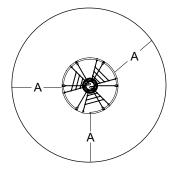


# **Assembly View**



Equipment Use Zone
A - (ASTM) 72 in. (1830 mm)
(CSA) 1800 mm
(EN) 2000 mm

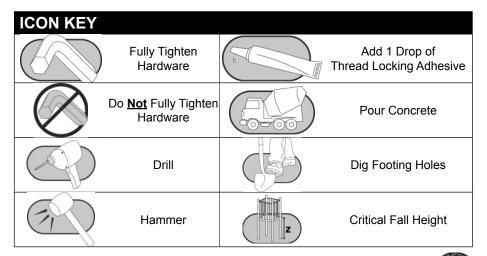
Refer to the Elevation View for the specific Critical Fall Height for the component.

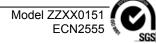
# **Installation Instructions**

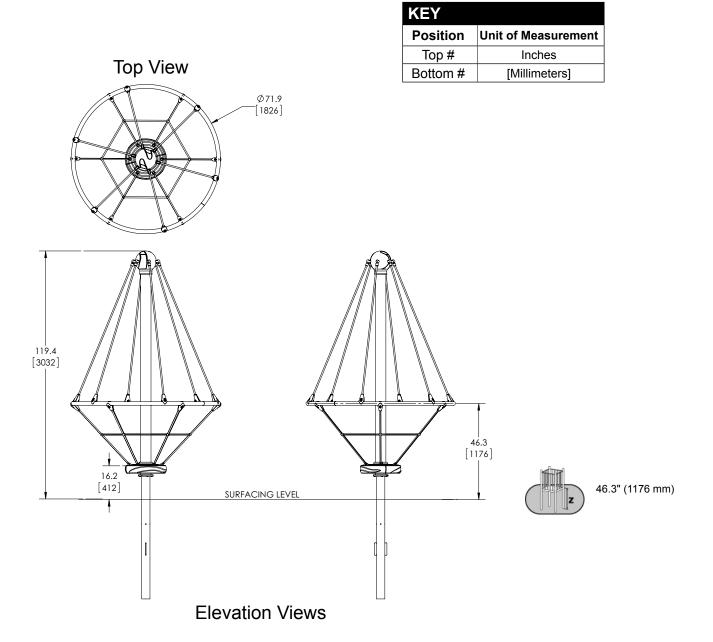
Playworld Systems® Model ZZXX0151 Spinami

**Installation Preparation** 

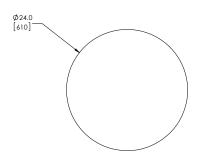
Recommended Crew:	. Three (3) adults
Installation Time:	. 6 man-hours
Concrete Required:	. 0.33 cubic yard (0,26 cubic meters)
Use Zone:	. Refer to the information below
User Group Age (years):	. ASTM/CSA: 5-12, EN: 6-14

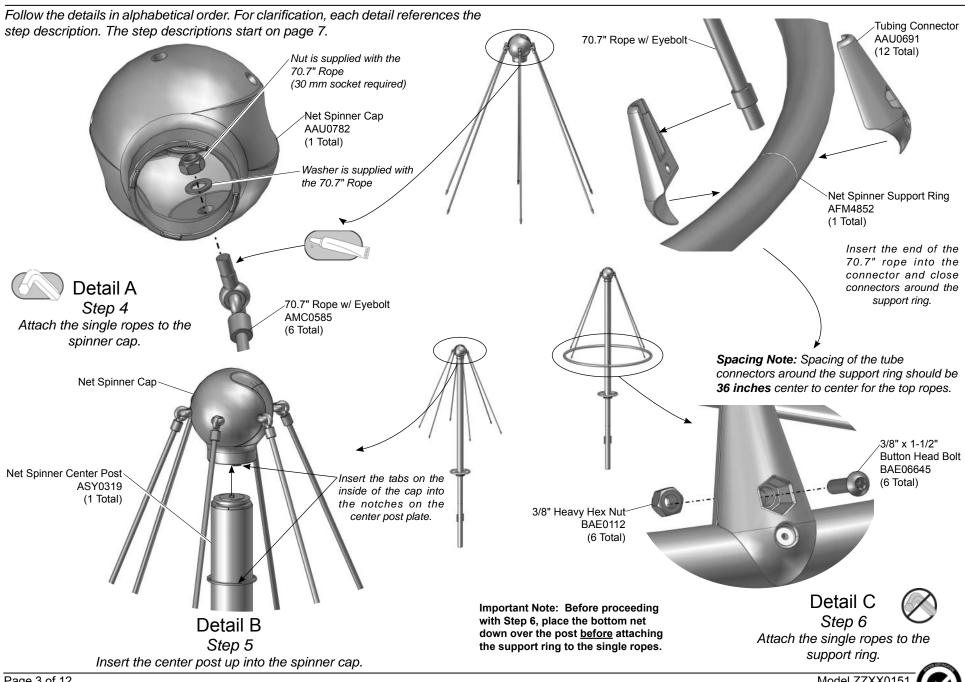


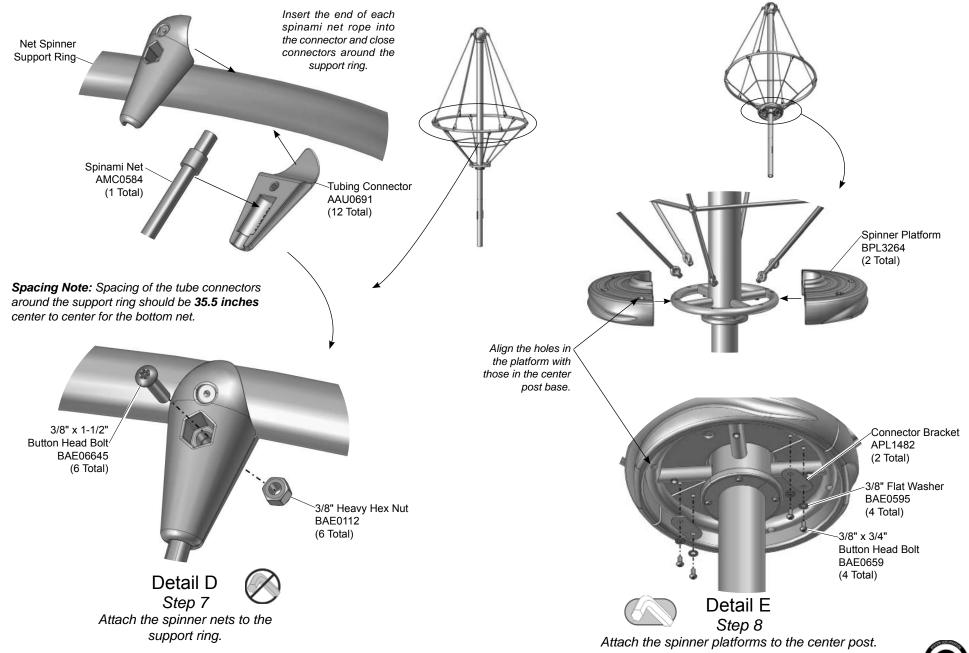


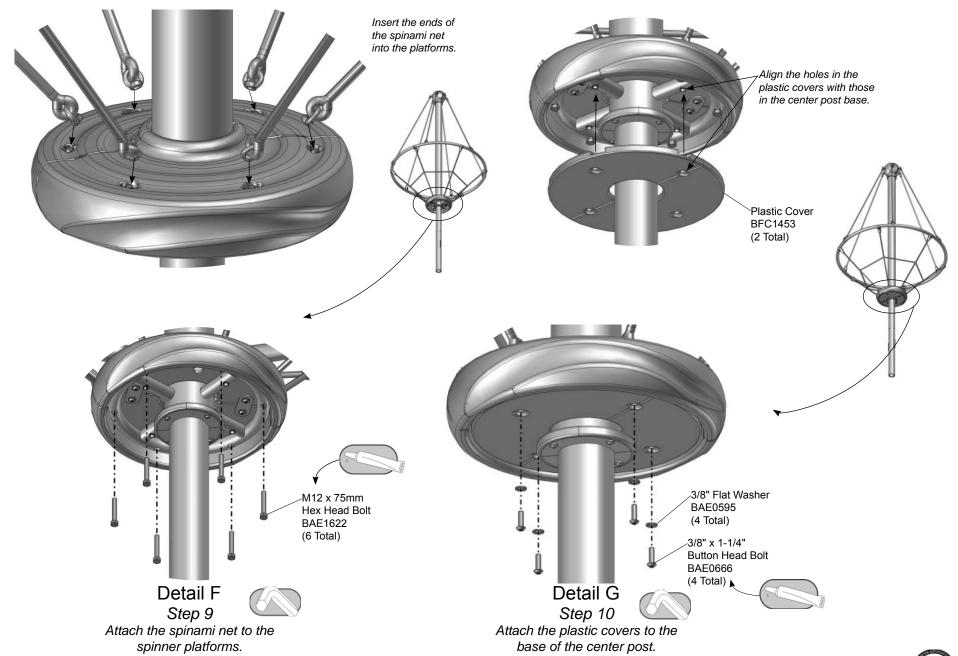


# **Footing Diagram**

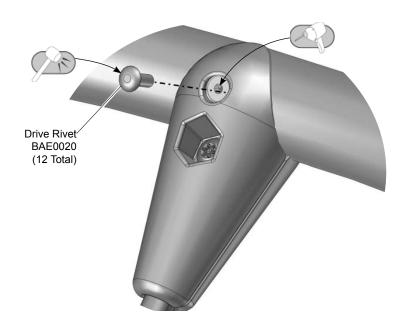








Model ZZXX0151 ECN2555



Detail H
Step 12
Secure the connectors to the support ring.

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

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 the footings as shown in the **Support Post Footing Detail** on the **next page**. Place the spinner post in the footing and block and brace in place.

**Step 4:** Attach the single ropes to the spinner cap. See **Detail A**. Insert the eyebolt on the end of each rope into the spinner cap, apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Fully tighten the connections.

**Step 5:** Insert the center post up into the spinner cap. See **Detail B.** Insert the post up into the cap making sure to insert the tabs on the inside of the cap into the notches on the center post plate.

Important Note: Before proceeding with the next step, place the bottom net down over the post <u>before</u> attaching the support ring to the ropes.

**Step 6:** Attach the ropes to the support ring. See **Detail C**. Place the open end of each rope into a connector, close the connectors around the support ring, and attach as shown.

**Note:** Spacing of the connectors around the support ring should be **36 inches** center to center for the top ropes.

**Step 7:** Attach the spinami net to the support ring. See **Detail D**. Place the open end of each net strand into a connector, close the connectors around the support ring, and attach as shown.

**Note:** Spacing of the connectors around the support ring should be **35.5 inches** center to center for the net.

**Step 8:** Attach the spinner platforms to the base of the center post. See **Detail E.** Position the platforms onto the base of the post, align the holes, and attach as shown. Fully tighten the connections.

**Step 9:** Attach the spinami net to the spinner platforms. See **Detail F**. Insert the ends of the net into the holes in the platform, apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Fully tighten the connections.

**Step 10:** Attach the plastic covers to the base of the center post. See **Detail G**. Insert the ends of the nets into the holes in the platform, apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Fully tighten the connections.

#### Final Details.

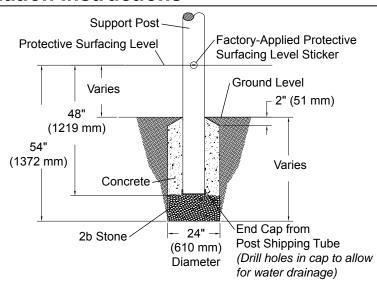
**Step 11:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

#### **Torque Specifications:**

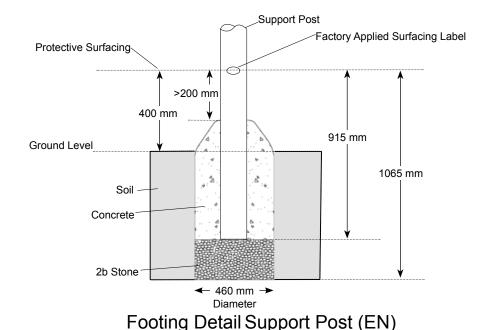
Bolts and nuts - Snug tighten and then tighten an additional one half turn.

**Step 12:** Install drive rivets. See **Detail H**. After the equipment assembly is complete, install a drive rivet on each connector to permanently secure it to the support ring. Using a 1/4" drill bit, drill through the connector and support ring. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the connector. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

**Note:** This step should be executed after structure has been assembled and properly footed.



# Support Post Footing Detail ASTM/CSA



#### **FOOTING NOTES**

- Support post footing depth equals 54 in. (1372 mm) less the depth of the protective surfacing material. The post is designed to have 36" (914 mm) in concrete.
   Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 42 in. (1067 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- 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.
- · Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

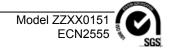
Model ZZXX0151 ECN2555 SGS

#### XX0151 - SPINAMI

PART NO.	DESCRIPTION	QTY.
AAU0691	CASTING - 1.90" O.D. TUBING CONNECTOR	24
AAU0782	CASTING - NET SPINNER CAP	1
AFM4852	FAB METAL - 71.90" O.D. SUPPORT RING	1
AMC0584	SPINAMI NET (LOWER)	1
AMC0585	70.7" ROPE w/EYEBOLT	6
APL1482	PLATE - 3.50" x 1.50" x 12 GA	2
ASY0319	ASSEMBLY - NET SPINNER CENTER POST	1
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	12
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0112	NUT - 3/8"-16 HEAVY HEX	12
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0659	BOLT - 3/8"-16 x .75" BUTTON HEAD - S.S.	4
BAE06645	BOLT - 3/8"-16 x 1.50" BUTTON HEAD - S.S.	12
BAE0666	BOLT - 3/8"-16 x 1.25" BUTTON HEAD - S.S.	4
BAE0922	TOOL - TT 45 L WRENCH	1
BAE1622	BOLT- M12 x 1.75 x 75mm HEX HEAD	6
BFC1453	SHEET - 16.38" x 8.19" x .75"	2
BPL3264	NET SPINNER PLATFORM	2



For Customer Service, Call 800-233-8404 or 570-522-9800 OUTSIDE U.S. 1000 Buffalo Road • Lewisburg, PA 17837 www.playworldsystems.com



This page is intentionally left blank.



#### **Fasteners**

- Inspect for loose fasteners.
   Tightening torque specifications are:
   <u>Bolts and Nuts:</u> Snug tighten and tighten an additional one-half turn.
- Inspect drive rivets to insure they are intact and secure.
- 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.

#### **Plastic Parts**

 Inspect all plastic surfaces for sharp points, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.

#### **Castings**

- Inspect the aluminum 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.

#### Rope/Net

· Inspect the rope for any fraying, wear or loose connectors.

#### **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.

#### **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.

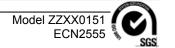
# **Equipment Maintenance**

Playworld Systems®
Model XX0151
Spinami





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



# **Inspection Form**

Page 12 of 12

- 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!

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



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 no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.
- **ASTM compliance:** For rotating play equipment that rotates around a vertical axis with a maximum dimension **greater** than 20 inches (508 mm) measured from the axis of rotation to the outermost perimiter which exceed the speed limitation requirements shall not be less than 108 inches (2743 mm) on all sides. This includes a use zone of 72 inches (1829 mm) that shall **not overlap** the use zone of other structures. The exemption is equipment where the diameter of the platform is less than 20 in. (510 mm) may overlap if the adjacent designated play surfaces of each structure are less than 30 in. (760 mm) above the protective surface. If adjacent designated play surfaces on either structure exceed a height of 30 inches (760 mm), the minimum distance between structures shall be 108 inches (2743 mm).
- For rotating play equipment that rotates around a vertical axis with a maximum dimension **less than or equal** to 20 inches (508 mm) measured from the axis of rotation to the outermost perimeter shall not be less than 72 inches (1829 mm) on all sides. Overlapping use zones is allowable if the adjacent fall height of each structure is less than or equal to 30 inches (760 mm) above the protective surfacing. If adjacent play structures have a fall height greater than 30 inches (760 mm) than the distance between the structures shall be no less than 108 in. (2743 mm).

- **CSA compliance:** For rotating play equipment, the use zone should extend on all sides a minimum distance of 1800 mm. This use zone may **not** be overlapped by the use zones of adjacent play equipment. A no-encroachment zone is also required for play equipment over 500 mm in diameter that rotates around a vertical axis. In addition to the use zone measurement, this zone will extend an additional 1800 mm and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment.
- **EN compliance:** For rotating play equipment, the use zone should extend on all sides a minimum distance of 2000 mm. This use zone may **not** be overlapped by the use zones of adjacent play equipment. There must also be a head clearance of 2000 mm above the maximum height of the rotating 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.

## **Guidelines**

- 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.
- 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

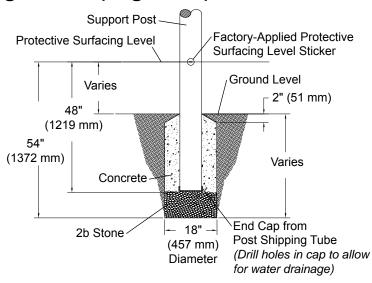
• Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, a comprehensive maintenance program must be developed for each playground and strictly followed. All equipment must 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**

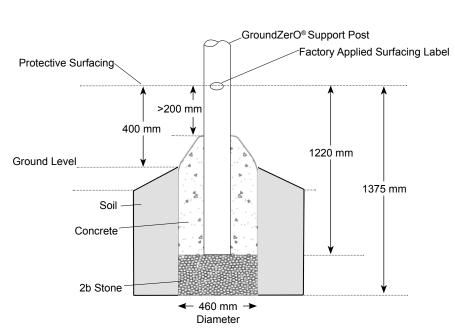
- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use 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.

2 of 6 SGS

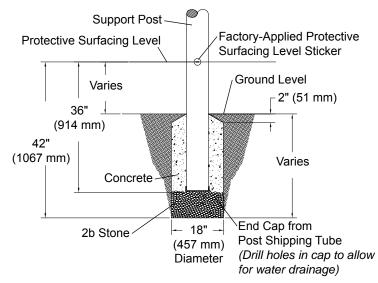
# Footing Details (in ground)



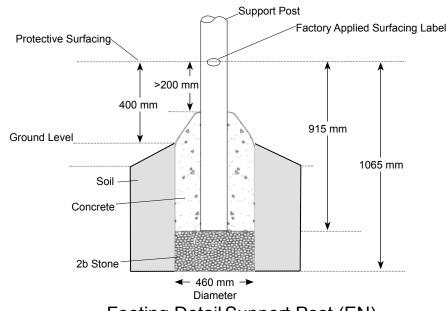
GroundZerO® Support Post Footing Detail ASTM/CSA



Footing Detail GroundZerO® Support Post (EN)



Support Post Footing Detail (ASTM/CSA)



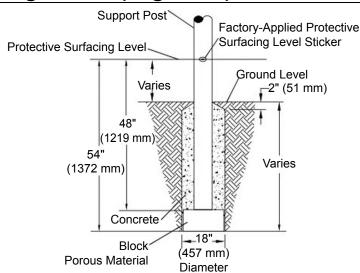
Footing Detail Support Post (EN)

Annex Page 3 of 6

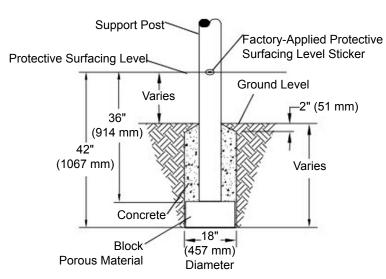
**Guidelines & Information (fs RPE)** 

# **Footing Details (in ground)**

# **Footing Notes**



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



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® support post footing depth equals 54 in. (1372 mm) minus the depth of the protective surfacing material. The posts are designed to have 36" (914 mm) in concrete.

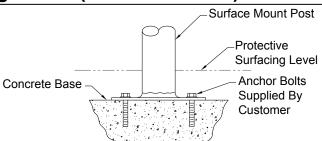
*Example:* If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 42 in. (1067 mm).

- 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 Detail (surface mount)**



Surface Mount Footing Detail

# **Footing Notes**

#### **FOOTING NOTES (SURFACE MOUNT)**

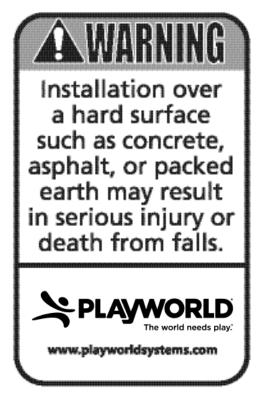
- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective 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<sup>®</sup> 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**