

**IMPORTANT NOTES: Read First**

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

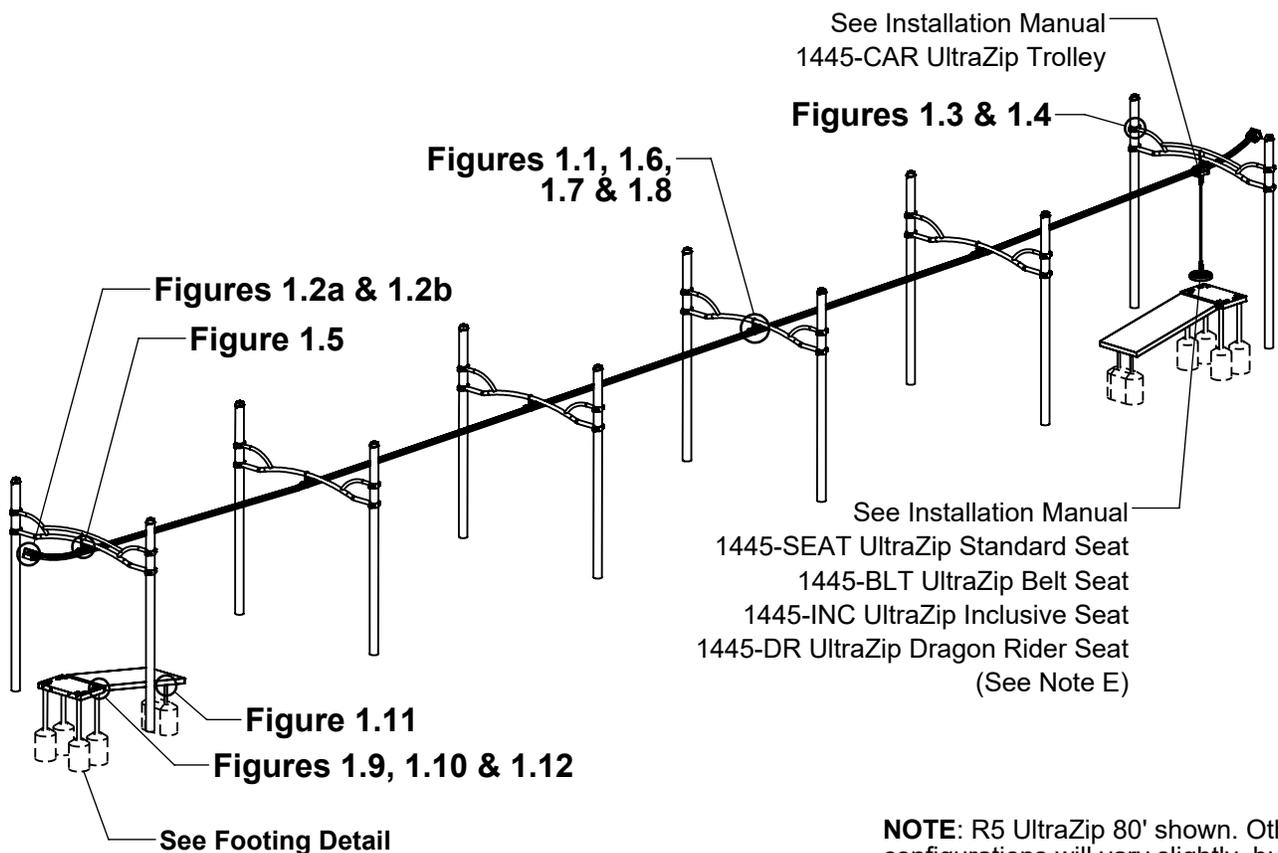
(B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).

(C) Refer to Installation Manual for 1445-CAR UltraZip Trolley, 1445-SEAT UltraZip Standard Seat, 1445-BLT UltraZip Belt Seat, 1445-INC UltraZip Inclusive Seat and 1445-DR UltraZip Dragon Rider Seat installation instructions.

(D) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at [www.cpsc.gov](http://www.cpsc.gov) for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

(E) All Ultrazip components and hardware should be inspected on a weekly schedule. Part number 451155, Dual Swivel Shackel including attaching hardware, should be replaced on an annual schedule or when excessive wear is present.

**FIGURE 1  
UltraZip**



# Step 1

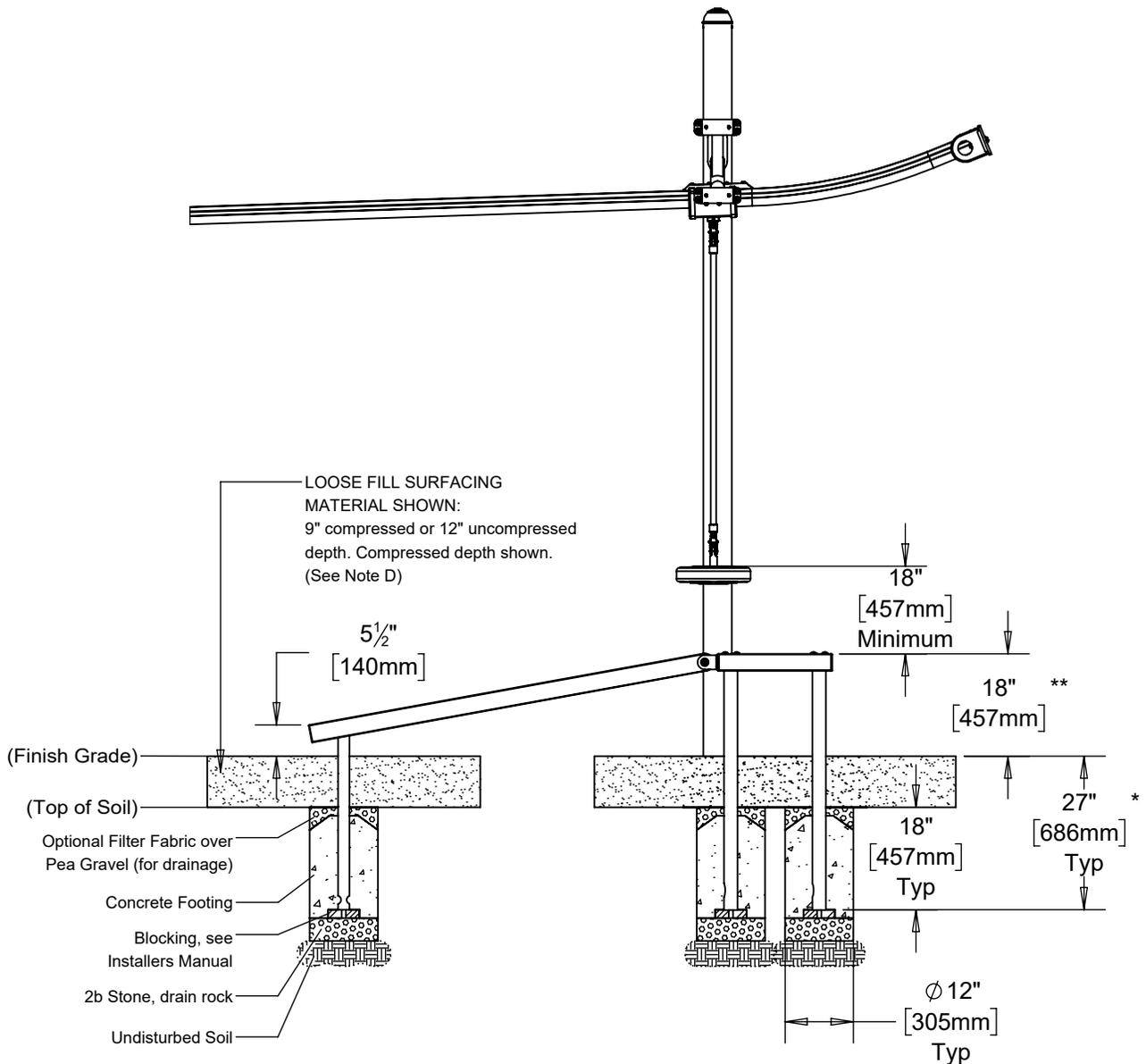
Refer to Footing Layout and mark footing hole locations. Dig (4) Ø 12" footing holes and (1) 12" x 24" oblong footing hole for each corresponding landing in assembly. Refer to Footing Detail for depth and details.

**IMPORTANT:** For areas with soft soil conditions, larger footings may be required.

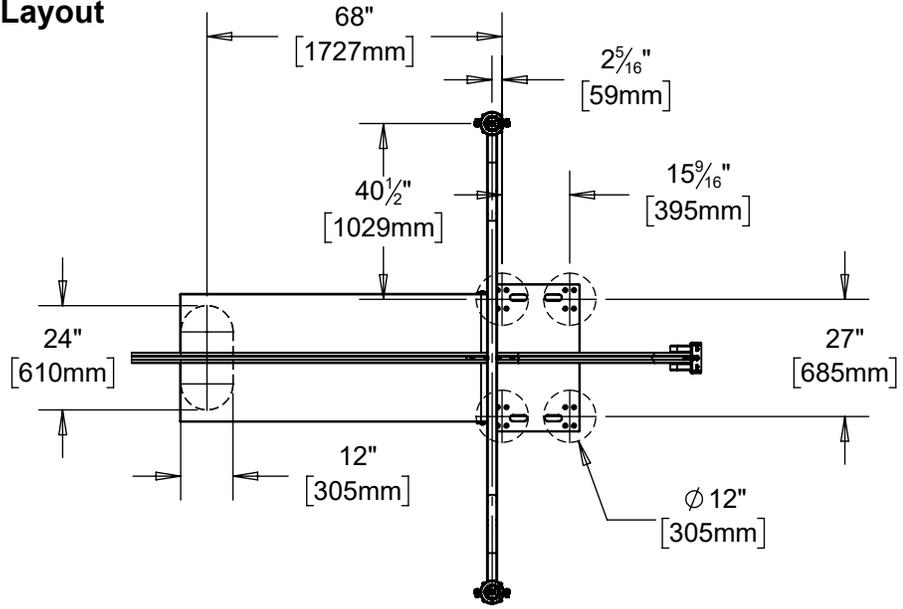
\* Footing depth must be adjusted to compensate for the depth/thickness requirements of selected safety surfacing. See Section 06.1 of the Installation Manual.

\*\* Height shown from finish grade to top of deck.

**Elevation View - Footing Detail**



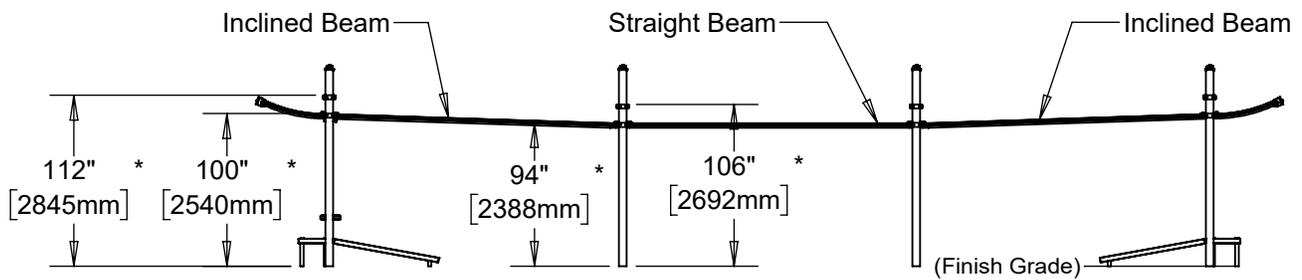
**Deck & Ramp - Footing Layout**



**Elevation View - UltraZip 48-80**

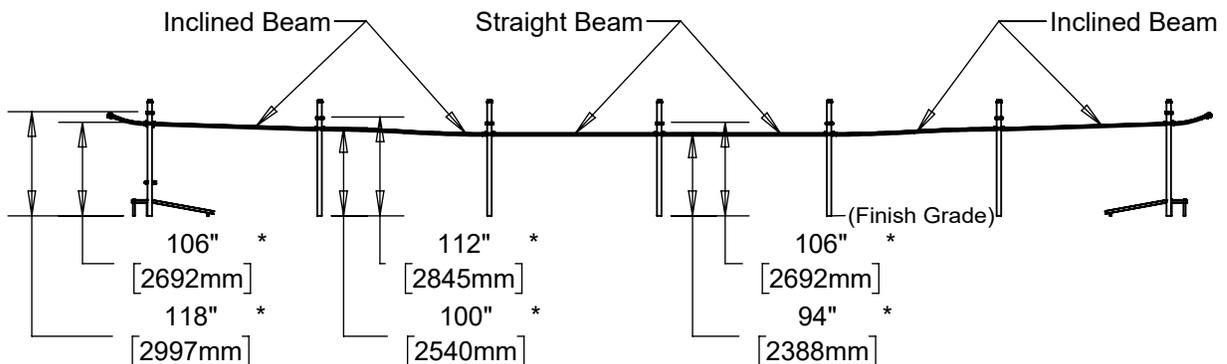
NOTE: S-1445-R5-48 shown.

\* Height shown from finish grade to top of split collars.



**Elevation View - UltraZip 96**

\* Height shown from finish grade to top of split collars.

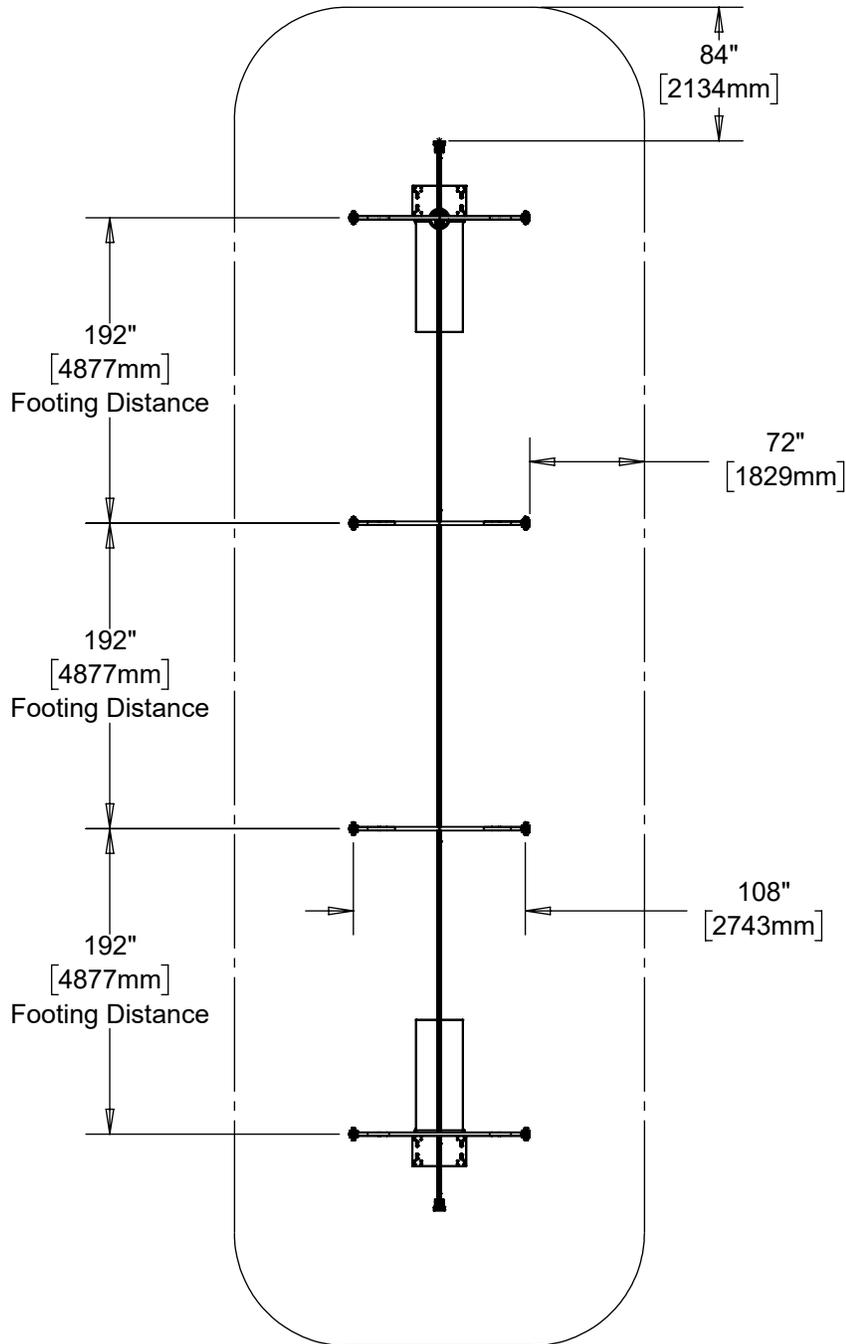


**Top View - Footing Layout**

**NOTE:** S-1445-R5-48 shown. Footing distance is the same for additional bays.

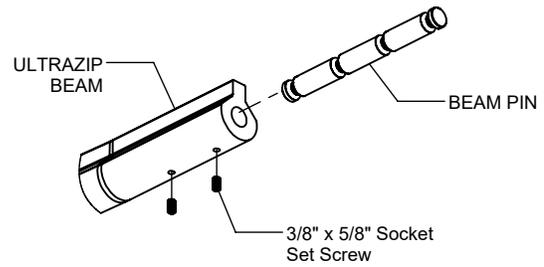
**72" [1829mm] use zone recommended.**  
**Refer to current ASTM 1487 standards.**

The Use Zone for play equipment shall be no less than 72" [1829mm] in all directions from the perimeter of the play structure. If the adjacent structure has a play surface greater than 30" (762 mm) above surfacing, the distance between structures shall be no less than 108" (2473mm).

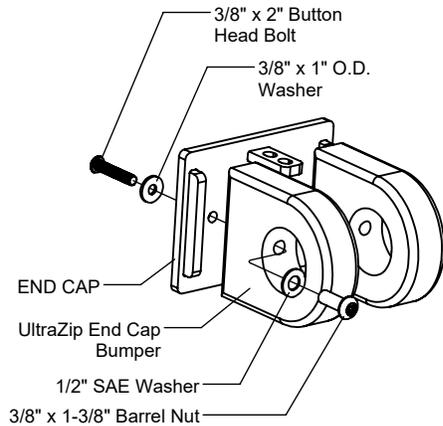


## Step 2 (Factory Assembled)

Insert and attach Beam Pins to one side of UltraZip Center Beams and one UltraZip End Beam as shown in Figure 1.1. (See Note A)



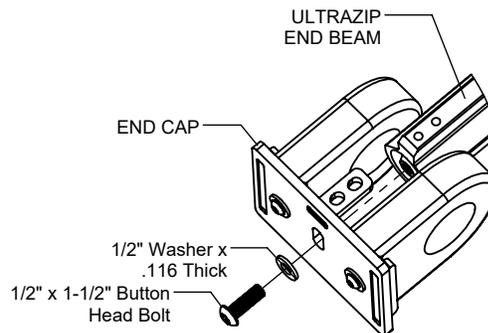
**Figure 1.1**



**FIGURE 2**

## Step 3 (Factory Assembled)

Assemble End Cap as shown in Figure 2. (See Note A)

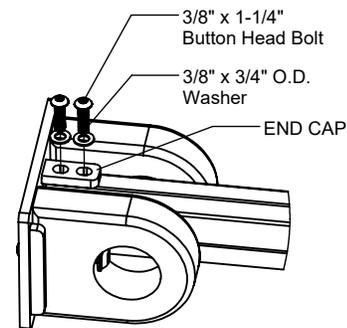


**Figure 1.2a**

## Step 4 (Factory Assembled)

Attach End Caps to UltraZip End Beams as shown in Figure 1.2a. (See Note A)

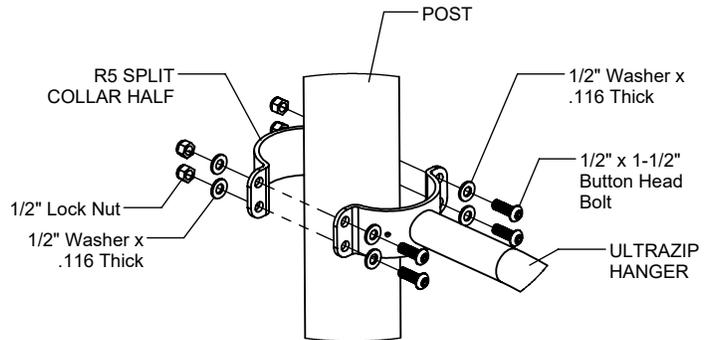
Attach UltraZip End Cap Support to UltraZip Beam as shown in Figure 1.2b. (See Note A)



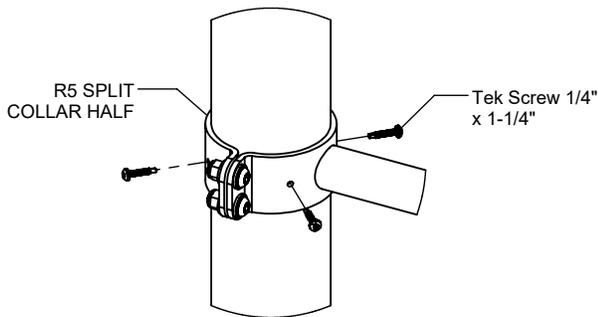
**Figure 1.2b**

## Step 5

Refer to Footing detail for collar heights and attach UltraZip Hanger to post as shown in Figure 1.3. (See Note A)



**Figure 1.3**



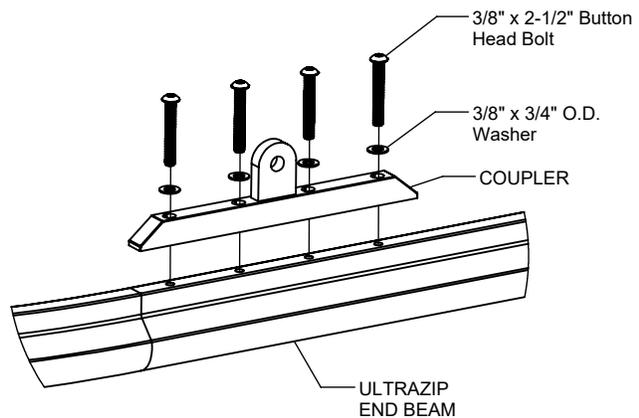
**Figure 1.4**

## Step 6

Secure UltraZip Hanger and Split Collar Halves to post as shown in Figure 1.4. (See Note A)

## Step 7

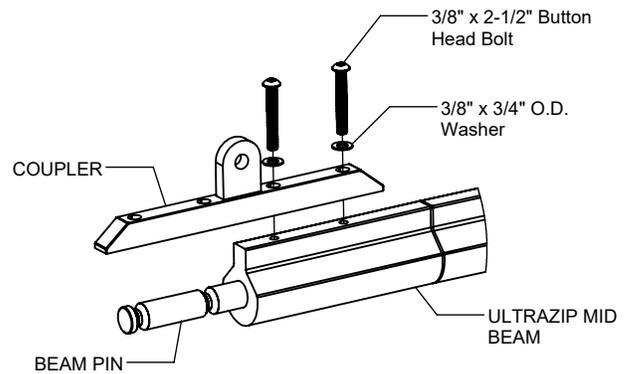
Attach Couplers to UltraZip End Beams as shown in Figure 1.5. (See Note A)



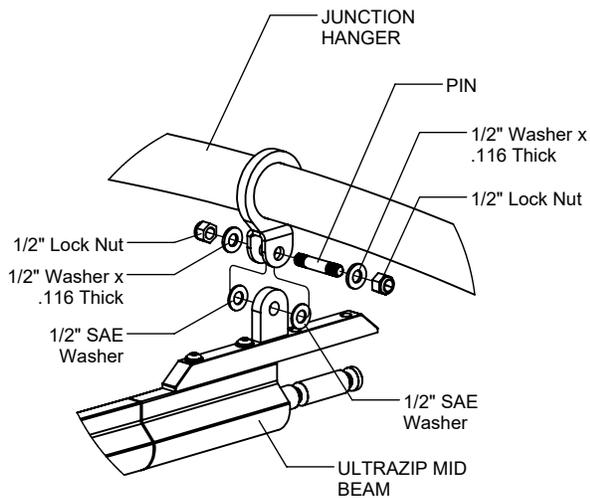
**Figure 1.5**

## Step 8

Attach Couplers to one side of UltraZip Mid Beams as shown in Figure 1.6. (See Note A)



**Figure 1.6**



**Figure 1.7**

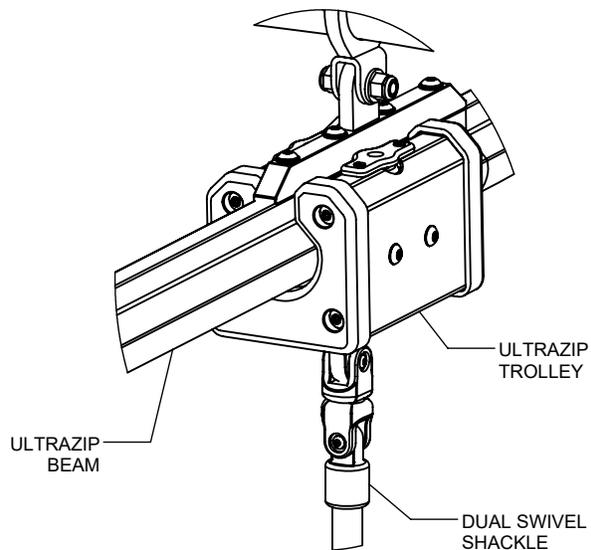
## Step 9

Attach UltraZip Mid Beam to UltraZip Hangers as shown in Figure 1.7. (See Note A)

## Step 10

Slide UltraZip Trolley onto assembled Beam and temporarily secure to prevent it from sliding off as shown in Figure 3.

**Note:** All Ultrazip components and hardware should be inspected on a weekly schedule. Part number 451155, Dual Swivel Shackel including attaching hardware, should be replaced on an annual schedule or when excessive wear is present.



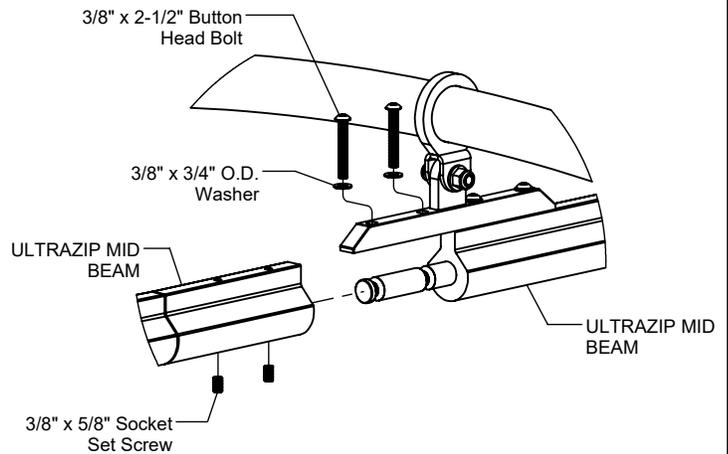
**FIGURE 3**

## Step 11

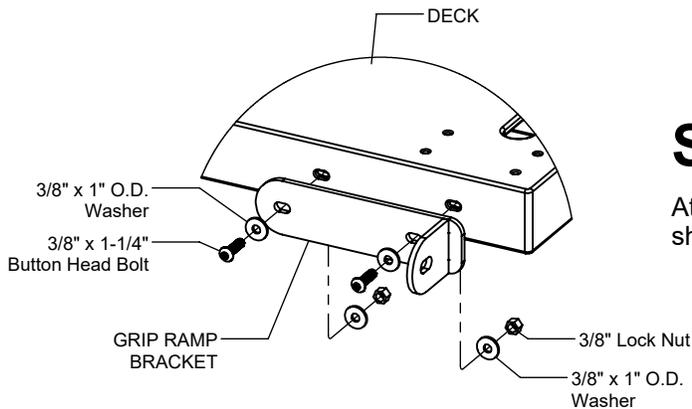
Slide open end of UltraZip Beam onto Beam Pin and attach to Coupler and Hanger as shown in Figure 1.8. (See Note A)

## Step 12

Repeat steps 9 & 11 for remaining Beams, working from the middle of the UltraZip to the ends of the UltraZip.



**Figure 1.8**



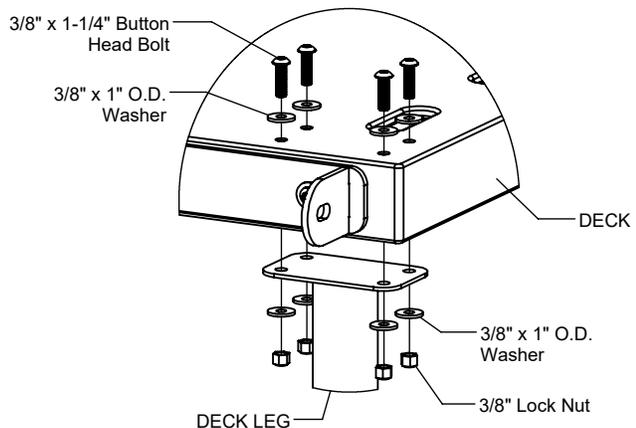
**Figure 1.9**

## Step 13

Attach Grip Ramp Brackets to Decks as shown in Figure 1.9. (See Note A)

## Step 14

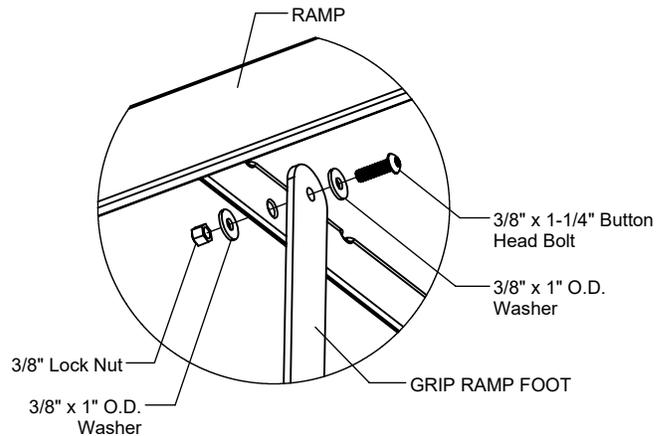
Attach Deck Legs to Decks as shown in Figure 1.10. (See Note A)



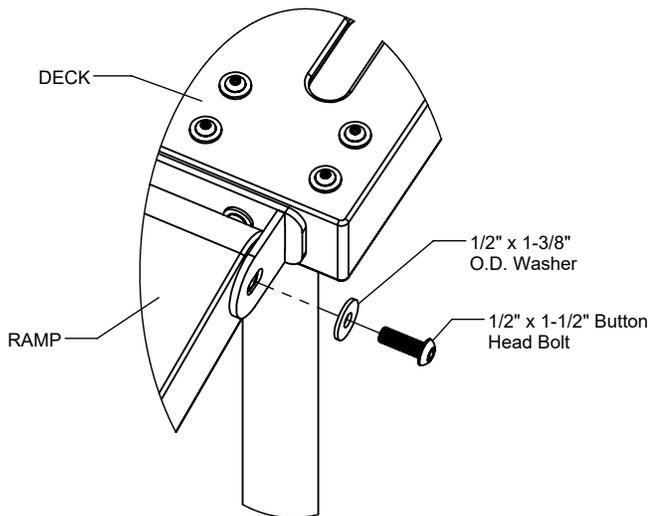
**Figure 1.10**

## Step 15

Attach Grip Ramp Feet to Ramp as shown in Figure 1.11. (See Note A)



**Figure 1.11**



**Figure 1.12**

## Step 16

Place Grip Ramp Feet and Deck Legs into footing holes and attach Ramp to Decks as shown in Figure 1.12. (See Notes A & B)

## Step 17

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

## Step 18

Plumb and level entire component. Pour concrete into footing holes. Allow at least 72 hours to cure before using this equipment. (See Note B)

## Step 19

Place required protective surfacing under and around UltraZip. (See Note C)

# ULTRAZIP INSTALLATION INSTRUCTIONS

## Parts List

ULTRAZIP - STANDARD ENTRY		
Part #	DESCRIPTION	QTY
BF-7068	Split Collar Half R5	4
FS-1445-C	UltraZip Coupler	1
FS-1445-R5EH-9FT	UltraZip End Hanger R5 9'	1
IE-0110	Hanger Pin	1
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9105072	Bolt Button Head 1/2" x 1-1/2"	16
9271062-TR	1/4" x 1-1/4" Tek Screw	16
9333032	Washer Flat 3/8" x 3/4" O.D. x .060" Thick	4
9335002	Washer Flat 1/2" (.116" thick)	34
9345002	Washer Flat SAE 1/2"	2
9415132	Nut Lock 1/2"	18

ULTRAZIP - STRAIGHT SECTION		
Part #	DESCRIPTION	QTY
BF-7068	Split Collar Half R5	4
FS-1445-C	UltraZip Coupler	1
FS-1445-R5JH-9FT	UltraZip Junction Hanger R5 9'	1
IE-0110	Hanger Pin	1
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	4
9105072	Bolt Button Head 1/2" x 1-1/2"	16
9263022	Screw Soc Set 3/8" x 5/8"	2
9271062-TR	1/4" x 1-1/4" Tek Screw	16
9333032	Washer Flat 3/8" x 3/4" O.D. x .060" Thick	4
9335002	Washer Flat 1/2" (.116" thick)	34
9345002	Washer Flat SAE 1/2"	2
9415132	Nut Lock 1/2"	18

ULTRAZIP - STANDARD EXIT		
Part #	DESCRIPTION	QTY
BF-7068	Split Collar Half R5	8
FS-1445-C	UltraZip Coupler	2
FS-1445-R5EH-9FT	UltraZip End Hanger R5 9'	1
FS-1445-R5JH-9FT	UltraZip Junction Hanger R5 9'	1
IE-0110	Hanger Pin	2
9103112-TR	Bolt Button Head 3/8" x 2-1/2"	8
9105072	Bolt Button Head 1/2" x 1-1/2"	32
9263022	Screw Soc Set 3/8" x 5/8"	2
9271062-TR	1/4" x 1-1/4" Tek Screw	32
9333032	Washer Flat 3/8" x 3/4" O.D. x .060" Thick	8
9335002	Washer Flat 1/2" (.116" thick)	68
9345002	Washer Flat SAE 1/2"	4
9415132	Nut Lock 1/2"	36

## Parts List

ULTRAZIP LANDING		
Part #	DESCRIPTION	QTY
AE-4047	Grip Ramp Foot 3	2
CE-0685	UltraZip Deck	1
CE-1093	UltraZip Ramp	1
FS-1214-BRKT	Grip Ramp Bracket	2
FS-1445-LEGT	UltraZip Deck Leg - Tall	4
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	22
9105072	Bolt Button Head 1/2" x 1-1/2"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	44
9335062-5	Washer Flat 1/2" x 1-3/8" OD	2
9413002	Nut Lock 3/8"	22

## Assembled Parts List

ULTRAZIP - STANDARD ENTRY		
Part #	DESCRIPTION	QTY
FS-1445-CAP	UltraZip End Cap	1
FS-1445-EB	UltraZip End Beam	1
HE-0086	UltraZip End Cap Bumper	2
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9103092-TR	Bolt Button Head 3/8" x 2"	2
9105072	Bolt Button Head 1/2" x 1-1/2"	1
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2
9333032	Washer Flat 3/8" x 3/4" O.D. x .060" Thick	2
9335002	Washer Flat 1/2" (.116" thick)	1
9345002	Washer Flat SAE 1/2"	2
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	2

ULTRAZIP - STRAIGHT SECTION		
Part #	DESCRIPTION	QTY
IE-0064	UltraZip Beam Pin	1
LE-0023-MID	UltraZip Mid Beam	1
9263022	Screw Soc Set 3/8" x 5/8"	2

ULTRAZIP - STANDARD EXIT		
Part #	DESCRIPTION	QTY
FS-1445-CAP	UltraZip End Cap	1
FS-1445-EB	UltraZip End Beam	1
HE-0086	UltraZip End Cap Bumper	2
IE-0064	UltraZip Beam Pin	1
9103062-TR	Bolt Button Head 3/8" x 1-1/4"	2
9103092-TR	Bolt Button Head 3/8" x 2"	2
9105072	Bolt Button Head 1/2" x 1-1/2"	1
9263022	Screw Soc Set 3/8" x 5/8"	2
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	2
9333032	Washer Flat 3/8" x 3/4" O.D. x .060" Thick	2
9335002	Washer Flat 1/2" (.116" thick)	1
9345002	Washer Flat SAE 1/2"	2
9443062-TR	Nut Barrel 3/8" x 1-3/8" BH	2



## Specifications

### ULTRAZIP END BEAM:

Shall be extruded from a high strength aluminum alloy with a welded machined aluminum pin.

### ULTRAZIP STRAIGHT BEAM:

Shall be extruded from a high strength aluminum alloy.

### ULTRAZIP COUPLER:

Shall be precision cut and welded 1/2" thick steel and will have a multi-stage baked-on powder coat finish.

### ULTRAZIP END HANGER:

Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1.900" O.D. 11 gauge support, 3/16" thick steel clevis, 1/4" thick stainless steel mounting brackets and 1/2" thick steel tie plate and will have a multi-stage baked-on powder coat finish.

### ULTRAZIP JUNCTION HANGER:

Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1.900" O.D. 11 gauge support, 3/16" thick steel clevis, 1/4" thick stainless steel mounting brackets and 1/2" thick steel plate and will have a multi-stage baked-on powder coat finish.

### ULTRAZIP END CAP:

Shall be fabricated from 3/8" steel and will have multi-stage baked-on powder coat finish.

### ULTRAZIP DECK:

Shall be fabricated using punched, formed, and welded 12 gauge sheet steel. The UltraZip Deck shall be Play-Tuff coated after fabrication.

### ULTRAZIP DECK LEGS:

Shall be fabricated using 2.375" O.D. 11 gauge steel tubing with welded 10 gauge steel mounting plate and will have a multi-stage baked-on powder coat finish.

### SPLIT COLLAR HALF:

Shall be fabricated using 1/4" thick HR steel and will have a multi-stage baked-on powder coat finish.

### ULTRAZIP BEAM PIN:

Shall be fabricated using AISI 1045 cold drawn steel.

### HANGER PIN:

Shall be fabricated using AISI 303 stainless steel.

### ULTRAZIP RAMP:

Shall be fabricated using punched, formed, and welded 12 gauge sheet steel and 2.875" O.D. sch. 40 pipe and shall be Play-Tuff coated after fabrication.

### GRIP RAMP BRACKET:

Shall be fabricated using precision cut and welded 1/4" thick steel and will have a multi-stage baked-on powder coat finish.

### GRIP RAMP FOOT:

Shall be fabricated using precision cut 1/4" thick steel and will have a multi-stage baked-on powder coat finish.

### ULTRAZIP END CAP BUMPER:

Shall be fabricated using PN 579108 D-Shaped, O-Bore Bumper.

### HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

## Inspection

All Ultrazip components and hardware should be inspected on a weekly schedule. Part number 451155, Dual Swivel Shackel including attaching hardware, should be replaced on an annual schedule or when excessive wear is present.

## Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.