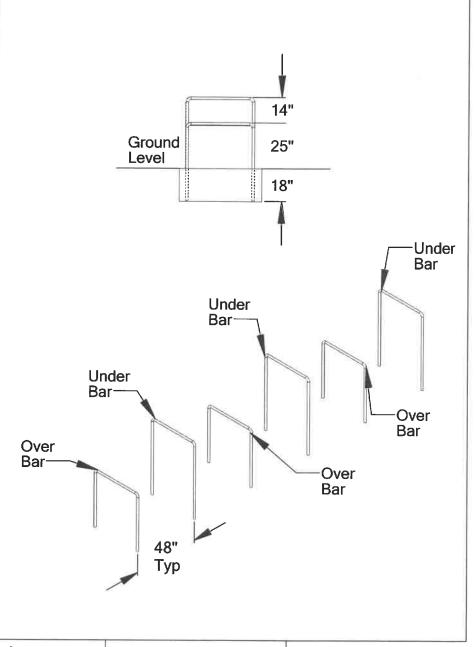


Over/Under Bars

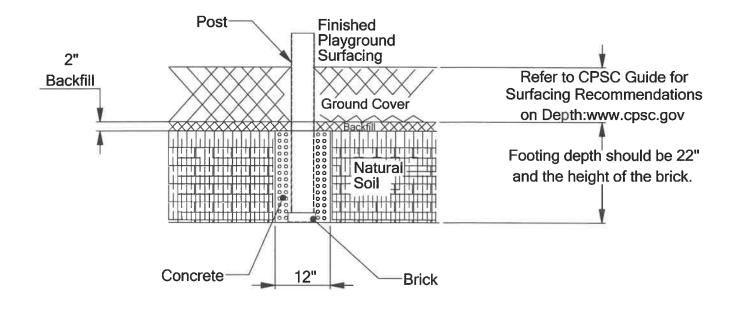
511-143

ITEM NO	PART NUMBER	DESCRIPTION	QTY.
1	503-102	Under Bars	3
2	503-103	Over Bars	3



5" Post Footing

Side View of installed Post



Sheet 1 of 2

5

1

3

2

When installing posts in the ground, we recommend using a recommendation to put a brick or rock at the bottom of the hole and adding water. For the Over/ Under bars, the hole mix. We do not recommend pouring the dry mix into the pre-mixed concrete. Quick Crete can be used if you preshould be 12" wide and flat bottomed. It is a good

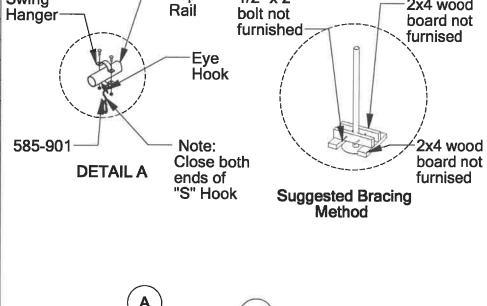
ROPE CLIMB

Swing

511-146

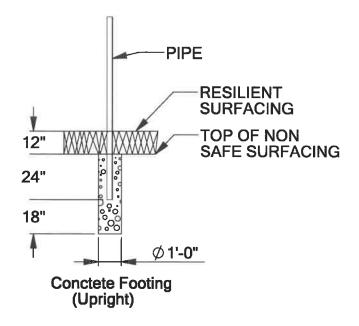
2x4 wood

1970			
ITEM N	O. PART NUMBER	DESCRIPTION	QTY.
1	533-981	1-1/2" Rope 10' Long	1
2	503-100	2-3/8" Sliding Pole	1
3	354-904	Double Clevis	1
4	585-520	2-3/8" Swing Hanger	1
5	105-017	3-3/8" Pipe Plug	1
6	345-907	Clevis Key	1



1/2" x 2"

Top



If resilient surfacing is to be less than 12", then additional pipe should be put in concrete to maintain proper finish grade for equipment.

Sheet 1 of 2

ROPE CLIMB

GENERAL USE /FALL ZONE & FOOTING RECOMMENDATIONS:

Stationary & portable equipment-Use/Fall Zones should extend a minimum of 6 feet in all directions from the perimeter of the equipment ground space. This area should be covered with the required amount fo Resilient Surfacing Material. For some equipment Use/Fall Zones can overlap. See Consumer Product safety guidelines. Diameter & depth of footing illustrated are satifactory in most applications for pipe sizes up to 2-3/8" diameter. Varying soil & climatic conditions may require deeper & heavier footings in some areas. Check local building codes.

GENERAL ASSEMBLY INSTRUCTIONS:

Check all the parts and hadware with the packing list to be sure you have received everthing needed to assemble this product. Contact your local distributor with notification of any missing or damaged parts. Contact must be made within ten days of receipt of your order. Only hand-tighten nuts & bolts on intial assembly. Final tightening should be done EVENLy after final assembly when unit has been plumbed & leveled. After assembly is complete, any ends of bolts proturding beyond nuts should be cut off and/or peened over to remove any sharp edges. Go over entire unit to fill smooth any sharp edges or projections that may have been caused by rough handling in shipping or installation. T-Clamps are designed for both one and two bolt connections. In many situations only one bolt is required. See specific assembly instructions. On products with platforms install 1-2 degrees off level to facilitate water damage.

GENERAL MAINTENANCE INSTRUCTIONS:

Check MONTHLY for loose bolts, damaged or broken parts. Tighten and/or replace immediately.

SPECIFIC ASSEMBLY INSTRUCTIONS;

NOTE: All threaded ends of bolts protruding beyond nuts must be cut off and/or peened to eliminate sharp edges. NO more than two threads should extne beyond face of nut.

Step #1: Mark & dig footing holes per footing drawing on Page 1. Step #2: Stand up and brace in footing holes. Height of top of the post above resilient is 10' adjustments are recommented by extending the depth of footing holes.

Step#3: Attach the rope using the 2-3/8" Hanger and Double Clevis hook to the metal bracket on the top of the rope. The chain end is placed inside of concrete to anchor rope so that no loops can be made in the rope. The hangar is attached at the edge of the sliding pole.

Step #4: Plumb & level. Tightne all nuts & bolts so that lock washers are flat. Make sure that the rope is tightn enough to where it cannot be made to loop on itself. Pour concrete and crown surface for drainage. Let stand 48 hours before removing braces, installing resilient surfacing and using equipment.

Step #5: Attach Warning Label and Manufacturer's Identification Label to a clean surface. The labels should be attached in a location where ther are clearly visible and legible and away from normal hand and foot placement areas. The labels must be replaced if they become illegible, destroyed or removed. Contact your distributor for replacement labels.

Sheet 2 of 2



INSTALLATION DETAILS

Recommended crew (Adult): 2

Installation time: 4 hr

User age: 5-12

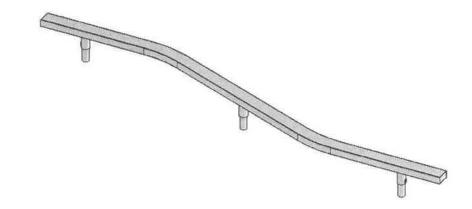
Use zone: 24' x 14'

• Weight: 50 lbs

SURFACING: Use of safety surfacing in compliance with ASTM specification F1292 is required.

MAINTENANCE:

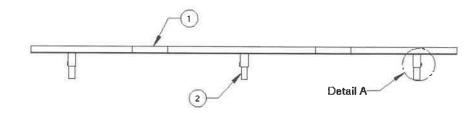
- As the owner of the playground you are responsible for maintenance of the equipment and play area. A maintenance schedule must be developed and the equipment inspected frequently. A maintenance section that includes component specific maintenance requirements is included at the end of this manual.
- Be sure to inspect surfacing for foreign objects that could cause injury and that sufficient surfacing are in place in accordance with ASTM and CPSC standards.





PARTS LIST

ID	PART#	DESCRIPTION	QTY
1	513-933	Curved Balance Beam	1
2	513-934	Leg Curved Balance Beam	3
3	196-802	½" x ½" Socket Set Screw	3
4	416-400	1/4" Socket Key	2
5	805-532	Warning Label	1
6	805-534	SportsPlay Label	1
7	516-400	Locktite	1

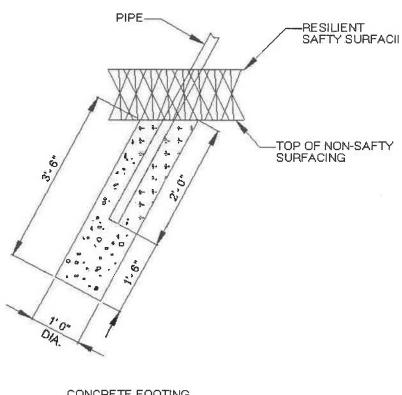


NOTE: Keep a copy of these instructions on file to assist you with maintenance and replacement parts.



FOOTING INFORMATION

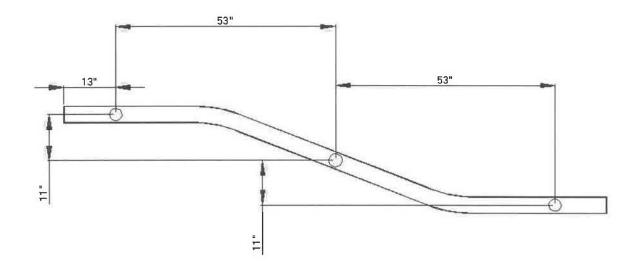
- Total footing depth is 24" less the height of the surfacing plus the height of the blocking material. If you are using 12" of surfacing the footing hole would need to be 12" plus the height of the blocking material (refer to both the side and front cutaway views to the right).
- If the Play structure is installed on an unlevel grade you must adjust the footing depth to accommodate the grade. For instance, if the grade for this component is 1" higher than the surface grade of the main playground post you must dig your footing hole 1" deeper.
- You must place the bottom of the support post on a suitable flat blocking material to prevent it from sinking further into the soil. We recommend you use a brick, block of wood or several inches of gravel. The footing depth does not include this blocking material since materials used often vary.
- It is the owner/installers responsibility to check local building codes and to comply with those codes. All footing depths listed here are recommendations and local soil types and frost lines may require a deeper and/or wider footing depth. If that's the case you must add more blocking material to accommodate the deeper footing, as the post length will still only be installed at the depth listed in this instruction manual.
- Assemble the entire unit before adding the concrete unless instructed to do so in the individual component instruction sections.



CONCRETE FOOTING (ANGLED)



FOOTING LAYOUT VIEW



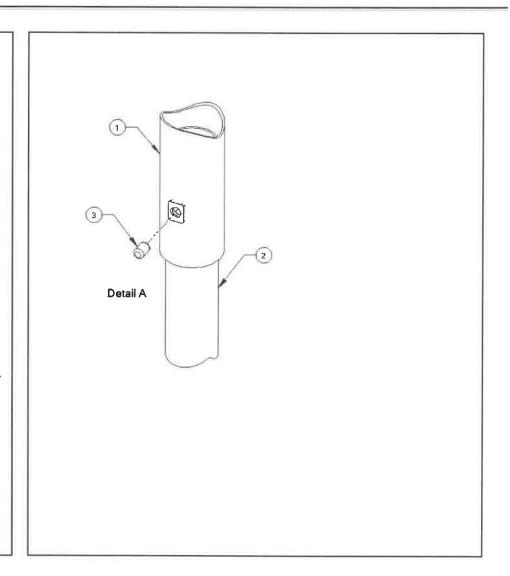


BEFORE YOU BEGIN

In addition to the components on the packing list you will need a tape measure, post hole digger, level and a dry erase marker.

INSTALLATION STEPS

- _1) Review all instructions before beginning:
- __2) Unpack, organize, and identify all components: Be sure to place all painted components on a protective surface (cardboard, cloth, etc...) to prevent damage.
- __3) **Assemble Curved Balance Beam:** Layout parts in correct position. Assemble beam on the ground.
- __4) **Attach Legs to Beam:** To do this you will need three 1 7/8" x 42" pipe (2), curved balance beam (1). Place the legs into the curved balance beam. See (Detail A).
- __5) **Dig footing holes:** Footing holes may be marked out and dug from footing layout; however, it is easier to position beam in proper location, mark holes, move beam aside, and dig holes.
- $_{-}$ 6) Stand beam upright onto legs and brace in footing holes so that 2'-3' of pipe will be under intended level of resilient surfacing and the top rail is at desired height. Plumb and level entire unit. Tighten all set screws.





INSTALLATION STEPS CONTINUED

- __7) Once the entire beam has been installed and you have verified that the entire beam is level you can add the concrete to the footing holes. Be sure to use concrete with a minimum 2,500 psi and mix the concrete per the manufacturer's directions before you pour it into the footing hole. Once the footing has been filled with concrete you should rope of the area for a minimum of 48 hours to allow the concrete set properly.
- __8) Once the concrete has set, back fill dirt over the footing holes; inspect the area and components for tools, hazardous debris and sharp edges. Verify all components are installed and all hardware is tight and then install the safety surfacing.
- __9) **Inspect the components:** for sharp edges and if necessary file them down and apply touch up paint.



INSTALLATION DETAILS

Recommended crew (Adult): 2

• Installation time: 1 (2 man hrs)

User age:2-5 for up to a 20" deck

5-12 for up to a 36" deck

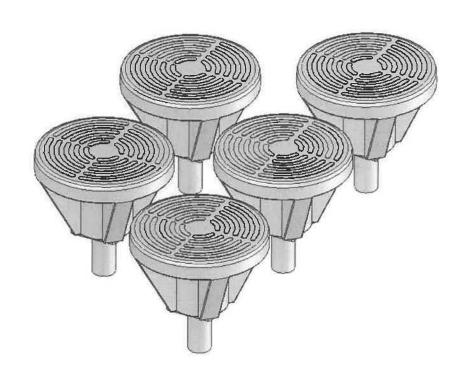
Use zone: see Special Safety Notes

Weight: 110 lbs

SURFACING: Use of safety surfacing in compliance with ASTM specification F1292 is required.

MAINTENANCE:

- As the owner of the playground you are responsible for maintenance of the equipment and play area. A maintenance schedule must be developed and the equipment inspected frequently. A maintenance section that includes component specific maintenance requirements is included at the end of this manual.
- Be sure to inspect surfacing for foreign objects that could cause injury and that sufficient surfacing is in place in accordance with ASTM and CPSC standards.

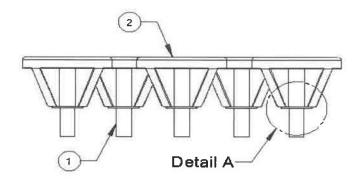




PARTS LIST

ID	PART#	DESCRIPTION	QTY
1	903-271	Stepping Stone Leg	5
2	435-659	Stepping Stone Molded set of 5	1 set
3	116-530	5/16" x 1" Button Head Bolts	20
4	316-501	5/16" Flat Washers	20
			-

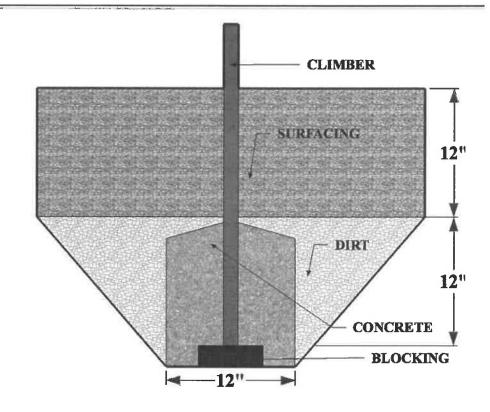
NOTE: Keep a copy of these instructions on file to assist you with maintenance and replacement parts.



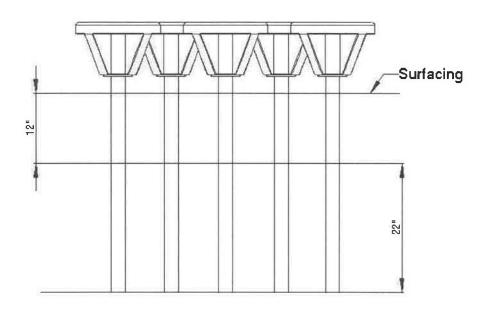


FOOTING INFORMATION

- The stepping stone footing depth is unique when compared to other footings. The footing varies based on your layout of the individual steps. Follow the instructions in the installation steps and ensure that you maintain proper spacing and elevation requirements between the steps. The drawing to the right is an example of a footing and the depth measurement is an example as each hole depth will vary based on your desired installation height.
- You must place the bottom of the support post or slide leg on a suitable flat blocking material to prevent it from sinking further into the soil. We recommend you use a brick, block of wood or several inches of gravel. The footing depth does not include this blocking material since materials used often vary.
- It is the owner/installers responsibility to check local building codes and to comply with those codes. All footing depths listed here are recommendations and local soil types and frost lines may require a deeper and/or wider footing depth. If that's the case you must add more blocking material to accommodate the deeper footing, as the post length will still only be installed at the depth listed in this instruction manual.
- Assemble the entire unit before adding the concrete unless instructed to do so in the individual component instruction sections.









SPECIFICATIONS

- Paint Electrostatically applied & oven cured powder coat
- Hardware Stainless steel & tamper resistant
- **Tube** FloCoat® Galvanized 1 3/8" OD and 1" OD.
- Stepping Stone Leg- 2 3/8" tube MIG welded to 3/16" steel plate
- Stepping Stone Plastic set of parts- ³/₄" HDPE UV stabilized plastic

SPECIAL SAFETY & ASTM COMPLIANCE NOTES

Safety Surfacing must extend 72" past the furthest Stepping Stone, and 72" wider than the greatest distance of the Stepping Stones.

INSTALLATION TIPS & TROUBLE SHOOTING

- SportsPlay Equipment Inc. recommends pre-drilling the holes in the post when attaching a four-hole bracket with a number #7 drill bit. This will make the attachment of the four-hole bracket with the self-tapping screws easier and it will prevent damage to the screw head during installation.
- Apply locktite to all bolts during assembly prior to completely tightening them.
- Stainless Steel hardware can occasionally be difficult to use particularly if you need to take them out to make an adjustment. It is recommended that you add a drop of oil to bolts that may have to be removed before you install them.
- Do not tighten bolts all the way until the unit is completely assembled and all components are square and level.
- Identify and separate all parts by referencing the detail drawings and the parts list.
- As you unpack and separate the components use the cardboard sheets that were used for packing and shipping to prevent damage to the components. This is particularly true all Powder Coated and Thermoplastic coated components, by setting the components on top of the cardboard.

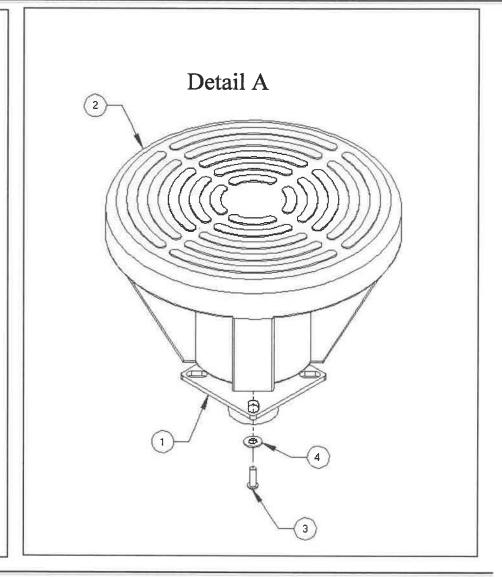


BEFORE YOU BEGIN

In addition to the components on the packing list you will need a a shovel or post hole digger, cement, drill with a #7 drill bit, 9/16" wrench, tape measure, dry erase marker, level and blocking material to support the Stepping Stone Legs.

INSTALLATION STEPS

- 1) Review all instructions before beginning
- __2) **Unpack, organize, and identify all components:** Be sure to place all painted components on a protective surface (cardboard, cloth, etc...) to prevent damage.
- __3) Locate placement of the Stepping Stones: See top down view of your instruction booklet.
- __4) **Dig your footings:** The footing holes for the Stepping Stone Legs cannot be any further than 12" apart.
- __5) **Set Stepping Stone Legs:** After you have the footings dug you will need to place the Stepping Stone Legs (1) in the footing holes. The Stepping Stones can be no further apart than 12" with a step height of no more than 6". You will need to use blocking material to hold the legs in to a level position and to get them to stay at the proper height. Now you can poor the cement into the footing holes. Be sure to use concrete with a minimum 2,500 psi and mix the concrete per the manufacturer's directions before you pour it into the footing hole.







INSTALLATION STEPS CONTINUED

- __6) Install Stepping Stone Plastic Parts: After the cement has dried you can install the Stepping Stone Plastic parts. You will need the 5/16" x 1" bolts (3), 3/8" Flat Washers (4). Place one 5/16" Flat Washer on to one of the 5/16" x 1" Button Head Bolts. Insert this through the Plastic Stepping Stone (2) and into the Leg (1) on the bottom side of the Leg. Repeat this until the Stepping Stones are installed. (See Detail A)
- __7) Once the concrete has set, back fill dirt over the footing holes; inspect the area and components for tools, hazardous debris and sharp edges. Verify all components are installed and all hardware is tight and then install the safety surfacing.
- __8) **Inspect the components:** for sharp edges and if necessary file them down and apply touch up paint.

PARALLEL CLIMBER

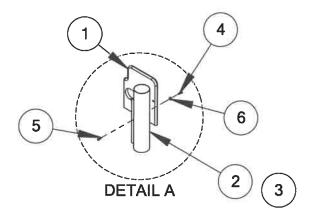
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	903-267	Plastic Panel Parallel Climber	6
2	903-268	End Post Parallel Climber	2
3	903-269	Center Post Parallel Climber	2
4	126-703	3/8" x 1" Button Pin SS	24
5	236-601	3/8" "T" Nut	24
6	316-601	3/8" Flat Washer	24
7	416-505	7/32" Long Arm Socket Key	1

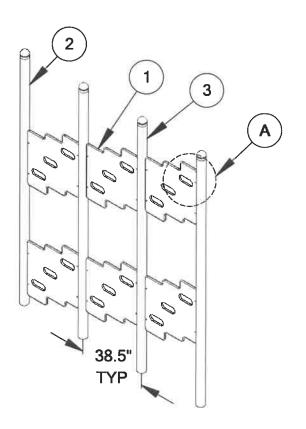
Material Needed:

Concrete: Approximately 8-80 pound bags 2 x 4 or equivalent: For bracing of structure.

Assembly:

- Lay out posts and panels on the ground in the desired location.
 Install the panels to the post with supplied hardware. Tighten all
- hardware.
- 3. Mark hole locations on ground using stakes, holes should be 38.5" center to center.
- 4. Dig holes 22" deep; using a transit to make sure that the holes are all equally deep.
- 5. Now stand teh climber up and into the holes (4 people are required for this step).
- 6. Using 2x4's brace the climber level in the holes, make sure it is securely braced.
- 7. Onec the climber is level in all directions pour concrete in the holes and allow to set 48 hrs. before opened to children.
- 8. Always install a resilient safety surfacing under all play equipment.





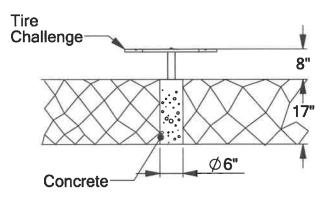
TIRE CHALLENGE

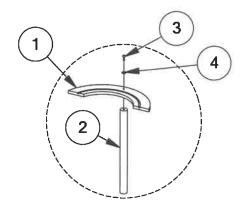
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	913-367	Tire Challenge	1
2	913-368	Tire Challenge Leg	11
3	126-701BPS	3/8" x 1-1/4" Button Pin SS	11
4	316-601	3/8" Flat Washer	11
5	416-505BPK	7/32" Long Arm Button Pin Key	1
6	516-400	LockTite	1

INSTRUCTIONS:

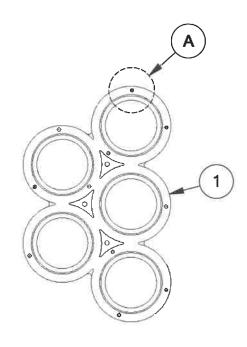
- Attach 11 legs to Tire Challenge as shown in Detail A. Tighten hardware, lock tite may be used also.
 Stand Tire Challenge in desired location and mark all hole 1.
- locations.
- Dig holes per footing diagram.
 Place assembly in holes so that the top of plastic is no more than 8" above protective surfacing. Brace and concrete in ground.
- Install safety surfacing. 5.

FOOTING DIAGRAM





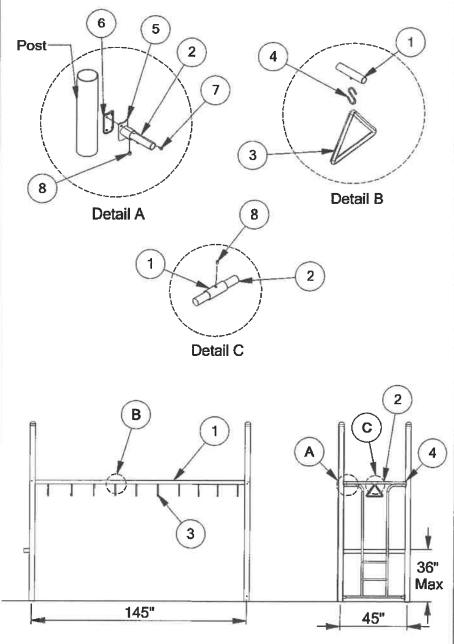
DETAIL A



RING CLIMBER

912-106

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	903-106	Ring Climber	1
2	13-403	40-1/2" Pipe	2
3	545-915	Trapeze Ring	10
4	585-901	"S" Hook	10
5	913-402	4 Hole Attachment Bracket	4
6	905-208	Gasket for Attachment Bracket	4
7	905-526	1/4" Self Tapping Pinned Screw	16
8	196-807	3/8" x 3/8" Set Socket Screw	6



Sheet 1 of 2

RING CLIMBER

Ring Climber 3-1/2" Plan:

The Ring Climber attaches above a deck of stand alone to the center of the posts with 4 attachment brackets. See Top Down View for post placement.

INSTRUCTIONS:

- Attach the 10 Trapeze Rings to the climber using the provided "S" Hooks. The gap in the closed "S" Hooks should be small enough to not allow a dime to slide through it. This is to ensure there are no entanglement hazards.
- Install the climber to the center of the posts; see top view.
- Insert the 10-1/2" pipes into the two sleeves on each end until they are centered and lock down with the 3/8" set screws.
- Install the ladder at a height of approx. 80" from the top of the safety surfacing to the bottom of the atttachment brackets, for school-age children, or at a height of no more than 60" for preschool-age children.
- It is recommended to mark all the heights on the post prior to trying to attach the brackets. The height from top of the safety surfacing to the overhead climber shall no exceed 84".
- Install the attahment brackets to the stubs of the climber, and just barely tighten the set screws.
- Lift one end of the climber and attach the brackets to the post with a gasket between the bracket and post, using the self-tapping screws.
- With the help of another person, raise the other end of the climber and repeat the previous step for this end.

Tighten all set screws.

SPECIFICATIONS:

Event: Galvanized coated steel.

Paint shall be electrostatically applied oven cured powdercoat.

Hardware: Stainless steel tamper resistant.

MAINTENANCE:

Touch up any marred paint surfaces. Periodically check hardware for integrity and tightness.

Sheet 2 of 2

3-1/2" Post Footing

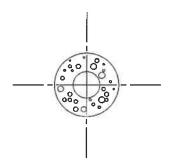
Post Installation:

Footing size may vary due to local soil and weather conditions. Base of footing MUST be below the frost line.

- Dig holes straight down, with a flat bottom and 12" wide making sure to dig holes wide and not cone shaped.
- Hole depths are 22" deep (this depth changes slightly with grade).
- Place a brick or block in the bottom of the hole. Post Depth in concrete varies based upon surfacing used. The posts are designed such that only 34" is allotted for use with surfacing and concrete. Ex: Post installed in 12" of surfacing are 22" into the concrete, not 34". Post installed 2" of Rubber surfacing are 32" deep in concrete.
- Post is placed on top of the brick.
- If the bottom is not flat and roomy, there will be no room to adjust. It is much easier to have too much room rather than not enough.
- You can dig by hand using a posthole digger but a tractor with a 12" auger will make the task much easier.
- Post tops should be level with one another.
- USE A LONG, HEAVY CONSTRUCTION BAR to adjust levels of posts, legs, etc. DO NOT try to level by pushing posts at shoulder or waist length. Carefully bump the posts at the bottom IN THE DIRECTION YOU WANT THE POST TO GO.
- Mark holes and dig by laying the deck on ground and using it as "jig". This marks where the centers of the postholes should be.

- Remove the deck from the area.
- Dig the (4) holes 22" deep and 12" wide. Holes are straight down and flat-bottomed. Install 10" diameter plywood in hole bottoms and place a brick in the bottom of the hole.
- Use a marker to mark 22" from bottom of posts. Use these marks so you can run a 4' level across marks to make sure the tops of the posts are equal to each other. If line marks are on bubble, then post tops should be on bubble to each other.
- Since your holes are 12" diameter and post are centered in holes you have approx. 4-1/2" all around the post.
- Block the posts into center of holes when posts are on bubble. Use scrap lumber and wedge to solidify the posts in their holes as you level the posts. Re-blocking may be necessary at times in order to achieve level. You may also have to widen your holes if they are not dug on center.

Top down view of post set into hole.

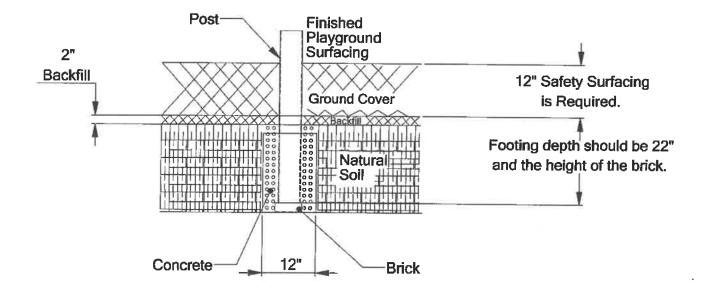


Sheet 2 of 2

1

3.5" Post Footing

Side View of installed Post



Sheet 1 of 2

1

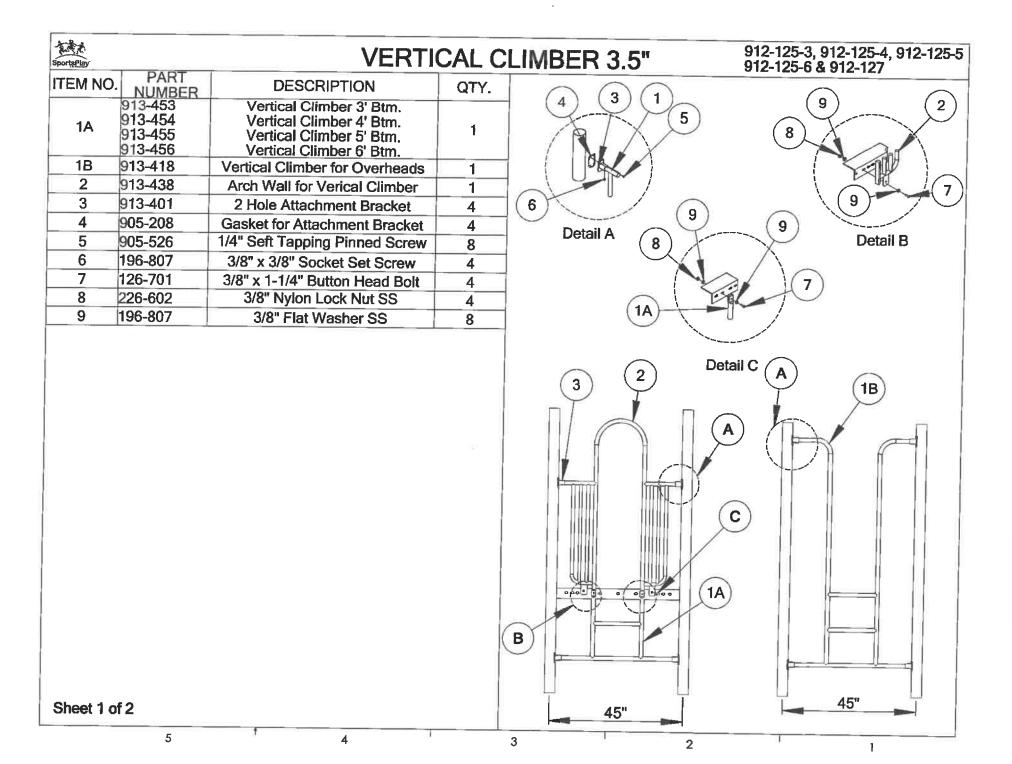
5

A

3

2

đi.



Vertical Climber Plan:

Vertical Climbers are used to access a deck or an overhead ladder. Vertical Climbers accessing a 3' high deck have one rung, 4' has 2 rungs, 5' has 3 rungs, and 6' deck has 4 rungs. They also use an Arch Wall to create an entry and barrier for the deck. See the Top Down View for placement.

INSTRUCTIONS:

- Vertical climbers accessing a deck are installed in the center of the posts on the bottom, have two pieces a bottom and Arch wall, and bolt into the deck on the top of the vertical climber bottom, and on the bottom of the Arch wall. Vertical climbers accessing an overhead ladder are only installed in the center of the post and are one piece. Each is installed using 4 attachment brackets, gaskets to prevent moisture build up between the post and bracket, and held to the post with self-tapping screws.
- Deck access climbers are installed with an even step of 12" from each rung to the deck.
- Vertical Ladders accessing overhead events are installed insuring that the distance between the bottom of the overhead connection pipes is either less than 3.5" or greater than 9". this measurement is <u>CRITICAL</u> for the safety of the users. (See Detail 1B).
- After positioning the climber make sure the setscrews in the brackets are fastened to the climber pipe.

SPECIFICATIONS:

Event: Vertical ladder with barrier walls are made from type #3 steel and connect to the deck with 4 attachment brackets; two for the bottom and two for the top. Rungs are 12" on center and are powder coated.

Paint shall be electro-statically applied oven cured powdercoat.

Hardware: Stainless steel and tamper resistant.

MAINTENANCE:

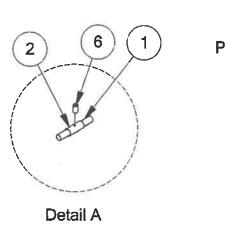
Touch up any marred paint surfaces. Periodically check hardware for integrity and tightness.

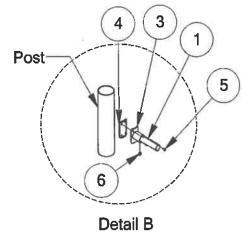
Sheet 2 of 2

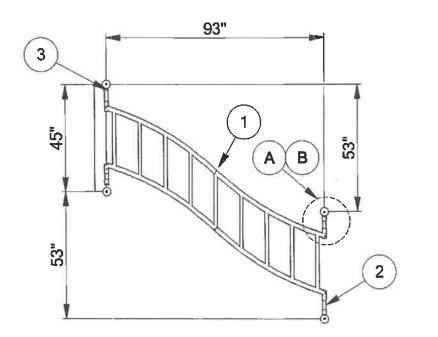
"S" HORIZONTAL LADDER

SportaPiny

aportariny			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	903-109	"S" Horizontal Ladder	1
2	913-410	11-1/4" Stub	4
3	913-402	4 Hole Attachment Bracket	4
4	905-208	Gasket for Attachment Bracket	4
5	905-526	1/4" Self Tapping Pinned Screw	16
6	196-807	3/8" x 3/8" Socket Set Screw	8







Sheet 1 of 2

5



"S" Horizontal Ladder 3-1/2" Plan:

The "S" Horizontal Ladder attaches above a deck or stand alone to the center of the posts with 4 attachment brackets. See the Top Down View for post placement.

INSTRUCTIONS:

- Install the ladder to the center of the posts see top view.
- Insert the stubs into the four sleeves on each end until the end of the stub with the cap is flush with the inside of the welded sleeve on the climber and lock down with the 3/8" set screws.
- Install the ladder at a height of approx. 80" from the top of the safety surfacing to the bottom of the bracket, for school-age children, or at a height of no more than 60" for preschool-age children. The height from the top of the safety surfacing to the overhead climber shall not exceed 84". It is recommended to mark the heights for the ladder before attaching the brackets.
- Install the attachment brackets to the stubs of the climber, and just barely tighten the set screws.
- With the help of another lift one end of the climber and attach the brackets to the post with a gasket between the bracket and post, using the selftapping screws.
- Now raise the other end of the climber and repeat the previous step for this end.
- Tighten all set screws.

SPECIFICATIONS:

Event: Galvanized coated steel.

Paint shall be electrostatically applied oven curred powdercoat.

Hardware: Stainless steel tamper resistant.

MAINTENANCE:

Touch up any marred paint surfaces. Periodically check hardware for integrity and tightness.

Sheet 2 of 2

3-1/2" Post Footing

Post Installation:

Footing size may vary due to local soil and weather conditions. Base of footing MUST be below the frost line.

 Dig holes straight down, with a flat bottom and 12" wide making sure to dig holes wide and not cone shaped.

Hole depths are 22" deep (this depth changes slightly

with grade).

Place a brick or block in the bottom of the hole. Post Depth in concrete varies based upon surfacing used. The posts are designed such that only 34" is allotted for use with surfacing and concrete. Ex: Post installed in 12" of surfacing are 22" into the concrete, not 34". Post installed 2" of Rubber surfacing are 32" deep in concrete.

Post is placed on top of the brick.

 If the bottom is not flat and roomy, there will be no room to adjust. It is much easier to have too much room rather than not enough.

You can dig by hand using a posthole digger but a tractor with a 12" auger will make the task much

easier.

Post tops should be level with one another.

USE A LONG, HEAVY CONSTRUCTION BAR to adjust levels of posts, legs, etc. DO NOT try to level by pushing posts at shoulder or waist length. Carefully bump the posts at the bottom IN THE DIRECTION YOU WANT THE POST TO GO.

Mark holes and dig by laying the deck on ground and using it as "jig". This marks where the centers of

the posthoies should be.

Remove the deck from the area.

 Dig the (4) holes 22" deep and 12" wide. Holes are straight down and flat-bottomed. Install 10" diameter plywood in hole bottoms and place a brick in the bottom of the hole.

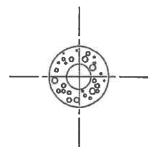
Use a marker to mark 22" from bottom of posts. Use these marks so you can run a 4' level across marks to make sure the tops of the posts are equal to each other. If line marks are on bubble, then post tops should be on bubble to each other.

Since your holes are 12" diameter and post are centered in holes you have approx. 4-1/2" all around

the post.

 Block the posts into center of holes when posts are on bubble. Use scrap lumber and wedge to solidify the posts in their holes as you level the posts. Re-blocking may be necessary at times in order to achieve level. You may also have to widen your holes if they are not dug on center.

Top down view of post set into hole.



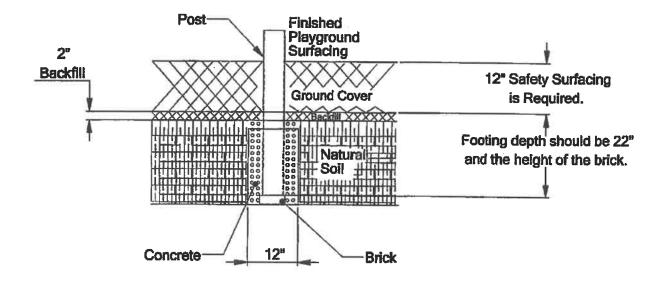
Sheet 2 of 2

1



3.5" Post Footing

Side View of installed Post



Sheet 1 of 2