



3490 BOARD ROAD SUITE B. YORK PA 17406
P: 717-767-4008 / 800-359-5350
F: 717-764-4191 / 800-969-4191
WEB: www.penfab.com
Email: info@penfab.com

TIPS TO ACHIEVE A SUCCESSFUL A-B PLOT

In order to get an accurate layout of a freeform pool, no matter the shape, please follow these instructions. This is not a very time-consuming process, but attention to detail is essential. Accurately recording these dimensions can save a lot of money and prevent ill-fitting liners. Please feel free to contact Pen Fab with any questions you may have.

This section will help you set up the pool for measuring:

1. Using chalk or masking tape, begin marking the coping on the pool with crosshairs that lie directly above the bead receiver groove of the pool. Determine the distance from the nose of the coping back to the bead receiver groove and use this distance as a guide for placing your crosshairs on the top of the coping. Begin at the edge of a stair in the shallow end (if you have one) or just choose a point and number it #1.
2. Continue around the perimeter of the pool, placing the crosshairs as described in step 1. There is no required specific distance between these points, but just be consistent. On straight walls and bigger radii, the spacing can be a bit larger and on tight and smaller radii, it is best to shorten the space between points to ensure the best fit of the liner. Continue to number the points in sequence from #1 on up.
3. Always place a point at each side of the shallow end break point, at the point where the hopper pad meets the transition slope and a point directly at the edge of any attachment to the pool (i.e. stairs, buddy seat, etc.).
4. To place the points A and B, use two stakes (rebar works the best) and locate them to one side of the pool, outside of the pool envelope, and at least 3' from the pool edge (the farther the better), and at least 16' apart (again the farther the better) and label one A and one B.
5. Once you have marked the entire perimeter of the pool and placed the A and B stakes, be sure to sketch the pool as best you can and write down several point numbers on the sketch to orient Pen Fab to the pool. Also note the placement of stakes A and B and which stake is which.

This section will help you in taking and recording accurate measurements:

6. The first dimension to take is the distance between stakes A and B. Record this dimension on the A-B record sheets which are available on our website (www.penfab.com)

NOTE: It is best to have at least two people for this portion of this process. One should be recording the dimensions and making sure the A and B stakes do not move and that the measuring tape is always straight and not caught on anything and the other should be reading and calling out the point numbers and dimensions.

7. Placing the hook end of the tape measure over the A stake, extend the tape as straight and flat as is possible to point #1. Take all of these dimensions to the ¼". Using just whole numbers will distort the exact perimeter of the pool. Call out the point number and the exact dimension to the recorder, such as A, one, 32' 5 ¼". Do not record the dimensions in inches; use feet and inches throughout this process.
8. Using this format, record the dimensions of all of the points around the pool in order. Be sure to call out points such as shallow end break point, hopper pad, stair, etc. and note them as such on the A-B chart.

9. Once you have taken all of the dimensions from the A stake, switch the tape to the B stake and follow the same procedure.
10. When you are finished with all of the points from the B stake, it is important to get dimensions for the contour of the bottom of the pool, along the bottom of the slopes as well. Take dimensions from the A and B stakes along the bottom of the slopes, using additional point numbers consecutively and noting them on the sketch that you made in step 5. Take enough measurements of the bottom contour as to accurately define this to avoid wrinkles in the liner bottom. These dimensions can be best achieved using a vacuum pole and a level as a way to project the bottom of the pool straight up. You can also use the vac pole and a string with a weight on it (similar to a plumb bob). Let the weight meet the bottom of the pool at the edge of the slope and then measure the distance from the end of the pole to the crosshair mark on the coping. All of these dimensions must be horizontal. Be careful to place the covered end of the vac pole on the bottom of the pool so as not to damage your liner if you choose that method versus the plumb bob.
11. Be sure that you have given and labeled the dimensions to call out the break point at the shallow end and the hopper pad in the deep end of the pool. Also be sure to note if the steps in the pool are straight or radiused.
12. Next, using the vac pole as in step 10, in at least three spots, measure the horizontal dimensions of the slopes going around the hopper pad. DO NOT measure down the slopes, but rather measure from the pool wall straight out to the edge of the vac pole and record these dimensions in the I, J and K dimension spots on the order form.
13. Lastly, take the tape measure from a few points to other points to use as cross check dimensions. For example, measure from point 1 to 26, or from break point on one side to a point on the other side of the pool. Provide 3 or 4 of these cross check dimensions and list them with the point #'s you used and the dimensions that you got. After we lay out your pool, we can use these to "cross check" your dimensions. This is a quick way to be sure everything is working out correctly.

Once you have completed this process, simply send your charts to Pen Fab and expect an approval drawing from us shortly thereafter. Be sure to check that the pool orientation is correct and that everything looks to be the same as your pool. If there are any variances or problems, we will note them on the drawing. You will be responsible for the liner fit if you approve the drawing and something is incorrect. Remember, we cannot see your pool and can only go by what is submitted to us.

If at all possible, try to keep the point labels and stake locations in place until after you have received the approval drawing, in case there are discrepancies as we plot out the pool.

Feel free to contact Pen Fab at any point if you need assistance.



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AB RECORD SHEET

Date:
Company:
Zip Code:
Job Name:
P.O.#

DISTANCE BETWEEN PT. A and PT. B												
PT.	A	B	PT.	A	B	PT.	A	B	PT.	A	B	
1			21			41			61			
2			22			42			62			
3			23			43			63			
4			24			44			64			
5			25			45			65			
6			26			46			66			
7			27			47			67			
8			28			48			68			
9			29			49			69			
10			30			50			70			
11			31			51			71			
12			32			52			72			
13			33			53			73			
14			34			54			74			
15			35			55			75			
16			36			56			76			
17			37			57			77			
18			38			58			78			
19			39			59			79			
20			40			60			80			

USE SPACE BELOW TO SHOW POOL LAYOUT WITH HOPPER. SHOW A-B PLACEMENT ON YOUR LAYOUT.