TARA

Pool & Outdoor Products

A GUIDE FOR MEASURING VINYL LINER POOLS

ABOUT TARA

Tara Pool & Outdoor Products is one of the nations leading manufacturers of in-ground vinyl pool liners and pool safety covers. Since 1984, Tara has supplied pool professionals with high quality swimming pool products. Every product Tara Pool & Outdoor Products produces is custom designed and built using state of the art design software and manufacturing equipment. To ensure the best fit and durability Tara Pool & Outdoor Products uses the best materials available.

Our company is family-owned and operated and many of our family-based values are instilled in our company. We build each pool liner and cover as if it was going to be installed in our own pool. We do this because we want the end customer to be very satisfied with the Tara pool liner or cover and want our customers to be proud of being a Tara Authorized Dealer.

We are more than a manufacturer for our customers. We are also a resource for them, providing tools that make it easier to sell and install Tara products. We know that our customers' reputations rely in part on the durability and quality of our products. We also provide an effective, responsive customer service team that will help answer not just Tara-specific questions, but other general pool-related questions.

OUR MISSION

Strive for excellent quality and service for our customers, improve the quality of life for our employees and contribute to the improvement of our community.

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TAKING CARE OF VINYL LINERS

Taking proper care of vinyl liners will greatly add to the beauty and life of the liner. We suggest the following steps to help take proper care of the liner:

- **Maintain proper water balance:**
  (a) pH in the 7.2 - 7.6 range
  (b) Total Alkalinity at 100 - 150 ppm.
  (c) Calcium hardness; 200 ppm minimum
- **Maintain free chlorine residual between 1.0 and 1.5 ppm.**
  If free chlorine drifts below 1.0 ppm, algae and bacterial growth can take hold more easily and may cause staining of the vinyl liner. Chlorine is quickly absorbed by sunlight. For this reason, it is recommended that all vinyl swimming pools be stabilized with cyanuric acid and that a range of 25 - 100 ppm be maintained.
- **A pH of less than 7.0 should be especially avoided, since it can cause the liner to form wrinkles.**
- **Avoid using muriatic acid for pH adjustment.** This acid will chemically attack the print pattern on the liner and in time will make it more susceptible to wearing off due to abrasion. It is recommended that sodium bisulfate be used for pH adjustment.
- **Test for the presence of metals in the water supply.** If metals are present, check once a month; if none are present, check at six month intervals. Dissolved metals may contribute to staining of the liner. Follow the chemical manufacturer's instructions concerning the use of chelating materials to remove dissolved metals.
- **Make sure the chemical balance is checked regularly.**
  A heavily used pool should be checked more often. Do not over do it when adding chemicals to the pool. Proper balance being maintained has a significant effect on the liner as well as many of the other pool components.

- **Make sure the circulation system is "ON" long enough to get good, daily filtering.** This is an important factor in keeping the chemicals mixed thoroughly for good balance. It may take several hours to filter the pools volume of water, depending on the size of the pool and the filtering system.
- **We do not recommend using floating chlorinators in vinyl liner pools.** They can become stationary in the pool and release high concentrations of chlorine in a small area causing the pattern on the liner to become bleached out, losing its color. This could happen at any time; even while the pump is running.
- **Automatic pool cleaners can help keep a pool clean when properly used, but excessive use should be avoided.** Excessive rubbing of the cleaner against a vinyl liner can be abrasive enough to cause the pattern to wear off of the vinyl. Minimum use recommended.
- **Use equipment which is specifically for use in a vinyl liner pool.** Keep all equipment in good condition. Replace any badly worn or defective parts before continuing use in the pool. For example, a vac head with missing brushes may cause a wrinkle to form in the liner and possibly tear the liner if the suction is strong, and if the vac head remains in one spot for a long period of time.

WINTERIZING THE POOL

- **NEVER** add chemicals directly to the pool! Dilute them first in a bucket of water and add them to the pool by pouring them into the skimmer, while the circulation system is on.
- Circulate the pool water for a full **72 hours** after the final addition of the chemicals. Even liquid chlorine can concentrate in the deep end and cause bleaching of the liner.
- The chlorine level should **not exceed 2.0 ppm**.
- Never drain the pool. For most pools we recommend that you not lower the water below the skimmer. However, in

northern markets it's necessary to lower the water below the skimmer mouth. Place a gizmo or a weighted plastic milk carton in the skimmer to protect it from freeze damage. Once a pool has been filled with water, the liner begins to lose its stretching properties; therefore the pool should be kept full of water at all times. The water acts as a protector for the liner and holds the liner in its proper position, thus eliminating any re-stretching and drying out of the vinyl. Follow the manufacturer's recommendations concerning the winterizing of the pump and filter.

- Use a good fitting winter cover that is sealed around the entire perimeter. An uncovered pool accumulates debris, such as leaves and worms. The debris absorbs the chlorine in the pool, leaving a potential risk for staining or bleaching of the liner.
- Do not use abrasive cleaning aids, i.e.; steel wool, sharp bristled brushes, scouring pads, etc. **We recommend using alkaline base cleaning agents for cleaning the area above the water line.** Acid base chemicals can leave a residue which causes the vinyl to fade out.

BACTERIA AND FUNGUS STAINS

Some types of bacteria and fungus found in the soil can actually penetrate through a vinyl liner and cause stains to appear on the liner. Usually they will start as spotted or cloud like formations on the liner. Often these spots appear gray, grayish green, or a light black in color. Algaecides used in the pool water have little if any effect on stains caused by bacteria, since they do not get to the source of the bacteria in the soil.

If a pool is known to have a problem with bacteria staining the liner, the ground underneath the liner may be treated with a solution of one half household chlorine bleach and one half water. Mix the bleach in the water and mist the floor of the pool with a small garden sprayer three or four times prior to dropping the new liner in the pool. After the last application of bleach solution, wait several hours before dropping the liner, making sure the solution has been absorbed into the ground.

We sell a product called **Stain Barrier** that is an effective tool for preventing liner stains due to in-ground contaminants.

Stain Barrier was developed as a barrier coating to be applied to walls and bottom of an in-ground pool prior to installing the vinyl liner. Stain Barrier is easy to apply either with a paint roller or by a paint sprayer. After the product is properly applied in a continuous coat to the dry pool walls and bottom and allowed to dry for 30 to 45 minutes *(depending upon the relative humidity in the atmosphere)* the vinyl liner can then be installed without delay. The impervious latex shield prevents any further stain of the vinyl. It is proven to provide protection against liner stains for the life of the liner.

If the liner has recently been replaced, one method which has been shown to be effective in some situations, is the use of **Copperas Iron Sulfate (FeSO4)** to change the pH of the soil around the pool, therefore killing off the source of the bacteria or fungus. This is not a guaranteed cure in all cases but it has had some astonishing results for some of our customers. Best of all, this can be tried without having to drain the pool and replace the liner!

COPPERAS IRON SULFATE is a chemical used by tree nurseries to treat the pH of soil and for some iron deficiencies in plants. For an average size pool, such as an 18 x 36 rectangle, you need about twelve to fifteen pounds of this powdered chemical. Sprinkle it on the ground next to the pool deck and extend out about 4 feet from the edge of the deck on as many sides of the pool as possible. Then turn a lawn sprinkler on the ground for two or three days, long enough to get the ground around the pool thoroughly saturated with water. The idea is to get the powder to soak deep into the ground so it can change the pH of the soil and hopefully kill off the source of the bacteria. Usually results are not seen for a week or two since it has to get deep in the ground to have any effect on the bacteria. The **COPPERAS IRON SULFATE** has not been known to have any harsh effects on grass but care may be taken when using around delicate flowers.

TERMITES AND ANTS

For many years it has been known and proven that termites and ants will attack a vinyl pool liner. It is suspected that the termites are attracted to the pool area due to the dampness around the pool. Usually the first signs are very small holes in the liner in the area above the water line. Quite often the liner may have dozens of holes in it within a short period of time after they have begun their attack on the liner. Most of the time if the liner is taken out of the bead track and pulled away from the wall you may see trails that the termites have left behind. Usually the holes they make in the liner are relatively small, about an eighth of an inch in diameter and are round or oval shaped. If the pool liner has to be replaced as a result of termites or ants, the homeowner is advised to get an exterminator to treat the ground beneath the liner and around the perimeter of the pool deck. Here are some of the more likely places for termites and ants to appear: a yard where a tree has been removed, where a patio or walkway has been removed, around wooden flower planters, and around wooden fences. Although this is not a widespread problem, it should still be taken seriously. An average of ten to fifteen cases a year are reported to us.

WRINKLING OF VINYL

Our vinyl manufacturer has invested a great deal of time and money into discovering the causes of and the prevention of wrinkling. Wrinkles that develop in swimming pool liners after installation are caused by the vinyl absorbing water and thereby changing dimensions. Testing has shown that high levels of chlorine or bromine will initiate excessive water absorption into the vinyl liner and lead to wrinkles. Low pH and cyanuric acid stabilizer are also factors in wrinkle formation because the activity level of the chlorine is affected by pH and stabilizer level. Our experience has shown that the use of trichloroisocyanuric acid sanitizer (Trichlor) and low pH levels can cause wrinkling of a vinyl liner. Alkaline sanitizers (Hydochlorite) and non-chlorine sanitizer systems have been found to be safer to use with vinyl liners.

COLOR FADING BELOW THE WATER LINE

There can be many contributing factors that lead to the fading of the liner. All of those factors can be grouped under the heading of chemical attack, however the leading cause is simply over chlorinating. Just as excessive use of bleach will fade clothes, over chlorinating of pool water will greatly accelerate the fading of a vinyl liner.

From the vinyl's standpoint, any chlorine level above 3 PPM will accelerate the fading process. The use of a chlorine based sanitizing system is going to bleach the liner. There is no way around this fact. The higher the active chlorine level, the quicker the fading will occur.

Be especially careful when shocking, closing or opening the pool. It is critical that you circulate the water for a minimum of 72 hours after any of these procedures. The average shock treatment is going to bring the chlorine level of the water to at least 25 PPM and as high as 50 PPM.

The specific gravity of the chlorine is higher *(weighs more)* than that of the water. It is therefore critical that you circulate the water long enough to insure that the chlorine will not settle out of the water and concentrate in the deepest part of the pool.

It is also important that you do not cover the pool for at least 24 hours after one of these treatments. The covering of the pool will greatly restrict the chlorine's ability to dissipate, thereby greatly increasing the likelihood of damage.
Our experience has shown that of all the sanitizing systems, Trichloroisocyanuric acid has the greatest potential to bleach a vinyl liner. Alkaline sanitizers (Hydochlorite) are much more vinyl friendly and just as effective. No matter what system you use, always use the minimum amount of chemical that will get the job done.

Remember: less is best when adding chemicals to a vinyl lined pool.

POINT-TO-POINT MEASUREMENTS

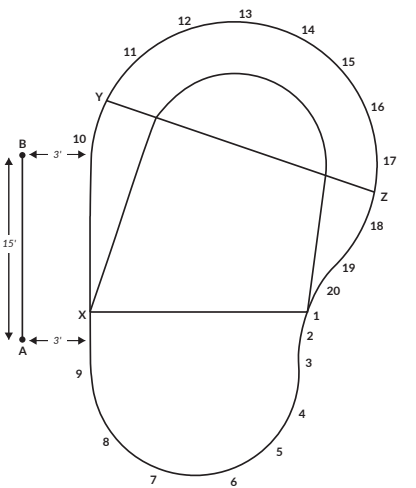
What will you need:

- 100 Foot Reel Measuring Tape
- 3 Ft. to 6.5 Ft. Telescoping Pole
- Clipboard
- 2 - 12 in. Galvanized Spike Nails
- Heavy Duty Steel Tape Measure
- AB Measuring Forms or Tara AB App (See page 92)
- Plumb Bob
- Roll of Nylon Thread

1. Establish the A-B line by marking the points on the deck or driving stakes into the ground. The A-B line should be at least 15' long, ideally 2/3rds the length of the pool, along the length of the pool. The A point should be placed on the shallow end side and the B point on the deep end side. Both the A and B points should be at least 3' from the edge of the pool so that an imaginary line extending through the A-B points and beyond them should not cross the pool.

2. Place points around the perimeter of the pool. Place point 1 on one side of the shallow end break. If the pool doesn't have a shallow end break, locate point 1 at the center of the pool. Mark and label a series of points around the pool wall perimeter. Points should be spaced according to pool shape, straight walls need fewer points and small radii should have more points. If the liner needs a straight step cut or if the liner covers the steps, locate each side of the step with two of the points. All transitions should have points located at them, ex. corners, break lines, covered step treads, ends of fiberglass steps.

3. If point 1 was placed at the shallow end break, mark and label point X on the opposite side of the break.



4. If the pool has a deep end break, mark, and label point Y on one side and point Z on the opposite of the break. Marking the shallow and deep end breaks will help ensure the liner fits properly.
5. Measure and record the distance between points A and B to the nearest 1/8".
6. Make a list of distances from point A to point 1, A to 2, A to 3, etc. until all the points marked are recorded. Make sure to measure to each mark and directly above the perimeter wall for accuracy. The accuracy of these measurements may be from 1/8" to 1/4". If there are X, Y and Z points, be sure to measure them also.
7. Make a list of distances from point B to point 1, B to 2, B to 3, etc. until all the points marked are recorded. When this list is finished, check to make sure all points marked are represented in the A list and the B list.
8. Measure the depths of the shallow end and deep end of the pool, measuring from the liner track to the floor of the pool. If the pool is full of water, the length of the hopper back wall and the width of the hopper side walls may be measured by placing one end of a telescopic pole at the intersection where the slope meets the hopper pad and while holding the pole perfectly straight up and down. Have someone measure the distance from the edge of the pool to the pole. If the pool has steps, indicate whether they are radius or straight. Draw a simple sketch of the pool showing the shallow end, the deep end, and the location of A and B.
9. It is also helpful to get the width of the side wall on the transition slope to help determine the contour of the slope if it does not go straight back to the shallow end break. Measure this about half of the way down to the deep end break.

As a quick check remember to ALWAYS:

- Make sure a line passing through A and B does not cross the pool perimeter.
- Mark the breaks in the pool bottom with points.
- Record the distance from A to B.
- Make sure you have the same number of A measurements and B measurements.
- Draw a sketch showing the relationship of A and B to the shallow end and the deep end.

TAKING THE BOTTOM DIMENSIONS

- It is absolutely necessary to use the proper methods for obtaining the dimensions needed to get a liner that fits without any unnecessary stretching or wrinkles after installation. The angles in the bottom of the pool should be measured in a horizontal direction, as **shown by the dotted lines** *(see diagram below)*. Shown is the side and end view of the pool and the letters which correspond to them as they appear on our liner order form:

A = The overall width of the pool.

AS = The width of the shallow end of the pool.

B = The overall length of the pool.

E = The length of the shallow end of the pool.

N = The length of the transitional slope; measured horizontally.

M = The length of the hopper pad.

L = The length of the hopper back wall; measured horizontally.

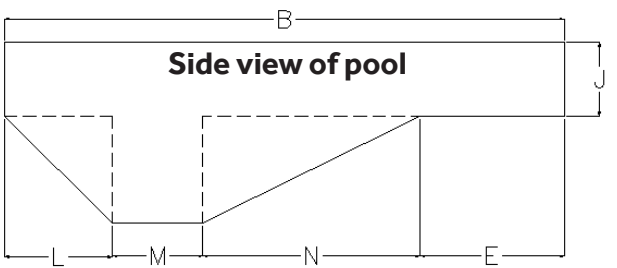
G = The width of the hopper side wall; left side standing at deep end.

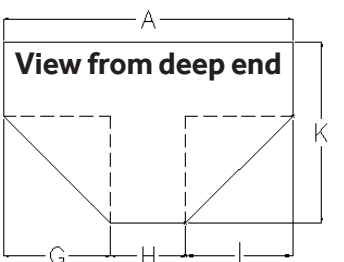
H = The width of the hopper pad.

I = The width of the hopper side wall; right side standing at deep end.

J = The depth of the shallow end; from the track to the floor.

K = The depth of the deep end; from the track to the floor *(where the wall meets the floor not the deepest point of the hopper).*



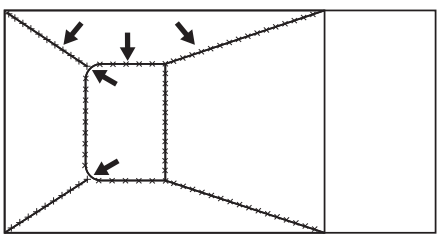


- Be sure to get the dimensions of the corners of the pool and add the bottom dimensions to make sure they are equal to the overall width and length of the pool, not including the step.
- The L, N, G, and I dimensions are taken horizontally giving the squared measurements of the angled slopes.
- The J and K depths are taken from the liner track to the pool floor.

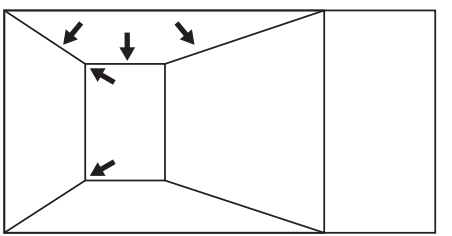
DO NOT TAKE J AND K FROM THE TOP OF THE DECK!!!

- A vinyl liner pool should have well defined lines in the bottom of the pool which represent the shape of the hopper pad, the transition slope, and the back and sidewalls of the hopper. If the valleys which form these lines are rounded out, be sure to note it on the order form. These areas, when rounded out, take up some of the area in which the liner would normally stretch into, causing wrinkles in the liner. The liner is cut to precise measurements and should only have to stretch a minimal amount to fit the pool.

Are the valleys in the bottom of the pool rounded out?



A vinyl liner pool should have well defined lines in the bottom of the pool, not rounded out.

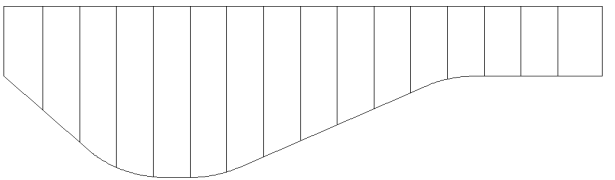


- Sometimes the corners of the hopper pad closest to the deep end of the pool will be rounded out, forming a radius in the corner instead of a square point. Be sure to note this on the order form to ensure proper fit in the hopper.

This is especially true in cases where the back wall of the hopper is smaller than the radius of the corners of the pool wall. For example, a pool that has four foot radius corners and a two foot back wall, the corners in the hopper will most likely have a radius.

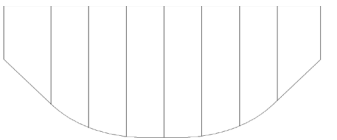
- If the pool is rectangular in shape, the corners of the hopper pad should come to a point. If the pool is oval, kidney, etc., the hopper should follow the contour of the pool on the deep end.
- If the bottom of the pool is bowled out and does not have distinct lines, take depth dimensions of the pool at one foot intervals down the centerline of the pool, from shallow to deep. Also, take depth measurements at one foot intervals across the deep end at its deepest point.

Side view of a pool with rounded bottom



Take the depth of the pool down the center at one foot intervals

Deep end view of a pool with a rounded bottom



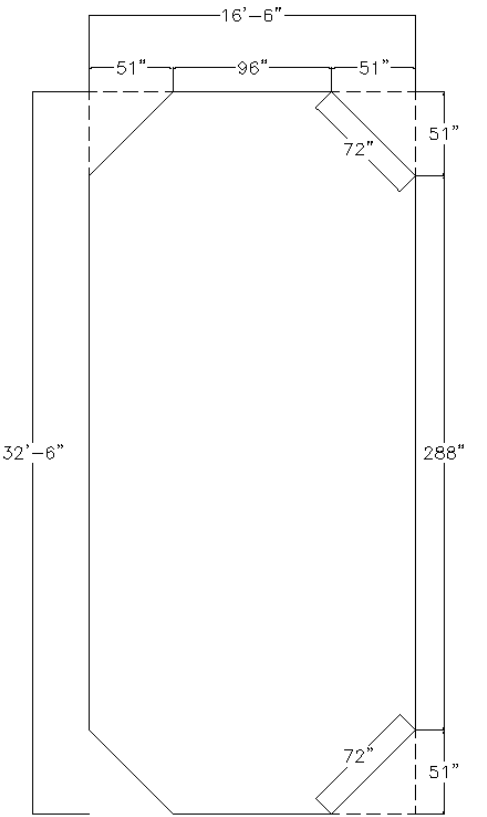
Take the depth of the pool across the deep end at the deepest point at one foot intervals

When taking depth measurements, be sure to measure from the liner track to the floor. Do not include the height of the coping above the liner track.

GRECIAN CORNERS

Most grecian shaped pools have corners which are on a 45 degree angle. Therefore, we can multiply the length of the corner by .7071 *(The cosine of a 45 degree angle)* to see if the pool is properly squared and the corners are on a 45 degree angle.

- First convert the length of the corner to inches and multiply by .7071 to get the squared dimension of the corner.
- In the example given, a pool with six foot corners, you would multiply 72 x .7071 to get the squared dimension of 51 inches. By adding the squared dimension of the corner to the length of the straight wall connecting the two corners the result should be the same as the overall width and length of the pool. This will indicate that the pool is in square and the corners are on a 45 degree angle.



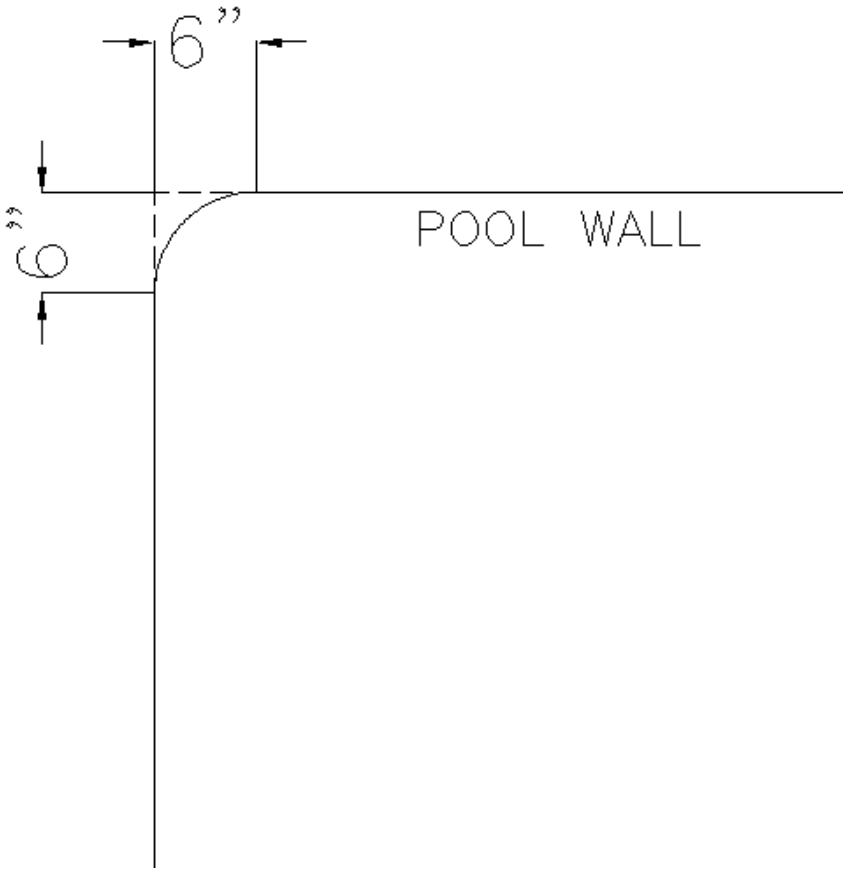
Width of pool: 51 + 96 + 51=198
198 ÷ 12 = 16.50 (16'6")

Length of pool: 51 + 288 +51 =390
390 ÷ 12 = 32.50 (32'6")

Note: The decimal .50 is multiplied by 12 to convert it into inches;
.50 x 12 = 6.0 inches

RADIUS CORNERS

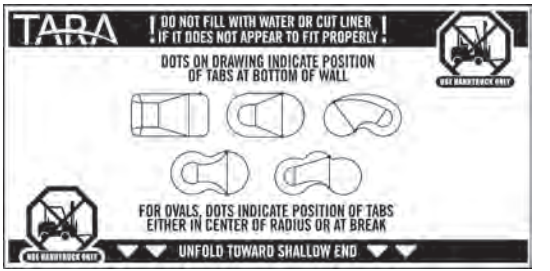
- To find the radius of a corner, first you must extend the end wall and the long wall of the pool to form a square, as shown by the dotted lines. The distance from where the two lines intersect (X) to where the curve stops is the radius of the corners. Be sure to measure only to where the curve stops. This is not necessarily to the nearest coping clip, since the coping corner may extend past the radius and go a few inches down the straight walls of the pool.
- Here are some of the most commonly used types of corners and some of the brand names associated with them:
  90 degree *(square)*.....TROJAN
  6 inch radius.....Most commonly used corner, most brands
  9 inch radius.....BUSTER CRABBE
  24 inch radius.....Fairly common on several brands
  30 inch radius.....POOL TECH
  46 inch radius.....CLAYTON & LAMBERT, PIONEER
  48 inch radius.....Very common on several brands
  54 inch radius.....IMPERIAL
- Some Polynesian pools have diagonal corners at the top of the panel which taper down to form a V shape, making the corner square at the bottom of the panel. These should be ordered as square corners, since it's the bottom of the corner that determines how the liner floor will be cut.
- If the corner has a diagonal cut corner, give the length of the diagonal corner piece. *(Same at top and bottom)*



Measure from the start of the radius.

The corner shown on the left is a 6" radius.

TARA TABS - LINER ALIGNMENT SYSTEM



- Our unique Tab system, for installing pool liners, helps installers position the liner in the pool with ease. If you've ever looked at the cover of a Tara Liner box, you may have noticed the pool shapes printed on the top. These drawings show where the "tabs" are located. The tabs are an indicator Tara has used for years to help pool professionals quickly position a liner in a pool. If you place the liner tabs in the location indicated on the top of the box, the rest of the liner will be easy to position. Using the tabs takes much of the guess work out of installation.
- The tab is a triangular shaped flap or tab of material that is added to the liner drawing when it is set up in Auto-cad. When that piece of the liner is cut, the tab looks like an extra "V" shaped bump. As all of the pieces of the liner are welded together, the tabs are left loose on the back side of the liner. They do not interfere with the appearance or performance of the liner. Simple and effective, Tara Liner's tabs are an incredibly accurate liner positioning system.

INSTALLING LINER LOCK AT THE CORNERS

- When installing a liner in a pool with small corners, such as 6" radius, 90 degree, etc.; we recommend using a piece of liner lock on each side of the corner. This helps to keep the liner positioned in the corner and helps prevent large air pockets forming behind the liner in the area above the water line. Large air pockets will create extra stretch on the liner and cause the material to dry out and have a dry rot effect.
- Push some extra slack into the corner by sliding the liner in the track into the middle of the corner as shown by the arrows *(in the diagram below)*. While holding the slack in the corner, install a piece of liner lock about one foot from the

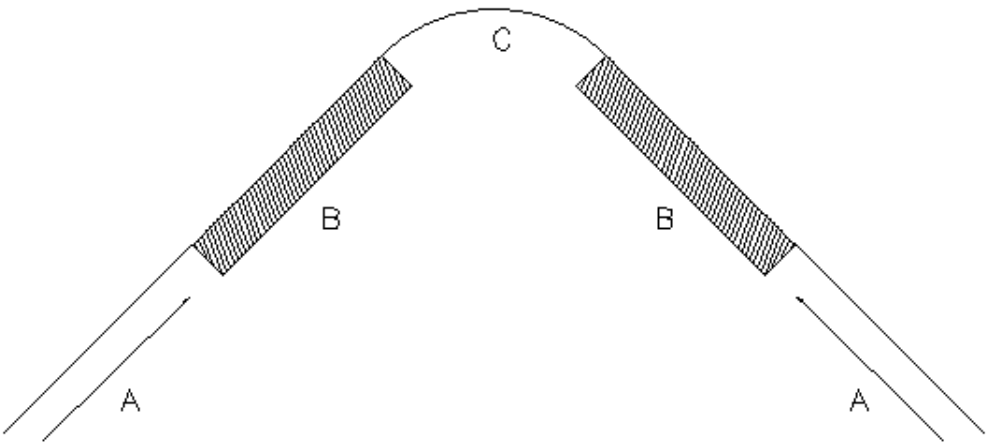
midpoint of the corner on each side. **It is easier if you install liner lock in the shallow end corners before you hang the liner in the deep end of the pool**.

- Normally you can push enough slack into the corner so the liner will lay in or very close to the middle of the corner panel, before hooking up the vacuum. After the pool is full of water, the liner should be within an inch or so from the corner panel in the area above the water line. **Do not remove the liner lock after the pool is full.** This will help hold the liner in place if the pool should develop a leak in the future.

A. Push an even amount of slack into the corner from each side, allowing the middle of the corner to lay flat against the wall.

B. Small pieces of liner lock about 6 to 8 inches long *(approximately 1 foot apart).*

C. Liner should lay completely against corner here after installing the two pieces of liner lock.



INSTALLATION TEMPERATURES

We do not recommend installing liners on days where temperatures are less than 55 degrees and sunny. When temperatures drop below 50 degrees, a vinyl liner becomes stiff and uncooperative. To achieve the best fit possible, the liner has to have a certain amount of flexibility. When temperatures are too low, the liner can be too stiff to fit properly.

It is possible to damage the liner by trying to install it in temperatures that are too cold. If the liner is forced into position it can be overstretched which will weaken it, making it more likely to tear.

VACUUMING THE LINER

One of the most important procedures in installing a vinyl liner is making sure to get a good vacuum on the liner. Be sure to tape up any areas where the vacuum can suck air from outside the liner. On most pools, a good location for installing the vacuum is a couple of feet past the shallow end break of the pool.

1. Be sure the end of the vacuum hose is all the way to the bottom of the upright pool wall. At the bottom of the pool wall is where the liner will have the most air behind it, all around the pool.
2. Using a suitable liner vacuum, it should only take about ten to fifteen minutes to have all of the air removed from behind the liner. At this time the liner should fit up against the pool walls similar to how it will look when the liner is full of water.
3. Normally the only area the liner will have any air left behind it, will be along the bottom of the wall around the pool. This air pocket should be relatively small, with the liner being two or three inches from the bottom of the pool wall. If not, check for air leaks and if necessary add another vacuum on the other side of the pool.
4. If the pool has a set of fiberglass steps in the shallow end, be sure the wall floor seam on the liner is pushed up against

the bottom of the steps. While the vacuum is removing air from behind the liner, it may be necessary to hold the liner against the front of the steps to get the vacuum to seal itself off. You can use weights such as sand bags or water bags to hold the liner in place. *(See page 41 for Vinyl Covered Step instructions)*

6. Before adding water to the liner, be sure to check the area at the bottom of the wall around the pool. The wall/floor seam on the liner should be right at the bottom of the wall, not out on the floor. This is a good indication that the liner is vacuumed down well and that the liner is properly fitted to the pool. If necessary, turn the vacuum off to re-adjust the liner.
7. The vacuum should remain on while the deep end is filling and until the water depth in the shallow end is at least six inches deep.

FLOATING LINER

Sometimes after heavy rains and/or flooding, water can get behind the liner and cause it to lift. This can result in wrinkles or even a bubble forming. Once water has found it's way behind the liner it will need to be removed in order for the liner to be moved back into position. If the liner is in good condition, it is possible that it can be repositioned without any noticeable wrinkles. The older the liner is the more likely it is that there will be wrinkles afterwards.

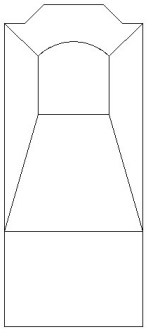
To prevent the liner from floating it is a good idea to keep the pool as near to full operating level as possible. In areas that are known to have a high water table, provisions can be made during initial construction to help keep the ground water away. Piping, with either holes or slots in the sides, can be installed vertically, down to a level close to the shallow end floor. A pump can be attached and the ground water can be pulled from the area adjacent to the pool and deposited a distance away. This piping can be retroactively installed, but takes some experience to complete.

If you experience a liner float, **DON'T DRAIN THE POOL**. This could cause a much bigger problem. Instead, try placing a hose behind the liner and removing the water using a transfer pump. You'll need a transfer pump, a stiff garden hose with the end cut off, some Vaseline and a telepole with a brush. Pull a small section of the liner out of the track. Attach the hose to the transfer pump and feed the end with hose coupling removed behind the liner. If you coat it with Vaseline beforehand it will make removing it later, much easier. To get the hose in place, you can pump water out of the pool behind the liner while your pushing the hose down the back side. Once the hose is in place, reverse the water flow and pump the water from behind the liner and back into the pool. Be careful not to pump it out too fast. As the water is being drained, you can use a telescoping pole with a brush attached to move the liner back into position.

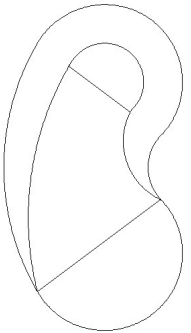
POPULAR SHAPES OF LINER POOLS

Today, vinyl liner pools are available in a broad variety of sizes, shapes, and designs, that were once thought of as being impossible to achieve with a vinyl liner pool. The next two pages show some of the most popular shapes of vinyl liner pools. Following those, are several pages that show each individually shaped pool and some tips on helping you get the right dimensions, the right way, the first time. After many years of manufacturing liners, we know how expensive, frustrating, and time consuming it is to have to go back to the pool to get more dimensions. We encourage you to take this guide with you when you measure the pool. Take a moment to read our comments or suggestions applicable to that pool. Hopefully this will provide you with some information to make measuring liners easier.

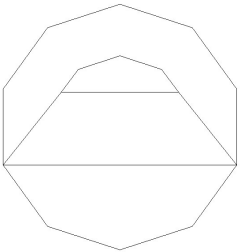
Bowed End



Crescent



Decagon



Diamond

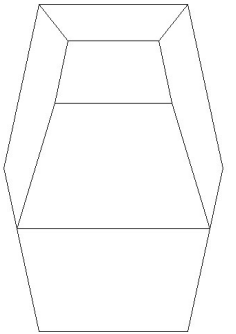
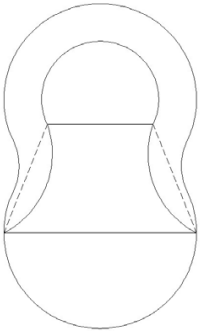
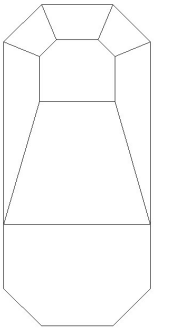


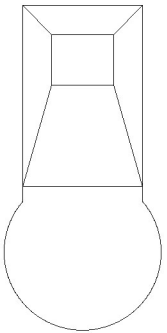
Figure 8



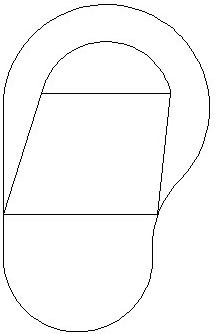
Grecian



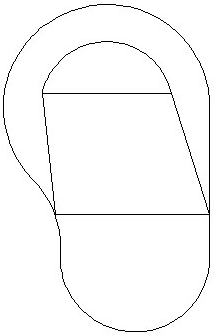
Keyhole



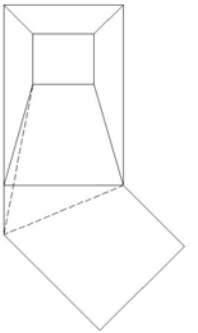
Kidney - Right



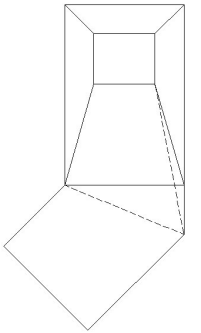
Kidney - Left



Lazy L - Right

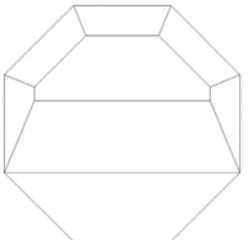


Lazy L - Left

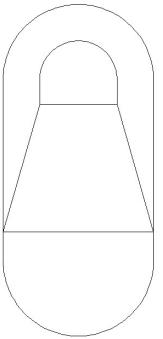


Mountain Lake

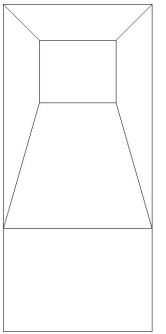
Octagon



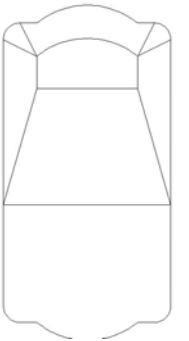
Oval



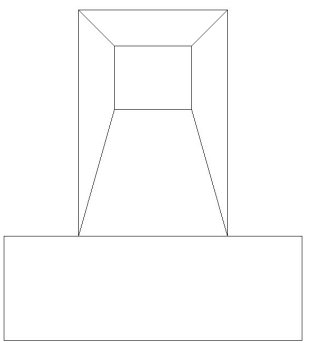
Rectangle



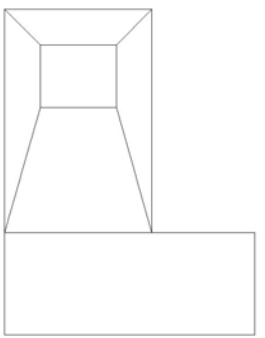
Roman End



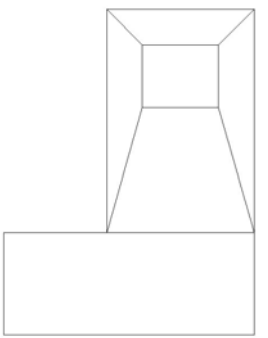
Tee



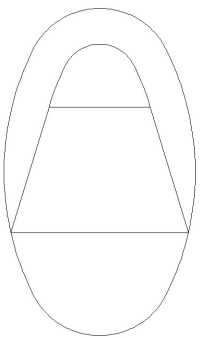
True L - Right



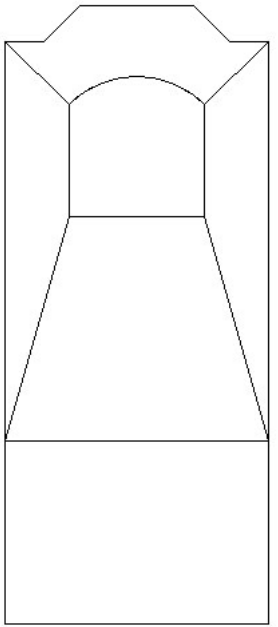
True L - Left



True Oval

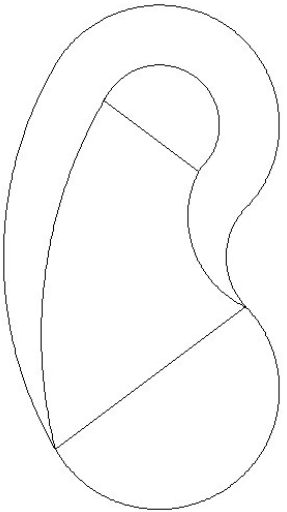


24
Bowed End



1. Get the length of the main body of the pool, by measuring down the side of the pool.
2. The total length of the pool including the bow, by measuring down the center line of the pool.
3. The lengths of the panels making up the bow on the end of the pool. Shown is 5 panels.
4. Radius or type of corners on the main body of the pool.
5. Get the measurement of only the straight sides of the hopper. The hopper is usually rectangular shape with a slight radius on the end that meets the back-wall.

CRESCENT



1. Determine if the pool turns left or right while standing at the shallow end and facing the deep end. **Shown is a Crescent Right**.

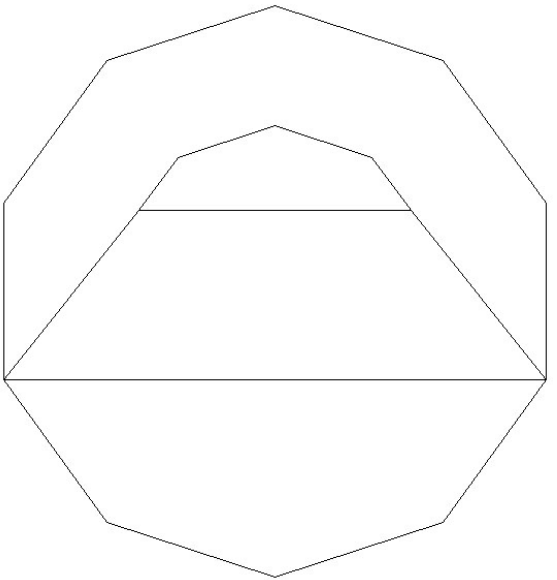
2. We recommend using a point-to-point chart to plot the perimeter and breaks in the bottom of the pool.

3. Normally the sidewalls of the transition slope will follow the contour of the pool, as shown.

4. It is very helpful to get the width of the sidewalls at the halfway point going down the transition, as shown.

5. If the liner needs a straight step cut or if the liner covers the steps, locate each side of the steps by measuring in a straight line from the right side of the steps to the right side of the shallow end break. Do the same for the left side. If using a point-to-point chart, let two of the points represent the step location.

26
DECAGON

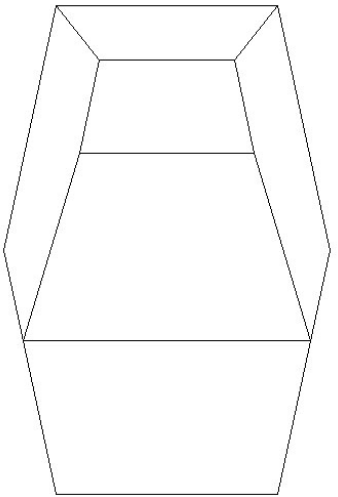


1. Get the length of the 10 panels making up the perimeter of the pool.

2. Get several diagonal dimensions by measuring from the corner of each panel to the corner of the panel directly across the pool. If these dimensions vary more than an inch or so, we suggest using a point-to-point chart to plot the perimeter.

3. Usually these pools will be of a non-diving depth, with either a flat bottom, a dished bottom, or a modified wedge shape as shown.

DIAMOND



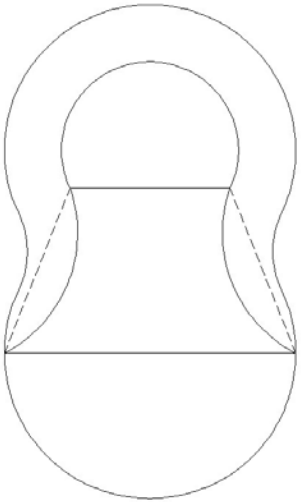
1. Get the lengths of all 6 walls making up the perimeter of the pool.

2. Get the width of the middle of the pool, at the widest point.

3. Normally the hopper will follow the contour of the pool as shown. If not, please note so on the order.

4. Be sure to get the corner dimensions of the shallow end and deep end corners. Many of these pools will have small diagonal corners, about 4 or 5 inches in length.

FIGURE 8



1. Get the overall length by measuring down the center line of the pool.

2. Width of the middle of the pool at its narrowest point, the I-beam.

3. If there is a short straight panel connecting the two circular shapes together, what length is it?

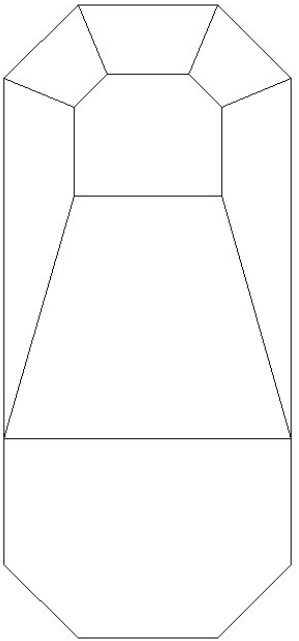
4. Width of the deep end at its widest point.

5. Do the sidewalls of the transition slope follow the contour of the pool, as shown with the solid lines, or do they come straight back to the shallow end break as shown with the dotted lines? It is very helpful to get the width of the sidewalls at the halfway point going down the transition slope.

6. If the widths of the shallow end and the deep end are not the same, or if the pool appears bent out of shape, we recommend using a point-to-point chart to plot the perimeter and the breaks in the bottom of the pool.

7. If the liner needs a straight step cut or if the liner covers the steps, locate the steps by measuring a straight line from the right side of the steps to the right side of the shallow end break and do the same for the left side.

GRECIAN



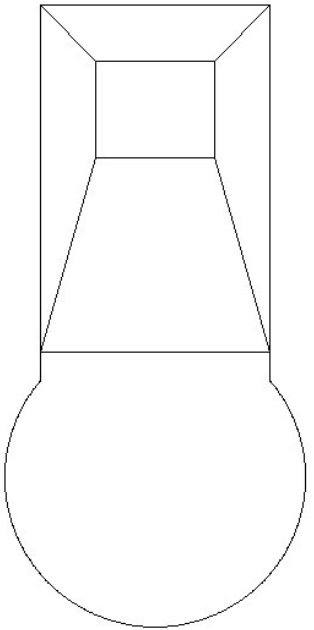
1. Get the lengths of all the walls making up the perimeter of the pool.

2. Does the hopper shape follow the contour of the pool, or is it rectangular in shape? Contour hopper is shown in diagram.

3. When taking width measurements, get the width at each end of the long straight walls as well as in the middle of the pool. If the width varies, take two diagonal measurements on the long walls of the pool.

4. If the liner covers the steps, be sure to closely check the length of the shallow end corner panels and check for a setback on the steps.

30
KEYHOLE



1. We recommend using a point-to-point chart for the perimeter. Be sure to use two points to locate the points where the circular portion of the pool meets the rectangle portion of the pool. It is best to use points at one foot intervals instead of at two feet intervals, at least on the shallow end of the pool.

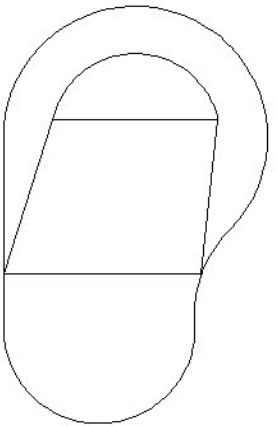
2. Get the corner dimensions on the deep end of the pool.

3. Be sure to specify what shape the hopper is.

4. When using a point-to-point chart, it is helpful to get the width of the shallow end, width of the deep end, and the width where the circular portion joins the rectangular portion, as well as the overall length of the pool. You can do this by measuring down the center line of the pool. These measurements are helpful in checking the plot of the points.

5. If the liner needs a straight step cut, or if the liner covers the steps, locate the steps by measuring in a straight line from the right side of the steps to the right side of the shallow end break and do the same for the left side. If you are using a point-to-point chart, use two points to locate the sides of the steps.

KIDNEY



1. Determine if the pool turns to the right or to the left by standing at the shallow end and facing the deep end. **Shown is a Kidney Right**.

2. We recommend using a point-to-point chart on all kidney shaped pools. We have found this to be the most accurate method of measuring free form shape pools.

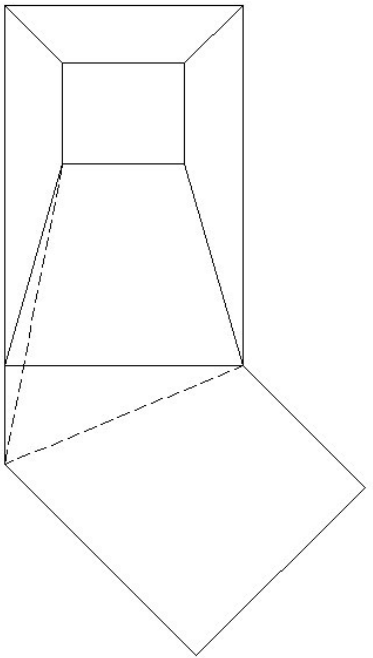
3. If the pool has a straight wall down one side of the pool as shown, what is the length of the wall?

4. Do the sidewalls of the transition slope follow the contour of the pool or do they come back to the shallow end break in a straight line, as shown? It is helpful to get the width of the sidewalls at the halfway point going down the transition slope.

5. If the liner needs a straight step cut or if the liner covers the steps, be sure to use two points to locate each side of the steps and measure the width of the steps.

6. Measure the sidewalls and the back-wall of the hopper the same as if it were a rectangle pool.

32
LAZY-L



1. Determine if the pool turns to the right or to the left by standing at the shallow end and facing the deep end. **Shown is a Lazy-L Right**.

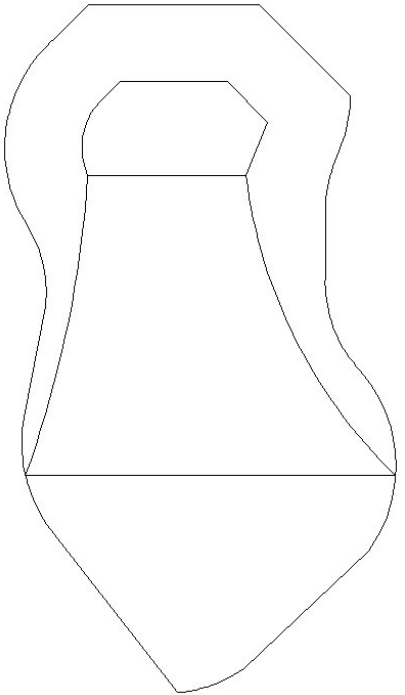
2. Get the lengths of all the perimeter walls.

3. Is the shallow end break parallel to the deep end wall as shown by the solid lines, or does it break from corner to corner as shown with the dotted lines?

4. Double check the widths of each end of the pool and the type of corners on each end of the pool. In some instances, they may differ.

5. It is best to square off the corners and take a set of diagonal measurements on the shallow end and the deep end of the pool to check for squareness of the pool.

MOUNTAIN LAKE



1. We recommend using a point to point chart for all mountain lake pools.

2. Do the sidewalls of the transition slope follow the contour of the pool, or do they come back to the shallow end break in a straight line?

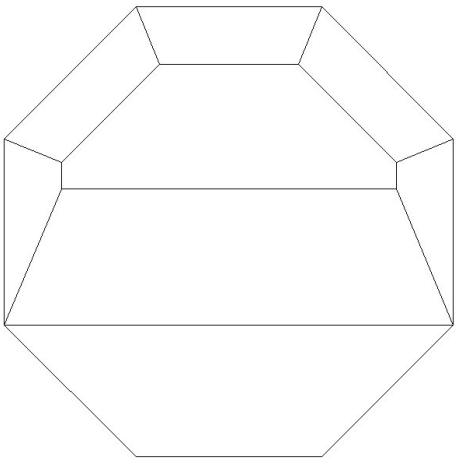
3. It is helpful to take the width of the sidewalls at the half way point going down the transition slope.

4. When using a point to point chart, it is helpful to use points to locate each end of the straight panels in the perimeter. You may want to make a sketch of the pool, as shown, and show the lengths and locations of the straight panels.

5. If the hopper sidewalls and the back wall are not the same, take the width of the walls in various places and show them on the drawn sketch.

6. If the liner needs a step cut or if the liner cover the steps, be sure to use two points to locate each side of the steps.

34
OCTAGON

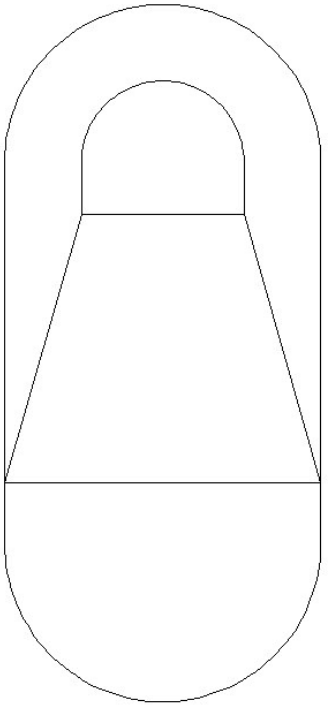


1. Get the lengths of the 8 panels making up the perimeter of the pool.

2. Get several diagonal dimensions by measuring from the corner of each panel to the corner of the panel directly across the pool. If these dimensions vary by more than an inch or so, you may need to use a point-to-point chart to plot the perimeter.

3. Octagons are usually of a non-diving depth and may have flat bottoms, dished bottoms, modified wedge bottoms, or a contour hopper bottom as shown.

OVAL



1. Get the width of the pool in the middle and at each end of the straight walls down the side of the pool.

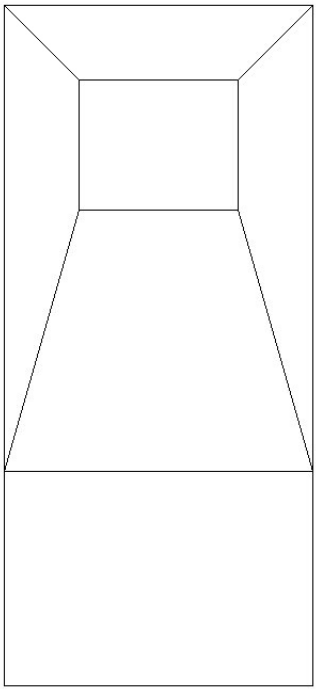
2. Be sure to get the length of the straight walls.

3. If the pool shape appears oval but the perimeter has a straight panel in each end of the pool, be sure to indicate that on the order and get the length of the straight panel in each end of the pool. In this case be sure to check the hopper shape since it may or may not follow the contour of the pool.

4. If the liner needs a straight step cut or if the liner covers the steps, locate the steps by measuring in a straight line from the right side of the steps to the right side of the pool where the straight wall stops. Do the same for the left side of the steps.

5. If the pool has a straight step in the center of the shallow end, always measure to the front of the steps to get the width of the steps on the order. With vinyl covered steps, do not include the setback part of the overall length. Lay something with a straight edge across the front of the steps to get the overall length of the pool.

36
RECTANGLE



1. Get the width of the pool in the middle and at each end of the straight walls down the side of the pool.

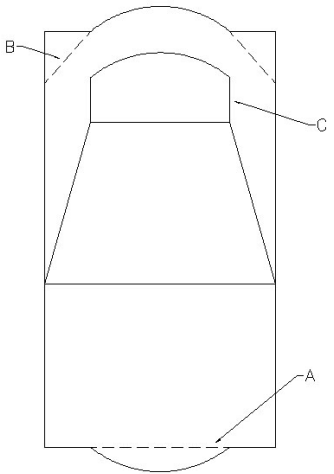
2. Square off the corners and take diagonal measurements to check the squareness of the pool.

3. If the pool has radius corners of more than 6 inches, the corners of the hopper pad closest to the diving board may be rounded out. If so, be sure to indicate that on the order. This is especially true on non-diving pools where the length of the back wall is less than the radius of the corner. For example, if the pool has four feet radius corners and two feet back and side slopes, the hopper corners will probably be two feet radius.

4. If the pool has small radius corners, such as 6 inch radius or square corners, the valleys going from the bottom of the corner panels down to the corners of the hopper pad closest to the deep end should form a true V shape in the bottom of the pool. If any of the valleys in the bottom of the pool are rounded out, be sure to indicate so on the order.

5. If the pool has a corner panel which is diagonal at the top of the pool but tapers down to form a square corner at the bottom of the wall panel, the liner should be ordered with square corners for a proper fit

ROMAN END



1. Having the corners squared off, get the length of the main body of the pool (*rect. shape)* by measuring down the side of the pool. Then get the distance from the outside of the corner over to where the radius starts at the bow. Also, get this dimension on the shallow end if the pool is a double roman end.

2. Form a straight line across the deep end *(line A)* and measure over to the center if the bow sticks out past the main body of the pool. Do the same in the shallow end if it is a double roman end pool and indicate if it needs a straight step cut or if the liner covers the stairs.

3. Does the pool have a flat triangle shaped safety ledge at the bottom of the wall in the deep end corners, *(line B)*; or does it slope down with the sidewalls of the hopper?

4. Is the area inside of the bow flat or does it slope down forming the back-wall on the hopper?

5. Give the measurement of only the straight side of the hopper *(line C)*. Normally, the hopper is square with a rounded end toward the back wall.

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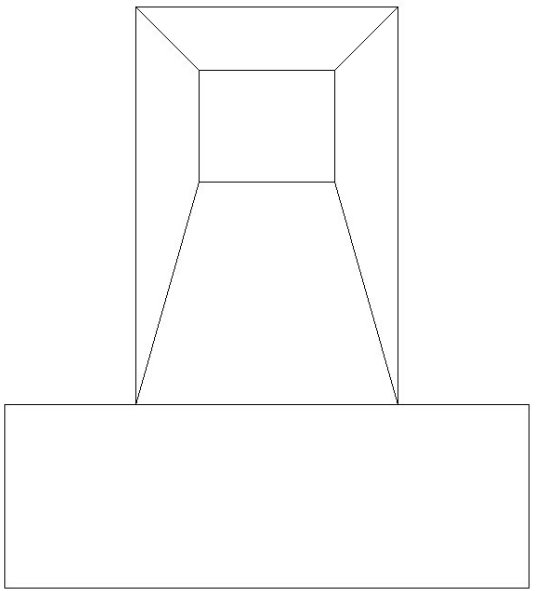
TEE SHAPE



1. Get all the lengths of the perimeter walls.

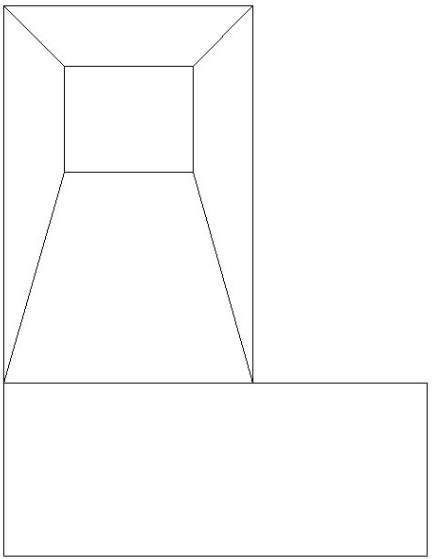
2. Get diagonal dimensions on the shallow end and the deep end to check for squareness of the pool.

3. Get the width of the pool where the shallow end portion of the pool joins the deep end portion of the pool.

4. Be sure to get the dimensions of all corners on the pool including the inside corner where the shallow end joins the deep end of the pool.

5. Be sure to check the shape of the hopper, especially if the pool has large radius corners or if it has grecian corners.

TRUE-L



1. Be sure to get the lengths of all of the perimeter walls on the pool.

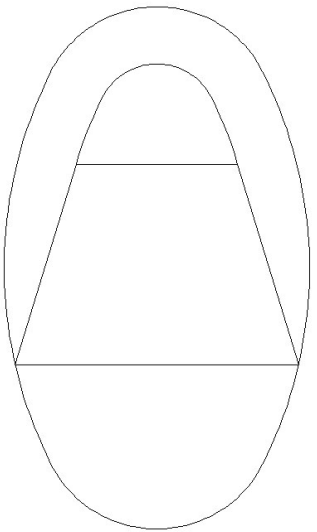
2. Get the corner dimensions on the pool at both ends and include the inside corner where the L turns.

3. After squaring off the corners, take diagonal dimensions on the shallow end and the deep end to check for squareness of the pool.

4. If the shallow end break does not run parallel to the deep end wall as shown, be sure to indicate where the break is located.

5. Determine if the pool turns to the right or to the left by standing at the shallow end and facing the deep end of the pool. **Shown is True L Right**.

40
TRUE OVAL



1. We recommend using a point to point chart to plot out the perimeter and the breaks in the pool.

2. Note this pool does not have any straight walls down the side of the pool like the regular oval has.

3. If the liner needs a straight step cut or if the liner covers the steps, be sure to use two points to locate each side of the steps. Measure the overall length of the pool to the front of the steps.

4. Do the sidewalls on the transition slope come straight back to the shallow end break as shown or do they follow the contour of the pool? It is helpful to get the width of the sidewalls at the half way point going down the slope.

VINYL COVERED STEPS

Some pools have steps which are covered by the liner. It is very important to have the precise measurements of the risers and treads of the steps. A liner has to be cut very close to the dimensions given, since the top step or steps will not have very much water on them to hold them into place.

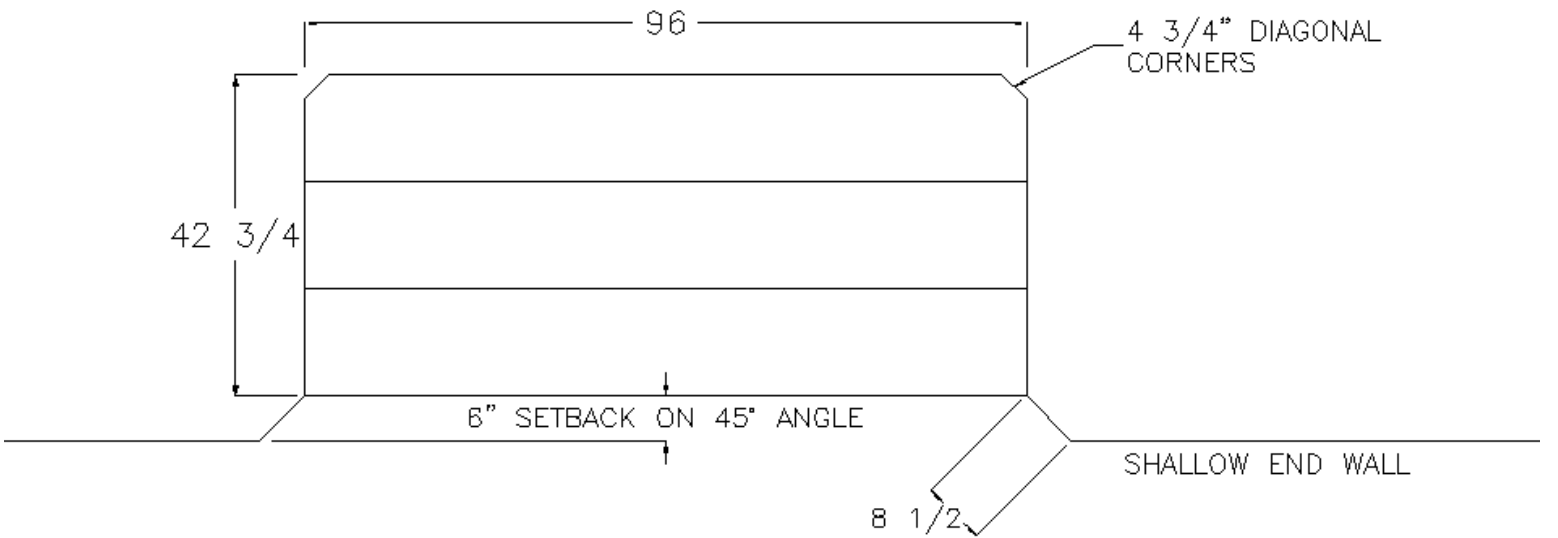
- When installing a liner with vinyl steps it is much easier to install the step section first. Be sure the seam at the wall and floor intersection of the liner is pushed all the way against the shallow end wall. If the step section is flush with the wall, the seam should be up against the bottom riser of the steps.
- After hanging the liner over the steps, place some weights on the liner right in front of the steps. Bags of sand work very well, or you may choose to use several 5 gallon buckets of water. If using buckets of water, use some cutouts from the old liner to set the buckets on to prevent making a hole in the liner. The buckets may have a sharp ridge on their bottom edge.
- If the step section is installed first and enough weight is used in front of the steps, it is not necessary to have a vacuum on the step section itself.

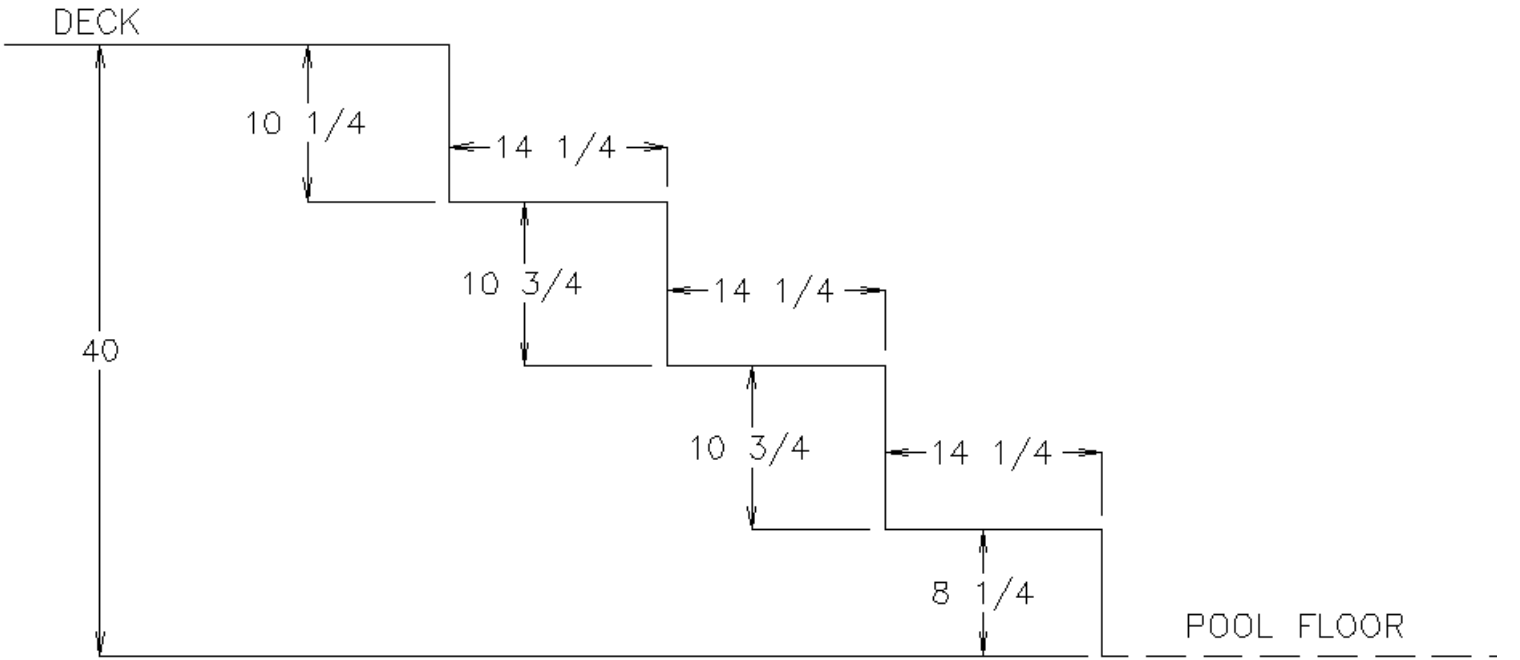
The following pages have diagrams and dimensions of some of the most common step sections which are vinyl covered. Be sure to check all of the dimensions given and whether the steps have a setback on them and the type of corner in the back of the steps. The height of the risers should be equal to the depth of the shallow end of the pool. The lengths of the treads plus the setback, if the steps have one, should be equal to the distance from the shallow end wall of pool to the back of the steps.

The steps shown in this guide are older style steps that use rods and rod pockets. Many new steps are designed with a bead receiver to hold the liner against the steps. At Tara we can manufacture the liner covered steps to suit any type of attachment whether it needs rod pockets or beaded steps.

CARDINAL

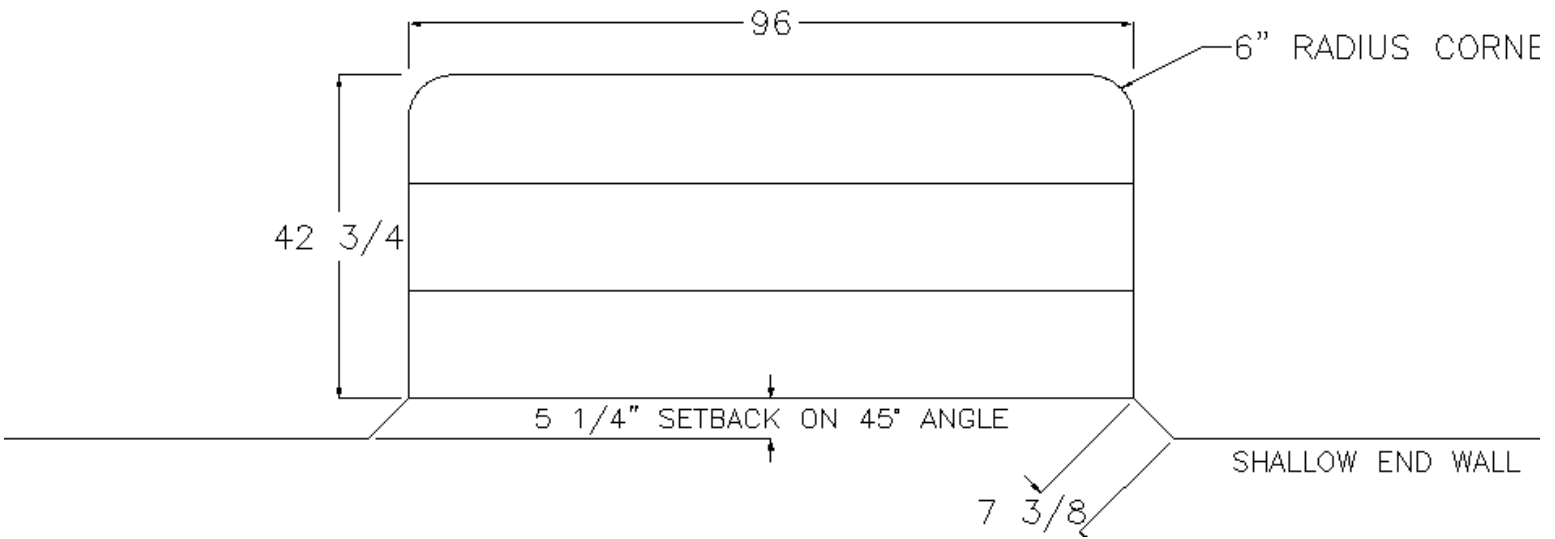
3 TREAD

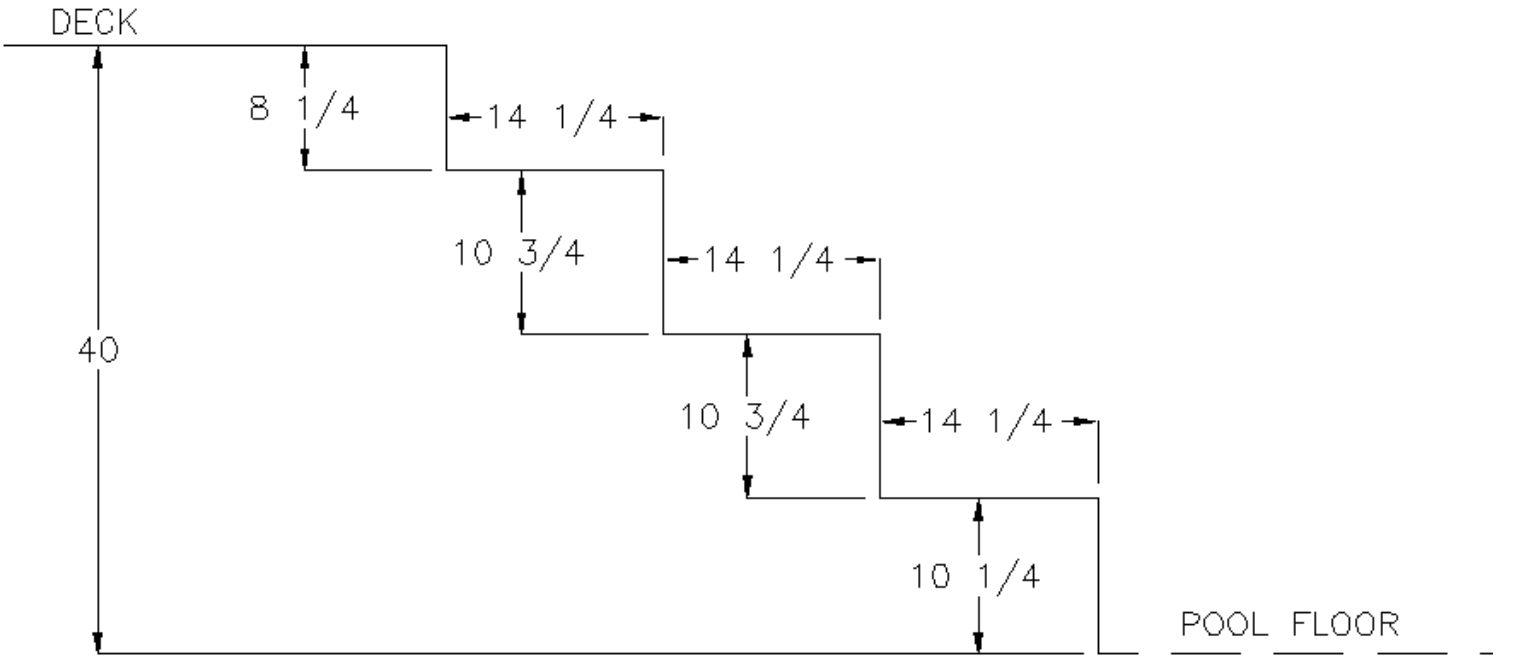



DECK
10 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
8 1/4
POOL FLOOR

CARDINAL

NEW STYLE

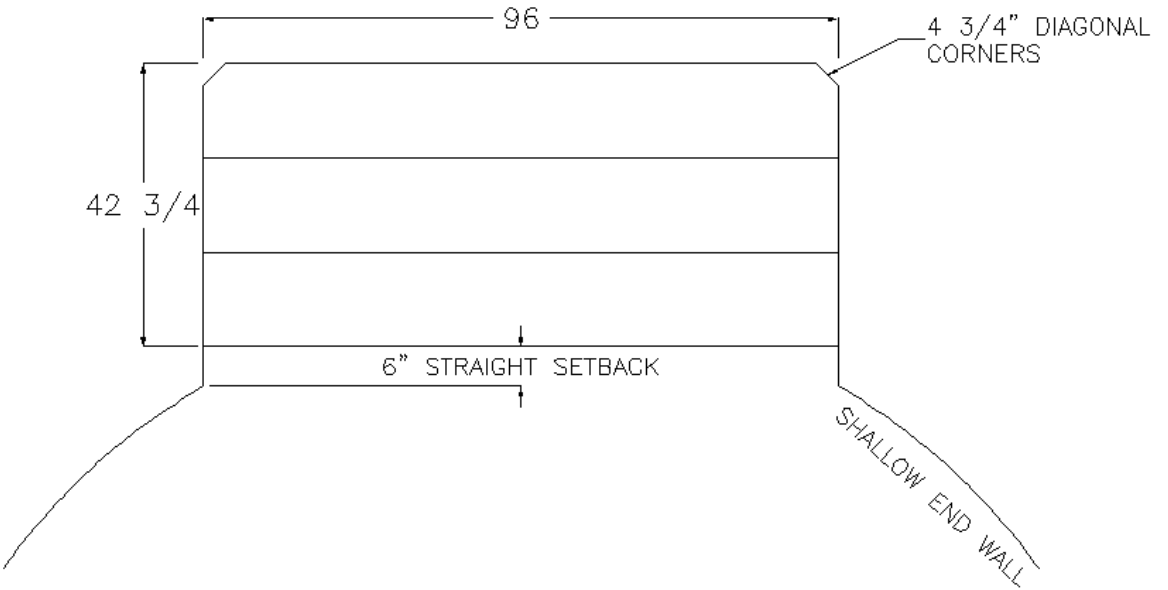


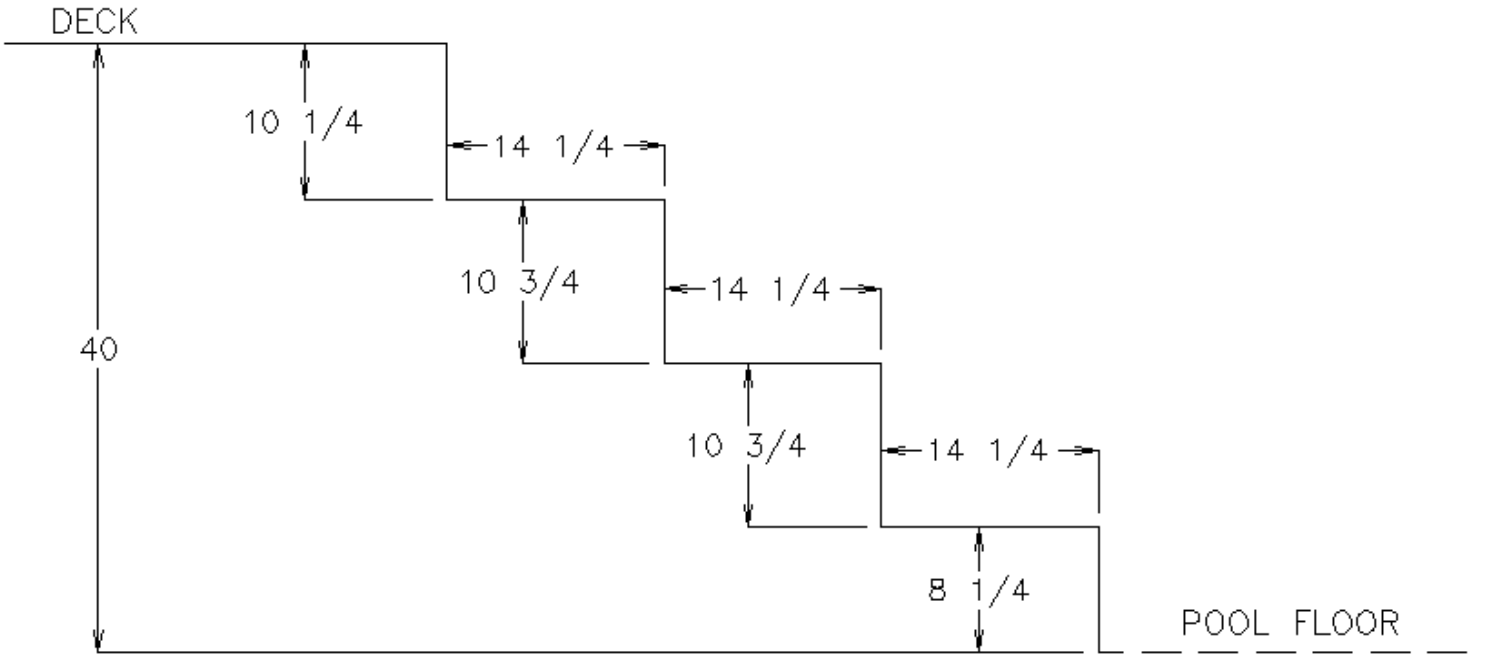

DECK
8 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
10 1/4
POOL FLOOR

CARDINAL

3 TREAD

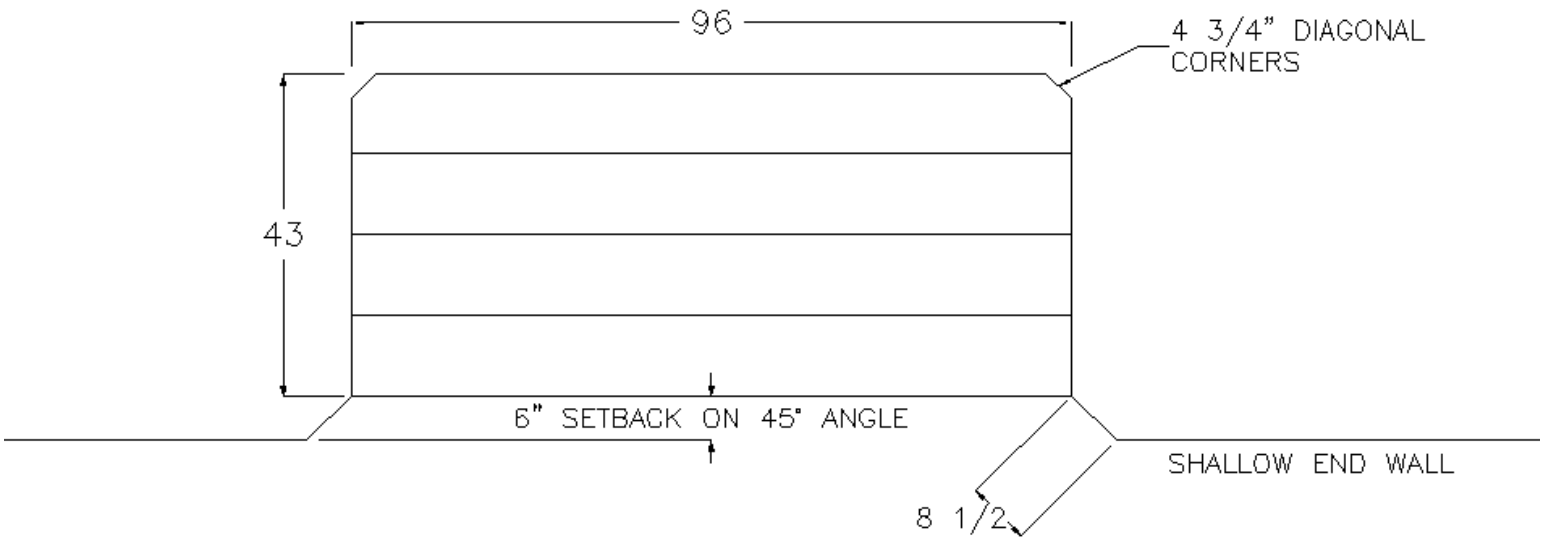
GRECIANS, KIDNEYS, OVALS, ROMAN ENDS

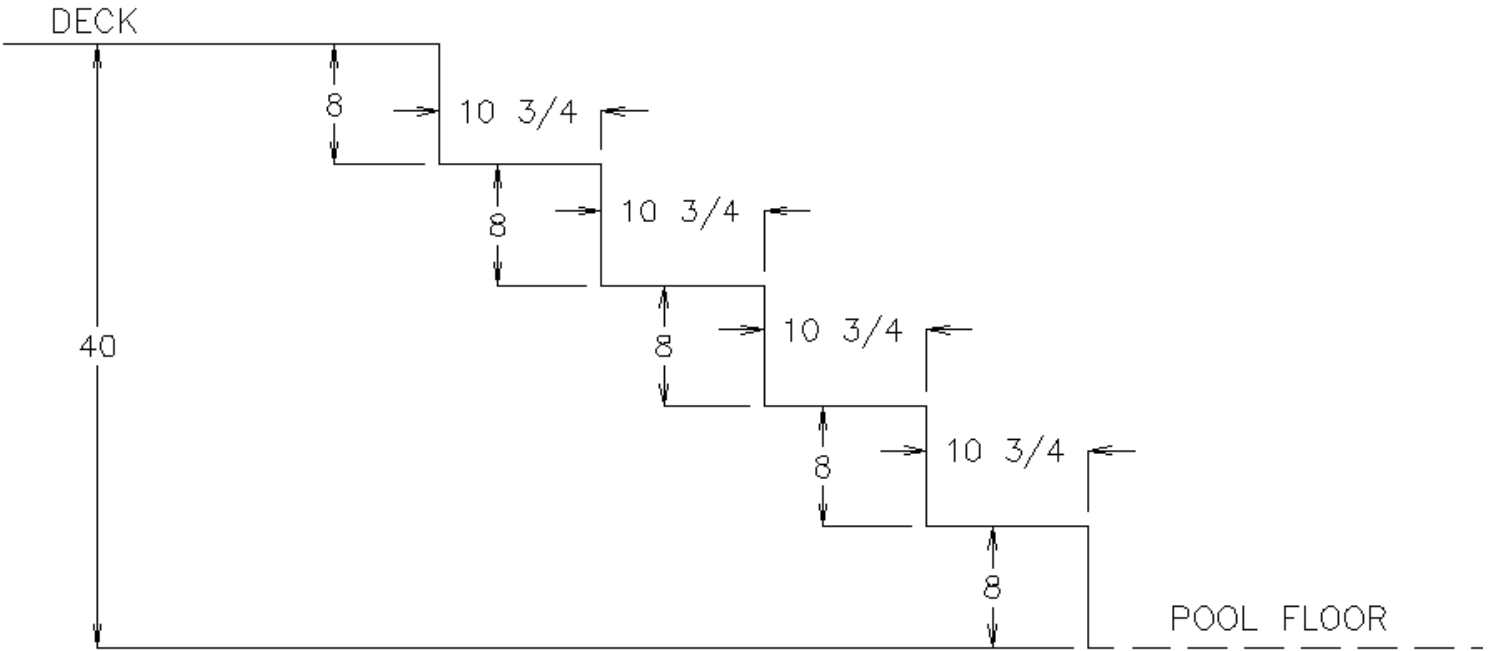



DECK
10 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
8 1/4
POOL FLOOR

CARDINAL

4 TREAD

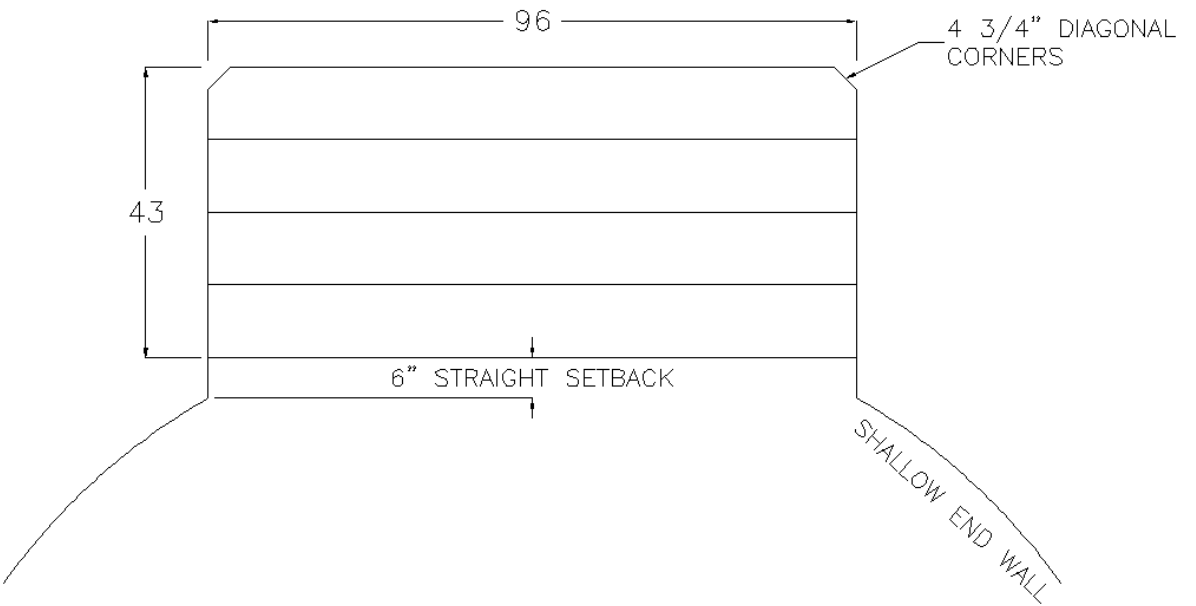


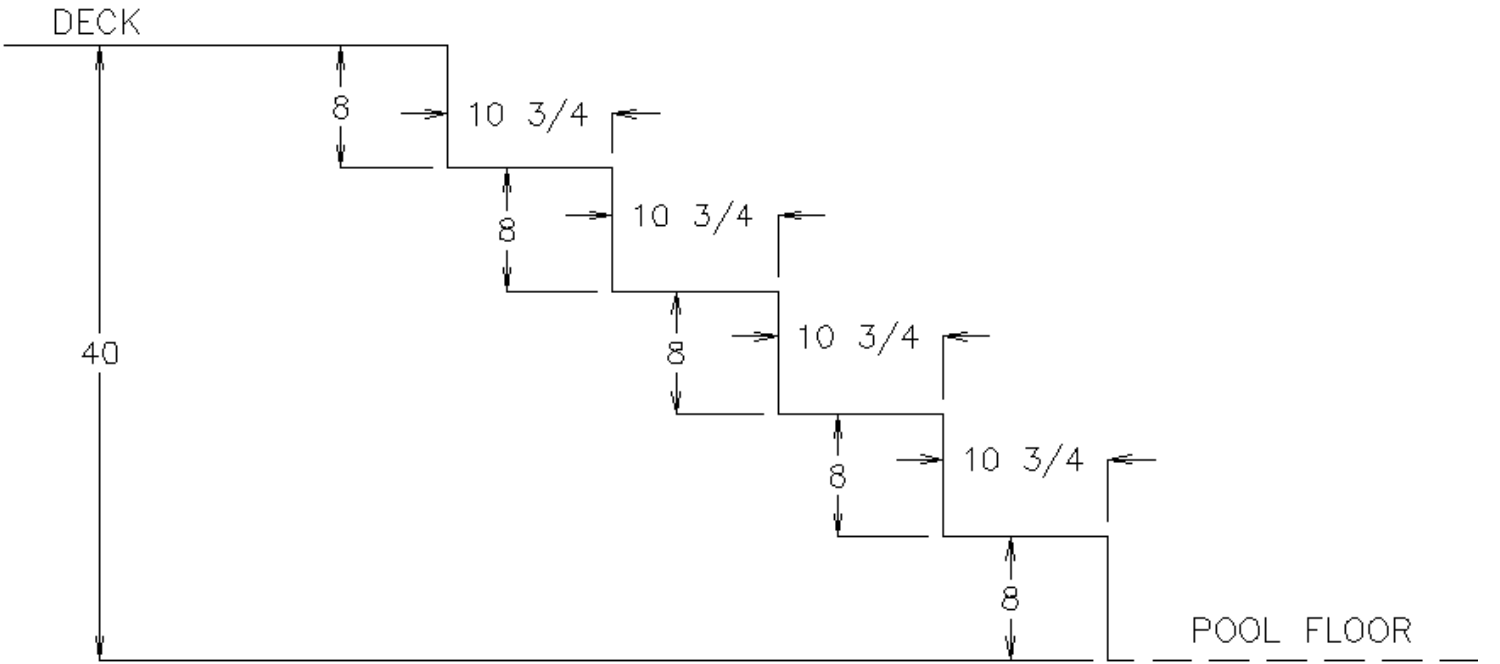

DECK
8
10 3/4
8
10 3/4
8
10 3/4
8
10 3/4
8
40
POOL FLOOR

CARDINAL

4 TREAD

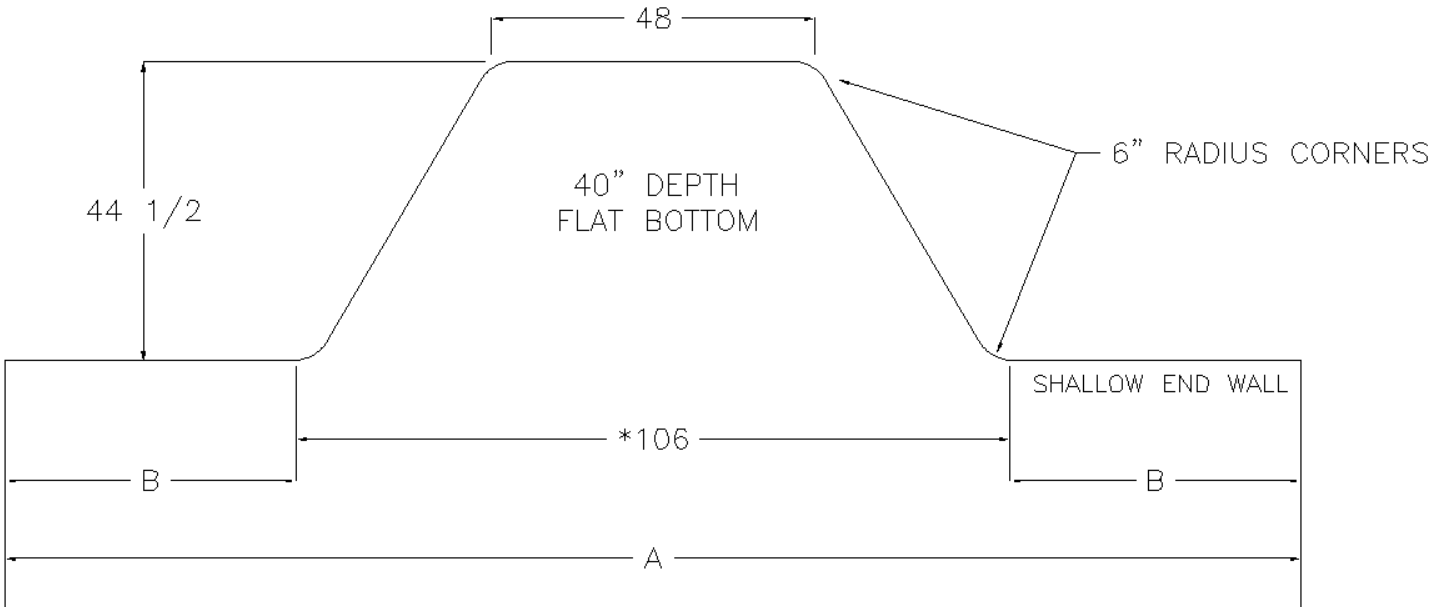
GRECIANS, KIDNEYS, OVALS, ROMAN ENDS




DECK
8
10 3/4
8
10 3/4
8
10 3/4
8
10 3/4
8
40
POOL FLOOR

CHAMPION

STANDARD COVE AREA



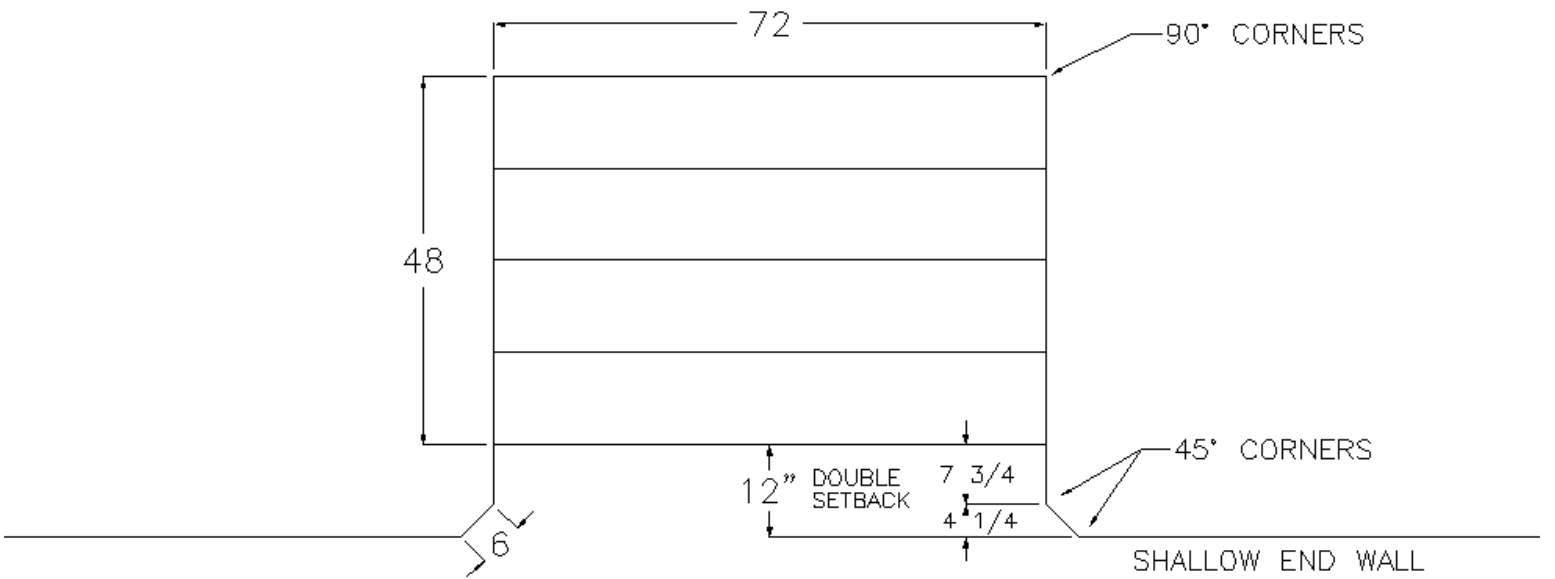
IF:	A=12 ft.	B=19 in.
	A=14 ft.	B=31 in.
	A=16 ft.	B=43 in.
	A=18 ft.	B=55 in.
	A=20 ft.	B=67 in.

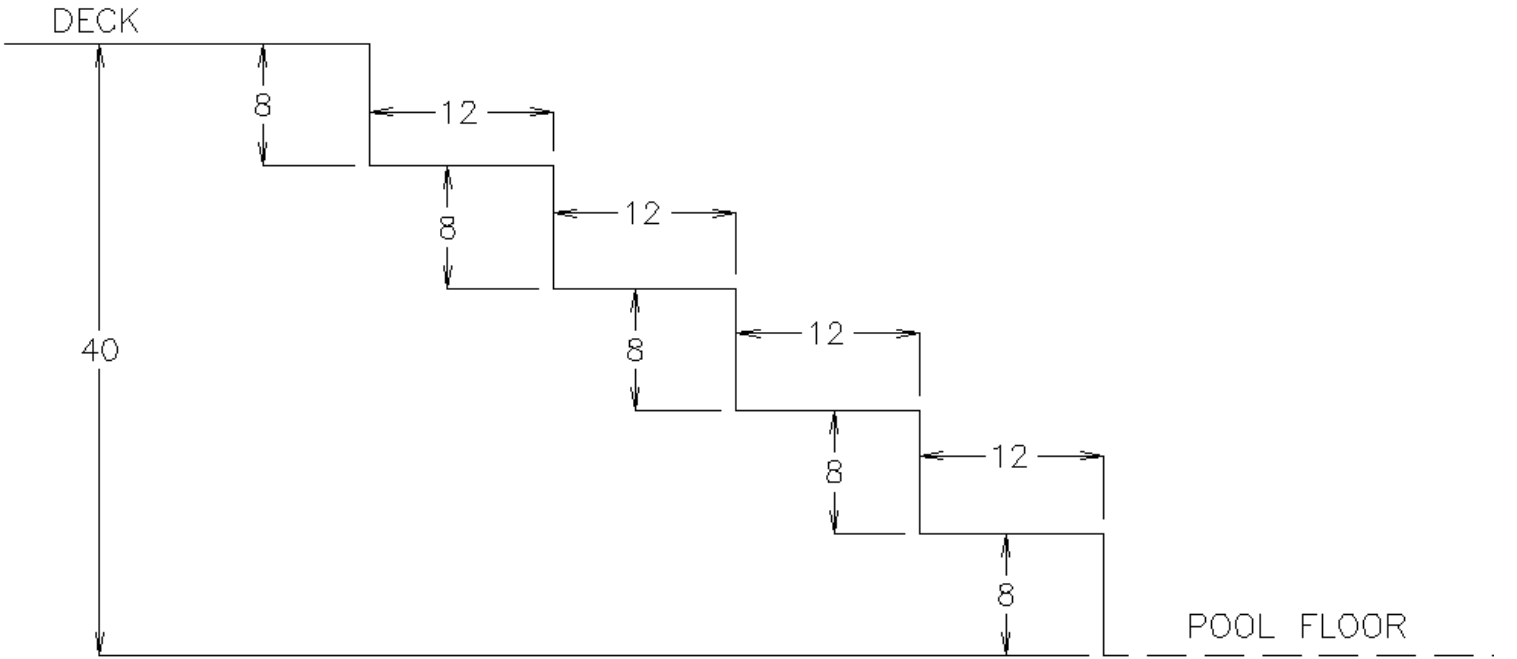
* ~ INCLUDES 6 in. REVERSE RADIUS CORNER

CORINTHIAN

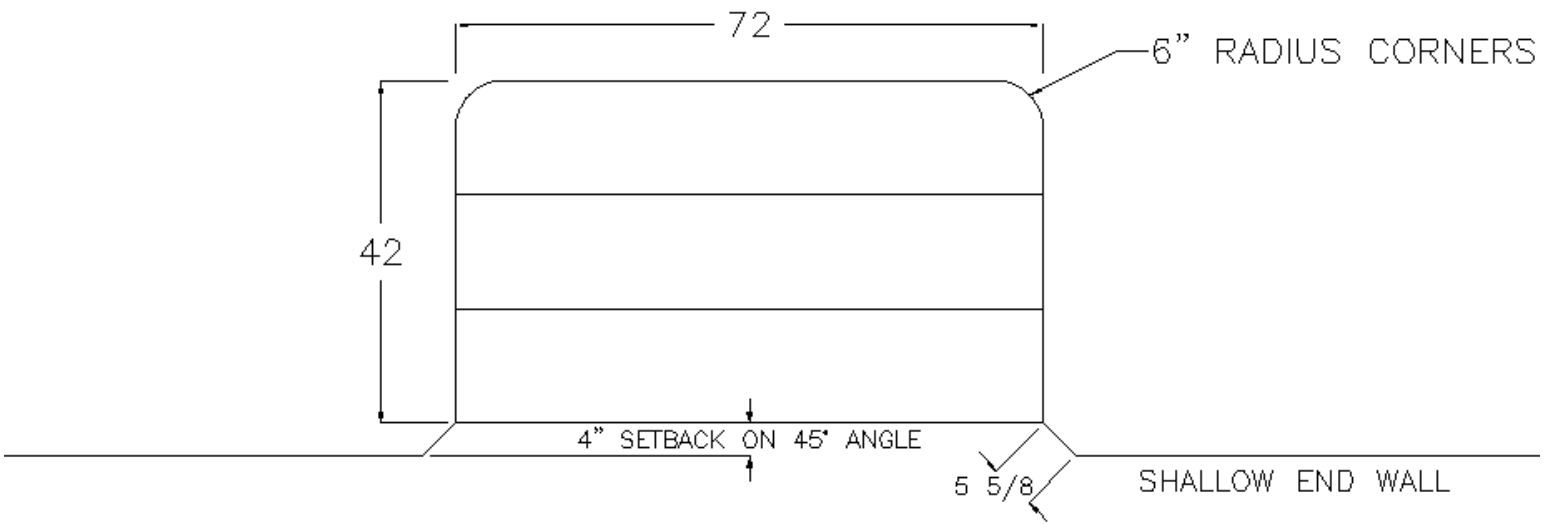
4 TREAD

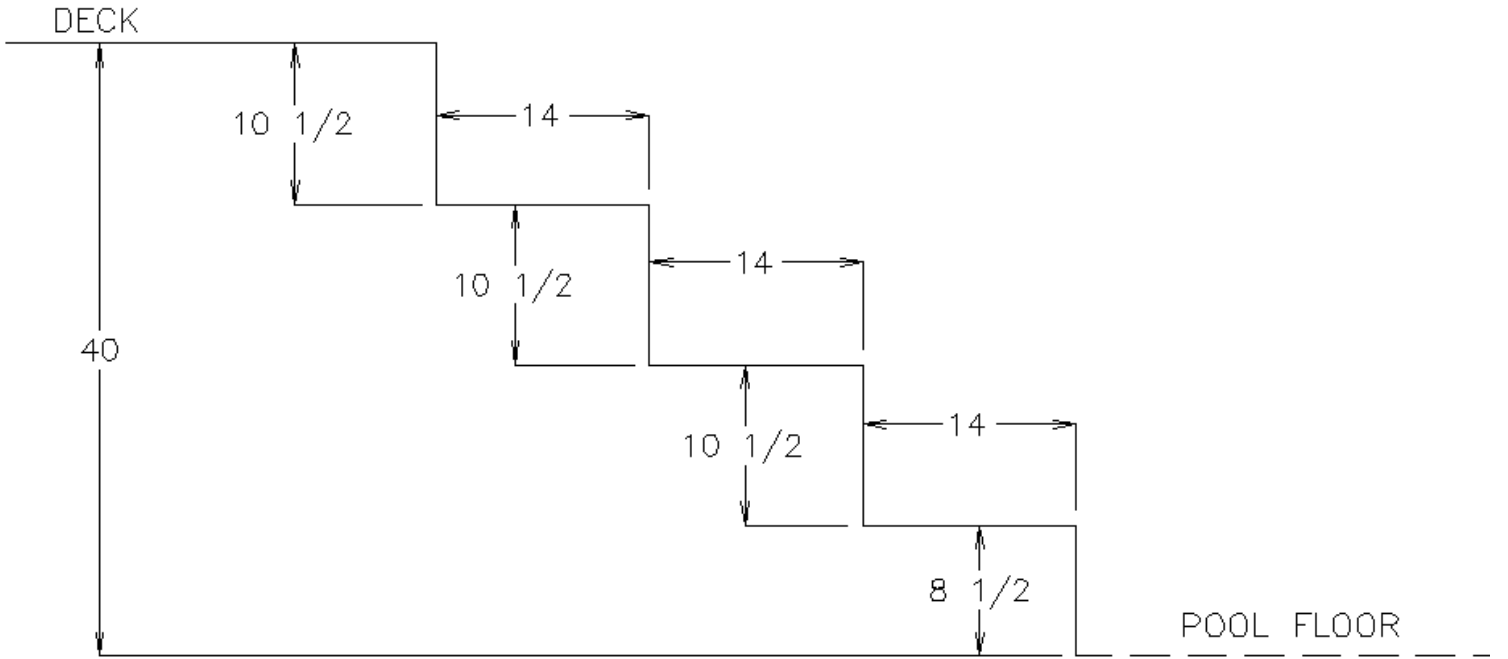
MOST COMMON 6' STEP




DECK
8
12
8
12
8
12
8
12
8
40
POOL FLOOR

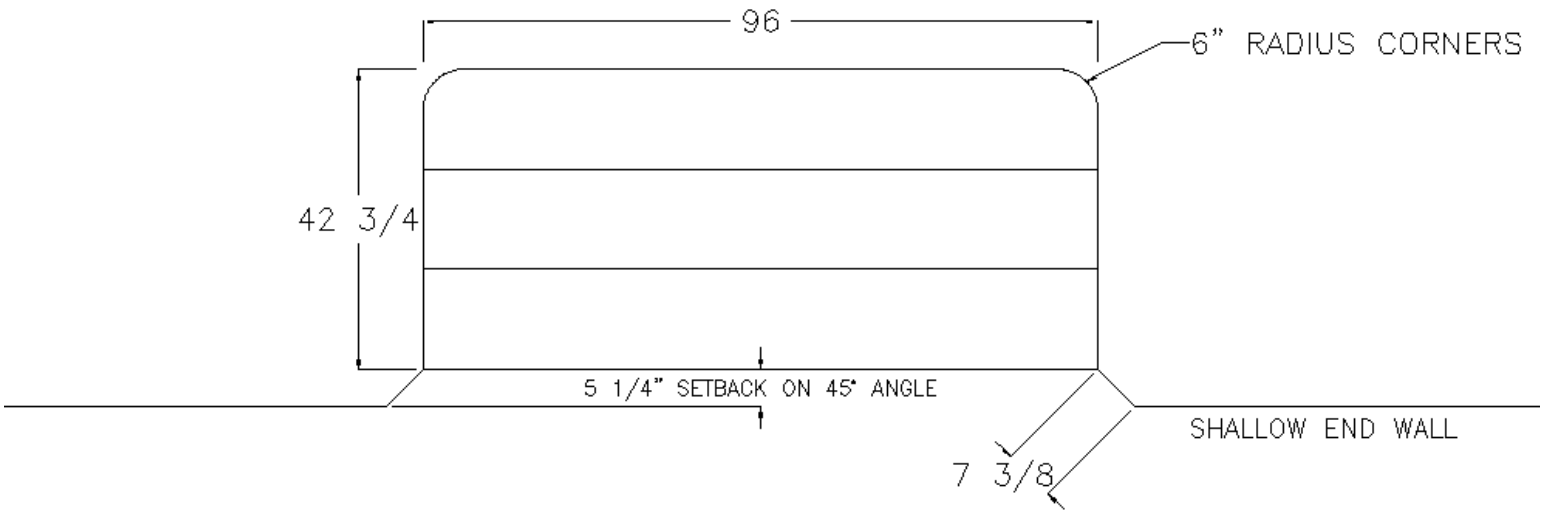
FORT WAYNE

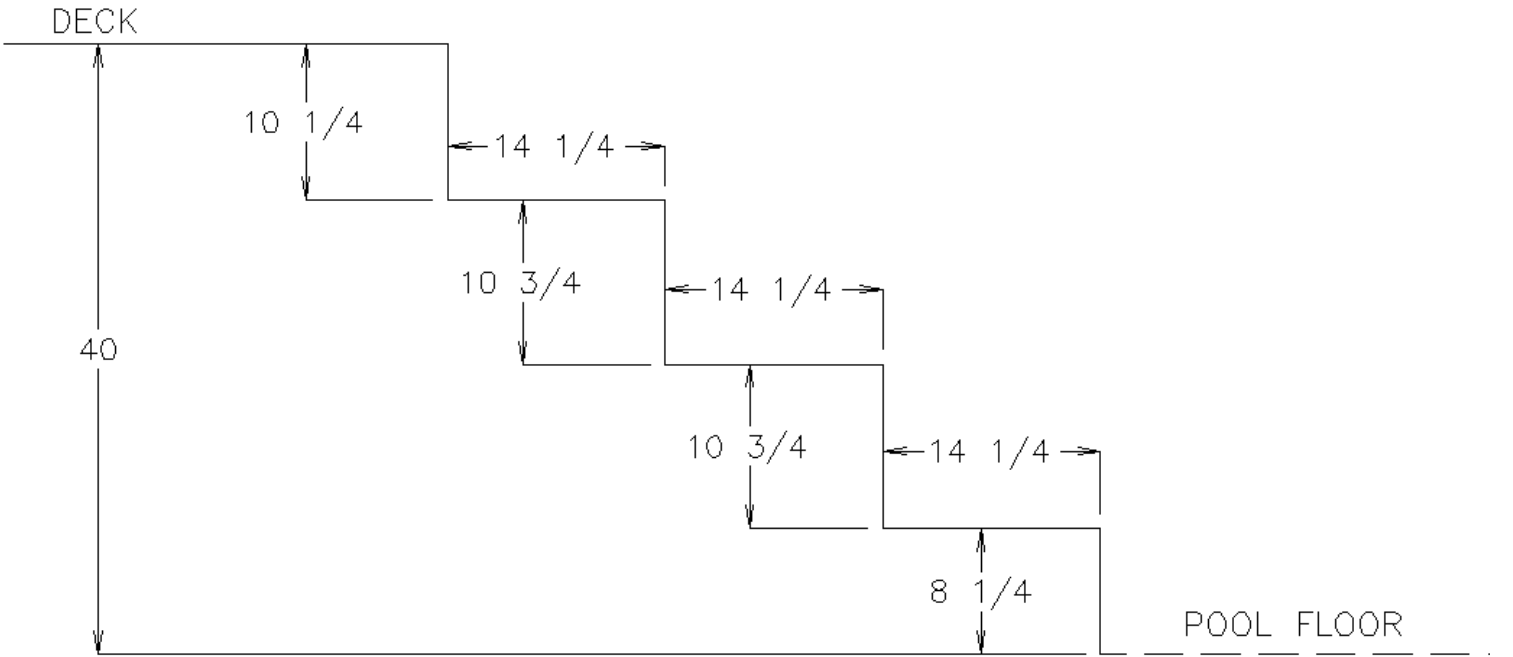

72
6" RADIUS CORNERS
42
4" SETBACK ON 45° ANGLE
5 5/8
SHALLOW END WALL


DECK
10 1/2
14
10 1/2
14
40
10 1/2
14
8 1/2
POOL FLOOR

HELDOR

NEW STYLE

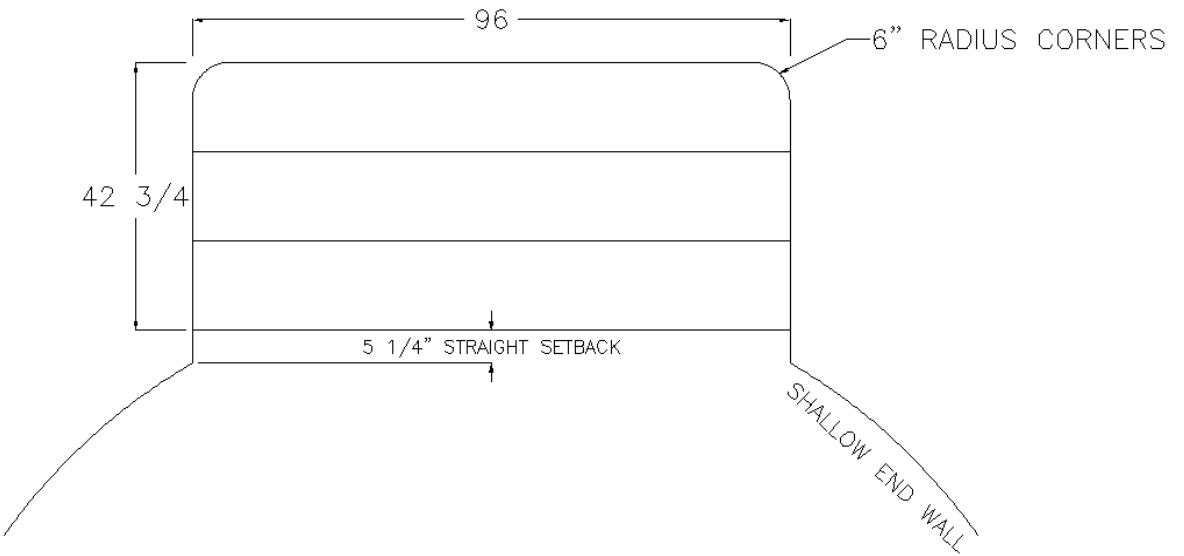


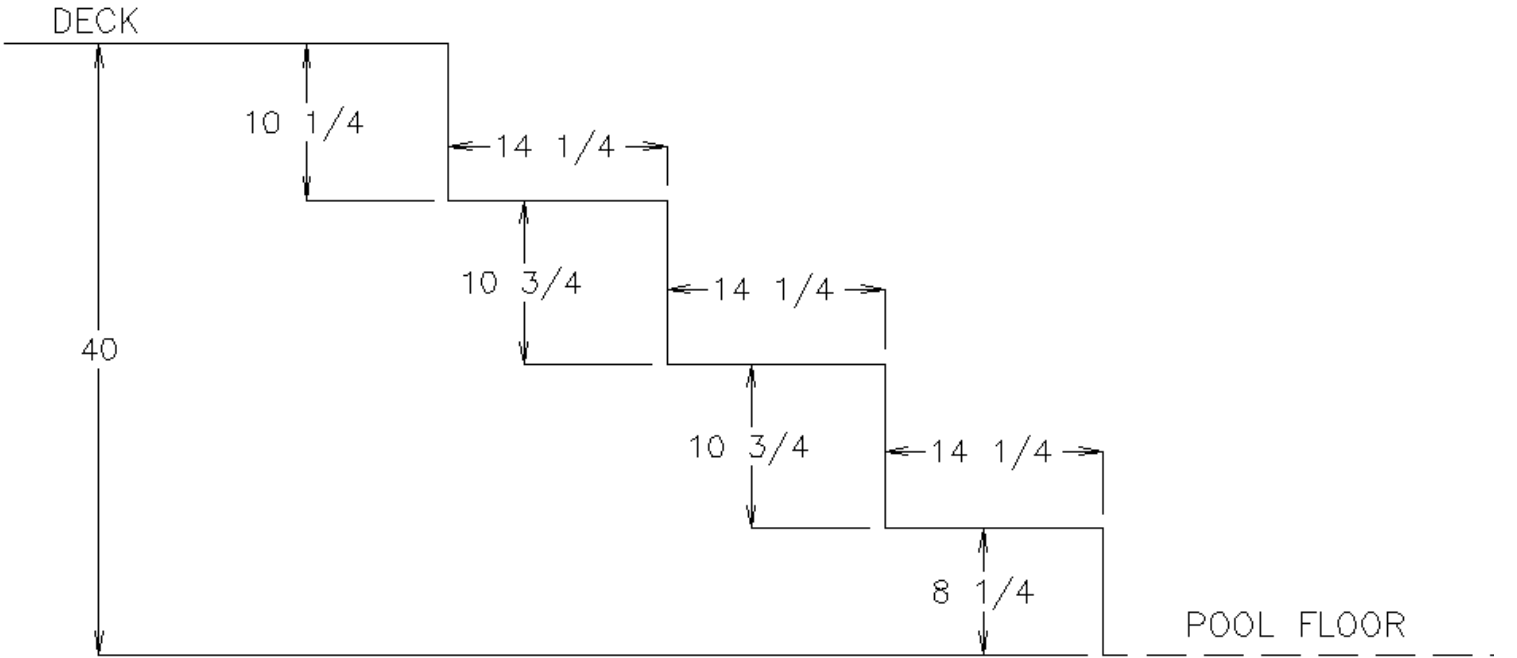

DECK
10 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
8 1/4
POOL FLOOR

HELDOR

NEW STYLE

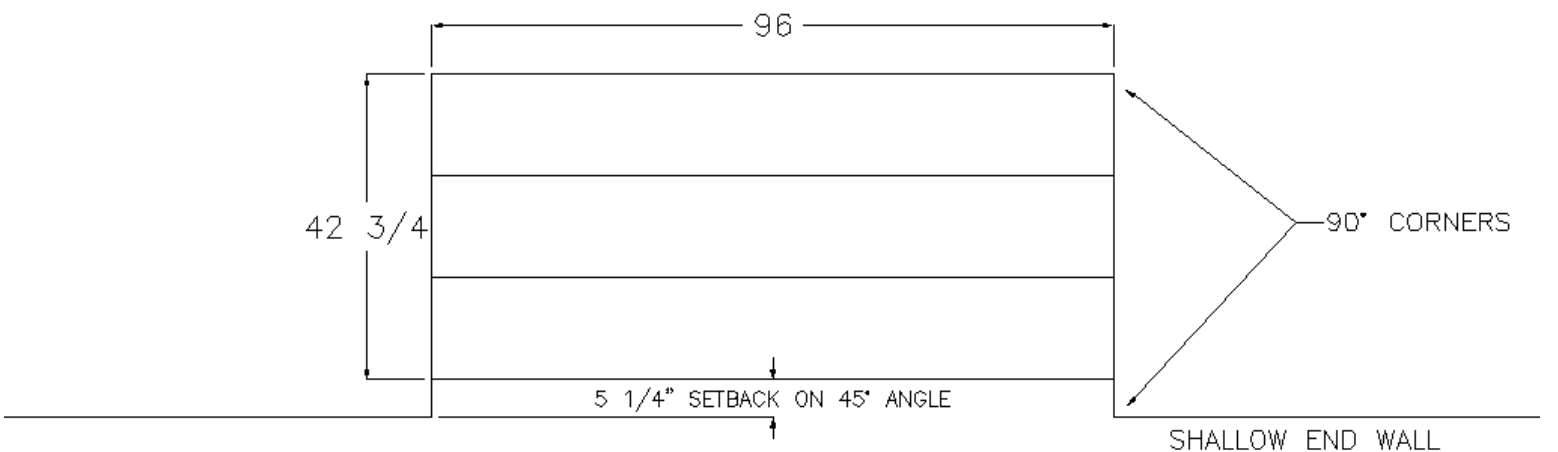
GRECIANS, KIDNEYS, OVALS, ROMAN

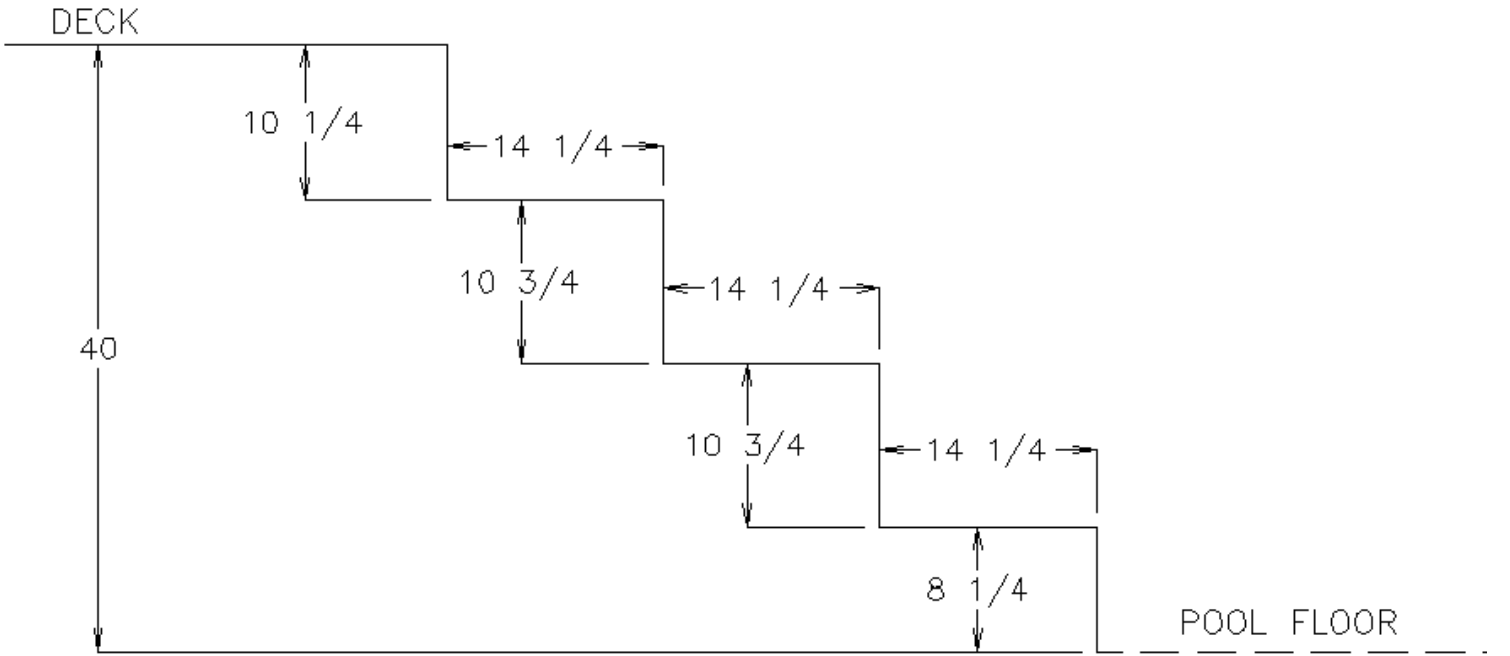



DECK
10 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
8 1/4
POOL FLOOR

HELDOR

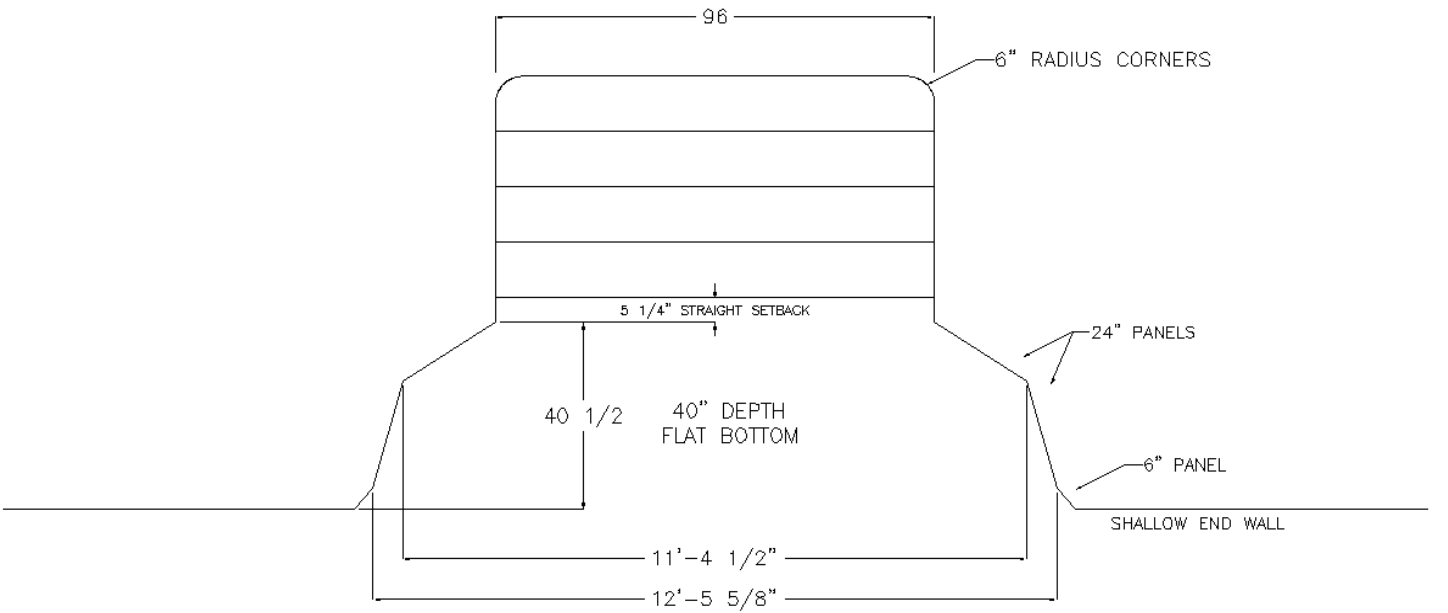
OLD STYLE

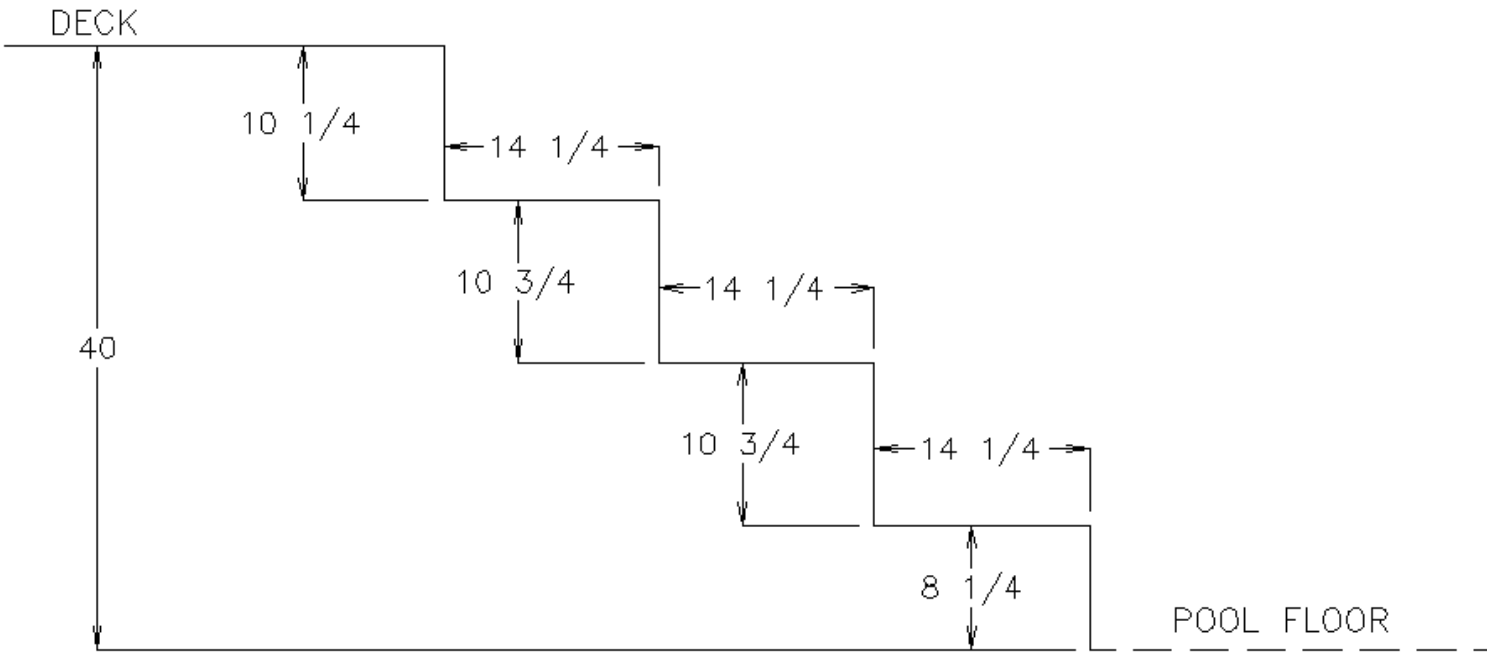



DECK
10 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
8 1/4
POOL FLOOR

HELDOR

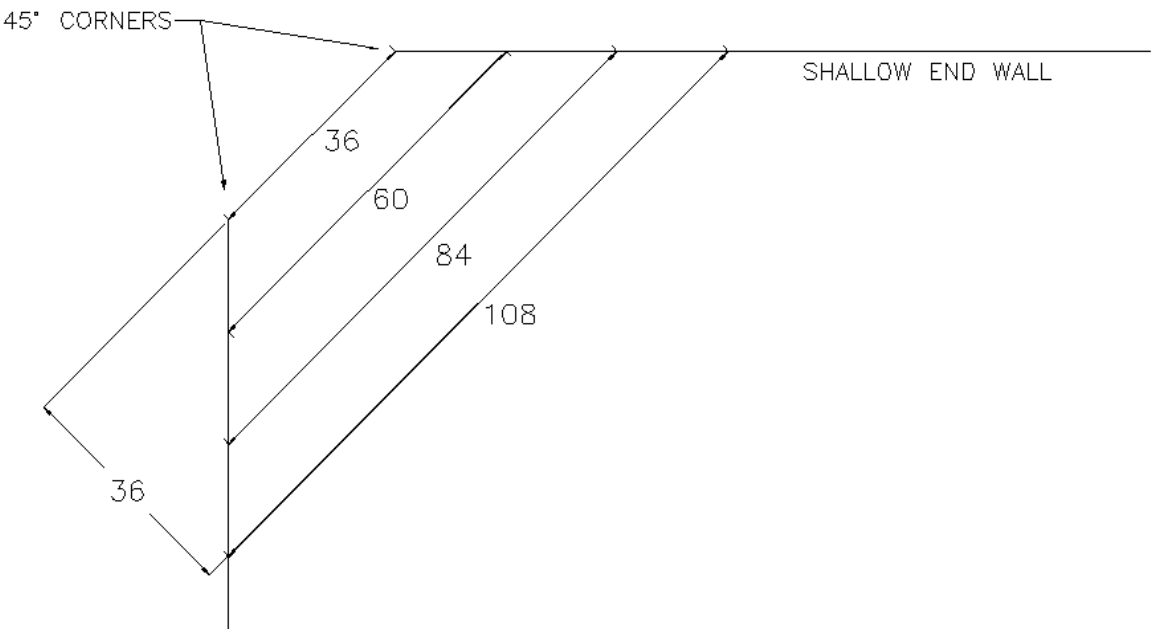
STANDARD COVE AREA

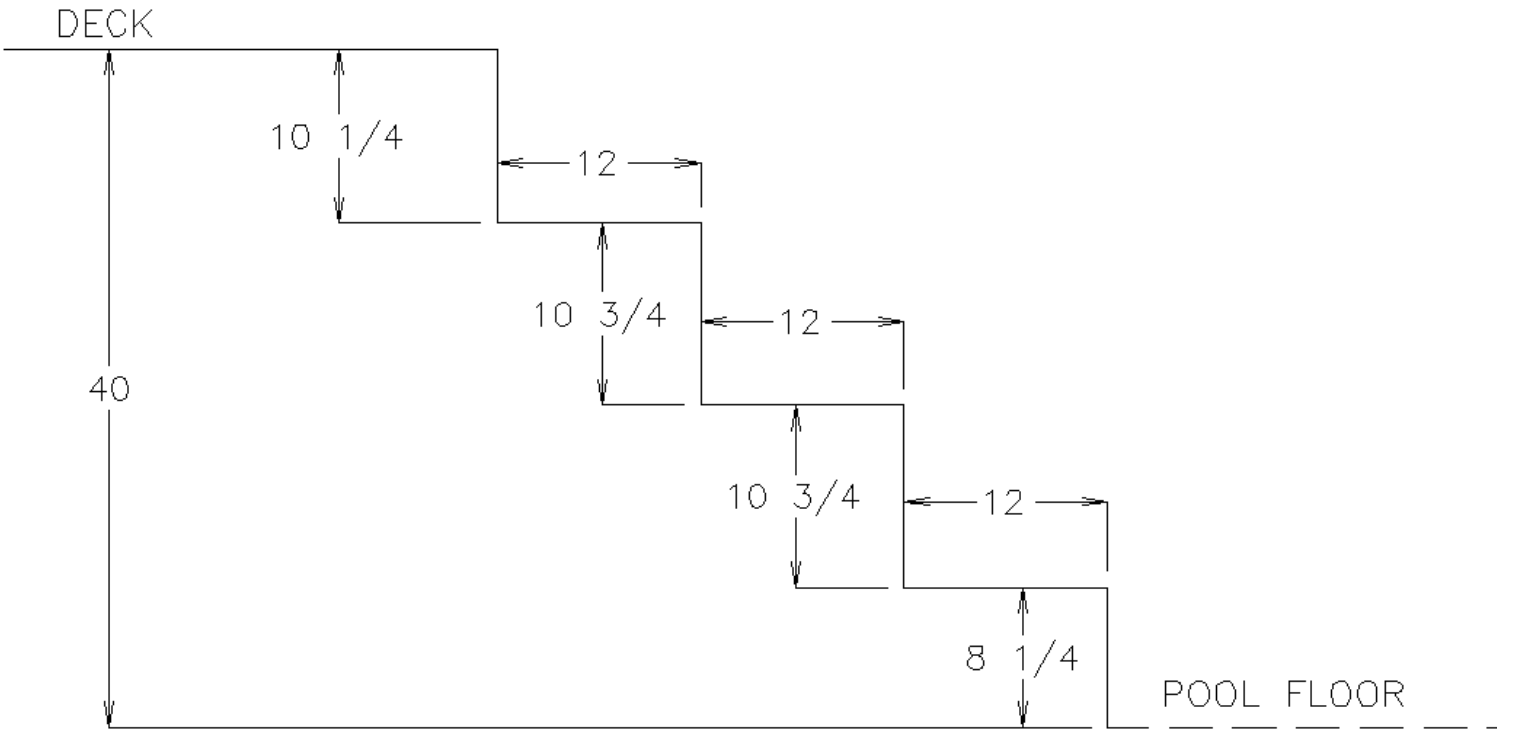



DECK
10 1/4
14 1/4
10 3/4
14 1/4
40
10 3/4
14 1/4
8 1/4
POOL FLOOR

HELDOR

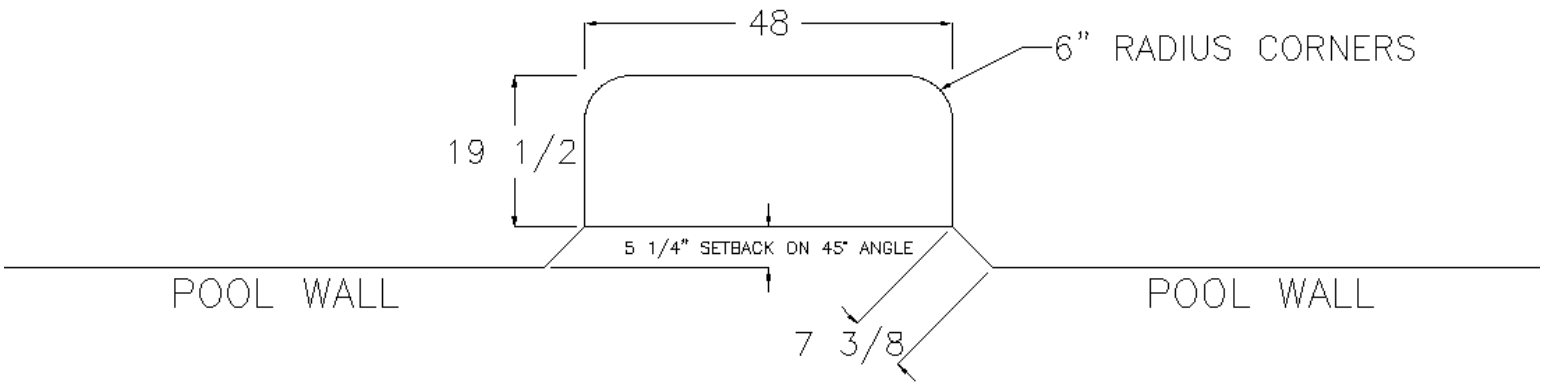
3' TO 9' INSIDE CORNER STEP

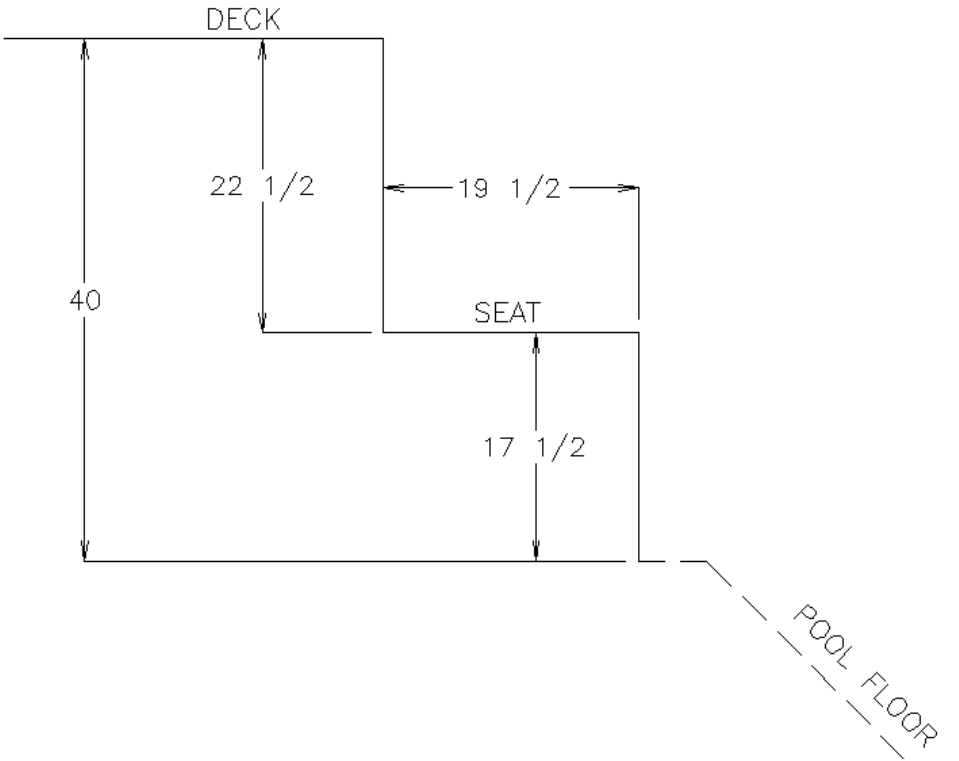



DECK
10 1/4
12
10 3/4
12
40
10 3/4
12
8 1/4
POOL FLOOR

HELDOR

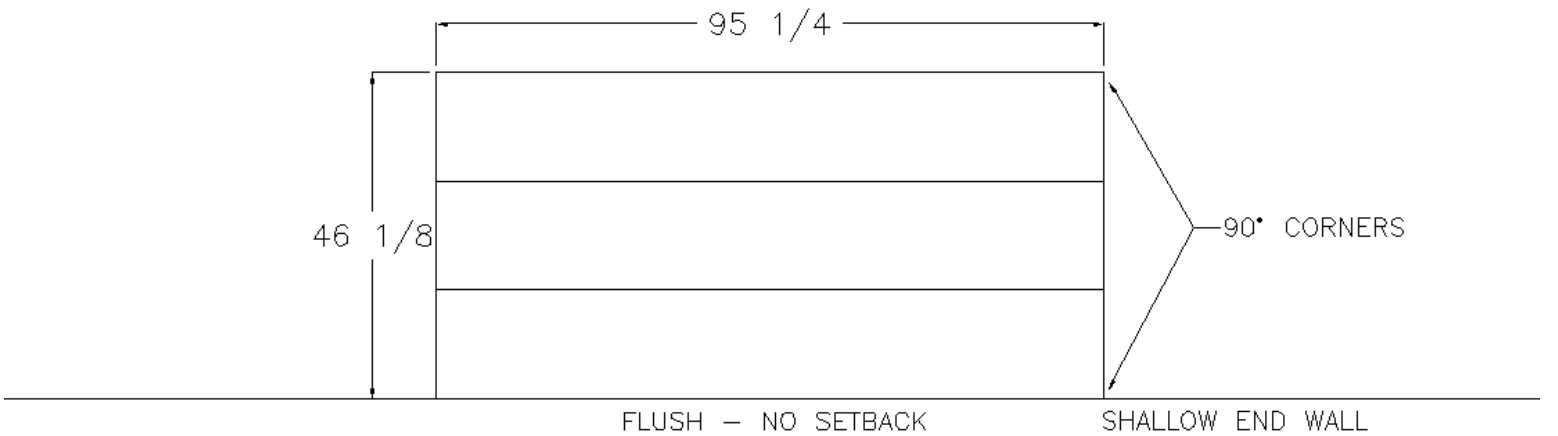
KUDDLE KOVE

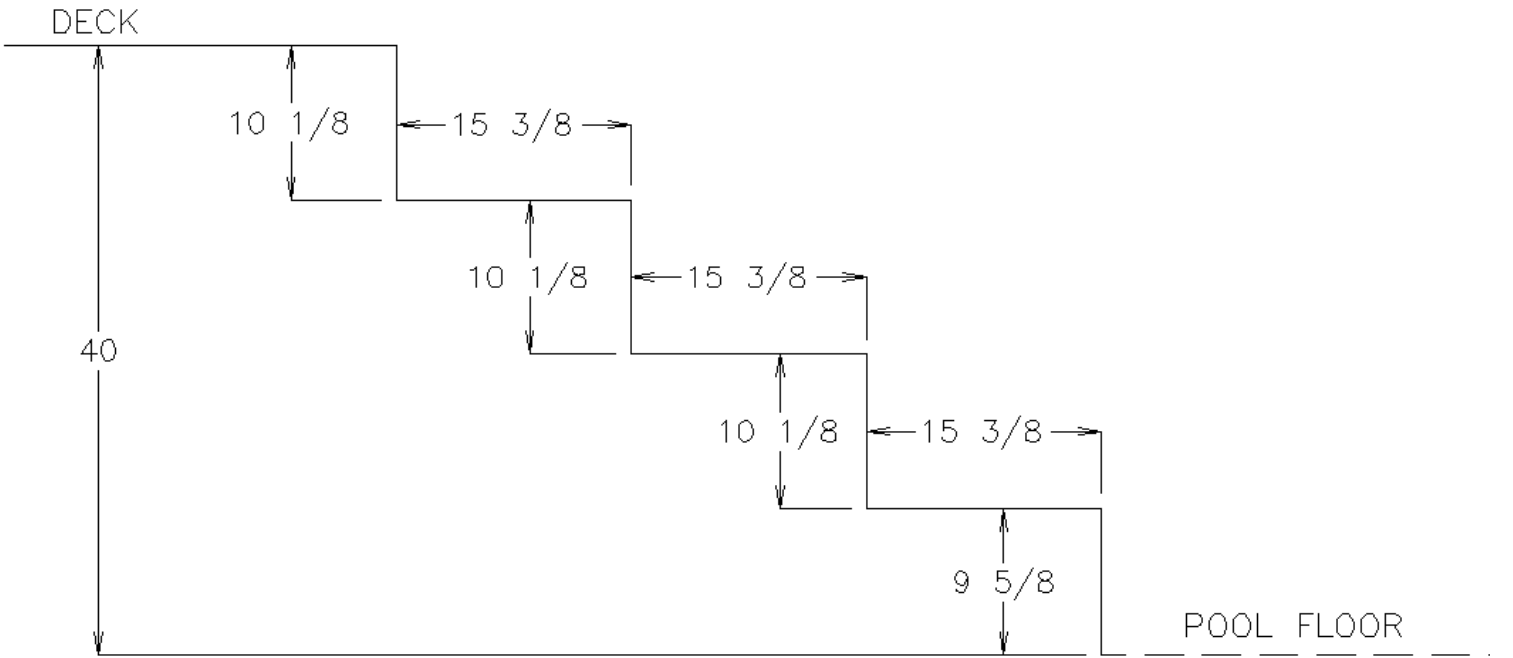



DECK
22 1/2
19 1/2
40
SEAT
17 1/2
POOL FLOOR

IMPERIAL

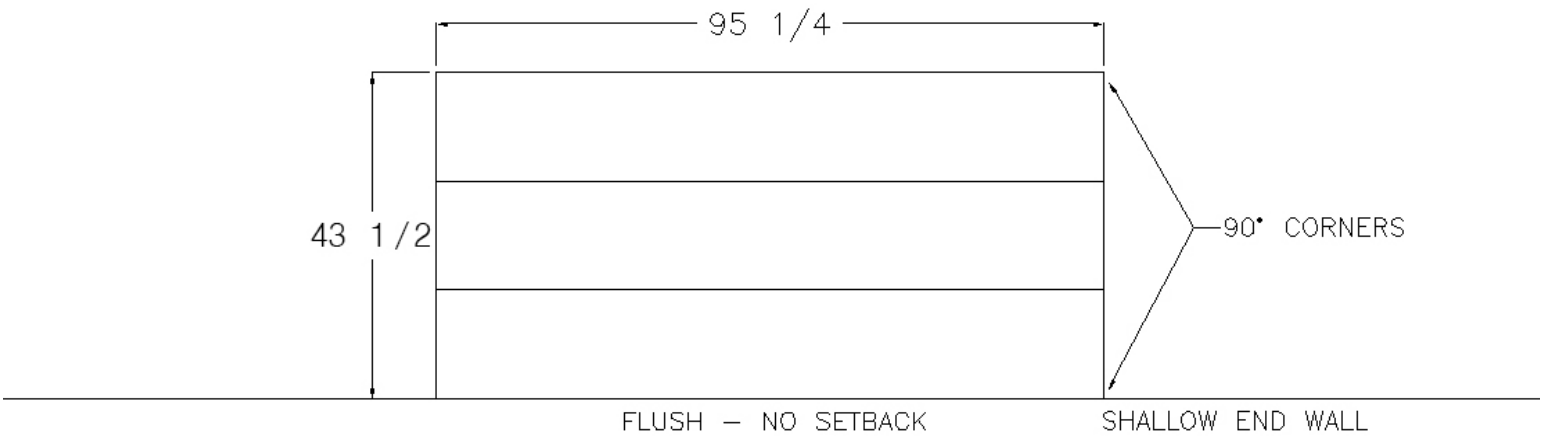
8' STEP

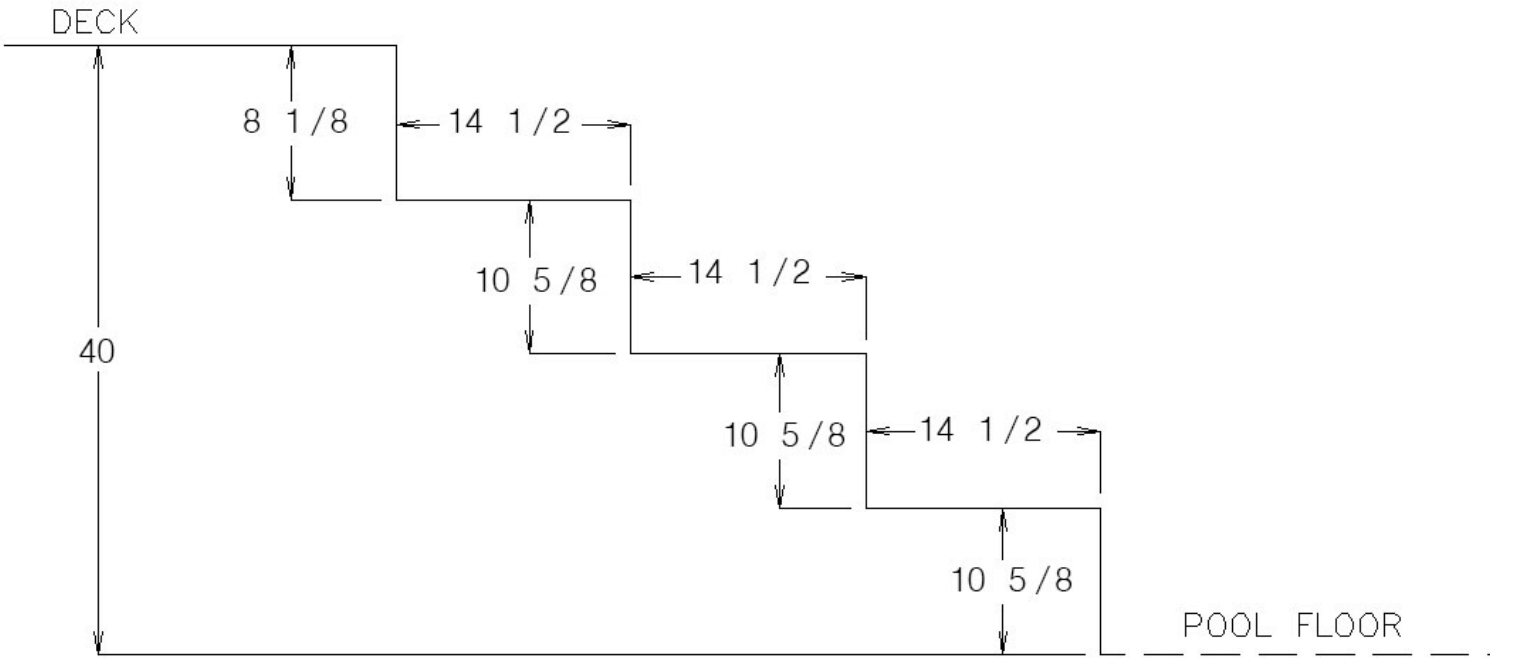



DECK
10 1/8
15 3/8
10 1/8
15 3/8
40
10 1/8
15 3/8
9 5/8
POOL FLOOR

IMPERIAL

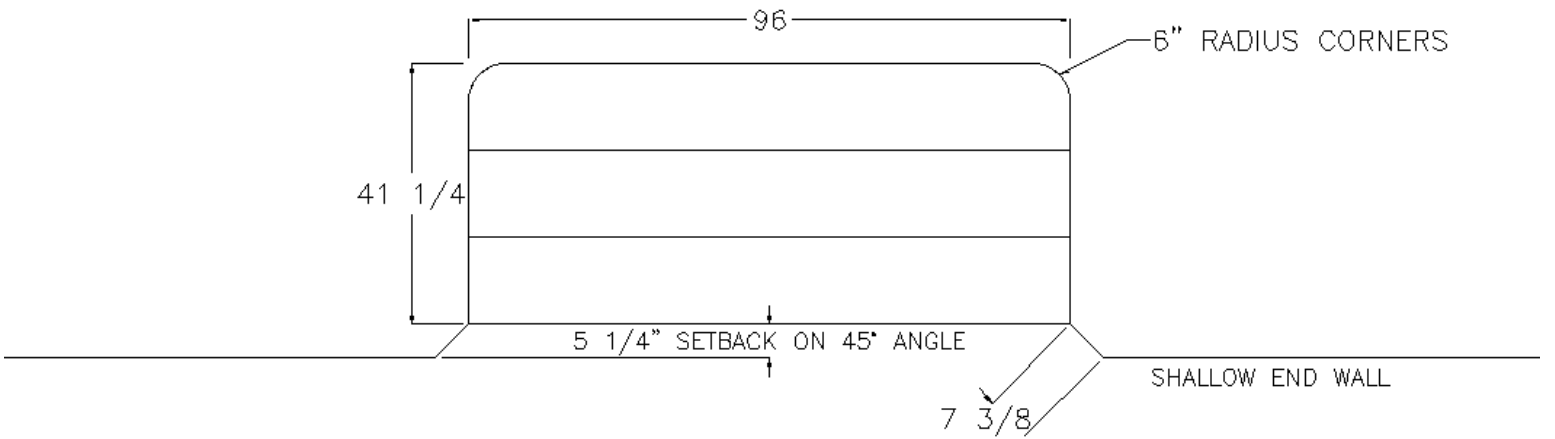
8' STEP NEW STYLE

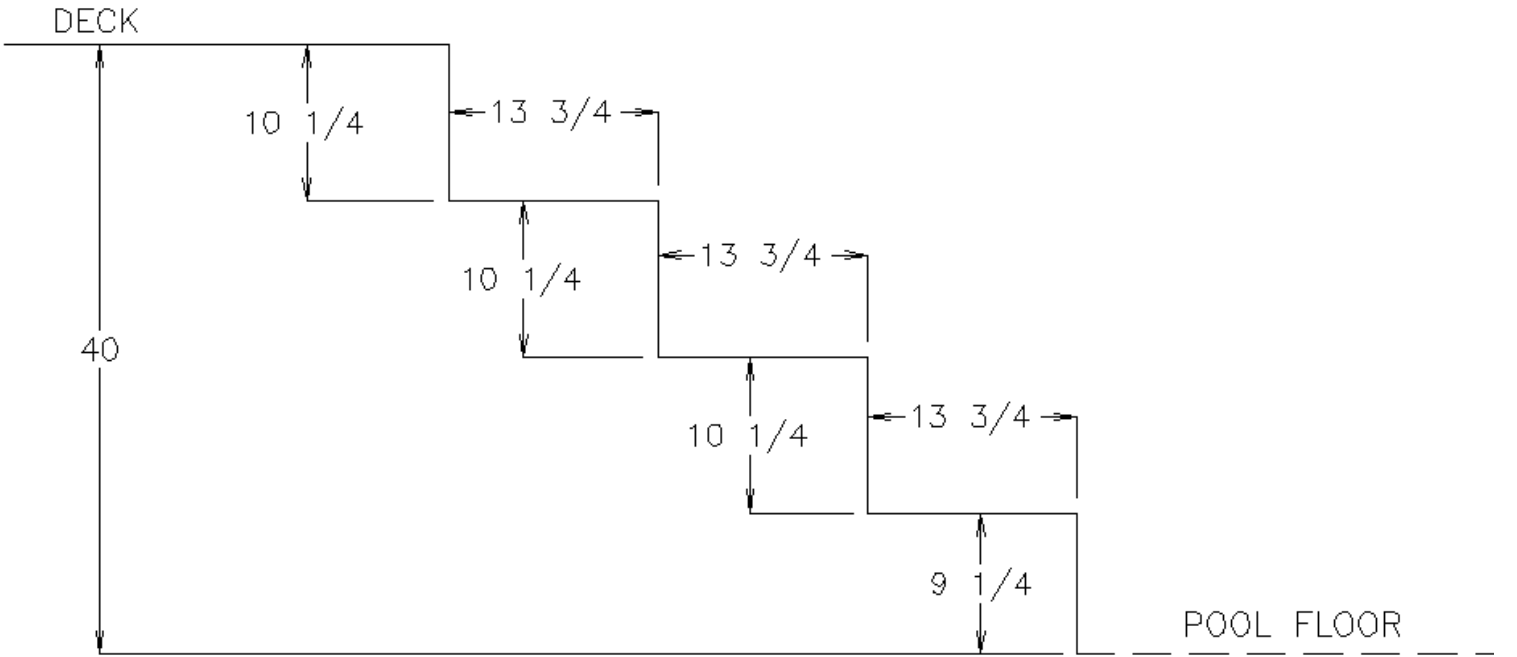



DECK
8 1/8
14 1/2
10 5/8
14 1/2
40
10 5/8
14 1/2
10 5/8
POOL FLOOR

ROYAL PALM

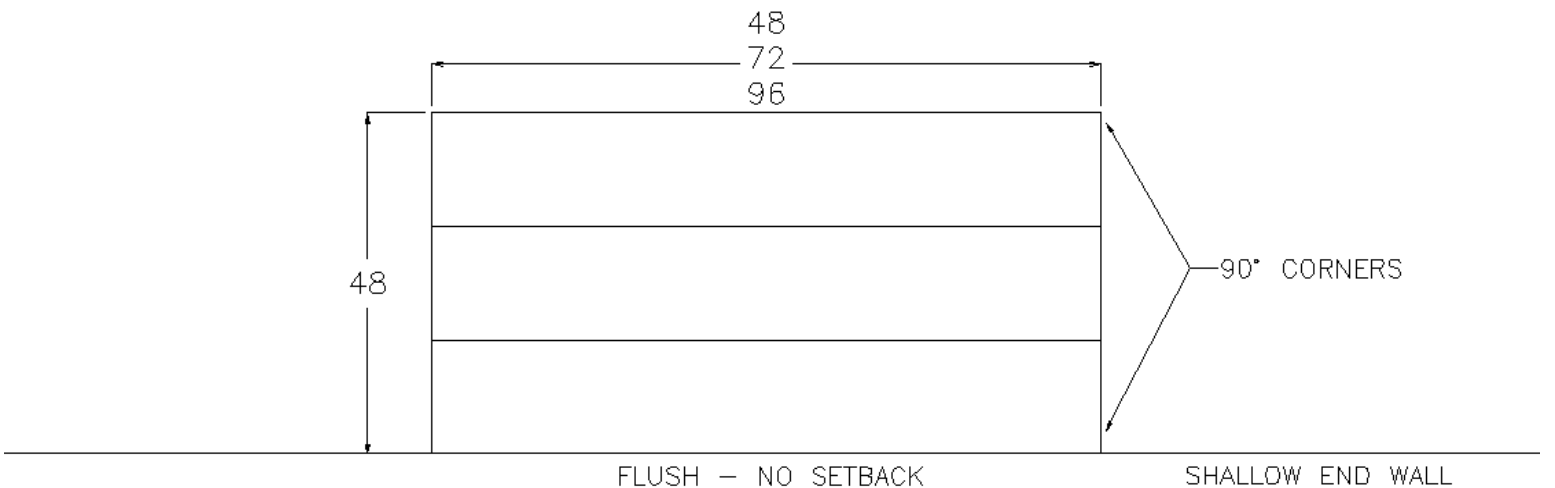
DEALER SPECS

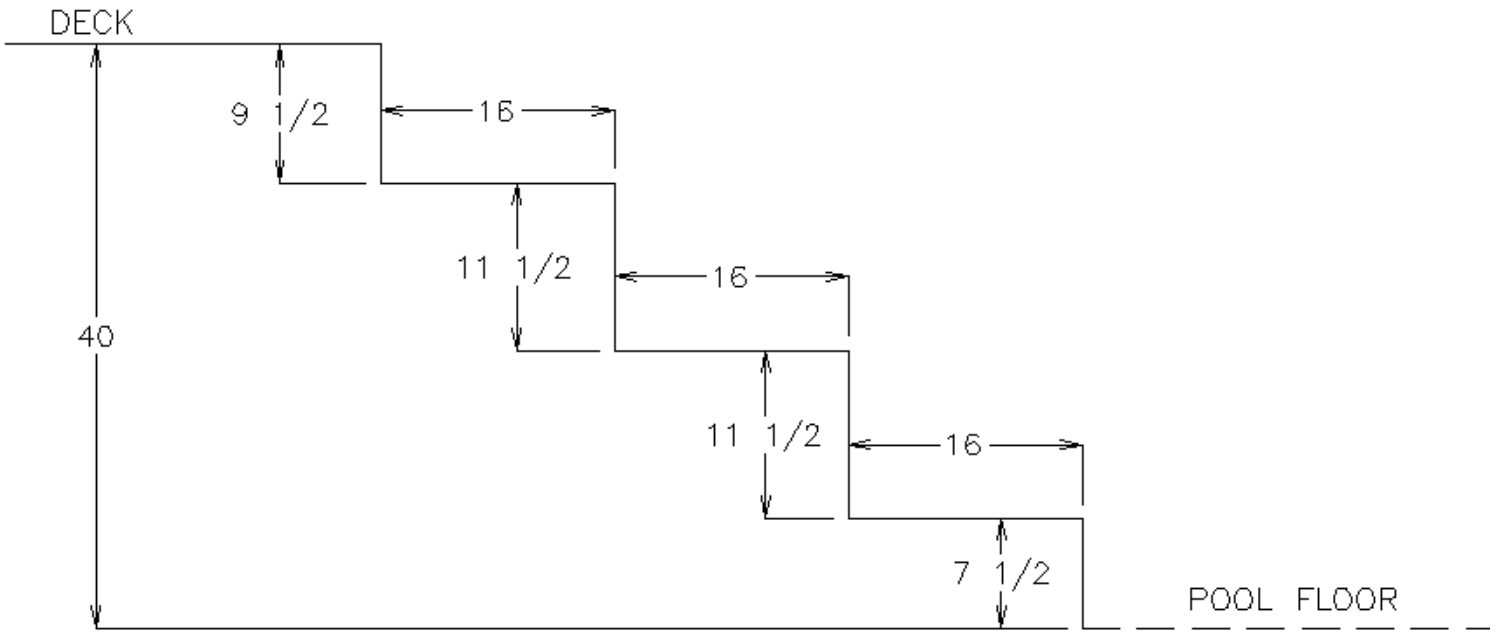



DECK
10 1/4
13 3/4
10 1/4
13 3/4
40
10 1/4
13 3/4
9 1/4
POOL FLOOR

SPARTAN

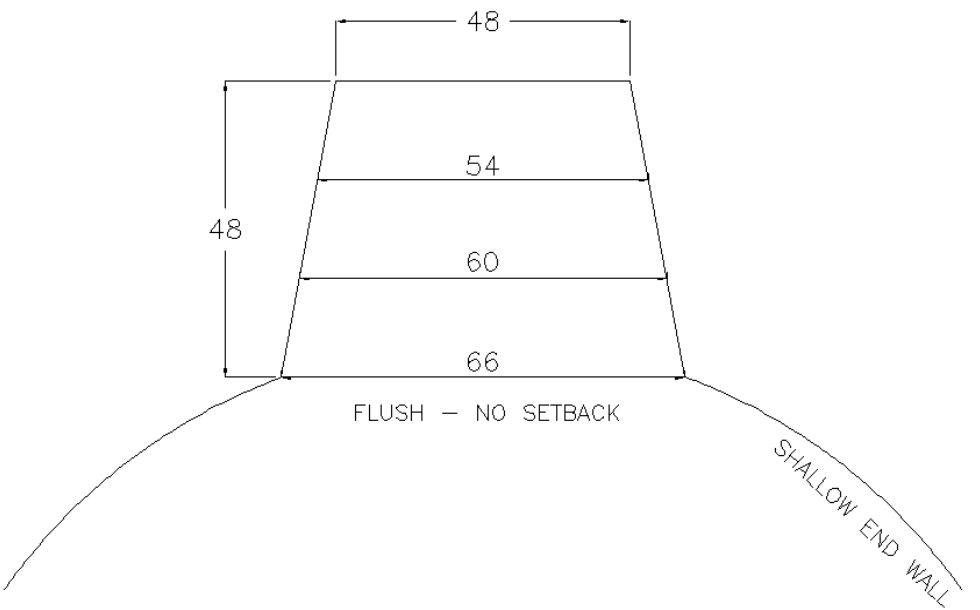
4', 6', OR 8' STEP

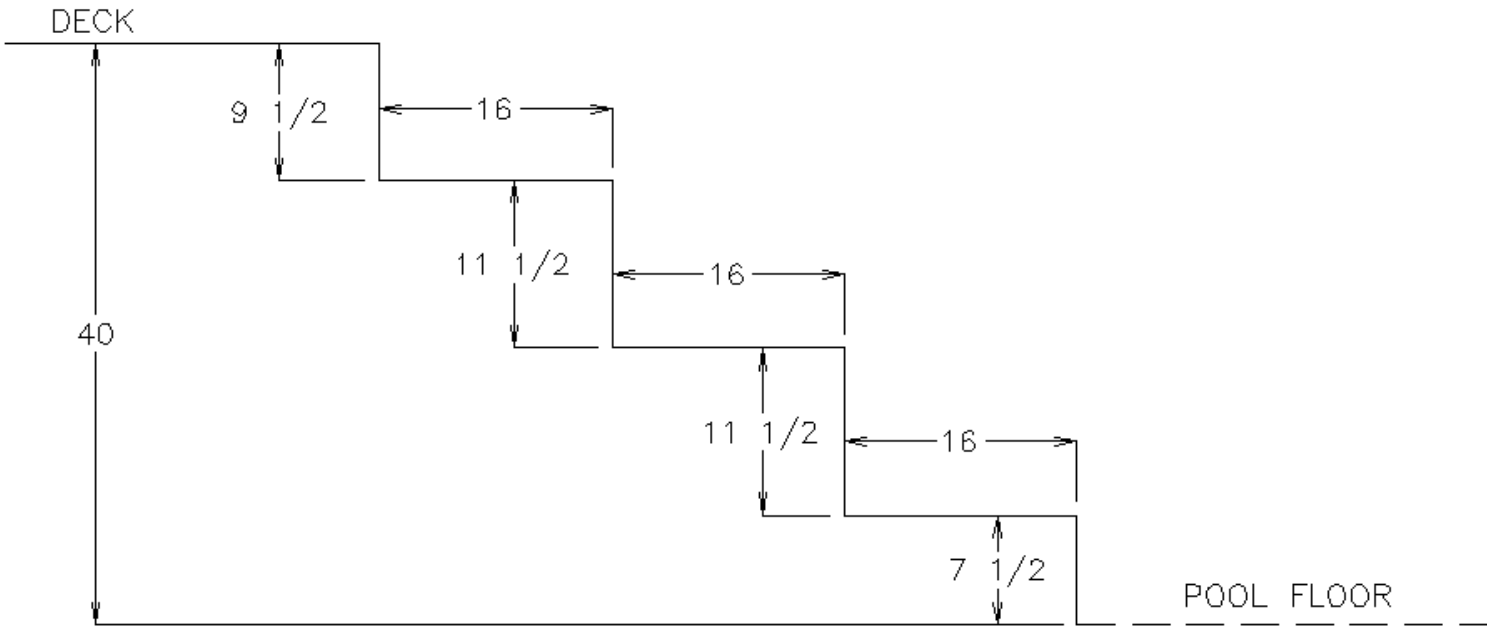



DECK
9 1/2
16
11 1/2
16
40
11 1/2
16
7 1/2
POOL FLOOR

SPARTAN

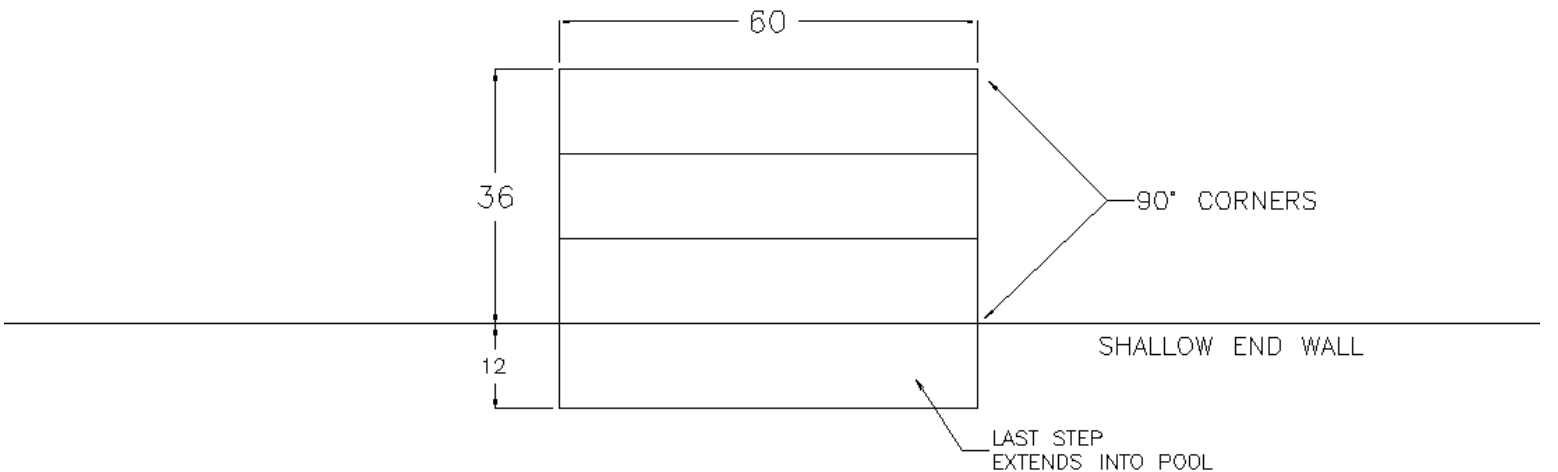
KIDNEY STEPS

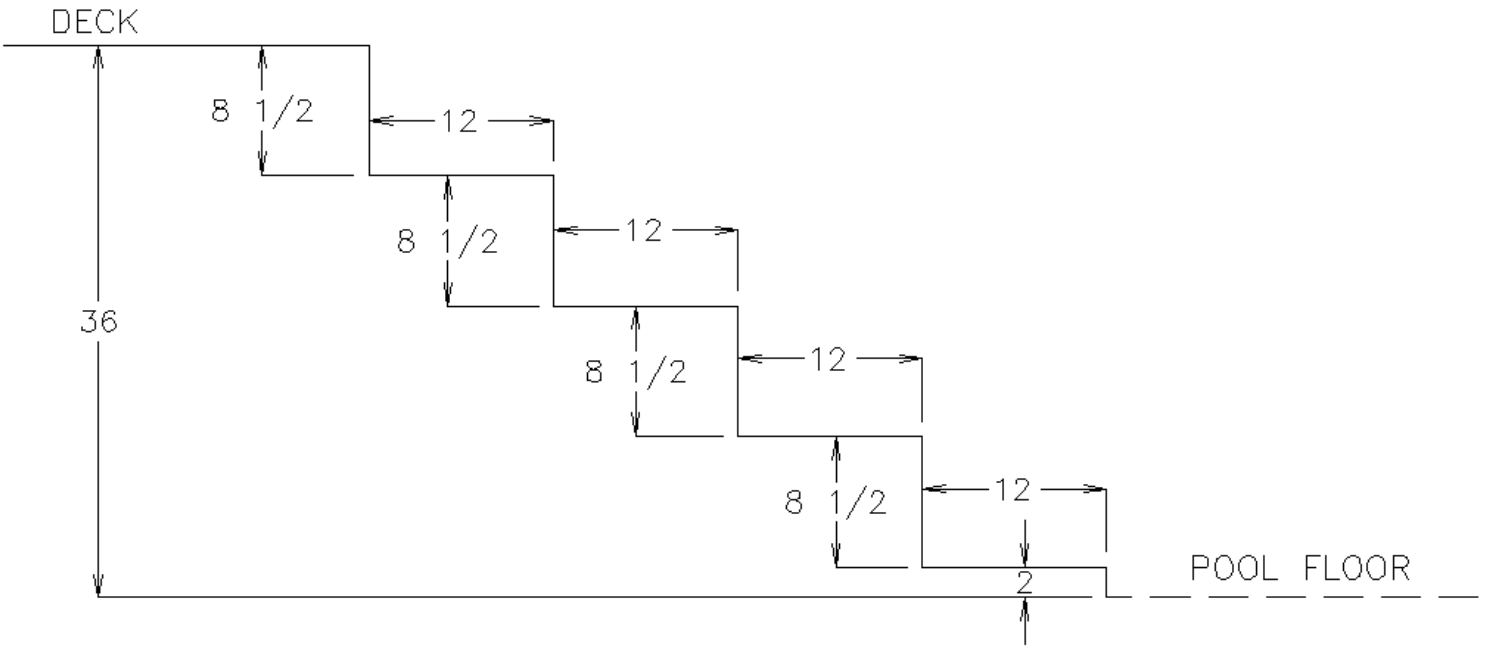



DECK
9 1/2
16
11 1/2
16
40
11 1/2
16
7 1/2
POOL FLOOR

SPARTAN

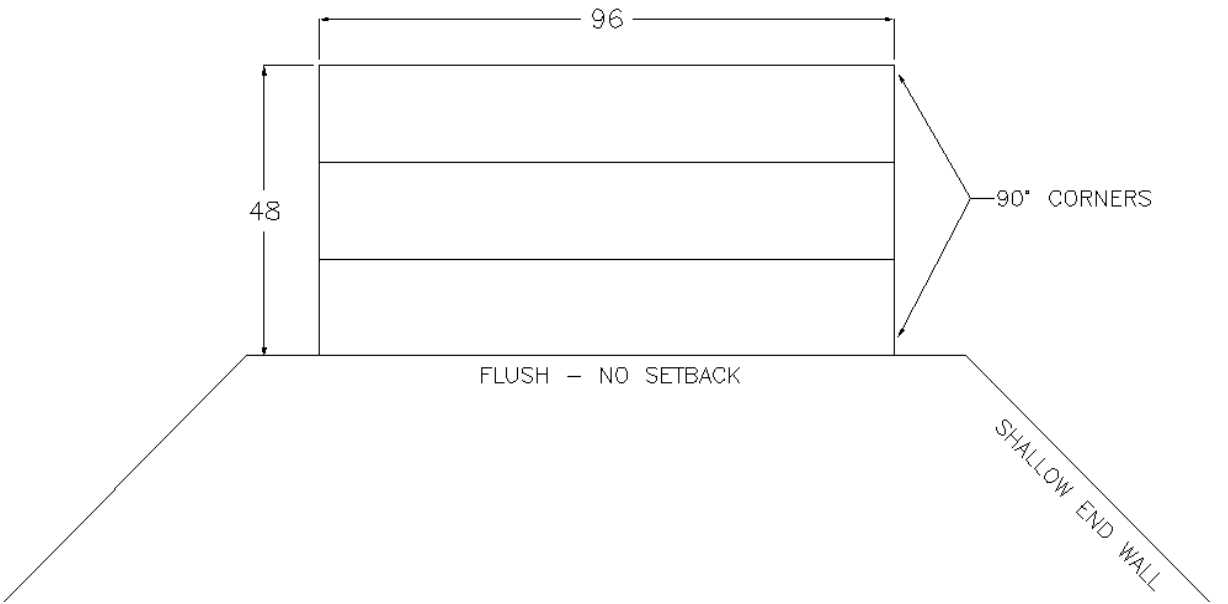
5' STEP

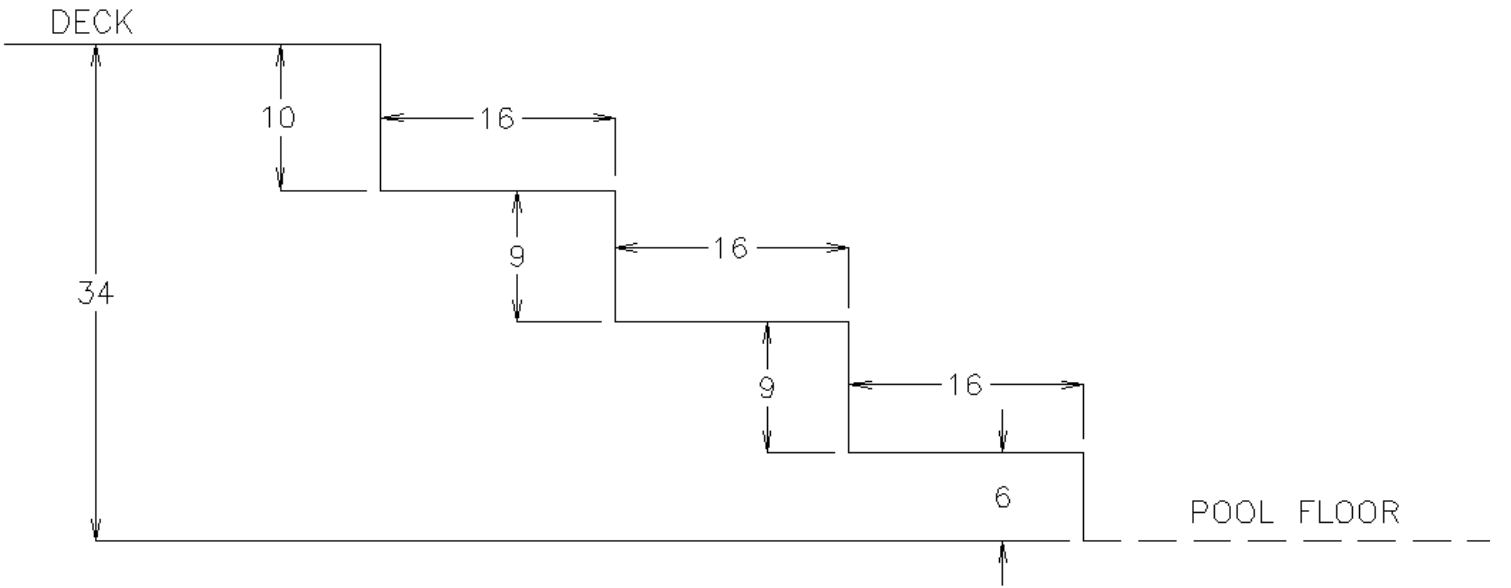



DECK
8 1/2
12
8 1/2
12
8 1/2
12
8 1/2
12
36
2
POOL FLOOR

SPARTAN

OCTAGONS

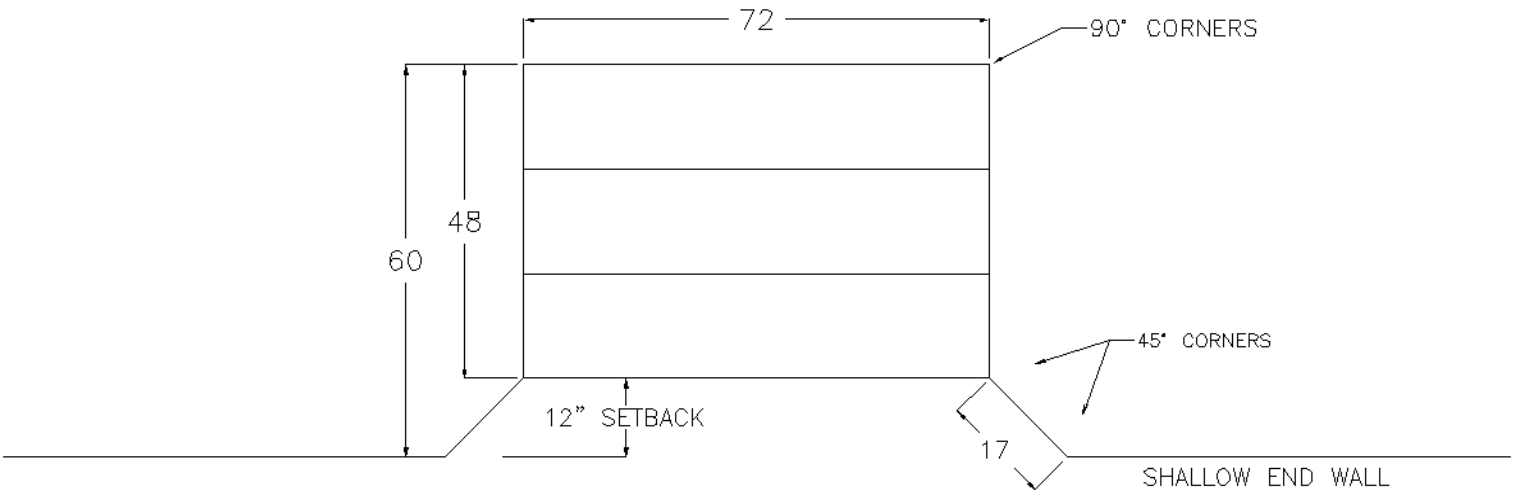


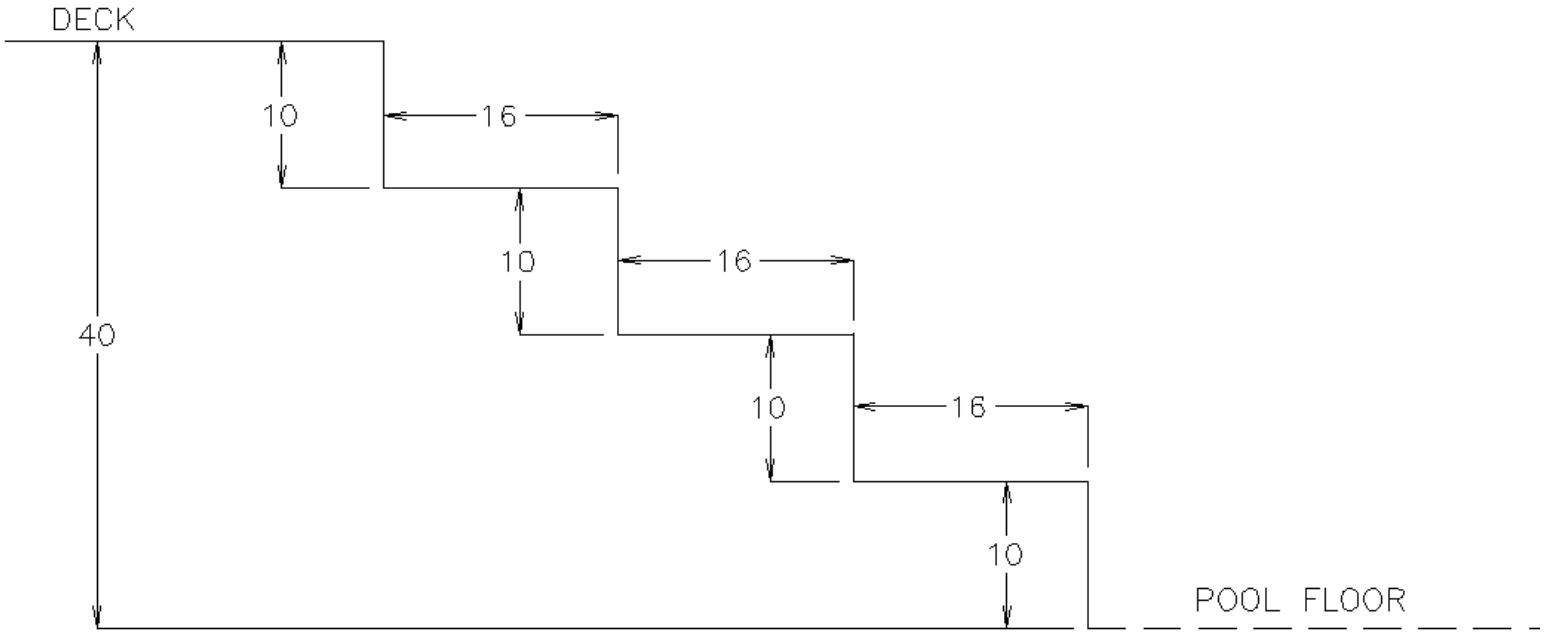

DECK
10
16
9
16
34
9
16
6
POOL FLOOR

TROJAN

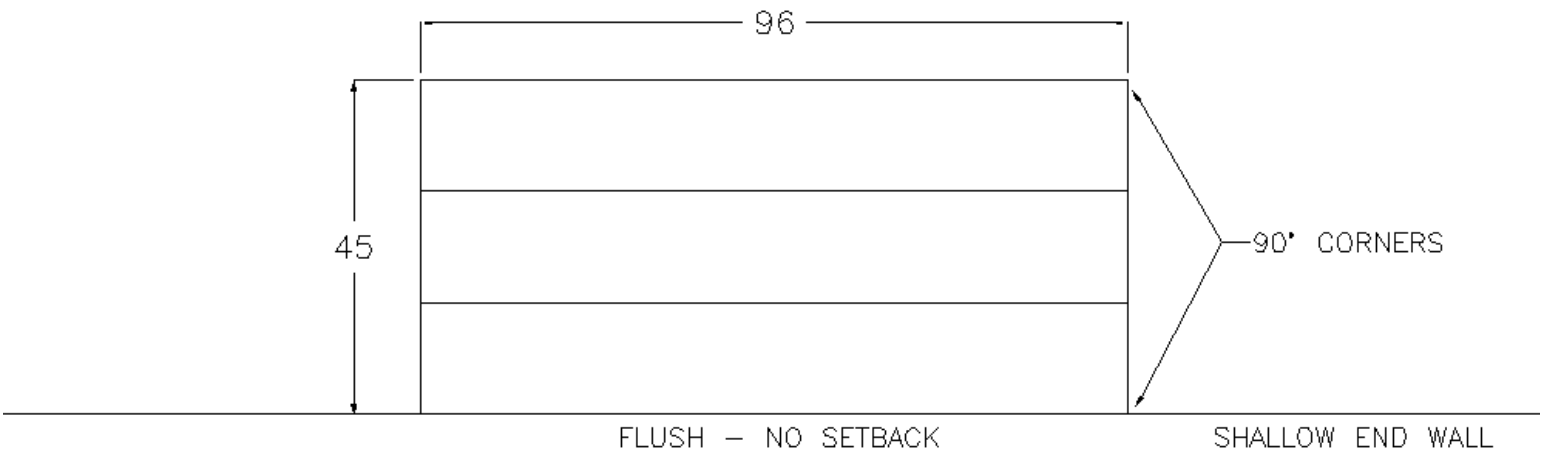
3 TREAD

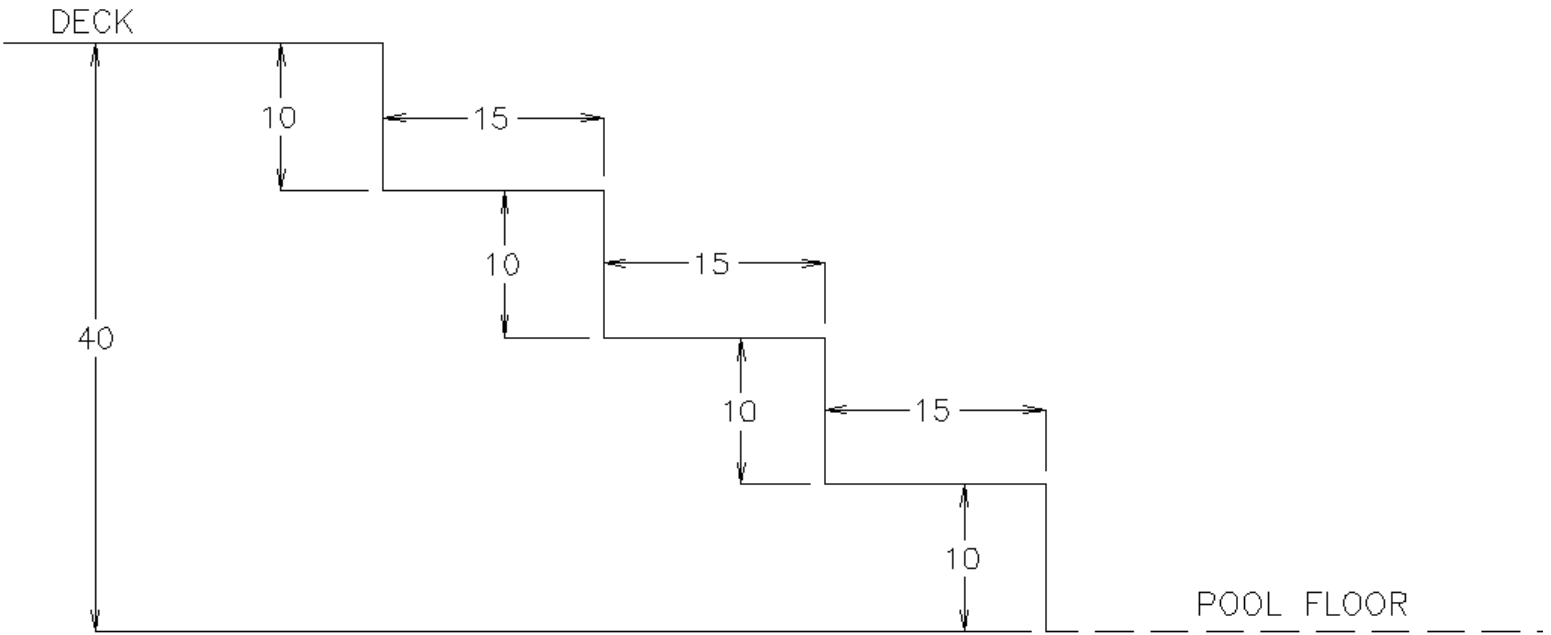
MOST COMMON 6' STEP




DECK
10
16
10
16
40
10
16
10
POOL FLOOR

WEATHER KING




DECK
10
15
10
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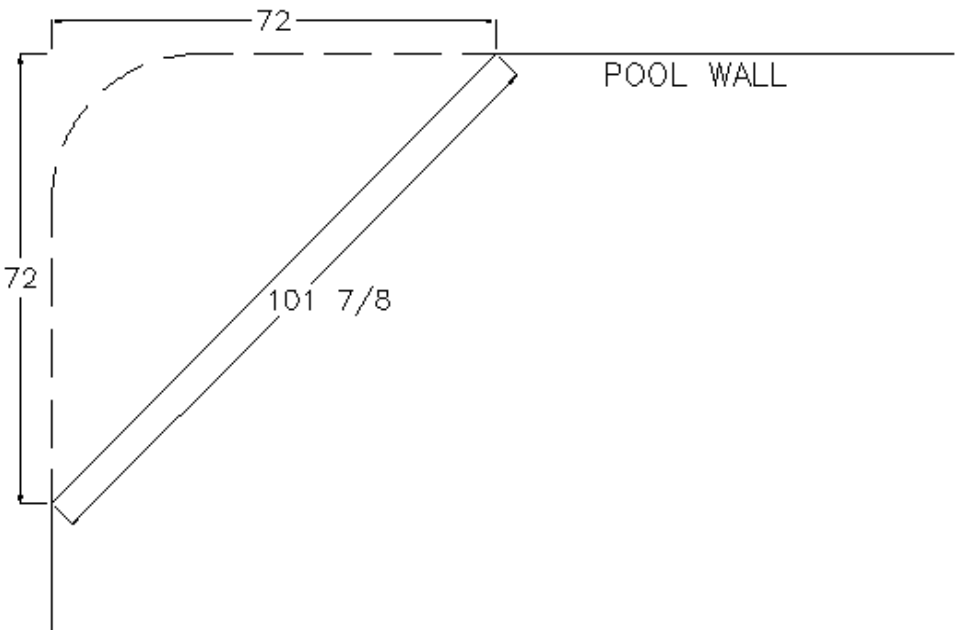
POOL FLOOR

PACIFIC INDUSTRIES

INSIDE CORNER STEP CUT



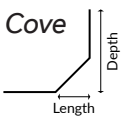
WHAT IF THE LINER DOES NOT FIT?

If it appears that the liner does not properly fit the pool, DO NOT FILL THE POOL WITH WATER!!!

1. Be sure the liner has been vacuumed down properly and that it fits the pool correctly before attempting to fill the pool with water or making any cuts in the liner.
2. If there are any wrinkles in the liner, they should be worked out before adding any water to the pool. Filling the pool with water will not make the wrinkles disappear!!!
3. Make sure you have the right liner for the pool by checking the description on the end of the box.
4. Re-check the dimensions of the pool, including the type of corners the pool has.
5. Are there any unique features about the pool which were not noted on the order form?
   - Is the bottom of the pool rounded out? ***- Are the valleys in the bottom of the pool rounded out?***
   - Are the hopper corners rounded out? ***- Is there a cove around the bottom of the wall in the shallow end?***
6. Was the liner dropped backwards in the pool? This can be verified by looking at the backside of the floor material. The panels which make up the floor of the liner are numbered, 1,2,3, etc; going from the shallow end to the deep end of the pool.
7. If you find any discrepancies in the dimensions of the pool, any special notations left off of the order, or if you have verified all of the above and the liner still does not fit the pool, contact one of our customer service representatives to see what may be done to correct the problem.
8. If a liner is sent back for repairs or modifications, it is very important to keep the liner as dry and as clean as possible. Once the vinyl gets wet, it will absorb moisture and make it difficult or impossible to weld together again. If a heavy film of dirt or dust gets on the liner it further reduces the chances of the vinyl being able to weld together again.

VOCABULARY

- **Back Slope -** The slope from the hopper pad to the end of the pool wall.
- **Back Wall -** The wall of the pool on the opposite side of the shallow end.
- **Bead -** A thick, usually wedge shaped strip on the top of the wall to hold the liner in the receiver. Usually it is a good idea to send us a **SAMPLE** of the bead if it is rounded or hook shaped or if you are not sure if it is standard bead. There are many different types of bead.
- **Bead Receiver (Bead Track) -** A small opening all around the pool beneath the coping into which the bead snaps. All depth measurements are taken from here.
- **Bowled Out (Soup Bowl / Parachute) -** This is when the deep end hopper is not well defined but is more rounded out.
- **Break Line (Break Point) -** Any place on the floor of the pool where the angle changes.
- **Coping -** The *"cap"* at the top of the wall at deck level, often extending past the plane of the wall and into the pool.
- **Cove -** Angled area at the bottom of the vertical wall in the shallow end, typically used to produce a shallow end depth greater than the wall height.

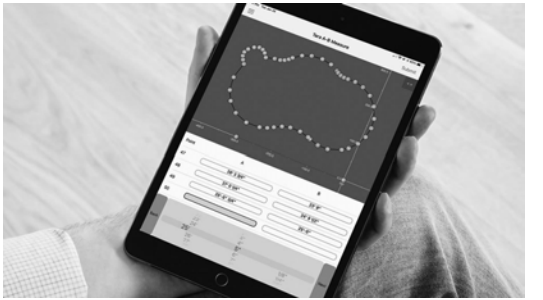


- **Finished Depth -** The depth of the deep end and of the shallow end with a sand or vermiculite bottom, level and ready for a liner, or the depth to an existing liner from the bead or bead receiver to the pool floor.
- **Hopper -** The flat area in the deep end of the pool.
- **Hopper Pad -** The flat area at the deepest section of the pool.
- **Orientation -** The determination of the *"Hand"* of the pool. This may vary from manufacturer to manufacturer and you must be aware of this. The reference can be from the shallow end or the deep end of the pool. Each will give you a different hand for the same pool. Tara Pool & Outdoor Products determines direction from the shallow end.

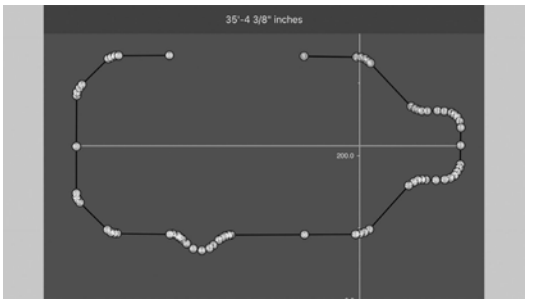
- **Safety Ledge (Toe Ledge) -** A flat area about 8" wide that wraps around the wall of the pool from the shallow end break around the deep end and back to the other shallow end break.
- **Set Back -** Not length of diagonal, it is the distance that a step, bench or sundeck is set back from the wall.
- **SF1 Corner -** Some Polynesian pools have diagonal corners at the top of the panel which taper down to form a V shape, making the corner square at the bottom of the panel. These should be ordered as square corners, since it's the bottom of the corner that determines how the liner floor will be cut.
- **Shallow End (Play Area) -** In a pool with multiple depths, this is the end of the pool that is the least deep.
- **Shallow End Breakover -** The edge where the transition slope meets the shallow end.
- **Side Slope -** The slope from the hopper pad to the side wall of the pool.
- **Slope (Ramp) -** The section of the pool floor that transitions from the shallow end to the deep end.
- **Step Cut -** Is not the seam location on a step it is the section on a pool with a round wall in the shallow end ie. oval, round, kidney, etc. where the fiberglass step is located or a corner plastic step that has a straight face.
- **Tab -** Triangular shaped flaps on the backside of a Tara vinyl liner, often located at the shallow end break, that are used to quickly align the pool liner in the correct position.
- **Transition Slope -** The slope that connects the shallow end to the deep end of the pool.
- **True Length -** This is **NOT** the length of the pool. This is the length of a slope or the bottom of a pool down one slope across the bottom and up the other slope. In other words, from the bottom of one wall to the bottom of the opposite wall keeping your tape measure on the ground. Do not give this measurement except with a bowl shaped hopper or if we request it.
- **Winter Cut / Summer Cut –** We require the actual measurements. If you give us the actual measurements and the liner doesn't fit, it is our fault. If you try to adjust the measurements and the liner doesn't fit it is not our fault.

TARA A-B APP

Measure any swimming pool quickly and accurately with the Tara A-B Measuring App. Simply enter your measurements for A and B as you go. See your points plot out in the app. Use one with one measuring tape or two. The easy-to-use scroll wheel measurement entry, speeds up the measuring process and prevents errors.



Confirm your measurements on-site using cross measurement in full screen mode. Once you're done, you can order your liner or safety cover directly from the app.



- **Enter your A-B measurements as you go**
- **Points are displayed as you measure**
- **Use with one tape measure or two**
- **Verify measurements on the job-site**
- **Send measurements directly from the app**
- **Attach photo of order form**
- **Expedite the order process**

Visit www.tarapools.com/tara-ab for details.
Scan the QR code to download the Tara A-B App for free from the Apple App Store.

TARA ORDER FORMS

We strongly encourage using Tara order forms. Using these forms and filling them out completely will help ensure that we have all necessary information. All of our liner order forms are available on our website www.tarapools.com/forms.

TARA 24/7

No matter where you are or what time it is, you can quickly pull up the status of your liner and safety covers orders using Tara 24/7. Our web-based order tracking system allows you to track orders, get quotes and place orders all from your computer, tablet or smartphone.

- **Easy to access**
- **Log on from any computer or mobile device**
- **Check order status**
- **Get instant quotes**
- **Place orders**
- **Access library of standard pool specs**

Create an account today, http://portal.taramfg.com.

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