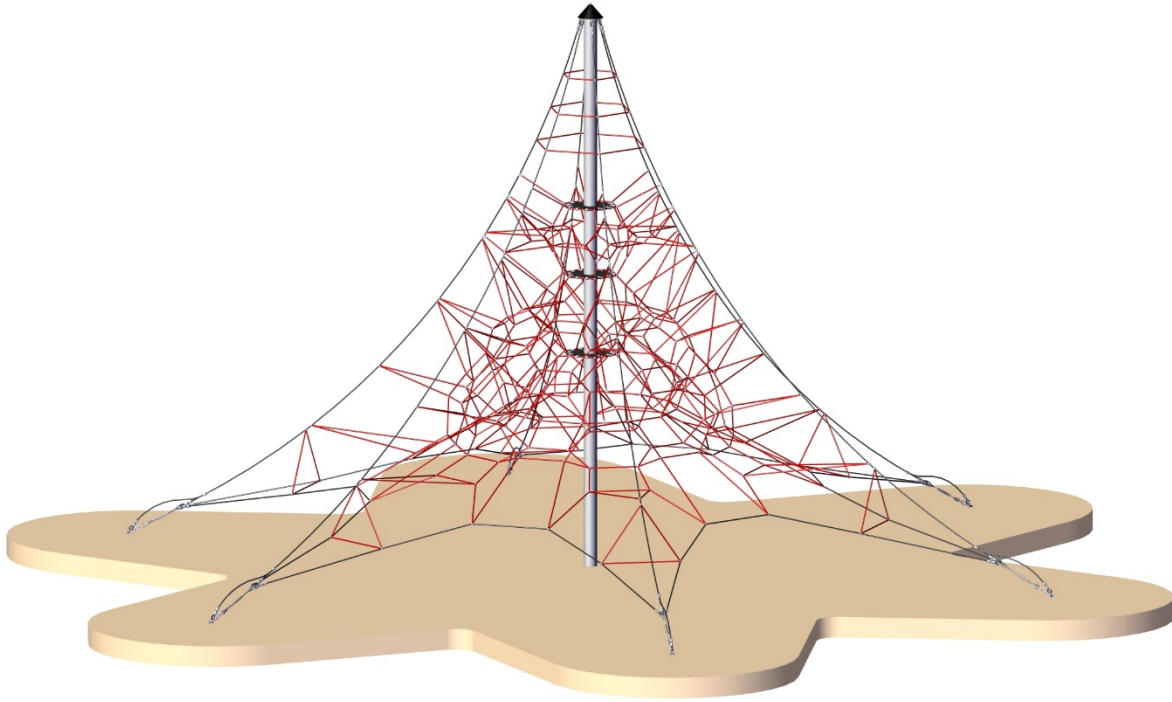


Installation Instructions



Spider Pyramid 8-6

Model No. 5000-8-6

Revision History

Initial Release: 11/12/2020

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Please read through the entire installation instructions upon receipt to ensure that all parts have been received and that all customer-supplied materials are procured prior to the start of installation.

Introduction

Thank you for purchasing the Spider Pyramid 8-6! Before we begin, please take some time to familiarize yourself with the components, tools, and installation steps to ensure adequate preparation for a smooth installation.

General Information

This equipment should be installed, inspected, maintained, and operated in accordance with ASTM F1487-17 or CSA-Z614 guidelines.

The installation site shall have a flat and level surface with a maximum slope of 3%.

For product support, including questions regarding installation, or to obtain replacement parts, please contact your equipment dealer.



Following installation, the complete assembly instructions, maintenance instructions, and maintenance records must be sent to the operator who must confirm receipt in writing. See the last page of this document.

We hereby confirm that this play equipment has been tested and certified in accordance with the play equipment standards ASTM F1487-17 and CSA-Z614.

Drawings/Views

The manufacturer reserves the right to make reasonable changes to technical details of our products for enhanced safety and assurance for users and operators.

Measurement Tolerances

Due to the properties and characteristics of the components above surfacing level, actual measurements may vary from those indicated in the diagrams. The manufacturer has established safe tolerances for these components.

Specifications

Assembly Time..... 3 hours
(after completion of foundations)

Personnel Required 3

Equipment

Height..... 318 in (8,077 mm)

Footprint..... 549.25 x 476.5 in
(13,950 x 12,100 mm)

Use Zone..... 694 x 621 in
(17,628 x 15,773 mm)

Fall Height 72 in (1,829 mm)

Age Group 5 to 12 years

Capacity 73

Largest Component: Post..... 349.75 in x Ø 7.63 in
(8,880 mm x Ø 194 mm)

Heaviest Component: Post 572 lb (259.5 kg)

Foundations

Concrete Mix C25/C30

Required Concrete:..... 16.7 yd³ (12.75 m³) foundations
0.3 yd³ (0.23 m³) pipe fill

Foundation List

Outer Foundations (Qty 6)..... 66.93 x 66.93 x 27.56 inches
(1,700 x 1,700 x 700 mm)

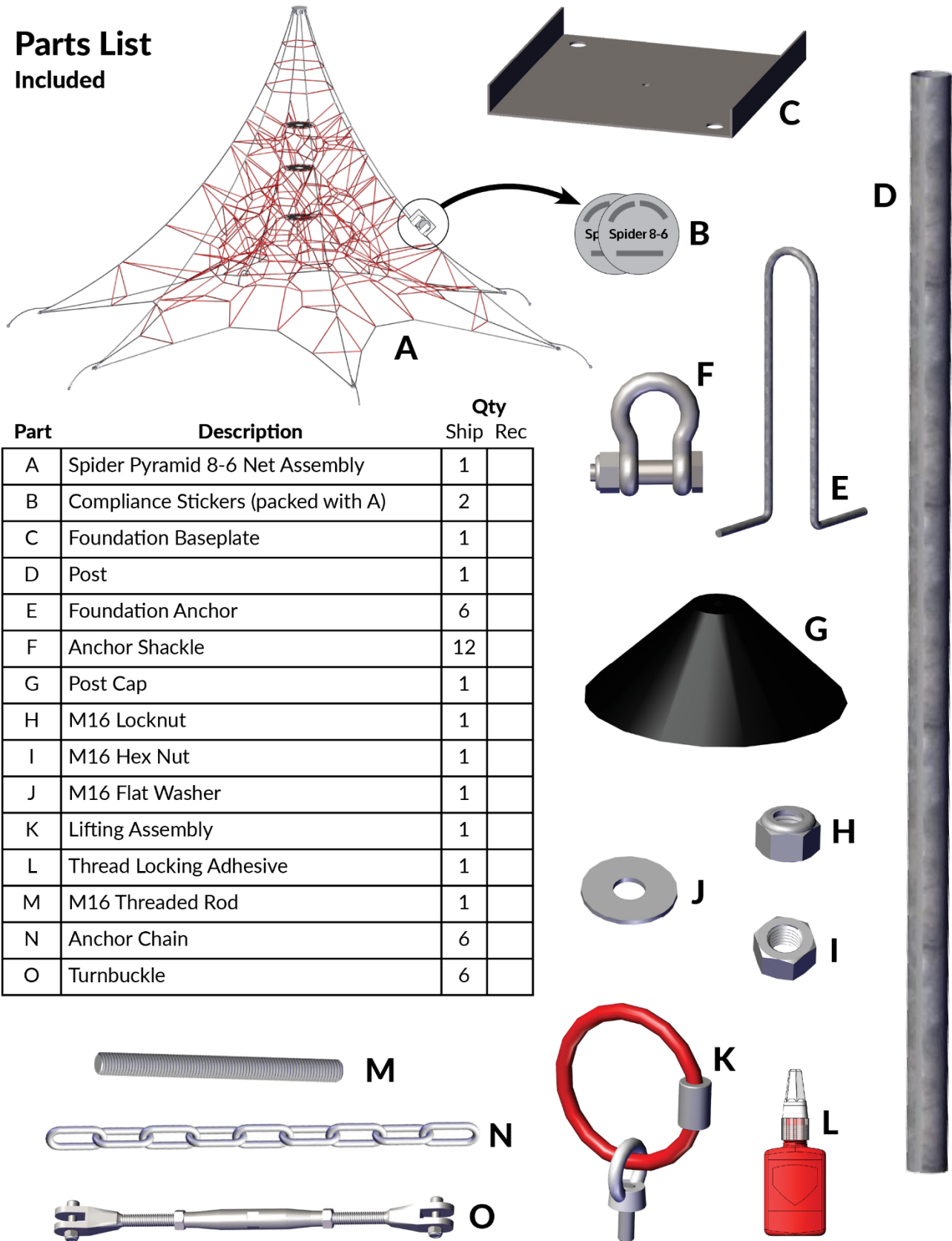
Middle Foundation (Qty 1)..... 39.37 x 39.37 x 23.62 inches
(1,000 x 1,000 x 600 mm)

Drainage Stone..... 65.9 ft³ (1.87 m³) total
(4 inches of stone required beneath each foundation)



In the case of sandy and soft soils, the size of the foundations must be enlarged by 50%.

Parts List Included



Part	Description	Qty	
		Ship	Rec
A	Spider Pyramid 8-6 Net Assembly	1	
B	Compliance Stickers (packed with A)	2	
C	Foundation Baseplate	1	
D	Post	1	
E	Foundation Anchor	6	
F	Anchor Shackle	12	
G	Post Cap	1	
H	M16 Locknut	1	
I	M16 Hex Nut	1	
J	M16 Flat Washer	1	
K	Lifting Assembly	1	
L	Thread Locking Adhesive	1	
M	M16 Threaded Rod	1	
N	Anchor Chain	6	
O	Turnbuckle	6	

Parts List

Customer-Supplied

These components must be procured prior to installation.

For concrete and stone requirements, please see the foundation specifications on page 3.

Part	Description	Qty
P	Middle Foundation Pipe ø 12 in x 26 in Schedule 40 (ø 300 mm x 650 mm)	1
Q	Foundation Rebar #4 x 25.5 in (ø 12 mm x 650 mm)	48
R	Foundation Rebar #4 x 63 in (ø 12 mm x 1,600 mm)	80

P



Q



R



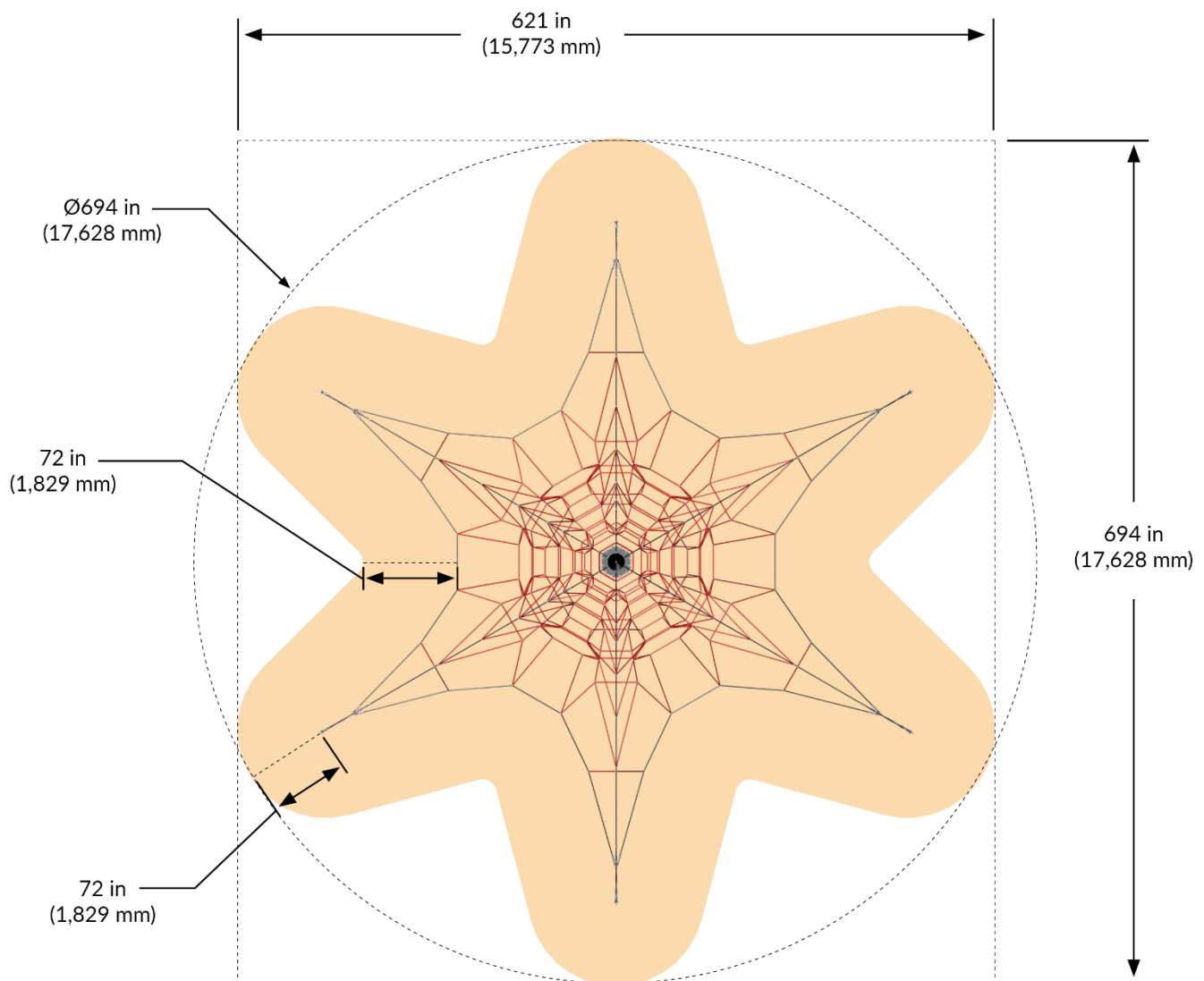
Installation

Part A: Site Prep and Use Zone

Be sure that the chosen site is well drained and level, with a 3% maximum slope.

A clear path and adequate protective surfacing are required 72 inches (1,829 mm) from the point where the guyline meets the surfacing on the corners, and from the outermost rope on the sides as shown below.

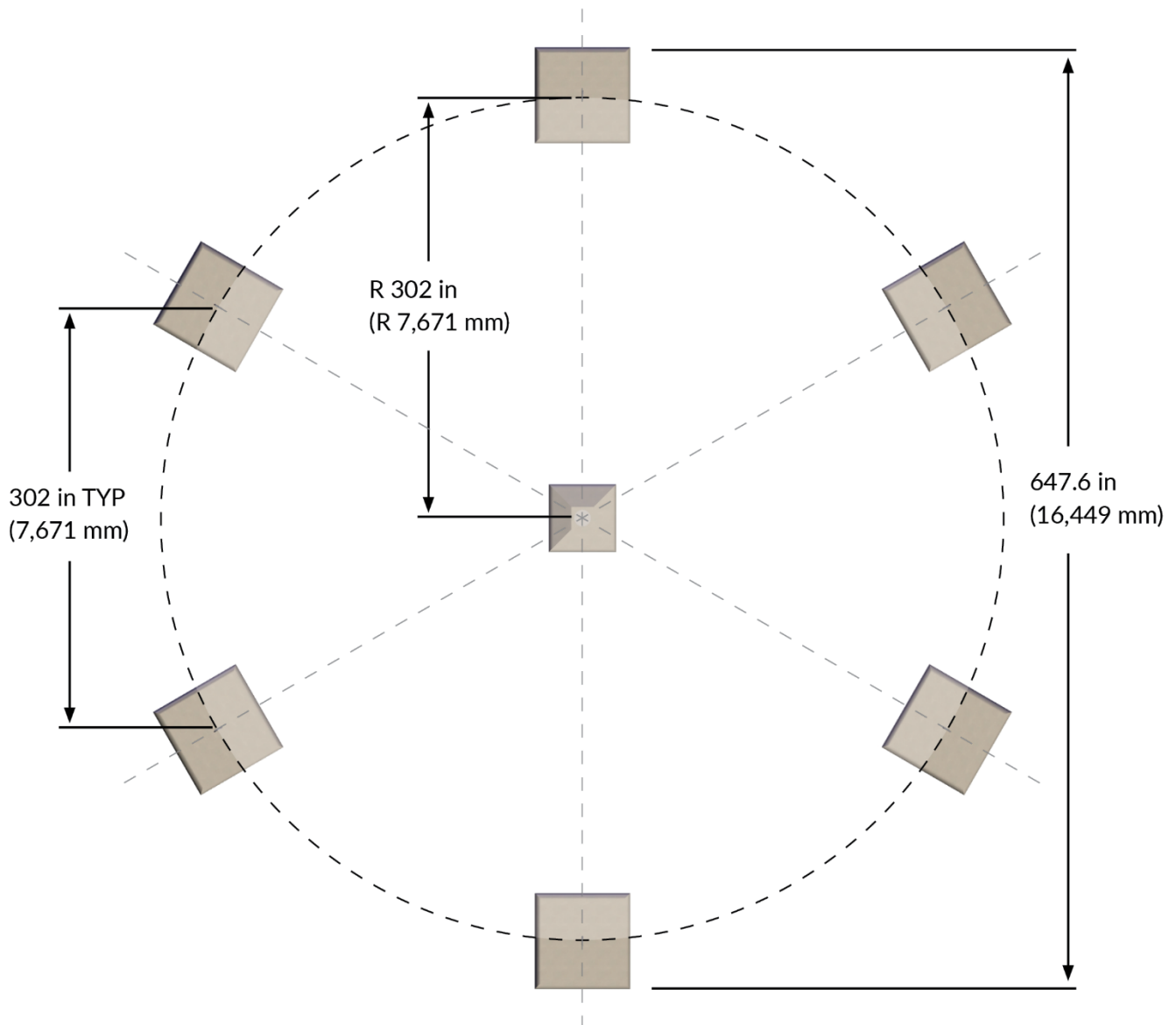
**The diagram is a guide for finding the measurement points only.
The actual measurement points will be determined by the height of
the surfacing material and installation methods used.**



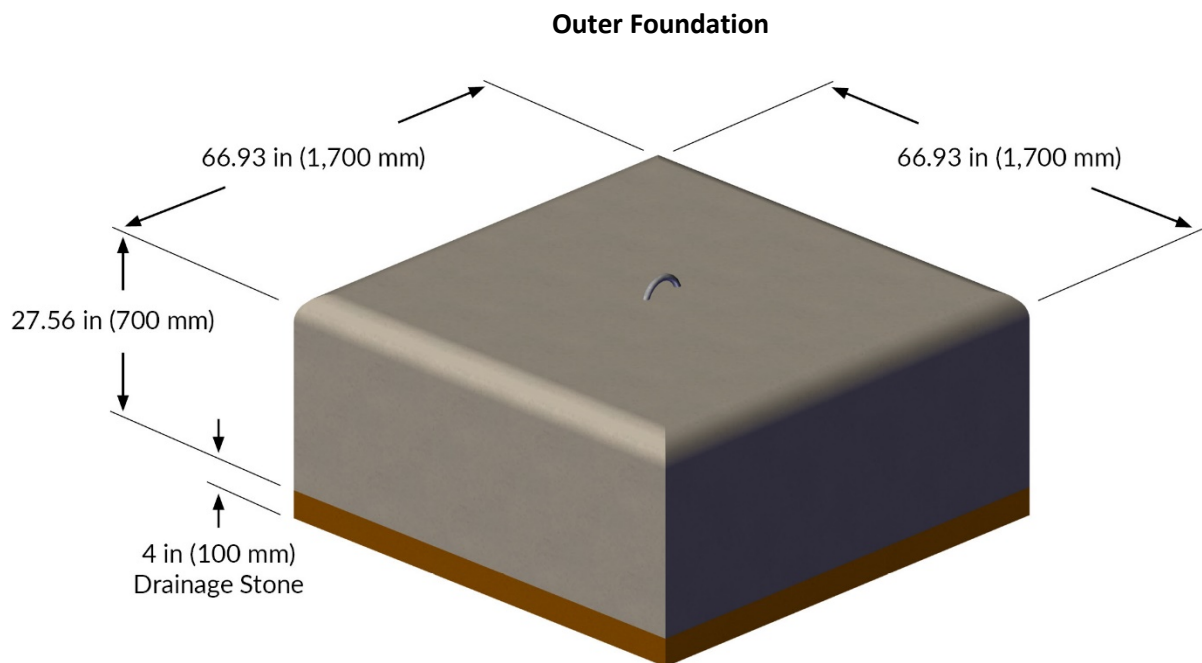
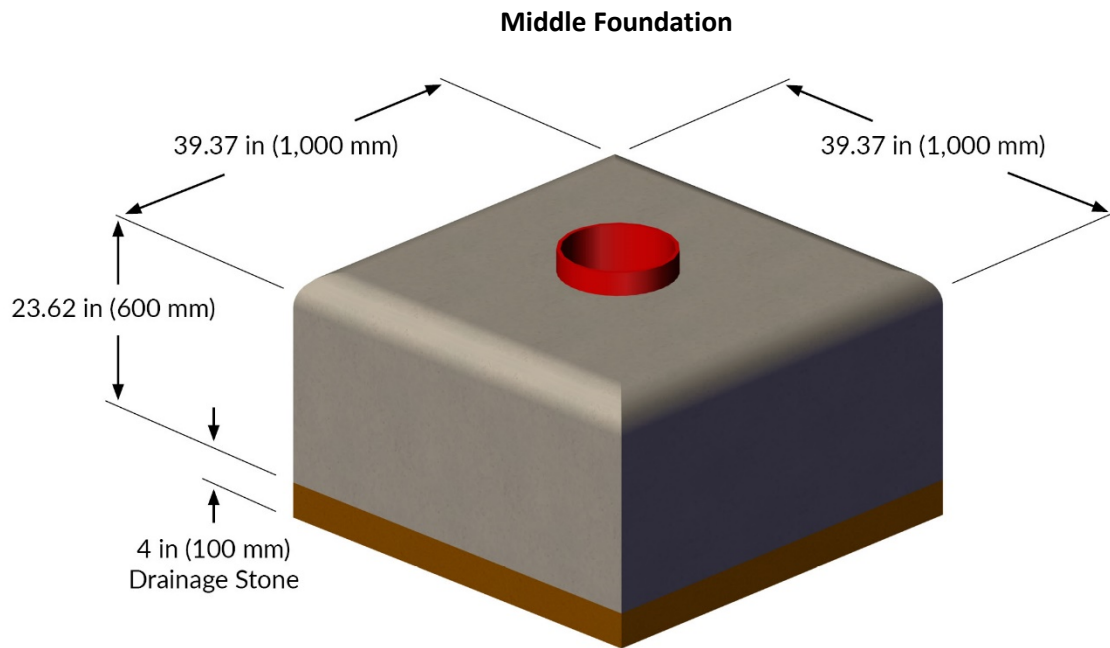
Installation

Part B: Foundation

- Seven concrete foundations are required for the Spider Pyramid 8-6.
Use the diagram below to find the exact locations of the center of each foundation.



Foundation Dimensions



- Dig all seven foundation holes to the following dimensions. Account for a required 16 inches (400 mm) of material (subgrade + surfacing) over the foundations. Depth dimensions include 4 inches (100 mm) for drainage stone.

Middle Foundation: 39.37 x 39.37 inches wide, and 27.62 inches deep without surfacing (1,000 x 1,000 mm wide, and 700 mm deep without surfacing)
Finished depth with surfacing: 43.62 inches (1,100 mm)

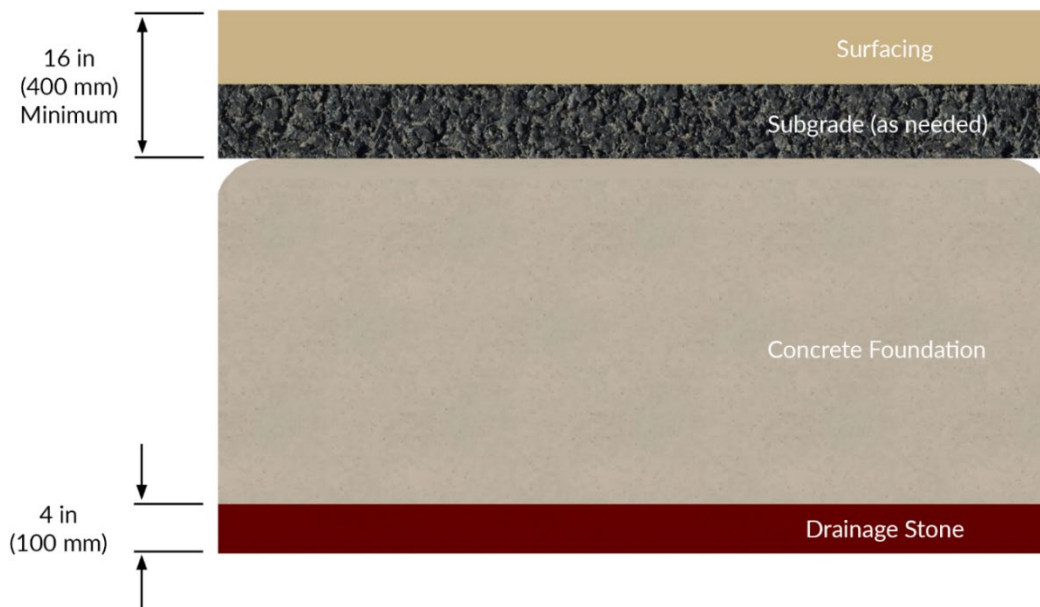
Outer Foundations: 66.93 x 66.93 inches wide, and 31.56 inches deep without surfacing (1,700 x 1,700 mm wide, and 800 mm deep without surfacing)
Finished depth with surfacing: 47.56 inches (1,200 mm)



The required material depth (subgrade + surfacing) of 16 inches (400 mm) is critical to meet the manufacturer's specifications for safe use and compliance.

Remember that the middle foundation is shallower than the outer foundations. Be sure to gauge the depth so that the TOP of all foundations will be at the same level.

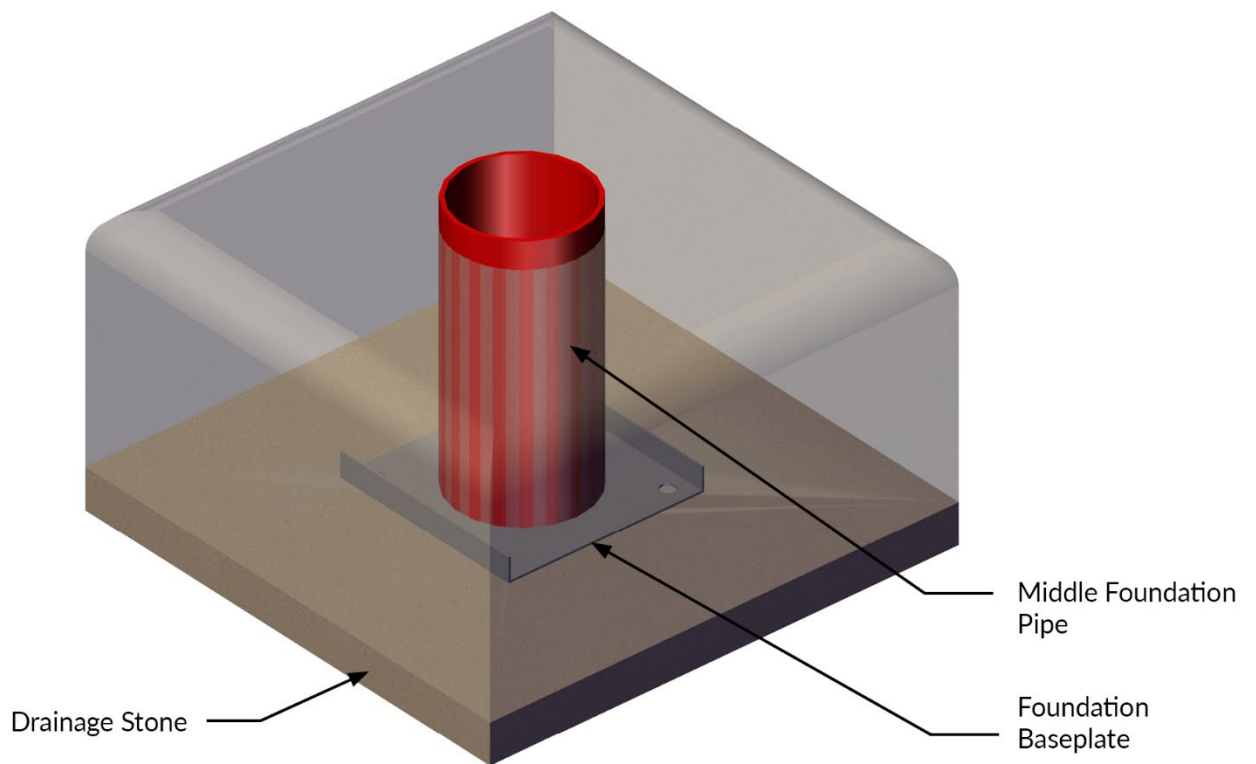
Please refer to ASTM F1292, ASTM F1951, ADA, and ABA standards when choosing the type and thickness of surfacing material.



- Place 4 inches (100 mm) of drainage stone evenly on the bottom of each foundation hole.

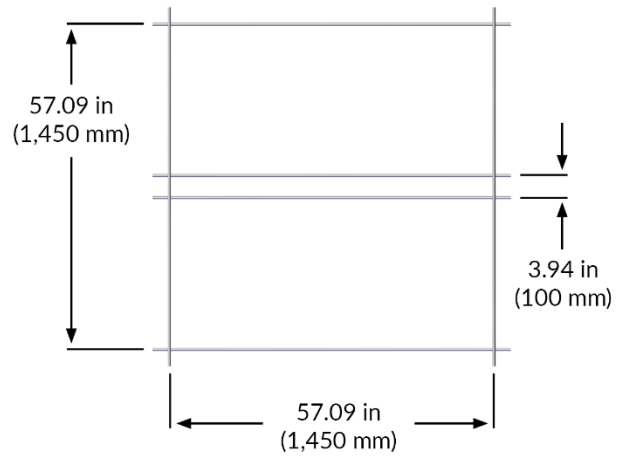
Middle Foundation Assembly

- Place the foundation baseplate (C) flat side down onto the drainage stone at the center point. Align all sides to the foundation.
- Place the middle foundation pipe (P) on-end onto the center of the foundation baseplate, ensuring both are level and the pipe is straight.
- After concrete is poured in a later step, the middle foundation pipe should protrude from the top of the concrete foundation by a couple inches.

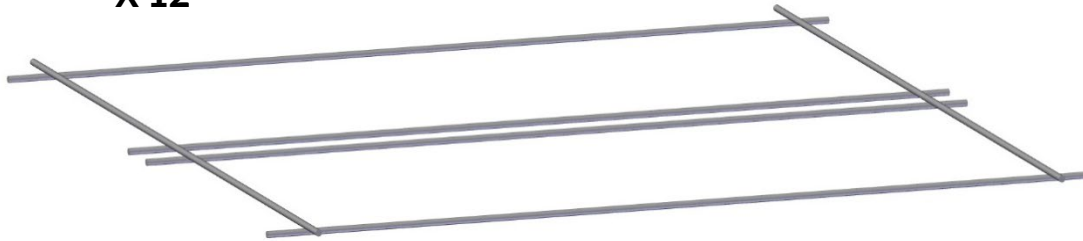


Outer Foundation Assembly

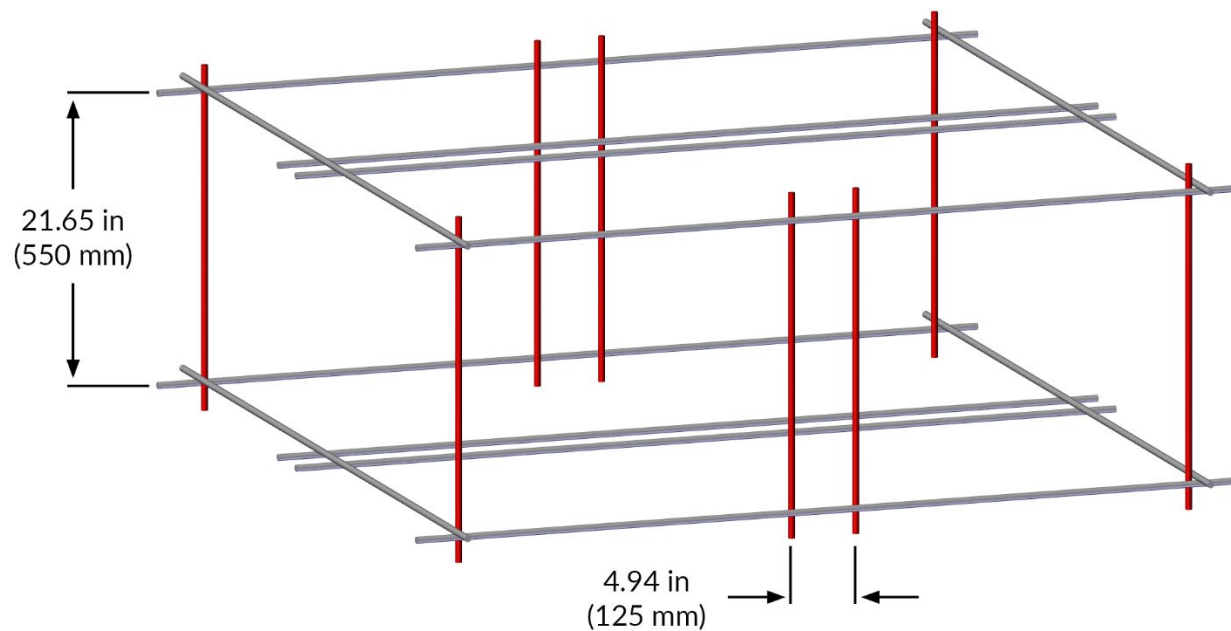
1. To build the rebar frames for each outer foundation, start with constructing 12 flat frames using 6 pieces of 63" rebar (R) each.



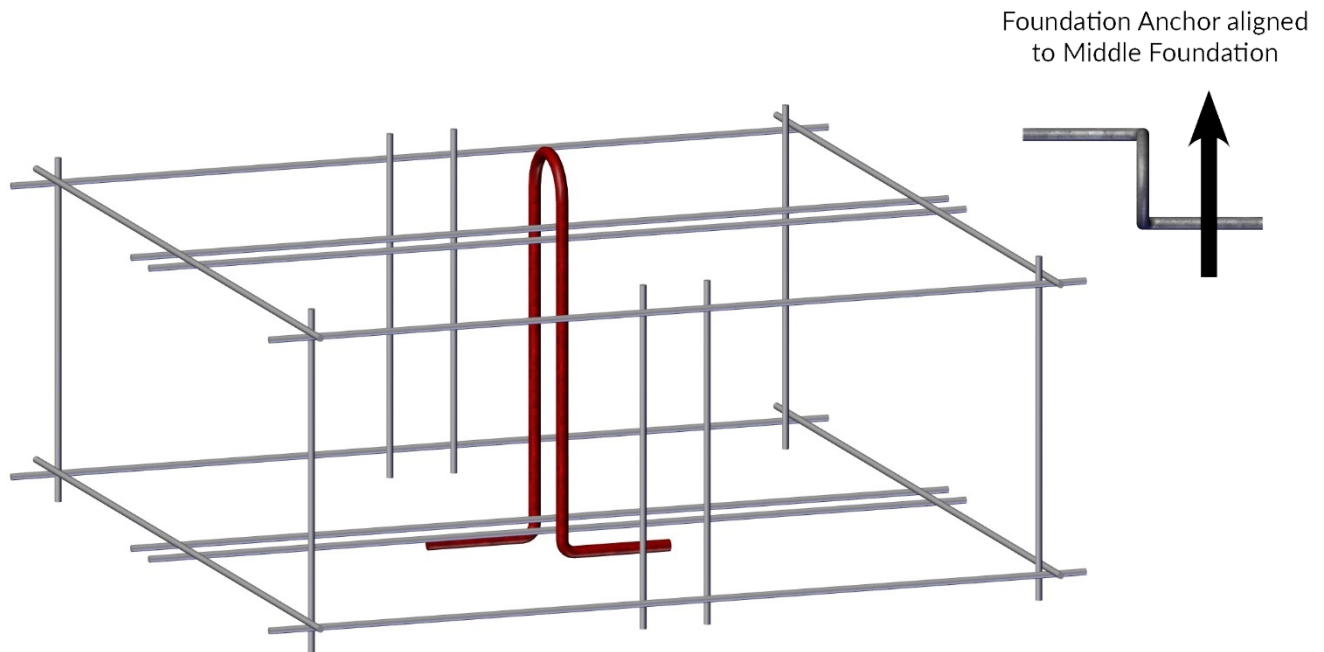
X 12



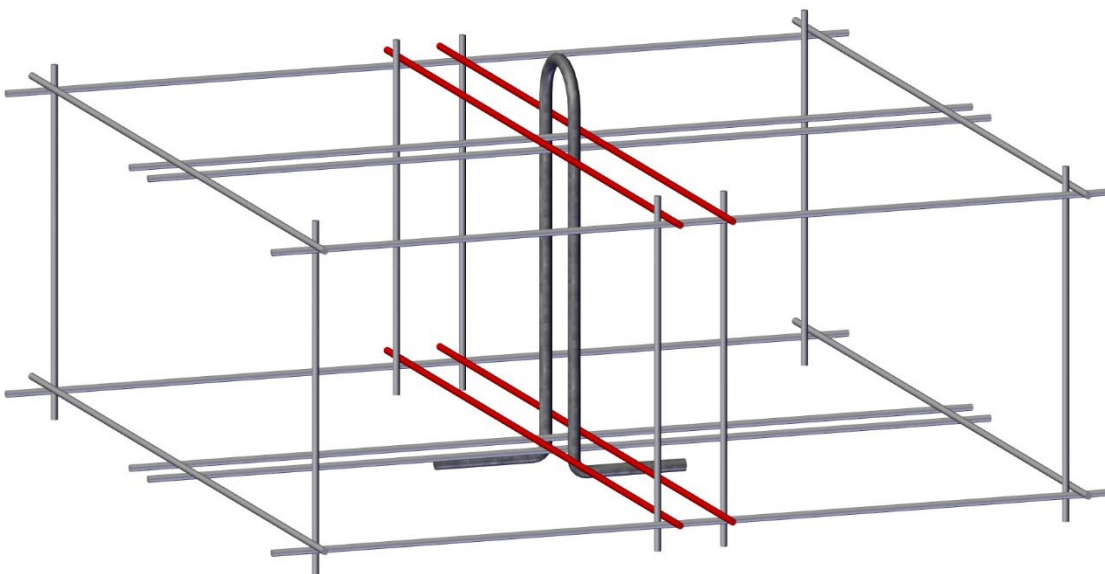
2. For each foundation, join two flat frames as top and bottom, by using 8 pieces of the shorter 25.5 inch rebar (Q) as shown in red.



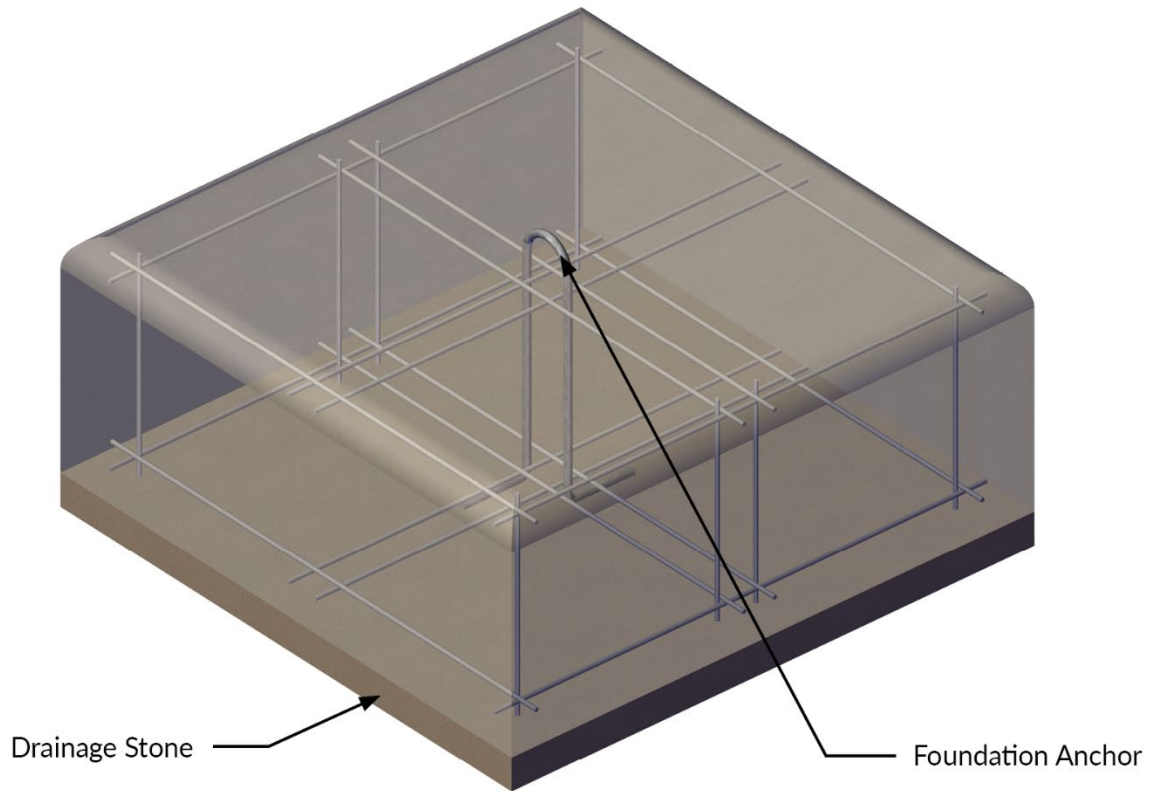
3. Add a foundation anchor (E) in the center of the frame as shown. Make sure that the frame is oriented so that the eye of the foundation anchor is aligned to the middle foundation.



4. Using 4 more pieces of 63 inch rebar, add the remaining cross sections to the top and bottom frames, on either side of the foundation anchor as shown.

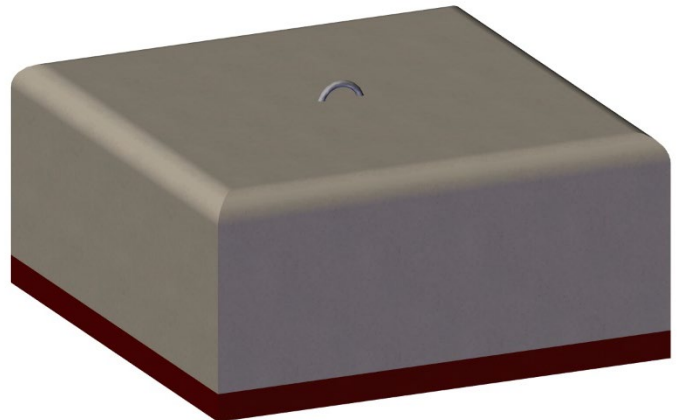
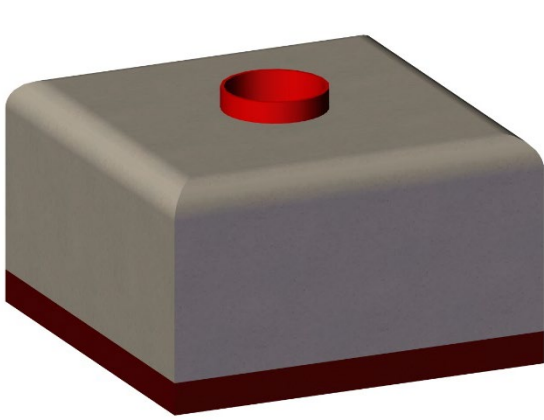
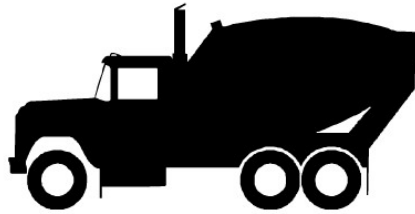


- After pouring the concrete in the next step, the top eye of the foundation anchors should protrude from the top of the outer foundations by a couple inches.



Concrete

- Pour concrete into all seven foundations and allow to set for the time recommended by the concrete manufacturer.
- Round the top edges of all four sides of each foundation to a 4 inch (100 mm) radius as shown below.





Apply at least 5 drops of thread locking adhesive (L) to the threads of all nuts, bolts, screws, and turnbuckles when installing. Do not apply thread locking adhesive to locknut (H).

In addition, the threads of stainless steel hardware must also be sprayed with Teflon spray or similar lubricant (not included) to prevent cold welding.

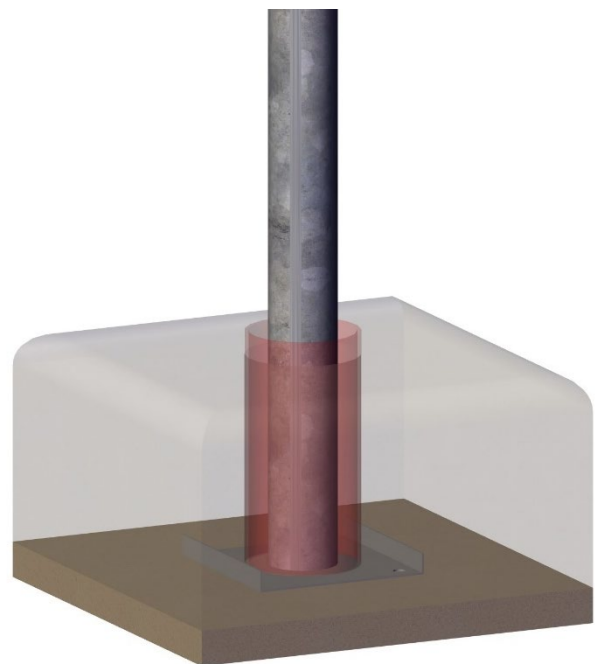
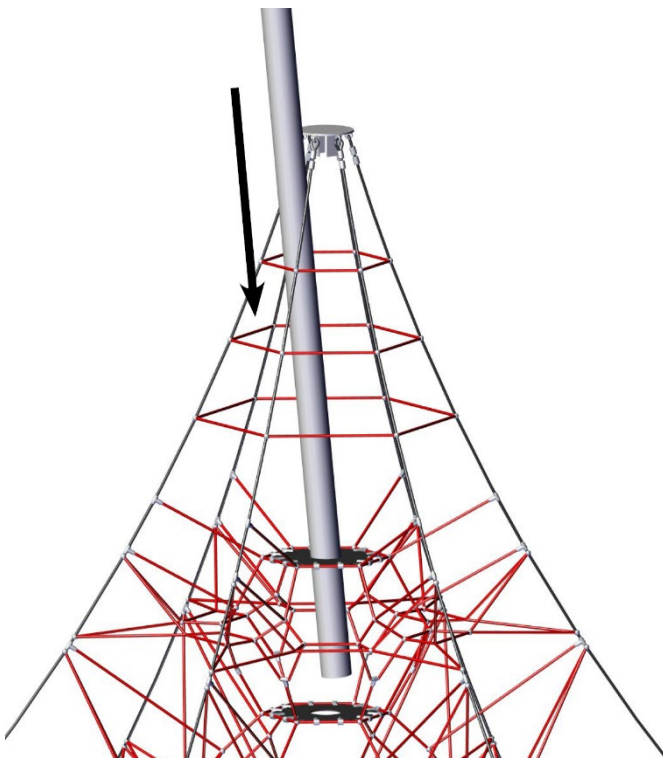
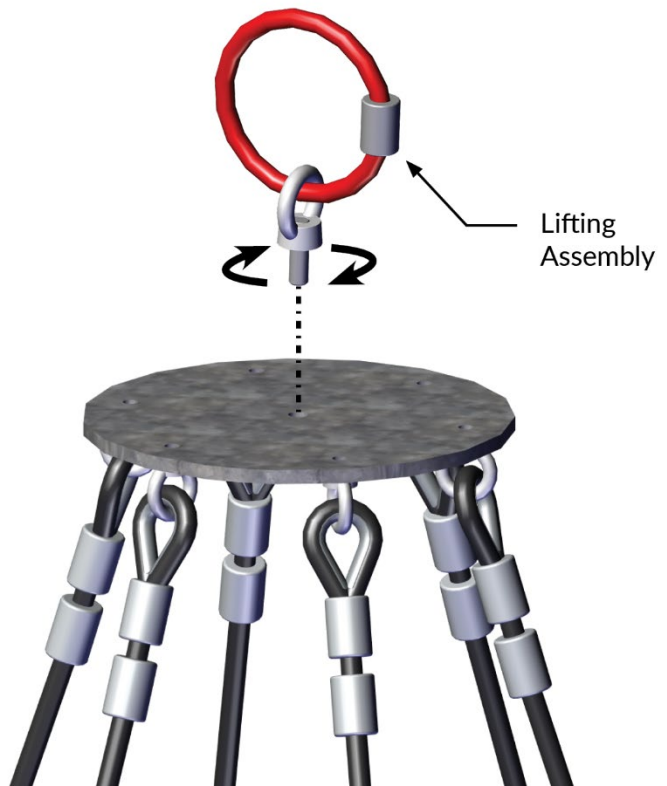
Stainless Steel Hardware:

- M16 Hex Nut (I)
- Eye Bolt of Lifting Assembly (K)
- M16 Threaded Rod (M)
- Turnbuckle (O)

Installation

Part C: Structure

- Attach the lifting assembly (K) to the net assembly (A) by threading the eye bolt into the center hole of the connection plate located at the top of the net assembly.
- Position the net assembly over the middle foundation.
- Slide the post (D) through the net, making sure to route it through the center of the netting and rubber platforms. When completely through into the middle foundation pipe, the bottom end of the post should rest flat against the foundation baseplate.

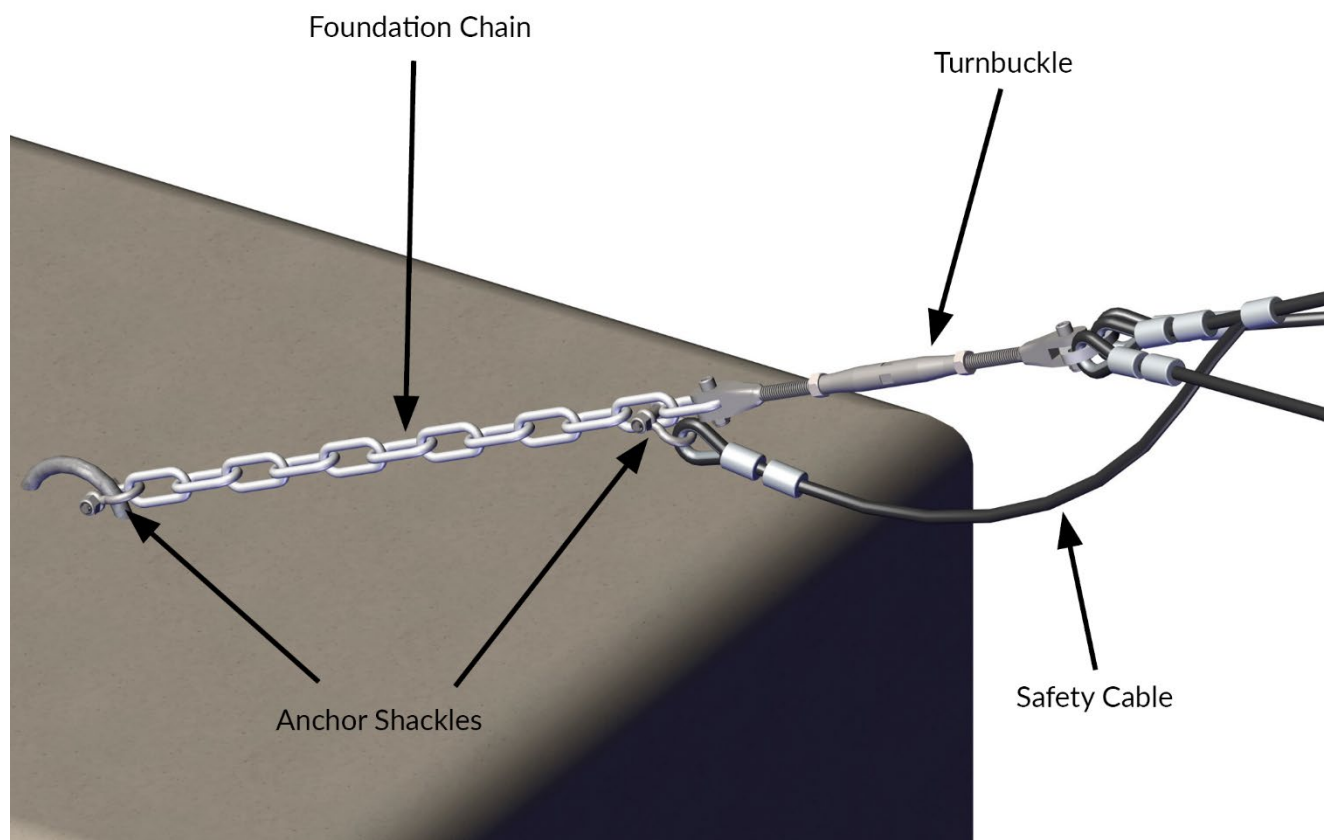
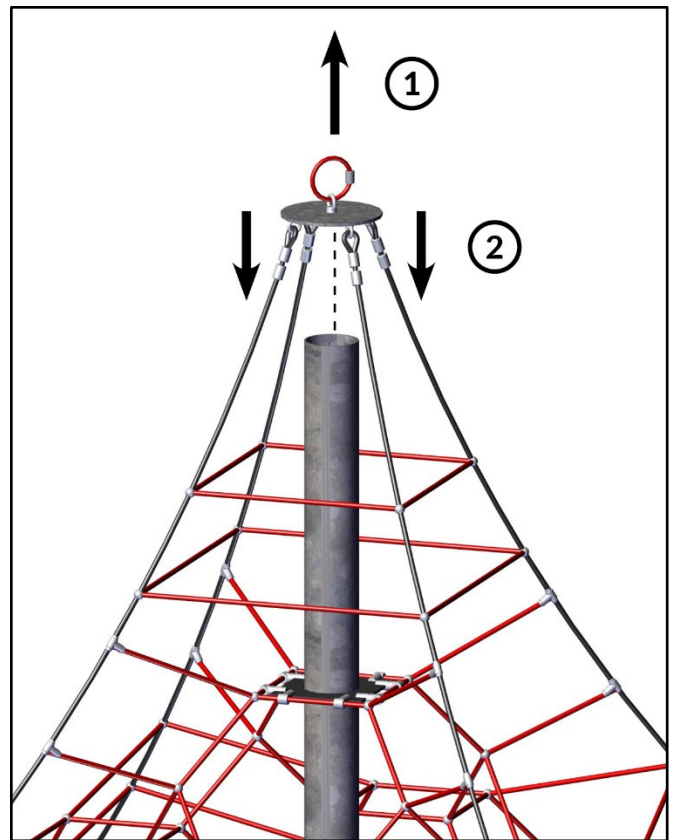


Middle Foundation

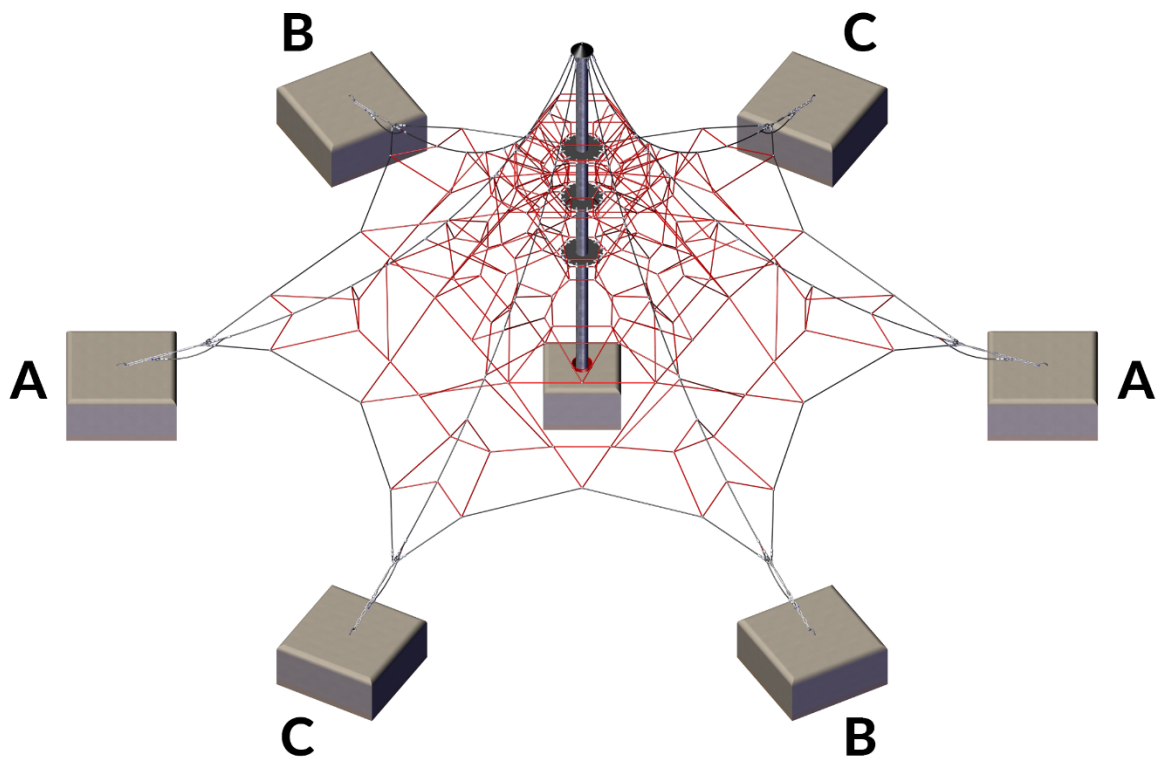
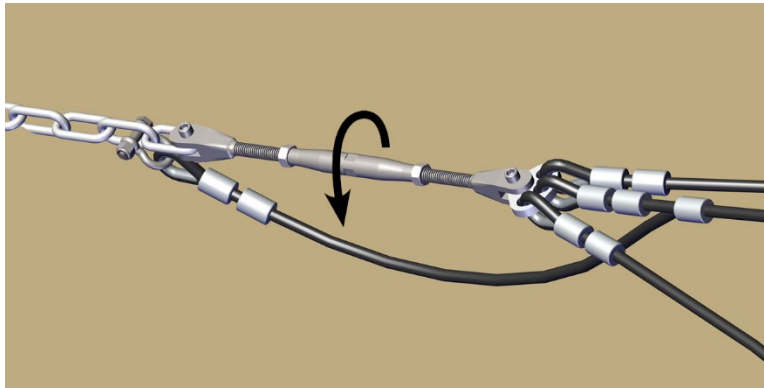
- Using the lifting assembly, lift the net up so that the post connector plate can be positioned onto the top of the post.

No hardware is needed to attach the connector plate to the post. When the net is tightened, tension will hold it in place.

- Rotate the net assembly to align each attachment point to a foundation anchor.
- Connect each attachment point to the foundation anchors using the chain (N), turnbuckles (O), and anchor shackles (F) as shown in the diagram below.
- With an anchor shackle, connect the safety cable of each attachment point to the first link of chain after the turnbuckle.



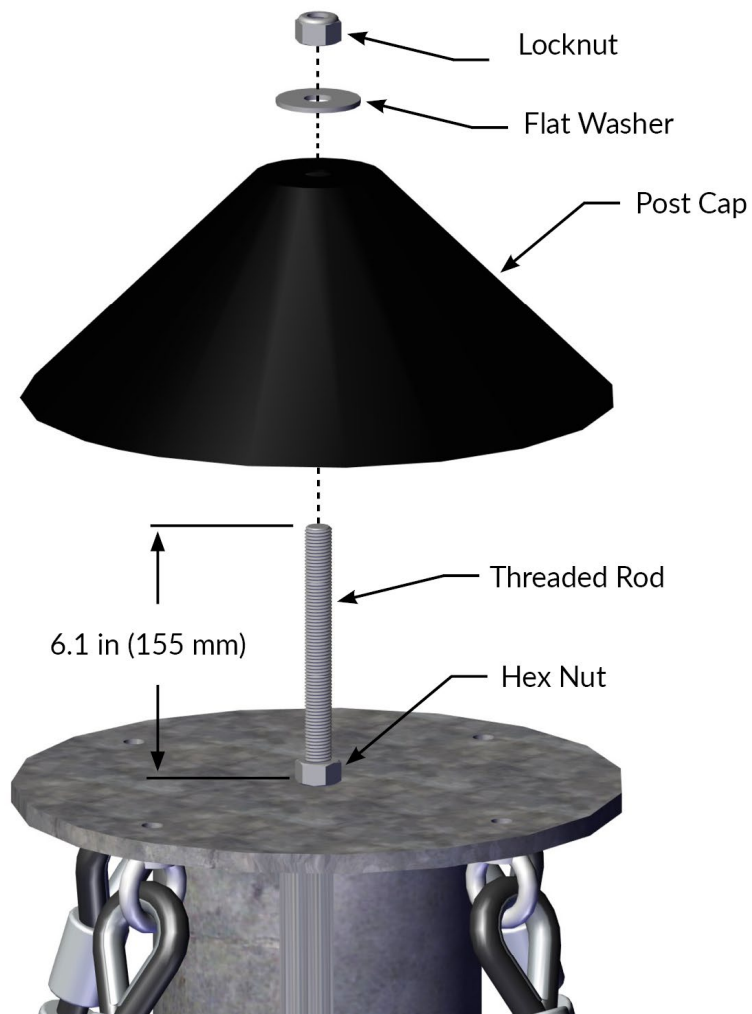
- Tighten the turnbuckles of opposite sides **simultaneously** (A and A, then B and B, then C and C – see diagram below) so that the net is tensioned evenly and that the post is straight and level. Final tensioning will be covered in a later step.
- Tighten jam nuts on turnbuckles after tensioning.



Installing the post cap:

- Unscrew and remove the lifting assembly from the top connection plate. With the structure now stabilized, it is safe to carefully climb the net only to access the connection plate.
- Screw the threaded rod (M) into the center hole of the connection plate leaving 6.1 inches of rod exposed above the plate.
- Thread the hex nut (I) onto the rod and tighten against the connection plate.
- Fit the post cap (G) onto the threaded rod and secure on top with the flat washer (J) and locknut (H).

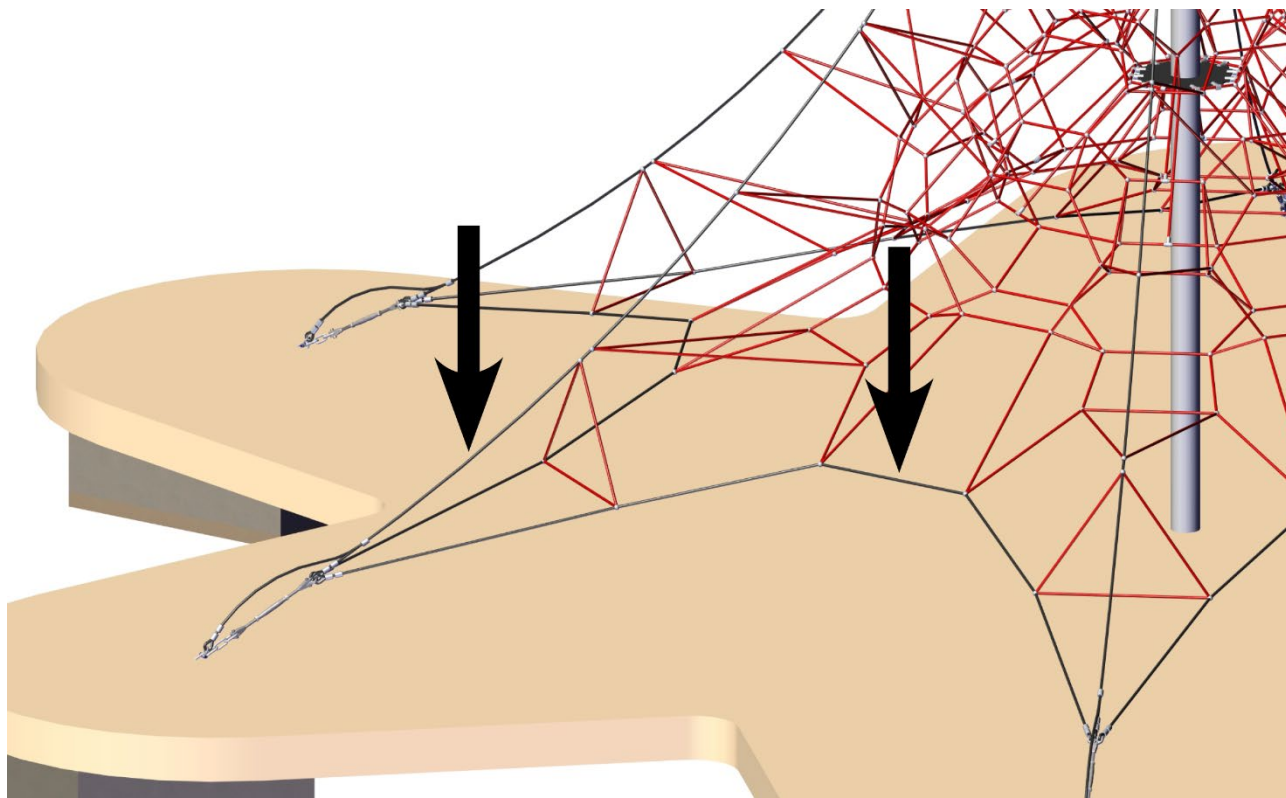
Note: No more than two threads of excess rod should be exposed above the locknut. If there is more, remove the post cap and thread the rod a little deeper into the connection plate, then reassemble the post cap.



- To test for proper tension, apply 165 pounds (74.8 kg) of pressure to the ropes indicated in the diagram below. Test only one rope at a time. Optimal tension has been achieved if the ropes do not deflect more than 2 inches (50 mm).
- If additional tensioning is required, be sure to check that the post is straight before proceeding to the next step.

For the Operator:

The structure will require occasional re-tensioning as the ropes relax, completed using the pressure test described above. The first re-tensioning should be done after the structure has been erected for one week. After the first re-tensioning, perform the pressure test once per month and adjust as needed to maintain proper tension. See page 22, *Maintenance*, for details.

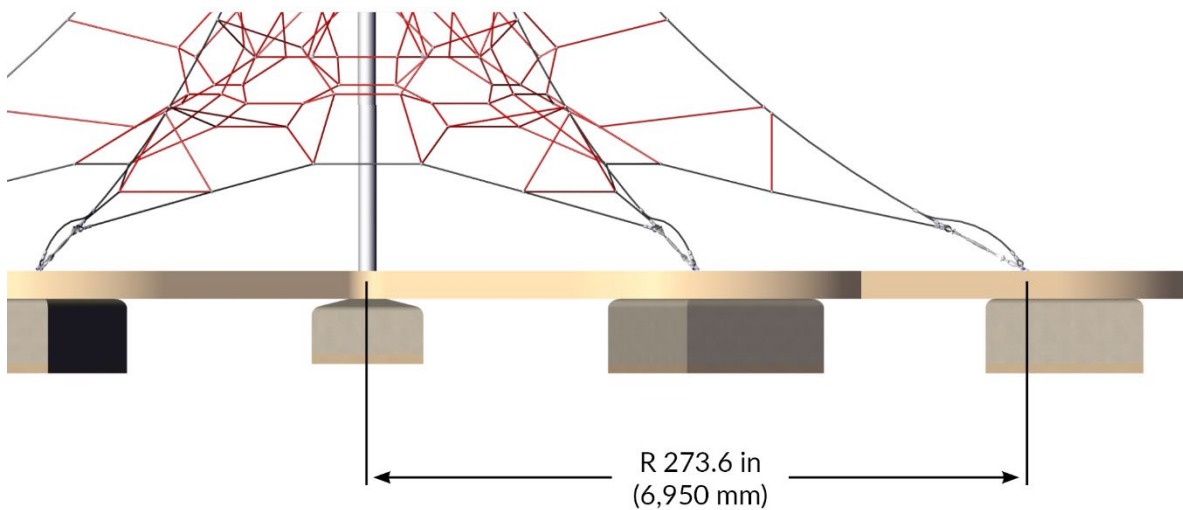


- With the post straight and tensioning complete, fill in the space around the post in the middle foundation pipe with concrete (approximately 0.3 yd³ or 0.23 m³) and allow to set for the concrete manufacturer's recommended time.



Finishing

- Place the two compliance stickers (B) onto the structure's post in locations which can be accessed without climbing the net, usually within 6 ft above the surfacing. Make sure the surface of the metal is clean and dry before applying the stickers.
- Apply and grade protective surfacing material to the use zone, per ASTM 1292.
- With surfacing in place, check the radius from center to the point at which each anchor assembly meets the surfacing. The radius should be approximately 273.6 in (6,950 mm).



- If using loose fill, mark the post at the final level of the surfacing material so that the proper level of fill can be maintained.
- Remove all tools, excess materials, or other assembly aids from the area prior to opening the equipment for play.

Final Checklist

Please make sure all following steps have been completed:

- () Attached all safety ropes to anchor chain.
- () Checked the net to be correctly tensioned.
- () Made sure the post is level.
- () Poured concrete in the middle foundation pipe around the post.
- () Applied all necessary surfacing per ASTM 1292.

Maintenance

To maintain safety, the operator must ensure that proper inspection and maintenance is carried out by a competent person in accordance with ASTM F1487-17 or CSA-Z614, and the following manufacturer recommendations.



Damage which may compromise safety must be repaired immediately. If repairs cannot be immediately carried out, the operator must close the equipment to prevent use.

Replacement Parts

Replacement parts may be obtained through your equipment dealer. Parts not obtained through a dealer must conform to the manufacturer's specifications.

Break-in Period

Between 1-2 weeks after installation (equipment break-in period), check all threaded connections and tighten if necessary. Check the tension on the ropes by following the procedure on page 20 and re-tension as needed. Check all foundations and post for stability. After the break-in period, the operator may follow the recommended inspection frequency.

Inspection Frequency

With average use and environmental conditions, check the following at or before the recommended frequency. If the equipment is exposed to regular high-use or harsh environments, the inspections should be performed at a higher frequency. Inspections should also be completed per ASTM 1487-17 or CSA-Z614 guidelines.

Monthly

- Check all connecting elements and fittings for wear and tear and tighten if necessary. Repair or replace damaged or missing parts.
- Check ropes for excessive wear. If ropes are worn through to the steel wire core, the equipment should be closed to prevent use until the rope is repaired or replaced.

Quarterly

- Check surfacing for adequate depth and fill in as necessary.
- Re-tension the ropes as needed. Follow the procedure on page 20 to check deflection.
- Check the stability of the foundations and post.

Yearly

- Check for corrosion on metal components. It may be necessary to dig out subterranean components to inspect them. Apply zinc paint to any corroded or scratched areas.

Maintenance Log

Copy and return to the owner/operator annually following initial inspection.

Name of operator
(town, school, business, etc.): _____

Equipment Location: _____

Model Name: Spider Pyramid 8-6

Model Number: 5000-8-6

Serial Number: _____

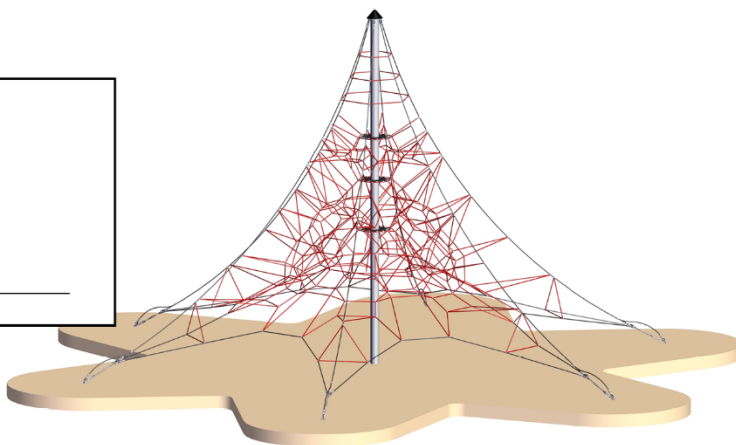
Date of Inspection	Inspector	Fault? Yes/No	Details	Repaired By	Repair Date

New Product Handover

Model Name: Spider Pyramid 8-6

Model Number: 5000-8-6

Serial Number: _____



Operator

Name of operator (town, school, business, etc.): _____

Street: _____ City: _____ State: _____ Zip: _____

Representative in charge: _____

Installer

Name of installation company: _____

Street: _____ City: _____ State: _____ Zip: _____

Representative in charge: _____

Installer Checklist:

- ☐ Adequate concrete foundation poured per instructions.
- ☐ Structure assembled per the instructions without modification (unless approved by the manufacturer.)
- ☐ Final inspection conducted and passed per instructions.

Operator received the complete assembly instructions, inspection & maintenance instructions, and maintenance log. Installer completed work to the manufacturer's specifications.

Operator Signature: _____ Date: _____

Installer Signature: _____ Date: _____