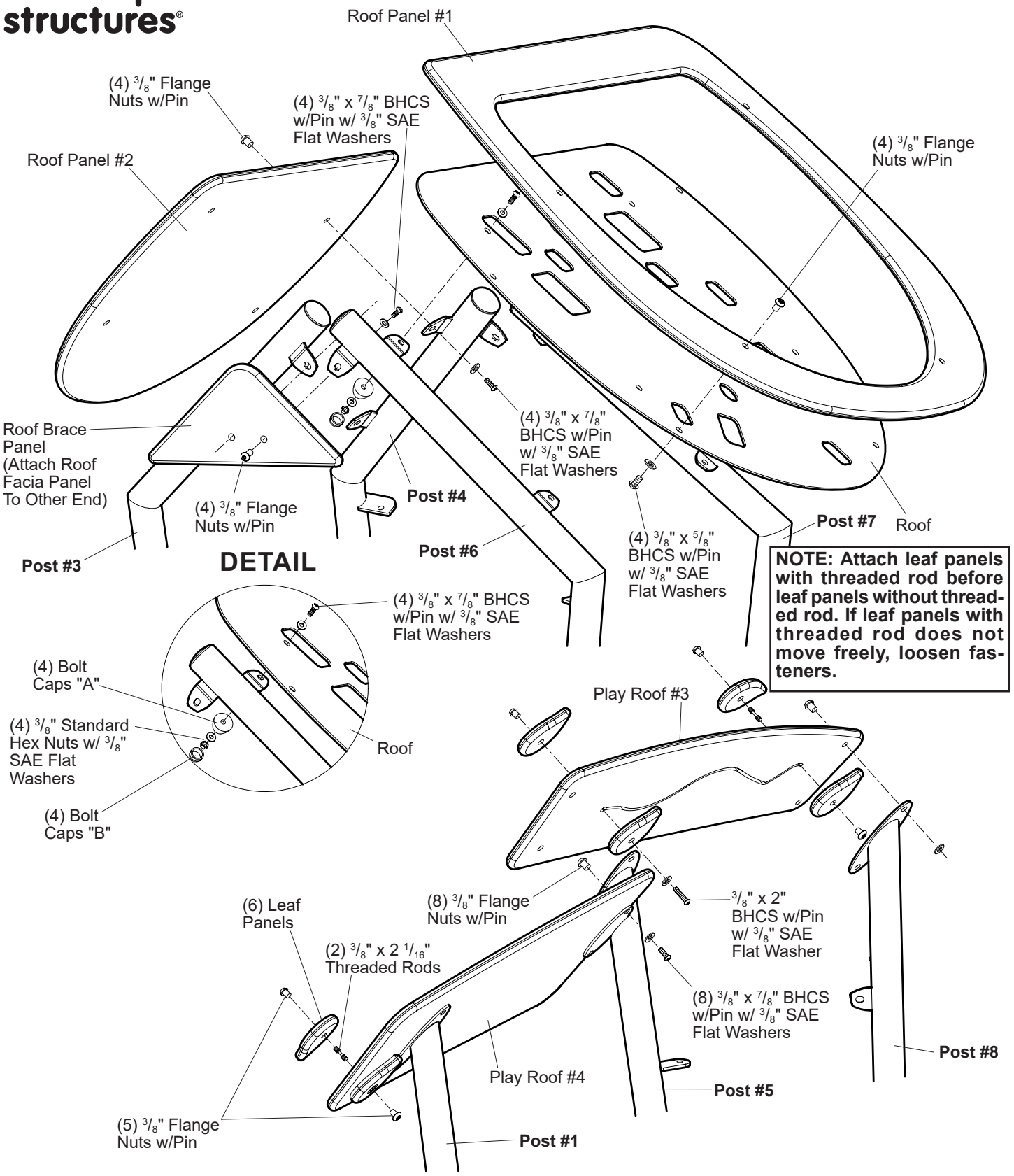
SAFETY NOTE

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.)



NOTE: Attach leaf panels with threaded rod before leaf panels without threaded rod. If leaf panels with threaded rod does not move freely, loosen fasteners.

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Roof

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.)

Parts List

Part#	Description	Qty.
200383	**Roof 2 Panel Set, Specify Color**	1
196802	Roof Panel #1, Specify Color	1
196805	Roof Panel #2, Specify Color	1
196807	Roof Panel #3, Specify Color	1
196833	Roof Panel #4, Specify Color	1
196810	Roof, Specify Color	1
196806	Roof Brace Panel, Specify Color	1
199316	Play Roof Facia Panel, Specify Color	1
197233	Leaf Panel, Specify Color	6
307488	**Motion Roofs Hardware Package**	1
100195	$^3/_8$" x $^5/_8$" BHCS w/Pin, SST	4
100196	$^3/_8$" x $^7/_8$" BHCS w/Pin, SST	20
100327	$^3/_8$" Standard Hex Nut, SST	4
100353	$^3/_8$" Flange Nut w/Pin, SST	25
100365	$^3/_8$" SAE Flat Washer, SST	29
100173	$^3/_8$" x 2" BHCS w/Pin, SST	1
123115	$^3/_8$" x 2 $^1/_{16}$" Threaded Rod	2
108184	Bolt Cap Part A, White	4
108185	Bolt Cap Part B, White	4

Specifications

Panels: Recycled Permalene® panel, color specified.

Roof: Fabricated from 7 GA. (.179") (4,55 mm) HRPO steel sheet. Finish: ProShield®, color specified.

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

Installation Instructions

1) Attach leaf panels to roof panels.

2) Attach roof and roof panels to post tabs.

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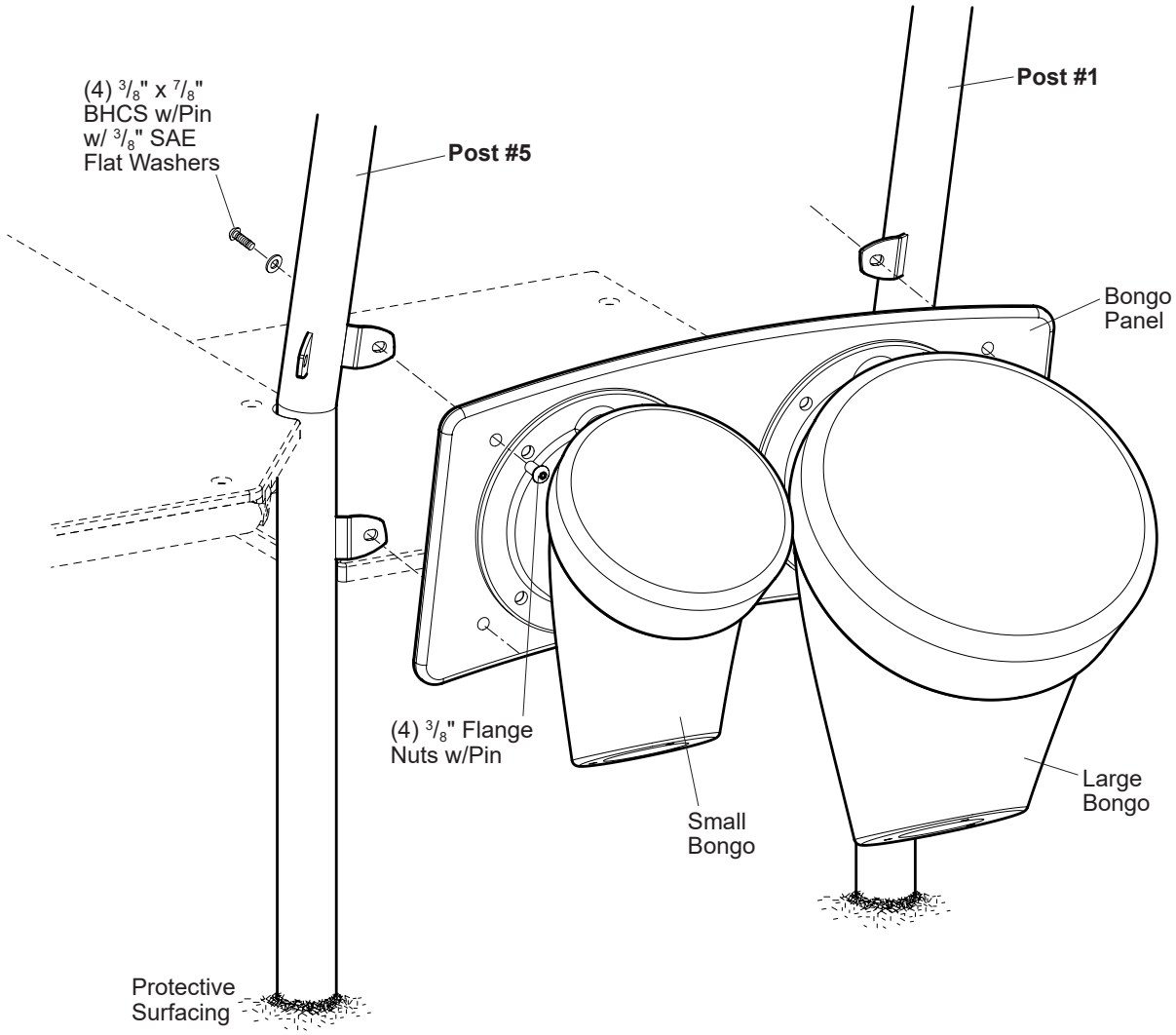
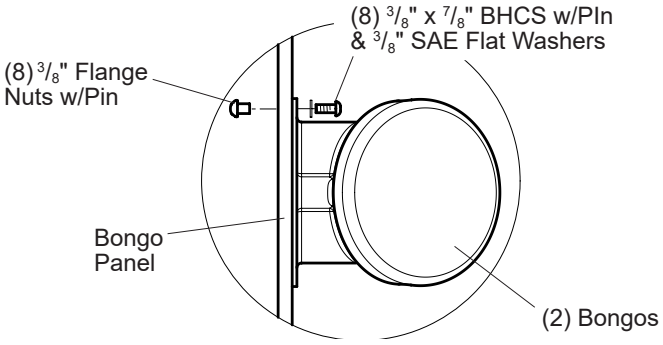
SAFETY NOTE

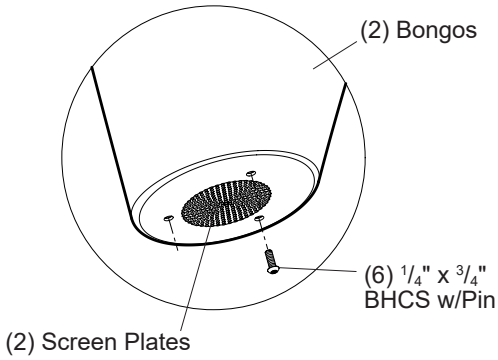
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)



DETAIL
BONGO ATTACHMENT



DETAIL
SCREEN ATTACHMENT



NOTE: Screen plates attach (flat side to flat side) to inside of Bongos.

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Bongo Panel

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.)

Parts List

Part#	Description	Qty.
163911	Small Bongo, Specify Color	1
163912	Large Bongo, Specify Color	1
196817	Bongo Panel, Specify Color	1
164523	Screen Plate, Black	2
200949	**Bongo Panel Hardware Package**	1
100196	$^{3}/_{8}$" x $^{7}/_{8}$" BHCS w/Pin, SST	12
100353	$^{3}/_{8}$" Flange Nut w/Pin, SST	12
100365	$^{3}/_{8}$" SAE Flat Washers, SST	12
162374	$^{1}/_{4}$" x $^{3}/_{4}$" BHCS w/Pin, SST	6
127463	T-27 TPP Hex Bit (Torx)	1

Specifications

Panel: Recycled Permalene® panel, color specified.

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

Screen Plate: Fabricated from 12 GA. (.105") (2,67 mm) HRPO flat steel. Finish: ProShield®, black in color.

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

Installation Instructions

1) Attach screen plates to bongos. **NOTE:** *Screen plates attach (flat side to flat side) to inside of Bongos.*
2) Attach Bongos to Bongo Panel.
3) Attach Bongo Panel to post tabs.

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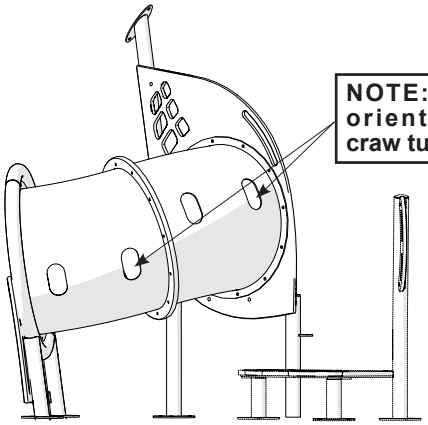
NOTE: Bottom hole in tunnel section does not require a fastener.



NOTE: Correct orientation of craw tunnel.

Crawl Tunnel Panel

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

(4) 3/8" Flange Nuts w/Pin

(11) 3/8" Flange Nuts w/Pin

Post #1

(11) 3/8" x 7/8" BHCS w/Pin w/ Roto Tunnel Contoured Washers

(2) 3/8" x 7/8" BHCS w/Pin w/ 3/8" SAE Flat Washers

Flanged 30° Tunnel Section

Post #2

(10) 3/8" x 7/8" BHCS w/Pin w/Roto Tunnel Contoured Washers

(2) 3/8" Flange Nuts w/Pin

(12) Attachment Blocks

(10) 3/8" Flange Nuts w/Pin

30° Tunnel Section

Entry Handhold Panel

(2) Tunnel Rings

Tunnel Support

(2) 3/8" Flange Nuts w/Pin

(2) 3/8" x 1 11/16" BHCS w/Pin w/ Roto Tunnel Contoured Washers

Protective Surfacing

DETAIL
TUNNEL ASSY.

9 5/8" 244

(2) 3/8" x 7/8" BHCS w/Pin w/3/8" SAE Flat Washers

(12) Attachment Blocks

Flanged Tunnel End

Tunnel Grass Left Panel

Tunnel Grass Panel

(2) 3/8" Flange Nuts w/Pin

(12) 3/8" x 1 1/8" BHCS w/Pin w/Roto Tunnel Contoured Washers

Standard Tunnel End

(12) 3/8" Standard Hex Nuts

NOTE: Be sure to orientate contoured washers as shown.

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Crawl Tunnel

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.)

Parts List

Part#	Description	Qty.
201077	Tunnel Ring Panel, Specify Color	2
196827	Crawl Tunnel Panel, Specify Color	1
200748	Tunnel Grass Left Panel, Specify Color	1
198121	Tunnel Grass Panel, Specify Color	1
108175	30° Tunnel Section, Specify Color	1
108177	Flanged 30° Tunnel Section, Specify Color	1
200498	Tunnel Support, Specify Color (SM)	1
201075	Tunnel Support, Specify Color (DB)	1
133047	Attachment Block, Specify Color	12
197232	Entry Handhold Panel, Specify Color	1
219162	**Crawl Tunnel Hardware Package**	1
100196	3/8" x 7/8" BHCS w/Pin, SST	29
100198	3/8" x 1 1/8" BHCS w/Pin, SST	12
123224	3/8" x 1 11/16 BHCS w/Pin, SST	2
100353	3/8" Flange Nut w/Pin, SST	31
100365	3/8" SAE Flat Washer, SST	8
216834	Roto Tunnel Contoured Washer, SST	35
100327	3/8" Standard Hex Nut, SST	12

DB = Direct Bury
SM = Surface Mount

Specifications

Panels: Recycled Permalene® panel, color specified.

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

Tunnel Support: Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm - 2,67 mm) wall galvanized steel tubing, and 1/8" (.125") (3,18 mm) HRPO steel sheet. Finish: ProShield®, color specified.

Attachment Block: 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 Instructions

1) Attach crawl tunnel panel to post and deck tabs.
2) Attach crawl tunnel sections to crawl tunnel panel.
3) Attach tunnel support, tunnel ring panels and grass panels to crawl tunnel.
4) Attach entry handhold panel to post tabs.

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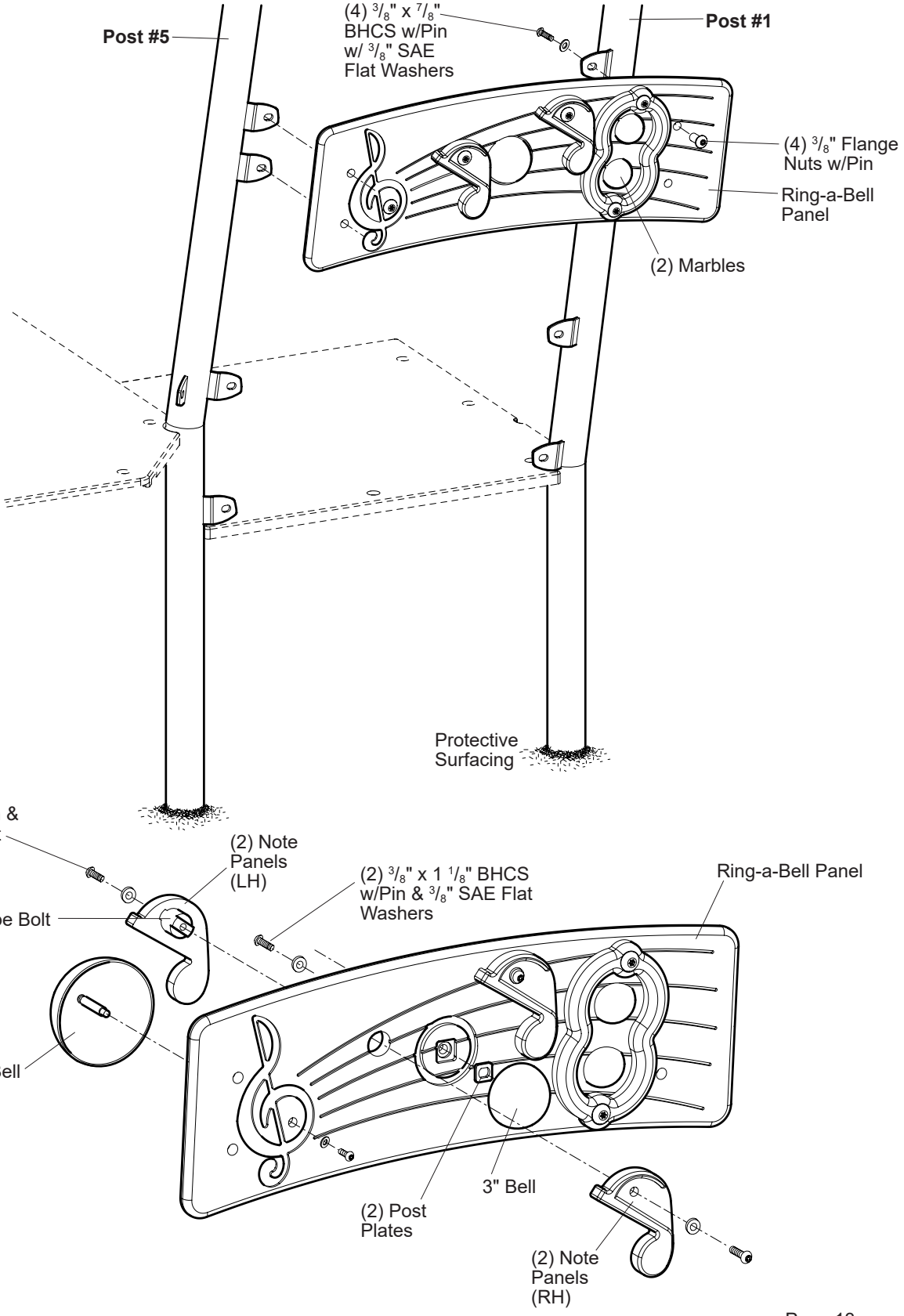

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Ring-a-Bell Panel

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.)

Parts List

Part#	Description	Qty.
197308	Note Panel (RH), Specify Color	2
197309	Note Panel (LH), Specify Color	2
158433	3" Bell, Specify Color	1
158434	5" Bell, Specify Color	1
200770	Ring-a-Bell Panel, Specify Color	1
219272	**Ring-a-Bell Hardware Package**	1
100196	$^3/_8$" x $^7/_8$ BHCS w/Pin, SST	8
100198	$^3/_8$" x 1 $^1/_8$" BHCS w/Pin, SST	2
100353	$^3/_8$" Flange Nut w/Pin, SST	4
100365	$^3/_8$" SAE Flat Washers, SST	10
158335	Bell Post Plate, SST	2
197312	Pipe Bolt Lock, Aluminum	2

Specifications

Panels: Recycled Permalene® , color specified.

Marble: 2" Diameter glass.

Bells: Fabricated from 10 GA. (.135") HRPO low carbon steel. Finish: ProShield®, color specified.

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

Installation Instructions

1) Attach panel to post tabs.

2) Attach Note panels and pipe bolt locks to Ring-a-Bell panel.

3) Insert post plates into bell panel cutouts. Attach bells to Ring-a-Bell panel, as shown.

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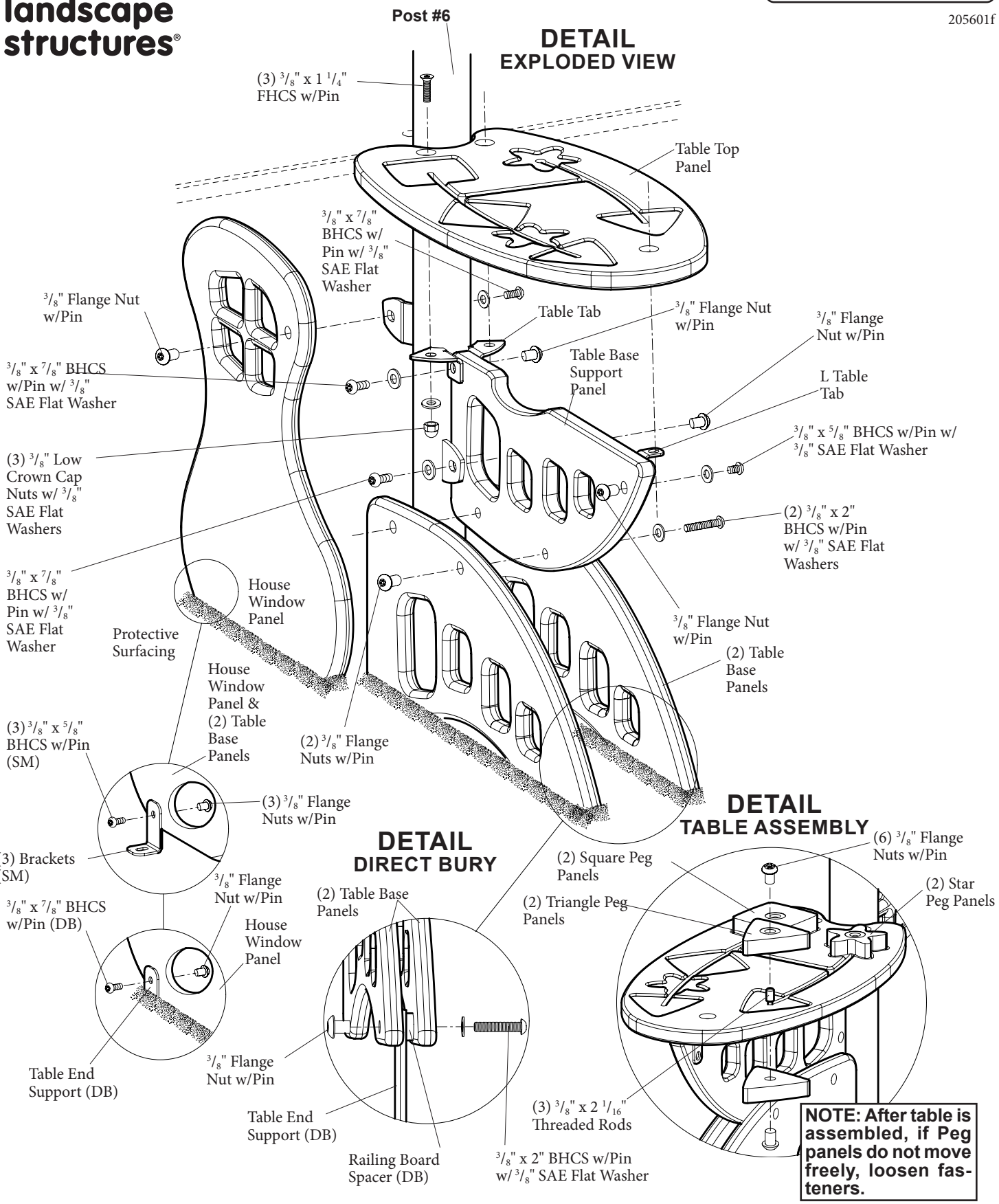

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Parts List

Part#	Description	Qty.
197306	Table Tab, Specify Color	1
204724	Angle Bracket, SST. (SM)	3
197307	L Table Tab, Specify Color	1
197054	House Panel, Specify Color	1
197055	Table Base Panel, Specify Color	2
197056	Table Base Support Panel, Specify Color	1
197069	Table Top Panel, Specify Color	1
197116	Star Peg Panel, Specify Color	2
197117	Square Peg Panel, Specify Color	2
197118	Triangle Peg Panel, Specify Color	2
201029	End Panel Support, (DB), Specify Color	2
207485	Railing Board,Spacer, (DB)	1
203618	**Play Table Hardware Package**	1
100196	$^3/_8$" x $^7/_8$" BHCS w/Pin, SST	4
100173	$^3/_8$" x 2" BHCS w/Pin, SST	3
100252	$^3/_8$" x 1 $^1/_4$" FHCS w/Pin, SST	3
100349	$^3/_8$" Low Crown Cap Nut, SST	3
100353	$^3/_8$" Flange Nut w/Pin, SST	15
123115	$^3/_8$" x 2 $^1/_{16}$" Threaded Rod	3
100365	$^3/_8$" SAE Flat Washer, SST	10
100195	$^3/_8$" x $^5/_8$" BHCS w/Pin, SST	4

Specifications

Panels: Recycled Permalene®, color specified.

End Panel Supt.: Weldment comprised of $^1/_4$" (6,35 mm) HRPO steel sheet and $^3/_8$" (9,53 mm) re-bar. Finish: ProShield, color specified.

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

Installation Instructions

1) Attach table base support panel and house window panel to post tabs.
2) Attach table base panels to table base support panel.
3) Attach table top panel to post tabs and L table tab.
4) Attach peg panels to table top panel.
5) Attach angle brackets/supports to table base panels.

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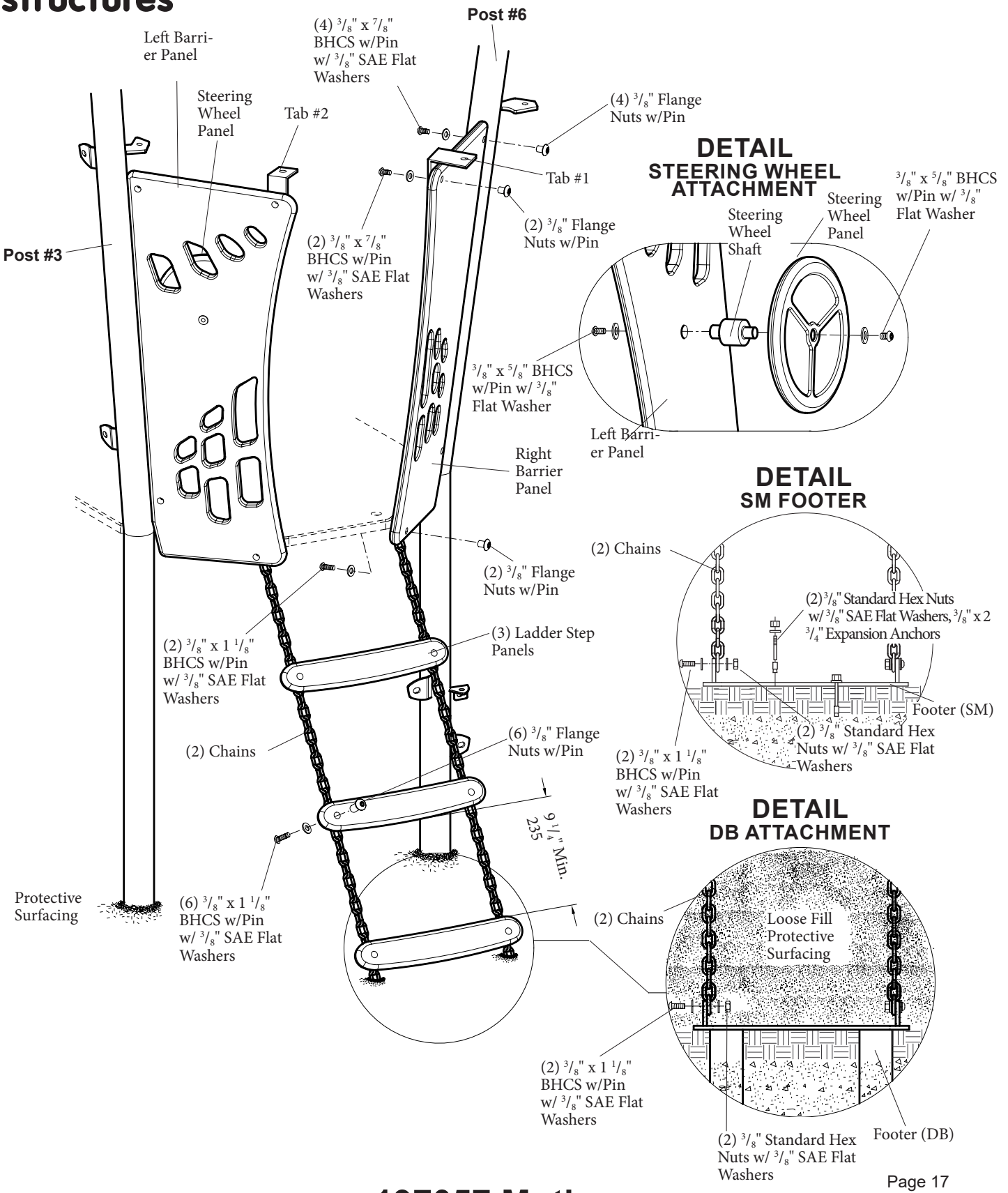

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Chain Ladder

Parts List

Part#	Description	Qty.
200775	Chain Ladder Footer, (DB)	1
200760	Chain Ladder Footer, (SM)	1
196657	Barrier Panel, (R), Specify Color	1
196655	Barrier Panel, (L), Specify Color	1
200723	Steering Wheel Panel, Specify Color	1
152053	37 1/2" Chain, (SM), Dark Grey	2
152048	49 13/16" Chain, (DB), Dark Grey	2
197074	Ladder Step Panel, Specify Color	3
197070	Tab #1, Specify Color	1
197071	Tab #2, Specify Color	1
203620	**Chain Ladder Hardware Package**	1
100195	3/8" x 5/8" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	6
100198	3/8" x 1 1/8" BHCS w/Pin, SST	10
100327	3/8" Standard Hex Nut, SST	2
100353	3/8" Flange Nut w/Pin, SST	14
100362	3/8" Flat Washer, SST	2
100365	3/8" SAE Flat Washer, SST	18
200550	Steering Wheel Shaft, Aluminum	1

DB = Direct Bury
SM = Surface Mount

Specifications

Panels: Recycled Permalene® panel, color specified.

Chain: Steel 3/16" (4,75 mm) straight link chain, 800 lb. (362,87 kilograms) working load limit. Finish: TenderTuff, color specified.

Chain

Ladder Footer: Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,29 mm - 2,54 mm) wall galvanized steel tubing and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield®, color specified.

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

Installation Instructions

1) Attach panels to post tabs.
2) Attach panels and chain to deck frame tabs.
3) Attach steering wheel to left barrier panel.
4) Attach ladder steps to chains.
5) **(Direct Bury)** Determine footing locations by pulling chain ladder tight and laying end on subgrade. Drill footing holes 2" out from end of where chain ladder meets subgrade.

   Fasten chain ladder to support.

   Pour concrete into footing holes. Push chain ladder support into concrete until chain ladder is tight and top of support is positioned flush with top of subgrade. Temporarily weigh support down so it remains in position until concrete has set.

   (Surface Mount) Attach support to chain ladder. Pull chain ladder tight and drill 1/2" x 3" deep holes through support using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten support to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

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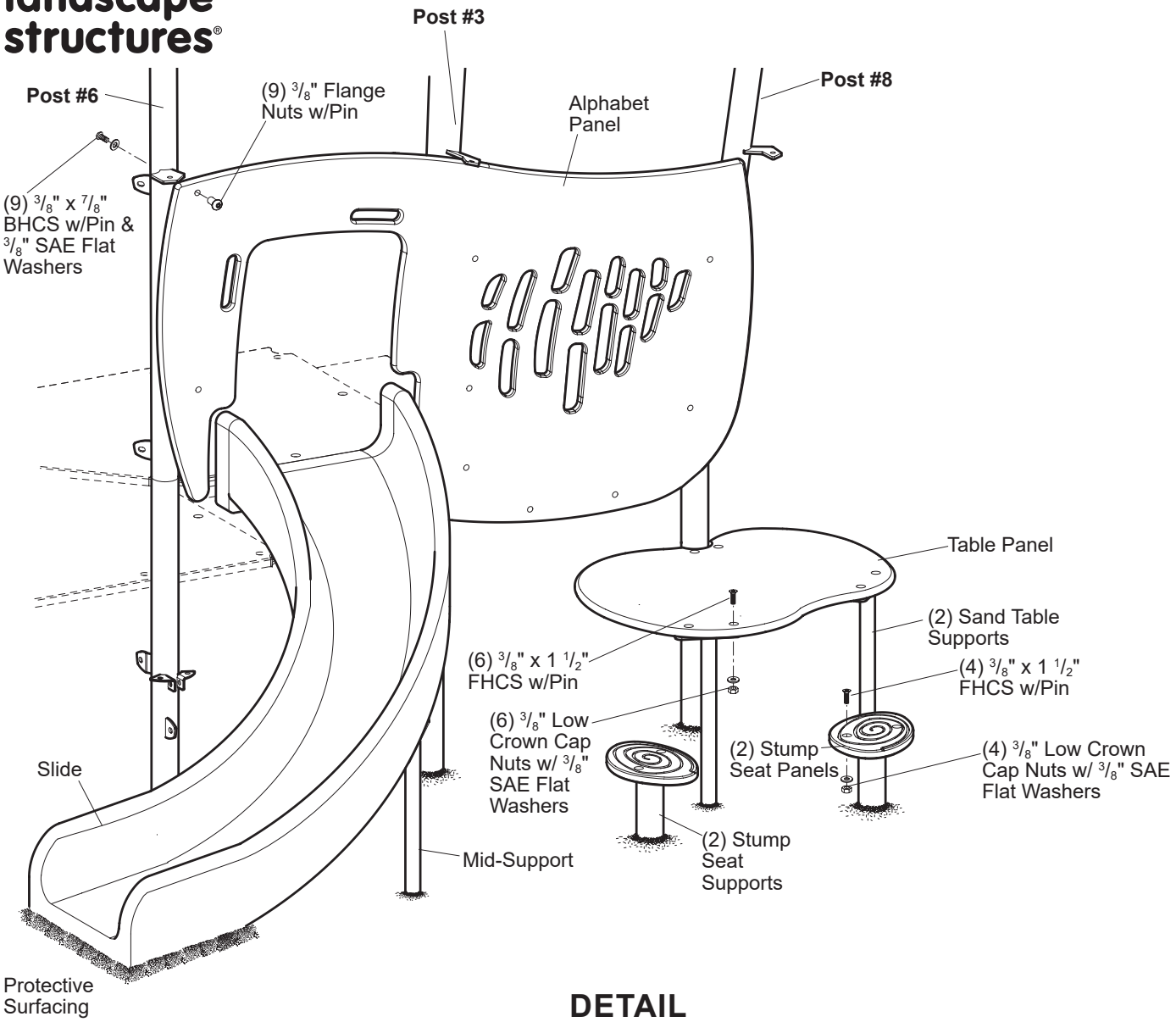
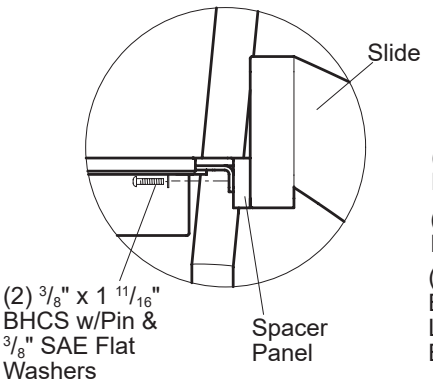
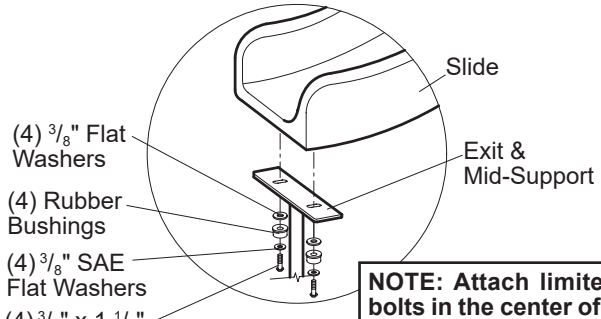


DETAIL
SLIDE ATTACHMENT



DETAIL
SUPPORT ATTACHMENT



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

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Slide & Sand Table

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.)

Parts List

Part#	Description	Qty.
200985	Sand Table Support, (DB), Specify Color	2
200282	Sand Table Support, (SM), Specify Color	2
275936	Curved Slide, Specify Color	1
200988	Exit Support, (DB), Specify Color	1
200337	Exit Support, (SM), Specify Color	1
200987	Mid-Support, (DB), Specify Color	1
200338	Mid-Support, (SM), Specify Color	1
197004	Stump Seat Panel #1, Specify Color	1
197050	Stump Seat Panel #2, Specify Color	1
197005	Stump Seat Support, (DB), Specify Color	2
200284	Stump Seat Support, (SM), Specify Color	2
200954	Slide Spacer Panel, Specify Color	1
227197	Alphabet Panel, No Chute, Specify Color	1
206333	Table Panel, Specify Color	1
307491	**Alphabet Hardware Package**	1
100196	3/8" x 7/8" BHCS w/Pin, SST	9
100353	3/8" Flange Nut w/Pin, SST	9
100365	3/8" SAE Flat Washer, SST	25
100362	3/8" Flat Washer, SST	4
151421	3/8" x 1 1/2" FHCS w/Pin, SST	10
123224	3/8" x 1 11/16" BHCS w/Pin, SST	2
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST	4
100349	3/8" Low Crown Nut, SST	10
127463	T-27 TPP Hex Bit (Torx)	1
111442	Rubber Bushing	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" (33,40 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,29 mm) galvanized steel tubing, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

Sand Table Support: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,29 mm) galvanized steel tubing, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

Exit Footer: Weldment comprised of 2.375" (60,33 mm) O.D. x .188" (4,78 mm) wall galvanized steel tubing, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

Stump Seat Support: Weldment comprised of 2.375" (60,33 mm) O.D. x .188" (4,78 mm) wall galvanized steel tubing, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

Panels: Recycled Permalene®, color specified.

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

Installation Instructions

1) Attach alphabet panel to post tabs and deck frame tabs.
2) Attach exit and mid-supports to slide. **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.
3) Attach slide to deck frame tabs.
4) Attach table panel to sand table supports and post tab.
5) Attach stump seat panels to stump seat supports.

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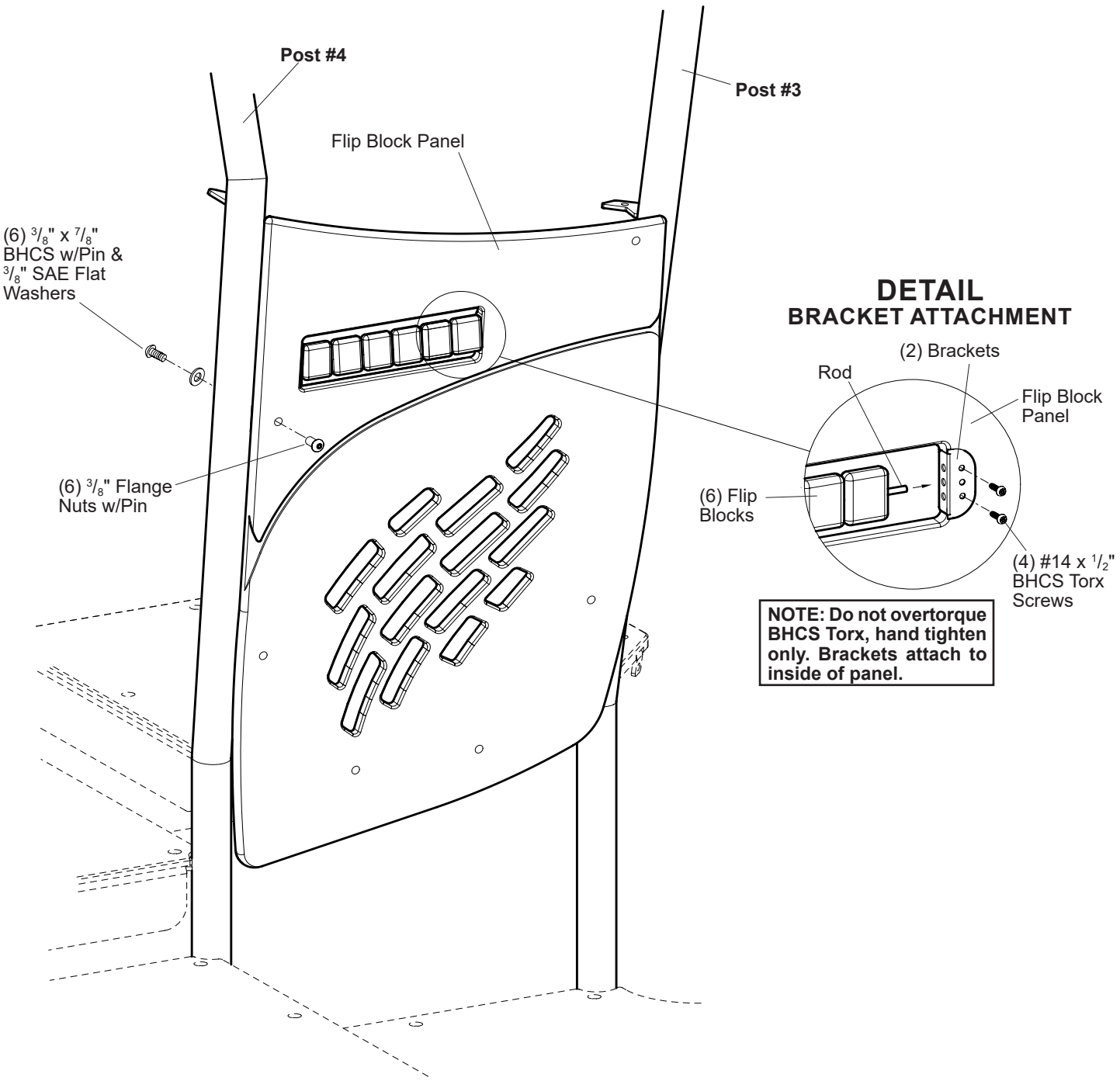

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Flip Block Panel

Parts List

Part#	Description	Qty.
196814	Flip Block Panel, Specify Color	1
106151	Flip Block Bracket, SST	2
200838	Flip Block 1, Specify Color	2
200982	Flip Block 2, Specify Color	2
200983	Flip Block 3, Specify Color	2
106161	1/4" x 12 3/8" Rod, SST	1
200964	**Flip Block Hardware Package**	1
100196	3/8" x 7/8" BHCS w/Pin, SST	6
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	6
129671	#14 x 1/2" Torx-Pin Cap Screw, SST	4
127463	T-27 TPP Hex Bit (Torx)	1

Specifications

Panel: Solid color Permalene® panel, color specified.

Flip Blocks: Made from compression-molded 3/4" (19,05 mm) thick U.V. stabilized high-density polyethylene with all edges eased. Black, red and yellow 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 Instructions

1) Attach flip blocks and brackets to flip block panel.

2) Attach panel assembly to post tabs.

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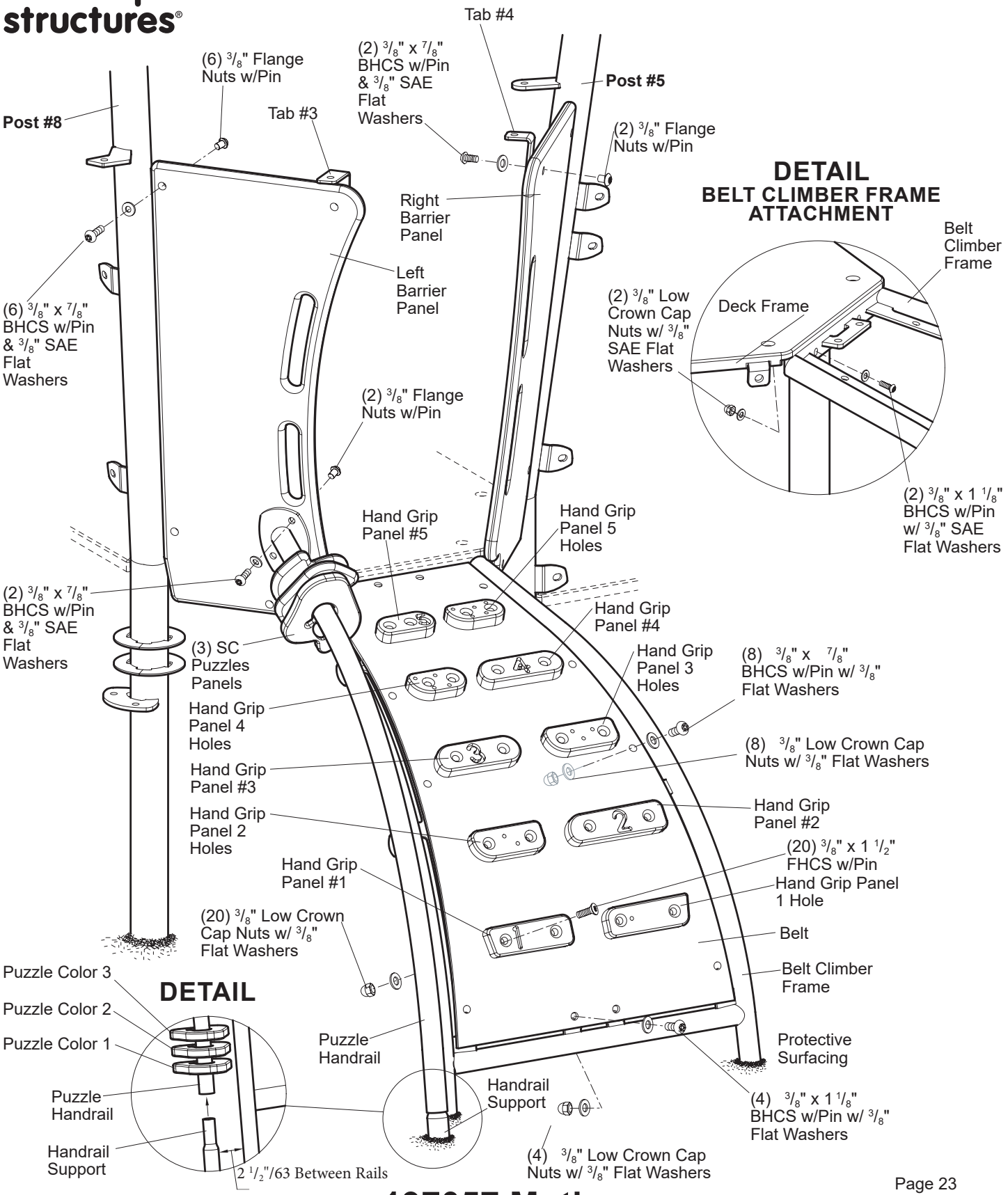
landscape structures®

ISO 14001 CERTIFIED

ISO 9001 Certified

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
BELT CLIMBER FRAME ATTACHMENT

DETAIL

Smart Play®

197057 Motion

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Document #35684200

Belt Climber

Parts List

Part#	Description	Qty.
199551	Hand Grip Panel #1, Specify Color	1
199552	Hand Grip Panel 1 Hole, Specify Color	1
199553	Hand Grip Panel #2, Specify Color	1
199554	Hand Grip Panel 2 Holes, Specify Color	1
199555	Hand Grip Panel #3, Specify Color	1
199556	Hand Grip Panel 3 Holes, Specify Color	1
199557	Hand Grip Panel #4, Specify Color	1
199558	Hand Grip Panel 4 Holes, Specify Color	1
199559	Hand Grip Panel #5, Specify Color	1
199560	Hand Grip Panel 5 Holes, Specify Color	1
292064	Belt Climber Frame, (SM), Specify Color	1
292065	Belt Climber Frame, (DB), Specify Color	1
292062	Belt, Black	1
196971	Puzzle Handrail, Specify Color	1
200273	Handrail Support, (SM), Specify Color	1
196974	Handrail Support, (DB), Specify Color	1
199776	Puzzle Panel Color #1, Specify Color	1
198901	Puzzle Panel Color #2, Specify Color	1
200410	Puzzle Panel Color #3, Specify Color	1
196653	Left Barrier Panel, Specify Color	1
197049	Right Barrier Panel, Specify Color	1
197048	Tab #4, Specify Color	1
197051	Tab #3, Specify Color	1
356839	**Belt Climber Hardware Package**	1
100196	3/8" x 7/8" BHCS w/Pin, SST	18
100198	3/8" x 1 1/8" BHCS w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	14
100362	3/8" Flat Washer, SST	44
151421	3/8" x 1 1/2" FHCS w/Pin, SST	20
100349	3/8" Low Crown Nut, SST	34
100353	3/8" Flange Nut w/Pin, SST	10

DB = Direct Bury
SM = Surface Mount

Specifications

Belt: Made from .315" (8,00 mm) thick mini rough top 3-ply rubber belting with polyester fabric plys, black in color.

Belt Climber Frame: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,29 mm) galvanized steel tubing, 1/4" (6,35 mm) HRPO steel sheet and 1/8" (.125") (3,18 mm) HRPO steel sheet. Finish: ProShield®, color specified.

Puzzle Handrail: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,29 mm) galvanized steel tubing, and 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield, color specified.

Handrail Support: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080" - .090") (2,03 mm-2,29 mm) galvanized steel tubing. Finish: ProShield, color specified.

Panels: Recycled Permalene®, color specified.

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

Installation Instructions

1) Attach barrier panels to post tabs and deck frame tabs.
2) Attach belt climber frame to deck frame tabs.
3) Attach belt to frame.
4) Attach hand grip panels to belt.
5) Slide puzzle color panels onto puzzle handrail. Insert handrail support into puzzle handrail. Attach puzzle handrail to left barrier panel.

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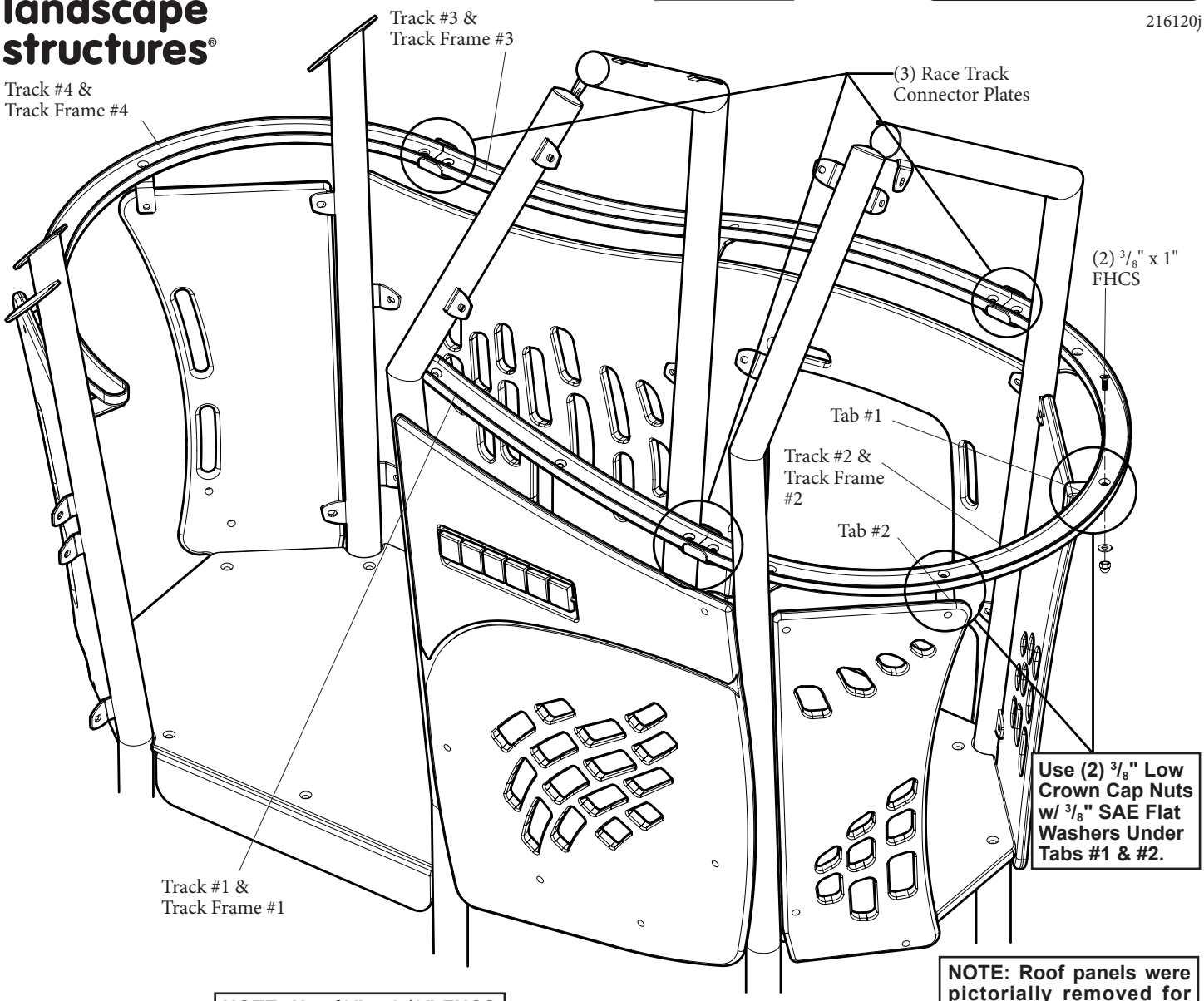
SAFETY NOTE

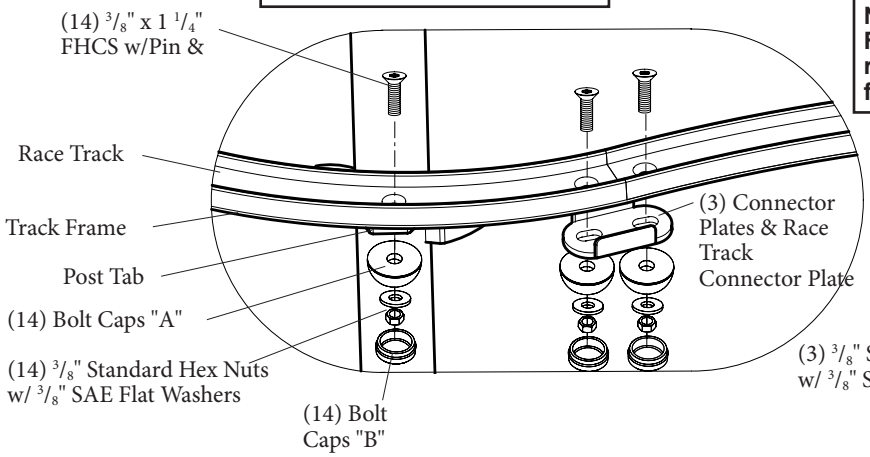
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

216120j

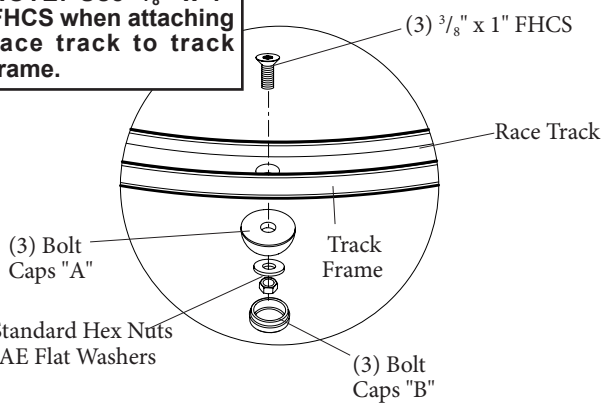


DETAIL
RACE TRACK ATTACHMENT

NOTE: Use 3/8" x 1 1/4" FHCS w/Pin when attaching race track and track frame to tabs & connector plates.



NOTE: Use 3/8" x 1" FHCS when attaching race track to track frame.



Smart Play®

197057 Motion

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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.)

Race Track

Parts List

Part#	Description	Qty.
230700	Race Track #1, Black	1
230702	Race Track #2, Black	1
230701	Race Track #3, Black	1
230703	Race Track #4, Black	1
196996	Race Track Frame #1, Specify Color	1
197000	Race Track Frame #2, Specify Color	1
197124	Race Track Frame #3, Specify Color	1
197132	Race Track Frame #4, Specify Color	1
201088	Race Track Connector Plate, Specify Color	3
200966	**Race Track Hardware Package**	1
100252	3/8" x 1 1/4" FHCS w/Pin, SST	14
137091	3/8" x 1" FHCS w/Pin, SST	5
108184	Bolt Cap Part A, White	17
108185	Bolt Cap Part B, White	17
100349	3/8" Low Crown Cap Nut, SST	2
100327	3/8" Standard Hex Nut, SST	17
100365	3/8" SAE Flat Washer, SST	19

Specifications

Race Track: Permalene®, black in color.

Connector Plate: Fabricated from 1/4" (6,35 mm) HRPO steel sheet. Finish: ProShield®, color specified.

Race Track Tab: Fabricated from 7 GA. (.179") (4,55 mm) HRPO steel sheet. Finish: ProShield, color specified.

Race Track Frame: Fabricated from 1/8" (.125") (3,18 mm) HRPO steel sheet. Finish: ProShield, color specified.

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

Installation Instructions

1) Attach track frames and race tracks to posts and panel tabs. Refer to the Race Track Attachment Detail.

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

ECO-0111101 Document 35684200 Replaces 30748700
Update hardware packages

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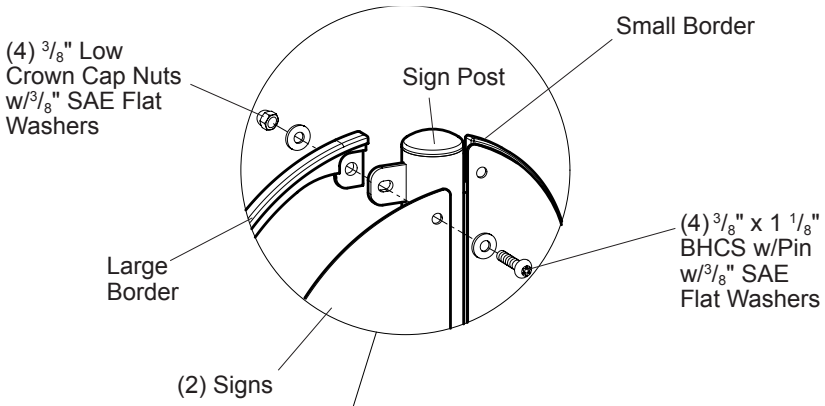
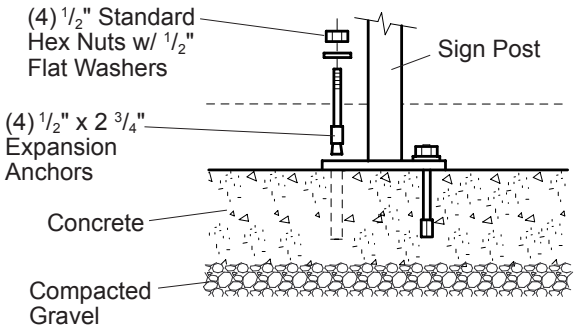
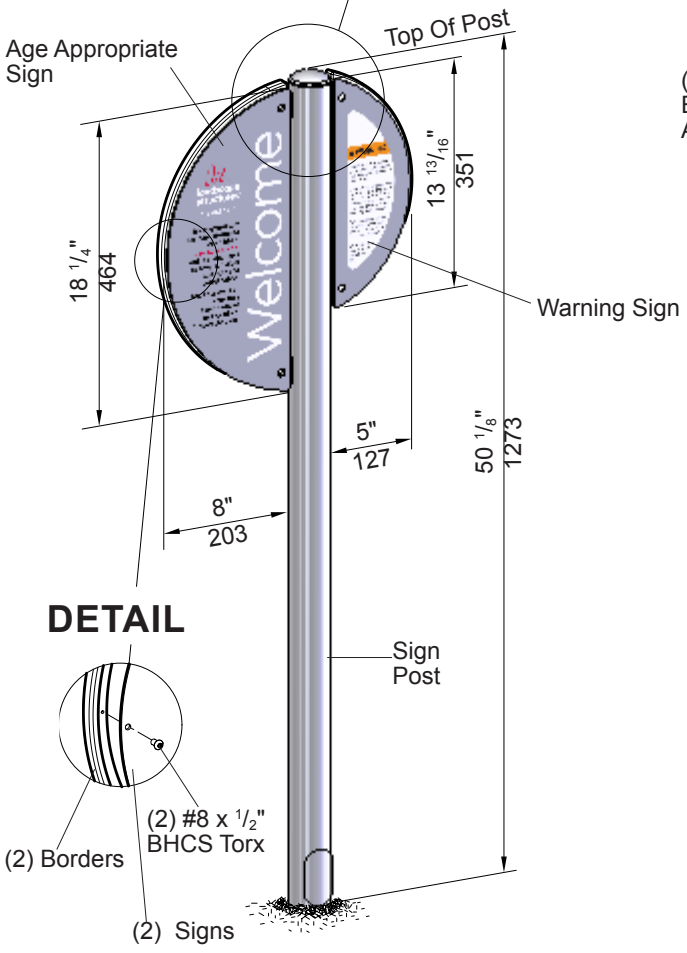
21325600

DETAIL
SIGN ATTACHMENT



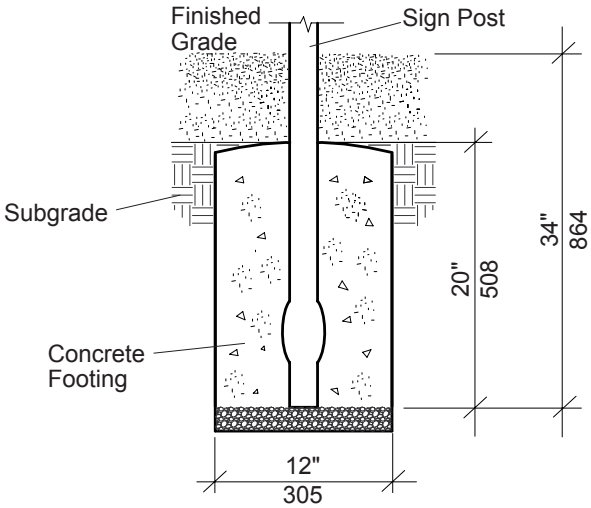
DETAIL
SURFACE MOUNT





DETAIL

DETAIL
DIRECT BURY FOOTING



Model 182503 - Landscape Structures Provided Welcome Sign
Model 182504 - Welcome Sign

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Welcome Sign

Parts List

Part#	Description	Qty.
219911	Warning Sign,Gray	1
219912	Age Appropriate Sign, 2-12 Years, Gray	*
219913	Age Appropriate Sign, 2-5 Years, Gray	*
219914	Age Appropriate Sign, 5-12 Years, Gray	*
219915	Age Appropriate Sign, 1 1/2-5 Years, Gray	*
219916	Age Appropriate Sign, 1 1/2-12 Years, Gray	*
219918	Age Appropriate Sign, 6-23 Months, Gray	*
180598	Sign Post (DB), Specify Color	*
181119	Sign Post (SM), Specify Color	*
193782	Large Border, Black	1
193783	Small Border, Black	1
213258	**Age/Warning Sign Hardware Package**	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100349	3/8" Low Crown Cap Nut, SST	4
100365	3/8" SAE Flat Washer, SST	8
168323	#8 x 1/2" BHCS Torx, SST	2
169413	1/4-6 Lobe T-15 Tamp. Bit	1
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
*** = Quantity Determined By Your Order**

Specifications

Sign Panel: Panel is fabricated from $^{1}/_{8}$" (.125")(3,17 mm) aluminum plate. Finish: ProShield®, gray in color. **(Sign)** Digital image is transfered to a $^{1}/_{8}$" (.125")(3,17 mm) ProShield coated aluminum plate, then infused into the ProShield.

Border: Permalene, black in color.

Post: Weldment comprised 2.375" (60,33 mm) O.D. RS20 (.095-.105) (2,41 mm-2,67 mm) wall galvanized tube, $^{1}/_{4}$" (6,35 mm) HRPO steel sheet and aluminum post cap. 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 man hour
(SM) Approx. $^{1}/_{2}$ man hour
Concrete Req: Approx. 1.31 cu. ft.
Weight: **(DB)** - 24 lbs.
(SM) - 27 lbs.

Installation Instructions

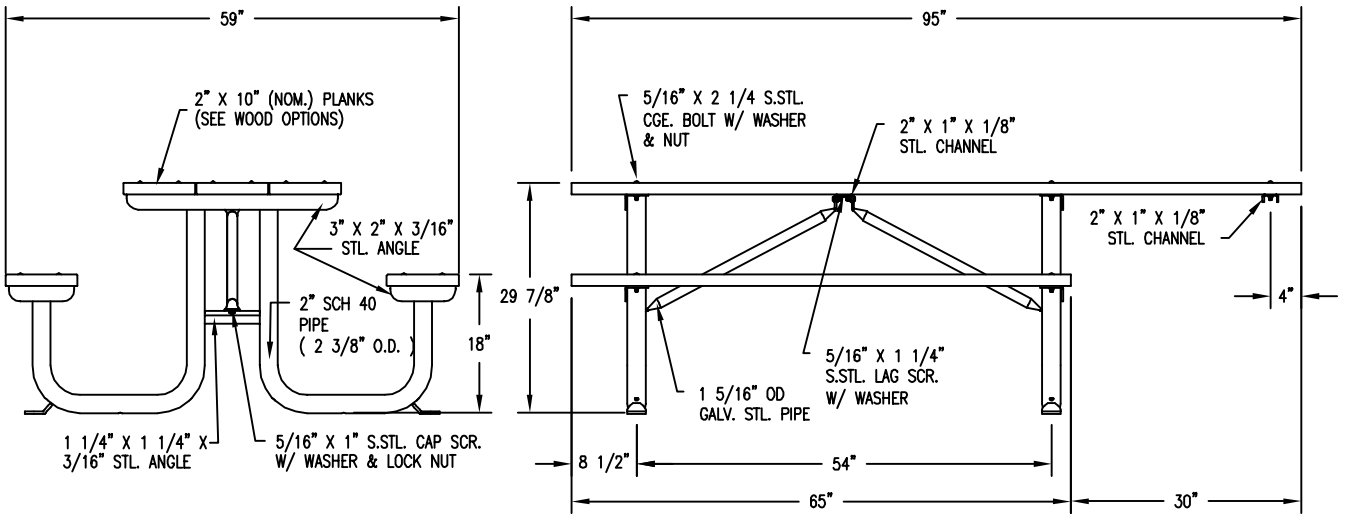
Direct Bury

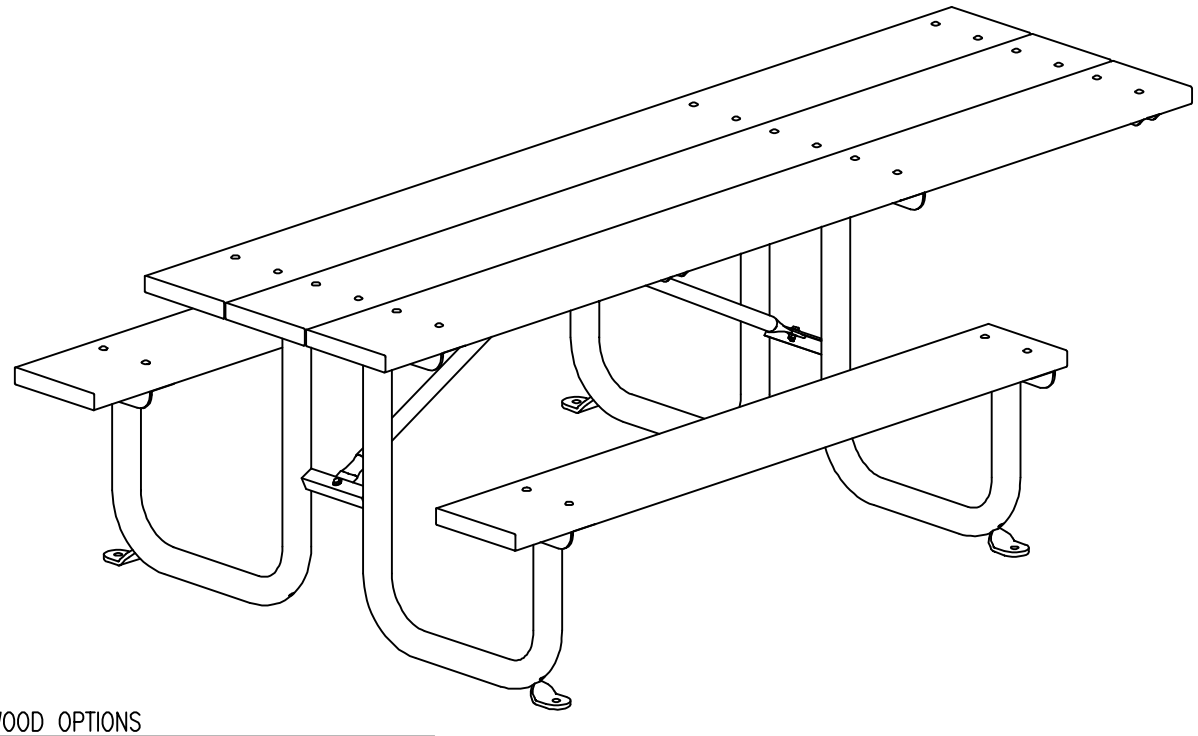
1) Dig footing hole to depth and diameter shown.
2) Attach sign panels and borders to post as shown, using $^{3}/_{8}$" x 1 $^{1}/_{8}$" BHCS with $^{3}/_{8}$" SAE flat washers and $^{3}/_{8}$" low crown cap nuts with $^{3}/_{8}$" SAE flat washers. Attach signs to borders using #8 x $^{1}/_{2}$" BHCS Torx.
3) Set sign assembly in footing hole and temporarily brace in plumb position.
4) Pour concrete footing. After concrete has cured, remove bracing.

Surface Mount

1) Attach sign panels and borders to post as shown, using $^{3}/_{8}$" x 1 $^{1}/_{8}$" BHCS with $^{3}/_{8}$" SAE flat washers and $^{3}/_{8}$" low crown cap nuts with $^{3}/_{8}$" SAE flat washers. Attach signs to borders using #8 x $^{1}/_{2}$" BHCS Torx.
2) With sign in proper position, using a $^{1}/_{2}$" masonry bit and hammer drill, drill 3" deep holes into concrete slab through holes in post plate. Tap $^{1}/_{2}$" x 2 $^{3}/_{4}$" expansion anchors into holes and secure using $^{1}/_{2}$" standard hex nuts with $^{1}/_{2}$" flat washers.

ECO 0100730 Document 22074200 replaces 21325600. Replaced signs.





WOOD OPTIONS

- ☐ 'C' & BTR. DOUGLAS FIR KD S4S EE
- ☐ OTHER _____

NOTE:

1.) 1/2" X 3 3/4" EXPANSION ANCHORS PROVIDED.

FINISH OPTIONS:

- ☐ ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
- ☐ HOT DIP GALV. AFTER FABRICATION.

DuMor, inc.	PICNIC TABLE	DATE DRAWN : 03/22/94 DRAWN BY : CDC DATE REV. : 01/11/17 REV. BY : RDH	REV. 1	DRAWING NUMBER 77-68-1	SHEET 1 OF 2

NOTES:

1.) DURING ASSEMBLY PROCEDURE; DO NOT COMPLETELY TIGHTEN HARDWARE.
2.) THE ACTUAL PARTS WILL NOT BE NUMBERED. NUMBERS ONLY APPLY TO DRAWING.
3.) UPON COMPLETION OF ASSEMBLY SQUARE ALL COMPONENTS THEN TIGHTEN ALL HARDWARE.
4.) MOUNT AND ANCHOR AS SPECIFIED.

TOOLS REQ'D

3/4" WRENCH
1/2" WRENCH
1/2" MASONRY DRILL BIT
DRILL

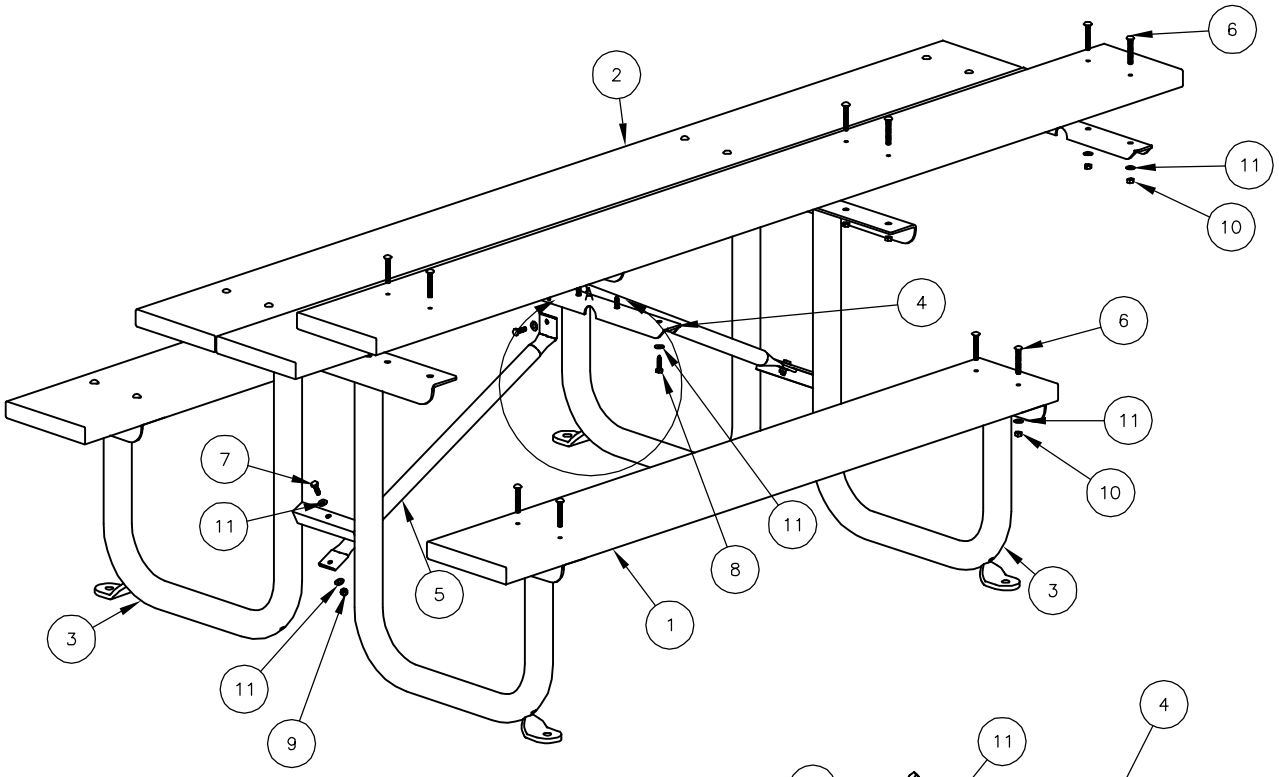
PARTS LIST

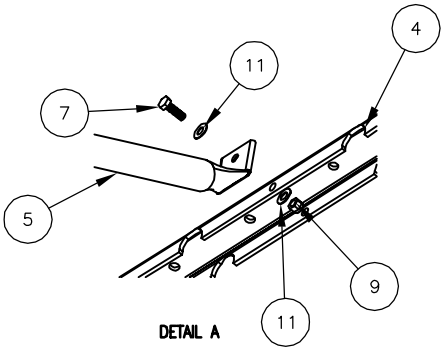
ITEM	QTY	PART NO	DESCRIPTION
1	2	0-71-68-1-01	2" X 10" X 65" SLAT, WOOD
2	3	0-71-68-1-02	2" X 10" X 95" WOOD SLAT
3	2	0-77-00-01	END SUPPORT FRAME
4	2	0-77-00-03	CENTER/END CHANNEL
5	2	0-77-60-02	DIAGONAL BRACE FOR 6' TABLE
6	26	1-11-062	5/16" X 2 1/4" SS CGE BOLT
7	4	1-12-061	5/16" X 1" SS HEX HD CAP SCR
8	6	1-13-001	5/16" X 1 1/4" SS HEX HD LAG SCR
9	4	1-20-016	5/16" SS NYLON LOCKNUT
10	26	1-21-015	5/16" SS HEX NUT
11	40	1-22-017	5/16" SS FLAT WASHER

KITS PROVIDED

ITEM	QTY	PART NO	DESCRIPTION
12	1	K-77	77 SER HARDWARE KIT
13	1	K-ANC0860-4	1/2" X 3 3/4" SS ANCHOR KIT (4PC)

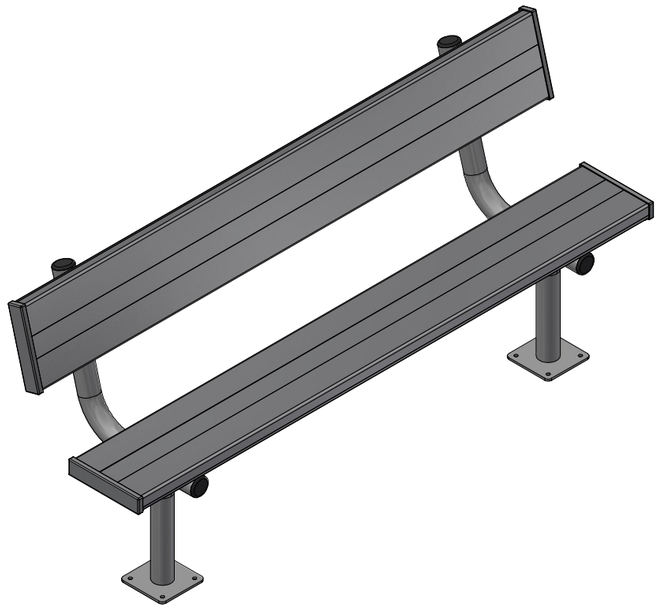
(1) ATTACH SLATS TO END SUPPORTS. ATTACH CENTER/END CHANNELS. ATTACH DIAGONAL BRACES.

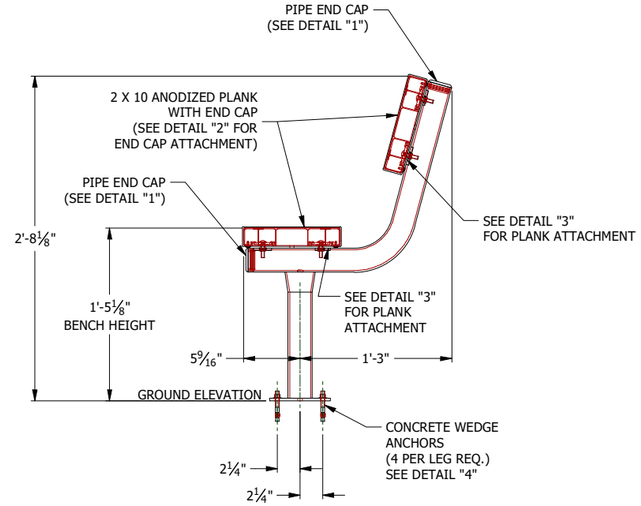




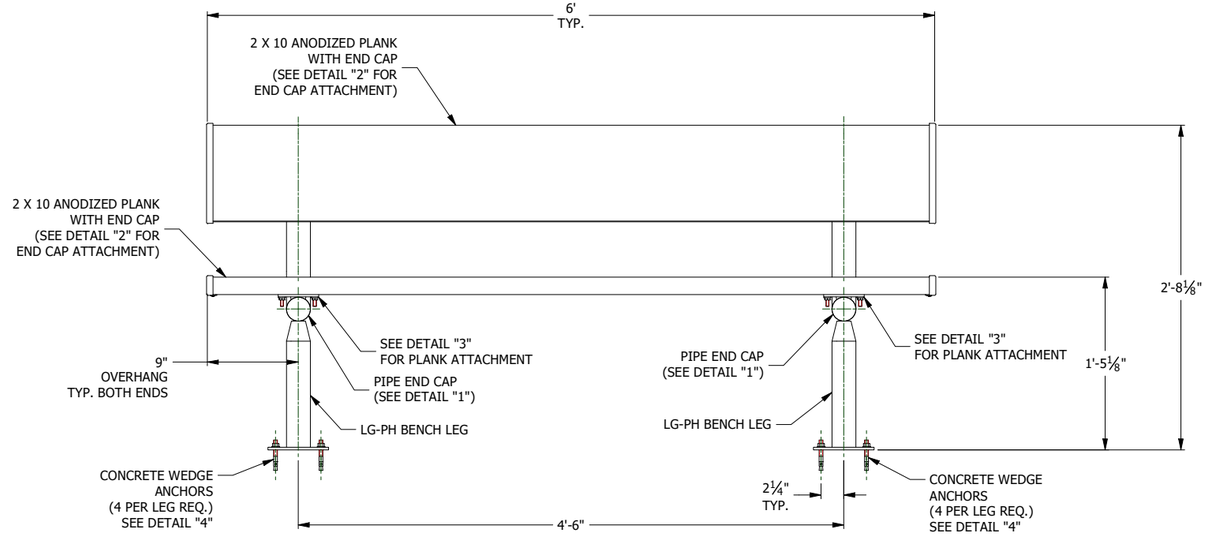
DETAIL A

DuMor, inc.	ASSEMBLY INSTRUCTIONS	DATE DRAWN : 03/22/94 DRAWN BY : CDC DATE REV. : 01/11/17 REV. BY : RDH	REV. 1	DRAWING NUMBER 77-68-1	SHEET 2 OF 2

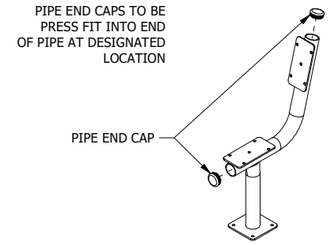




END VIEW

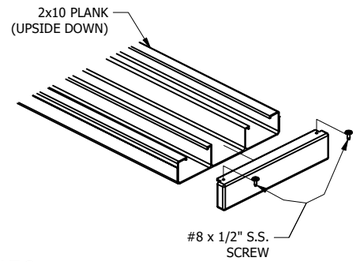


1 PIPE END CAP ATTACHMENT



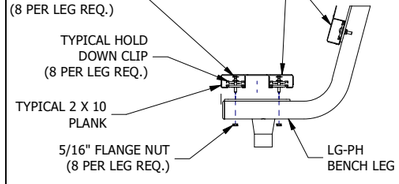
N.T.S.

2 TYPICAL 2 X 10 END CAP ATTACHEMNT



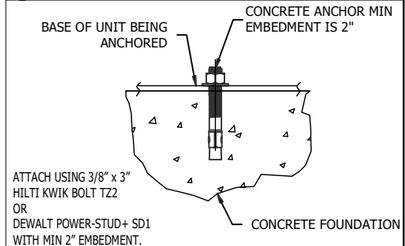
N.T.S.

3 TYPICAL 2 X 10 PLANK ATTACHEMNT



N.T.S.

4 WEDGE ANCHOR - 3"



N.T.S.

National Recreation Systems
A PLAYCORE Company

NATIONAL RECREATION SYSTEMS, INC.

MODEL: BE-PH00600 ASSEMBLY DWG

DESCRIPTION: BENCH GALV. 6'-0" "PH" SURFACE MOUNT WITH BACKREST

DRAWN BY:	DATE:	REVISION	SCALE:	SHEET #:
VJHECK	8/30/2024	0	N.T.S.	BA.1

NB-0307.5APRF

NON ELEVATED 3 ROW x 7'-6" BLEACHER

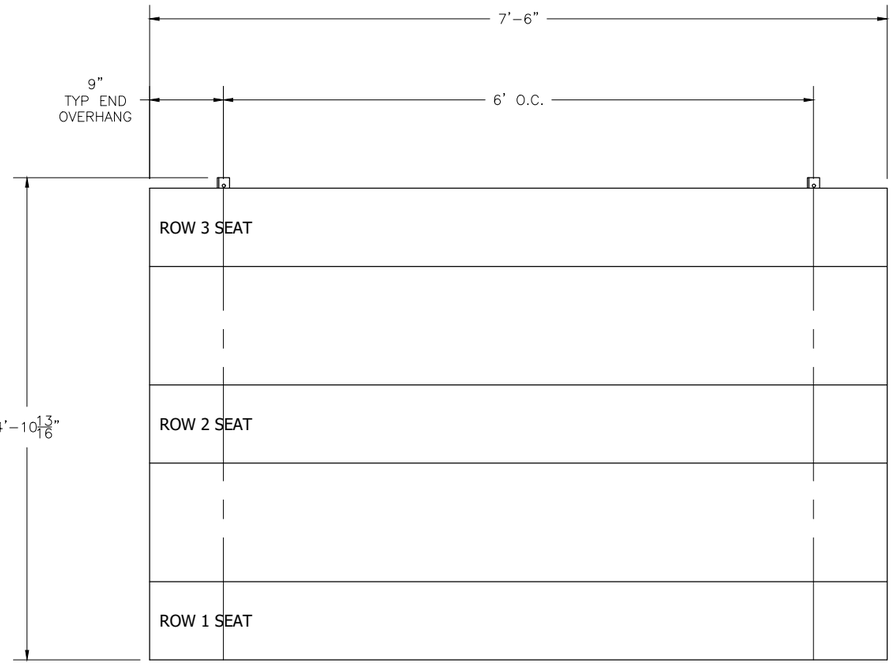
DRAWING REFERENCE NUMBER: NB–0307.5APRF	
DRAWING SHEET INDEX	
1.CS	COVER SHEET
2.TD	SEATING PLAN
3.FP	FOUNDATION PLAN
4.BA	BLEACHER ASSEMBLY PREP
5.BA	BLEACHER ASSEMBLY
6.AP	ANCHORING PLAN
7.PF	PLANK AND FRAMING PLAN

RECOMMENDED TOOLS		
SOCKET WRENCH	POP RIVET GUN	CORDLESS DRILL
½" DEEP WELL SOCKET	LEVEL	3/16" DRILL BIT
9/16" DEEP WELL SOCKET	RUBBER MALLET	7/16" DRILL BIT
TAPE MEASURE	GLOVES	SAFETY GLASSES

NRS™
National Recreation Systems
A PLAYCORE Company
PH: 888-568-9064 FAX: 260-482-7449 WWW.BLEACHERS.NET

MODEL:	NB–0307.5APRF				
DESCRIPTION:	NON ELEV. 3 ROW x 7.5' ASSEMBLY COVER SHEET				
DRAWN BY: IP	DATE: 8/30/23	REVISION: A	SCALE: N.T.S.	SHEET NUMBER: 1.CS	

BLEACHER TOP VIEW

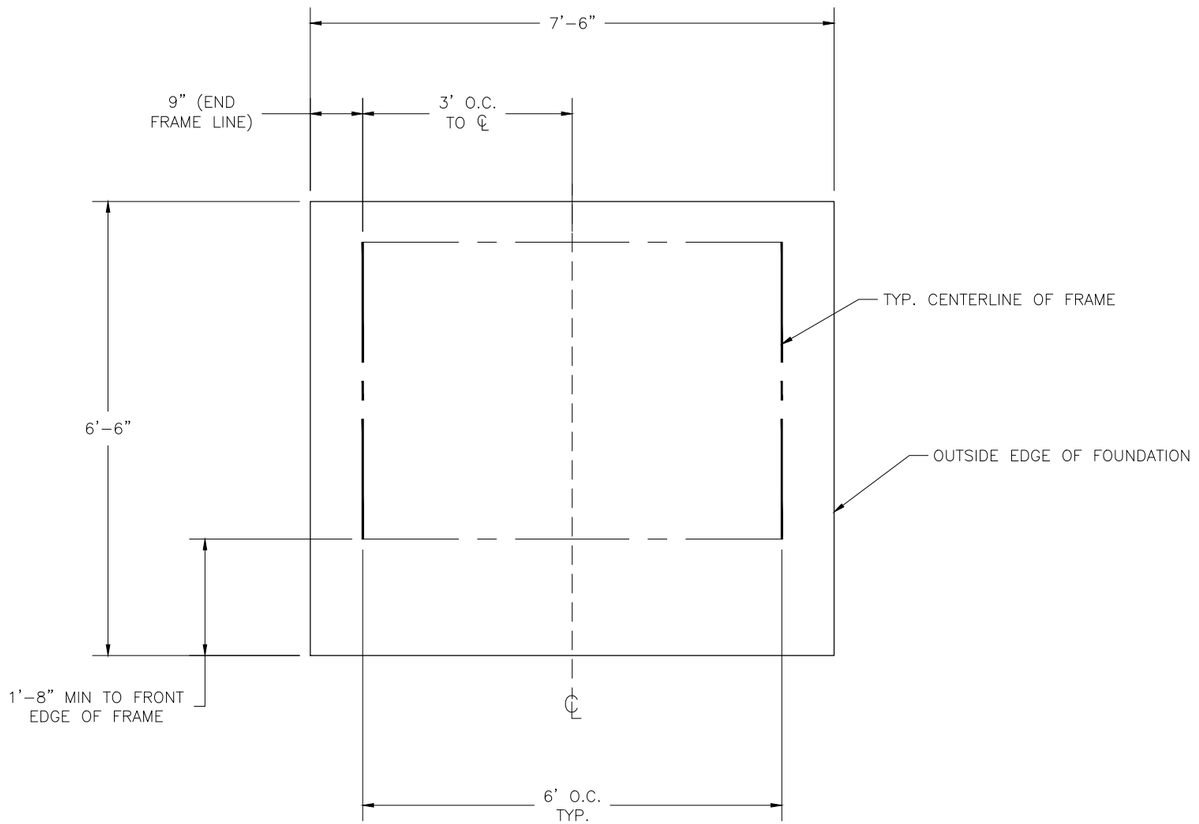


SECTION LENGTH	GROSS SEATS	ACTUAL SEATS	NO. OF ROWS	NET SEATS
7.5	5.00	5.00	3	15
			NET SEATS	**15**
			WHEELCHAIR SPACES	**0**
			TOTAL NET SEATING CAPACITY (BASED ON 18" PER SEAT)	**15**

National Recreation Systems
A PLAYCORE Company
PH: 888-568-9064 FAX: 260-482-7449 WWW.BLEACHERS.NET

MODEL: NB–0307.5APRF					
DESCRIPTION: NON ELEV. 3 ROW x 7.5' BLEACHER SEATING PLAN					
DRAWN BY: IP	DATE: 8/30/23	REVISION: A	SCALE: N.T.S.	SHEET NUMBER: 2.TD	

LOCATE FRAMES ON FOUNDATION



CONCRETE FOUNDATION SPECIFICATIONS

SCOPE:
Foundation construction is not part of NATIONAL RECREATION SYSTEMS, INC's., scope of work unless noted otherwise in the contract documents. The OWNER shall review the foundation design with local code authorities and coordinate with NRS, Inc.

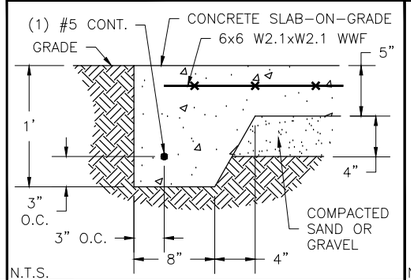
FOUNDATION DESIGN & ANCHORS:
1) The foundation designs are based on the following:
- a) Minimum presumed soil bearing of 2000 psf.
- b) Bleacher frame dead and live load of 700 lbs./ft.
- c) Bleacher frame wind uplift of 250 lbs./ft.

2) Unless otherwise specified on the drawings the bleacher frames shall be attached to concrete with a ½" dia. x 3¾" wedge type expansion anchor. The anchors shall be embedded a minimum of 2" into the concrete.

CONCRETE SPECIFICATIONS:
1) All concrete construction shall be in accordance with ***ACI 318.08.***
2) All concrete shall be air-entrained using an air entraining admixtruing meeting ***ASTM C620***. Total air content: 5%-7% per ***ASTM C173***.
3) All concrete shall have a minimum 28-day strength of Fc=3000psi. Concrete shall have air-entrainment
4) A ¼" bituminous expansion joint material shall be placed between strip and slab foundations when adjacent to each other.
5) The depressions in the top of the foundations between high spots shall not exceed 5/16" below 10-foot long straightedge. The 10-foot straightedge method used to measure foundation flatness shall be in accordance with ***ACI 302.1R-04*** *"Guide for Concrete Floor and Slab Construction".*

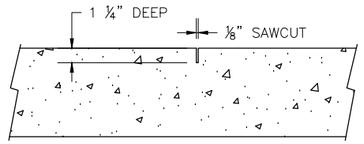
CONCRETE SLAB RECOMMENDED SPECIFICATIONS:
1) Concrete slab shall have a minimum thickness of 5" (some areas may require 6") and placed on 4" of compacted gravel or compacted sub base.
2) NRS. INC., recommends that the concrete slab be reinforced with 6x6-W2.1xW2.1 welded wire fabric at 1½" concrete cover from the top. In lieu of welded wire fabric, steel fiber substitution requires OWNER approval and his understanding of potential maintenance issues.
3) Contractor may substitute blended fiber reinforcing, provided the blend consists of multifilament polypropylene fibers and cold drawn steel wire fibers. Novamesh 950 or approved equivalent, applied at a dosage rate of 5lb/CY unless specified otherwise or a different recommendation is made by the manufacturer.
4) Crack control joints shall be sawed into slab to form approximate square patterns. The maximum spacing for control joints shall not exceed 13'-6", UNLESS INDICATED OTHERWISE. The bleacher frames shall not be set on control joints. The designer shall contact NRS to coordinate joint spacing requirements with the specific bleacher design.
5) The slab may be sloped a maximum of 1/8 inch per foot for drainage. The maximum overall out of level slope for the slab perpendicular to the seats (front to rear) shall not exceed 2" and parallel to the seats (end to end) shall not exceed 4".

① CONCRETE SLAB SECTION



N.T.S.

② CONTROL JOINT DETAIL



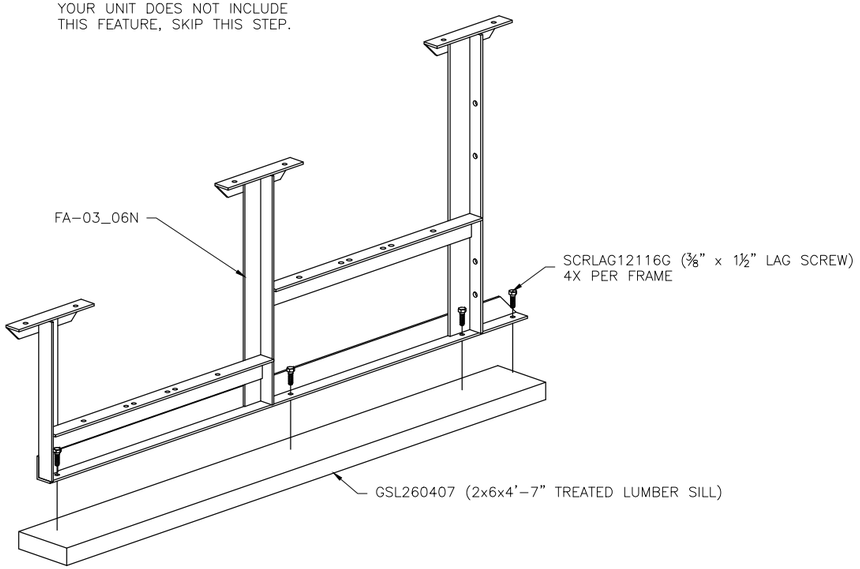
N.T.S.

NRS National Recreation Systems
A PLAYCORE Company
PH: 888-568-9064 FAX: 260-482-7449 WWW.BLEACHERS.NET

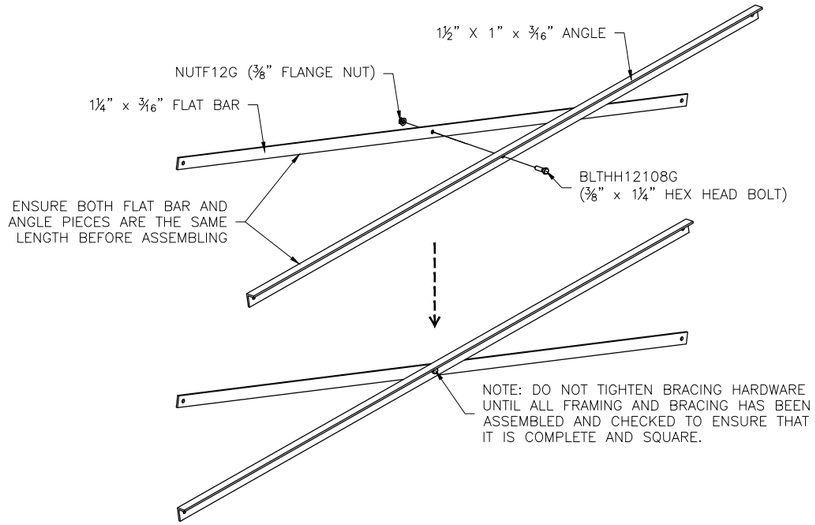
MODEL: NB–0307.5APRF					
DESCRIPTION: NON ELEV. 3 ROW x 7.5' FOUNDATION PLAN					
DRAWN BY: IP	DATE: 8/30/23	REVISION: A	SCALE: N.T.S.	SHEET NUMBER: 3.FP	

(OPTIONAL) ATTACH GROUND SILLS *

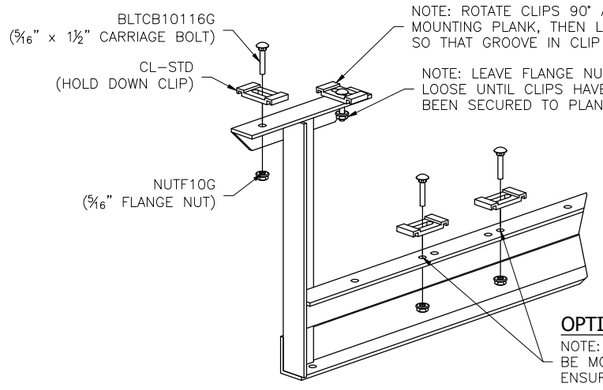
*NOT ALL BLEACHERS WILL RECEIVE GROUND SILLS. IF YOUR UNIT DOES NOT INCLUDE THIS FEATURE, SKIP THIS STEP.



PRE-ASSEMBLE X-BRACE PAIR(S)

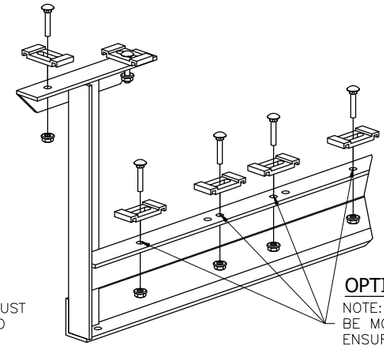


ONCE FRAMING IS COMPLETE, PRE-ASSEMBLE CLIP SETS ON BLEACHER FRAMES



OPTION A: SINGLE FOOT BOARDS

NOTE: CLIP SETS ON FOOT SUPPORTS MUST BE MOUNTED TO HOLES SHOWN HERE TO ENSURE CORRECT FIT WITH FOOT PLANK.



OPTION B: DOUBLE FOOT BOARDS

NOTE: CLIP SETS ON FOOT SUPPORTS MUST BE MOUNTED TO HOLES SHOWN HERE TO ENSURE CORRECT FIT WITH FOOT PLANK.

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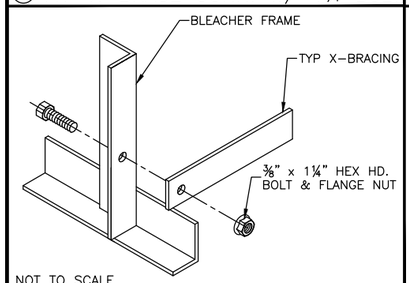
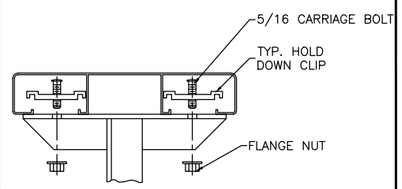
MODEL: NB–0307.5APRF					
DESCRIPTION: NON ELEV. 3 ROW x 7.5' BLEACHER ASSEMBLY					
DRAWN BY: IP	DATE: 8/30/23	REVISION: A	SCALE: N.T.S.	SHEET NUMBER: 4.BA	

① TYP X–BRACE CONN. W/ 1¼ BOLT



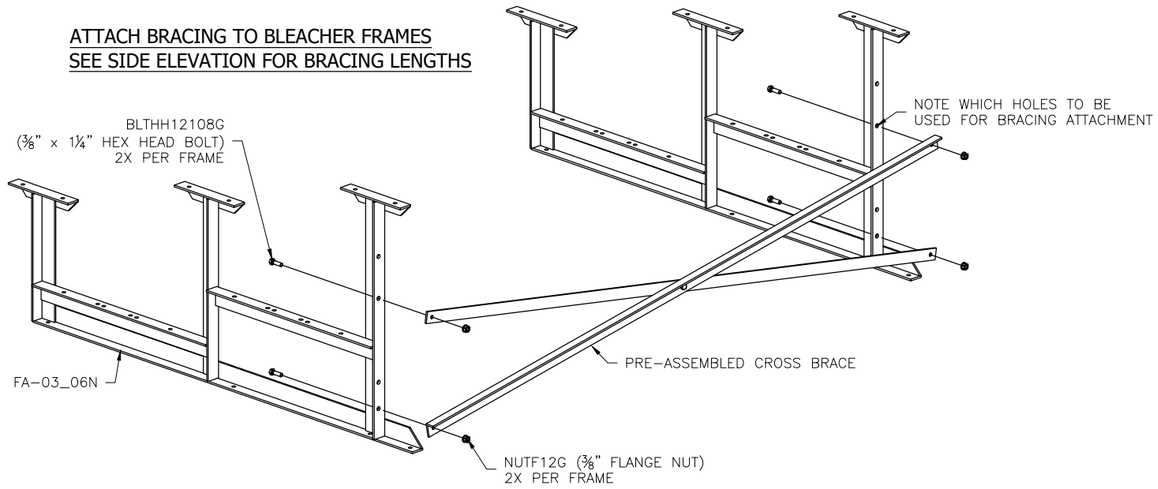
NOT TO SCALE

② TYP 2x10 PLANK ATTACHMENT

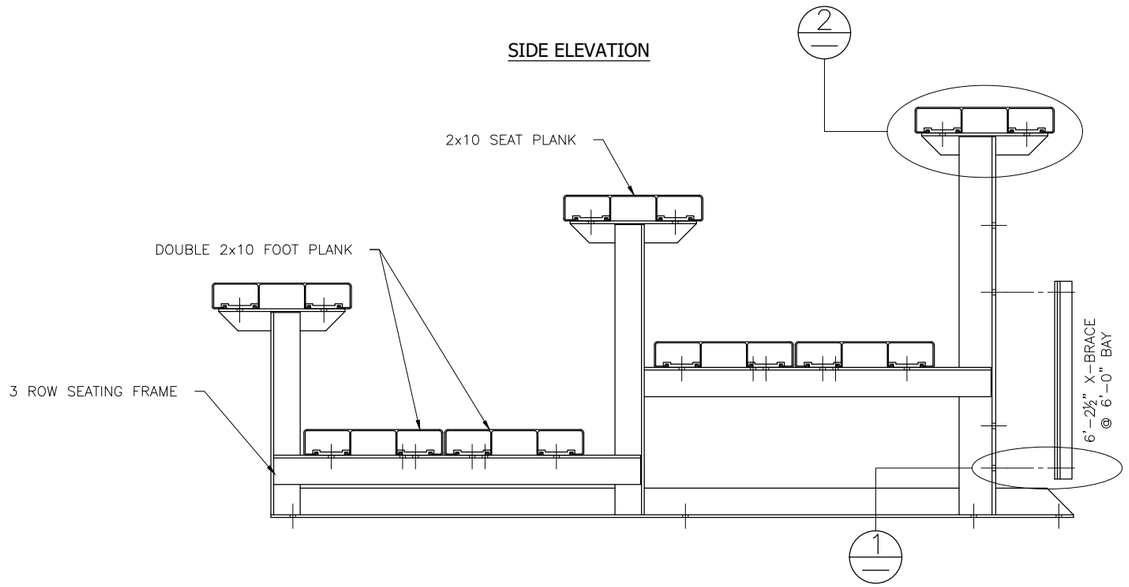


NOT TO SCALE

ATTACH BRACING TO BLEACHER FRAMES
SEE SIDE ELEVATION FOR BRACING LENGTHS



SIDE ELEVATION



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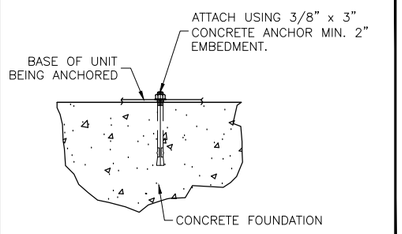
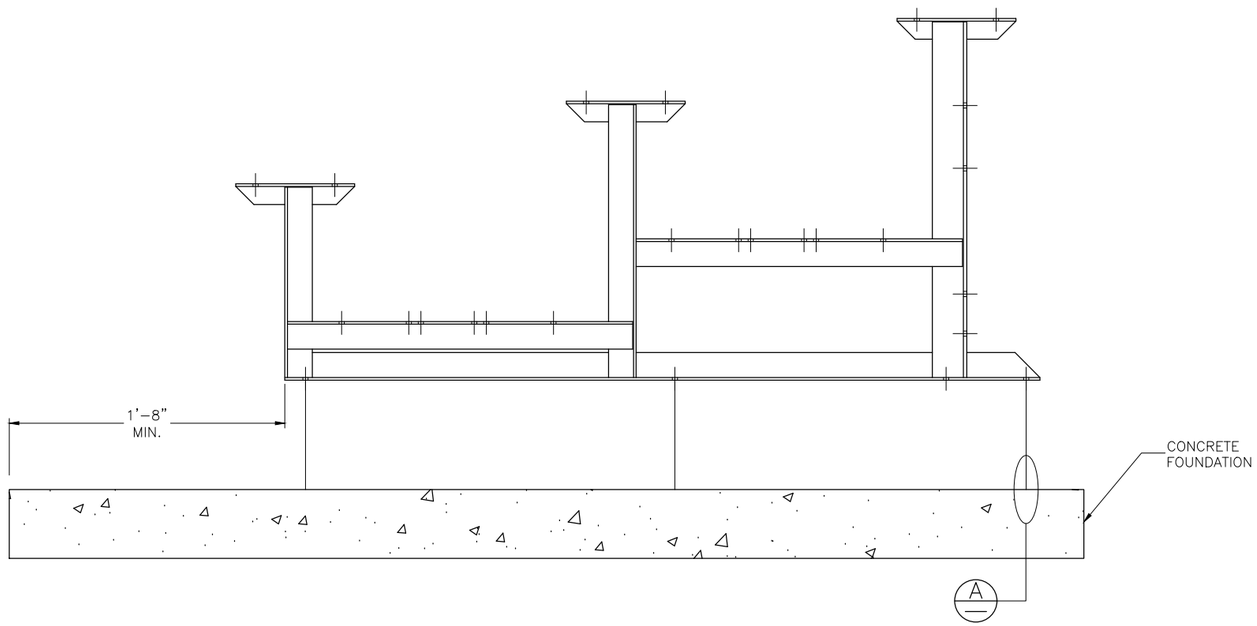
MODEL: NB–0307.5APRF					
DESCRIPTION: NON ELEV. 3 ROW x 7.5' BLEACHER ASSEMBLY					
DRAWN BY: IP	DATE: 8/30/23	REVISION: A	SCALE: N.T.S.	SHEET NUMBER: 5.BA	

(A) WEDGE ANCHOR DETAIL – 3"



(OPTIONAL) ANCHOR BLEACHER TO CONCRETE FOUNDATION *



* CONCRETE WEDGE ANCHORS NOT INCLUDED WITH ALL UNITS. IF USING OTHER ANCHORING SYSTEM, SKIP THIS STEP AND REFER TO INSTRUCTIONS SPECIFIC TO THE ANCHORING SYSTEM PURCHASED FOR YOUR UNIT.

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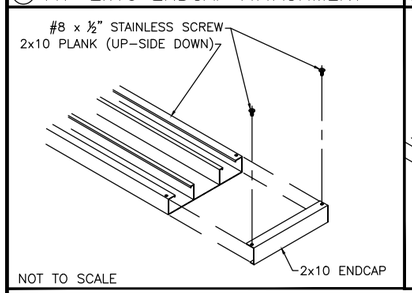
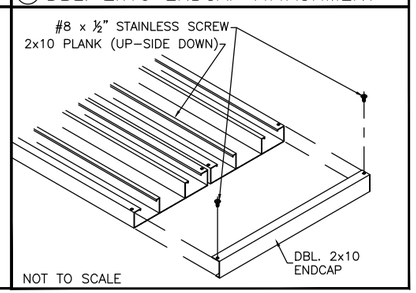
MODEL:	NB–0307.5APRF						
DESCRIPTION:	NON ELEV. 3 ROW x 7.5' BLEACHER ANCHORING PLAN						
DRAWN BY:	IP	DATE:	8/30/23	REVISION:	A	SCALE: N.T.S.	SHEET NUMBER: 6.AP

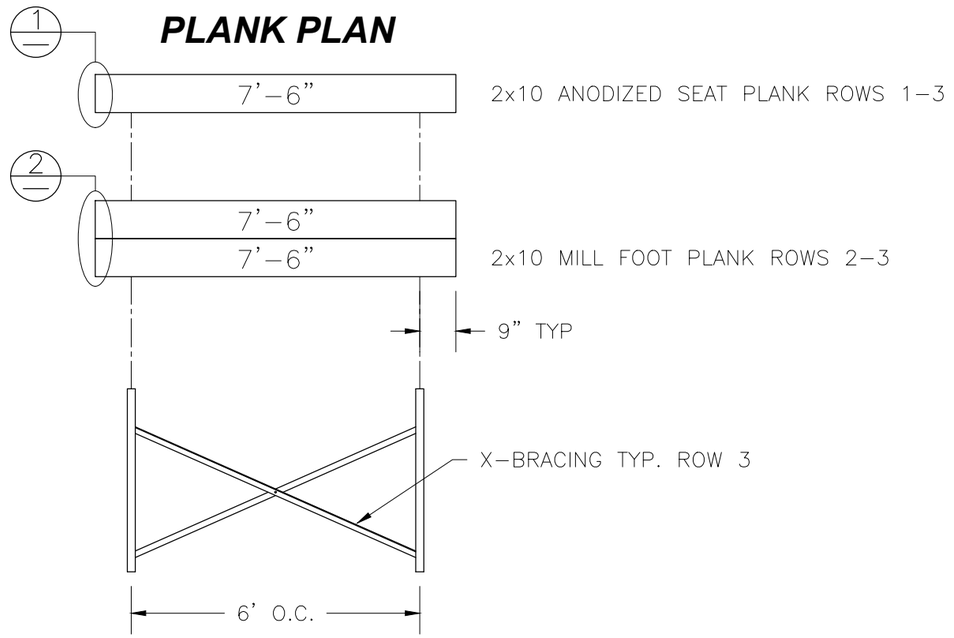
1 TYP 2x10 ENDCAP ATTACHMENT



2 DBL. 2x10 ENDCAP ATTACHMENT



PLANK PLAN



FRAMING PLAN

NRS National Recreation Systems
A PLAYCORE Company
PH: 888-568-9064 FAX: 260-482-7449 WWW.BLEACHERS.NET

MODEL: NB-0307.5APRF					
DESCRIPTION: NON ELEV. 3 ROW x 7.5' PLANK AND FRAMING PLAN					
DRAWN BY: IP	DATE: 8/30/23	REVISION: A	SCALE: N.T.S.	SHEET NUMBER: 7.PF	

SECTION 02 97 00

LANDSCAPE WORK

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

A. CONTRACT DOCUMENTS: This Section does not stand alone. Comply with all Contract Documents, Conditions of the Contract, Division 1 General Requirements, Drawings, and other documents that define the Work of the Contract.

B. The General Provisions of the Contract, including GENERAL and SUPPLEMENTARY CONDITIONS AND GENERAL REQUIREMENTS (if any), apply to the work specified in this Section.

C. Examine all other Sections of the Specifications for requirements that affect the Work of this Section whether or not such Work is specifically mentioned in this Section.

D. Coordinate work with that of all other trades or contracts affecting or affected by the Work of this Section. Cooperate with such trades to ensure the steady progress of all work under the Contract.

1.02 DESCRIPTION OF WORK

A. All areas disturbed during construction and not otherwise surfaced shall be rough graded, restored with topsoil, sodded, seeded and maintained until a satisfactory stand of grass or wildflowers, as determined by the Owner’s Representative, is established.

B. Perform all lawn construction of specified areas as shown on the Plans.

C. Plant all trees, shrubs, and other plantings as specified and shown on the Plans.

D. Mulch all tree pits and plant beds as detailed and shown on the Plans.

E. Maintain all seeded and planted areas, including weeding, watering and mowing, as specified herein until acceptance.

F. Acceptance of lawns will not be granted prior to establishment of a satisfactory stand of grass and at least three mows. To receive a Certificate of Substantial Completion, the Contractor must establish an acceptable and satisfactory stand of grass at all seeded and sodded lawn areas.

1.03 QUALITY ASSURANCE

A. General:

1. Perform restoration work in compliance with applicable requirements of governing authorities having jurisdiction.

B. Codes and Standards:

1. All work and materials shall conform to the latest applicable sections under the state's various jurisdictions; Rhode Island Department of Transportation (RIDOT) Standard Specifications for Road and Bridge Construction, as amended, hereinafter referred to as the "Standard

Specifications"; as well as the codes and standards referenced in the individual sections. In case of conflict, the codes and standards referenced in the individual sections shall govern.

2. All work and materials shall also be in full accordance with the latest rules, regulations, and safety orders of the State's Division of Industrial Safety OSHA, A.N.S.I. - A10.1 Safety Code for Building Construction, and all other state, county, town, municipality, and the utility laws rules, and regulations. Nothing in these Plans and Specifications shall be construed to permit work not conforming to the above.
3. Plants and planting shall conform to American Association of Nurserymen's Standards for Nursery Stock (ANSI Z601) for size, shape, number of leaders, branching patterns, health, etc. Plants shall be nursery grown under similar climatic conditions to those of the project locality for a minimum of two (2) years.
4. Planting and shall conform to the American National Standard for Tree Care Operations, ANSI A300 current edition. Tree Care Industry Association, Inc.

C. Source Quality Control:

1. General: Ship landscape materials with Certificates of Inspection as required by governing authorities. Comply with regulations applicable to landscape materials.
2. Do not make substitutions. If specified landscape material is not obtainable, submit proof to Owner of non-availability and proposal for use of equivalent material. When authorized, adjustment of Agreement amount will be made, if appropriate.
3. Plant names indicated comply with the latest edition of Hortus III. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name.
4. Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock" ANSI Z6Q.1.
5. Plants shall be at least the minimum size indicated. Larger stock is acceptable if approved by the Owner, at no additional cost. When larger plants are used, increase the spacing proportionally.

D. Inspection: Owner reserves the right to inspect and approve trees and shrubs at the place of growth for compliance with specification requirements for name, variety, sizes, and quality. Contractor shall coordinate with supplier(s) as needed to accommodate Owner's inspection if requested.

E. Special Requirements:

1. Protection: Comply with all applicable regulations and safety orders in effect at the place of construction. Protect this and adjacent properties from all damage due to this operation. Protect open excavations, trenches, etc., with fences, covers or railings as required to maintain safe pedestrian and vehicular traffic.
2. Responsibility: The Contractor is responsible for the finished condition of their work. Notify the Owner's Representative promptly in writing if any conditions exist which are contrary to requirements. Without extra cost to the Owner, restore street pavements, walks, curbs, gutters, trees, etc., that may be damaged in the performance of Work under this Section, in a manner prescribed by any authorities having jurisdiction.
3. Setting and Establishing Finish Elevation Lines: All elevations, grades, lines, etc., required to complete the work under this Section shall be arranged and paid for by the Contractor, and performed by a qualified employee of the Contractor. It is the Contractor's sole responsibility to establish elevations, and to set and protect stakes during operations.

1.04 JOB CONDITIONS

A. Coordination: Coordinate all Work of this Section with related work of other Sections. Failure to coordinate properly will not reduce the obligation to meet the standards of acceptance of the various elements of work contained herein.

B. Sequencing and Scheduling:

1. No grass shall be begun until acceptance of fine grading by the Owner's Representative.

2. No permanent seeding shall be done in areas where construction operations may damage the installed work.

3. All existing or new grass areas damaged by construction operations or other causes shall be repaired to the Owner's Representative's satisfaction, at no additional cost to the Owner.

C. Existing Conditions: All Work that the Work of this Section is contingent upon shall be examined and any deficiencies shall be reported to the Owner's Representative. Commencement of work will be construed to mean complete acceptance of the preparatory Work. No adjustment will be made for discrepancies brought to the attention of the Owner's Representative after work has begun.

D. Extent of Work: Areas to be loamed, seeded, and mulched include all areas shown on the Drawings and all areas disturbed by the Contractor's activities which are not scheduled for other surfaces. All areas disturbed by the work and not otherwise covered or protected by other surfacing shall be dressed, seeded, and mulched.

E. Planting Time: Plant shall be done within the following dates:

1. Deciduous trees and shrubs- March 15th to June 15th or September 15th to December 1st.

2. Evergreen trees and other- March 15th to June 15th or August 15th to October 1st.

1.05 SUBMITTALS

A. Chemical analysis of the topsoil by an approved testing laboratory to be utilized with recommended rates of fertilization and liming based upon the analysis. Contractor shall submit the test results to the Owner's Representative prior to application of soil amendments.

B. Submit USDA certifications for grass seed purity and blend, for areas to be seeded.

C. Submit USDA certification for sod seed purity and blend, for areas to be sodded.

PART 2 - PRODUCTS

2.01 PLANT MATERIALS

A. General Qualifications:

1. Plant material shall be good examples of their species or variety, with uniform, well developed branch structure. Trees shall have a balanced head and single leader.

2. Trees shall be accordance with the American Standard of Nursery Stock of the American Association of Nurserymen.

3. Plant materials shall be freshly dug. No plants from cold storage or previously held in stock will be accepted.

4. All material shall be nursery grown. No collected material will be accepted.

5. Only materials grown with Hardiness Zones 1 through 5, as established by the Arnold Arboretum, Jamaica Plain, Massachusetts, or USDA Zones 2 through 6 will be accepted. The

Contractor shall certify in writing that the stock has been grown under Zone 5 (Arnold Arboretum) or Zone 6 (USDA) or hardier conditions.

6. Plant material shall be sound, healthy, and vigorous of growth, free of disease, inspect pests, eggs or larvae. All parts shall be moist and show active green cambium when cut.

7. Plants shall conform to the measurement specified, except that plants larger than those specified may be used if approved by the Owner. Use of larger plants shall not increase the contract price nor allow the Contractor to use smaller than specified material on other plants. If larger plants are approved, the root ball, root spread, or container shall be increased in proportion to the size of the plant.

8. Caliper measurements shall be taken on the trunk 6 inches (15cm) above the root collar for trees up to 4 inches (10cm) in caliper, and 12 inches (30 cm) above the root collar for trees over 4 inches (10cm) in caliper. Height and spread dimensions specified refer to the main body in their normal position. If a range of size is given, no plant shall be less than the minimum size, and no less than 50 percent of the plants shall be as large as the maximum specified. Plants that meet measurements but do not possess a normal balance between height and spread shall be rejected.

B. Deciduous Trees: Provide trees of height and caliper listed or shown with branching configuration recommended by ANSI Z60.1 for type and species required. Provide single stem trees except where special forms are shown or listed.

C. Deciduous Shrubs: Provide shrubs of the height or spread listed and with not less than minimum number of canes specified by ANSI Z60.1 for type and height of shrub required.

D. Container-grown deciduous shrubs will be acceptable in lieu of balled and burlapped deciduous shrubs, subject to specified limitations for container-grown stock. Containerized plants shall be well established in the container with a root system sufficiently developed to retain its shape and hold together when removed from the container. Plants shall not be pot bound, nor have kinked, circling, or bent roots. Root collar shall be apparent at surface of rootball.

E. Coniferous and Broadleafed Evergreens: Provide evergreens of sizes shown or listed. Dimensions shall be in accordance with ANSI Z60.1.

F. Trees with multiple leaders, unless specified will be rejected. Trees with damaged, cut, or crooked leader, included bark, abrasion of bark, sunscald, disfiguring knots, insect damage, mold, prematurely opened buds, or cut off limbs over ¾ inch (2 cm) diameter that are not completely callused are cause for rejection.

G. Balled and burlapped plants shall be dug with solid balls of standard size, the balls securely wrapped with non-synthetic, untreated, biodegradable burlap, and tightly bound with non-synthetic, biodegradable rope or twine. Alternatively, rootballs may be placed in wire basket lined with non-synthetic, untreated, biodegradable burlap and tightly bound with nonsynthetic, biodegradable rope and twine. Root collar shall be apparent at surface of ball. Bare root plants shall have a healthy, well branched root system characteristic of the species and with adequate spread.

2.02 SOIL AMENDMENTS

A. Amend topsoil per recommendations from soil test reports.

B. Ground Limestone: Ground Limestone shall contain not less than 85% of total carbonates, ground to such fineness that at least 90% passes through a 20-mesh sieve and at least 50% passes through a 100-mesh sieve.

C. General Fertilizer: Commercial type of neutral character, with some elements derived from organic sources and containing following percentages of available plant nutrients.

1. Use 5-10-5, 50% organic or other approved formulation for planting mixes.

2. Provide material composed of organic, slow-acting, guaranteed analysis fertilizer. Use a percentage of nitrogen to provide not less than one (1) pound of actual nitrogen per 1,000 square feet of lawn area. Provide nitrogen in a form that will be available to lawn during initial period of growth.

2.03 MISCELLANEOUS LANDSCAPE MATERIALS

A. Water: Shall be free of substances harmful to plant growth. Source, hoses, pumps, or other methods of transportation shall be furnished by Contractor.

B. Straw Mulch:

1. Mechanical Seeding: Provide clean, seed-free, salt hay or threshed straw of wheat, rye, oats or barley.

2. Hydroseeding: Provide a cellulose pulp fiber such as "Silva Fibre" as produced by Weyerhauser Company, Tacoma, Washington, or approved equal.

C. Grass Seed Requirements and Analysis:

1. Grass seed shall be fresh, clean, dry, new crop seed meeting the standards of SRA-156, U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act.

2. Seed shall be of the following varieties, mixed in proportion by weight and testing the minimum percentages of purity and germination.

Name	Proportion	Minimum % Germination	Minimum % Purity	Maximum % Weed
Kentucky Bluegrass Top Quality Names Variety	40%	80	85	0.5
Fine Textured Endophytic Perennial Ryegrass	35%	90	85	0.5
Creeping Red Fescue	25%	90	85	0.5
(Application = 4 lb./1,00 Sq. Ft.)				

a. Perennial Ryegrass shall consist of one or more of the following varieties: Baron, Famous, NuBlue.

b. Turf Type Tall Fescue shall be Rebel Jr. or approved equal

D. Guying and staking materials, if specified, shall be as follows. Stakes shall be 6-foot to 8-foot long sections of unflanged metal or 2-inch by 2-inch hardwood. Support ties shall be 3/4-inch or wider bands of flat woven polypropylene or polyester. Ground anchors shall be arrowhead shaped earth anchors or malleable iron castings, aluminum castings, or stamped steel.

PART 3 - EXECUTION

3.01 RATES OF APPLICATION

A. Chemical controls, grass seed shall be applied at the following rates:

Material	
Initial Soil Amendments	per Soil Test Recommendations
Fertilizer	per Soil Test Recommendations.
Grass Seed	4 pounds/1,000 sq. ft.

Straw Mulch	2-inch settled depth

3.02 INSTALLATION

A. Soil Preparation:

1. Soil Preparation of new lawn areas, or areas disturbed by Contractor's Operations:

   a. Where lawn grass is to be planted in areas that have been altered or disturbed by excavating, grading, or stripping operations, prepare soil as follows:

      1. Limit soil preparation to areas to be planted within 7 days.

      2. Loosen topsoil within lawn areas by tilling to a minimum depth of 6 inches. Remove by mechanical raking all stones over 1 inch in any dimension, sticks, weeds, clods, lumps, roots, rubbish, and other extraneous matter.

   b. Protect existing grass areas and create a smooth transition between them and new work. Repair any damage done to the satisfaction of the Owner's Representative.

   c. Fine grade as necessary to achieve a smooth even surface true to line and grade. Match grades smoothly with existing grass areas to remain.

   d. Secure acceptance of fine grading by the Owner's Representative prior to the commencement of seeding or sodding operations.

B. Seeding Season:

1. The calendar dates for seeding shall be:

   Spring - March 15 to May 15
   Fall - August 15 to September 30

2. All disturbed areas shall be treated during the seeding season as follows:

   a. Areas at final grade: Permanent seeding shall be accomplished.

   b. Areas not to be brought to final grade for an extended period of time: Temporary seeding shall be perennial ryegrass (Lolium perenne) at the rate of 3 pounds per 1,000 square feet.

   c. During "out of season" periods unseeded areas shall be treated in accordance with the Standard Specifications. "Out of Season" treatments shall be removed prior to seeding unless otherwise directed by the Owner's Representative.

C. Seeding New Grass Areas:

1. Where new grass areas abut other newly planted or existing planted areas establish limits of new grass with lime. Secure approval by Owner's Representative of limed edge prior to beginning seeding operations.

2. Application of Soil Amendments:

   a. Apply fertilizer, lime, and other initial soil amendments evenly at rates determined by topsoil test results and thoroughly incorporate into the upper 2 inches of topsoil by disking, harrowing or other acceptable methods.

   b. Rake the finished surface smooth.

3. Erosion Preventative: Slopes steeper than one foot vertical to 3 feet horizontal or greater, or any areas which will receive concentrated run-off water, shall be covered with biodegradable jute netting erosion control blanket. If jute netting is used, overlap seems not less than one foot, and the material shall be secured by pegs.

4. Maintain a moist seed bed at all times. Water the seed bed so that the topsoil is wet to a depth of two inches.

5. Protect the seed bed with barricades, if necessary, to keep all traffic off the areas.
6. After grass has appeared, re-seed all areas which have failed to show a uniform stand of grass. For isolated points of erosion that are not able to be stabilized by re-seeding, install sod as directed by Owner.

D. Hydroseeding New Grass:

1. Landscaper shall hydroseed all lawn areas except areas to be established as lawn. The Landscaper shall submit a written description of the proposed process, complete with materials and equipment to be used, to the Owner's Representative for approval prior to initiation of any hydroseeding operations.
2. Application of soil amendments and seed to be accomplished in one operation by the use of approved mobile hydraulic system operated by experienced personnel. Materials shall be mixed with water in slurry tank and kept in an agitated state so that materials will be uniformly suspended in the water. Spraying equipment to produce uniform and even distribution of materials on areas designated. Inadequately covered areas to be re-sprayed as necessary or as designated by the Owner's Representative.
3. Apply slurry uniformly to all areas to be seeded. Rate of application as required to obtain specified seed sowing rate.
4. Reference Paragraphs 3.02 A, B, and C.
5. Straw mulch shall be applied as a separate activity, after hydroseeding is completed. Spray-applying straw mulch at as part of the hydroseeding shall not be allowed.

E. Mechanical Seeding of New Grass:

1. If approved by the Owner's Representative, the Contractor may mechanically seed small sections of the areas to be seeded to lawn. This methodology shall be limited to small sections of lawn and shall not be used unless prior approval has been granted.
2. Do not use wet seed or seed which is moldy or has been damaged in transit or storage.
3. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds 5 miles per hour or when the ground is in a frozen, wet, or otherwise non-tillable condition.
4. Sow no less than the quantity of seed specified.
5. Cover seed with a thin layer of topsoil by raking or dragging.
6. Immediately after the seeding operations have been completed, the entire area shall be compacted by use of a roller weighing 60 to 80 pounds per linear foot. If the soil is of such a type that a smooth or corrugated roller cannot be operated satisfactorily, a pneumatic roller may be used if it has tires of sufficient size so that complete coverage of soils is obtained. When a cultipacker or similar equipment is used, the final rolling shall be at right angles to the prevailing winds to prevent wind erosion.
7. Protect seeded areas against erosion either by spreading specified hay mulch or hydro-mulching immediately after completion of seeding operations. If straw mulch is used, spread uniformly to form a continuous blanket not less than 2-inches settled thickness over seeded areas. Spread straw mulch by hand, blower or other suitable equipment.

F. Existing Grass:

1. All existing grassed or vegetated areas shall be protected from unnecessary damage due to construction operations.
2. Existing grassed or vegetated areas within the project site shall be maintained by the Contractor.

G. Trees and Shrubs

1. All trees and shrubs are to be installed according to nursery provider recommendations. They shall be planted according to the planting schedule on the Plans. All materials and products necessary for the proper planting of shrubs shall be supplied by the Contractor at no additional cost to the Owner including but not limited to: topsoil, mulch, and fertilizer.
2. Excavate pits, beds, and trenches with vertical sides and with bottom of excavation slightly raised a center to provide proper drainage. Loosen hard subsoil in bottom of excavation.
3. Bare Root Shrubs: Make excavations at least 10 inches wider than root spread and deep enough to allow for setting of roots on a layer of compacted backfill and with collar set at same grade as in nursery.
4. Balled and Burlapped Trees and Shrubs: Make excavations at least two (2) feet wider than the ball diameter and equal to the ball depth.
5. Provide freshly dug trees and shrubs. Do not prune prior to delivery. Do not bend, bind, or tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape. Provide protective covering during delivery. Plants shall not be bound with wire or rope at any times so as to damage the bark or break branches. Plants shall be lifted and handled with suitable support of the soil ball to avoid damaging it.
6. Deliver trees and shrubs after preparation for planting has been completed and plant immediately. If planting is delayed more than six (6) hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist.
7. Plants must be protected at all times from the sun or drying winds; Those that cannot be planted immediately on delivery shall be kept in the shade, well protected with soil covered with wood chips or other acceptable material, and kept well watered. Plants shall not remain unplanted any longer than 3 days after delivery without permission from the Owner.
8. Label at least one tree and one shrub of each variety with a securely attached waterproof tag bearing legible designation of a botanical and common name. Tag shall remain legible a minimum of 60 days.
9. Notify Owner in writing of all soil or drainage conditions which Contractor considers harmful to growth of plant material. State condition and submit proposal for correcting condition, including additional cost, if any.
10. Test drainage of plant beds and pits by filling with water. Conditions permitting the retention of water for more than 24 hours shall be brought to the immediate attention of the Owner's Representative. State condition and proposal or correcting condition including additional costs for correction and obtain written approval from Owner before proceeding.

H. Planting:

1. Balled and Burlapped Stock: Set plant plumb and in center of pit or trench with top of ball at same elevation as adjacent finished landscape grades. Remove burlap from sides of ball. Remove all metal baskets when set, place additional backfill around base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill.
2. Bare Root Stock: Cut injured roots clean; do not break. Set roots on cushion of planting soil mixture. Spread roots and carefully work backfill around roots by hand and puddle with water until backfill layers are completely saturated. Plumb before backfilling and maintain plumb while working backfill around roots and placing layers above roots. Set collar at same grade as to finish landscape grades. Spread out roots without tangling or turning up to surface.
3. Dish top of backfill to allow for mulching.

4. Prune, thin out and shape trees and shrubs in accordance with standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by Owner, do not cut tree leaders, and remove only injured or dead branches from flowering trees, if any. Prune shrubs to retain natural character and accomplish their use in the landscape design.
5. Remove and replace excessively pruned or misformed stock resulting from improper pruning.
6. Inspect tree trunks for injury, improper pruning and insect infestation, and take corrective measures before wrapping.
7. Guy and stake trees immediately after planting, as indicated.
8. Space plants in accordance with indicated dimensions or Owner's Representative's instruction. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants.
9. Dig holes large enough to allow for spreading of roots and backfill with planting soil. Planting holes shall be backfilled with excavated soil. When holes are approximately two-thirds full, they shall be thoroughly watered to eliminate air pockets. After this initial watering, excavated soil shall be installed to the top of the hole and watered. Prevent puddle soil conditions by avoiding compaction once the soil is wet. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover crowns of plants with wet soils.
10. Removal of ropes, strings, wire baskets, burlap, and other wrappings from balled and burlapped plants. After the plant has been set and one third of the backfilling completed to support the ball, ropes, strings, wire baskets, burlap, and other wrappings shall be removed from the root ball and planting hole prior to backfilling. The balance of the wrappings may be left intact around the bottom one-third of the ball. If the root collar is deep in the ball, remove excess soil away from the trunk using hands, not tools.
11. Planting areas shall be finish-graded to conform to ANSI A300 (Part 6) after the full settlement has occurred. All plants shall be mulched over the root system with a 2 to 4 inch settled thickness layer of aged bark mulch immediately after planting. Mulching material shall be pulled back no less than 3-inches and no more than 6-inches from the trunk.

I. GUYING, STAKING, AND PRUNING

1. Only trees so designated by the Town Forester shall be staked and guyed. Exceptions should only be made in windy areas, areas where excessive vandalism is expected or where planting large bare root trees in light soil. Ties made of approved material shall be attached directly to the stakes or may be attached to stakes by wire. In no case shall the wire extend around the tree trunk. Ties should be attached loosely enough to allow a small amount of play in the trunk. For drooping stems, ties shall be placed at the point on the stem at which the top can stand up on its own. Stakes shall be driven outside the root ball. For trees larger than 3-inches in caliper, use ties attached to 3 guy wires and ground anchors. Ground anchors are to be driven at a 45 degree angle in the ground and placed at 120 degree intervals around the trunk. The Town Forester shall be responsible for removing all stakes and straps after a one-year period. These stakes and straps will become property of the Town of Coventry after removal.
2. The trunk protection shall be secured at the top and bottom of the trunk in a manner so as not to restrict or damage the bark.
3. No pruning shall be performed on the crowns of newly installed trees except to remove broken or damaged branches existing at the time of planting.

3.03 PROTECTION

A. Erect barricades and warning signs as required to protect newly seeded and sodded areas and existing grass areas to remain from traffic. Maintain barricades until acceptance.

3.04 MAINTENANCE

A. Specific Operations:

1. Maintenance shall consist of the following elements:

a. Watering, fertilizing, weed control, disease control, insect control, mowing, trimming, and other operations such as rolling, regrading, replanting, as required to establish a smooth, acceptable lawn, free of eroded or bare areas.

b. Remulch with new mulch in areas where the mulch has been displaced by wind or maintenance operations. Anchor as required to prevent displacement. Remove all weeds on a weekly basis from all mulch beds by hand-pulling.

c. After the grass has appeared, all areas and parts of areas which fail to show a uniform stand of grass, for any reason whatsoever, shall be reseeded and such areas and parts of areas shall be seeded repeatedly until all areas are covered with a satisfactory growth of grass.

d. Suitable signs and barricades shall be erected to protect the seeded areas.

e. Watering: If irrigation has not been installed, the Contractor shall be responsible for the watering of all seeded and sodded areas, which shall be kept moist. The Owner's Representative's opinion will prevail in the event that a dispute develops with the Contractor as to whether or not the seeded and grassed areas are moist. Seeded areas on which growth has started shall be watered to a minimum depth of 2 inches to assure continuing growth. Watering shall be done in a manner which will provide uniform coverage, prevent erosion sue to application of excessive quantities over small areas, and prevent damage to the finished surfaces due to the watering equipment. The Contractor shall furnish sufficient watering equipment to apply one complete coverage to the seeded areas in an 8 hour period. In areas where plans indicate that others will be installing irrigation, Contractor shall assume that this new irrigation will not be operational and that the Contractor will need to supply temporary irrigation to all areas.

f. Initial grass mowing shall occur when grass reaches a height of 4 inches. Time the subsequent mowings to maintain the grass at a 2 to 3 inches in height. Do not mow lower than 2 inches. Do not delay mowing until grass blades bend over and become matted. Do not mow wildflower areas.

g. Apply fertilizer after first mowing and when the grass is dry. Use fertilizer which will provide not less than 1.0 lb of actual nitrogen per 1,000 sq. ft. of grass area.

2. The Contractor shall care for all seeded and sodded areas until the work has been accepted. Care shall include any re-grading, re-fertilizing, re-seeding, and mowing which may be necessary.

3.05 ACCEPTANCE OF PLANTINGS AND GRASS

A. General:

1. To receive a Certificate of Substantial Completion, the Contractor shall establish an acceptable and satisfactory stand of grass at all seeded and sodded lawn areas.

2. The Owner's Representative will have final authority on the acceptance of lawn areas and the determination of an acceptable and satisfactory stand of grass. To be acceptable, all areas of grass shall be well-rooted, thick in growth, uniformly healthy in color, texture, and growth pattern, and shall meet the following criteria:

a. A minimum germination rate of 90% for all seeded lawns. Areas and spots not showing a prompt "catch" shall be scarified, re-fertilized, and re-seeded at two-week intervals until 90% germination is attained,

b. No bare spots larger than one foot (1') square with less than 75% germination shall be evident,

c. No annual, perennial, or noxious weeds shall be evident.

3. Plantings will be acceptable provided requirements, including maintenance, have been complied with.

4. Grass may not be accepted prior to 30 days from its installation and three (3) mowings.

B. Inspections:

1. Preliminary Inspection and Acceptance:

After the completion of planting and all other related operations the Contractor shall make a written request to the Owner for a formal inspection of the Work. If plant materials and workmanship are acceptable upon inspection, written notice will be given to the Contractor stating that the Work has received Preliminary Acceptance and that the establishment period has commenced from the date of the notice. Establishment period shall be one (1) year.

2. Final Inspection for Acceptance:

a. A final inspection for acceptance of all grass and plantings will be held after all adjustments required by the preliminary inspection for acceptance have been made. The Contractor shall notify the Owner's Representative in writing requesting a final inspection to grant acceptance.

b. At the discretion of the Owner's Representative, acceptance may be granted to individual areas.

c. At time of final inspection plant material shall be sound, healthy, and vigorous of growth, free of disease, inspect pests, eggs or larvae. All parts shall be moist and show active green cambium when cut.

d. Following acceptance, the Owner shall assume responsibility for all lawn and plant maintenance.

3.06 GUARANTEE PERIOD

A. Following completion of the establishment period, (1-year), the plants shall be guaranteed for a period of two (2) years. At the end of the guarantee period, a Final Inspection with the Contractor and Owner will be held to determine whether any plant material replacements are required.

B. During the guarantee period the Contractor shall provide care as required to produce an acceptable planting at the final inspection. To be found acceptable at that time each plant shall have been established in place for at least two (2) years, shall show at least 75% healthy growth and shall have the natural character of its species as determined by the Owner.

C. Plants found unacceptable or dead shall be removed promptly from the site and replaced during the specified planting season. Replacements shall be of the same species and size and shall conform in all respects to the specifications for furnishing and installing new plants. Replacements shall be maintained and guaranteed as specified for the original plantings. If, at the end of the guarantee period for the replacement planting, the replacement is not in acceptable condition, the Owner may elect to accept a credit in lieu of a second replacement.

D. Cost of replacement shall be borne by the Contractor, except when such replacement is required due to vandalism or neglect by others.

E. During the guarantee period of (2) years, control measures shall be employed by the Contractor to maintain all landscaped areas free of invasive plant species.

* * * END OF SECTION * * *