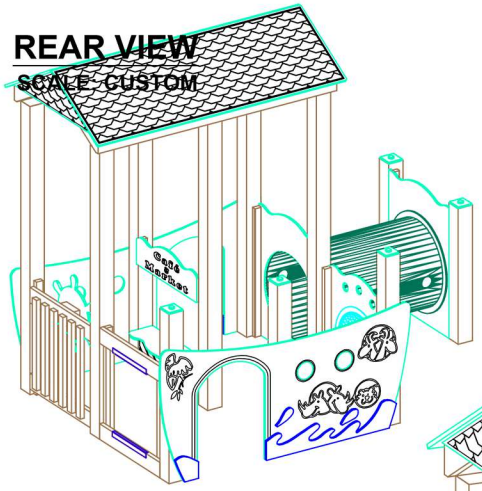
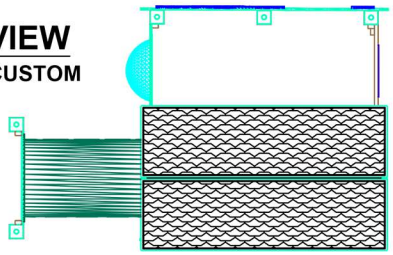
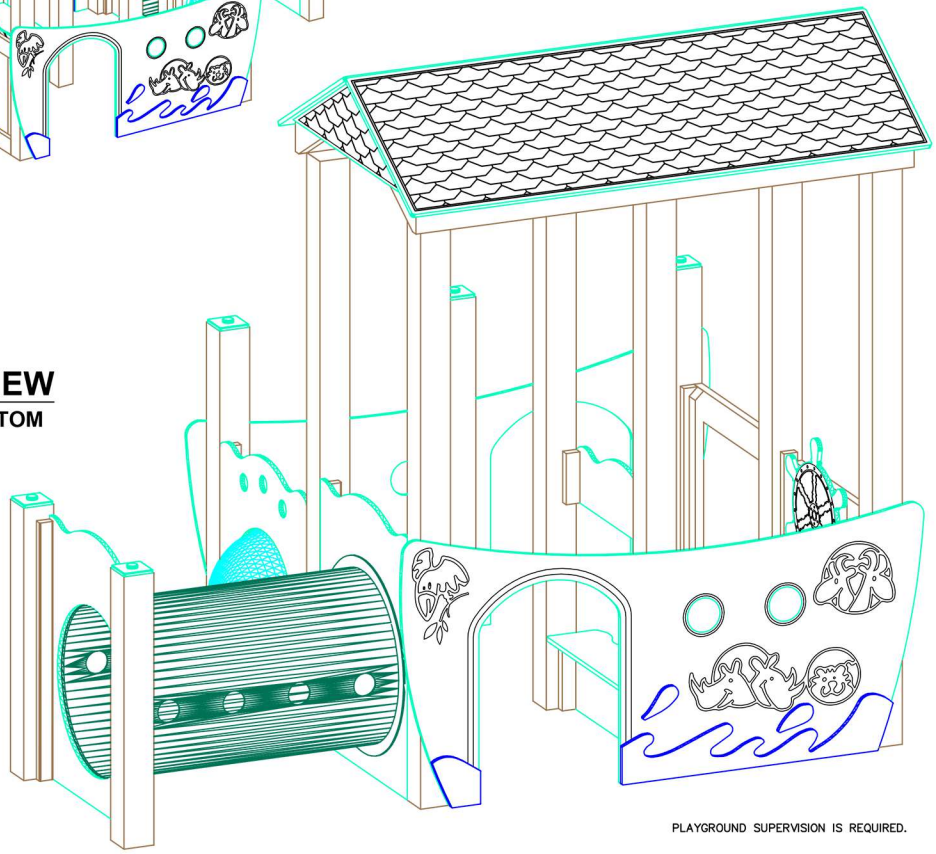
REAR VIEW
SCALE: CUSTOM



TOP VIEW
SCALE: CUSTOM



FRONT VIEW
SCALE: CUSTOM



PLAYGROUND SUPERVISION IS REQUIRED.

REFERENCE NUMBER	DATE	DRAWN/SAVED BY	SCALE	SHEET	PAGE
R3–Ark RECYCLED R3–ARK DESIGN	9–12–18	WSB / WILLOW.BRANSCUM	3/8" = 1'–0"	3 OF 3	3D_VIEW

R3 RECYCLED LINE

INSTALLATION INTRODUCTION

It is very important that you read this entire manual before beginning the installation process.
We are continuously striving to improve our product,
and this *Installation Introduction* will contain the most up-to-date information.

PLEASE NOTE THE FOLLOWING:

INVENTORY

Please note that inventory should only be taken with the main Packing List that ships with each job.

STORAGE

When play equipment is received at a job site it should be installed as soon as possible (within a few days from receipt). We package the equipment to keep it safe and damage-free during shipment. However, the packaging material is not suited for periods of extended storage in an uncontrolled environment. The combination of moisture from the environment mixed with the heat generated inside the plastic bag may cause damage to the finish of the powder coated items.

If an immediate installation is not possible, certain steps should be taken to minimize the risk of damage to the equipment. If play equipment must be stored, ideally it should be kept in a controlled environment (storage container, inside building, etc…) away from heat and moisture. If this is not possible, the packaging material should be removed from the equipment, using caution so as not to damage the finish with special regard given to powder coated items.

Any large sheets of poly (panels, etc.) need to be stored flat or well-supported to prevent warping.

Our playground equipment is engineered and designed based on the most current ASTM F1487 standard to provide a safe yet fun and challenging play environment for children that helps develop skills appropriate for specific age groups. Our playground equipment is also designed for ease of installation and maintenance so more time can be spent playing -- not working!

It is very important that you read this entire manual before beginning the installation process.

You may choose to build your modular structure in a radiating fashion, meaning that you will start with a single post or deck assembly located at the core of the structure creating a central backbone to build outward from. You may also choose to start building the structure at one end and work toward the other. Because these posts are a large diameter and are flat and even on the bottom, setting a post in concrete to begin the installation is not necessary. Once the first deck is installed, the structure is quite stable. We recommend you use the actual parts to locate the vertical post locations along with the FOOTING LAYOUT drawing provided.

There may be situations or special circumstances that will require you to use your own judgment. If you have any questions or are unsure about a situation, please contact your local Sales Representative.

Taking the time to read these instructions in their entirety will help ensure that your equipment is assembled correctly, maintained properly and enjoyed with proper adult supervision so that children can enjoy it for years to come.

SITE PREPARATION

Using the provided plan view drawing of your playground, locate all structures within your site making sure that the placement of the structures meets all required clearances.

All asphalt, concrete and other such hard debris must be removed from the entire site prior to installation.

Site must be graded as close to level as possible to create the safest possible environment for the playground. Special installation considerations must be implemented for sites that are not level.

Check local soil and drainage conditions within the site area. Proper drainage around the structures and their supports is important. Inquire with local contractors in your area for the proper recommendations.

Check with local authorities regarding building codes, permit needs, requirements, etc. before beginning installation.

Site must be isolated from hazards such as swimming pools, ponds, lakes, other bodies of water, highways, roads, drop-offs, cliffs, etc. A method to contain children must be provided that still allows for observation by supervisors. If fences are used, they should conform to local building codes and/or ASTM F-2049.

Site should be surveyed and marked for underground utilities prior to excavation.

Never leave the job site unattended without making sure that all open holes are covered with a material such as plywood. Rope off all unfinished equipment to keep the children away until the build is complete.

SAFETY AND CLEARANCE STANDARDS AND GUIDELINES

Our play equipment is engineered and designed based on the most current ASTM F1487 standard.

For information regarding public playground safety and your responsibilities as the purchaser, manager or installer of this equipment, we recommend you contact the U.S. Consumer Product Safety Commission (CPSC) for the latest copy of the Public Playground Safety Handbook. You may obtain a copy of this guidebook by contacting the CPSC at 800-638-2772, or by visiting their website at www.cpsc.gov.

The playground area, both around and underneath the structure, must be covered with impact attenuating surfacing material. The surfacing material used should have a Critical Height Value of at least the height of the highest designated play surface on the equipment. The critical height for surfacing is to be rated in accordance with the most current version of ASTM F1292. To purchase a copy of ASTM F1292, Standard specification for impact attenuation of surface systems under and around playground equipment, contact American Society for Testing and Materials (ASTM) by calling 610-832-9585, or by visiting their website at www.astm.org. This information is also given in the Public Playground Safety Handbook. Additional considerations for protective surfacing materials are given as well.

Acceptable playground surfacing materials are available in two basic types: unitary or loose-fill. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products. If loose-fill surfacing materials are used, please refer to the Public Playground Safety Handbook published by the CPSC for critical height values for tested materials. We at R3 recommend a minimum depth of 12” for our play equipment.

Never add components that are not approved by R3.

If relocation of any equipment is desired that differs from the drawings and/or site plan that was provided, prior written approval from R3 must be obtained. Failure to do so may create a dangerous play environment for children.

If individual pieces of equipment are ordered as parts only (without being placed in a site plan drawing), it is the responsibility of the customer/installer to determine the appropriate use zone needed for that equipment. Contact your local sales representative to get this information.

If you have any doubt about the correct placement of any piece of equipment, please contact your sales representative or R3 to get clarification.

Unless specified otherwise, the fall height of a piece of equipment is the distance between the highest designated playing surface and the protective surfacing beneath it.

The use zone for play equipment should extend a minimum of 6’ in all directions from the perimeter of the equipment.

The use zones of two stationary pieces of playground equipment that are positioned adjacent to each other may overlap of the adjacent designated play surfaces of each structure are no more than 30” above the protective surface and the equipment is at least 6’ apart.

If adjacent designated play surfaces on either structure exceed a height of 30”, the minimum distance between the structures should be 9’.

Use zones of the play equipment will be shown in the plan view drawing and must be adhered to. The fall height of the equipment will also be given in the drawing.

PRE-INSTALLATION CHECK

Compare all items received to the main BOM/packing list. Notify your sales representative immediately if any parts are missing or damaged. **We are not responsible for items discovered missing or damaged after 72 hours from time of delivery!**

COMMON INSTALLATION TOOLS

Wheelbarrow (to mix concrete)
High speed 3/8" electric drill w/clutch with 3/32" and 3/16" bits
String level, Magnetic level, 4' level
Large flat head screwdriver
Mallet
Hack saw
Shovel / Post hole digger / Auger
Pry bar
Tape measure
3/16" and 1/4" allen head wrench
T-10 TORX Tool (supplied by R3)
T-15 TORX Tool (supplied by R3)
T-25 TORX Tool (supplied by R3)
T-30 TORX Tool (supplied by R3)
T-45 TORX Tool (supplied by R3)

INSTALLATION GUIDELINES

Excavate holes in accordance with footing drawing. If the site cannot be graded level, adjust the depth of footings to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required.

Verify equipment will fit in area as shown on drawings. If you choose to set the first post in concrete for added stability during installation, allow concrete to harden at least 24 hours before adding additional posts, decks and components. Assemble the entire structure before pouring the rest of the concrete, using the equipment to place vertical posts (verify using footing drawing). This will be the procedure unless otherwise instructed per the individual instruction. Concrete with a minimum psi of 2,500 must be used, and should be mixed in accordance with manufacturer's specifications.

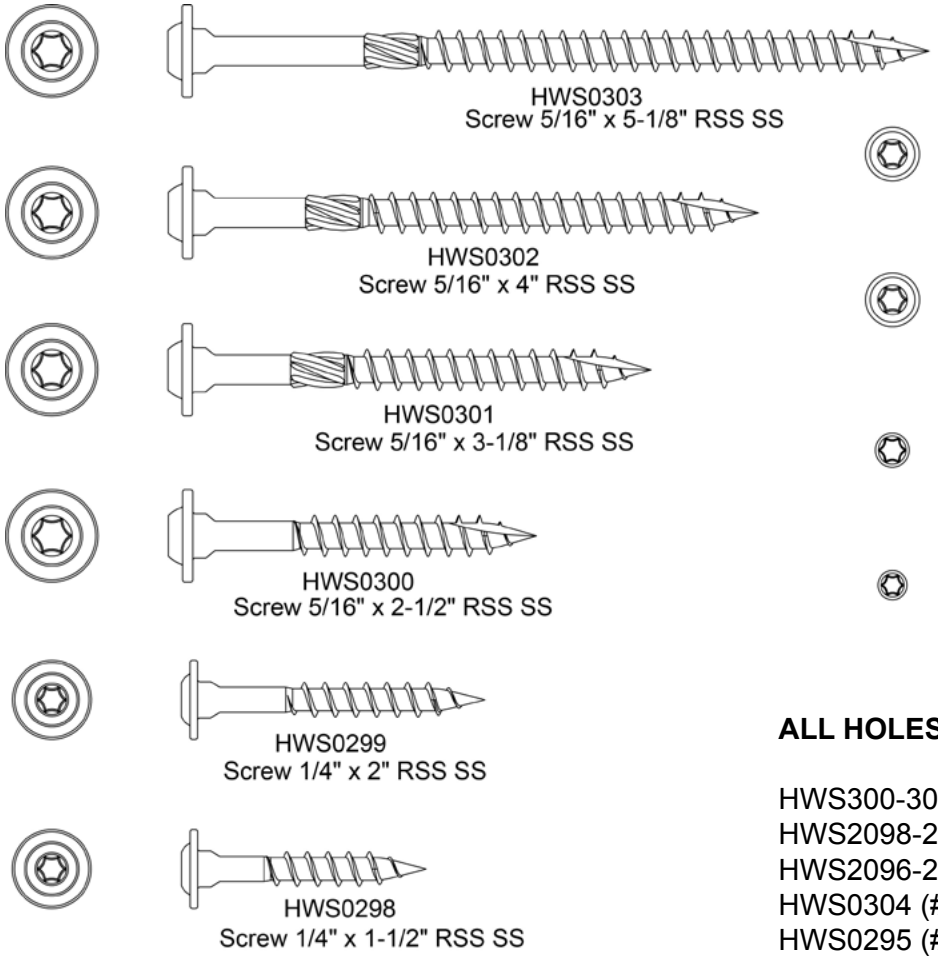
Never leave the installation site unattended without making sure that all fastening hardware on all equipment is tight. Failure to do so may result in injury or component damage.

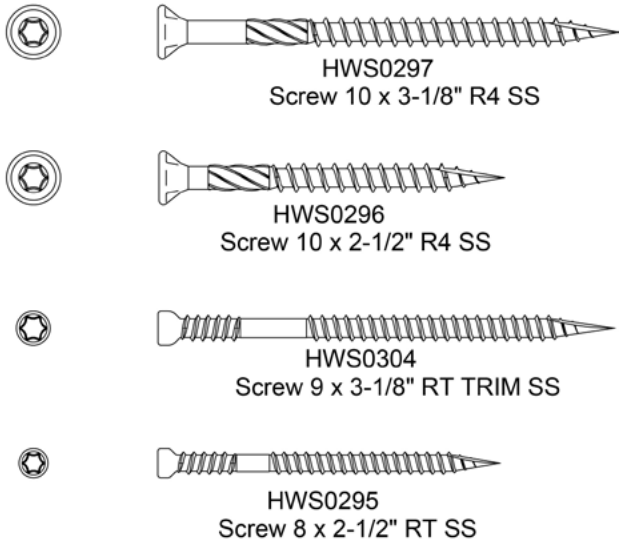
All installation areas should be roped off with clearly marked warning signs posted. Even during installation, it has been found that children will use unattended equipment - thereby risking accidents. Do not attach swing chains, exercise rings, or similar moving components until entire construction is complete and safety surfacing is in place. Remember that any equipment which appears to be complete will invite unauthorized usage regardless of its actual state of readiness.

Keep installation site roped off for at least 48 hours before equipment usage to allow concrete to harden.

R3 recommends you have a Certified Playground Safety Inspector (CPSI) on site during installation. At a minimum, your structure should be inspected by a CPSI after surfacing is placed and prior to use by children.

STANDARD HARDWARE





ALL HOLES MUST BE PREDRILLED

HWS300-303 (5/16” screws) use a T-30 bit
HWS2098-299 (1/4” screws) use a T-25 bit
HWS2096-297 (#10 screws) use a T-25 bit
HWS0304 (#9 screws) use a T-15 bit
HWS0295 (#8 screws) use a T-10 bit

*NOTE: The #8 and #9 screws self-countersink - use caution not to drive in too far. The #10 screw head will lay flush and the others have a built in washer-like head.

IN-GROUND MOUNT

Any components that require a footing (vertical post, slide foot, climbers, etc.) are sent at a length to accommodate 12” of surfacing material. If a different depth of surfacing will be used, modifications need to be made (EXAMPLE: If only 8” of surfacing material will be used, posts or legs will either need to be cut down 4” or footings will need to be dug 4” deeper).

When concrete is poured in footing, 4” of space needs to be left at the top to allow for backfill of sub-grade.

Any components that require a footing (vertical post, slide foot, climbers, etc.) are sent at a length to accommodate a specific deck height. If deck height is modified from standard, modifications need to be made to the part (EXAMPLE: If a component is made for a 72” deck height, but is being used on a 68” deck height, posts or legs will need to be cut down 4” -- plus any additional adjustments for surfacing as described above).

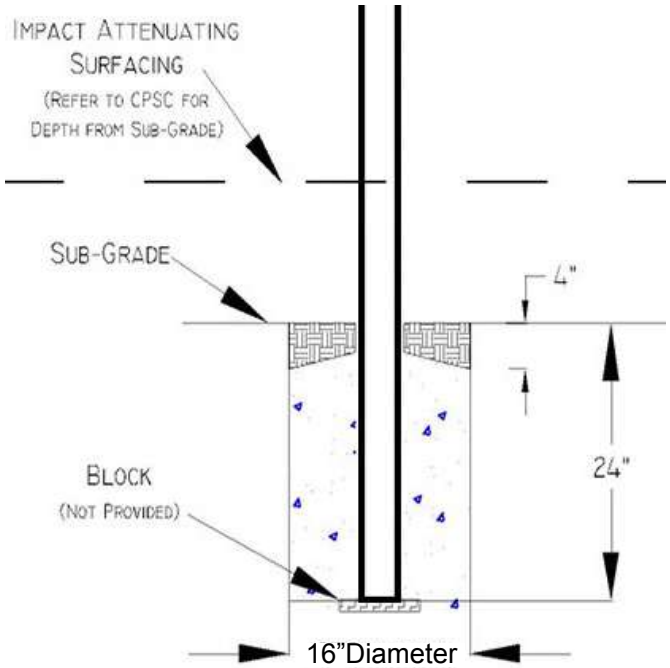
Most climbers are manufactured for specific deck heights. (EXAMPLE: A coil climber is manufactured for a 24”, 36”, 48”, 60”, 72”, 84” and 96” deck height instead of only one “standard” deck height).

Concrete must have a minimum rating of 2,500 psi and must be mixed per manufacturer’s recommendations. Allow concrete to harden for at least 48 hours before equipment usage! NOTE: One 80# bag of concrete yields approximately 0.60 cubic feet.

IN-GROUND MOUNT -- 16” x 24”

Standard footing for vertical posts in a structure

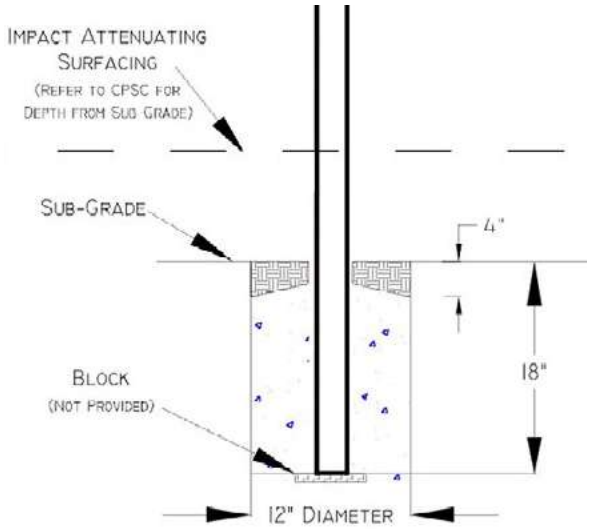
(uses 2.8 cubic feet of concrete per footing)



IN-GROUND MOUNT -- 12”x18” FOOTING

Standard footing for:
Secondary items in the play structure

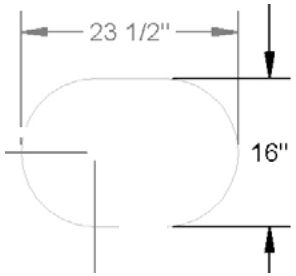
(uses 1.18 cubic feet of concrete per footing)

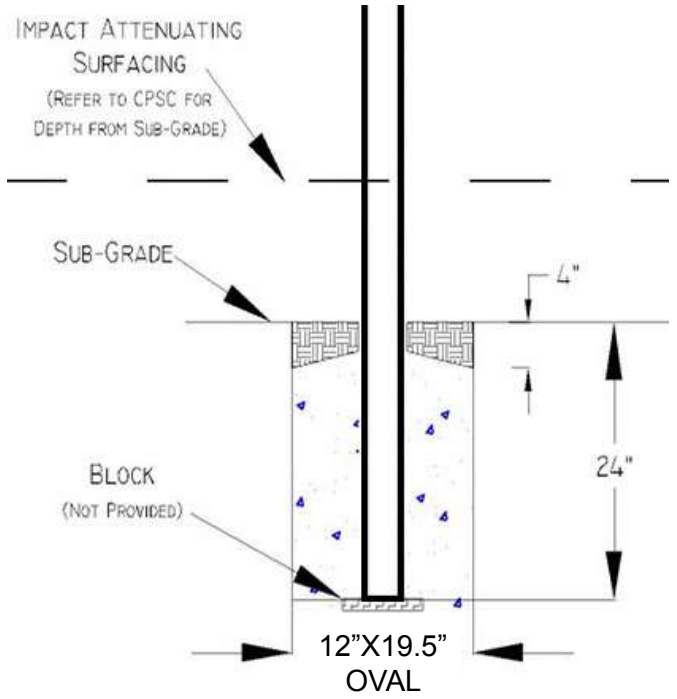


IN-GROUND MOUNT -- 12”x19-1/2”x 24”

Standard footing for “dual” vertical posts in a structure

(uses 2.4 cubic feet of concrete per footing)





SUPERVISION GUIDELINES

Even playgrounds that are designed, installed and maintained in accordance with safety guidelines and standards can still present hazards to children in the absence of adequate supervision.

Because all playgrounds present some challenge and because children can be expected to use equipment in unintended and unexpected ways, adult supervision is highly recommended.

Not all playground equipment is appropriate for all children who may use the playground. Direct children to age-appropriate activities.

Supervisors should be aware that the playground equipment is designed based on the most current version of ASTM standard F1487. The age-appropriateness of the equipment is also set based on this standard. The range of users encompassed by this consumer safety performance specification is the 5th percentile 2-year-old through the 95th percentile 12-year-old.

It is important to recognize that preschool-age children require more attentive supervision on playground equipment than older children.

Following these recommendations will help minimize accidents and injury to children while playing, but will not eliminate them entirely.

Always remember that hazards can be eliminated - but risk can not.

Supervisors should understand the basics of playground safety such as:

- Checking for broken equipment and making sure children don't play on it.
- Checking for and removing unsafe modifications, especially ropes tied to equipment before letting children play.
- Checking for properly maintained protective surfacing.
- Making sure children are wearing proper footwear.
- Watching and stopping dangerous horseplay, such as children throwing protective surface materials, jumping from heights, etc.
- Watching for and stopping children from wandering away from the play area.
- Not permitting the use of wet playground equipment. Wet equipment will not provide the necessary traction and gripping capability. Slips or falls may occur.
- Constantly observing play patterns to note possible hazardous play and overcrowding on playground equipment.
- Making sure children do not wear loose clothing, hoods, drawstrings or jewelry while on the playground equipment. These items could pose a strangulation/entanglement hazard.
- Checking to see that play surfaces are at an acceptable temperature before allowing children to play on them.

MAINTENANCE

Surfacing should be checked regularly to ensure surfacing has not displaced significantly, particularly in areas of the playground most subject to displacement (heavy traffic areas). Displaced loose-fill surfacing should be raked back into proper place so that a constant depth is maintained throughout the playground area.

Key points to look for during regular checks of surfacing:

- Areas under swings and at slide exits. Activity in these areas tend to displace surfacing quickly. Rake loose-fill surfacing back in place.
- Pooling water on mulch surfacing. Wet mulch compacts faster then dry, fluffy mulch. If puddles are noticed regularly, consider addressing drainage issues.
- Frozen surfacing. Most loose-fill surfacing that freezes solid no longer functions as protective surfacing. Even if the first few inches are loose, the base layer may be frozen and the impact attenuation of the surfacing may be significantly reduced.

R3 does not manufacture loose-fill surfacing materials and is only providing the above information as an added measure of safety. Please contact the manufacturer of the surfacing for recommended maintenance and inspection requirements. The checklist on the following pages is intended to address general maintenance concerns. It does not provide a complete safety evaluation of the playground equipment such as risk of falls from equipment or moving impact incidents. Also, please be aware that playgrounds that are designed, installed and maintained in accordance with safety guidelines and standards can still present hazards to children in the absence of adequate supervision.

MAINTENANCE

An inspection and maintenance program is a requirement of playground ownership. Whether you have multiple large facilities with numerous equipment or one piece of equipment or fall somewhere in between, it is your responsibility as a playground owner/operator to inspect and maintain your equipment. Because the safety of playground equipment and its suitability for use depend on good inspection and maintenance, a comprehensive maintenance program for each playground must be developed and strictly followed. All playground areas and equipment should be inspected frequently for potential hazards, paying special attention to moving parts and other components which can be expected to wear. Inspections should be carried out in a systematic manner by trained personnel familiar with the playground area, such as maintenance workers, playground supervisors, etc. Inspections alone do not constitute a comprehensive maintenance program. Any damaged or worn parts, or any other hazards identified during inspection must be repaired or replaced before allowing children to use the playground equipment.

Implementing an inspection and maintenance program is of the utmost importance and requires the full cooperation from the owner down to the playground supervisors. The importance of this program should be understood and supported by all members of administration, maintenance and the inspection staff as well as the playground supervisors. All information pertaining to the equipment should be kept on file (e.g., manufacturer of equipment, sales representative information, sales brochures, date of purchase, sales paperwork, shipping paperwork, drawings, bill of materials/packing list, installation instructions, date of installation, installer information, warranty information, etc. A record of any accident or injury reported to have occurred on the playground equipment should also be retained.).

The frequency of inspection and maintenance will be determined by several factors, such as the amount of use the equipment receives, the age of the children playing on the equipment, the age of the equipment and the area in which the equipment is installed. However, the more the equipment is inspected, the better the chances of finding and correcting any potential problems. A recorded inspection schedule should be adhered to and a copy signed and kept on file. New sites and equipment should be added to the inspection schedule. Training must be an ongoing commitment. The inspection report will serve as a report card against your audit and action plan. The audit will continue to play a major role in the inspection and maintenance program by measuring progress using statistics, actions taken and actions recommended.

We recommend that you enlist the services of a Certified Playground Safety Inspector to assist you with auditing your equipment and developing an inspection and maintenance plan to suit your individual needs. He or she will also be able to assist in the development of short term plans as well as long term plans in response to equipment that is broken, damaged, missing, vandalized, worn, etc.

The checklist on the following pages is intended to address general maintenance concerns. It does not provide a complete safety evaluation of the playground equipment such as risk of falls from equipment or moving impact incidents. Also, please be aware that playgrounds that are designed, installed and maintained in accordance with safety guidelines and standards can still present hazards to children in the absence of adequate supervision. If the checklist on the following pages meets your needs, please make several copies before marking on the pages. This checklist is yours to modify as you determine best for your equipment.

MAINTENANCE CHECKLIST

Surfacing

_____ Adequate protective surfacing under and around the equipment
  _____ Install/replace/surfacing

_____ Surfacing materials have not deteriorated
  _____ Replace surfacing
  _____ Other maintenance: _____

_____ Surfacing materials contain no foreign objects or debris
  _____ Remove trash and/or debris

_____ Loose-fill surfacing materials are not compacted
  _____ Rake and fluff surfacing

_____ Loose fill surfacing materials have not been displaced under heavy use areas, such as under swings or at slide exits
  _____ Rake and fluff surfacing

General Hazards

_____ There are no sharp points, corners or edges on the equipment
_____ There are no missing or damaged protective caps or plugs
_____ There are no hazardous protrusions
_____ There are no potential clothing entanglement hazards such as open S-hooks or protruding bolts
_____ There are no crush and shearing points on exposed moving parts
_____ There are no trip hazards such as exposed footings or anchoring devices and rocks, roots or any other obstacles in a use zone
  _____ Recover exposed footings or anchoring devices
  _____ Remove rocks, roots or other debris

Drainage

_____ The entire play area (inside equipment as well as surrounding area) has satisfactory drainage, especially in heavy use areas such as under swings or at slide exits
  _____ Improve drainage
  _____ Add drain holes
  _____ Other maintenance: _____

Security of Hardware

_____ There are no loose fastening devices or worn connections
  _____ Replace fasteners
  _____ Other maintenance: _____
_____ Moving parts such as swing hangers, bearings and track rides are not worn
  _____ Replace part
  _____ Other maintenance: _____

General Upkeep of Playgrounds

_____ There are no user modifications to the equipment, such as strings or ropes tied to the equipment, swings looped over top rails, etc.
  _____ Remove string or rope
  _____ Correct other modification
_____ The entire playground area (inside equipment as well as surrounding area) is free from debris or litter such as tree branches, soda cans, bottles, animal feces, glass, etc.
  _____ Clean playground area and remove debris
_____ There are no missing trash receptacles
  _____ Replace trash receptacles
_____ Trans receptacles are not full
  _____ Empty trash receptacles
_____ All play structures should have a legible Manufacturer's ID label installed.
  _____ Install new label

MAINTENANCE CHECKLIST

Paint

_____ Paint is not peeling, cracking, chipping or chalking
  _____ Sand area and repaint with provided touch-up paint

Durability of Equipment

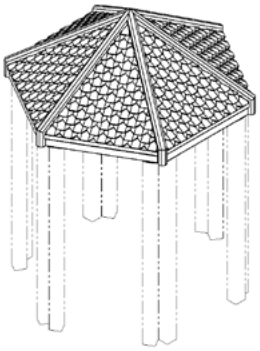
_____ There is/are no rust, cracks, splits, splinters or any other damage to the play equipment.
  _____ Repair damage
  _____ Order replacement part
  _____ Other maintenance: _____
_____ There are no broken or missing components on the equipment (e.g. handrails, guardrails, barriers, steps, rungs)
  _____ Repair damage
  _____ Order replacement part
  _____ Other maintenance: _____
_____ There are no damaged fences, benches or signs on the playground
  _____ Repair damage
  _____ Order replacement part
  _____ Other maintenance: _____
_____ All equipment is securely anchored
  _____ Anchor equipment
_____ Equipment is sturdy and not easily swayed
_____ Check equipment for signs of tilting and/or sinking by checking alignment of major support posts, beams, platforms, etc.
_____ Check windows/domes/bubbles/mirrors for signs of wear, cracks or discoloration

Signature _____ Date _____

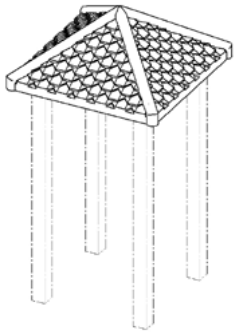
Action Taken _____

ROOF
R3 Recycled Line

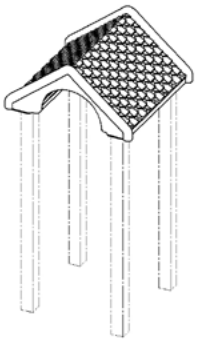
USER GROUP: 2 - 12
RECOMMENDED CREW: 2 people
TOOLS REQUIRED:
T-25 TORX tool (supplied by manufacturer)
T-30 TORX tool (supplied by manufacturer)
Level
High speed 3/8" electric drill *w/clutch*
NOTE: Use of any other driver may result in damage to tool and/or hardware!
3/8" drill bit
1/2" drill bit
INSTALLATION TIME: 1 hour



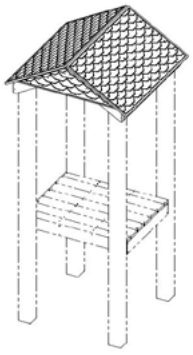
Hex Roof



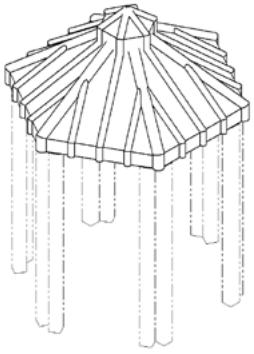
Square Roof

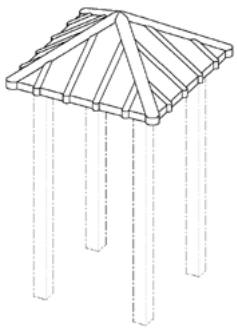


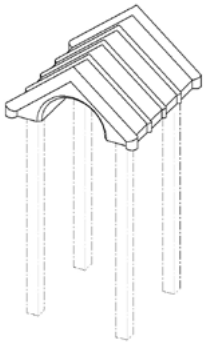
Gabled Roof

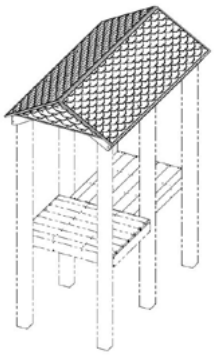


Gabled Panel Roof









PRE-INSTALLATION CHECK:

Compare all items received to the packing list. Notify your local sales representative immediately if any parts are missing or damaged.

We are not responsible for items discovered missing or damaged after 72 hours from time of delivery!

Before beginning installation, make sure that you have read and understand the *Installation Introduction* manual that was supplied to you. If you did not receive a copy, or if you have a question regarding anything covered in this manual, contact your local sales representative.

SQUARE ROOF AND GABLE ROOF

STEP 1
Refer to PLAN VIEW and FOOTING LAYOUT to locate roof.

STEP 2
Select four square/gable roof attachment panels and sixteen #10x2-1/2" R4 SS screws. Position plate on top of vertical post with edges of plate aligned with inside edges of post (the two larger holes in the plate will face the outside of the roof). Using a 3/16" drill bit, predrill four holes in each post through holes in plate and secure with screws as shown below. Repeat for all plates.

STEP 3
Select roof, eight 1/4" zip togglers and eight 1/4"x1-3/4"wafer bolts. Set roof in place on plates, making sure roof is centered in grid. Using a 1/2" drill bit, drill two pilot holes through plate into roof. Insert zip togglers in holes. Grasp loop at end and slide insert flush with surface. Snap off flush with surface. Insert wafer bolts and gently tighten. Repeat for remaining three plates. Tighten hardware (see Zip Toggler Detail).

PLATE TO POST
#10x2-1/2" R4 SS screws
predrill with 3/16" drill bit
use T-25 tool for hardware

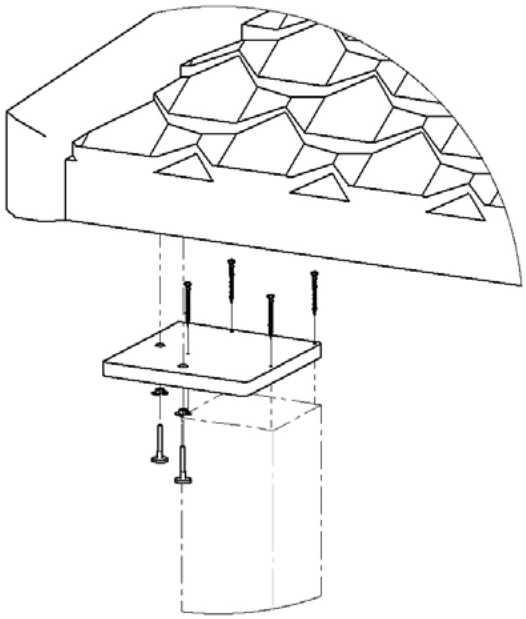


PLATE TO ROOF
1/4" zip toggler
1/4"x1-3/4" wafer bolt
predrill with 1/2" drill bit

Zip Toggler Detail

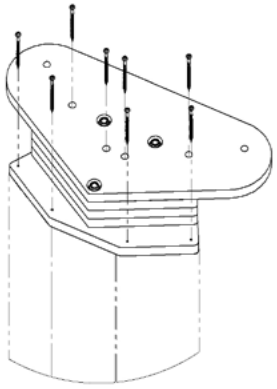
1. Insert in hole.
2. Zip flush with surface.
3. Snap off flush with surface.
4. Tighten bolt flush.

HEX ROOF

STEP 1
Refer to PLAN VIEW and FOOTING LAYOUT to locate roof.

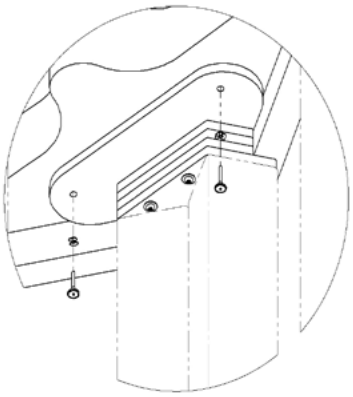
STEP 2
Select one hex roof attachment bracket and eight #10x3-1/8" R4 SS screws. Position plate on top of vertical post with edges of bracket aligned with outside edges of post (rounded edges on top of bracket will face the inside of the roof). Using a 3/16" drill bit, predrill eight holes in each post through holes in bracket and secure with screws as shown below. Repeat for all brackets.

BRACKET TO POST
#10x3-1/8" R4 SS screws
predrill with 3/16" drill bit
use T-25 tool for hardware

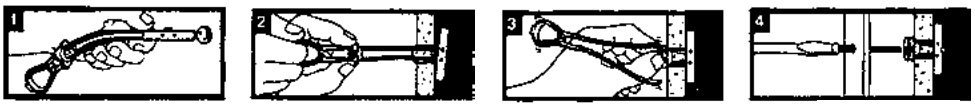


STEP 3
Select roof, twelve 1/4" zip togglers and twelve 1/4"x1-3/4"wafer bolts. Set roof in place on brackets, making sure roof is centered in grid. Using a 1/2" drill bit, drill two pilot holes through bracket into roof. Insert zip togglers in holes. Grasp loop at end and slide insert flush with surface. Snap off flush with surface. Insert wafer bolts and gently tighten. Repeat for remaining five brackets, keeping roof centered. Tighten hardware (see Zip Toggler Detail).

BRACKET TO ROOF
1/4" zip toggler
1/4"x1-3/4" wafer bolt
predrill with 1/2" drill bit



Zip Toggler Detail



1. Insert in hole.
2. Zip flush with surface.
3. Snap off flush with surface.
4. Tighten bolt flush.

GABLED PANEL ROOF

STEP 1

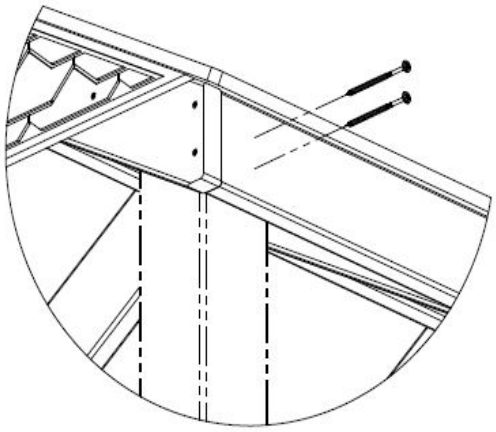
Refer to PLAN VIEW and FOOTING LAYOUT to locate roof.

STEP 2

Set roof in place over posts. Verify roof is level. Using a 3/16” drill bit, drill two holes through the roof into each post as shown below. Secure with screws.

ROOF TO POST

5/16”x5-1/8” RSS SS Screws
predrill with 3/16” drill bit
use T-30 tool for hardware

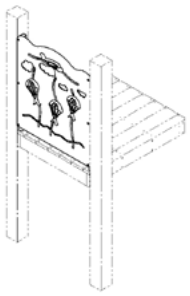


R3 Recycled Line
ACTIVITY PANELS AND BARRIERS

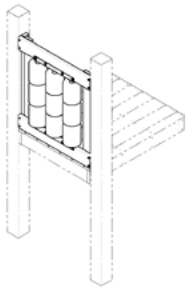
USER GROUP: 2 - 12
RECOMMENDED CREW: 2 people
TOOLS REQUIRED:

T-25 TORX tool (supplied by manufacturer)
T-30 TORX tool (supplied by manufacturer)
T-45 TORX tool (supplied by manufacturer)
Level
Tape measure
3/16" drill bit
High speed 3/8" electric drill *w/clutch*
NOTE: Use of any other driver may result in damage to tool and/or hardware!

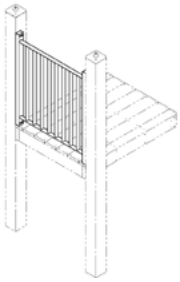
INSTALLATION TIME: 15 minutes - 1 hour



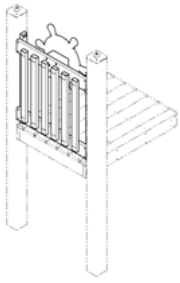
Above Deck Activity Panels



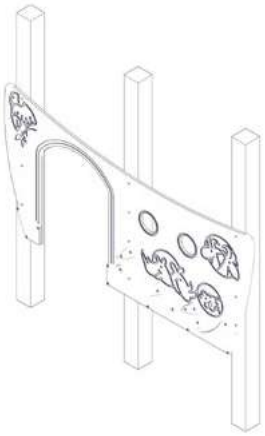
Above Deck Spinner Panels



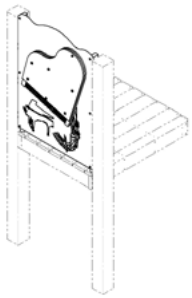
Above Deck Pipe Wall



Above Deck Picket Wall

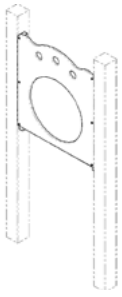


Large Ground Level Panels (Noah's Ark shown)

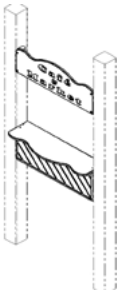


Above Deck Piano Panel

Below Deck Half Activity Panels



Below Deck Full Activity Panels



Below Deck Table Top Panels Café Market Table

PRE-INSTALLATION CHECK:

Compare all items received to the packing list. Notify your local sales representative immediately if any parts are missing or damaged.

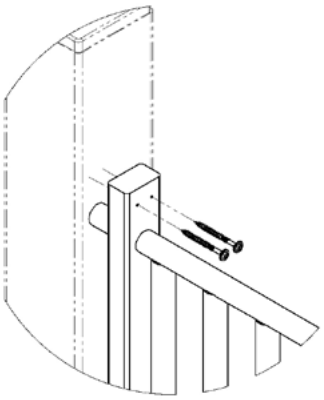
We are not responsible for items discovered missing or damaged after 72 hours from time of delivery!

Before beginning installation, make sure that you have read and understand the *Installation Introduction* manual that was supplied to you. If you did not receive a copy, or if you have a question regarding anything covered in this manual, contact your local sales representative.

Refer to PLAN VIEW and FOOTING LAYOUT to determine location and orientation of activity panel or barrier.

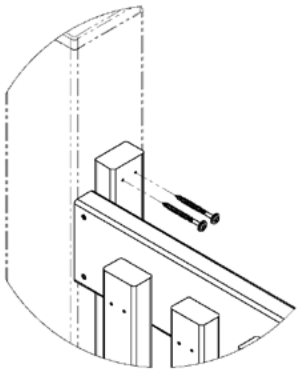
BARRIER CONNECTIONS

For pipe walls, slide attachment boards over stubs of pipe wall (picket walls are shipped pre-assembled). For all barriers, set barrier in place, making sure that pickets are facing the outside of the deck (if applicable), and the attachment boards are resting on the face of the deck. **NOTE:** The top of the attachment board should be 41" above the surface of the deck. Make sure side of panel is flush with post. Using a 3/16" drill bit, drill two pilot holes through the top and the bottom of the attachment board into one post. Secure using two 5/16"x4" RSS stainless steel screws at the top and at the bottom of each attachment board. See details below.

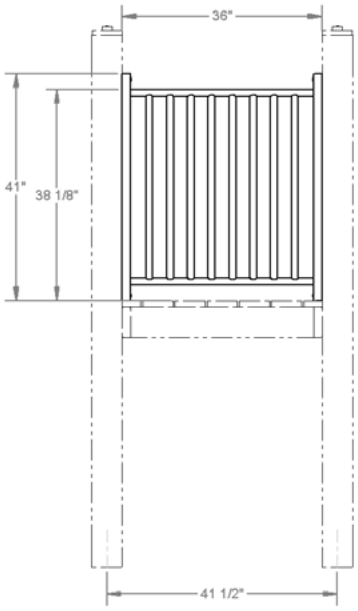


Pipe Wall to Post

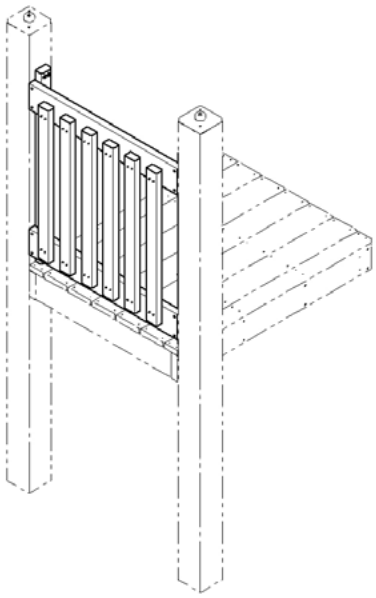
BARRIER TO POST
5/16"x4" RSS SS Screw
predrill with 3/16" drill bit
use T-30 tool for hardware



Picket Wall to Post



Pipe Wall Elevation



Picket Wall Iso View
(pickets facing outside of deck

PANEL CONNECTIONS (For large, ground-level panels see Page 5)

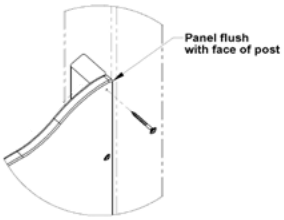
For standard panels, half panels and café-market table, attach panel support strips to side of panel that will face deck (spinner panels are shipped pre-assembled, and piano panels use longer strips).

NOTE: Support strips are 2”x3”. The 2” side will attach to the panel (the 3” side is for attachment to the post). For half panels, the support strip will be flush with the bottom of the panel. For standard panels, the support strip will extend 2” past the bottom of the panel to allow a 2” space between the panel and the deck when installed.

PANEL TO SUPPORT

5/16”x2-1/2” RSS SS Screw
predrill with 3/16” drill bit
use T-30 tool for hardware

Standard Panel to Support



Standard Panel to Support
(Close Up)

Set panel in place, making sure that the “finished side” of the panel is facing the outside of the deck or play area, that it is flush with the post and that panel is at correct elevation.

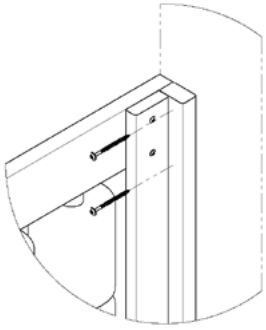
Support strips for panels will rest on top of deck/surfacing (leaving 2” between panel and deck/surfacing)

Bottom of half panels will be 10” above finished surfacing

Bottom of café-market table base will be even with top of finished surfacing. Top of café-market table will be 48” above top of finished surfacing.

Top of piano panel will be 51-3/4” above deck/surfacing.

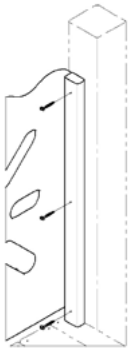
Make sure front of panel is flush with post. Using a 3/16” drill bit, drill pilot holes through support strip into one post (two holes top and bottom for spinner panels -- three evenly spaced holes for standard panels -- two evenly spaced holes for café-market table). Secure using 5/16”x4” RSS stainless steel screws. See details below.



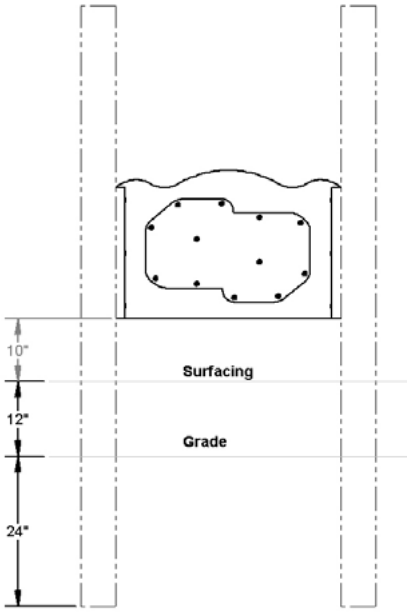
Spinner Panel to Post

PANEL TO POST

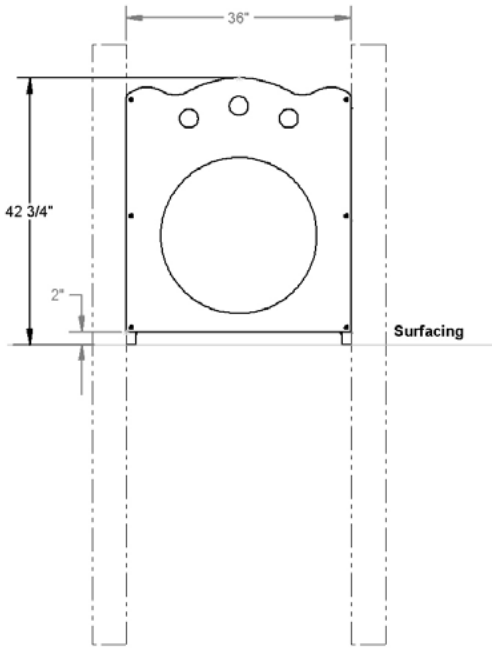
5/16”x4” RSS SS Screw
predrill with 3/16” drill bit
use T-30 tool for hardware



Standard Panel to Post



ELEVATION - HALF PANELS



ELEVATION - STANDARD PANELS / BARRIERS

CAFÉ-MARKET TABLE

Place table top on table base, making sure the rounded edge of table top faces the outside of the play area (oriented same as routed top panel) and set the back square edge flush with the back side of the post. Using a 3/16” drill bit, drill pilot holes through tabletop into mounting strip (two holes on each side). Secure using #10x2-1/2” R4 SS stainless steel screws. See detail below.

TABLE TOP TO BASE

#10x2-1/2” R4 SS Screw
predrill with 3/16” drill bit
use T-25 tool for hardware

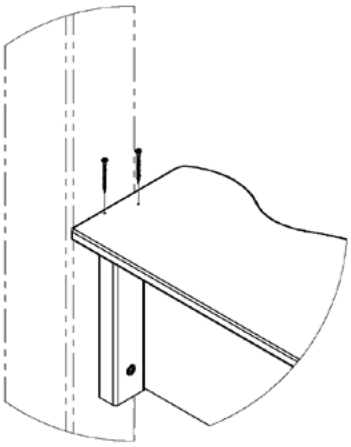
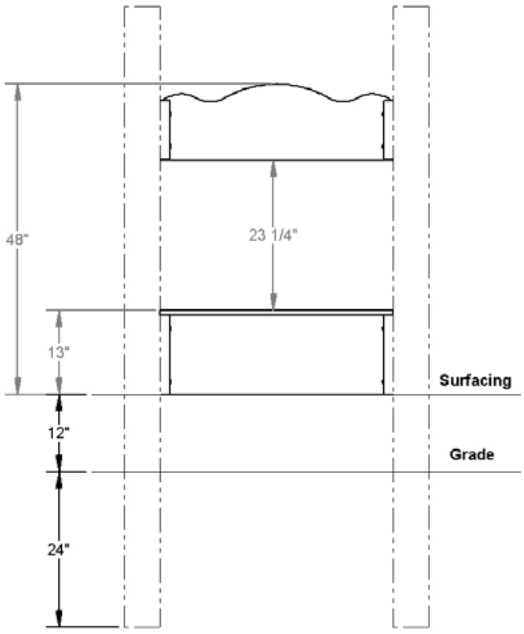


Table Top to Base



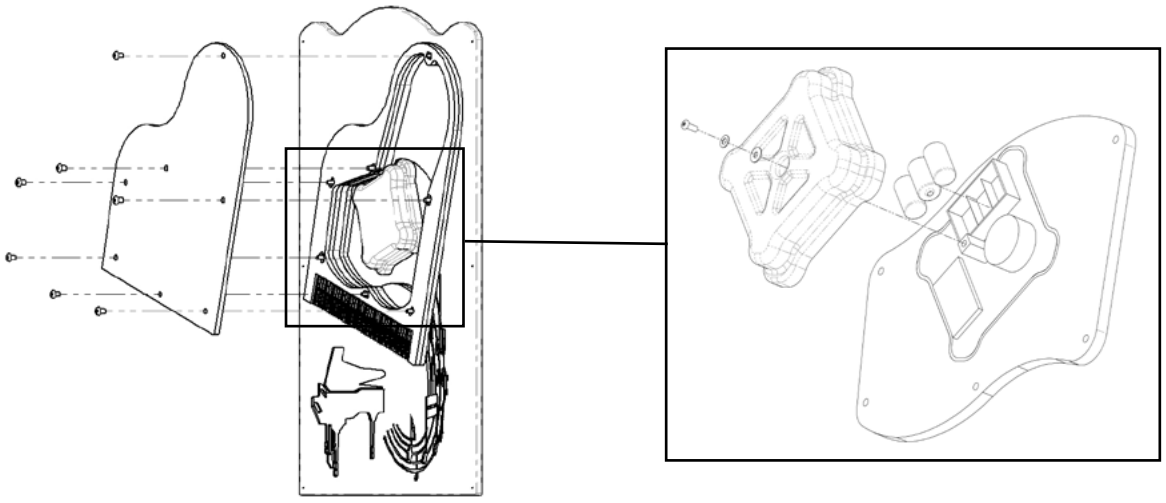
ELEVATION - CAFE/MARKET TABLE

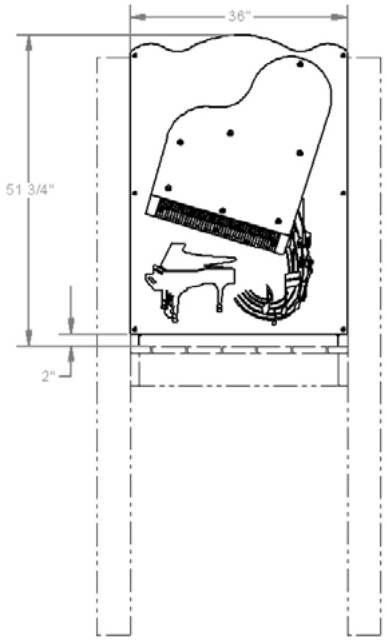
PIANO PANEL

The piano panels ships pre-assembled and installs the same as any other panel. The details below are for replacing the batteries.

PIANO BATTERY REPLACEMENT

Batteries are standard D-cell (Qty. 3)
Use T-45 tool for back of panel
use T-30 tool for battery cover





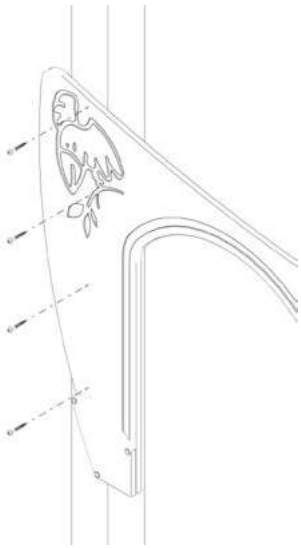
ELEVATION - PIANO PANEL

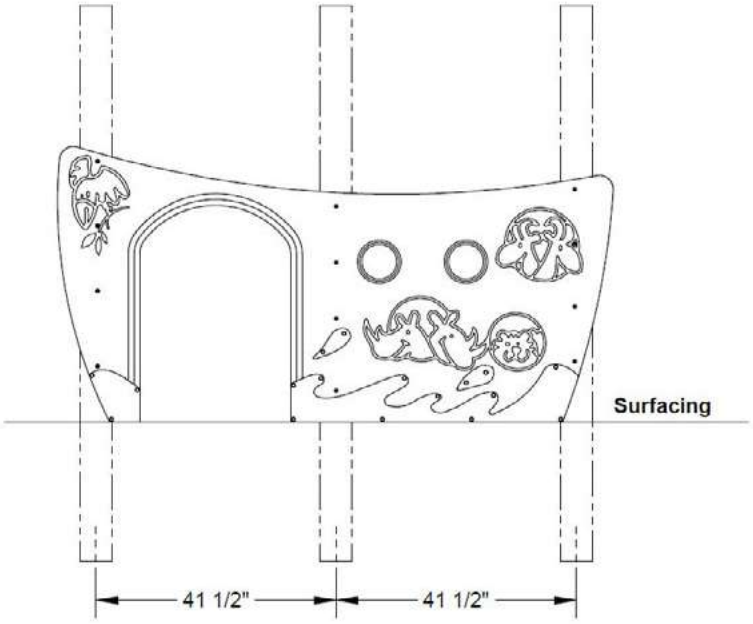
LARGE, GROUND-LEVEL PANELS

Set panel in place where bottom of panel will be even with top of finished surfacing. Make sure panel is level and spaced evenly. Using a 3/16” drill bit, drill pilot holes through panel into post (four holes per post). Secure using 5/16”x2-1/2” RSS SS screws. See detail below.

PANEL TO POST

5/16”x2-1/2” RSS SS Screw
predrill with 3/16” drill bit
use T-30 tool for hardware





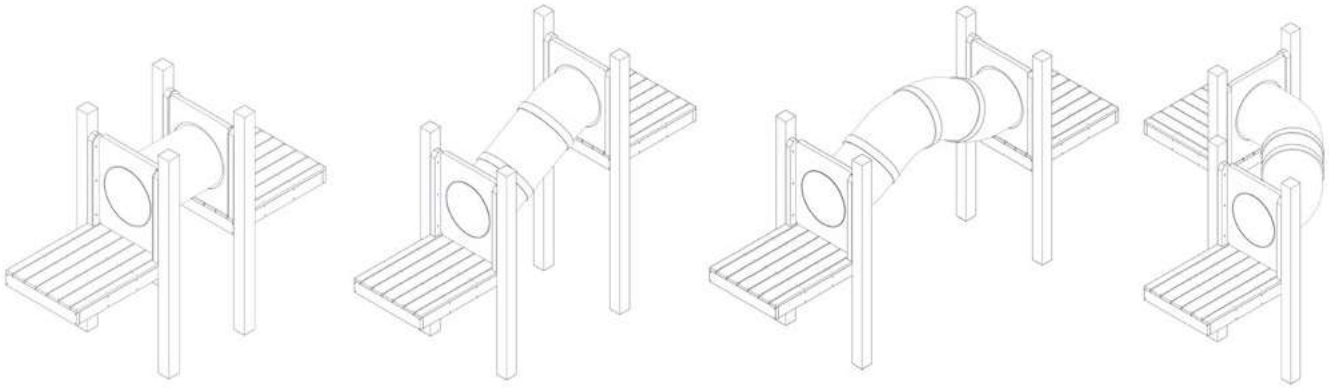
ELEVATION - LARGE GROUND-LEVEL PANEL

R3 Recycled Line
CRAWL TUNNEL

USER GROUP: 2 - 12
RECOMMENDED CREW: 2 people
TOOLS REQUIRED:

- T-30 TORX tool (supplied by manufacturer)
- Tape measure
- Level
- High speed 3/8” electric drill *w/clutch*
- **NOTE:** Use of any other driver may result in damage to tool and/or hardware!
- 3/16” drill bit
- 1/4” drill bit
- 1/2” drill bit

INSTALLATION TIME: 1 hour



PRE-INSTALLATION CHECK:
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Before beginning installation, make sure that you have read and understand the Installation Introduction manual that was supplied to you. If you have a question regarding anything covered in this manual, contact your local sales representative.

STEP 1

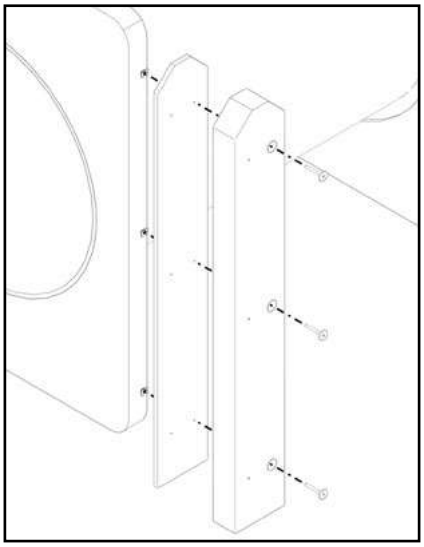
Refer to PLAN VIEW and FOOTING LAYOUT to locate position and orientation of crawl tunnel.

STEP 2

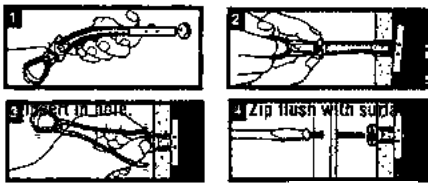
Select mounting board, spacer, three 1/4" zip togglers and three 1/4"x1-3/4" wafer bolts. Align countersunk holes in mounting board with holes in spacer and panel with edge of mounting board even with front edge (crawl tunnel side) of panel. **NOTE:** The LEFT and RIGHT boards are different. The RIGHT board is shown in the detail below. There are countersunk holes on one side of the board. These must face the outside of the crawl tunnel and the smaller holes must be on the "deck side" of the crawl tunnel. Using a 1/4" drill bit, drill three pilot holes through mounting board, spacer and into the panel. Remove mounting board and spacer. Using a 1/2" drill bit, drill three holes in the panel through the pilot holes. Insert zip togglers in holes in panel. Grasp loop at end and slide insert flush with surface. Snap off flush with surface. Hold board and spacer back in place and align holes. Insert wafer bolts and gently tighten. Repeat for remaining two holes. Tighten hardware (see Zip Toggler Detail). Repeat for other mounting boards.

MOUNTING BOARD TO SPACER TO PANEL

1/4" zip toggler
1/4"x1-3/4" wafer bolt
predrill with 1/4" and 1/2" drill bit



Zip Toggler Detail



3. Snap off flush with surface.

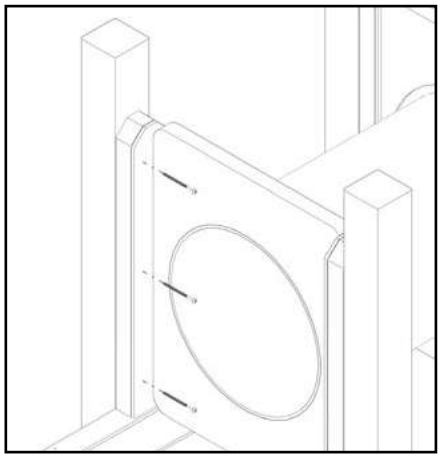
4. Tighten bolt flush.

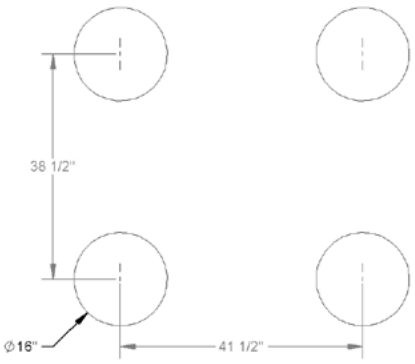
STEP 3

Select six 5/16"x5-1/8" screws. Set crawl tunnel assembly in place making sure panel is resting on deck and mounting board is flush with post. Using a 3/16" drill bit, drill three evenly-spaced pilot holes through the mounting board into the post. Secure with screws. Repeat for other side. Repeat for other end of crawl tunnel.

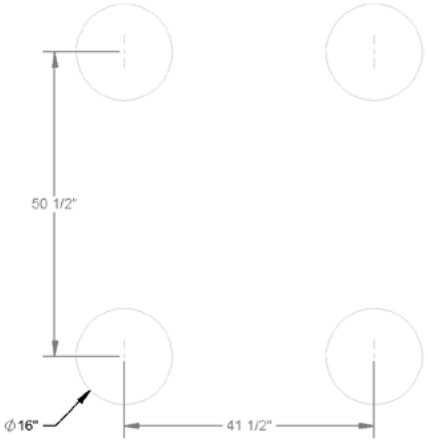
MOUNTING BOARD TO POST

5/16"x5-1/8" screw
predrill with 3/16" drill bit
use T30 bit for hardware

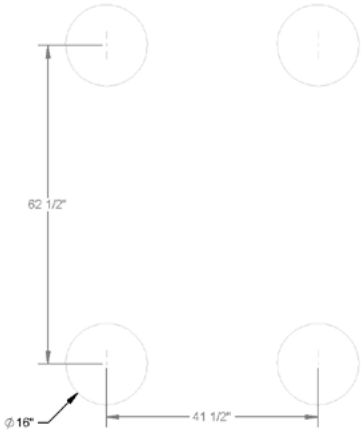




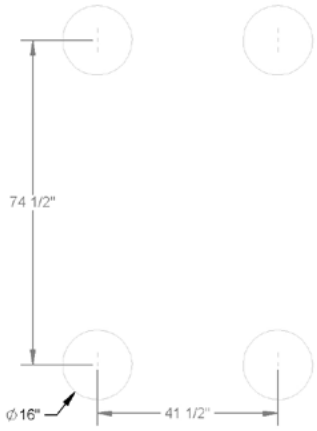
38-1/2" STRAIGHT FOOTING



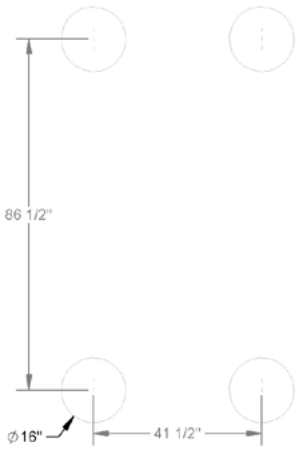
50-1/2" STRAIGHT FOOTING



62-1/2" STRAIGHT FOOTING

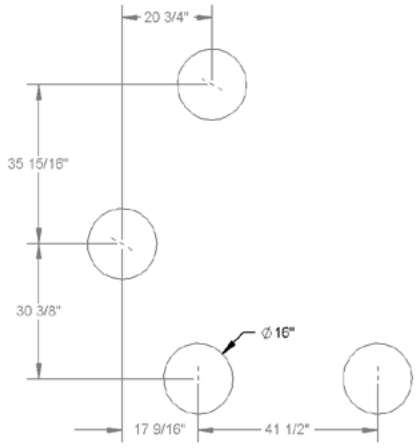


74-1/2" STRAIGHT FOOTING

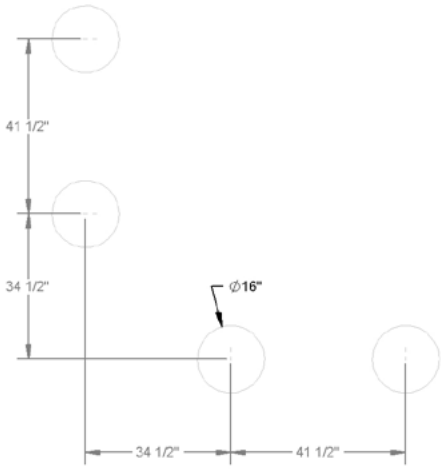


86-1/2" STRAIGHT FOOTING

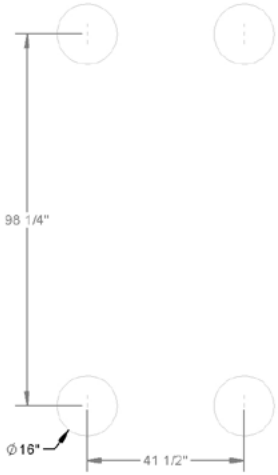
98-1/2" STRAIGHT FOOTING



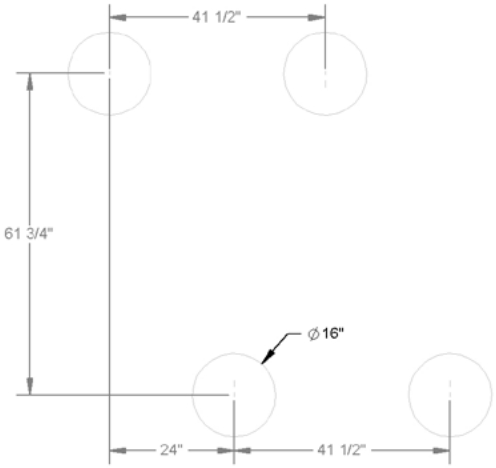
60 DEGREE CURVE FOOTING



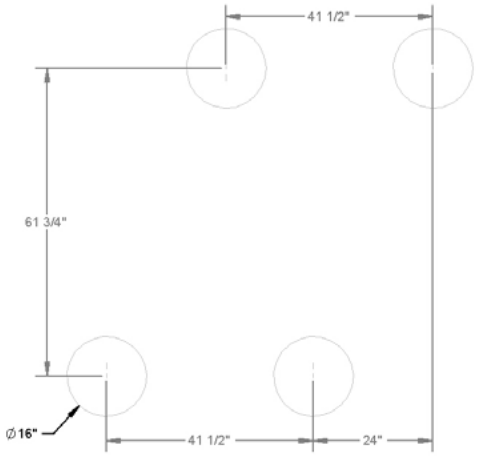
90 DEGREE CURVE FOOTING



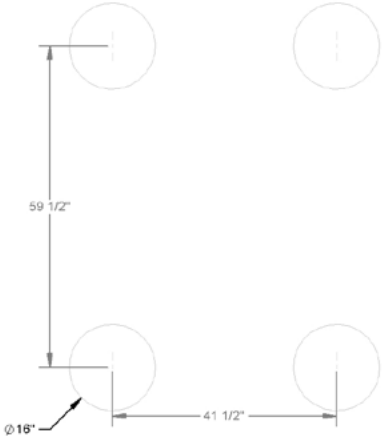
WAVY TUNNEL HUMP FOOTING



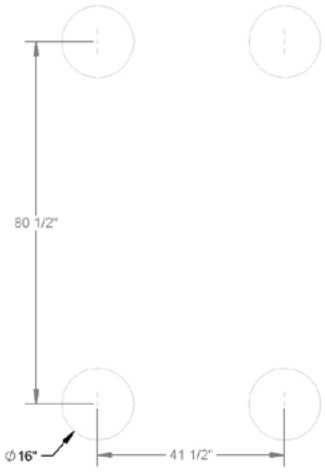
ZIG ZAG LEFT FOOTING



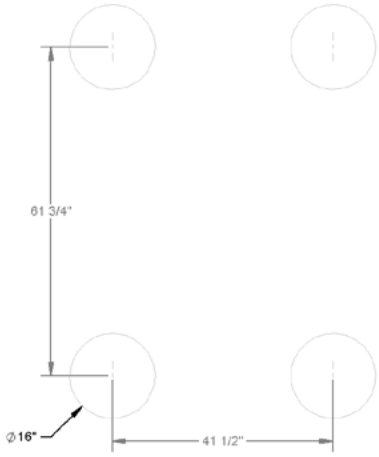
ZIG ZAG RIGHT FOOTING



6” INCLINE FOOTING



12” INCLINE FOOTING



24” INCLINE FOOTING