

Above Ground Pool Assembly & Installation

OVAL SLAT WALL POOL

Buttress Free

WARNING:

**THIS POOL IS NOT DESIGNED FOR DIVING OR JUMPING
DANGEROUS INJURY CAN RESULT-SHALLOW WATER!!!**

Follow All Safety and Maintenance Instructions

Your pool is designed for years of pleasurable, safe family fun. But, when used incorrectly, a swimming pool can be dangerous. To insure your pool is used safely you **must** observe the following safety precautions:

- Do not dive!-Do not jump!- No rough play!- No running or pushing!
- Do not walk on the top rail. It can be slippery and is not a walkway.
- Be sure to install all safety labels provided with your pool according to the instructions.
- Keep a safety rope 1/4" by 50' with a flotation buoy with an outside diameter of 15". Have accessible in a prominent area by your pool.
- Post near all entrances to pool area; a list of telephone numbers of the:
 - Nearest available police
 - Nearest available fire department
 - Nearest available rescue unit
 - 911 emergency number if available
 - Nearest ambulance service
 - Nearest available hospital
 - Nearest available physician
- Provide fencing or enclosure which is independent of the house as a closure around the entire pool area. The fencing must be made of durable material, a minimum of 4' in height from ground level and with closures with self-latching locks, to make pool inaccessible to toddlers and uninvited guests. Make sure

gate is always closed. Be sure to follow local building code requirements for load capacity and fencing if using an aftermarket or homebuilt deck. You must make sure all fence and barriers are in working order so that pool is always protected.

- Check with your local town for any special laws in your locale.
- Never drink alcoholic beverages or use any intoxicants which could hinder your judgment and reflexes.
- Never use pool alone. All children must be supervised continuously.
- Do not use pool if bottom is not clearly visible: At night, sufficient lighting must be available. It is the pool owners sole responsibility to provide adequate lighting for pool bottom, safety signs and walkways, which exceeds minimum standards of the IES of North America.
- Do not climb, stand or sit on any pool structure or the filter system. Components such as the filtration system, pumps and heater must be positioned so as to prevent their being used as a means of access to the pool by young children.
- Be sure that all toys, chairs and tables or similar objects that a young child could climb on be at least four feet (4') from pool.
- Do not use pool during electrical or rain storms.
- See available National Spa and Pool Institute (NSPI), publications for more tips on pool safety.

WARNING:

DO NOT AFFIX
ANY OTHER PRODUCTS
MADE BY OTHERS
TO YOUR POOL
SUCH AS,
BUT NOT LIMITED TO ,
DECKS AND SLIDES!

IMPORTANT NOTICE! READ BEFORE INSTALLATION

ENCLOSED IN FRAME CARTON IS SAFETY ENVELOPE. 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.



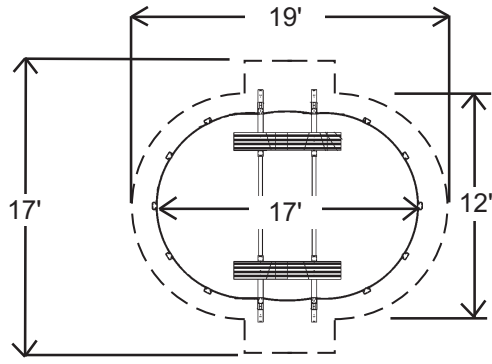
SIGN MUST BE PLACED ON WALL NEXT TO ENTRY TO POOL

THESE WARNINGS 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.

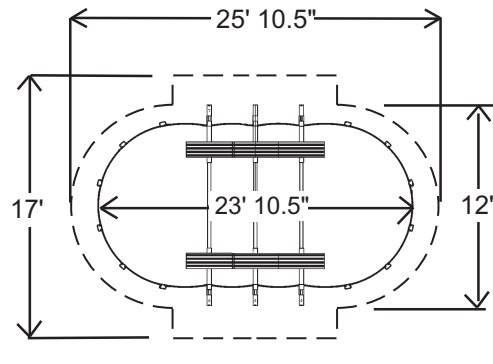


SIGN TO BE PLACED ON LINER ABOVE WATER LINE OPPOSITE ENTRY TO POOL

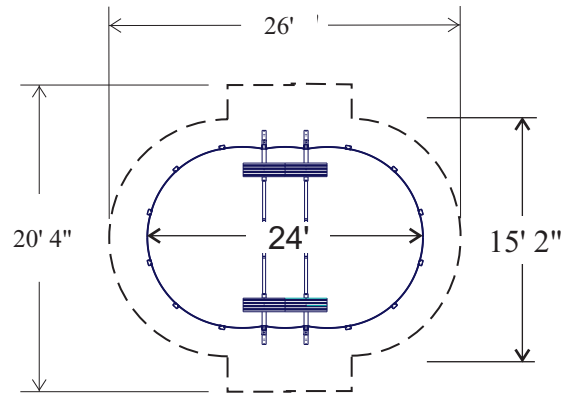
BUTTRESS-FREE POOL SIZES



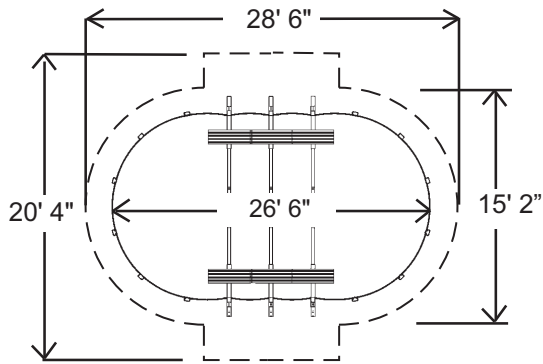
12 x 17



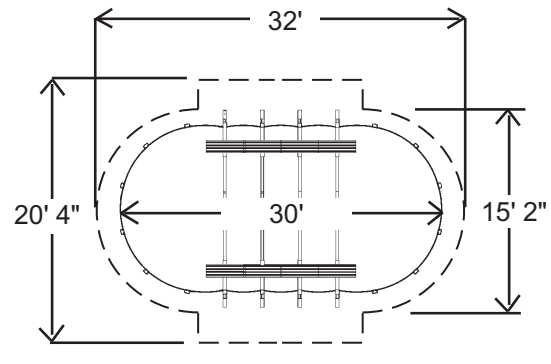
12 x 24



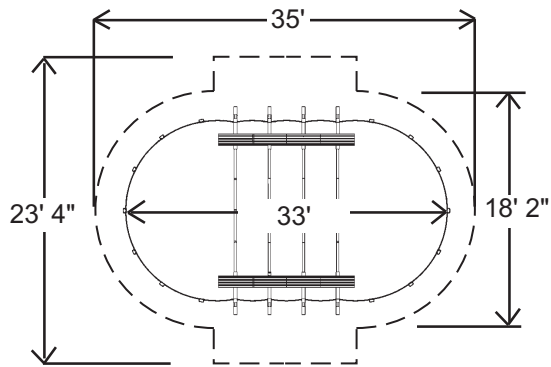
15 x 24



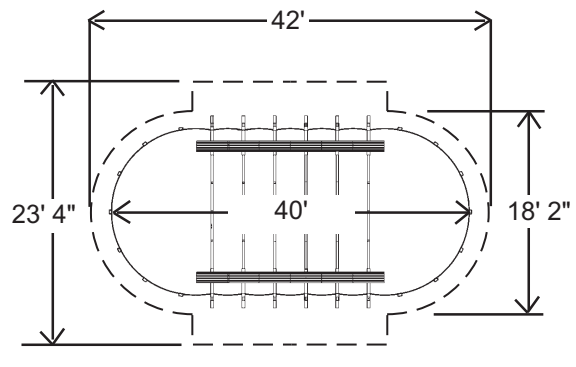
15 x 26



15 x 30



18 x 33



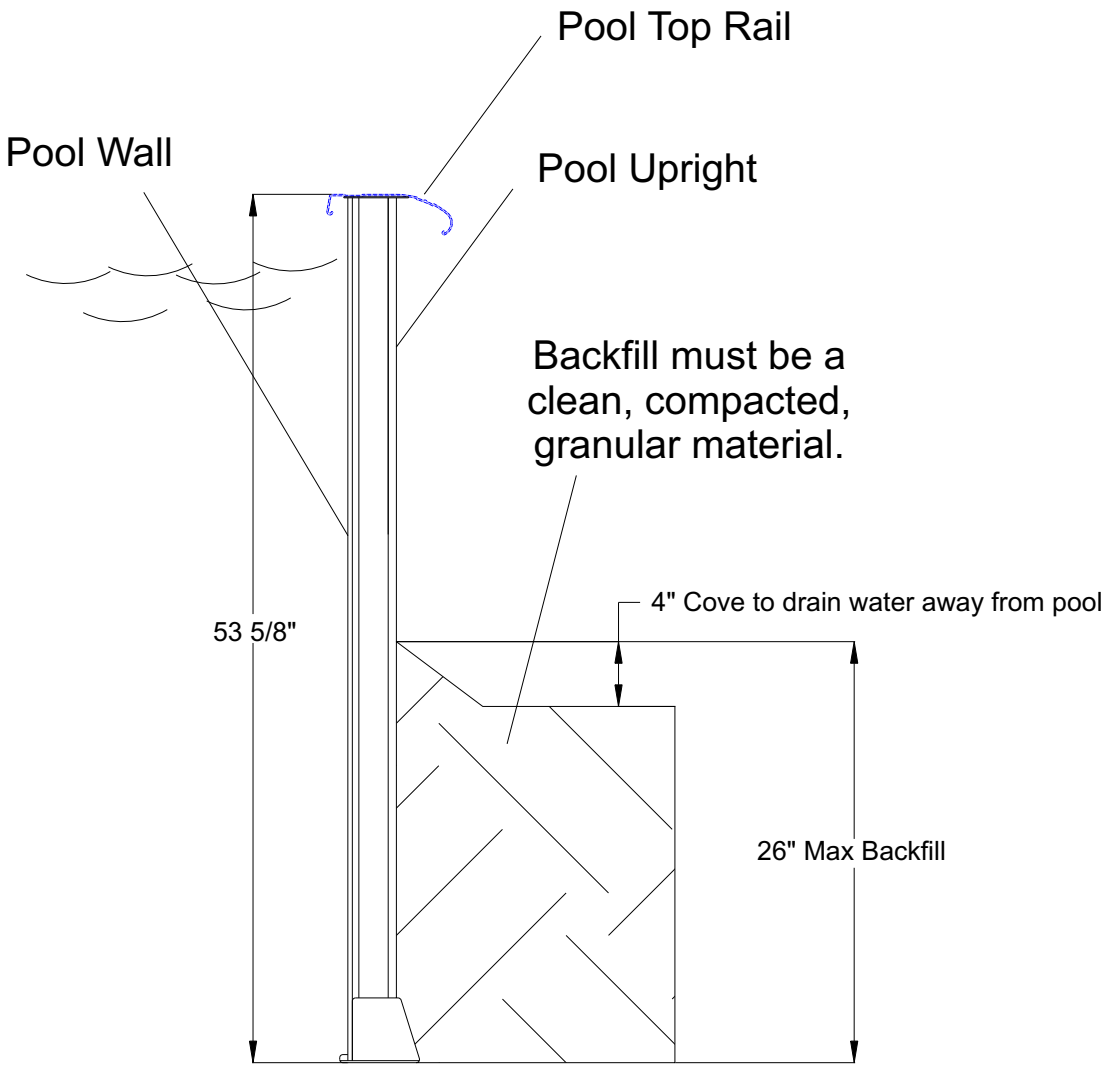
18 x 40

Note: All above diagrams are for Buttrless-Free oval pools. If you have a traditional Buttrless oval pool, you will need to add 3 feet to the width of the space needed for installation. The length measurement will not change.

- Actual size of pool.
- Space needed for installation.

Semi-In Ground Installation

The extruded aluminum slat wall pool can be installed semi-in ground. It can go in the ground 26". As shown in the diagram we recommend an earth cove next to the pool wall to drain water away from the pool. Accumulation of water against the outside of the pool wall will cause the pool to cave in and does void the warranty. In the 12 months following the pool installation the home owner must check every-other month for settling of the earth against the pool wall. If there is settling next to the pool water can collect and cause a cave in. The area around the pool must then be graded and filled in around the pool as needed. The pool must never be emptied of water when the earth around the pool is wet, such as following rain or snow melt, as this will also cause the pool wall to collapse and void the warranty.



INTRODUCTION:

Congratulations on becoming the owner of a new above ground swimming pool. This is the instruction packet for installing your swimming pool. The following are some helpful hints that you should take into consideration before installing your pool.

- 1) Read through the entire instruction booklet before you begin. This will enable you to find out exactly what is involved with installing your swimming pool before you begin. While you are going through the instructions, please be aware that all of the diagrams are representative of a 15' x 30'/18' x 33' pool. If you have a different size pool you will find that your pool has a different number of uprights than the ones in the diagrams.
- 2) **DO NOT ATTEMPT INSTALLATION IN WINDY OR GUSTY WEATHER** This will not only make installation more difficult, it may result in damage to your pool before it is completely installed.
- 3) Although we have broken down the installation into many simple steps, you will probably find that Steps 1 and 2 will be the most labor intensive and time consuming steps. Once you have completed those two steps you should find that the rest of the installation moves along much more quickly.
- 4) Please be sure to review all safety material and local codes before beginning your installation. There is a yellow safety envelope packed with your pool. This envelope contains safety material and warning stickers to be placed on your pool. If you are missing any of these items please contact your dealer or the factory to obtain it. The warranty is void if all safety precautions are not followed.
- 5) In the event that you need to make a warranty claim, it is important to know the size and model of your swimming pool in order to expedite the handling of your claim. Please fill in the information below and keep for your records. All of this information can be found on the labels attached to the cartons your pool is packed in.

NAME OF POOL: _____

SIZE OF POOL: _____

DATE OF PURCHASE: _____

NAME OF POOLWALL: _____

NAME OF LINER: _____

- 6) Make sure you have the necessary tools and materials before beginning your installation. Below is a list of the tools and materials needed.

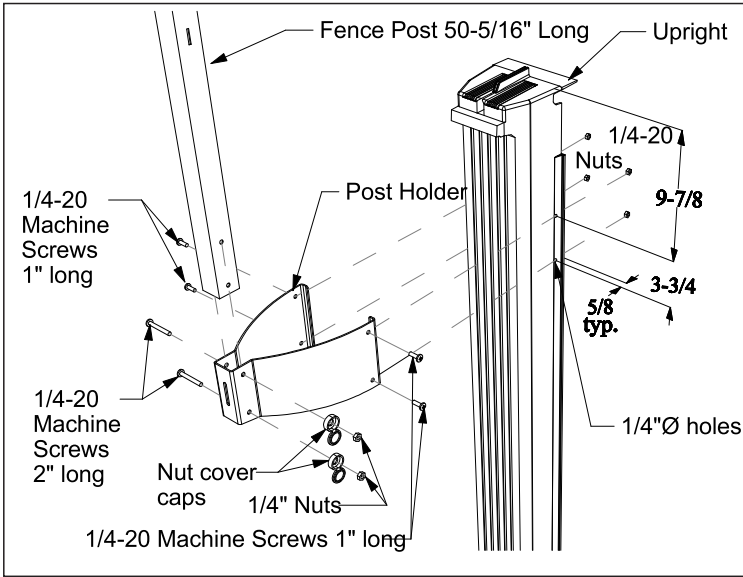
- | | |
|-----------------------------|--|
| - Shovel | - Carpenters level and/or transit (Optional) |
| - Tape measure | - Patio Blocks (2" x 8" x 16") |
| - Phillips head screwdriver | - Box cutter (Razor blade) |
| - Duct tape | - Tamp |
| - Sand | - 5/16" wrench |
| - Filter | - 1/4" wrench |
| - Skimmer/Return fitting | |

IMPORTANT!

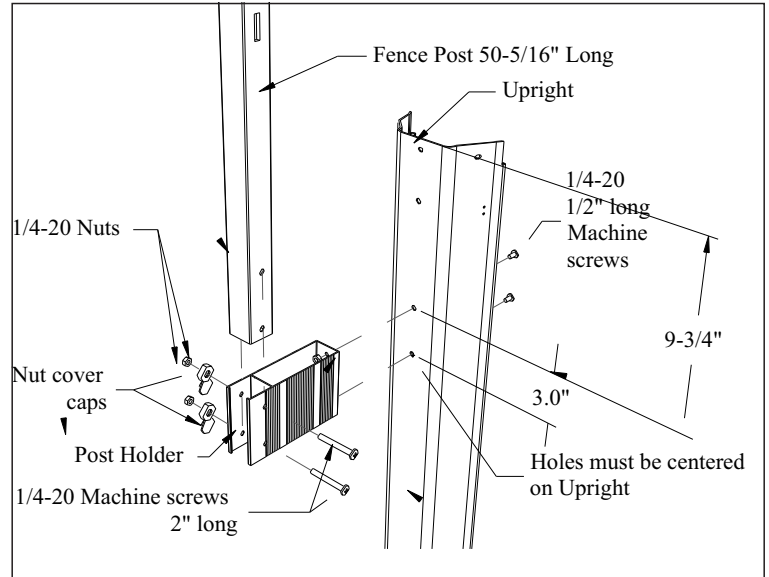
If you are installing a fence on your pool, you will need to install post holders on your uprights **BEFORE** you install the uprights on the pool.

Please refer to your Fence Installation Instructions for details.

Plastic Upright



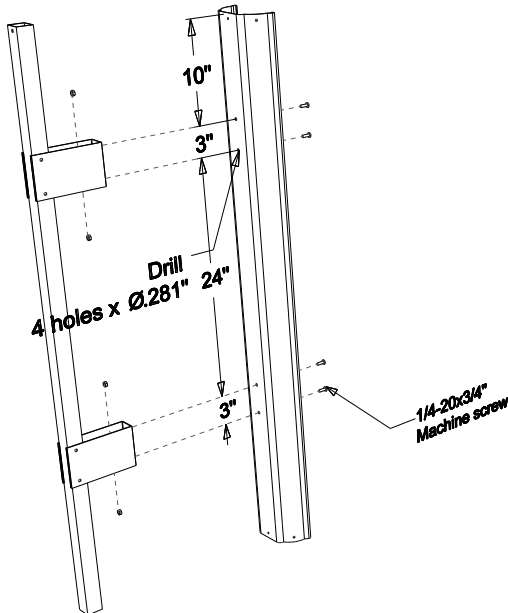
Metal Upright



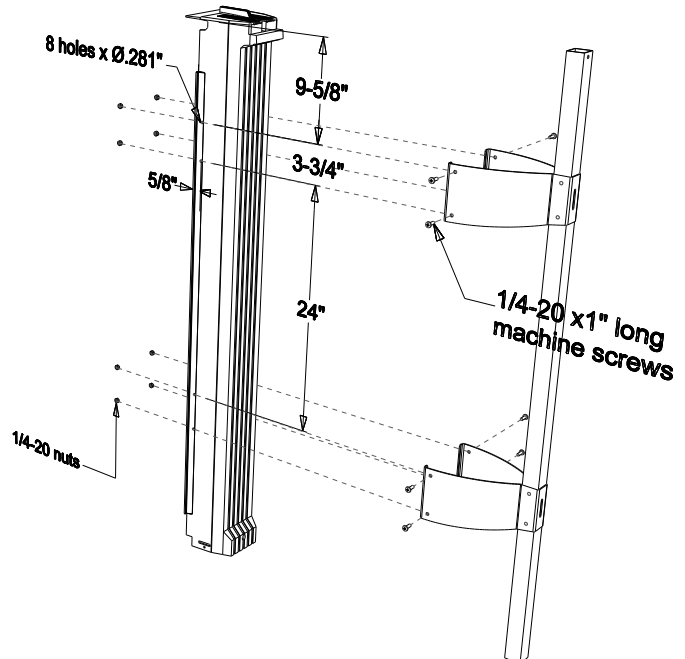
If you are installing a deck on your pool, then part of the deck support system must be installed on your pool uprights **BEFORE** you install the uprights on the pool.

Please refer to your Fence Installation Instructions for details.

Metal Upright



Plastic Upright



POOL LOCATION:

Do not locate pool over underground lines, septic tanks, under electrical lines, near hazardous structures, or out of local code restrictions. It is essential that the area selected for your pool has a level and firm base. Do not assemble your pool on asphalt, tar or oil base surfaces. Avoid areas with sharp objects, or ground treated with weed killer or other chemicals. Also avoid areas where nut grass, Bermuda grass or bamboo grass grows, as they can grow through your liner. Grass must be removed. Do not place components such as filters, pumps, and heaters in a way that they can be used as a means of access to pool by young children. Be sure to follow all local building codes and obtain all building permits required for your area.

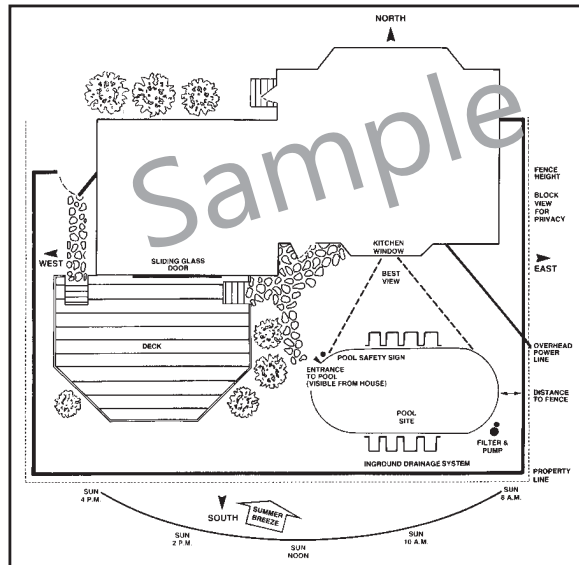


Fig. 1

*BE SURE TO AVOID:

- All electrical wires
- All gas lines
- Septic tanks
- Cesspools
- Dry wells
- Tree roots/stumps
- buried debris (trees, building material, etc.)
- sudden slopes within 6' of pool area

STEP 1 – PREPARING THE SITE:

Refer to the "True Size" diagram on the second page to see the dimensions of your swimming pool. Once you have these measurements and have chosen a site to install your pool, mark or outline the ground where the pool will be going using spray paint or some other marking agent. Please keep in mind that you will need some extra room to work. Be sure to account for the space that the side supports extend out on each side of an oval pool. The strap end channel extends only 19" out from the wall on each side. Refer to the Actual Size chart for further clarification.

For example, a 15x30 oval should have the following space in order to install the pool.

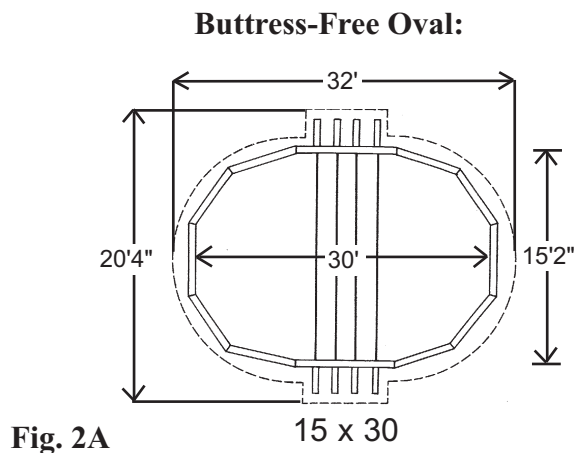


Fig. 2A

*Once you have the appropriate area marked out, remove any sod that is in the area. Also be sure to avoid all electrical wires, gas lines, septic tanks, cesspools, dry wells, tree roots, stumps, buried debris, and sudden slopes within 6' of the pool area.

STEP 2 – LEVELING:

Once you have designated the space for installation, and have cleared away the sod in that area, you can begin to level the ground. The ideal tool for doing this is a transit. If you do not have access to a transit, use a long board (be sure that the board is perfectly straight) and a carpenter's level, as shown in the diagram.

The key to properly leveling the surface for an above ground swimming pool is to start at the lowest point and dig everything else down to that level. You do not want to build up the lower areas to be level with the higher areas. Doing this will cause the ground to settle once the pool is full of water. If the ground settles it could destroy your pool, which could be dangerous and is not covered under the warranty.

You will probably not be able to get the ground completely level until you lay out the frame, but the closer you get it now the easier the job will be later. We recommend that you do not proceed until the entire site is within an inch of being perfectly level.

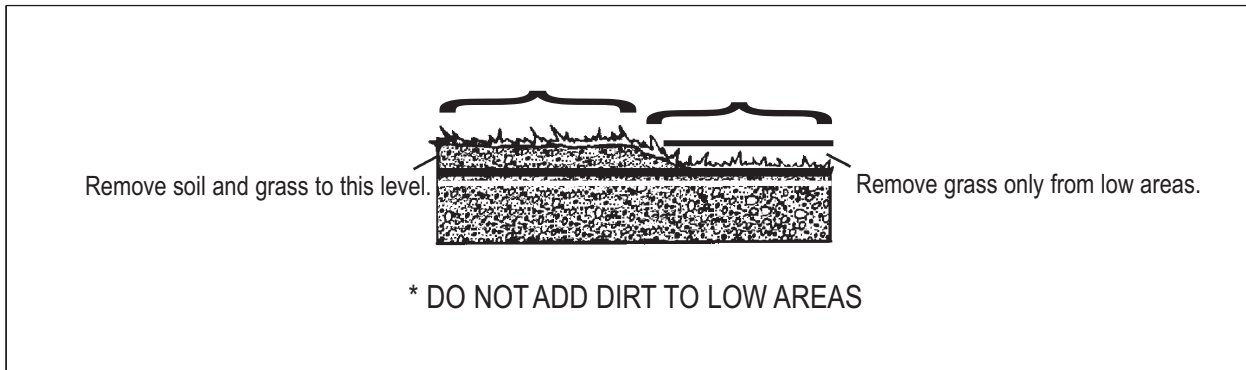


Fig. 3

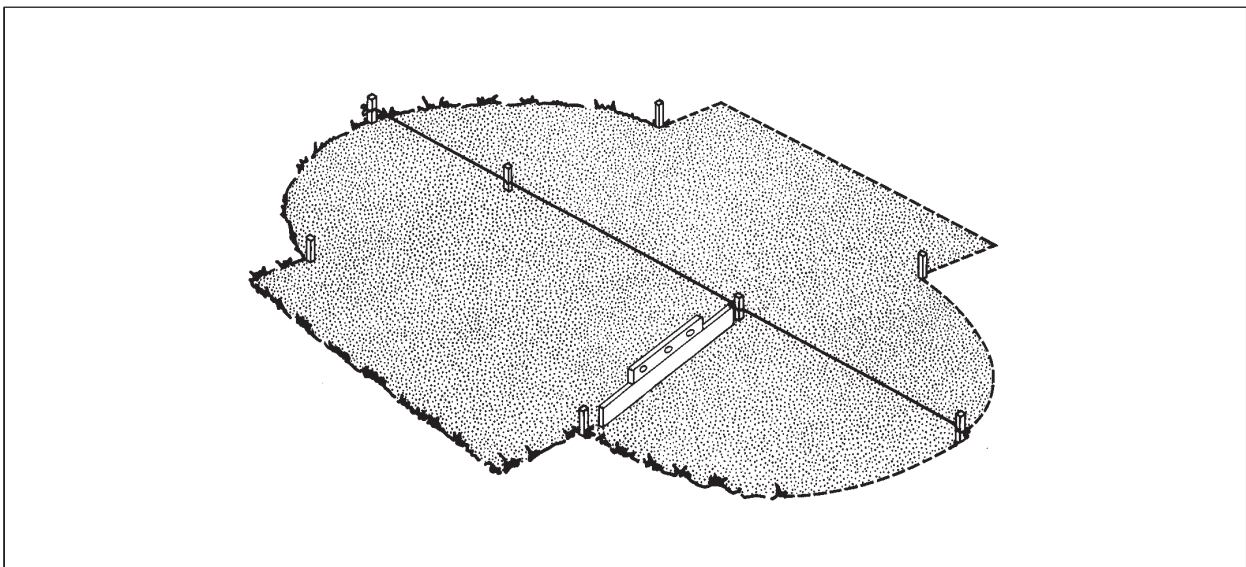


Fig. 4

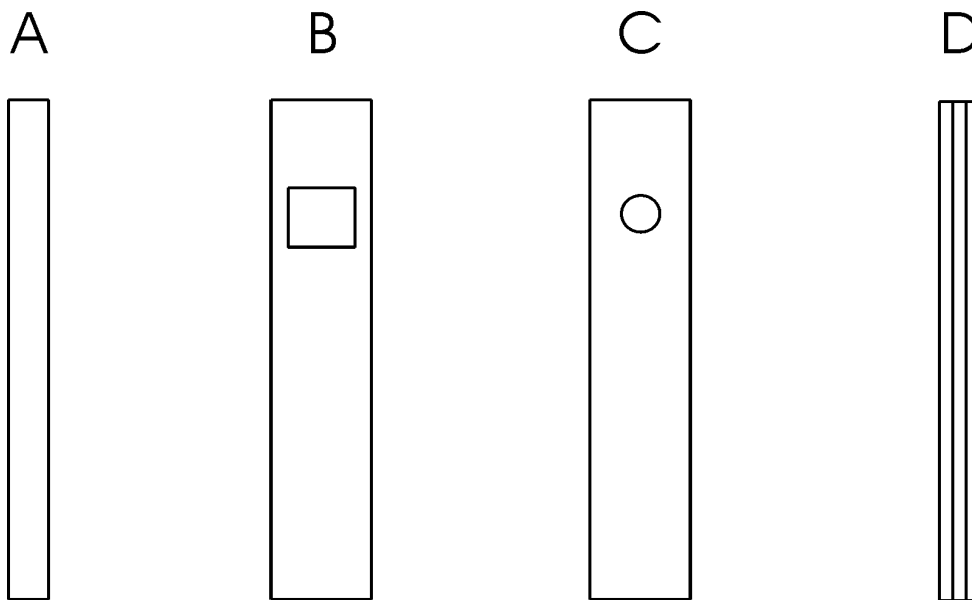
STEP 3: IDENTIFY SLAT WALL PARTS

Use your pool parts breakdown sheet to separate all pool components, becoming familiar with each part.

Please note that we include five extra slats just in case you have any parts that are damaged in transit or at the job-site. We know how frustrating it can be to stop a job due to a damaged part and we take every precaution to make sure that does not happen.

The wall of your pool has four different types of slats. Please separate the four different types of slats before you begin. The smooth surface of the slat ALWAYS faces in toward the water side of the pool. All ribs and bumps are on the outside, or dry side of the pool. Shown below are the four different types of slats.

VERY IMPORTANT
BE SURE TO IDENTIFY AND SEPARATE THE
DIFFERENT SLATS BEFORE BEGINNING
INSTALLATION.



- A is a regular slat
- B is a skimmer slat
- C is a return slat
- D is a beam slat

STEP 3: IDENTIFY SLAT WALL PARTS continued

This chart will help you finding the right amount of slats to complete your wall.

Slat Wall Pool: Slat Count

Pool Size	Beam Slats	Reg Slats Needed	Parent Wall	Carton #1	Carton #2	Carton #3	Carton #4	Carton #5
8'	22	49	WSLAT54-SMN08	CW54RB-4722B	-	-	-	-
12'	22	85	WSLAT54-SMN12	CW54RB-4722B	CW54R-38	-	-	-
15'	22	115	WSLAT54-SMN15	CW54RB-4722B	CW54R-68	-	-	-
18'	26	139	WSLAT54-SMN18	CW54RB-4722B	CW54RB-6404	CW54R-28	-	-
20'	30	153	WSLAT54-SMN20	CW54RB-4722B	CW54RB-6408	CW54R-42	-	-
21'	28	166	WSLAT54-SMN21	CW54RB-4722B	CW54RB-6506	CW54R-54	-	-
24'	36	186	WSLAT54-SMN24	CW54RB-4722B	CW54RB-6414	CW54R-75	-	-
27'	36	214	WSLAT54-SMN27	CW54RB-4722B	CW54RB-6414	CW54R-56	CW54R-47	-
28'	42	218	WSLAT54-SMN28	CW54RB-4722B	CW54RB-6414	CW54RB-6404	CW54R-43	-
30'	40	238	WSLAT54-SMN30	CW54RB-4722B	CW54RB-6414	CW54RB-6404	CW54R-63	-
33'	48	258	WSLAT54-SMN33	CW54RB-4722B	CW54RB-6420	CW54RB-8806	CW54R-59	-
1016	28	96	WSLAT54-SMN1016	CW54RB-4722B	CW54RB-4906	-	-	-
1217	28	114	WSLAT54-SMN1217	CW54RB-4722B	CW54RB-6306	-	-	-
1220	32	128	WSLAT54-SMN1220	CW54RB-4722B	CW54RB-4010	CW54R-41	-	-
1224	36	145	WSLAT54-SMN1224	CW54RB-4722B	CW54RB-7014	CW54R-28	-	-
1524	32	160	WSLAT54-SMN1524	CW54RB-4722B	CW54RB-4010	CW54R-73	-	-
1526	36	171	WSLAT54-SMN1526	CW54RB-4722B	CW54RB-6114	CW54R-63	-	-
1530	40	189	WSLAT54-SMN1530	CW54RB-4722B	CW54RB-4010	CW54RB-6408	CW54R-38	-
1833	44	214	WSLAT54-SMN1833	CW54RB-4722B	CW54RB-3416	CW54RB-6406	CW54R-69	-
1840	52	248	WSLAT54-SMN1840	CW54RB-4722B	CW54RB-3416	CW54RB-6114	CW54R-50	CW54R-56
2143	52	265	WSLAT54-SMN2143	CW54RB-4722B	CW54RB-3416	CW54RB-6114	CW54R-69	CW54R-54

STEP 4 – UNPACKING THE POOL:

At this point you should open all of the cartons that have come with your pool. Separate all of the parts, becoming familiar with each by checking them against the specific parts breakdown sheet packed in the yellow envelope. Count the number of each part and check that against the packing list as well. This way if you are missing something you can contact the people you purchased the pool from before you begin the construction of the pool.

Below are some generic diagrams of oval pool components to help you identify the parts and where they will be used. **IMPORTANT: Do not attempt to assemble these parts now. Once you confirm that you have all of the components needed for your pool, continue on with the instructions.**

BUTTRESS-FREE OVAL ASSEMBLY:

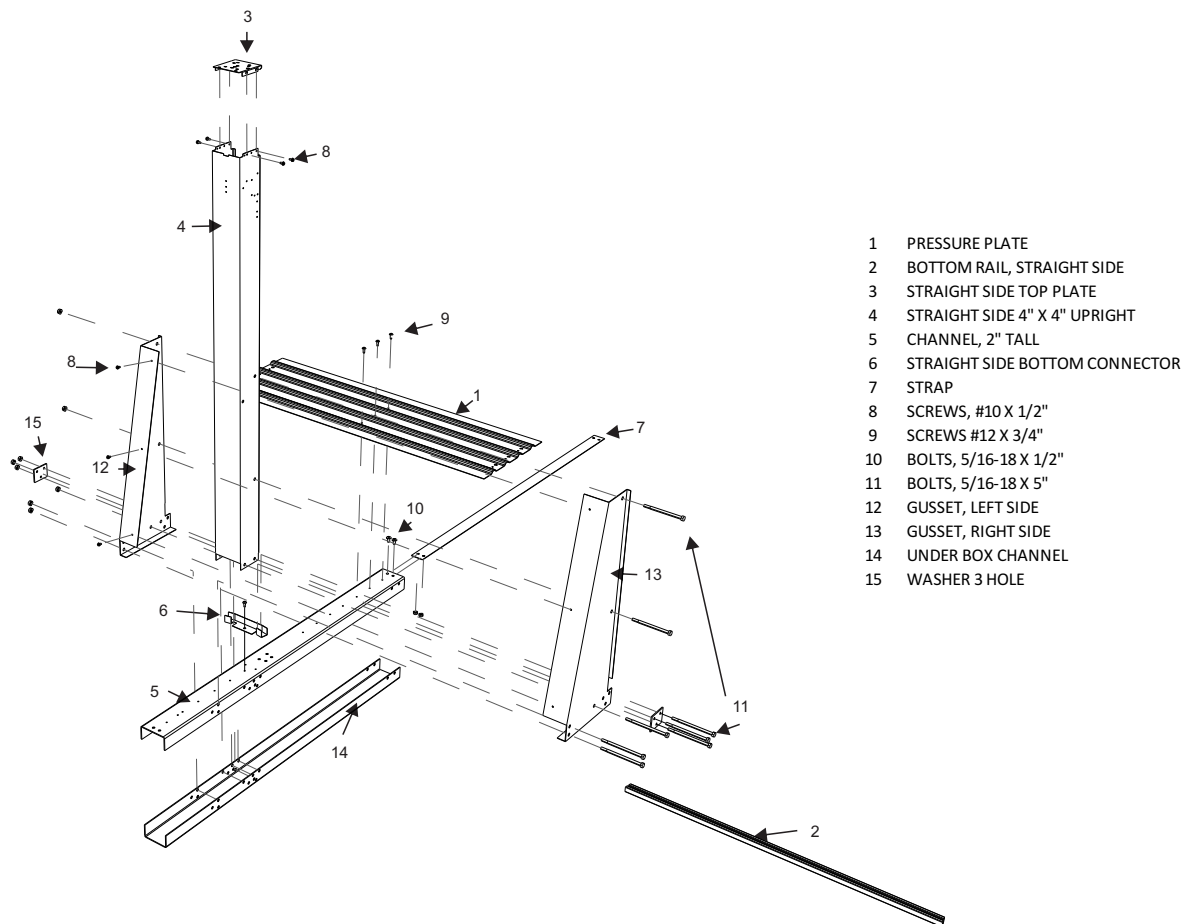


Fig. 6

STEP 5 -

PRE-ASSEMBLING THE STRAIGHT SIDES OF A BUTTRESS-FREE OVAL POOL ONLY:

*** IF YOU HAVE A TRADITIONAL BUTTRESS OVAL, PLEASE REFER TO THE

A) Start by laying out the under box channels so that the open sides of each under box channel is facing up. Then slide the strap end channel over the top of the under box channels so that they form a tube. Be sure that the holes in both channels are aligned, but do not bolt them together yet. See Fig. 11

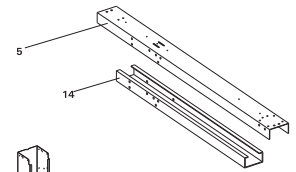


Fig. 11

B) Now slide the straight side 4"x4" uprights over the strap end channels making sure that the holes line up as shown in Fig.12.



Fig. 12

C) Once the straight side 4"x4" uprights are attached, apply the left and right side gussets on each. The pieces are marked "L" and "R". The gussets are applied under the channels and around the straight side upright. Once you have them in place screw the left and right gussets to each other using three #10 screws. See Fig.13 for visual instructions.

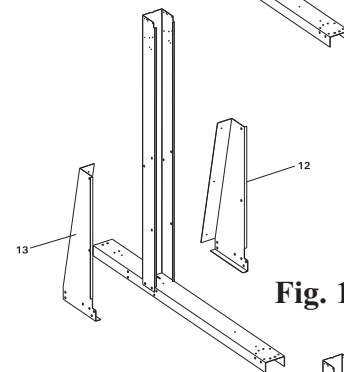


Fig. 13

D) All holes should be lined up at this point. Bolt the components together as shown in the diagram. Use 5/16" x 5" long bolts and 5/16" nuts for the channels, and 5/16" x 5" long stainless steel bolts for connecting the gussets to the uprights. Remember to include the three-hole plate at the fronts of the gussets. If these washers are left off your pool will break! See Fig.14 for visual instructions.

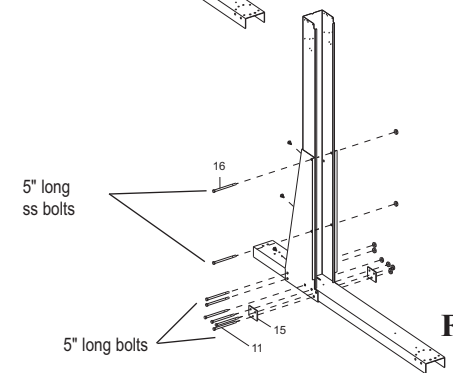


Fig. 14

E) Once all of the 5" long bolts have been tightened, install the straight side bottom connectors. This is done by placing the connector on top of the strap end channel just inside the straight side upright. The hole in the connector should line up with the hole in the strap end channel. Secure the connector to the channel using a single # 12 x 3/4" screw for each as shown in Fig.15.

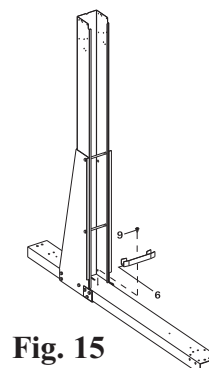


Fig. 15

PART IDENTIFIER

1	PRESSURE PLATE
2	BOTTOM RAIL, STRAIGHT SIDE
3	STRAIGHT SIDE TOP PLATE
4	STRAIGHT SIDE 4"x4" UPRIGHT
5	CHANNEL, 2" TALL
6	STRAIGHT SIDE BOTTOM CONNECTOR STRAP
8	SCREWS, #10 X 1/2"
9	SCREWS, #12 X 3/4"
10	BOLTS, 5/16-18 X 1/2"
11	BOLTS, 5/16-18 X 5"
12	GUSSET, LEFT SIDE (Buttress-Free)
13	GUSSET, RIGHT SIDE (Buttress-Free)
14	UNDER BOX CHANNEL
15	WASHER, 3 HOLE
16	BOLTS 5/16-18 X 5"

*Please do not be alarmed if you are not using all of the holes in the strap end channels. We use this same channel for a few different products so there are some holes that you will not be using for this pool.

Please follow diagrams to be sure you are using all of the correct holes and hardware.

STEP 6 – STRAP ASSEMBLY FOR BUTTRESS-FREE OVAL POOLS ONLY:

You will have three strap components per complete strap for 12' wide oval pools, and four strap components per complete strap for all pools 15' and 18' wide.

Strap Section Chart:

	12' x 17'	12' x 24'	15' x 24'	15' x 26'	15' x 30'	18' x 33'	18' x 40'
40.683"			6	9	12		
41.025"	4	6					
52.6875"						12	18

Secure the remaining strap sections to each other using two 5/16" x 1/2" bolts and 5/16" nuts. All holes must be used.

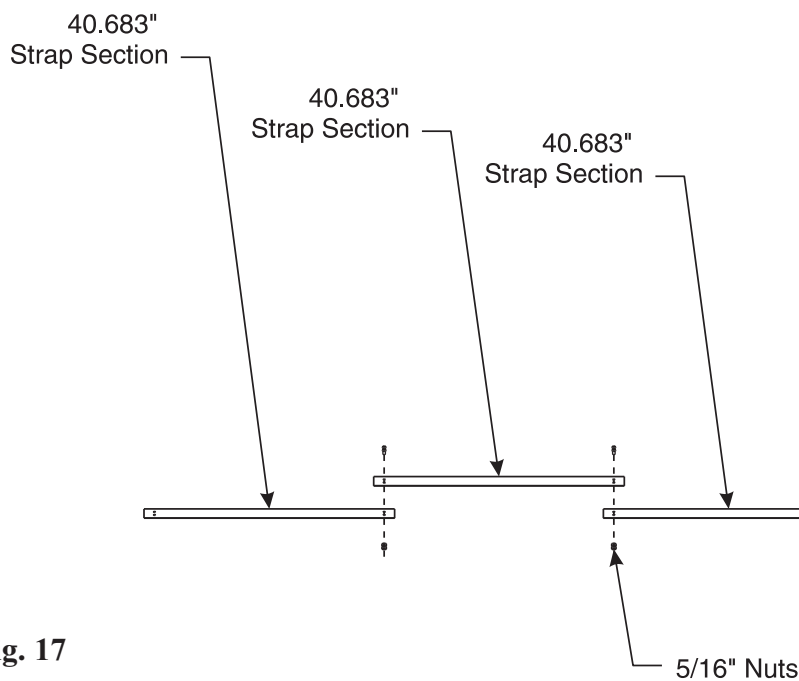
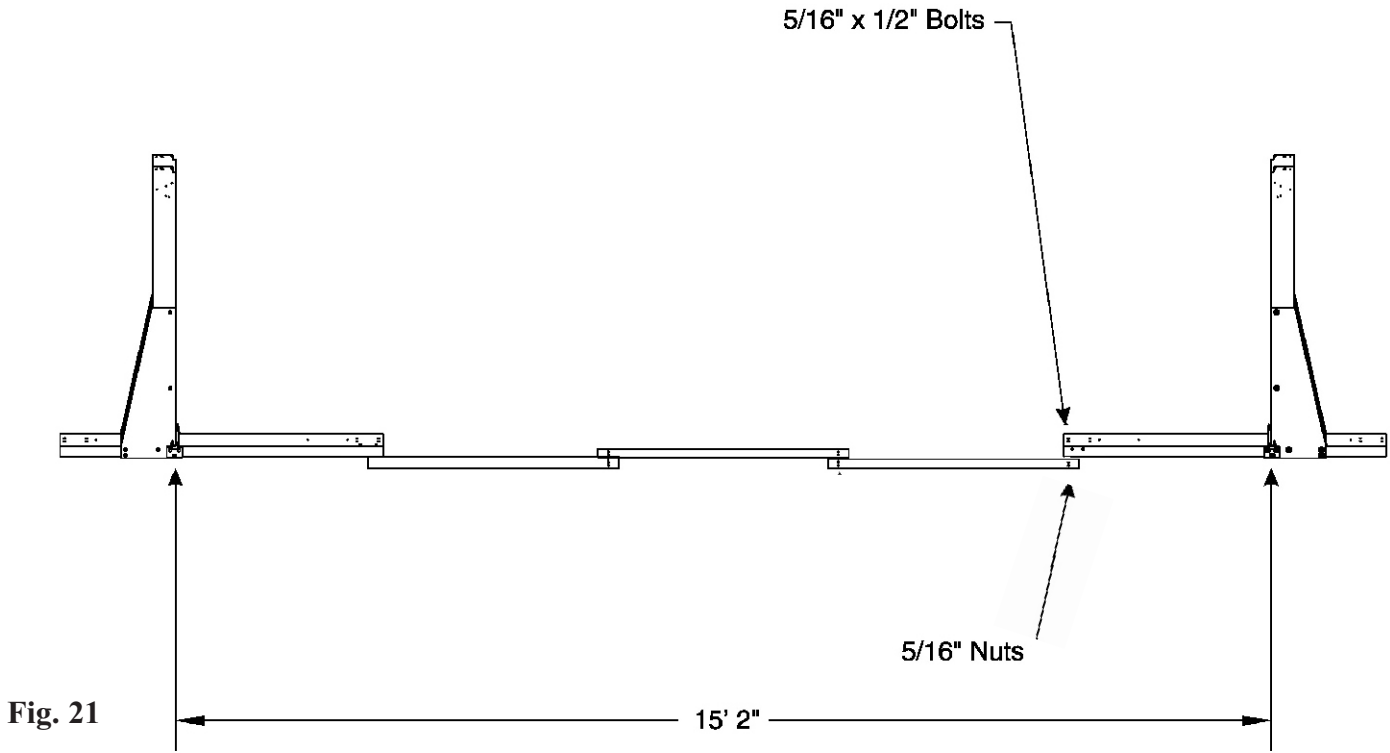


Fig. 17

STEP 7 -ATTACHING STRAPS TO STRAP END CHANNELS FOR A BUTTRESS-FREE OVAL POOL ONLY:

When the straps are completely assembled (as shown in Fig.21) attach each end of the straps, and an end channel cap (shown in Fig.22 and Fig.23) to a strap end channel using two 5/16" x 1/2" bolts and two 5/16" nuts at each point of connection. Note that the strap should be attached to the underside of the channels (as shown in Fig.21) with the heads of the bolts on top of the channel and the nuts on the underside of the channel. Always use the two holes closest to the end of the strap end channel when you are connecting the straps to the strap end channels (as shown in Fig.23).

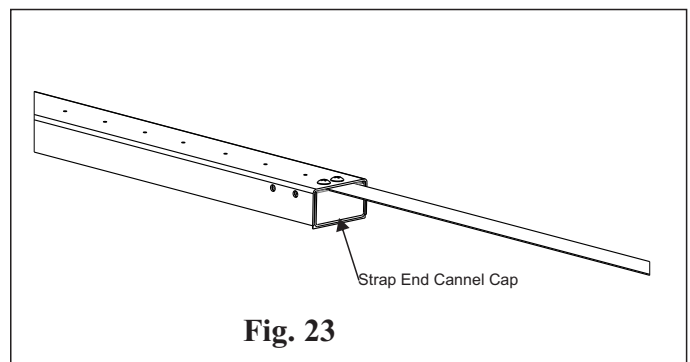
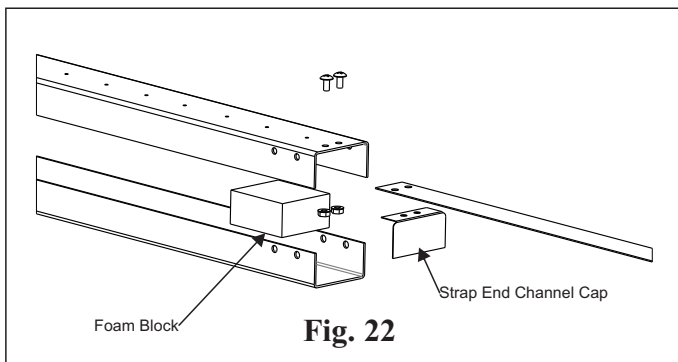


As you are bolting the strap to the strap end channels, add the end channel caps to the underside of the straps at each end as shown in Fig.22 and Fig.23.

When these end channel caps are lined up properly, the two holes in these end channel caps will line up with the two holes in the straps, as well as, the corresponding holes in the strap end channels themselves.

These end channel caps are secured in place using the same two 5/16" x 1/2" bolts and two 5/16" nuts that are used to secure the straps to the strap end channels.

When these parts are installed correctly they will cover the openings at the ends of the channels. This will prevent the sand base of your pool from washing into these channels once the pool is filled with water.



STEP 8 - STRAIGHT SIDE LAYOUT:

After all of the straps have been fully assembled and attached to the strap end channels you can now start to set them up in their final positions. If your pool has an odd number of straps (for example a 12' X 24' pool has three straps) find the center point of the site you leveled earlier and put the first strap and straight side upright assembly there. You then place one assembly 42", from center of strap end channel to center of strap end channel, on each side of that first assembly. Continue like this until all assemblies are used.

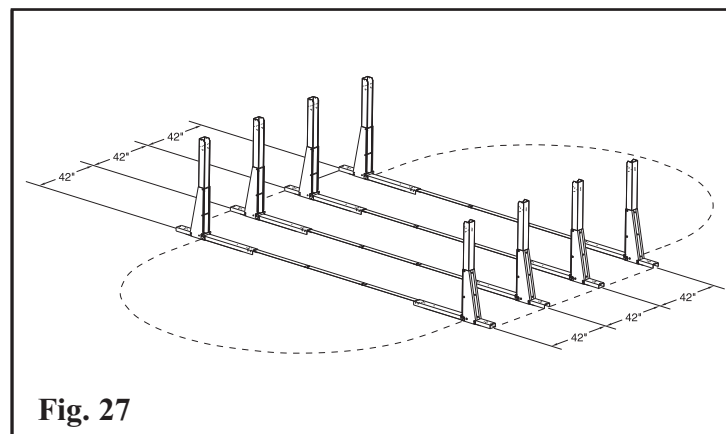
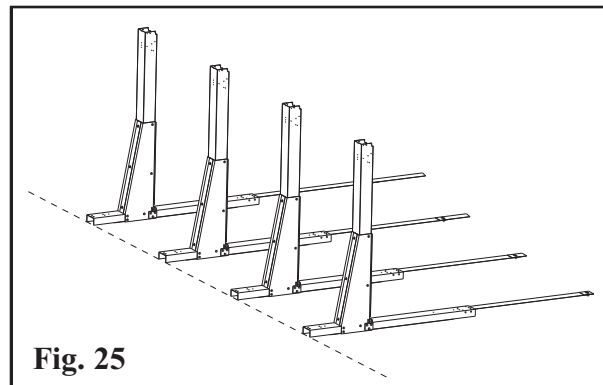
If your pool has an even number of straps and straight side assemblies (for example a 15' x 30' pool has four, which is pictured below) find your center point, mark it on the ground, and put an assembly on each side of that mark 21" away to the center of the strap end channels. If your pool has more than two assemblies you will put the next assemblies 42" on center from the previous assembly, as shown in Fig. 26 and Fig. 27, always keeping the same number of assemblies on each side of your center point.

Once you have all assemblies in place you want to be sure that all of the straight side uprights on one side line up with each other. This can be done fairly accurately by eye but we recommend that you use a string extending from the first upright to the last. If there are any uprights not touching the string, or that cause the string to bulge out, adjust that assembly so that the string is perfectly straight.

If you are trying to install your pool parallel to an already existing object such as a fence, simply measure from the fence to each straight side upright making sure that the measurement is exactly the same for each.

Once you are confident that one side is straight the other side should already be straight. If it does not appear to be straight, check to make sure that the straps are setting flat on the ground.

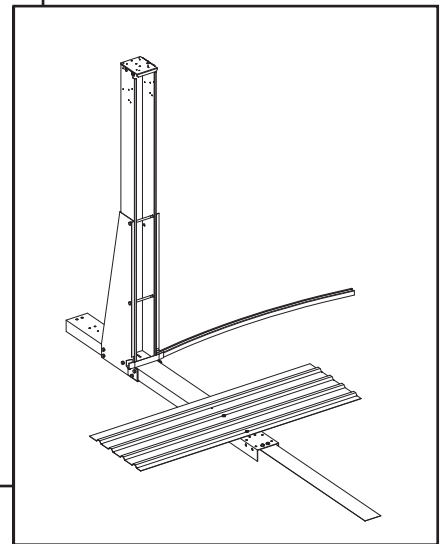
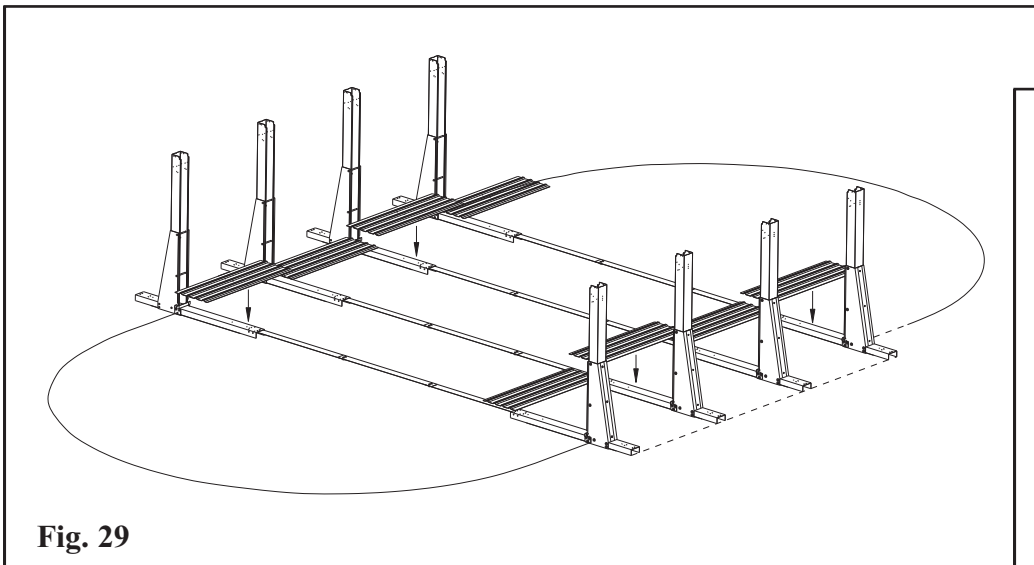
Buttress-Free



STEP 9 – PRESSURE PLATE INSTALLATION:

Place one 44" pressure plate on each strap end channel so that the center of the plate is even with the center of the channel. When installing these plates the corrugation bumps should be up and the flat surface should be down. One edge has a larger flat surface than the other. The larger flat surface should be closer to the center of the pool. (See diagram). **The pressure plate must extend past the end of the channel about 1" towards the center of your pool.** If you have done this correctly the two holes in the center of the pressure plate line up with the two holes in the center of the strap end channel. Secure the plates to the channels using two #12 X $\frac{3}{4}$ " screws in each. Once all plates are secured to the channels, the plates should overlap each other. Secure the plates to each other using three #12 screws in each overlapping area.

Buttress-Free



STEP 10 - IDENTIFYING WALL RIMS:

There are two different types of wall rims, the top wall rims and the bottom wall rims. They look similar, but they are different lengths. The shorter wall rims must go on the top of your pool, and the longer wall rims must go on the bottom. Please refer to your packing slip to determine the exact length. Track length is measured at its center by placing a tape measure in the center channel. The bottom wall rim slides into the bottom plate. The top wall rim does not slide into the top plate, it slides over the wall between the top plates.

The top wall rim is installed in between the top plates. It does not overlap or enter top plates.



The bottom wall rim is inserted up to the dimple only.



Oval

		<u>12x17</u>	<u>12x24</u>	<u>15x24</u>	<u>15 x 26</u>	<u>15x30</u>	<u>18x33</u>	<u>18x40</u>
Bottom Wall Rim	Quantity	12	10	10	10	10	12	12
Curved end of Oval	Length	38"	38"	49"	49"	49"	50"	50"
	Description	5' 6" RADIUS	5' 6" RADIUS	7' 6" RADIUS	7' 6" RADIUS	7' 6" RADIUS	9' 0" RADIUS	9' 0" RADIUS
	Part Number							
Top Wall Rim Curved	Quantity	8	10	10	10	10	12	12
End of Oval	Length	32 7/8"	32 7/8"	43 7/8"	43 7/8"	43 7/8"	44 7/8"	44 7/8"
	Description	5' 6" RADIUS	5' 6" RADIUS	7' 6" RADIUS	7' 6" RADIUS	7' 6" RADIUS	9' 0" RADIUS	9' 0" RADIUS
	Part Number							
Bottom Wall Rim	Quantity	-	4	4	4	4	4	4
Transition (4 corners)	Length	-	39"	45"	39"	39"	39"	39"
	Description	-	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS
	Part Number	-						
Top Wall Rim	Quantity	4	4	4	4	4	4	4
Transition (4 corners)	Length	35 1/4"	36 1/2"	39 1/8"	36 1/2"	36 1/2"	36 1/2"	36 1/2"
	Description	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS
	Part Number							
Top and Bottom Wall	Quantity	4	8	4	8	12	12	20
rim Straight Side of	Length	37 1/2"	37 1/2"	37 1/2"	37 1/2"	37 1/2"	37 1/2"	37 1/2"
Oval (Between	Description	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS	9' 0" RADIUS
straight side uprights)	Part Number							

STEP 11 - BOTTOM WALL RIM ASSEMBLY:

When you unpacked the bottom wall rim you should have noticed the three different size rails (except if you have a 12' x 17' pool, in which case you only have two different sizes.) Some of the rails are 37 1/2" long and some are 39" long. Reference the size chart in Step 10 for your exact pool. It is very important to separate the wall rims by size now.

Bottom Wall Rim 1" x 5/8".
Used on the bottom
of the pool.

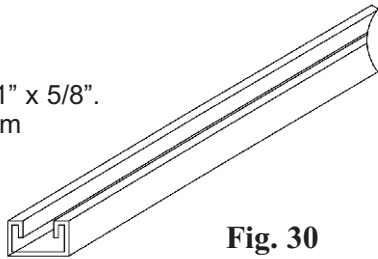


Fig. 30

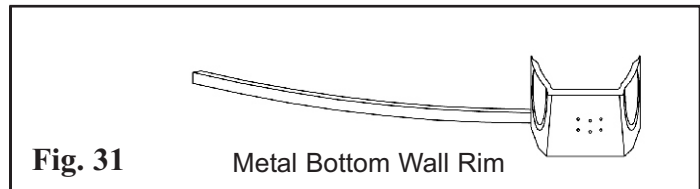
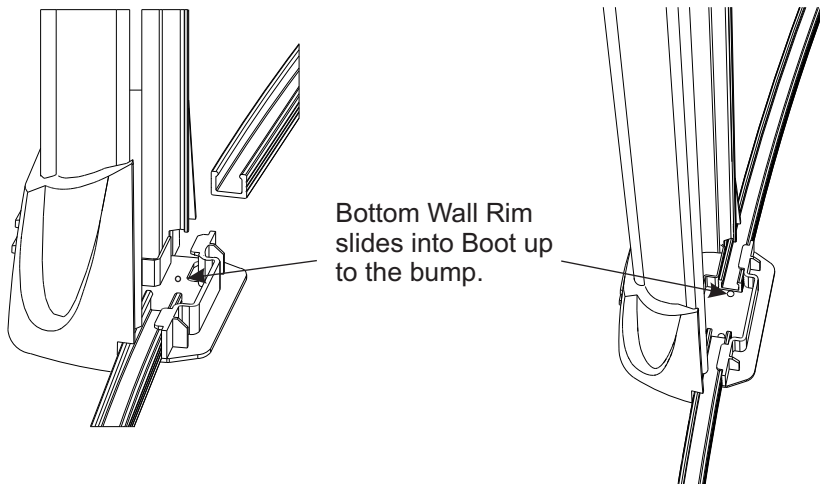


Fig. 31

Metal Bottom Wall Rim

***IMPORTANT: Make sure you are using the bottom wall rims and not the top wall rims . The bottom wall rims are longer.**

- A) The 37 1/2" long bottom wall rims go in between the straight side uprights. You simply press them down inside the straight side bottom connector on each side. These wall rims will eventually need to be sitting flat on the ground, but you can do that as you are leveling the pool.
- B) The four 39" bottom wall rims are for the "corners." One side snaps into the straight side connector on the final straight side upright, while the other side slides into a bottom plate or bottom cuff.
- C) You should have an even number of the longest bottom wall rims, as well as, an even number of bottom plates or bottom cuffs (depending on the model pool you have.) These will form the curved ends of your pool. Half of these wall rims and plates/cuffs will go on one end and the other half on the other end. Slide each wall rim into the plate, or cuff, up to the stop as shown. Be sure that the plate, or cuff, is outside of the half circle created on each side of the pool. Once all wall rims are assembled, you should now be able to see the entire shape of the oval pool on the ground.



Bottom Wall Rim
slides into Boot up
to the bump.

Fig. 31

Fig. 32

The bottom wall rim is inserted
up to the dimple only.

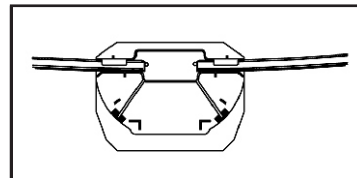


Fig. 33

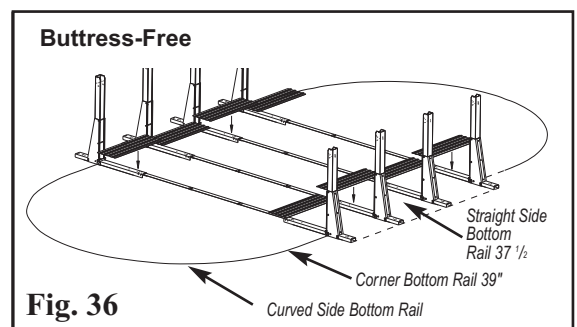


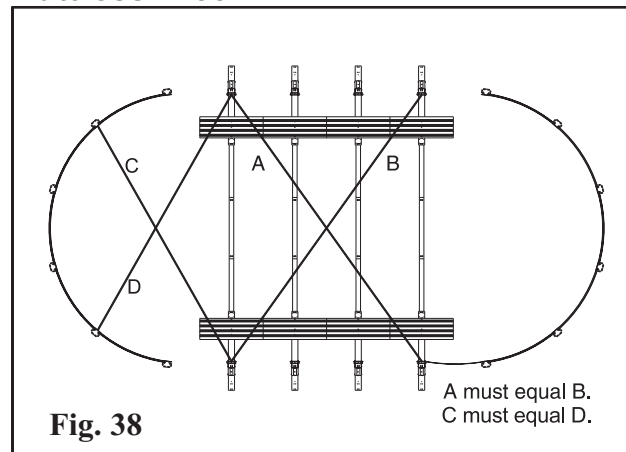
Fig. 36

IMPORTANT: Some pools have resin bottom plates or resin bottom cuffs rather than the traditional metal bottom plate. Please refer to your pool parts breakdown sheet to confirm which component applies to your particular pool.
*All measurements are in inches unless otherwise identified.

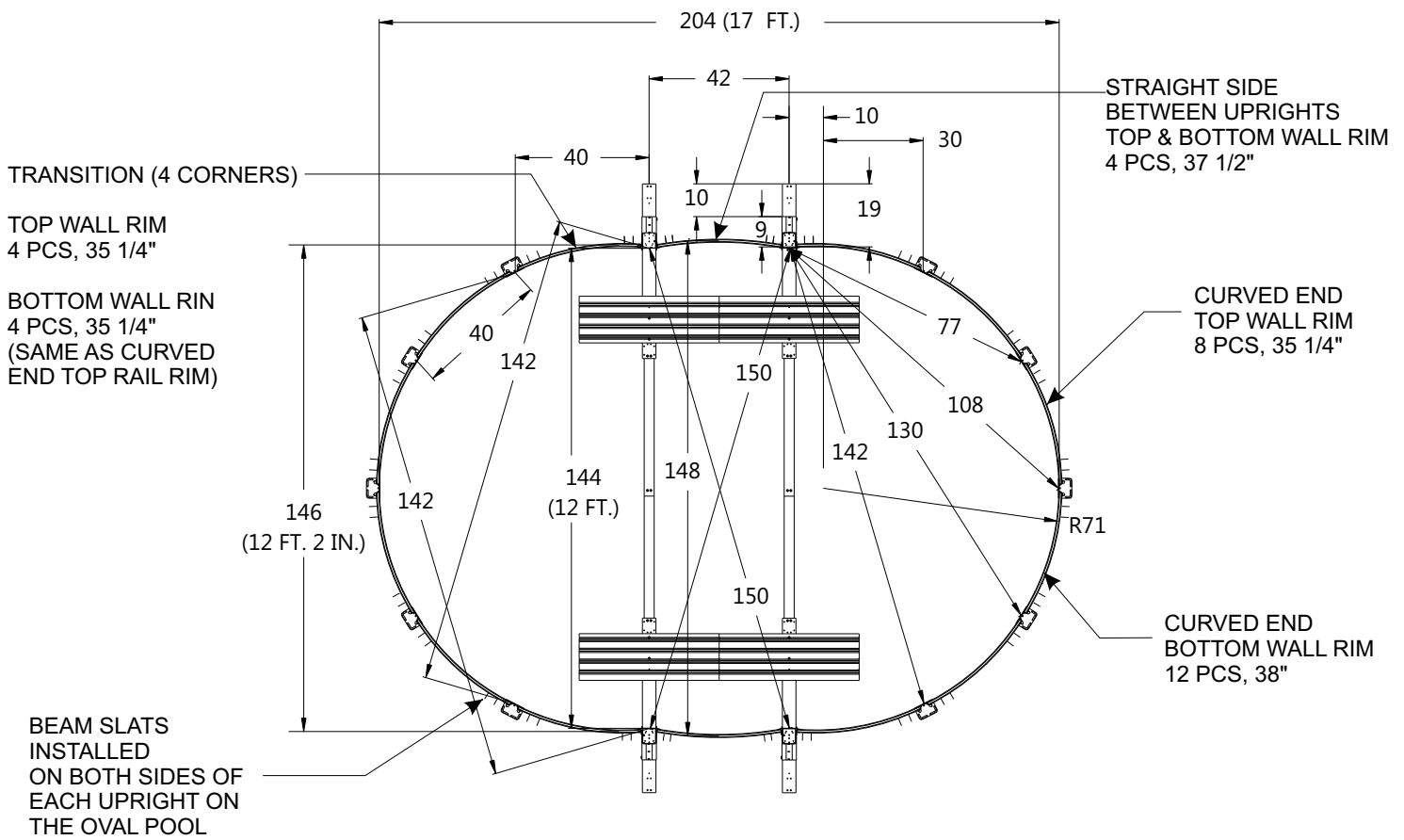
STEP 12 – SQUARING THE STRAIGHT SIDES:

Now that the bottom structure of the pool is fully assembled, make sure that the straight sides of the pool are perfectly in line with each other. We refer to this as "squaring" the pool. This is done by measuring from the outside of the first straight side upright on one side, to the outside of the last straight side upright on the opposite side (the two straight side uprights farthest from each other.) When making these measurements they should always be taken from the lower 12" of the straight side uprights because the higher up on the straight side upright you go, the less accurate the measurements will be. Once you have that measurement, you should measure the distance between the two opposite straight side uprights the same way (as shown in Fig.38.) The two measurements should be exactly the same. If they are not, adjust one entire straight side as necessary. This is a very important step, do not continue until the measurements are identical.

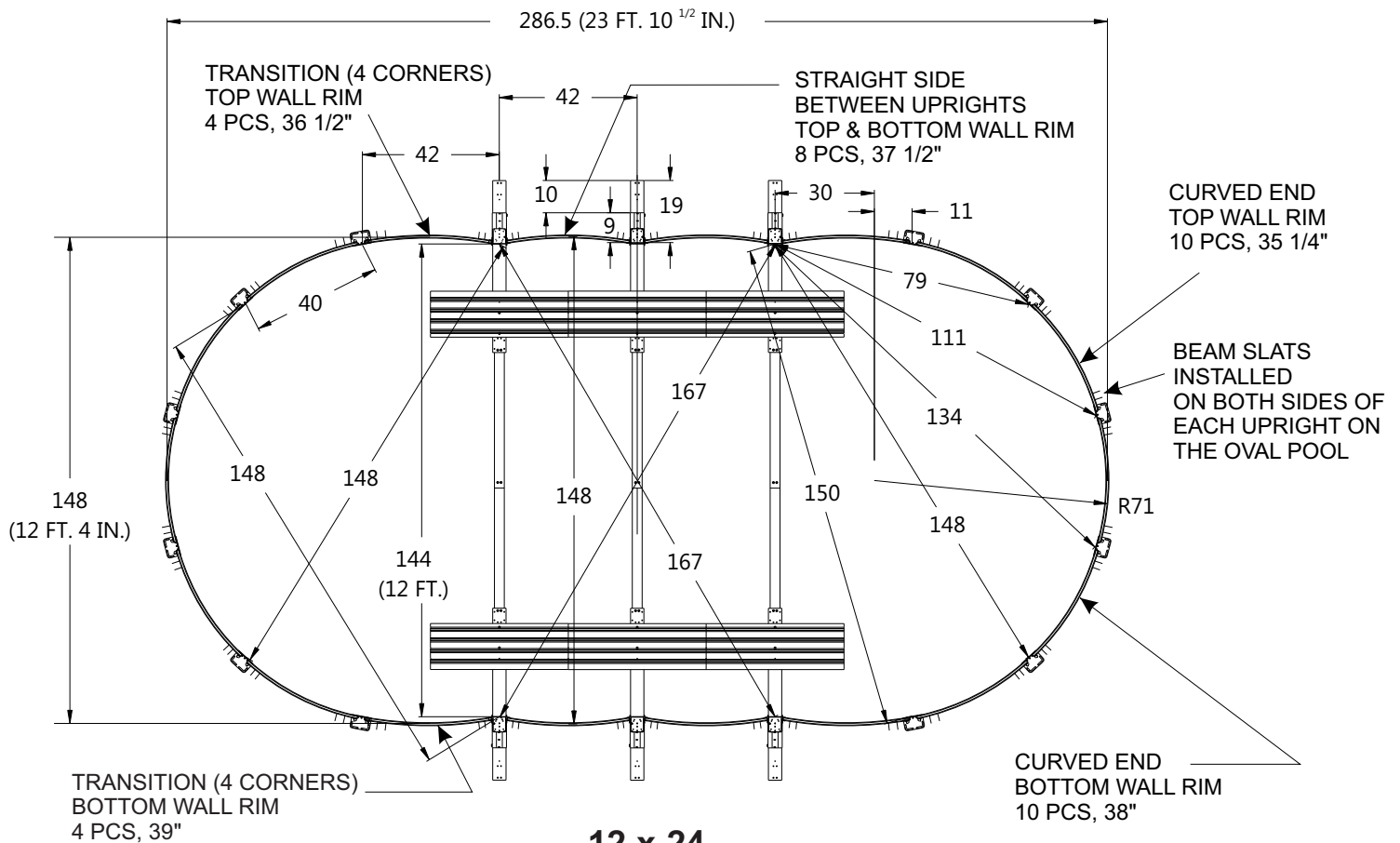
Buttress-Free



The following are detailed diagrams for every size oval pool that we make. Most of these measurements apply to both the Traditional Buttress oval assemblies and the Buttress-Free oval assemblies. Please use the diagram that applies to your pool to make sure you have everything in its proper position before proceeding with these instructions. Taking a few minutes to check these measurements now can save you major time and efforts down the road if something is not correct.

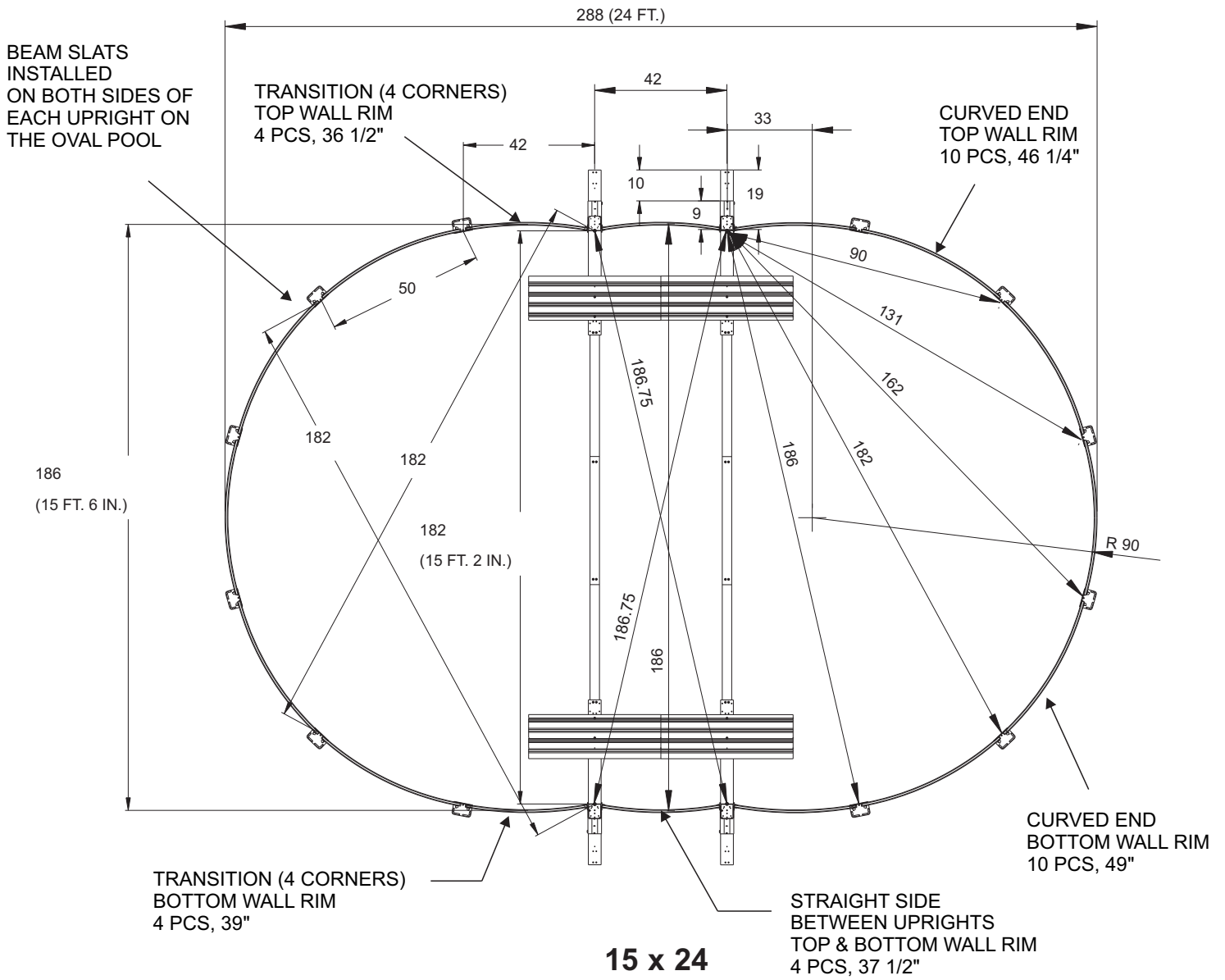


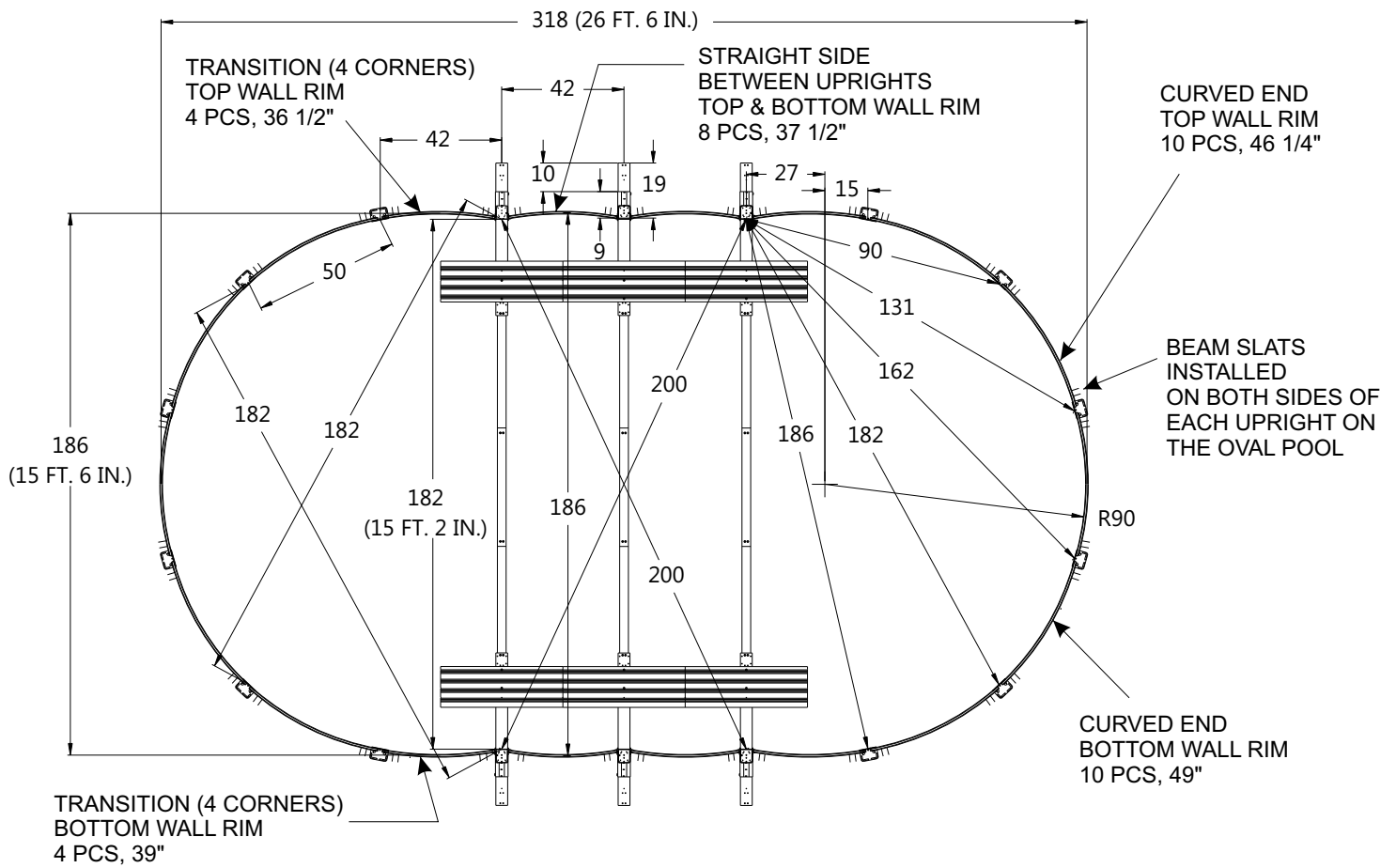
12 x 17



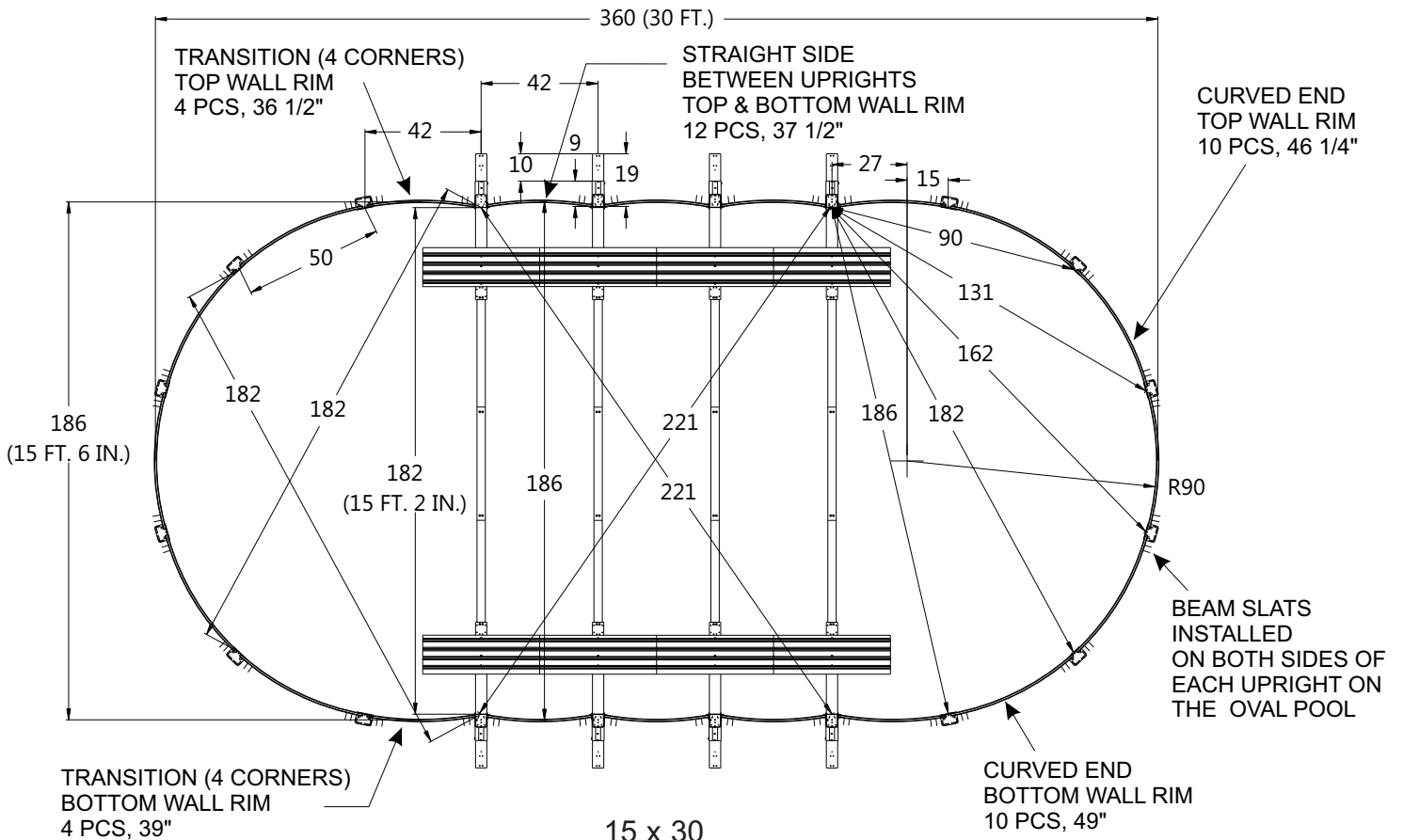
12 x 24

*All measurements are in inches unless otherwise identified.



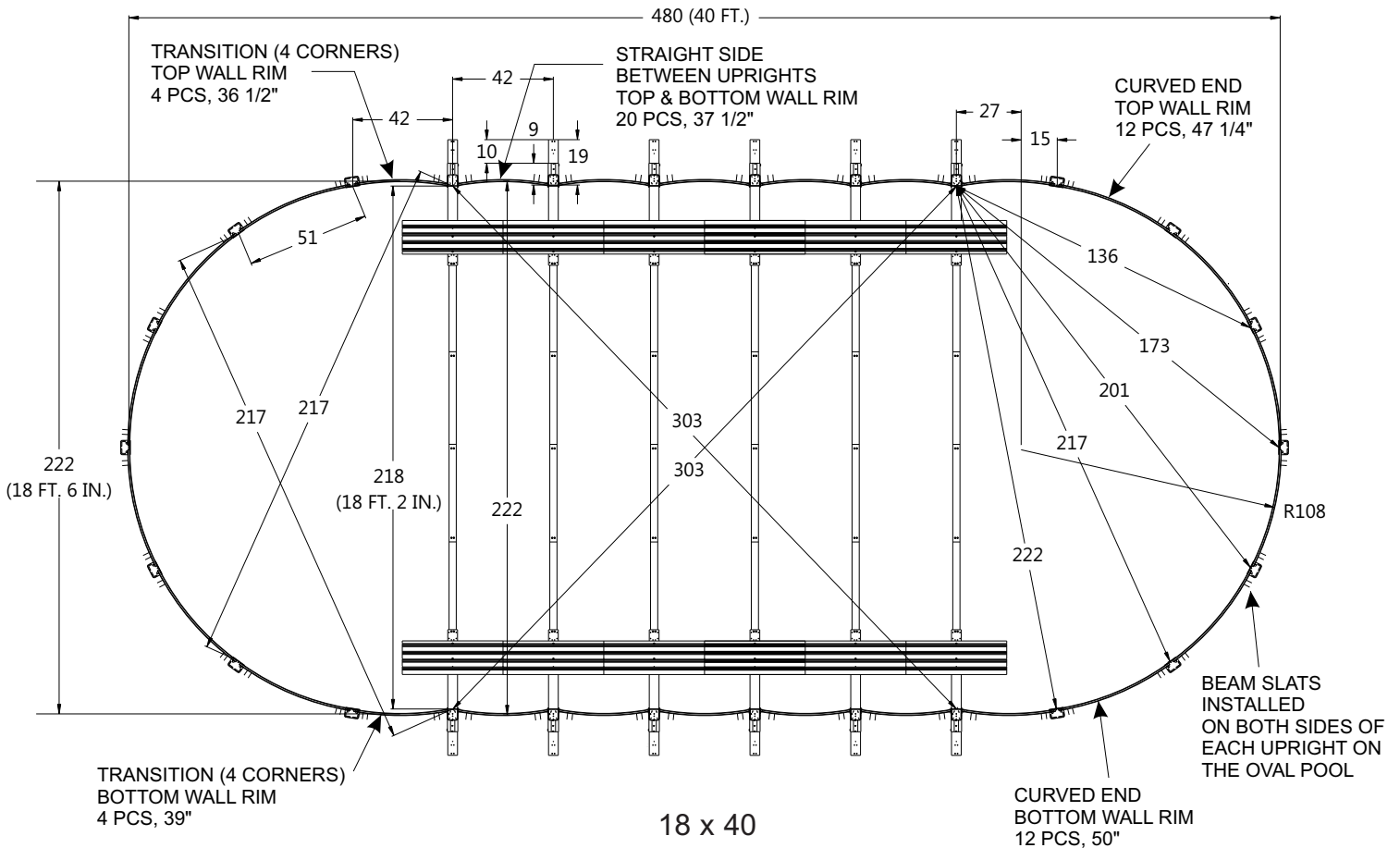
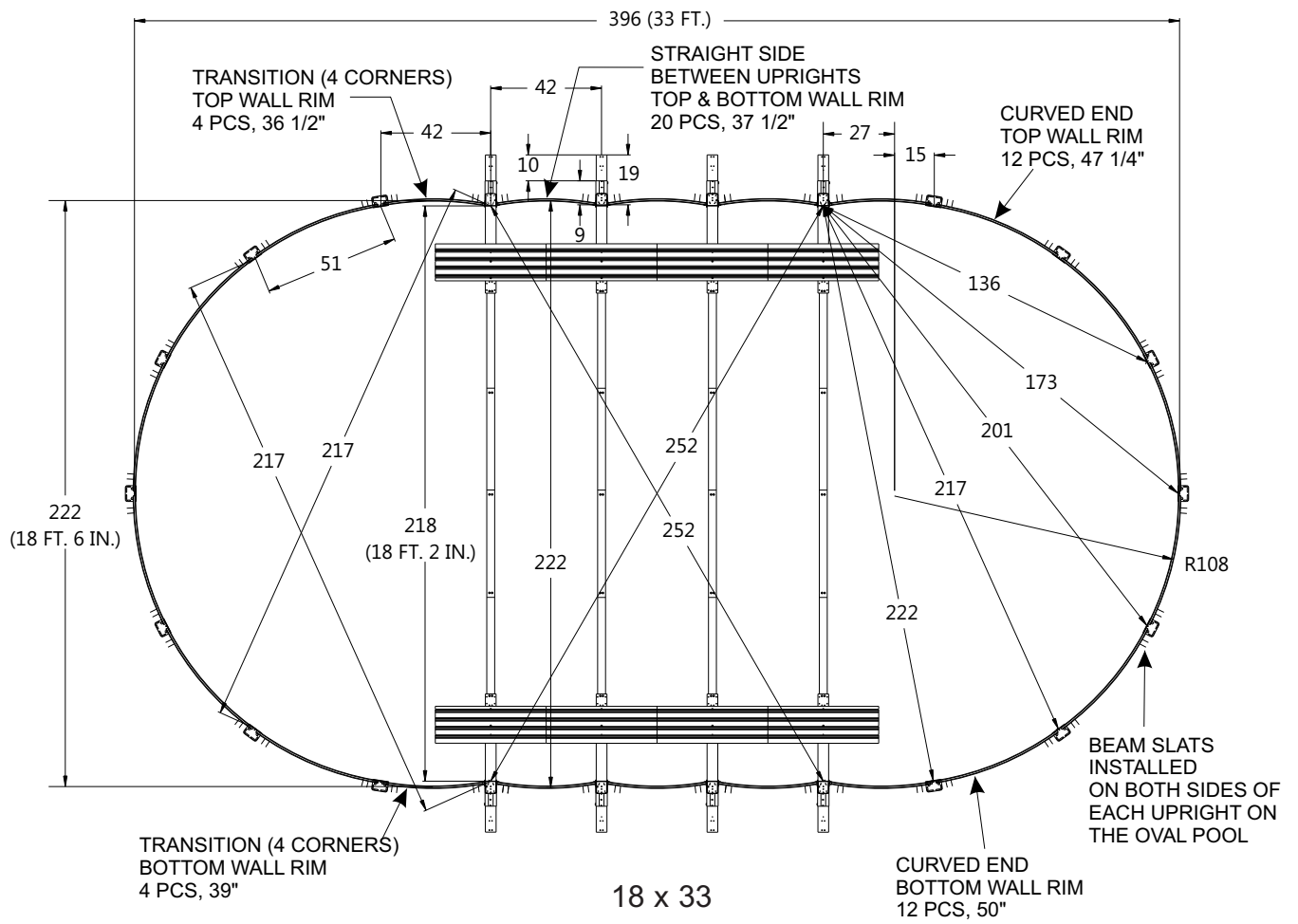


15 x 26



15 x 30

*All measurements are in inches unless otherwise identified.

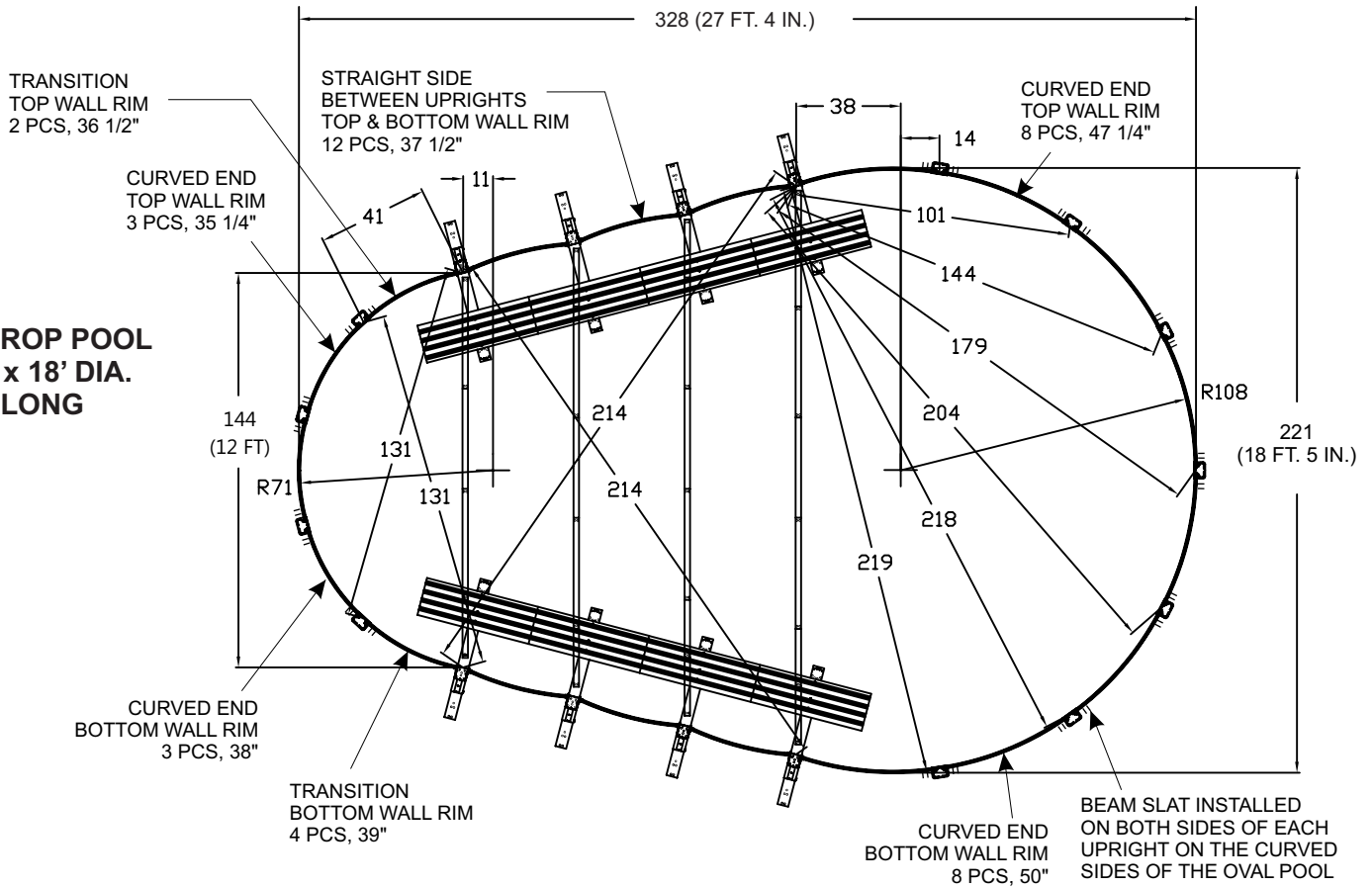


*All measurements are in inches unless otherwise identified.

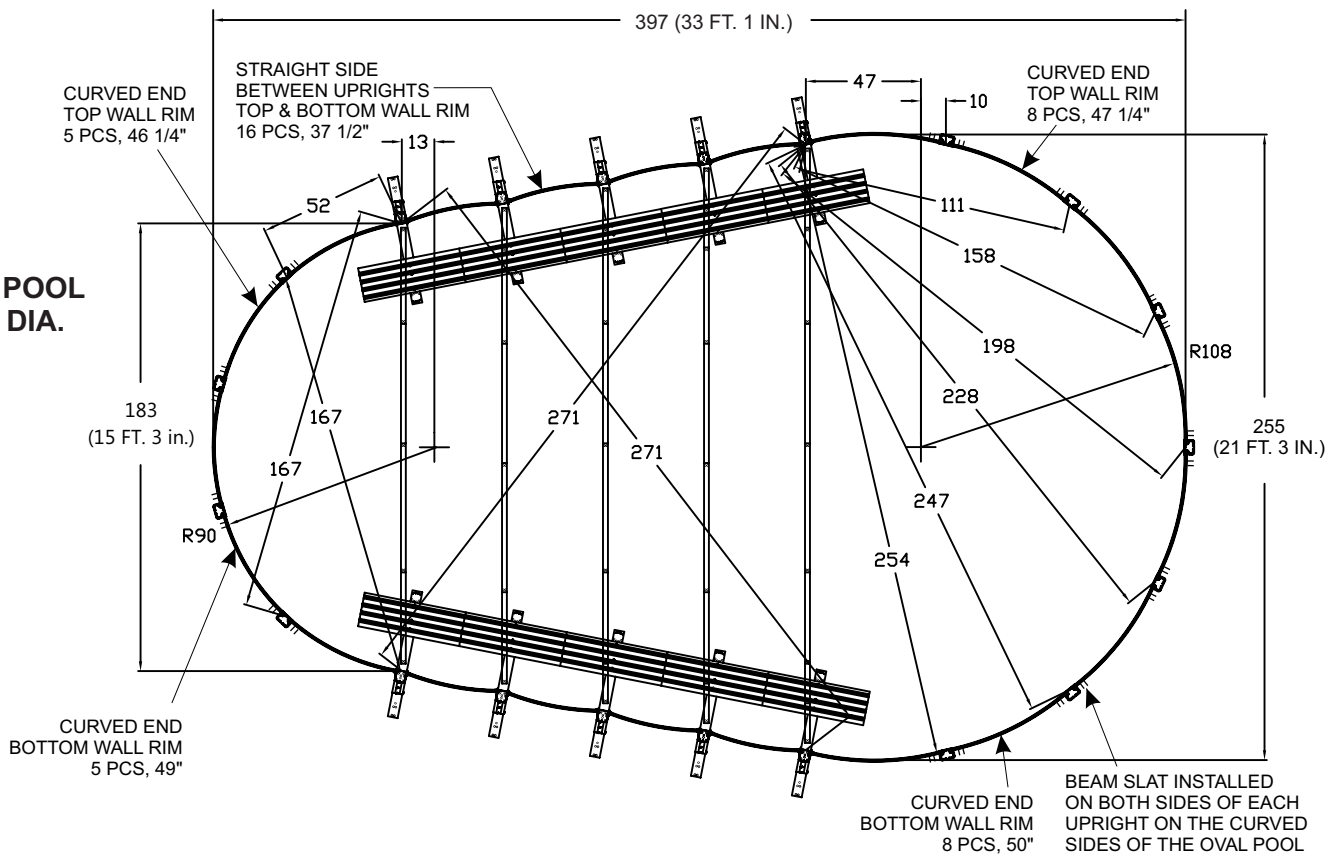
Notes

This document addresses the assembly of a variety of standard size oval pools. However, even if you have purchased a tear-drop style pool, the assembly process is still basically the same. Your dimensions though, will be different. Please refer to the images below for the tear-drop style pool dimensions.

**TEAR-DROP POOL
12' DIA. x 18' DIA.
x 27' 4" LONG**



**TEAR-DROP POOL
15' DIA. x 21' DIA.
x 33' LONG**



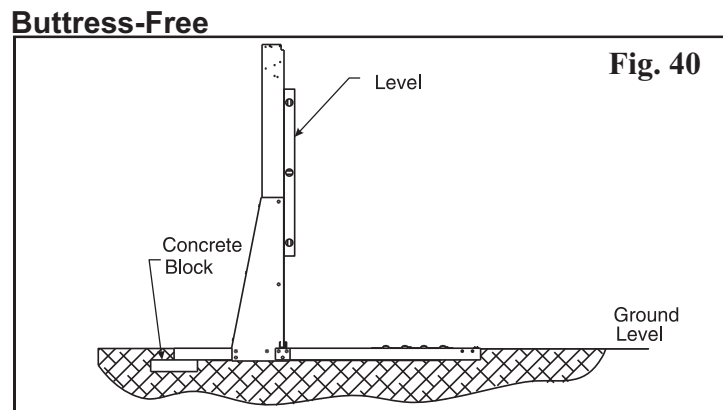
STEP 13– LEVELING THE STRAIGHT SIDES:

The leveling of the straight sides is a very crucial part of a good installation. If this is not done accurately it will cause a lot of problems for you.

The strap end channels are two inches deep. The top of the strap end channel needs to be level with the ground. The bottom plates or bottom cuffs on the curved sides also need to be level with the ground.

One at a time we recommend digging the strap end channels into the ground. Once all of the channels on a side are level, put a 2" x 8" x 16" patio block under the back of each strap end channel as shown in Fig.39 and Fig.40. This must be done for each strap end channel. Remember the block is two inches deep and so is the end channel. You will need to dig down a total of 4" where the block is in order to get the top of the strap end channel to ground level.

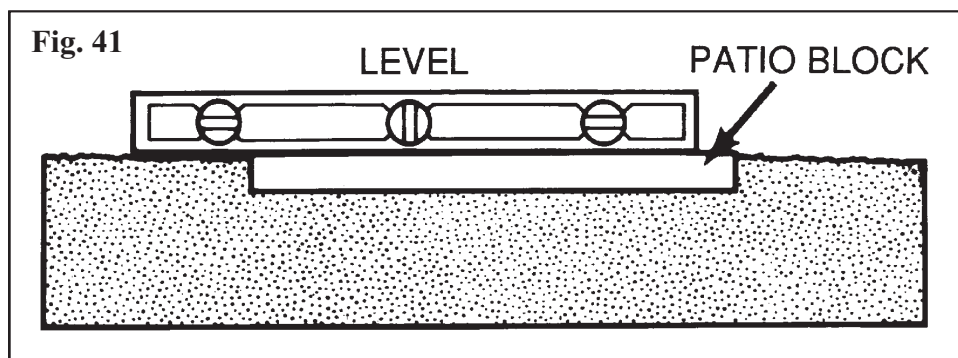
Once you have completed one entire side, do the same for every strap end channel on the opposite side. After that is complete it is a good idea to check that your straight side uprights are all level from top to bottom by using a carpenters level. The pressure plates and straight side bottom rails ensure that your bottoms are still 42" on center. Be sure that the tops of the straight side uprights are as well.



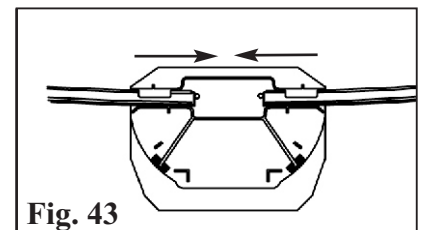
STEP 13A – LEVELING THE CURVED SIDES:

The next step is to level the curved sides of the pool. Before doing this you may want to measure the overall length and width of the pool to ensure that it is the same size as shown on step 10 of this booklet. If it is off by a couple of inches your wall will not fit properly. You can fix this situation by simply sliding the curved side bottom rails in or out of the bottom plates or bottom cuffs as shown in Fig.42 and Fig.43. This should be done an even amount for each plate or cuff.

Once you are certain that the pool is the correct size, level the curved sides of the pool. Do this by placing a 2" x 8" x 16" patio block under each of the bottom plates or bottom cuffs. The blocks will need to be sunk into the ground so that the bottom plates or bottom cuffs are at the same level as the tops of the strap end channels. It is also important to make sure that the rails between the plates or cuffs are resting flat on the ground.



Rails can be slid in or out from the stops on the bottom plates or cuffs to adjust for wall length being a little off.

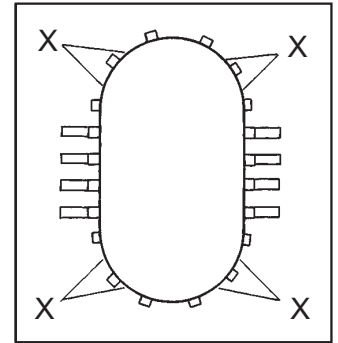


NOTE: Check for levelness in all directions. When placing patio blocks under curved side bottom plates or bottom cuffs, leave 1" of the block inside the pool and 6" showing outside of the pool.

STEP 14 – WALL INSTALLATION

The location of skimmer and return slats must be planned before proceeding. These slats can be anywhere you want on the pool. However, we recommend you keep the following in mind:

1. You will need to run plumbing to both the skimmer and the return slat, so place them in a location that is close to your filtration system.
2. Keep the return and the skimmer separated by at least 3 regular slats, but not more than 8 slats..



X = Suggested skimmer and return location.

Fig. 44

****THE FIRST SLATS INSTALLED MUST BE TWO REGULAR SLATS CENTERED ON A BOTTOM PLATE. THEN INSTALL A BEAM SLAT TO EACH SIDE OF THE BOTTOM PLATE****

IN THE FIRST 4 TO 5 FEET YOU MUST INSTALL THE SKIMMER AND RETURN SLATS.

DO NOT USE EXTRA SLATS UNLESS YOU HAVE DAMAGED ONES. A POOL WITH EXTRA SLATS IN THE WALL WILL FAIL. THIS IS EXTREMELY DANGEROUS.

EVERY UPRIGHT ON THE CURVED SIDE AND THE STRAIGHT SIDE OF THE POOL MUST HAVE A BEAM SLAT ON EACH SIDE OF IT.

Installation of the pool wall will be easier with a team of four people. Begin the installation of your slat wall pool by placing two regular slats in the bottom track, centered on a bottom plate. Then slide one beam slat into the right side of the regular slat. Beam slats have two large ribs on them. Until the pool is completely assembled, helpers always need to hold up both ends of the pool wall.

The edges of the slat should interlock as shown in Fig. 45. Make sure that the smooth surfaces of the slats are facing in toward the wet side of the pool and the ribs and bumps are facing outward toward the dry side of the pool. You may need to gently tap the slat down using a rubber mallet or hammer using a block of wood to prevent any denting or nicking of the slat. The last slat installed is often particularly tricky. The use of 3-in-1 household oil or WD-40 often helps (do not use motor oil).

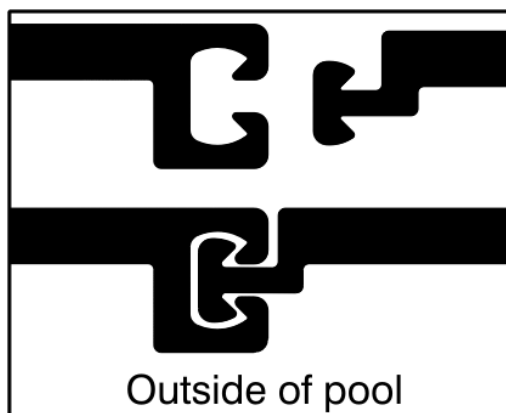


Fig. 45

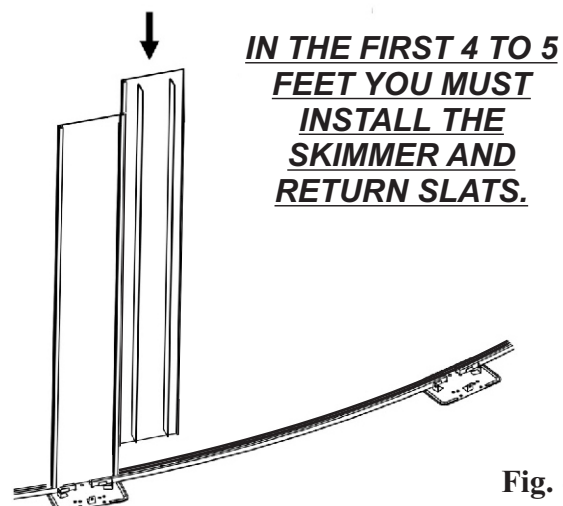


Fig. 46

STEP 14: WALL INSTALLATION (cont.)

The several different kinds of slats that go on your pool are to be located in a specific order. The diagram below shows the pattern of slat types plates once your slat wall assembly is eventually completed. Frame uprights and top rails are shown at this time for general reference only. Note that beam slats are always centered around bottom plates and uprights.

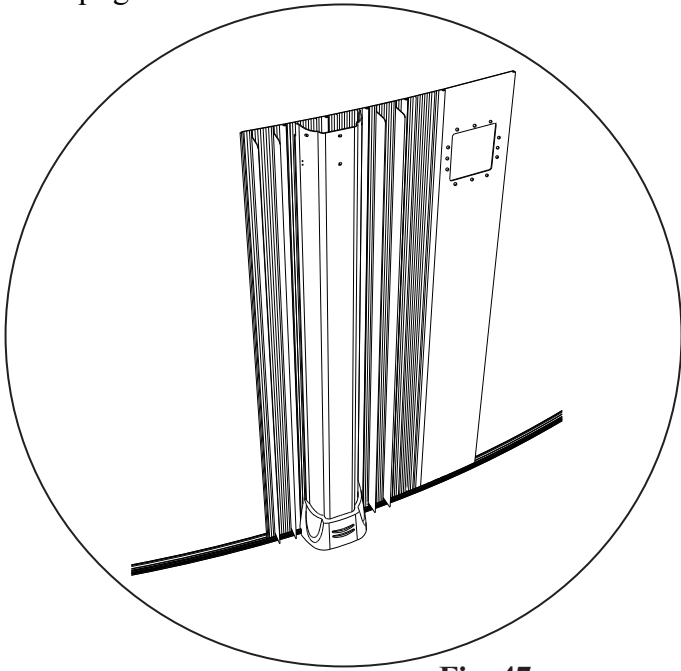


Fig. 47

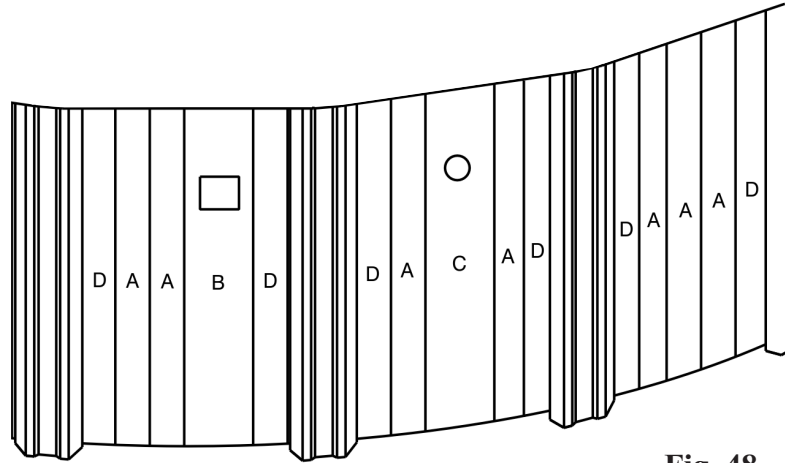


Fig. 48

-A is a regular slat

-B is a skimmer slat

-C is a return slat

-D is a beam slat

Continue to install slats until you have a section of wall about five feet long. Once you have completed a five-foot section, you are ready to start installing the pool frame upright onto the pool wall.

This is a good time to start the pre-assembly of the uprights. It is easiest to line all uprights next to each other in a line. It helps to lean them against a fence or some other sturdy object. On most models the top of the uprights can be identified by either an extra hole in the middle, or by an extra hole on each side (depending on which pool you have) for the decorator caps. Place the metal top plate* on the upright making sure the holes line up and the hooked part of the plate is facing the open end of the upright (the side that goes against the pool wall). Now put a #10 x 1/2" screw in the center hole only. Do not install screws in the two side holes until later. This will make things easier and more efficient later down the line.

Now install the fence post holders onto the uprights, if you have purchased a fence to go around your pool (see **separate instructions**). If not, or when that is completed, you should line the uprights around the pool at every bottom plate for your convenience later on.

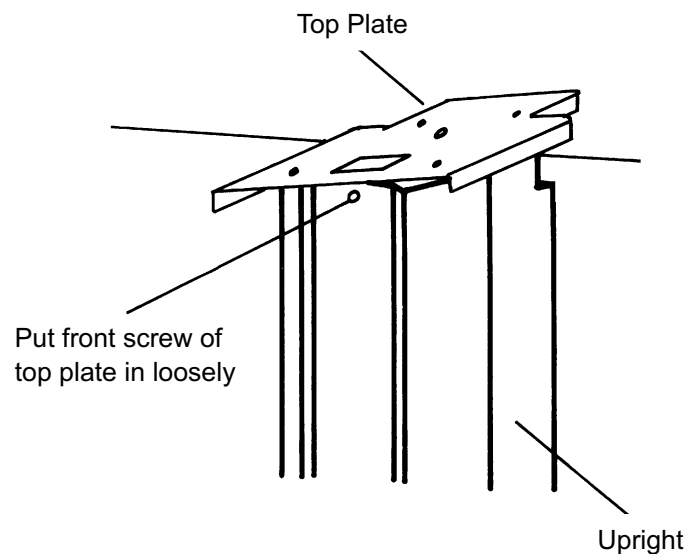


Fig. 49

**This is one example of a top plate. The plate for your pool may look a little different.*

STEP 15 – WALL FRAME INSTALLATION:

Install a pool upright as shown in Fig 50. The upright attaches at the bottom to the bottom plate. On the top of the pool wall, install the plastic beaded track receiver as shown in Step 16.

Fastening uprights will be done by sliding them in the resin boot until the hooks engage into the upright square holes.

The top plates remain unsecured for now, but they should be temporarily clipped over the wall to prevent the uprights from falling backward.

Check pool for roundness again, making sure the diameter is the same in all directions.

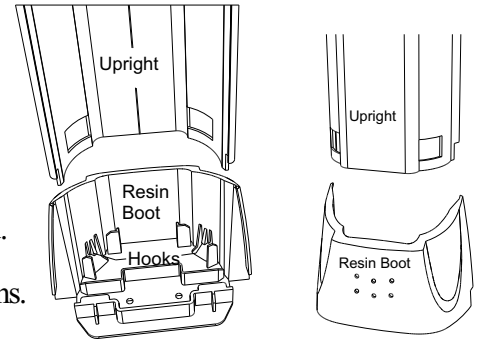


Fig. 50 A

Fig. 50 B

STEP 16- FRAME INSTALLATION-LINER COMPONENTS:

Once you have enough pool wall slats assembled, you should install a second upright, beaded track receiver, metal top channel, secure top plate and top rail. The top track does not attach to the top plate. It is just placed on top of the beaded track receiver between each set of uprights. The top rail will hold everything down and in place. Continue this process around the pool.

Buttress-Free

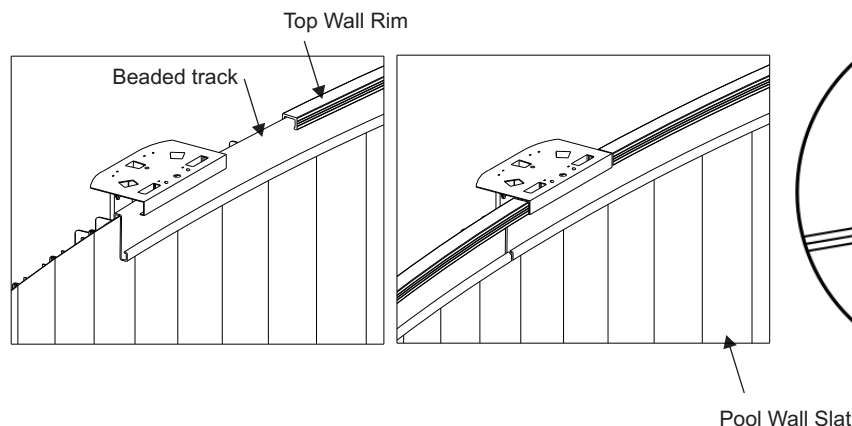
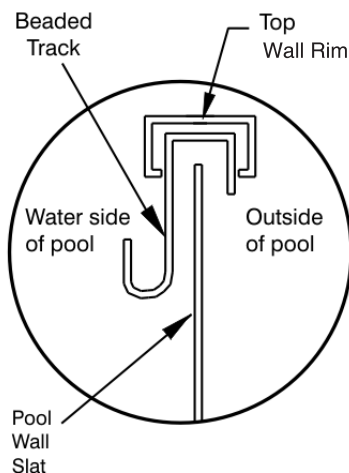
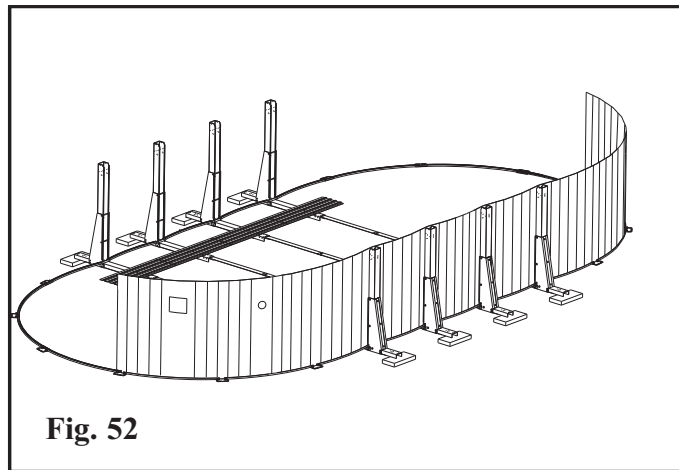


Fig. 53

STEP 17 – PREPARING THE COVE:

Using neutral alkalinity sifted earth or fine sand without pebbles, build a 2" base over the entire pool area to protect the liner. Make sure that the straps and the pressure plates are covered entirely. If the base does not fully cover the metal components, they will show through and will damage the liner. If using vermiculite or foam base, you must have at least two inches of soil or sand on top of the straps and pressure plates. Vermiculite alone will not properly cover these metal components, possibly allowing damage to the liner. Do not use any substance with high alkaline or acid content, such as peat moss. It will cause the pool to corrode.

Next, using sifted earth or fine sand, build a 6" to 8" pool cove inside the metal wall along the entire circumference. The cove will prevent the liner from creeping under the wall and will also protect the liner from any metal corners of the pool framework. **THIS STEP IS NOT OPTIONAL – IT MUST BE DONE!** 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 by the warranty. The plastic sheeting will not prevent a washout in the event that your liner is damaged. The plastic is only to protect the metal framework of the pool from corrosion.

After the cove and base are in place, rake and tamp the entire pool area. Make sure that no sand remains on the wall above the cove. This could cause pinholes in your liner.

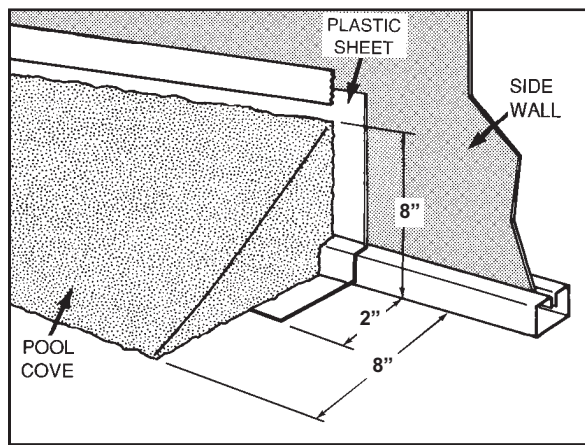


Fig. 54

STEP 18- HANGING LINER:

SNAP BEAD LINER

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 down the road.

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.

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.

SNAP BEAD LINER

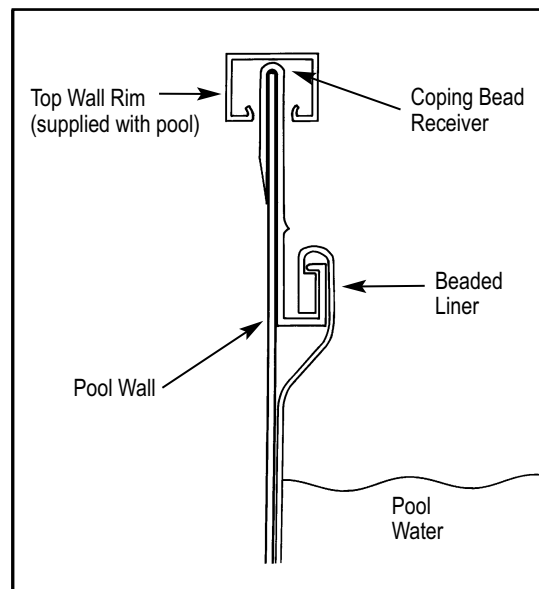
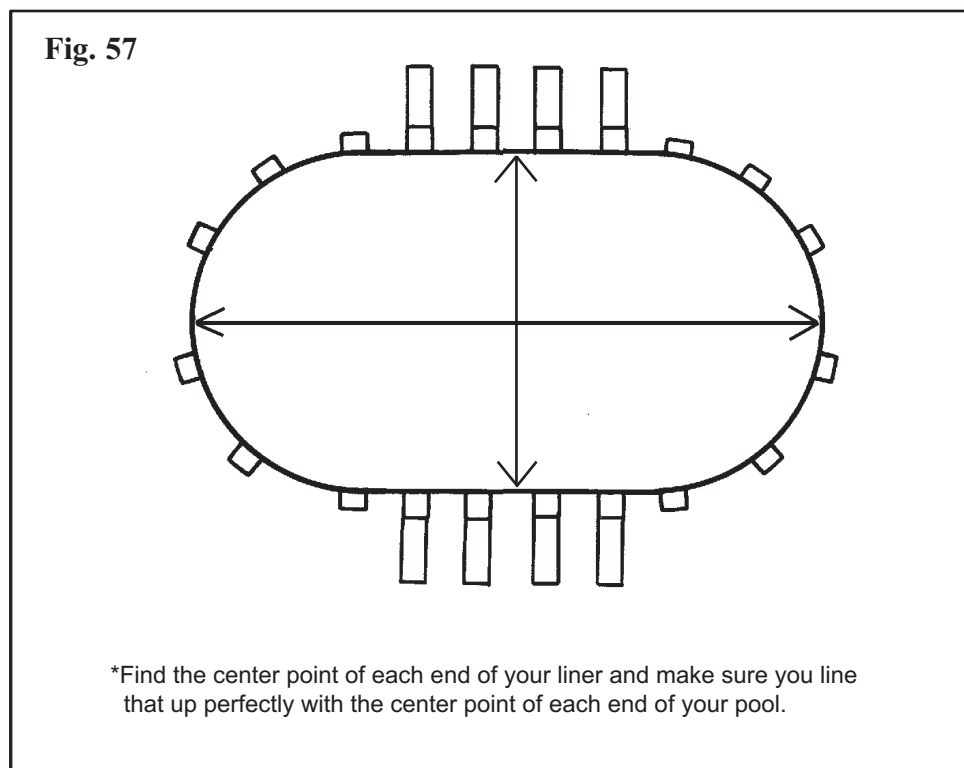
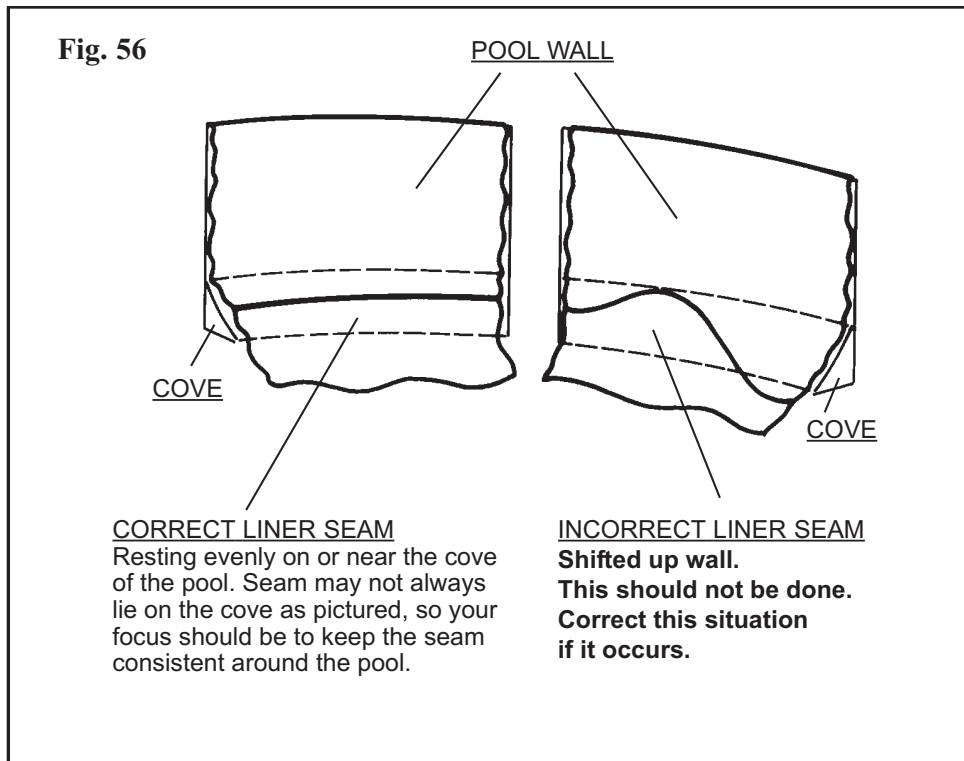


Fig. 55

STEP 19- LINER INSTALLATION:

Do not place the liner wall seam directly over the skimmer or skimmer return cutouts.

Place the liner at the center of the pool with the flap from the seams facing down. (For print liners, leave the print side facing up.) Spread the liner so that the bottom seam of the circumference is resting on the cove evenly around the pool. The seam should not be up on the wall or shifted to one side. These conditions will cause tightness or stretching of the liner when the pool is being filled.



*NOTE: Line wall seam straight up and down, away from skimmer and skimmer return.

STEP 20 – TOP WALL RIM INSTALLATION:

When the liner is completely adjusted and the plastic coping is secured, the next step is to install the top wall rims. You should have three different size top wall rims (except for 12' X 17' pools which only have two) Reference the chart in Step 10.

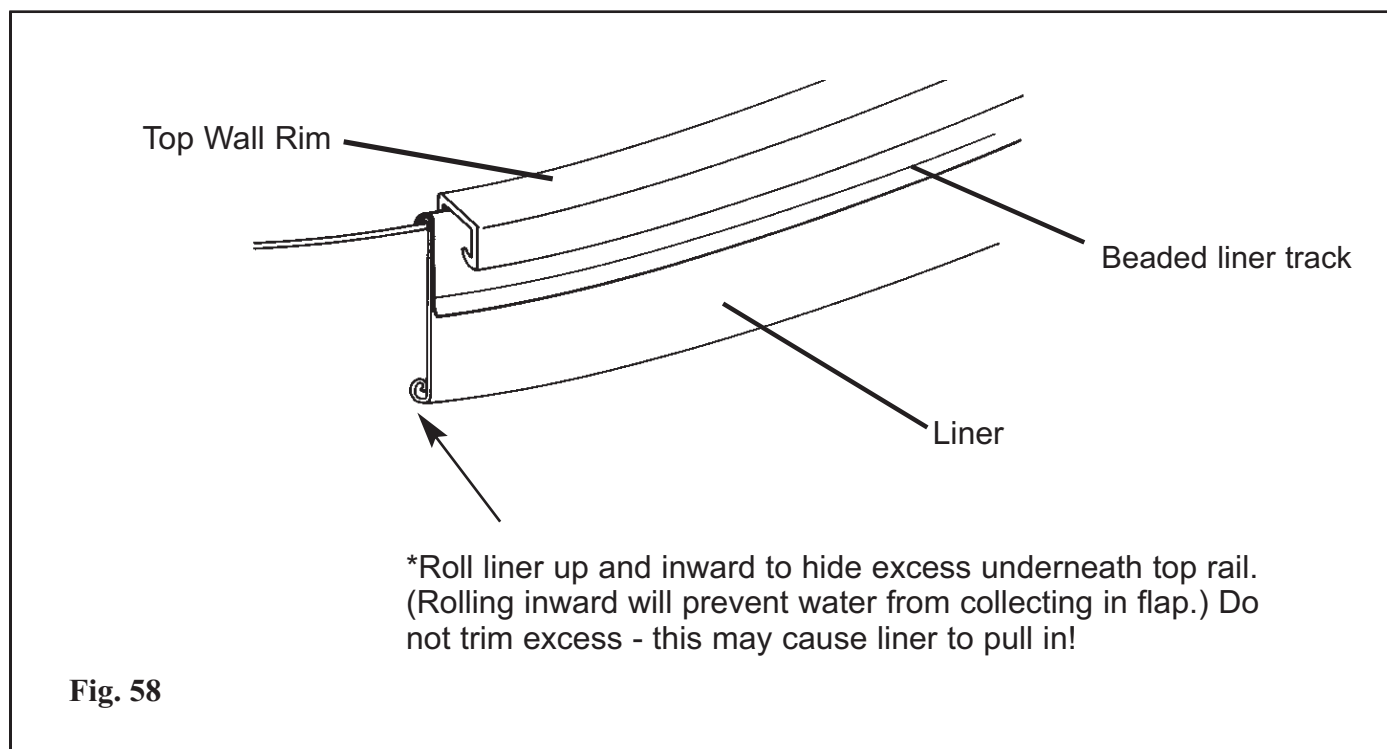
A) Starting at the first upright on one of the curved sides, push one of the longest top wall rims over the coping so it fits snugly. Continue this until you get to the last curved side upright and then do the same with the remaining “long” stabilizers on the other curved side.

B) Once the curved sides have been completed find the four 37" wall rims. Push these wall rims over the coping in the “corners”.

Remember, the “corners” are the space between the last straight side upright and the first curved side upright.

C) The 33" wall rims are used in the spaces between the straight side uprights.

See Figure 53 for more images



Buttress-Free

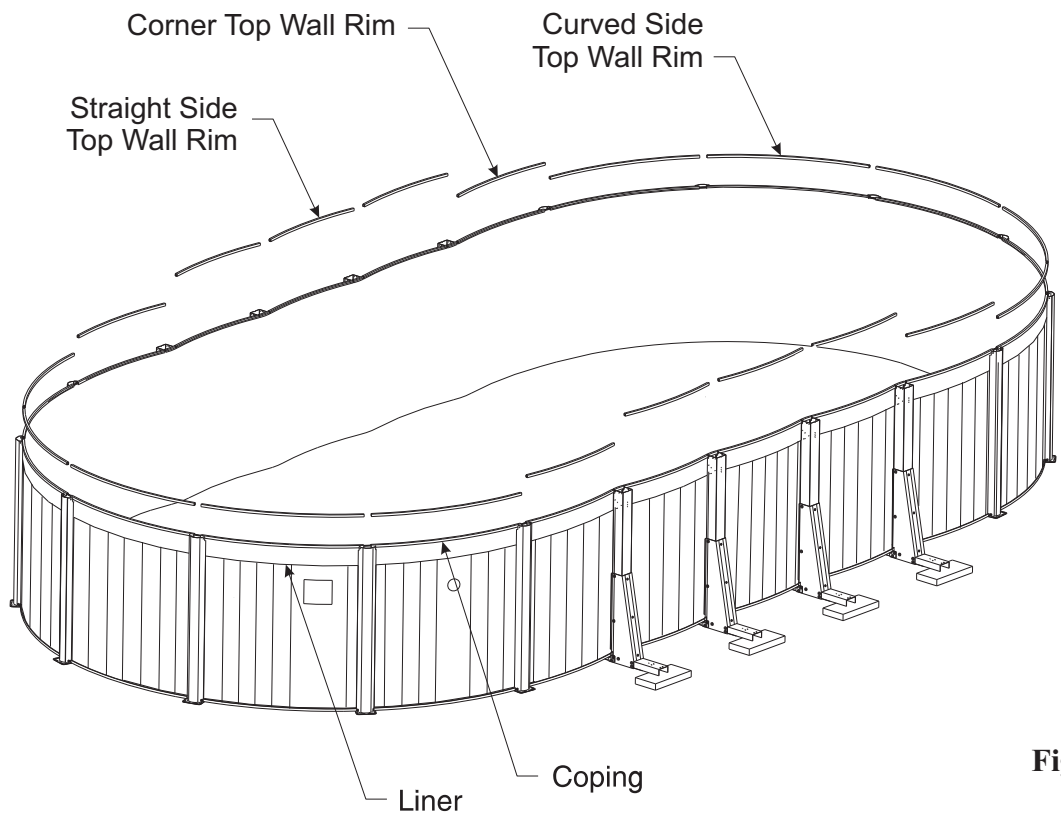
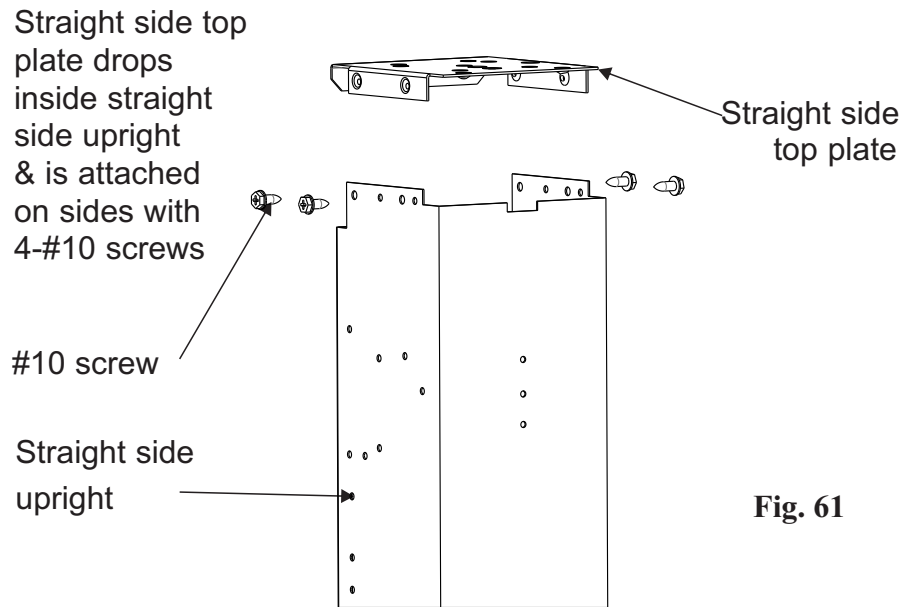


Fig. 60

STEP 21 – STRAIGHT SIDE TOP PLATE INSTALLATION:

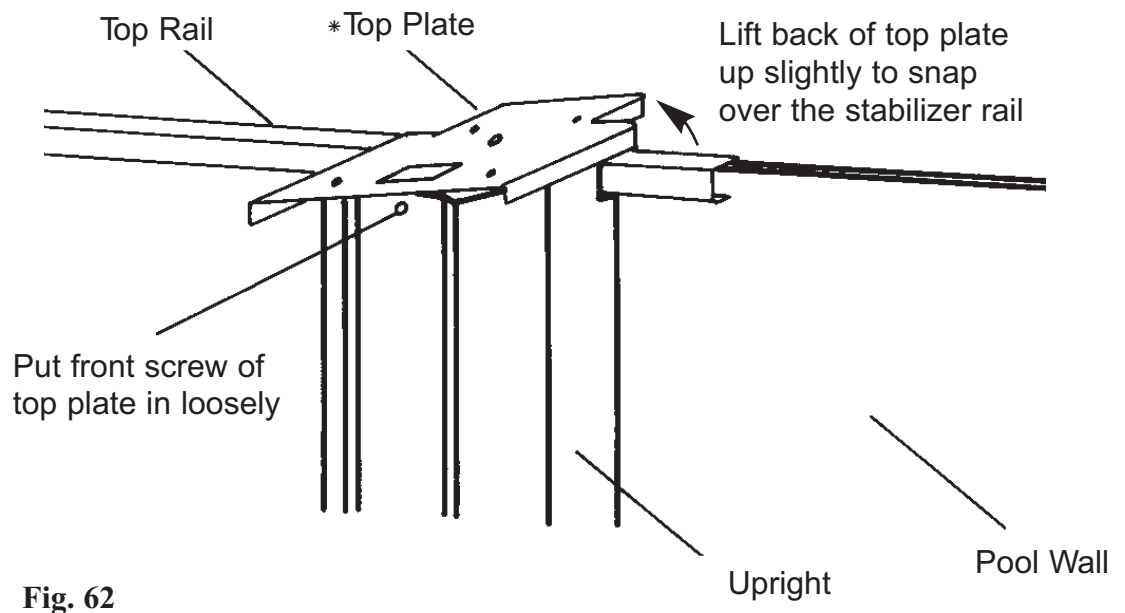
Now is the time to install the straight side top plates. Simply place each one over a different oval upright and the stabilizer rail, match the holes on the top plate to those on the straight side upright, and fasten them together using four #10 x 1/2" screws in each.



STEP 22 – SECURING THE CURVED SIDE UPRIGHTS:

For the uprights on the curved ends of the pool, you can now pull the front of the top plate (the hooked part) over the stabilizer bar and, after you are positive that the upright is level, you can now add the final two screws necessary to secure the uprights to the pool. If the uprights are not level, it will be very difficult to get the top rails to fit together. It is a good idea to use a carpenter's level to check that the upright is standing perfectly straight. If the upright is leaning left or right this is easy to correct before putting the final two screws into the top plate.

**Sample Top Plate - Yours may look a little different*



STEP 23 – TOP RAIL INSTALLATION:

Your pool either has metal top rails, or resin top rails. Please notice the different hardware that is necessary for the resin top rail pools.

You should have two people while installing the top rails. If a top rail falls in the pool it can cut your liner.

- You should have two different length top rails with your oval pool. The 41 ¼" long top rails (measured from longest point to longest point) are for the straight sides of the pool. Note, the four rails that connect the curved side uprights to the straight side uprights are 41 ¼" rails.
- Install all straight side rails (41 ¼") first by placing them on the top plates, lining up the holes in the top rail with the holes in the top plates, and secure them down using four #10 screws for each top rail. All screws should be put on loose and tightened after all rails are on.
- Once all of the straight side rails are done, install the longer rails on the curved sides of the pool in the same fashion.

Buttress-Free

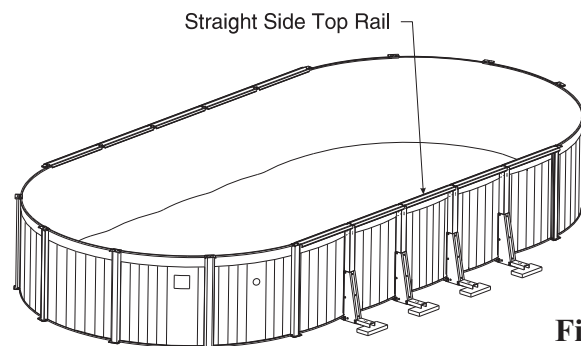
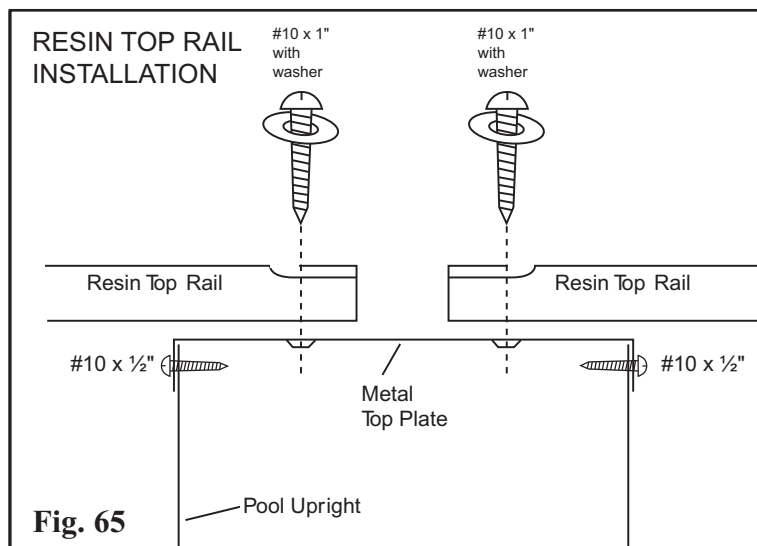


Fig. 64

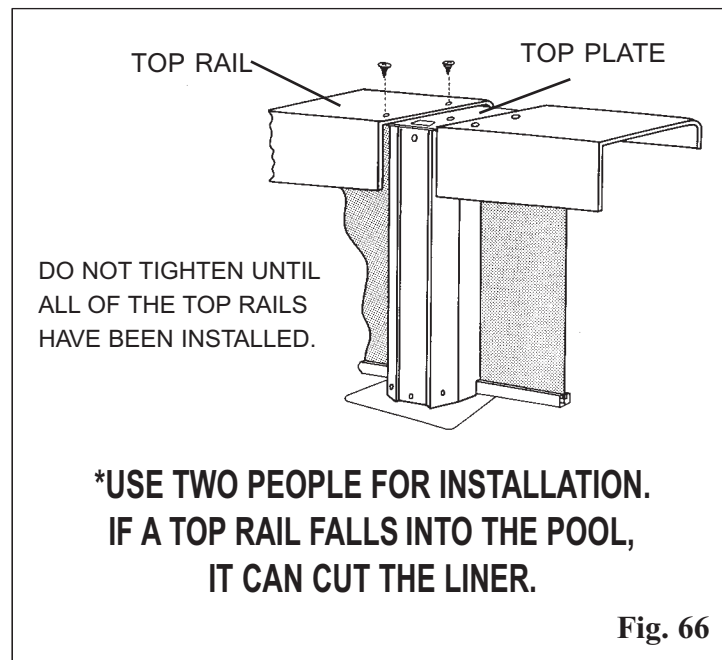


RESIN TOP RAIL INSTALLATION:

When a resin top rail pool is assembled, you must use special hardware to attach the resin top rail to the metal top plate. Please see the Fig 65.

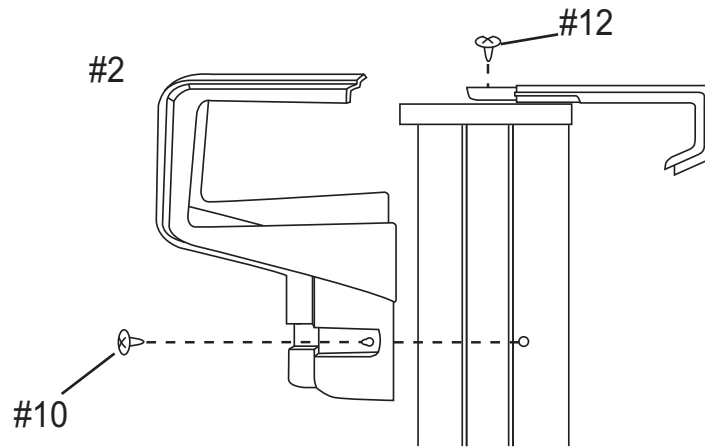
The special hardware is:

- a) A #10 screw that is 1" long.
- b) A washer with the screw to distribute the pressure more evenly.



STEP 24 –TOP COVER INSTALLATION:

2 PC RESIN TOP COVER: Center small half over hole in the top plate as shown and attach with a #12 screw. Slide the large half over the small half to secure using two #10 screws.



Important Pool Safety & Maintenance

Keep your pool wall and frame clean. Always wash away any deposits of pool chemicals which land on the frame of your pool. Wash periodically with a mild soap solution (no abrasives). At least once a year use a clear non-yellowing household wax on all metal components.

Your pool and liner must be inspected regularly for leaks, corrosion, scratches, and punctures. If any problem is found IMMEDIATE CORRECTIVE ACTION MUST BE TAKEN. Small repairs and punctures in your liner may be easily repaired using repair kits available at your local dealer. Scratches on your pool wall & frame must be touched up with anti-rust enamel. Wire brush all rust and add a coat of enamel primer followed by a coat of color matching paint. Pool water is full of various caustic chemicals, which will corrode metal parts. If any corrosion is allowed to continue, failure of the pool structure may occur which could result in excessive property damage as well as bodily harm.

The skimmer area and below it are particular areas that must be carefully and regularly inspected. If this area is wet, and remains wet for any length of time, it usually means there is a small leak. Skimmer/skimmer return gaskets must be replaced when they become defective. Water must not be permitted to continually run down the wall, if neglected pool will break. If proper skimmer/skimmer return gasket care is not maintained, your warranty will be void!

Be sure to follow all local and state safety regulations when installing any accessory to your pool. Any decks, and all entries, must be carefully monitored for safety and access to pool. Installing any other manufacturer's deck or slide is strictly forbidden!

Winterizing Your Pool

During the winter your pool is subject to more stress than in the summer, and any breakage that is caused by incorrect winter procedures is not subject to any warranty with this company.

All of our pools and liners are designed to be left up all winter, but nonetheless are subject to the warranty of the liner being purchased. Continue to chlorinate and filter until the pool is closed down.

Before closing down your pool for the winter you must make a complete inspection of the pool.

- Check all the connections to make sure everything is tight and in good condition
- Check to see that the liner is snugly held in place over the wall.
- Check for any indication of rust or deterioration in any part.

IF ANY OF THE ABOVE IS FAULTY YOU MUST CORRECT THE SITUATION IMMEDIATELY.

Lower the level of water to about one foot below the skimmer intake and return holes. Throughout the winter you must continually check this level, as it must not reach the skimmer holes at any time during the winter.

During the winter the pool requires the use of an equalizer to allow for the expansion and contraction that occurs when ice is formed and to hold cover up. This can be a product manufactured for this express purpose and is available at your swimming pool dealer.

The use of a winterizing agent will simplify the start up of your pool next season.

A cover designed for winter use is also recommended to keep pressure on the equalizer so it is forced into the water, keep dirt out, and at the same time, serve as a safety cover.

If your skimmer is supplied with a winter plate and cap you must still follow the same steps as above. It is essential that no water be allowed to run down the wall for any period of time. If your skimmer did not come with the winter plate it is available at a nominal charge at your dealer and is recommended.

Important Winter Rules

After your pool has been winterized and all steps carefully followed, the following checks and procedures must be strictly followed during fall, winter, and spring seasons.

Your pool warranty will be invalid if pool has been improperly winterized and the following procedures not strictly adhered to. Pools that have been incorrectly winterized have been known to collapse under the tremendous pressures exerted by ice and snow.

A pool that is left up during the freezing temperatures must not be allowed to leak. It is not uncommon for a leak to develop during rigorous summer usage and go undetected. What is thought to be water loss due to evaporation or spillage may be caused by a small leak. Persistent wet areas around the pool should be inspected. To determine if your pool is leaking, mark the liner at the water level and closely observe the water level in the pool for a period of 10 - 12 days after the pool is closed for the season. Any rain during this period may compensate for any undetected water leakage. Therefore, the observation period must be extended to find any leaks.

Maintain a strict leak inspection schedule throughout fall, winter, and spring months. Spring thawing which frequently leads to ground heaving can be especially dangerous if care is not taken.

Maintain a strict inspection of the inner skimmer housing to see that water is not leaking at the gasket. If the skimmer was not removed, water should not be allowed to collect in the skimmer housing as the water will freeze and crack the housing and cause possible damage to the wall.

Should ice, or anything else, cut your pool liner allowing the pool to empty, be sure to release the cover thereby removing the weight from the top of your pool. Failing to do so can cause your pool to collapse.

Consult your pool dealer for the proper winter chemicals for quick spring start up.

During the course of the winter the liner may pull out of it's coping due to no fault of the pool installer. Due to freezing and thawing of the ground, the ground sometimes sinks and the liner with the weight of ice or water will sink also, thus pulling the liner out of it's coping.

Be sure to pull off all excess snow and ice from the winter cover.

Do not permit ice skating or horseplay during the winter as this can cause pool and liner damage, as well as, serious injuries.