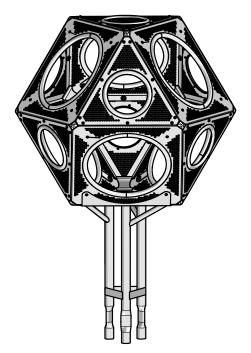
PLAYWORLD The world needs play.



Assembly View (representative model)

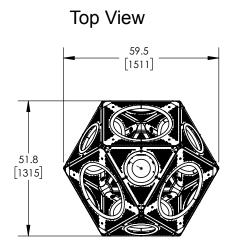
Installation Instructions

Universal Models UN8627 and UN8627S Ground Level PlayCube Metal In-Ground and Surface Mount

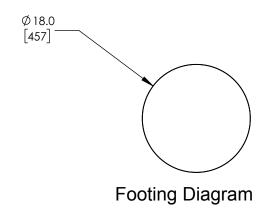
Installation Preparation

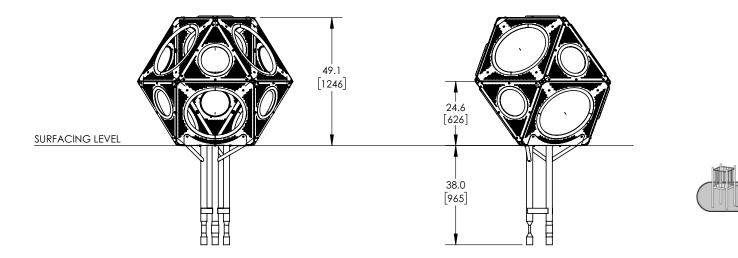
Recommended Crew:	. Four (4) adults
Installation Time (In-Ground):	.2.5 man-hours
Installation Time (Surface Mount):	.2 man-hours
Concrete Required:	. 0.12 cubic yard (0,09 cubic meters)
Use Zone:	. Refer to Master Layout Drawing
User Group Age (single cube):	. ASTM/CSA: 2-12, EN: 2-14
User Group Age (multiple cubes):	. ASTM/CSA: 5-12, EN: 6-14

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer	z	Critical Fall Height



KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

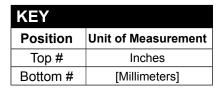


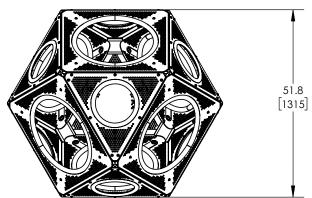


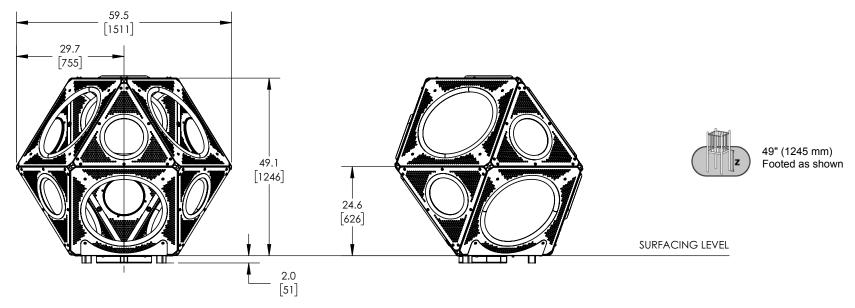


49" (1245 mm) Footed as shown

Top View

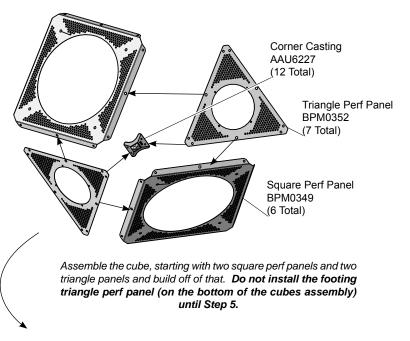


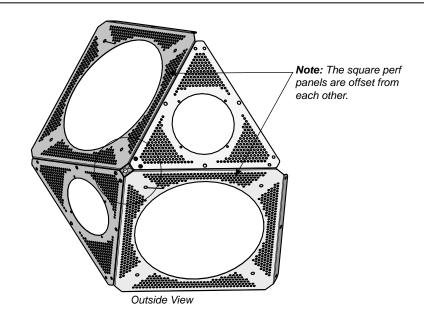


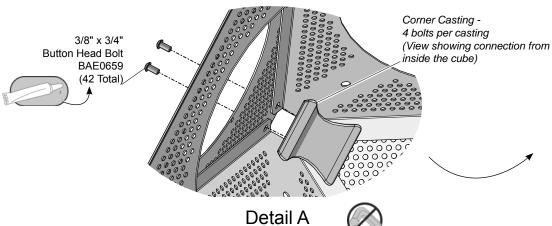


Elevation Views ZZUN8627S

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 13.

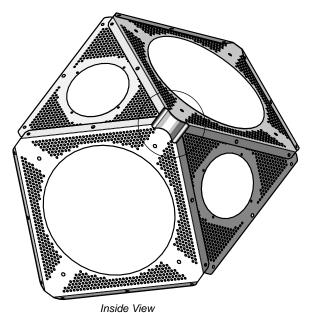




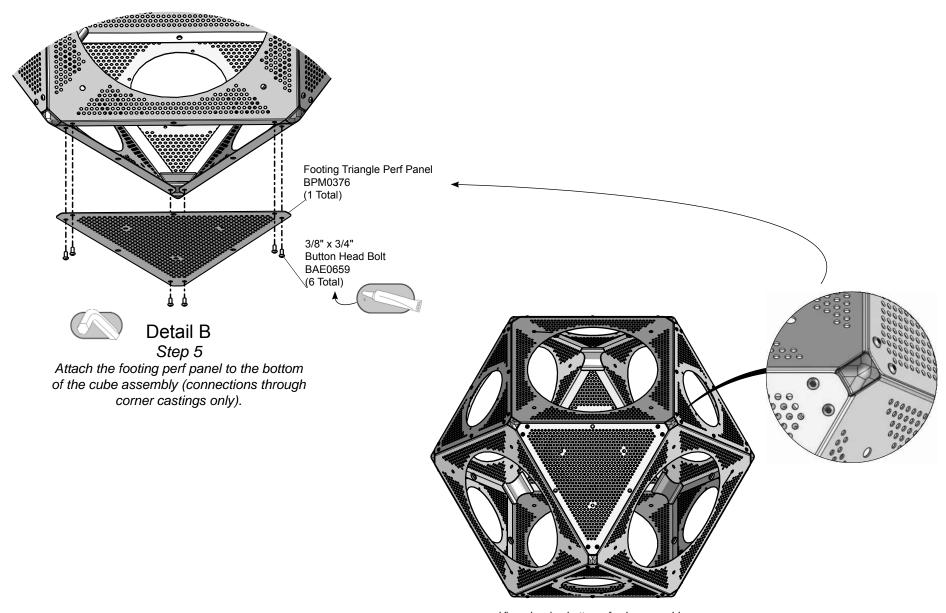


Step 4

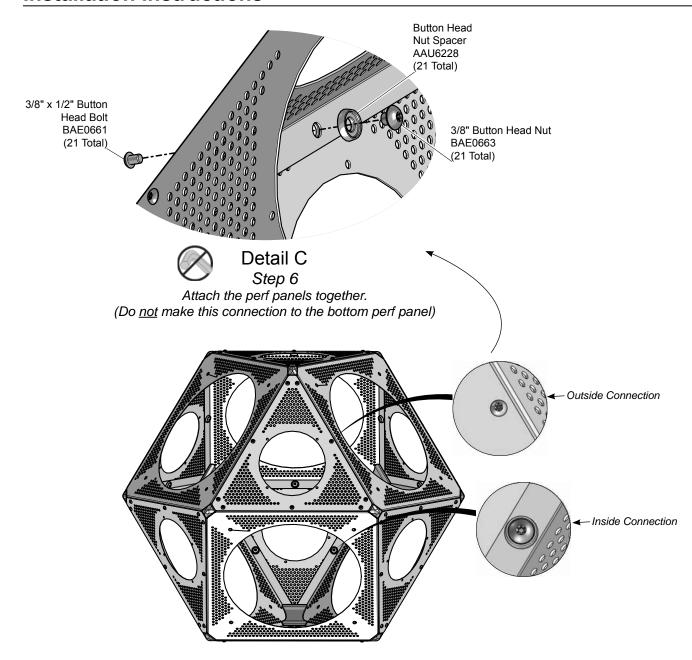
Attach the corner castings to the perf panels.

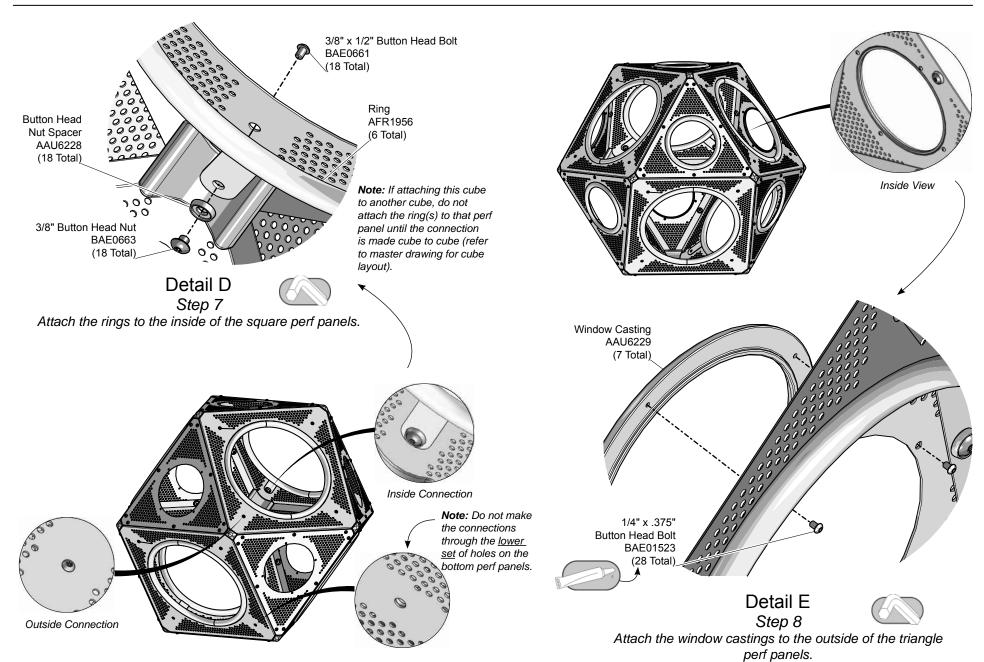


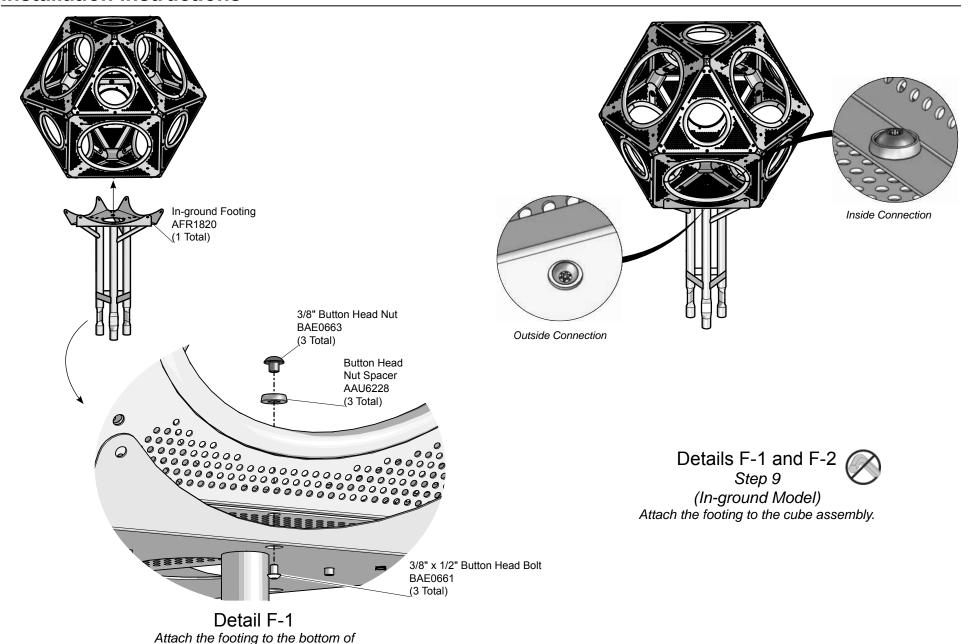
maide view



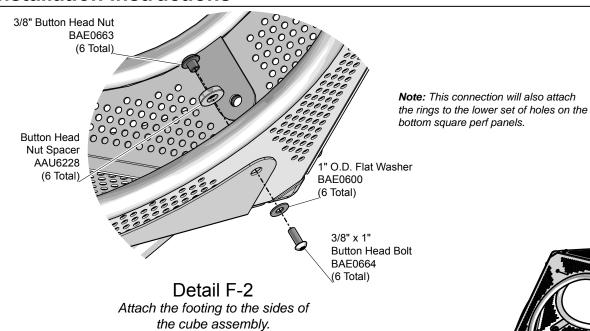
View showing bottom of cube assembly.



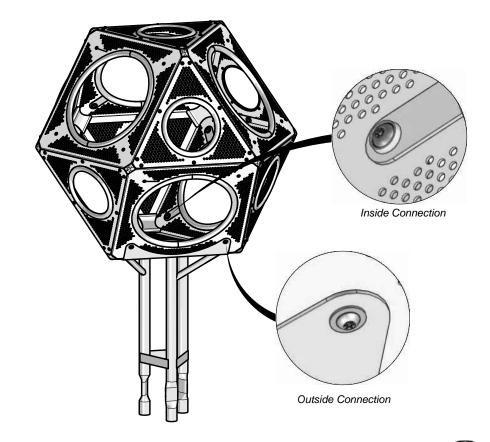


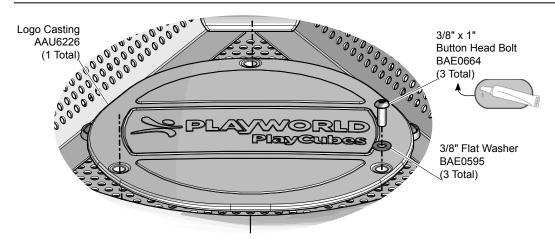


the cube assembly.

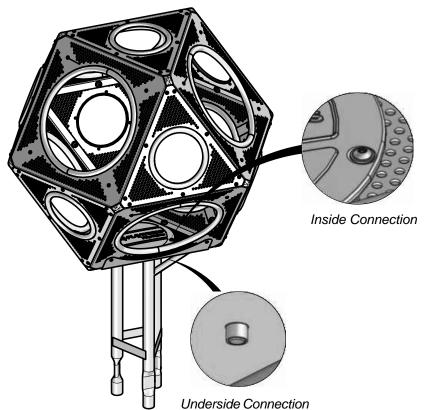


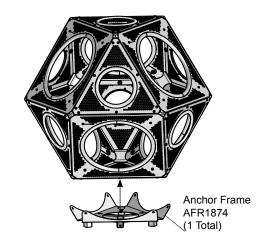
Details F-1 and F-2
Step 9
(In-ground Model)
Attach the footing to the cube assembly.





Detail G
Step 10
(In-ground Model)
Attach the logo casting to the bottom of the cube.





Note: This connection will also attach the rings to the lower set of holes on the bottom square perf panels.

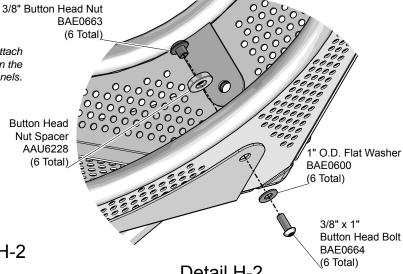
Details H-1 and H-2

Step 11

(Surface Mount Model)

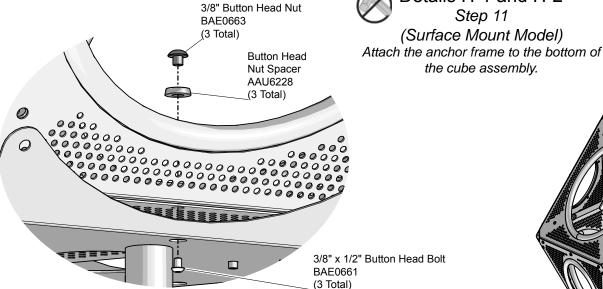
the cube assembly.

Button Head Nut Spacer AAU6228 (6 Total)



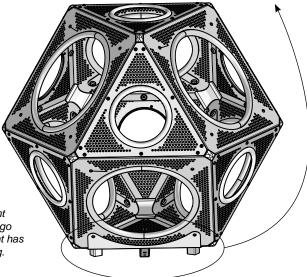
Detail H-2

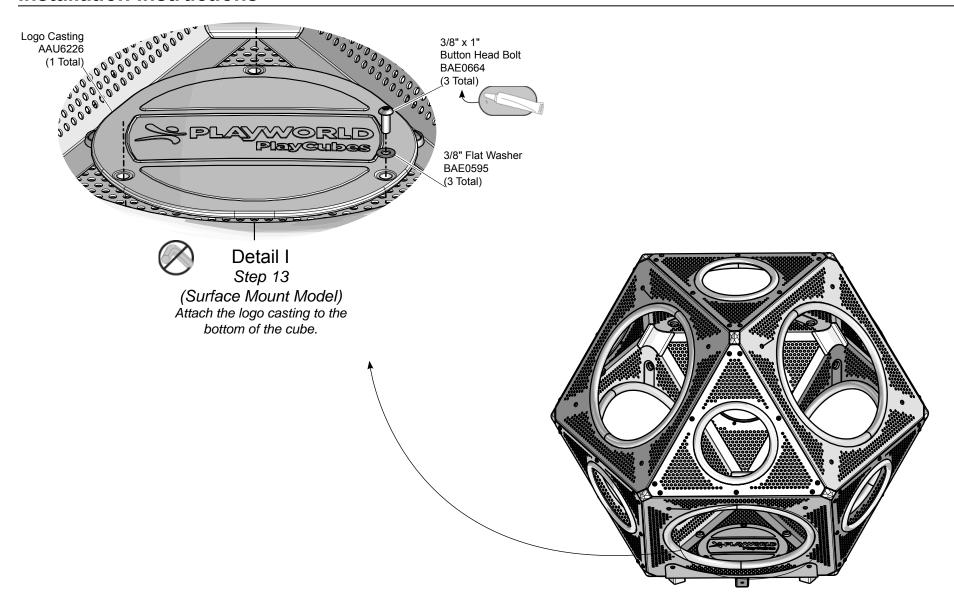
Attach the footing to the sides of the cube assembly.



Detail H-1 Attach the footing to the bottom of the cube assembly.

Note: For the suface mount model, do not attach the logo casting until the component has been secured on its footing.





Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate or prepare footings as shown in the **Support Post <u>or</u> Surface Mount Footing Details** in the Annex at the end of this document.

Assemble the cube.

Step 4: Attach the corner castings to the perf panels. See **Detail A**. Starting with two square perf panels and two triangle perf panels and align the holes Apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Continue assembling the cube.

Note: Do not install the footing triangle perf panel (on the bottom of the cube assembly) until Step 5.

Step 5: Attach the footing perf panel to the bottom of the cube assembly. See **Detail B.** Align the holes on the footing panel with the holes on the bottom of the cube assembly. Apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Only make the connections through the corner castings at this time.

Step 6: Attach the perf panels together. See **Detail C**. With the holes aligned on the panels, attach as shown. Do not make this connection to the bottom perf panel.

Step 7: Attach the rings to the inside of the square perf panels. See **Detail D**. Position the rings against the inside of the square perf panels, and attach as shown. **Important Note:** Do not make this connection through the lower set of holes on the bottom perf panels.

Step 8: Attach the window castings to the outside of the triangle perf panels. See **Detail E**. Position the window castings on the outside of the triangle perf panels and align the holes. Apply a drop of thread locking adhesive to the bolt threads, and attach as shown.

Note: Steps 9 and 10 refer to the in-ground model only.

Step 9: Attach the footing to the cube assembly. See **Details F-1 and F-2**. Position the footing on the bottom of the cube assembly and align the holes. Attach the footing to the bottom of the cube. See **Detail F-1**. Attach as shown. Attach the footing to the sides of the cube assembly. See **Detail F-2**. Attach as shown. Note: This connection will also attach the rings to the lower set of holes on the bottom square perf panels.

Step 10: Attach the logo casting to the bottom of the cube. See **Detail G.** Position the logo casting on the bottom of the cube and align the holes. Apply a drop of thread locking adhesive to the bolt threads, and attach as shown.

Note: Steps 11 and 13 and refer to the surface mount model only.

Step 11: Attach the anchor frame to the bottom of the cube assembly. See **Details H-1 and H-2**. Position the footing on the bottom of the cube assembly and align the holes. Attach the footing to the bottom of the cube. See **Detail H-1**. Attach as shown. Attach the footing to the sides of the cube assembly. See **Detail H-2**. Attach as shown.

Note: This connection will also attach the rings to the lower set of holes on the bottom square perf panels.

Final Details.

Step 12: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

In-ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 13: Attach the logo casting to the bottom of the cube. See **Detail I.** Position the logo casting on the bottom of the cube and align the holes. Apply a drop of thread locking adhesive to the bolt threads, and attach as shown.

UN8627 - GROUND LEVEL PLAYCUBE METAL - IN-GROUND MOUNT UN8627S - GROUND LEVEL PLAYCUBE METAL - SURFACE MOUNT

PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	QTY.
AAU6226	FLOOR CASTING - METAL PLAYCUBE	1	AAU6226	FLOOR CASTING - METAL PLAYCUBE	1
AAU6227	METAL PLAYCUBE CORNER CASTING	12	AAU6227	METAL PLAYCUBE CORNER CASTING	12
AAU6228	SPACER - BUTTON HEAD NUT	48	AAU6228	SPACER - BUTTON HEAD NUT	48
AAU6229	WINDOW CASTING - METAL PLAYCUBE	7	AAU6229	WINDOW CASTING - METAL PLAYCUBE	7
AFR1820	POST - 31.788" x 27.84" x 42.28"	1	AFR1874	FRAME - 31.78" x 27.84" x 6.35"	1
AFR1956	RING - PERF PLAYCUBE	6	AFR1956	RING - PERF PLAYCUBE	6
BAD0085	THREAD LOCKING ADHESIVE	1	BAD0085	THREAD LOCKING ADHESIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	3	BAE0595	WASHER - 3/8" SAE FLAT	3
BAE0600	WASHER - 1" O.D. FLAT	6	BAE0600	WASHER - 1" O.D. FLAT	6
BAE0659	BOLT - 3/8"-16 x .75" BUTTON HEAD - SS	48	BAE0659	BOLT - 3/8"-16 x .75" BUTTON HEAD - SS	48
BAE0661	BOLT - 3/8"-16 x .50" BUTTON HEAD - SS	42	BAE0661	BOLT - 3/8"-16 x .50" BUTTON HEAD - SS	42
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	48	BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	48
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	9	BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	9
BAE0922	TOOL - TT 45 L WRENCH	2	BAE0922	TOOL - TT 45 L WRENCH	2
BAE01523	BOLT - 1/4"-20 x .375" BUTTON HEAD - SS	28	BAE01523	BOLT - 1/4"-20 x .375" BUTTON HEAD - SS	28
BPM0349	FAB METAL - SQUARE PANEL	6	BPM0349	FAB METAL - SQUARE PANEL	6
BPM0352	FAB METAL - TRIANGLE PERF WITH WINDOW	7	BPM0352	FAB METAL - TRIANGLE PERF WITH WINDOW	7
BPM0376	FAB METAL - TRIANGLE FOOTING GROUND LEVEL	1	BPM0376	FAB METAL - TRIANGLE FOOTING GROUND LEVEL	1



For Customer Service, Call 800-233-8404 or 570-522-9800 outside u.s.

1000 Buffalo Road • Lewisburg, PA 17837 www.playworld.com

Models ZZUN8627 and ZZUN8627S ECN2704



Fasteners

- Inspect for loose fasteners.
 Tightening torque specifications are:
 Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Castings

- Inspect the castings to insure they are properly secured to the component.
- Visually inspect the castings for cracks or breakage. If any damage is detected, barricade the equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

 Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

· Inspect metal parts for finish damage.

To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

To repair the panel coating, contact the Playworld Systems' Customer Service Department for a coating repair touch-up kit.

Footings

 Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

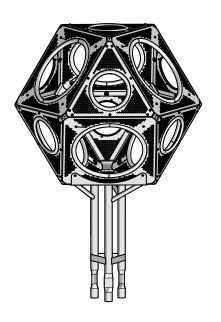
 Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance

Universal Models
UN8627 and UN8627S
Ground Level PlayCube Metal
In-Ground and Surface Mount





Inspection Form

Page 16 of 16

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

Models ZZUN8627 and ZZUN8

INSPECTION CHECKLIST		Frequency	Inspe Code	ction Date	Date Repairs Completed	
Inspect surfacing to insure proper depth and distribution.		High				Inspection Codes
Inspect footing to insure support is secure and footing is not damaged.		Low				P = Pass F = Fail
Inspect metal parts for structural and finish damage.		Medium				NA = Not Applicable
Inspect for loose, missing, worn, or broken faste	eners.	High				
						_
						-
						-
Inspector: Name (Please Print)	Signature:	<u> </u>			Da	u ate: / /
MAINTENANCE SCHEDULE						
Item in Question	Description of Problem		(Date		
Repairer: Name (Please Print)	Signature:				Dat	e:/

Guidelines



Important! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment must be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and noencroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.
- **ASTM compliance:** The overall use zone measurements for stationary play equipment should extend a minimum of 72 inches (1829 mm) from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. The use zone of stationary play equipment may be overlapped by the use zone of adjacent stationary play equipment if the adjacent designated play surfaces are no greater than 30 inches (762 mm) above the protective surfacing level. They should be a minimum of 72 inches (1829 mm) apart. If the adjacent designated play surfaces are greater than 30 inches (762 mm) above the protective surfacing level, the pieces of equipment should be a minimum of 108 inches (2743 mm) apart.
- **CSA compliance:** The overall use zone measurements for stationary play equipment should extend a minimum of 1800 mm from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. The use zone of stationary play equipment may be overlapped by the use zone of adjacent stationary play equipment if the adjacent designated play surfaces are no greater than 700 mm above the protective surfacing level. They should be a minimum of 1800 mm apart.

- **EN compliance:** The overall use zone measurements for stationary play equipment are dependent upon the fall height of the equipment. For a fall height exceeding 1500 mm a formula is applied to determine the use zone (impact zone) of the equipment. There is a minimum of 1500 mm from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. Refer to the Use Zone diagram or master structure drawing.
- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.
- Insure that Age Appropriate and Hard Surface Warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

Guidelines

- IMPORTANT! Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.
- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

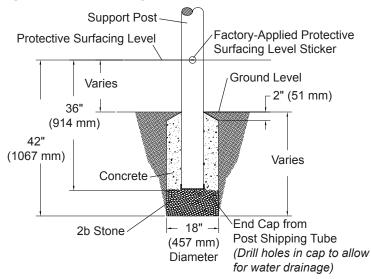
Maintenance

• Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, a comprehensive maintenance program must be developed for each playground and strictly followed. All equipment must be inspected frequently for any potential hazards. Special attention must to be given to moving parts and other components that can be expected to wear. Inspections must to be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

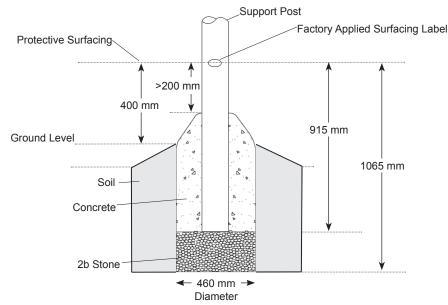
Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

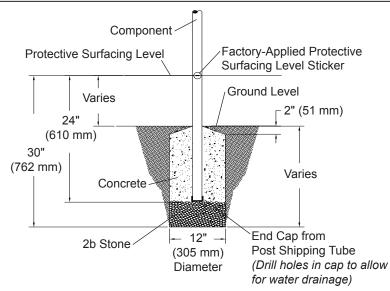
Footing Details (in ground)



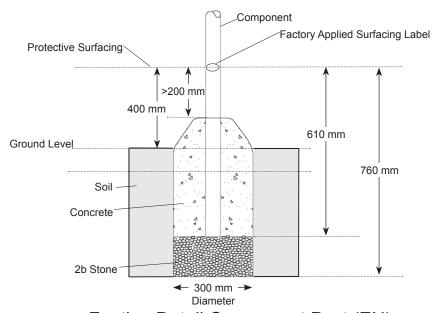
Support Post Footing Detail (ASTM/CSA)



Footing Detail Support Post (EN)



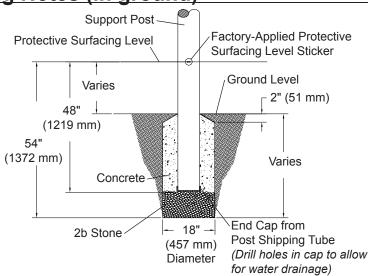
Component Footing Detail (ASTM/CSA)



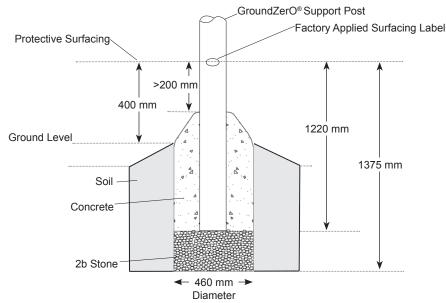
Footing Detail Component Post (EN)



Footing Notes (in ground)

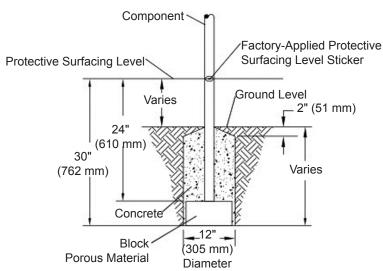


GroundZerO® Support Post Footing Detail ASTM/CSA

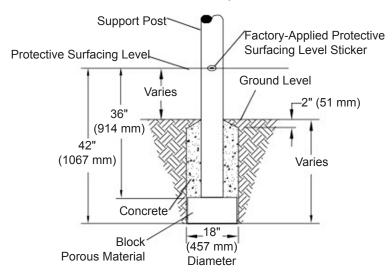


Footing Detail GroundZerO® Support Post (EN)

IN GROUND FOOTING DIAGRAMS-BLOCK OPTION



Component Footing Detail (ASTM/CSA)
Block Option

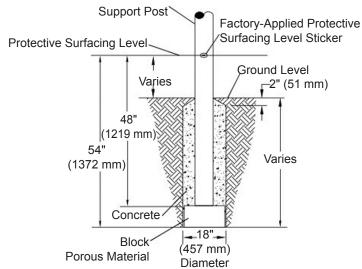


Support Post Footing Detail (ASTM/CSA)
Block Option



Footing Notes & Details (in ground)

IN GROUND FOOTING DIAGRAMS-BLOCK OPTION



GroundZerO® Support Post Footing Detail ASTM/CSA **Block Option**

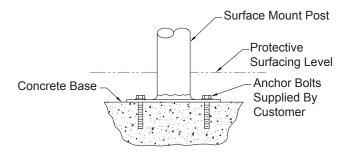
FOOTING NOTES (IN GROUND)

- · Support post footing depth equals 42 in. (1067 mm) minus the depth of the protective surfacing material. The posts are designed to have 24" (610 mm) in concrete.
 - Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
 - GroundZerO® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.
- Component footing depth equals 30 in. (762 mm) minus the depth of the protective surfacing material. The posts are designed to have 12" (305 mm) in concrete. Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).
- Most support posts and component support legs will have either a factory-applied sticker with a line, or factory-applied mark designating the level of protective surfacing on a clear and level installation site. The footing depth measurements are based on this line/mark.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase the bottom of the support post in concrete. Place the post directly on packed stone or other porous material.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.

For example:

- If local soil is loose or unstable, a larger footing may be required.
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- The base of the footing must be below the frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

Footing Notes & Details (surface mount)



Surface Mount Footing Detail

FOOTING NOTES (SURFACE MOUNT)

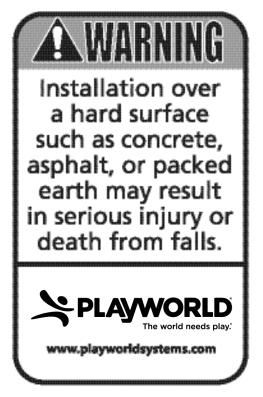
- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- The footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.

Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

FINAL INSPECTION

- Playworld Systems[®] insists on the installation of protective surfacing within the
 use zone of each play structure in accordance with the applicable standard or
 specifications appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently.
 Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
 - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
 - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
 - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
 - Insure all exposed pipe ends have properly installed end caps. Insure that drive rivets are secure.
 - · Clean dried concrete off of components and any other affected surface.
 - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
 - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
 - Insure that protective surfacing is properly installed according to C.P.S.C. (or other appropriate body) recommendations. Footings must not be exposed.

- Insure that hard surface warning/Playworld Systems® identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For locations complying with ASTM F1487 or CSA Z-614, Age Appropriate labels must also be applied in a visible location.
- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Surfacing Warning Label