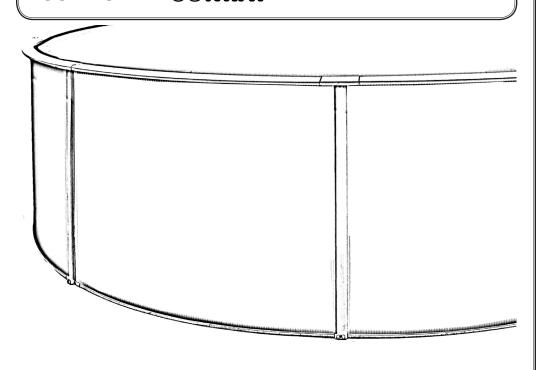
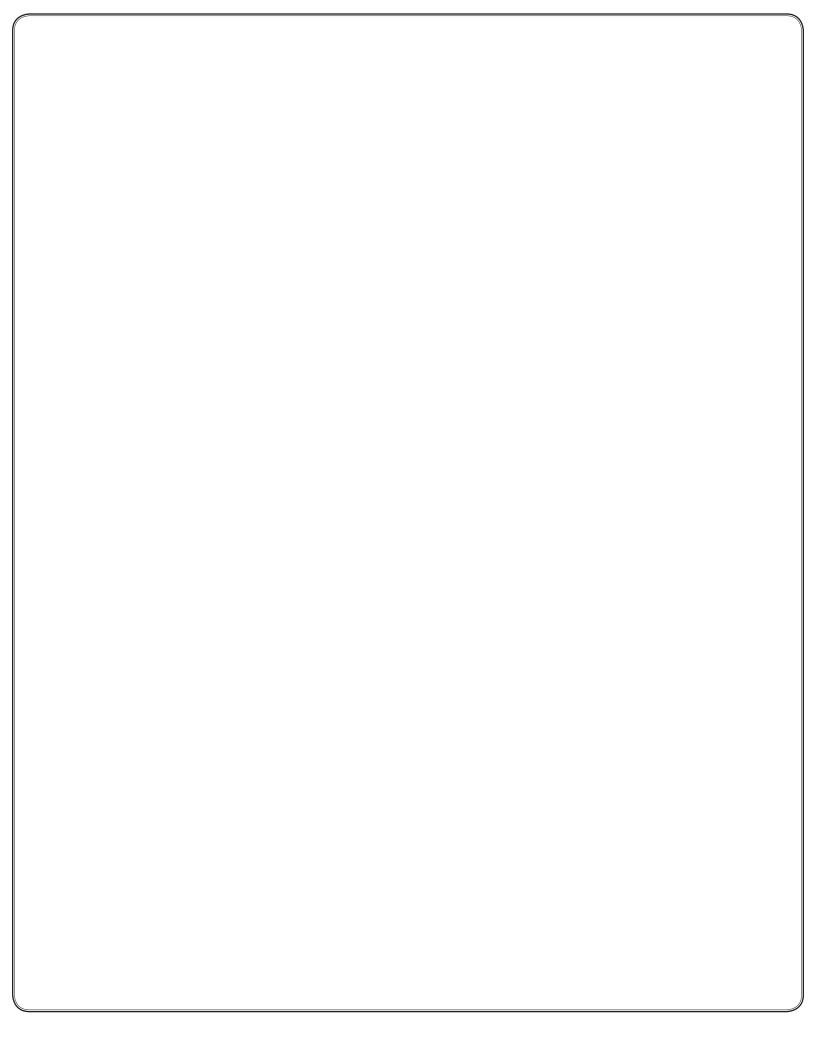
INSTALLATION MANUAL - CHANNEL LOK II OVAL POOLS POOL MODEL - SUNRAY





ABOVE GROUND POOL SAFETY PLEASE READ BEFORE INSTALLATION



FAILURE TO HEED THESE WARNINGS CAN RESULT IN PERMANENT INJURY, PARALYSIS FROM A BROKEN NECK, ELECTROCUTION OR DROWNING.

THIS POOL IS NOT DESIGNED FOR DIVING OR JUMPING!

DANGEROUS INJURY CAN RESULT, SHALLOW WATER!

Your pool contains a large quantity of water, and is deep enough to present inherent dangers to life and health unless the following safety rules are strictly observed. First-time users run the highest risk of injury. Make sure everyone understands. To insure your pool is used safely you **must** observe the following safety precautions:

1. NO JUMPING OR DIVING

The top rail of your pool is not a walkway and must not be used for jumping or diving. Do not permit jumping or diving into the pool from a deck or the top rail of the pool. Diving or jumping into the pool can result in serious injury.

2. NEVER USE THE POOL ALONE

Never permit the pool to be used unless it is attended by at least one person other than the bather. Someone should always be available to lend assistance in an emergency.

3. NEVER LEAVE CHILDREN UNATTENDED

Never leave a child alone and unsupervised in or near the pool—not even for a second. There is no substitute for constant adult supervision.

4. NO ROUGH PLAY

Do not permit "rough-playin" in and around your pool. Surfaces can become slippery and hazardous when wet.

5. LIGHT THE POOL AT NIGHT

If the pool is used after dusk, adequate lighting must be provided. Illumination in the pool area must be sufficient to clearly judge pool depth and all features in and around the pool. For lighting recommendations, consult your local licensed electrical contractor

6. RESTRICT ACCESS TO THE POOL

Do not leave chairs or other furniture beside the pool that could be used by a child to climb up into the pool. Ladders must be removed whenever the pool is unattended. A fence with a lockable gate around the pool or yard is strongly recommended and may be required by law in some jurisdictions.

7. NO ALCOHOL OR DRUGS

Never drink alcoholic beverages or use any intoxicants which could hinder your judgment and reflexes

8. KEEP YOUR POOL CLEAN AND SANITARY

Your filter system will remove suspended particles from the water and the surface skimmer will remove insects, leaves and other debris from the water surface. Use the correct pool chemicals as directed to destroy harmful bacteria and prevent formation of algae. Remember, unsanitary water is a serious health hazard.

9. KEEP OFF TOP LEDGES

Do not walk on top ledges. They can be slippery and they are not a walkway.

10.POOL COVER SAFETY

The cover must have a tamperproof locking retainer cable that positions the cover around the pool wall and keeps it securely in place. Never allow anyone, especially small children on the cover. Asphyxiation or drowning could result. When purchasing any pool cover, please consult a swimming pool professional.

11.ELECTRICAL HAZARD

Never touch or attempt to service electrical equipment, including the filter when your body and/ or the ground is wet. Electrocution or permanent injury due to high voltage (120V AC) could result. The pool should be bonded in accordance with Section 680-26 of the National Electical Code. For further assistance contact your dealer or a local licensed electrician. Do not use pool during electrical or rain storms.

12.SAFETY ROPE & POLE

Keep a safety rope 1/4" by 50" with a flotation buoy with an outside diamter of 15". Have accessible in a prominent area by your pool. Keep a pole not less that 16 feet (4,88m) long with a blunt or hook end available at pool side in case of emergencies.

13 POOL CHEMICALS

Do not place chlorine, chlorine tablets or sticks directly into skimmer, or winterize your pool with liquid chlorine. Damage to the skimmer, pool liner and filter will result. Failure to obey this instruction will void all component warranties. Always follow Chemical Manufacturer's instructions when storing, handling and dispensing pool chemicals.

14.CHECK FOR DAMAGE

Periodically check your pool and ladder components for damage and wear. Be sure all screws are in place. Replace all damaged or worn components and tighten all screws before you use the pool, deck or ladders. At first sign remove rust and touch up immediately.

15. POOL PARTS

Never modify the pool or accessories, or remove or drill holes in the pool, deck or ladder components unless instructed. Your pool wall is made of thin metal, there is an inherent cut hazard with metal so use gloves during installation. Always use Original Equipment Manufactured parts for your replacement parts.

FOLLOW ALL SAFETY INSTRUCTIONS

Read and follow all safety instructions packaged with pool, ladder, deck or any other accessory. Additional pool safety publications can be obtained by contacting: The Association of Pool & Spa Professionals (www.apsp.org)



REMEMBER WATCH CHILDREN



IMPORTANT NOTICE READ BEFORE INSTALLATION!

The safety stickers must be installed as per following instructions. Failure to properly install warning labels will void warranty. Failure to mount these safety labels may subject you to substantial liability in case of injury. These warning are not to be removed under any circumstances! If they become discolored or fall off please request replacements which will be sent at no charge.



PLACE SIGN ON LINER ABOVE WATER LINE, OPPOSITE EN-TRY TO POOL



PLACE SIGN ON WALL NEXT TO POOL ENTRY

Section 1

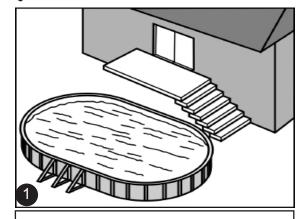
General Instructions - Channel Lok II Oval Pools Ground Preparation

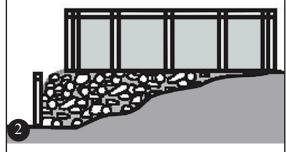
Read all instructions completely before you begin.

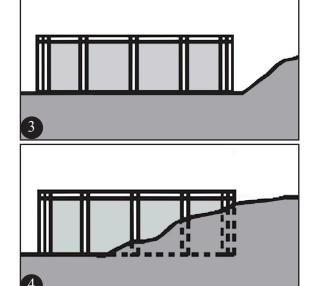
A. Determine a Location for your Pool

1. The Terrain

- Pay special attention to choosing the right location for your pool:
- Choose a large area, as flat and level as possible and well drained.
- Choose a spot on dry, firm earth—
 do not install the pool on concrete,
 asphalt, tar paper, sand, gravel, peat
 moss, wood or chemically treated
 soil.
- Check with your pool dealer to see if Nut Grass grows in your area.
 This type of grass may grow up through your pool liner. Your dealer will be able to advise how best to treat the site.
- Sloped areas will need to be made level by digging away high spots, not by filling low spots—be prepared to hire earth-moving equipment if necessary.





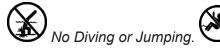


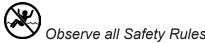


Important Note:

Ground preparation is one of the most important steps in the installation process. A proper foundation will ensure the rest of the pool assembly goes smoothly and that no problems will occur when the pool is filled with water.

Open all of the frame cartons and read all of the instructions before you begin. Be sure to read Section 2 and get a complete overview of the pool base and buttress assembly before starting the ground preparation.





2. Things to Avoid

Do not locate your pool near or on any of the following:

- Overhanging tree branches.
- · Overhead wires and clotheslines.
- Buried pipes and wires-contact your gas, electric and telephone utilities to find buried pipes and wires before you dig.
- Hilly and uneven terrain.
- Areas with poor drainage.
- Grass, stones and roots. Grass will rot underneath the pool liner, and stones and roots will damage the pool liner.
- Areas recently treated with oil-based weed killers, chemicals or fertilizers.

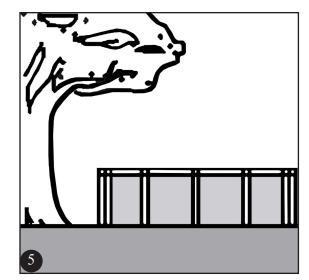
3. Plan Ahead

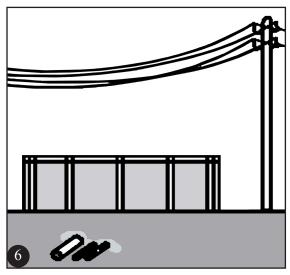
- Will you be adding an adjacent deck later? Be sure to leave room.
- Will you be using pool accessories or other appliances that need electricity or gas? Locate your pool near these services or plan to have them installed later by a licensed contractor.

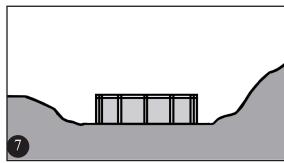
4. **Tools Needed**

Make sure you have the necessary tools and materials before beginning your installation:

- Shovel
- Hammer
- Tape Measure
- SprayPaint
- Screwdriver
- Level
- Straight wood plank Rake
- String & Stakes
- Duct tape
- Wheelbarrow
- Mallet
- Waterhose
- Compactor
- Vacuum cleaner
- Wrench
- Cement blocks (5cm x 20cm x 40cm / 2"x8"x16") (optional)
- Material that provides a permanent base (ex. crushed stone)
- Fine Sand (void of debris)
- 2 x Plywood (60cm x 120cm / 2ft x 4ft)
- Pool Carpeting (optional)
- Polyethlyne Plastic Sheeting
- Vinyl covered hooks to hold the wall steady









Important:

When locating the centre of the pool, be sure to take into consideration any structures

(deck, patio, house) or

relevant items (change rooms, gazebo, etc.)

that the pool may need

ensure that the pool is in

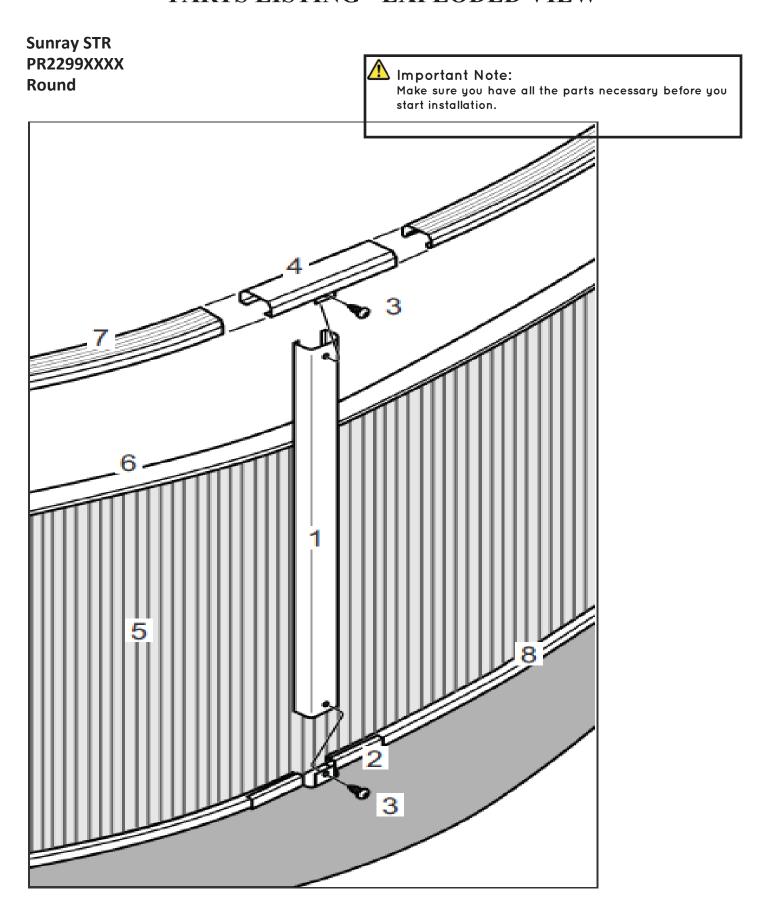
the most visual pleasing location for your

to line up with and

property.

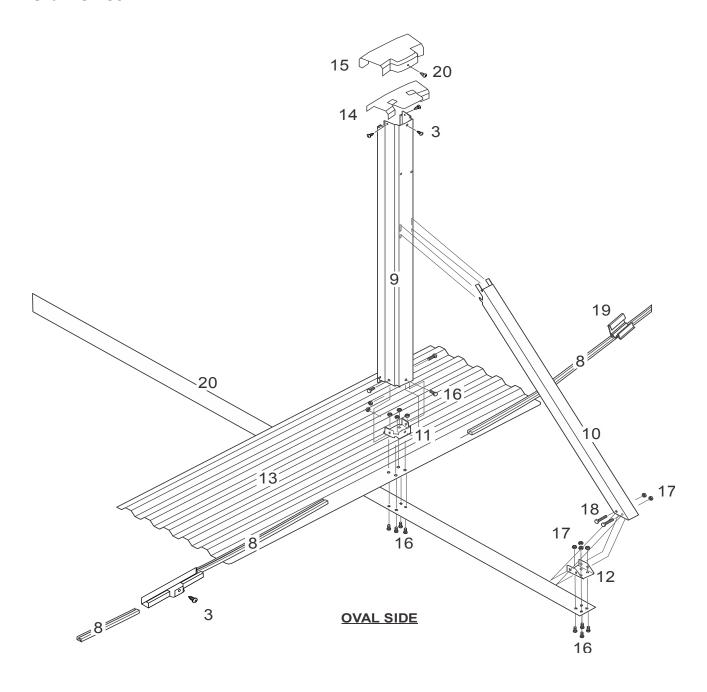


PARTS LISTING - EXPLODED VIEW



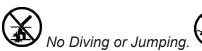
PARTS LISTING - EXPLODED VIEW

Sunray STR PV2299XXXX Channel Lock



PARTS LISTING - CONTENT LIST

Product Description: Sunray Oval Revised: Sept 2012 **Product Code: PV2299XXXX** Quantity required for installation (by pool size) INDEX# **DESCRIPTION** PARTS# LENGTH 56 1/4" TL10008 Top ledge TL10013 63" 50 1/2" TL10015 TL10014 44 3/4" TL10016 57 3/8" TL10009 57 3/8" 56 1/4" TL10017 TL10010 56" TL10012 56 1/8" 47-1/2" UR10008 Upright Ledge cover - resin (for buttress) LC10010 Ledge cover - steel (round end) LC10009 SideTop Plate - buttress Bottom connector/Bottom Plate Slotted Tube Connector (steel) Slotted Tube Connector - side (resin) 47" Round Coping **Bottom Rail Support** Slotted Tube 18' (blue) 62" Slotted Tube 12' 55 1/2" 55 1/2" Slotted Tube 15' Slotted Tube 18' 55 1/4" Slotted Tube 18' (black) 50" 44 1/8" Slotted Tube 24' (white) Slotted Tube 24' (green) 55 1/2" Bottom Rail 18' (blue) 61" Bottom Rail 12' 53 15/16" Bottom Rail 18' (black) 48 3/4" Bottom Rail 15' 53-15/16" Bottom Rail 18' 53 13/16 Bottom Rail 24' (yellow) 54 1/16" Bottom Rail 24' (green) 55 7/8" 55 1/8" Bottom Rail 24' (green) Bottom Rail 24' (white) 44-5/8" Hardware Pack (Qty. - 59) Hardware Pack (Qty. - 29) 47-1/2" Upright CL10006 Diagonal CL10007 Hold Down Plate Diagonal Bracket Oval bottom Plate 16 to 20 Hardware Pack 215.55" 12 Strap 15' Strap 251.55" 18' Strap 287.55" Wall



Wall Joiner Bar

C. Prepare the Foundation of your Pool



Important:

When locating the centreline of the pool, **be sure** to take into consideration any structures (deck, patio, house) or relevant item (change rooms, gazebo

structures (deck, patio, house) or relevant items (change rooms, gazebo, etc.) that the pool may need to line up with and ensure that the pool is in the most visual pleasing location for your property.

12 x 18 (3,66m x 5,49m) Oval Pool Dimensions

R 76-1/2" (193 cm)

S 88-1/2" (224 cm)

L 28" (72 cm)

M 28" (72 cm)

P 56" (143 cm)

W 96" (244 cm)

X 72" (183 cm)

Y 80-1/2" (204 cm)

Z 100" (254cm)

12 x 24 (3,66m x 7,32m) Oval Pool Dimensions

R 74-1/4" (188 cm)

S 86-1/4" (218 cm)

L 67-7/8" (170 cm)

M 20" (51 cm)

N 48" (122 cm)

P 135-3/4" (343 cm)

W 96" (244 cm)

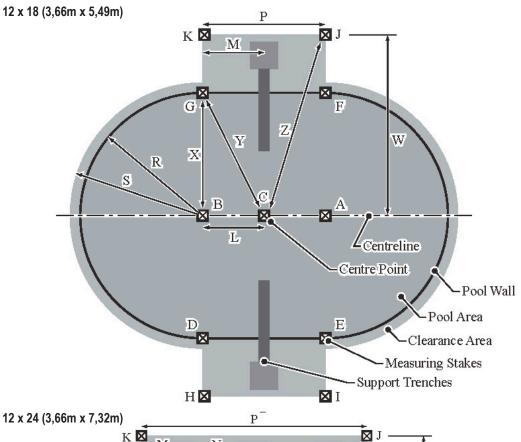
X 72" (183 cm)

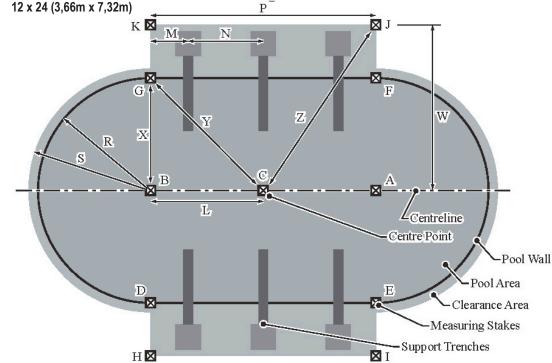
Y 86-1/2" (219 cm)

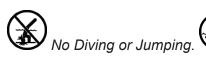
Z 117-1/2" (297 cm)

1. Choose the Correct Ground Preparation Drawing

a. Choose the drawing that matches your pool size from the five plan drawings below. This drawing will have all of the necessary dimensions for the ground preparation instructions that follow. **NOTE: Please be sure to use your pool's footprint for your pool size on the last pages of this Section 1.**

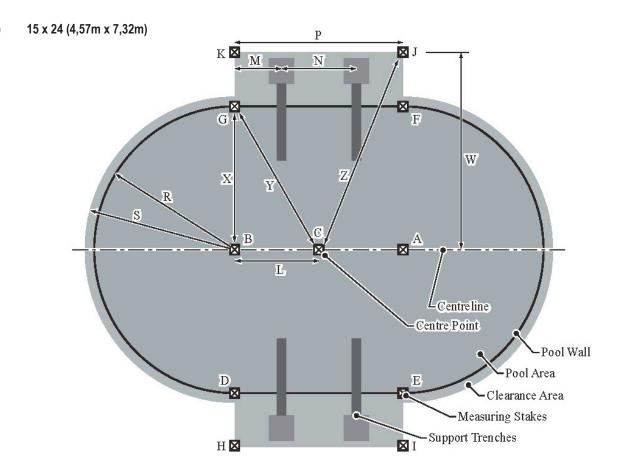






15 x 24 (4,57m x 7,32m) Oval Pool Dimensions

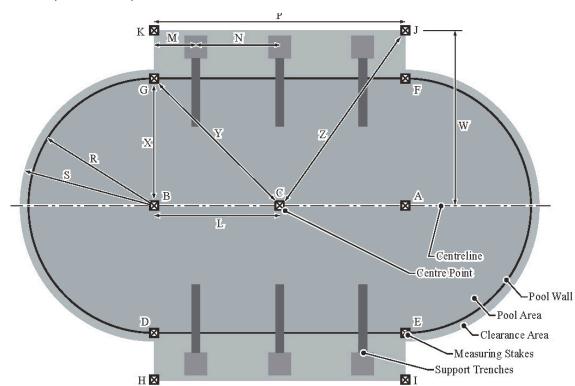
- R 93" (236 cm)
- S 105" (267 cm)
- L 49" (125 cm)
- M 25" (64 cm)
- N 48" (122 cm)
- P 96" (244 cm)
- W 114" (290 cm)
- X 90" (229 cm)
- Y 93-1/8" (236 cm)
- Z 124" (315 cm)

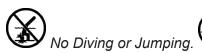


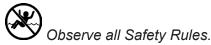
15 x 30 (4,57m x 9,14m)

15 x 30 (4,57m x 9,14m) Oval Pool Dimensions

- R 93" (236 cm)
- S 105" (266 cm)
- L 84-5/8" (214 cm)
- M 25-1/4" (64 cm)
- N 59-1/2" (150 cm)
- P 189-1/4" (480 cm)
- W 114" (290 cm)
- X 90" (229 cm)
- Y 107-7/8" (272 cm)
- Z 142" (360 cm)







18 x 33 (5,49m x 10,05m) **Oval Pool Dimensions**

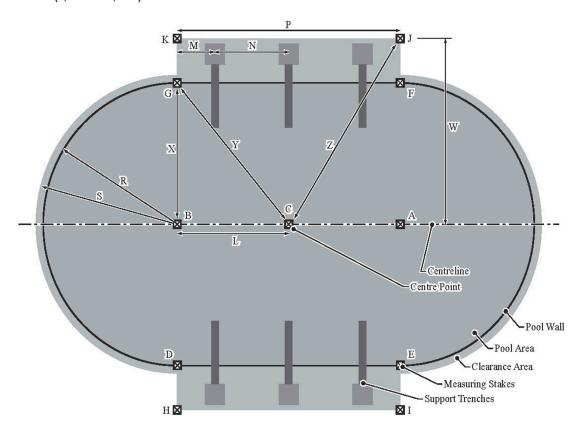
- R 110-1/2" (279 cm)
- S 122-1/2" (310 cm)
- L 87-7/8" (221 cm)
- M 25-1/2" (64 cm)
- N 59-1/2" (150 cm)
- 169-3/4" (429 cm)
- W 132" (335 cm)
- X 108" (274 cm)
- 123-1/4" (312 cm)
- 157" (399 cm)



Important:

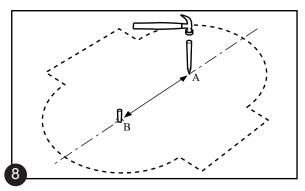
Determine the location of your pool. Make sure you have the proper distances away from any adjacent structures (i.e. fences, house etc.). Contact local authorities for this information and any additional requirements governing the installation of a pool in your area.

By using the distances provided by local authorities and adding them to dimension S from the drawings above, you can calculate the location of the centreline of the pool.



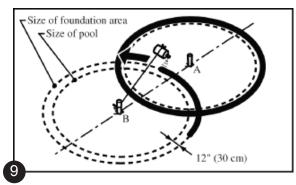
2. Mark out the Area

a. Drive two pegs (A) and (B) into the ground. These pegs will both be on the centreline of your pool. Choose the right distance between them from the chart below. Note: Distance A to B is equal to dimension P on the previous ground preparation drawings.



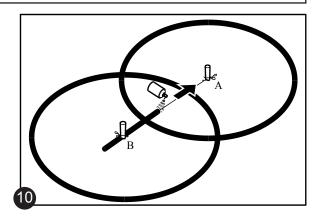
Pool Size	Distance between two pegs (A) and (B)
12' x 18' (3,66m x 5,49m)	72" (183cm)
12' x 24' (3,66m x 7,32m)	144" (366 cm)
15' x 24' (4,57m x 7,32m)	108" (274cm)
15' x 30' (4,57m x 9,14m)	180" (457cm)
18' x 33' (5,49m x 10,05m)	180" (457cm)
(0,10 x 10,00)	(101 0)

b. Use a length of string tied between peg (A) and a can of spray paint, and mark a circle on the ground. Next, do the same for peg (B). Choose the length of string you need for your pool from the chart below. The circles will be 12" (30 cm) bigger all round than the pool.

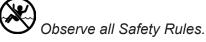


Pool Size	Length of String
12' x 18' (3,66m x 5,49m)	84" (213cm)
12' x 24' (3,66m x 7,32m)	84" (213 cm)
15' x 24' (4,57m x 7,32m)	102" (259cm)
15' x 30' (4,57m x 9,14m)	102" (259cm)
18' x 33' (5,49m x 10,05m)	120" (305cm)
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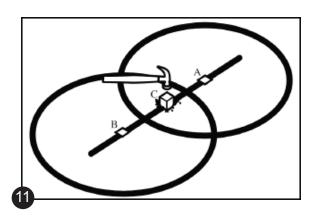
c. Join the two pegs (A) and (B) with a piece of string. Use this string as a guide to paint your centreline on the ground with the can of spray paint.

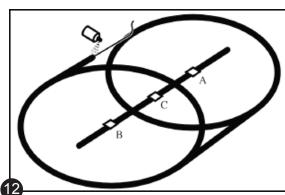


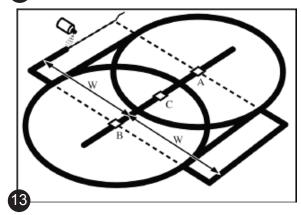




- d. Drive a flat-topped stake (C) exactly halfway between the two pegs (A) and (B) on the centreline. Stake (C) will mark the exact centre point of your pool. The stake must be at least 1" (25 mm) square and 6" (15 cm) long. Drive it down flush with the ground surface.
- e. Replace the two pegs (A) and (B) with two more flat-topped stakes. Drive them down flush with the ground surface.
- f. Join the two circles with straight lines to make an oval. Use pegs and a piece of string as a guide for the can of spray paint.
- g. Mark areas along both straight sides of your oval. Use pegs and string as a guide for the can of spray paint to mark straight lines. Use the chart below to find the correct width W from the centreline of the pool. The ends of the side areas should line up squarely with stakes (A) and (B).







Pool Size	Distance from Centreline for Side Area W
12' x 18' (3,66m x 5,49m)	96" (244cm)
12' x 24' (3,66m x 7,32m)	96" (244 cm)
15' x 24' (4,57m x 7,32m)	114" (290cm)
15' x 30' (4,57m x 9,14m)	114" (290cm)
18' x 33' (5,49m x 10,05m)	132" (335cm)



Important:

Measure carefully to make sure the centre stake (C) is in the correct location, exactly halfway between pegs (A) and (B). You will use stake (C) later as a reference point for other measurements.



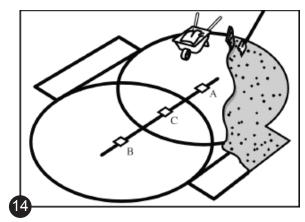


3. Remove the Sod

- a. Remove all sod and plants from the area.
- b. Remove any sticks, stones and roots from the area.

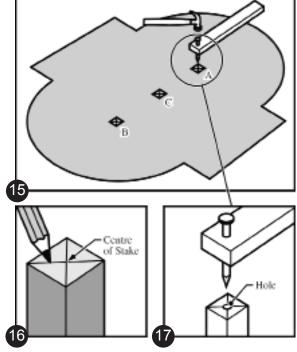
4. Make the Area Flat and Level

a. You will use a 2-by-4 to help level the pool foundation area. Choose the length of straight 2-by-4 you need for your pool from the chart below.



Pool Size	Length of plank 2-by-4 (5cm x 10cm)
12' x 18' (3,66m x 5,49m)	84" (213cm)
12' x 24' (3,66m x 7,32m)	84" (213 cm)
15' x 24' (4,57m x 7,32m)	102" (259cm)
15' x 30' (4,57m x 9,14m)	102" (259cm)
18' x 33' (5,49m x 10,05m)	120" (305cm)
	· · ·

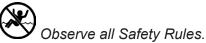
- b. Adjust the height of the stake (A, B or C) that is located at the **lowest** end of the pool area by hammering it down until it is **exactly** level with the ground. Place a carpenter's level on a 2-by-4 and place the board across the three stakes to make sure the tops are exactly level with each other. Adjust the other two stakes down as needed.
- c. Nail one end of the 2-by-4 to the top of the stake where the level of the pool foundation is **lowest.** Drill a hole for the nail in the **centre** of the top of the stake first and make the hole big enough so the nail is a little loose and can be removed without moving the stake. Mark the centre of the stake before you drill the hole by marking lines diagonally from opposite corners (see diagram 16). Use a nail long enough to hold the end of the 2-by-4 to the stake while you rotate it in a circle.



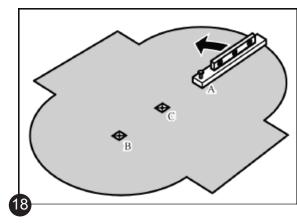


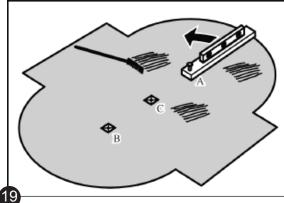
Remember:

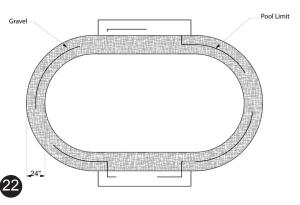
Your pool must be perfectly level. Take the time you need to be sure your foundation is perfectly level.



- d. Put a carpenter's level on the 2-by-4 and swing the board in a circle to find the high and low spots.
- e. Remove all the high spots with a shovel, hoe or rake. To make sure your pool is stable, compact the ground well before adding the sand. Be prepared to hire earth moving equipment if you need to level a large area. Remember, your pool must be level across the diameter of the pool
- f. Small dips and hollows may be filled in, but the soil must be hard-packed with a tamping tool.
- g. Remove the 2-by-4 from the stake and nail it to the next stake on the centreline
- h. Repeat the last five steps until the whole oval area is level. Take your time and make sure the area is **perfectly level.** If necessary, adjust the height of each stake and keep scraping away soil 19 until the entire area is level.
- i. Take material such as rock dust or fine mortar that can conform a solid, permanent base and deposit this material around the rim of the basin. The material used should be spread around the perimeter of the pool to a width of 24" (60cm) and a thickness of 2" (5cm).
- i. Recheck the outer perimeter of the oval shape, where the pool wall will be placed. Compact the ground and make 22 sure there are no high or low spots. The bottom edge of the pool wall must rest flat on the ground and have no gaps under it.









Use a surveyor's transit instead of a carpenter's level, if one is available.



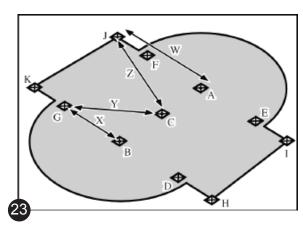
Remember:

The outer 12" (30 cm) of the cleared oval area must be perfectly flat. The bottom edge of the pool **must** rest flat on the ground and have no gaps under it. Take the time you need to be sure this area is perfectly flat and level.



5. Add Corner Stakes

- a. Prepare eight corner stakes (D), (E), (F) & (G), and (H), (I), (J) & (K) by marking the centre point of each stake the same way as in step 4(c).
- b. Drive the eight corner stakes into the ground. Drive them down flush with the ground surface. Locate each stake exactly by using the measurements for your pool in the chart below. Be sure to measure using the centre point of each stake.

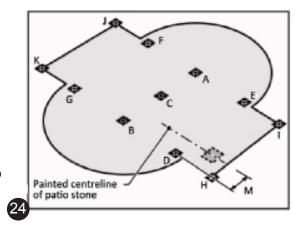


c. Tie strings between stakes (H) and (I) and between (J) and (K).

Pool Size	Distance X	Distance Y	Distance W	Distance Z
12' x 18' (3,66m x 5,49m)	72" (183cm)	80-1/2" (204cm)	96" (244cm)	102-1/2" (260cm)
12' x 24' (3,66m x 7,32m)	72" (183 cm)	101-3/4" (258cm)	96" (244cm)	120" (305cm)
15' x 24' (4,57m x 7,32m)	90" (229cm)	105" (267cm)	114" (290cm)	126-1/8" (320cm)
15' x 30' (4,57m x 9,14m)	90" (229cm)	127-1/4" (323cm)	114" (290cm)	145-1/4" (369cm)
18' x 33' (5,49m x 10,05m)	108" (274cm)	140-5/8" (357cm)	132" (335cm)	159-3/4" (406cm)

6. Prepare Buttress Trenches

- a. Locate the first trench by measuring the distance M from the centre of stake (H) to the **centreline** of the trench. Use the chart below to find the right distance M for your pool.
- b. Place a stake in the ground on the edge of the cleared area at distance M, underneath the string added in step 5(c).



\Diamond
<u>~</u>

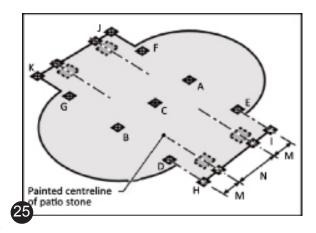
Hint:

Instead of wooden corner stakes, you can use 12" (30 cm) spikes.

Pool Size	Distance from Stake to Trench Centreline M	Distance between Trenches N
12' x 18' (3,66m x 5,49m)	36" (91cm)	n/a
12' x 24' (3,66m x 7,32m)	24" (61 cm)	48" (122cm)
15' x 24' (4,57m x 7,32m)	30" (76cm)	48" (122cm)
15' x 30' (4,57m x 9,14m)	30-1/2" (77cm)	59-1/2" (151cm)
18' x 33' (5,49m x 10,05m)	30-1/2" (77cm)	59-1/2" (151cm)



c. Repeat steps (a) and (b) to locate the next trench along the side of the pool. Measure the **distance N** from the centreline of the first trench to the centreline of the next trench. Use the chart on previous page to find the right distance N for your pool. (Important Note: The 12 x 18 pool has only **one** trench per side; the 15 x 24 pool has **two** trenches per side; the 12 x 24, 15 x 30 and 18 x 33 pools all have **three** trenches per side.)

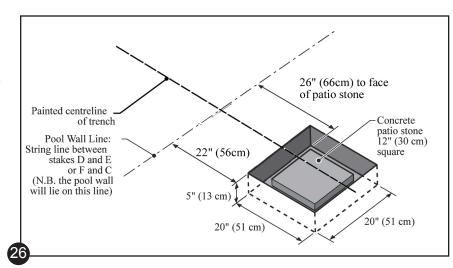


- d. Place another stake in the ground on the edge of the cleared area at distance N, underneath the string added in step 5(c).
- e. Repeat steps (a) to (d) for the other side of your pool.
- f. Tie a string between each pair of stakes on opposite sides of the cleared area (the stakes added in steps (b) and (d), above) to mark the centreline of the trenches.
- g. Mark the centrelines along each string with the can of spray paint.
- h. Recheck your measurements. Make sure the distances M and N **exactly** match the distances given in the chart above (see also diagram 26) and that the centrelines for the trenches are **exactly parallel.**
- i. Remove the strings. (**Note:** Keep the strings. They will be temporarily replaced later, after the trenches are dug out, to help you double-check that the trenches are parallel.)



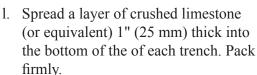
Stabilizer or equivalent must be used to backfill the patio stone trenches. j. Carefully dig out each patio stone trench. Measure from the centreline painted on the ground and the line between the stakes.

> Do not dig the trenches too large or too deep; the ground around the edges of eacth trench must remain firm and undisturbed.

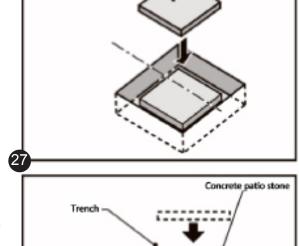


Concrete patio

k. Temporarily replace the strings removed in step (i) to check that the trenches are exactly parallel. Remove the strings again when you are finished.

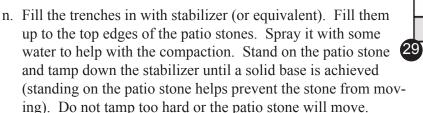


m. Place a concrete patio stone 12" x 12" square x 2" thick (30 x 30 x 5 cm) into each trench, on top of the limestone layer. Make sure it is level and positioned correctly.



Crushed limestone or equivalent base 1" (25mm) in bottom of trench

Additional crushed limestone or equivalent



- o. Recheck the distances between the patio stone and make any adjustments you need to make sure the spacing is exactly right. Refer to page 1-10, Step 6 for measurements.
- See the drawing on the next page for an overview of all the parts used to install the buttresses, uprights and base rails.

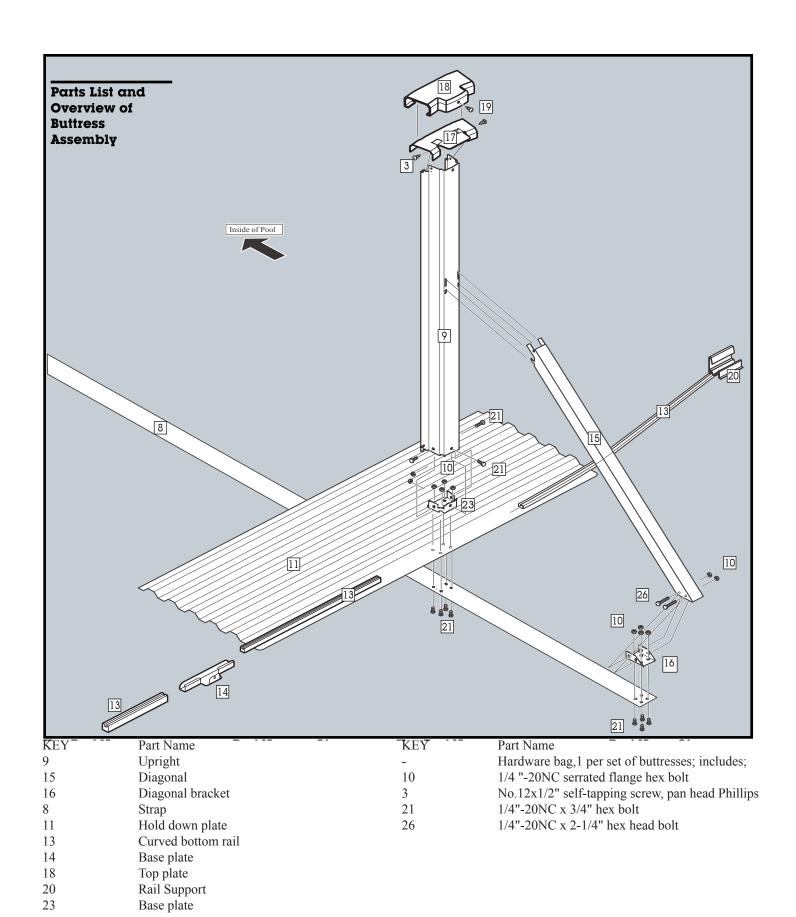


Caution:

Make sure there is adequate drainage in the bottom of each trench and along the sides of the pool area. There must be adequate drainage for a safe and secure pool foundation.





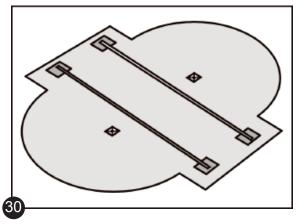


HARDWARE FOR CHANNEL LOK-II POOLS

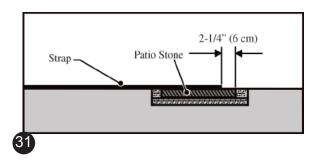
DESCRIPTION	ACTUAL SIZE	TOOL REQUIRED FOR INSTALLATION
SELF TAPPING SCREW #12 X 1/2 INCH (1,2cm) LONG		PHILLIPS NUMBER 3 SCREWDRIVER OR RED HANDLE #2 ROBERTSON SCREWDRIVER
SERRATED FLANGE HEXAGON NUT 1/4-20 (0,6cm)		7/16 INCH (1,1cm) WRENCH OR SOCKET
HEXAGON HEAD BOLT 1/4-20 X 3/4 INCH LONG (0,6cm x 1,9cm)		7/16 INCH (1,1cm) WRENCH OR SOCKET
HEXAGON HEAD BOLT 1/4-20 X 2 1/4 INCH LONG (0,6cm x 5,7cm)		7/16 INCH (1,1cm) WRENCH OR SOCKET

7. Strap Preparation for the Buttresses

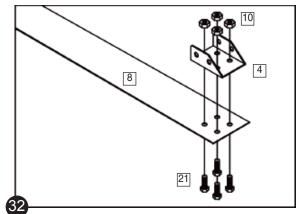
- a. Gently flatten any kinks or bends out of the straps (key 8).
- b. Lay the strap across the levelled area for the pool as shown in diagram 30. Centre the strap over the patio stone as shown in diagram 30.



Space the end of the strap 2-1/4" (6 cm) from the outside edge of the patio stone.



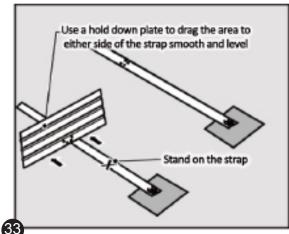
c. Fasten one diagonal bracket (key 4) to the strap (key 8) using four 3/4" long bolts (key 21) and nuts (key 10). Make sure the angled part of the bracket is facing the correct direction as shown in diagram 32. The surface that the diagonal bracket is fastened to will be the top of the strap.

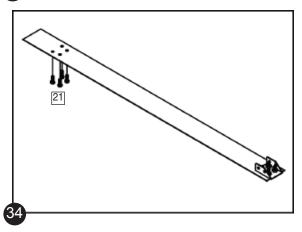


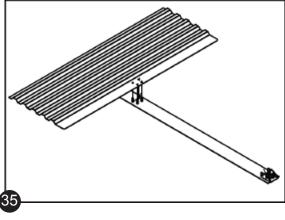
- d. Repeat steps (a) to (c) for the other end of the strap.
- e. Repeat steps (a) to (d) for the other straps.

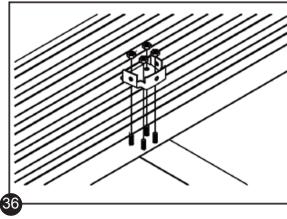
8. Installing the Upright

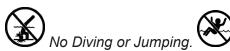
- a. Using a straight edge (you can use one of the hold down plates), drag along the top edge of the strap to ensure the ground is exactly even and level with the strap (the area 24" (61 cm) beyond each side of the strap must be level too). If it is not level, spread some crushed limestone (or equivalent) on the ground. Stand on the strap and tamp it down hard with a tamping tool. Verify the ground is level to the strap by running the straight edge along the top edge of the strap. Repeat this step until the ground is level.
- b. Gently lift the strap and insert four 3/4" long bolts (key 21) into the holes closest to the centre of the pool. Ensure the bolt heads are facing the ground. Lay the strap back down on the ground and place the hold down plate and base plate (as shown in diagram 36) over the bolts protruding from the strap and fasten the nuts to the bolts and tighten.

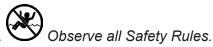










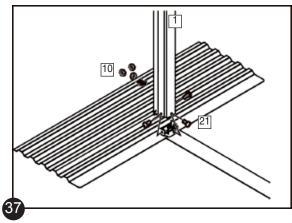




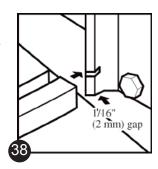
Caution:

Failure to properly install and tighten all of the bolts and nuts may void the warranty on your pool.

c. Fasten one upright (key 1) to the base plate using three 3/4" long bolts (key 21) and nuts (key 10). Make sure the bottom end of the upright is fastened to the base plate. The bottom end of the upright has three large holes which are used to fasten to the base plate.

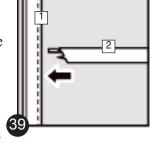


- d. When you come to section 2, you will install the bottom rails, linking them to the buttresses. Make sure now that there is approximately a 1/16" (2 mm) gap under the tab at the bottom of each upright so the bottom rails slide on easily.
- e. Repeat steps (a) to (d) for the other side of the pool.



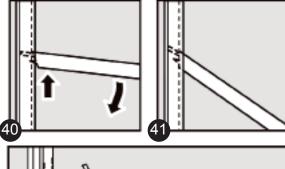
9. Install the Diagonals

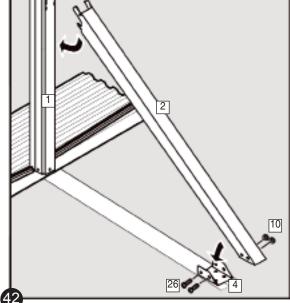
a. Hold one diagonal brace (key 2) approximately horizontal, insert the four tabs at the end



of the diagonal into the slots in the upright (key 1) (see diagram 39).

b. Pull upward on the inserted end of the diagonal to make the tabs slide up and lock into position in the slots. At the same time, swing the other end of the diagonal down onto the diagonal bracket (key 4) on the base channel (see diagrams 40 and 41).

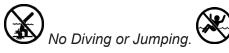






Important:

Ensure all four tabs at the end of the diagonal are inserted into the slots in the upright.

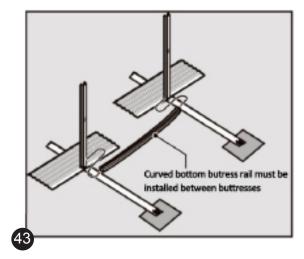




- Very important: as you swing the diagonal down, make sure you apply constant upward pressure on the end of the diagonal brace with the tabs to ensure they stay fully locked in position in the slots.
- c. Fasten the bottom end of the diagonal brace to the diagonal bracket (key 4) with two 2-1/4" (57 mm) bolts (key 26) and nuts (key 10). Do not overtighten the bolts. They only need to be snug enough to ensure a secure fit (see diagram 42).
- d. Repeat steps (a) to (c) for the other side of the pool.
- e. Repeat steps (7) to (9) for the rest of the buttresses.

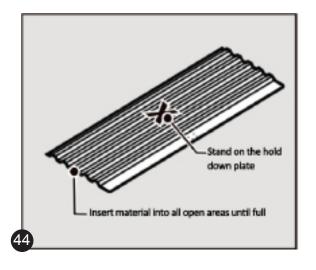
10. Buttress Location Verification

- a. Tie strings between stakes (D) and (E) and between (F) and (G). These will be used as a reference to make sure the buttresses are exactly lined up with each other. Stand at each corner of the pool and check the alignment of the buttresses with the strings.
- b. Jump to Section 2 and complete steps 1(a) and (b). This will allow you to install the bottom buttress rails, ensuring the correct distance between the buttresses. Important: complete only steps 1(a) to (c) for now, and then continue with step 11 below; you will complete the rest of Section 2 later.



11. Fill in the Hold Down Plates

a. Standing on the hold down plate, insert material into all open voids on the outside edges of the hold down plates until they are full. These voids are the open areas between the ground and the top edges of the hold down plate. This will prevent any low spots from forming around the hold down plates when the pool is filled with water.



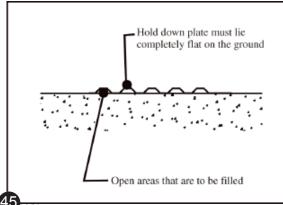


Important:

After the ends of the hold down plate has been filled with material, place a sheet of plastic (approximately 15" x 15" (38cm x 38cm)) at each end of the hold down plate. This will prevent any additional material from flowing into the ends of the hold down plate that may cause low spots to form around the plates.



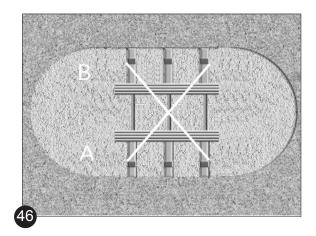
Important: Make sure each hold down plate lies completely flat. The hold down plate must lie flat or it may lift and damage the pool liner after the pool is filled with water.



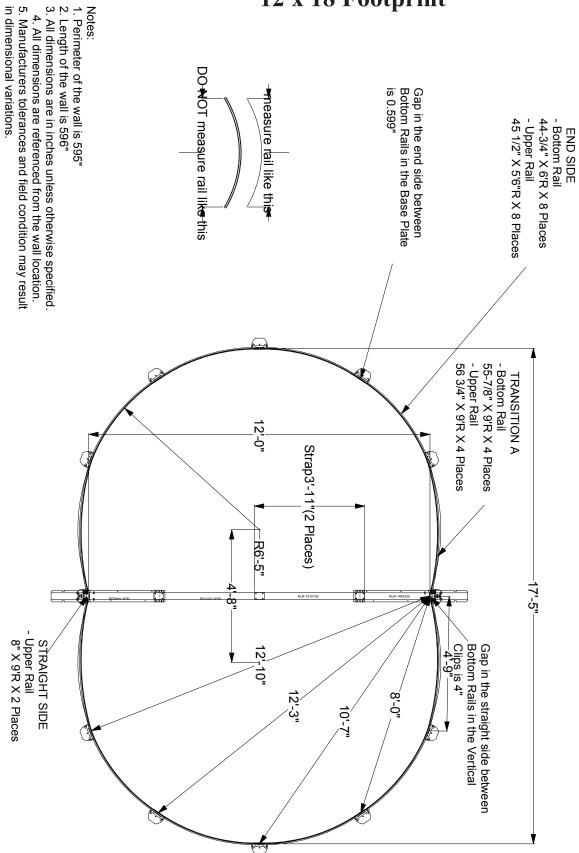
b. Repeat step (a) for the other hold down 45

12. Remove the strings and stakes

- a. Make sure all of the strings and stakes (except stakes (A) and (B)) are removed from the entire pool area and fill in any holes with crushed limestone (or equivalent). Leave stakes (A) and (B) in place for now; they will be used later to centre the pool wall.
- b. Measure the two intersecting axes to ensure that the two straight sections are parallel.

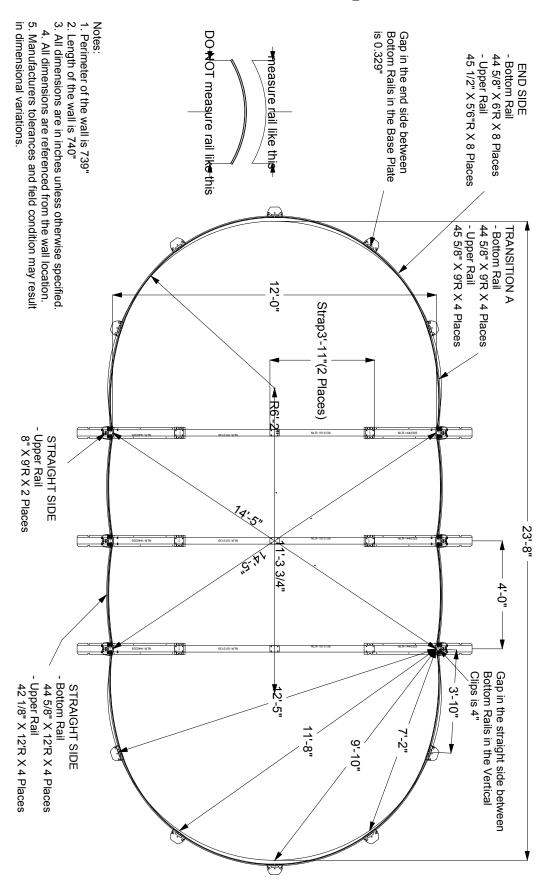


12 x 18 Footprint

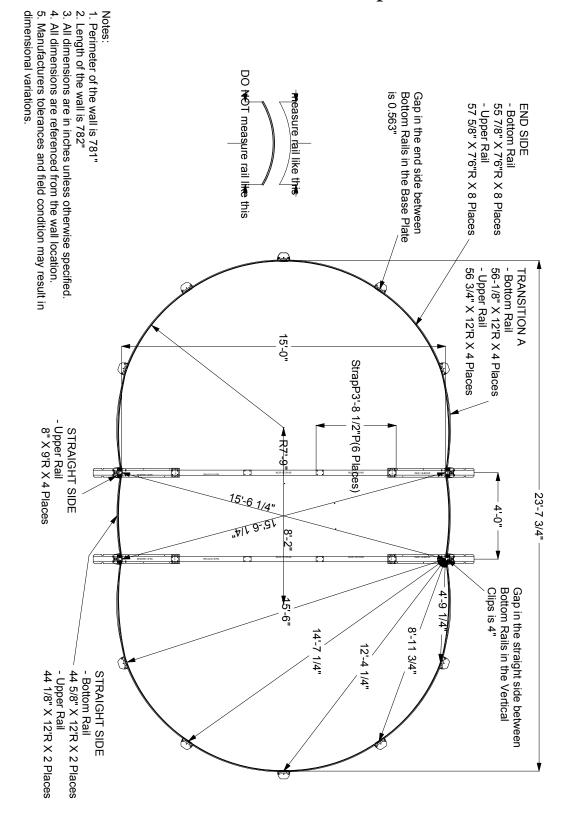




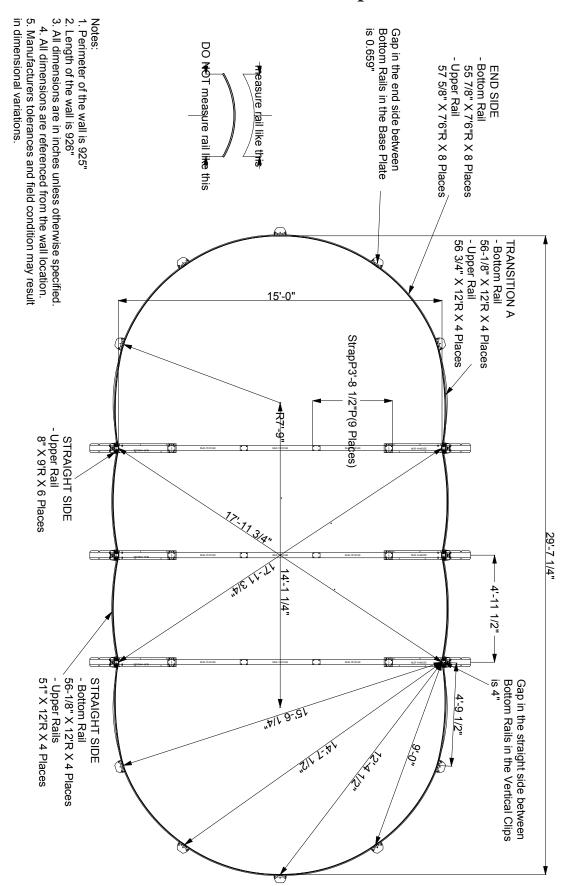
12 x 24 Footprint



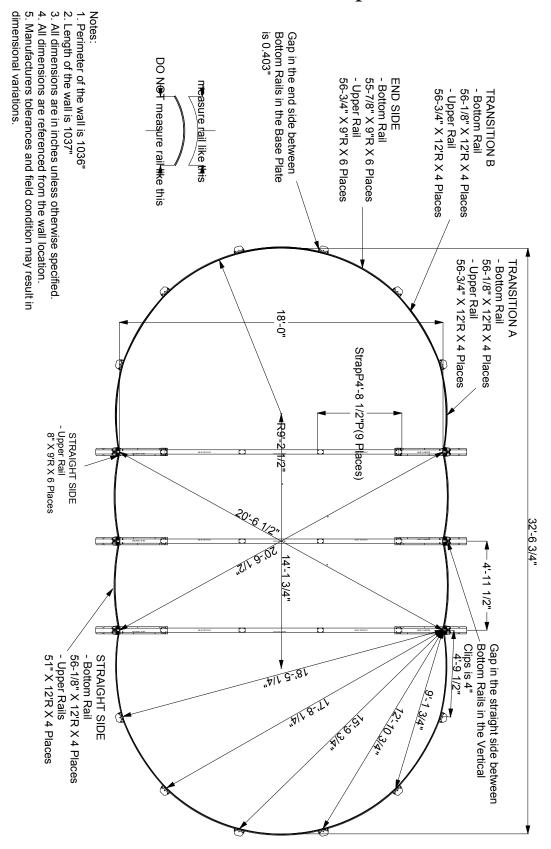
15 x 24 Footprint

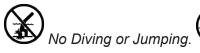


15 x 30 Footprint



18 x 33 Footprint







Section 2

Pool Component Installation Manual

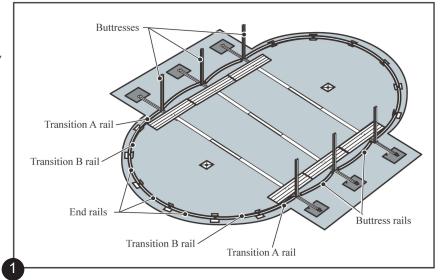
Assembling the Pool Base & Side Buttresses

1. Install the Curved Bottom Rails

a. Each pool uses two, three or four different types of curved bottom rails (key 13). The rails are colour coded or stamped with a part number. Use the chart below to choose the types and quantities of bottom rails for your pool (part numbers are shown in brackets under each colour).

Pool Size	Buttress Rail	Transition Rail A	Transition Rail B	End Rail
12' x 18' (3,66m x 5,49m)	n/a	4 blue	n/a	6 plain
		(no. 1460134)		(no. 1460061)
12' x 24' (3,66m x 7,32m)	4 white	4 blue	n/a	6 plain
	(no. 1254424)	(no. 1460135)		(no. 1460061)
15' x 24' (4,57m x 7,32m)	2 white	4 red	n/a	8 plain
	(no. 1254424)	(no. 1460136)		(no. 1460062)
15' x 30' (4,57m x 9,14m)	4 green	4 red	n/a	8 plain
	(no. 1460033)	(no. 1460136)		(no. 1460062)
18' x 33' (5,49m x 10,05m)	4 green	4 red	4 yellow	6 plain
	(no. 1460033)	(no. 1460136)	(no. 1255624)	(no. 1460063)

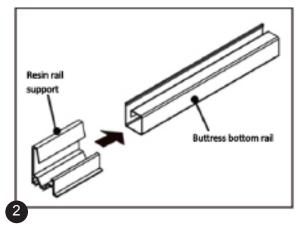
The 18 x 33 (5,49m x 10,05m) pool is the only size that uses all four types of rails. Diagram 1 shows the locations for each type.

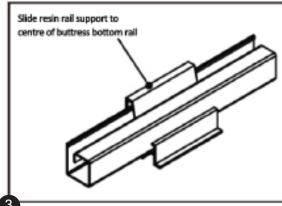




When measuring the distance to the face of each base plate, use a piece of string longer than required and place a mark on the string at the required distance.

b. The pool has been supplied with resin rail supports. If you have a 12 x 18 (3,66m x 5,49m) pool proceed to step (d). For all other pools slide the resin rail support to the middle of the buttress bottom rail as shown in diagrams (2) and (3). Repeat this step for all otherbuttress bottom rails.

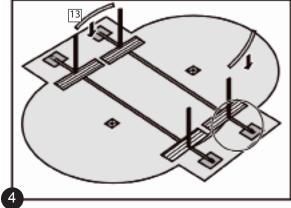


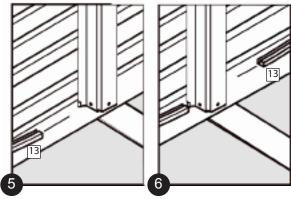




Cut several small pieces of wood approximately (10 x 10 cm) square and place one between the two bottom rails located at each base plate. This will keep the bottom rails from closing while the wall is installed. Be sure to remove the blocks of wood later, before installing the verticals in Section 4.

- c. Insert the buttress rails between the buttresses (if you have a 12 x 18 (3,66m x 5,49m) pool, skip step (c) and go to step (d)). The bottom rails insert into the notch in the upright. Make sure the groove faces up.
- d. Insert the transition A rails (key 13). Slide one end of each rail into the notch in the upright (see diagrams 5 and 6) and slide the other end together with a base plate (key 14) (see diagrams 9, 10 and 11).



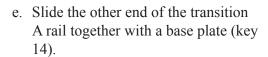


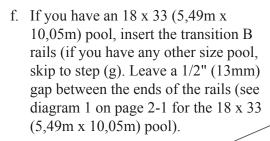


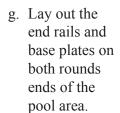
If you want, the patio stones around the round ends of the pool may be round instead of square, or they can be left out completely. The patio stones in the trenches under the buttresses along the straight sides must be used, even if you don't have them on the round ends.

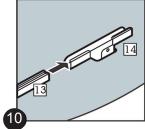
If you want, instead of using patio stones you can make use stabilizer. Dig a 12" x 12" (30 x 30 cm) square hole 2" (5 cm) deep and fill the hole with stabilizer.

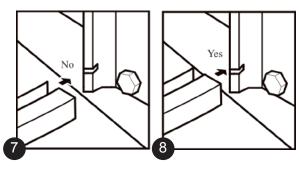
Important: make sure you slide the rail into the notch so the closed, square part of the rail is in the notch, not the open groove part of the rail (see diagrams 7 and 8).

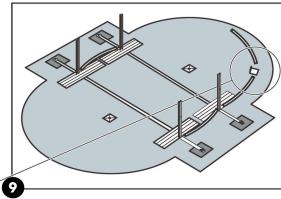


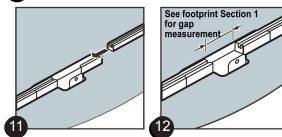








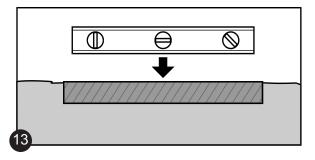




Using a piece of string attached to the centre of stake (A), measure the distance to the face of each base plate and make sure it is the same as dimension R (Note: this step will not work on the buttress rails or transition rails.)

- h. Insert the end rails. Leave a gap between the ends of the rails, see Section 1 footprint for gap measurement..
- i. Optional concrete patio stones may also be used under each base plate on the round ends of your pool. Patio stones 12" (30 cm) square or larger will do. They must be sunk into the ground so the tops are flush with the soil around them. Use the carpenter's level to make sure the patio stones are perfectly sure the patio stones are perfectly level and flush with the ground. Use the carpenter's level and a 2-by-4 between patio stones to make sure the stones are level with each other.

- j. Use a carpenter's level as you install each curved bottom rail to make sure it is level.
- k. Remove all the wooden stakes from the ground.



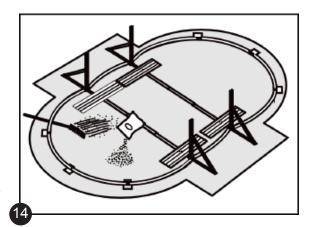


Remember:

Spread brick sand/stabilizer over the entire pool foundation area inside the base rails. This provides a protective surface for the pool liner to rest on.

2. Spread out Brick Sand/Stabilizer

- a. Make sure any screw or bolt heads that are to be covered with sand or styrofoam are covered with duct tape first.
- b. Make sure all of the trenches are completely filled with crushed limestone (or equivalent).
- c. Spread a layer of fine brick sand (no pebbles)/stabilizer over the foundation area, 2" (5 cm) deep. Use a rake to make the brick sand/stabilizer flat and smooth.



3. Proceed to Section 3





Section 3



Hint:

Bring the following items onto the pool foundation before you start uncoiling the pool wall: the pool liner, some extra brick sand to make the cove in Step 5, and a ladder to climb out after the wall is assembled.



Caution

Do not attempt to install the pool wall in the wind. Wait for a calm day.



Hint

Secure the omega stabilizer to the wall with a piece of duct tape after installation to prevent it from lifting off the wall.

Pool Component Installation Manual

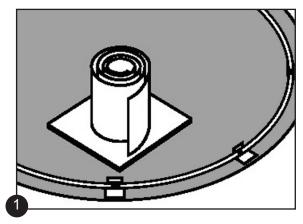
Assembling the Pool Wall & Liner

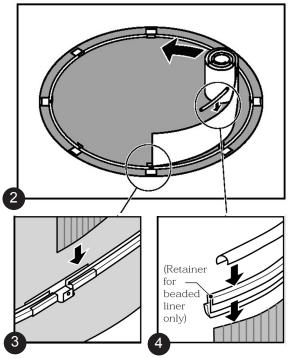
A. Assemble your Pool Wall

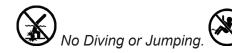
This section is for Round and Oval pools (ROUND POOLS ARE SHOWN).

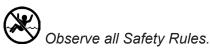
1. Set the Pool Wall in place

- a. Wait for a calm day. Do not attempt to install the pool wall in the wind.
- b. Unpackage the coiled pool wall and stand it on a piece of cardboard or plywood at the centre of the pool. The cut-outs for the through-the-wall skimmer should be towards the top of the wall. Look for a "THIS WAY UP" label and arrow. Make sure the skimmer and water return holes are where you need them to be. The skimmer and water return holes are positioned towards the end of the pool wall. (The section before the wall started).
- c. Start uncoiling the wall, guiding the bottom edge into the curved bottom rail. The starting end of the wall must be positioned over a bottomplate, and the skimmer and return holes should be positioned where the pump and filter will be. Set lengths of Omega Stabilizer onto the top edge of the wall as you uncoil it.











Hint:

Using a 2" (5 cm) piece of duct tape, tape the ends of the 6" (15 cm) metal slotted tube connector over the slotted tubes and onto the pool wall. This will prevent the slotted tubes from moving during liner installation.

d. The slotted tubes (Omega Stabilizer) are colour coded or stamped with a part number. Use the chart below to choose the types and quantities of slotted tubes for your pool (part nos. are shown in brackets under each colour). Set lengths of slotted tube onto the top edge of the wall as you uncoil it and join the slotted tubes with connectors as you go, leaving a 1/2" (13 mm) gap between each. (If you have a **beaded pool liner**, set lengths of **liner retainer** on the top edge of the wall first, then the slotted tubes and connectors.)

Pool Size	Buttress Tube	Transition Tube A	Transition Tube B	End Tube
12' x 18' (3,66m x 5,49m)	n/a	4 blue (no. 1470127)	n/a	6 plain (no. 1470126)
12' x 24' (3,66m x 7,32m)	4 white (no. 1470105)	4 black (no. 1470129)	n/a	6 plain (no. 1470126)
15' x 24' (4,57m x 7,32m)	2 white (no. 1470105)	4 green (no. 1470100)	n/a	8 plain (no. 1470097)
15' x 30' (4,57m x 9,14m)	4 green (no. 1470100)	4 green (no. 1470100)	n/a	8 plain (no. 1470097)
18' x 33' (5,49m x 10,05m)	4 green (no. 1470100)	4 green (no. 1470100)	4 green (no. 1470100)	6 plain (no. 1470098)



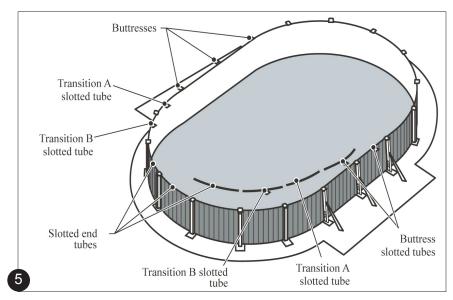
Hint:

Secure the omega stabilizer connector to the wall with a piece of duct tape after installation to prevent it from lifting off the wall.



Hint:

Stick a screwdriver through two of the holes to help line up the ends of the wall. The 18 x 33 pool is the only size that uses all four types of slotted tubes. Diagram 5 shows the locations for each type



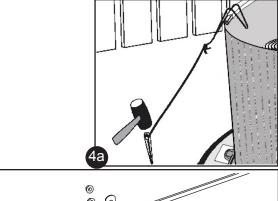


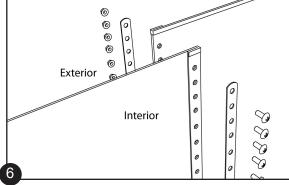


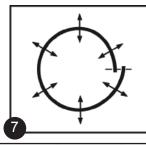
- **NOTE:** We also suggest installing vinyl-covered hooks and rope to hold the wall steady.
- e. Work around the foundation until the entire pool wall is uncoiled into the bottom rails and the top edge is covered with the omega stabilizer and connectors (and beaded liner retainers if you have a beaded pool liner)

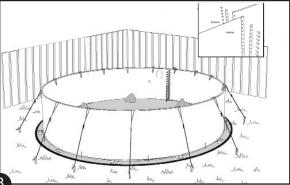
2. Join the Ends of the Pool Wall

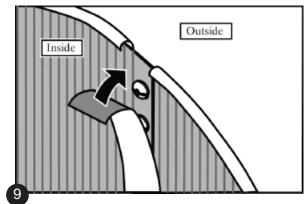
- a. Line up the holes in the two ends of the pool wall.
- b. To line up the holes, make the circle bigger or smaller by nudging the base plates in or out with your foot.
- c. To fasten the wall joint, overlap the two steel bars, one on the inside and the other on the outside. Tighten the mechanical screws on the inside and the nuts on the outside. Make sure there is a bolt in each hole.
- **NOTE:** When tightening the screws start from either the top and go down or vice versa. do not start a few screws from top and a few from the bottom to meet in the middle, this can cause problems later on
- d. Ensure that all bolts and all the holes are used.
- e. Cover the seam and bolt heads on the inside of the pool wall completely with 2 layers of 2" (50 mm) duct tape.













Secure the omega stabilizer connector to the wall with a piece of duct tape after installation to prevent it from lifting off the wall.



Stick a screwdriver through two of the holes to help line up the ends of the wall.

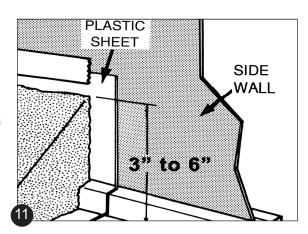




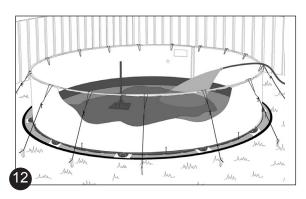
3-3

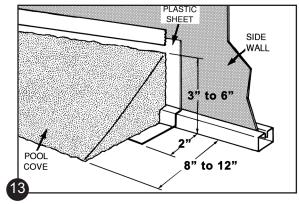
4. Make a Cove

a. If you are using sand, bank the sand against the wall to form a cove of 3" to 6" (7.5cm to 15cm) high and 8" to 12" (20cm to 30cm) wide at ground level. This will prevent the liner from creeping under the wall, and it will also protect the liner from any metal edges of the pool framework. THIS STEP IS NOT OPTIONAL, IT MUST BE DONE.



- b. Water the sand to compact it and use a trowel to spread it evenly.
- c. Since earth containing chemicals can cause discoloration or corrosion, it is suggested that you place polyethylene plastic sheeting under the cove around the perimeter of the wall, so no earth comes in contact with the metal. Since the presence of such chemicals is beyond the control of the manufacturer, such damage is not covered under warranty.
- d. If you are using styrofoam cove pieces instead of sand, insert them in the bottom rail and refer to the installation instructions that are provided with them.







Remember:

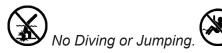
The cove is an important part of the pool structure.

Take your time to make a

complete, full-size cove.

Remember:

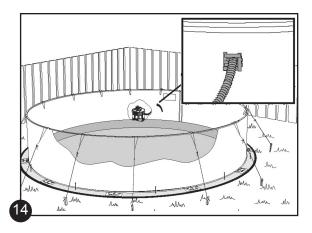
The bolt heads must be toward the inside of the pool. Cover the bolt heads with duct tape.





e. A vacuum cleaner can later be used to remove the air from between the liner and the wall. This technique enables you to remove folds in the liner. However the following precautions should be taken:

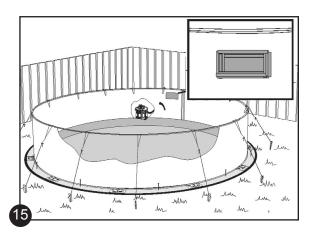
Do not use an industrial vacuum cleaner which could be too powerful.



Tape the end of the vacuum hose before inserting it into the wall so as not to damage the liner.

Insert the nozzle until it is about 4" (10cm) above the cove (insert through the water return outlet or the skimmer depending on the diameter of your hose). Make sure you will be able to remove the hose later on.

Tape the hose to the wall.

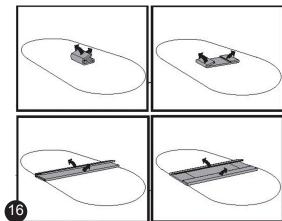


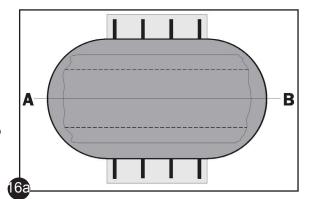
f. Close the skimmer opening with cardboard and adhesive tape so that the suction of air works better..

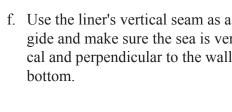
B. Install your Pool Liner

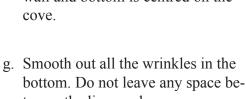
1. Set the liner in place

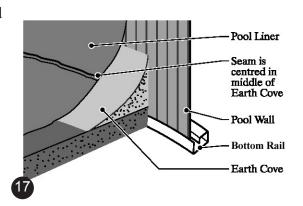
- a. Open the carton. Do not use anything sharp to open the carton.
- b. Unpack and unfold the liner and spread it out in the sun to warm it up. Inspect all the seams and surfaces for holes.
- c. Remove your shoes to avoid damaging the base or tearing the liner.
- d. Spread out the liner, smooth side down. Unfold the liner from the centre of the pool toward the sides.
- e. Use the liner's bottom seam(s) as a guide and make sure the seam(s) are parallet to the straight sections and to the imaginary line which links points A and B in the illustration 16a. It is recommended that you begin installing the liner in a round section.
- gide and make sure the sea is vertical and perpendicular to the wall and bottom.
- g. Make sure the seam between the wall and bottom is centred on the cove.
- tween the liner and cove.











If possible, unfold the liner on the grass one to two

hours before installation. Be careful not to leave

the liner too long or you

may damage the grass.

The liner is generally

smaller than the support

structure of the pool. It will stretch more easily when warm. It is important that the liner is installed on

a warm sunny day.



Important: This step applies only if you have an Overlap Liner. See next page for Beaded Liner or V-Bead Liner.

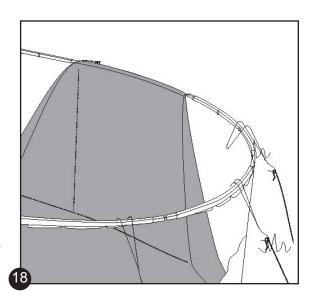


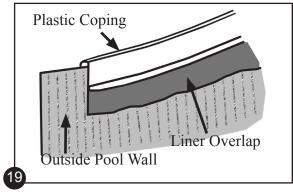
Important:

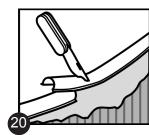
Do not trim off the excess liner. (If the liner ever needs to be removed. trimming the liner will make re-installation very difficult.) Instead, roll up any excess liner and tape it in place near the top of the pool wall.

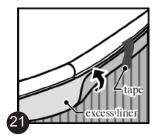
2. Fasten the Liner in place (Overlap Liner only)

- a. Starting at the liner wall seam, hang the liner over the wall making sure that the seam is straight up and down, perpendicular to the floor. (Remove stabilizers gradually as you fold the liner over the top of the wall.)This will assure you that the liner begins going over the wall straight.
- b. As you put the liner over the wall you can secure it by using the plastic coping strips to keep it in place. If you end up with excess material, continue around the pool, pulling excess liner evenly, and distribute over the wall until the excess is gone.
- c. Fasten the liner to the top of the wall with plastic coping. Let the liner hang slack for now. Do not pull the liner tight.
- NOTE: Some liners may fit very tightly, it is better to install uprights, top plate and top ledge before going onto next step. See Section 4.
- d. Turn the vacuum cleaner on and push the liner outward with your feet to iron out any wrinkles. Once finished, turn off vacuum cleaner.
- e. Start filling the pool with water. As the pool fills, work out all the wrinkles and smooth the liner to the wall. Remove the plastic coping around the top edge of the wall one piece at a time and adjust the liner. Keep smoothing out the wrinkles.
- f. After all the wrinkles in the liner are removed, trim any extra length of plastic coping so there is no overlap.
- g. Roll up any excess liner hanging below the plastic coping and tape it in place near the top of the pool wall. Important: Do not trim off the excess liner.









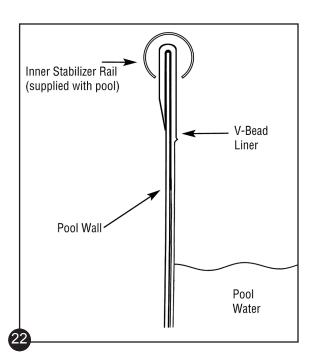


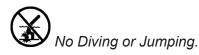


3. Fasten the Liner in place (HUNG/J or V-BEAD LINER ONLY)

- a. With a V-Bead liner you will not use the plastic coping strips that are packed in the parts carton of your pool. You can discard those pieces, if they are included, as they only apply to pools with overlap liners.
- b. The top of the wall of the liner has what is called a "V-Bead" welded onto it. Simply open up the bead with your fingers and hang it directly on top of the pool wall. When this is done properly, the only portion on the outside of the pool wall is approximately 1" of the V-Bead. No printed liner material is actually going over the top of the wall to the outside of the wall.
- c. Make sure the bead is on evenly around the entire pool, and that the liner is hanging straight down from the top of the wall. The liner should not have creases in it because it is twisting around the pool. If the liner is twisting, it is because it is not sitting properly in the pool. Make necessary adjustments before proceeding.

NOTE: Some liners may fit very tightly, it is better to install uprights, top plate and top ledge before going onto next step. See Section 4.





Remember:

pool wall.

Do not trim off the excess liner. (If the liner

ever needs to be removed,

make re-installation very difficult.) Instead, roll up

any excess liner and tape it

in place near the top of the

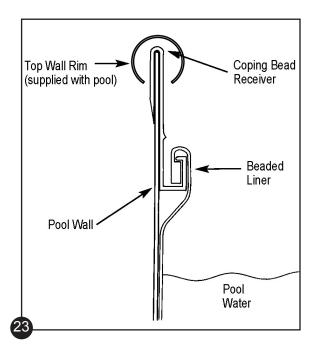
trimming the liner will

4. Fasten the liner place (BEADLOCK/SNAPBEAD LINER ONLY)

- a. With a snap bead liner you will not use the plastic coping strips that are packed in the parts carton of many pools. You can discard those pieces (if they are included). Instead, you should have received a beaded liner track (referred to as a "coping bead receiver" in this image).
- b. The beaded liner track should be installed onto the pool wall all of the way around the pool. These pieces should be as close together as possible. Leaving spaces between bead tracks can cause liner problems later on.
- c. Once all of the beaded liner track is on the wall, you can snap the liner bead into the beaded liner track at four random points around the pool. After that is done, and you are satisfied with how the liner is situated within the pool, you can continue snapping the remainder of the liner into place around the pool.
- d. Go around the entire pool again making certain that the liner is securely snapped into the track. This is important to confirm so that the liner does not pull out while under the pressure of being filled with water.

NOTE: Some liners may fit very tightly, it is better to install uprights, top plate and ledge before going onto next step. See Section 4.

5. Proceed to Section 4 Assembling the Pool Fram





Pool Component Installation Manual

Installing the Top Rails & Verticals

A. Attach your Uprights and Top Ledges (SUNRAY)

1. Continue filling your Pool

- a. Continue filling your pool with water. Do not put in more than 12" (30 cm) of water until the top rails and vertical columns are all attached.
- b. Keep working on the top rails and vertical columns while the pool fills.
- See the drawing on the next page for an overview of all the parts used to install the verticals, top rails and top connectors.

2. Install the Uprights and Ledges

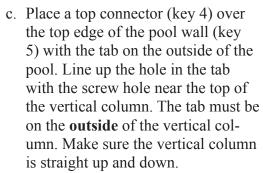
- a. Line up the bottom of one vertical column (key 1) with the tab on one base plate (key 2). The tab must be on the **outside** of the vertical column.
- b. Line up the screw holes and fasten with one self-tapping screw (key 3).

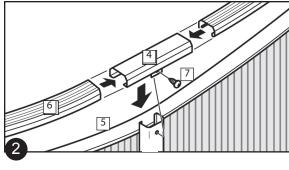




Hint:

Use the ridges in the pool wall to make sure the vertical column is straight up and down.



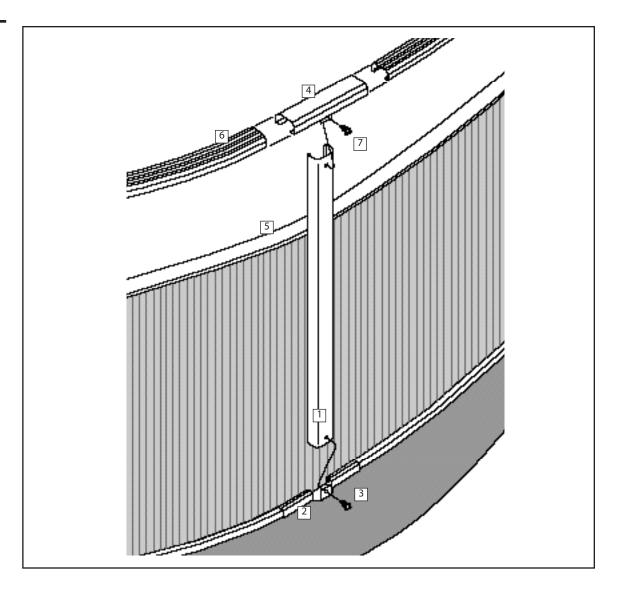


- d. Slide one end of a top rail (key 6) into the top connector.
- e. Fasten the top connector to the vertical column with one self-tapping screw (key 7).
- f. Repeat the last five steps for each of the vertical columns around the pool wall.





Overview of Vertical, Top Rail and Top **Connector Assembly**

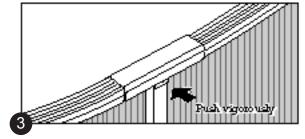




Important:

The pool wall may bulge and shift a little while filling with water. This is normal.

g. Make the pool settle into a perfect circle by pushing the top of the pool wall vigorously inward at each vertical (this will help make the bottom of the pool wall shift into a perfect circle).





Caution:

Before anyone uses your pool, read and follow all the Safety **Rules** in Section 1. This pool is **not** for diving or jumping.



B. Fill your Pool with Water

1. Finish filling the pool

- a. Turn off the vacuum and carefully remove it from the pool.
- b. Fill the pool with water to 2" (5cm) below the lowest opening. Make sure you remove any creases from the liner in the bottom of the pool before the water level gets too high.
- c. While the pool is filling, remove the nails that were holding the bottom rails in place.
- d. Your pool is now installed. You must now install the filter and pump, the skimmer and water return inlet. Please follow the installation instructions that come with these products.



Caution:

Before making any openings in the liner, fill the pool with 60cm (24") of water to stretch the liner fully. When filling your pool, begin with a garden hose until there is about 30cm (12") of water in the pool. This will allow the liner to stretch gradually. You can then use a heavier flow to finish filling it up.



Make sure that your pool is round, do not assume that by filling up the pool that this will help the pool to place itself into a perfect round circle. Ensure that it is round before filling up the pool with water.

IMPORTANT SAFETY INFORMATION:

Please refer to the safety page at the beginning of this instruction manual. You must follow the rules and information regarding placement of safety stickers on your pool.



