

### <u>General Measuring Guidelines – All Pool Shapes</u>

Measuring your pool will be easier if you have another person helping you. Also, draining your pool will make the measuring process easier, however, it is not necessary. Measurements can be easily taken from outside of the pool.

Never assume your pool is standard. All pools are different. Please measure your pool for an exact fit. Actual pool measurements should be made even if original pool plans are available due to the fact that slight variances may have occurred during construction. The builder may not have followed the pool plan precisely.

When measuring the pool, do not make allowances for weather conditions, temperature, or the fact that vinyl shrinks and expands. These calculations are made when the new liner is designed.

Please supply all measurements in feet and inches. Round your measurements up to the nearest half inch.

Follow the "step-by- step" measuring instructions carefully, referring to all diagrams to ensure accurate measurements.

Remember to include your name, address, phone and fax numbers on each page that you send to us. You must also sign the MEASURING FORM before we can begin designing your liner.

Remember to record ALL of your measurements on the MEASURING form. You may need to transfer measurements you have made on the "MEASURING INSTRUCTIONS" pages onto the actual MEASURING FORM. When recording your measurements, use feet-inch notation as in 15-9.5 or 15'-9.5" each of which is acceptable to represent 15 feet, 9 and ½ inches.

Write your measurements legibly, using BLACK INK. (No pencil or felt-tip marker please!) Make copies of all pages for your records BEFORE sending them to us. You will need to refer to your copies if we have questions regarding your measurements.

### **MEASURING INSTRUCTIONS**

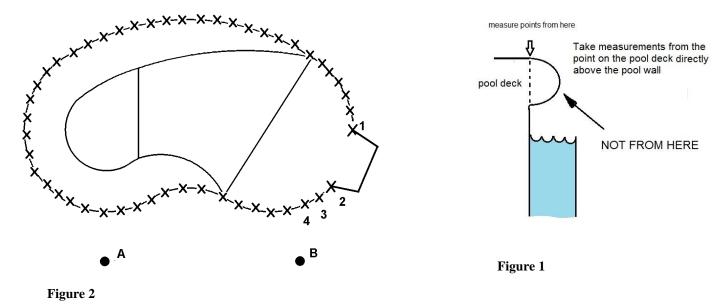
#### Non-standard or complex Pool Shapes (A-B Layout)

#### **Overview:**

Many pools which are not Rectangular, Oval, Grecian, True-L or Lazy-L require a measuring method known as an A-B layout or A-B plot.

This measuring method requires many measurements from 2 fixed points outside the swimming pool to points around the perimeter of your pool.

The method is illustrated in the diagram (Figure 1).



Each numbered X represents a point on the perimeter of the pool. The A and B in the diagram refer to the 2 key points outside the pool from which you will take a measurement to each perimeter point.

Remember that the points around the perimeter are at the on the deck at a point directly above the pool wall (where the liner snaps into the track) not at the edge of the coping (the pool deck). See figure 2.

#### **Equipment List**

In order to create an A-B layout of your pool, you will need some basic tools as follows:

- Measuring tape (see figure 3)
- 2 stakes (pegs, oversized nails, wooden stakes with nais in the top) to locate points A and B
- A-B point measuring form (page 6 of this document)
- Blank ink pen (to write down the measurements)
- Chalk stick (for indicating the point on the perimeter)

Please note that the preferred measuring tape has a ring at the end to attach it to the A or B stake location (see figure 4).

In addition, **make sure that the measurements are taken using the tape side with inches** and not tenths of a foot (see figure 5) (if the tape measure you use is similar to the one shown).





Figure 4



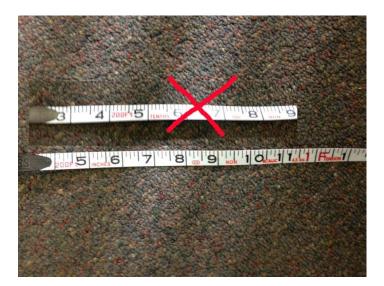
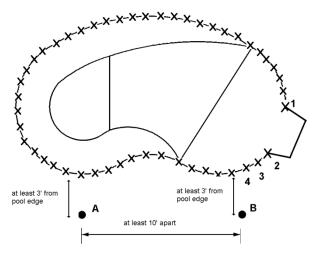


Figure 5



## Step#1: Set your stake locations A and B

Points A and B must be at least 10 feet apart from each other and must each be at least 3 feet from the nearest pool edge (see Figure 6).

Attach the end of your tape measure to the stake (peg/nail) at location A. Anchor the stake into the ground. Locate and anchor the point B stake at least 10 feet from location A.

Measure the distance from point A to point B.

Record the distance from A to B on the measurement form.

Figure 6

#### Step#2: Mark and measure from Pt#1 to A

Locate point #1 and use a chalk stick to mark it. Make a special mark or write a 1 beside the point marker to indicate that this is the first A-B point. If your pool has a shallow end step use a point right beside the step at the bead receiver. If your pool has no step, pick a point anywhere on the pool perimeter. Measure the distance from point#1 to A.

## Record the measurement on the A-B measurement form in the column marked <u>Distance to A</u> in the row numbered 1.

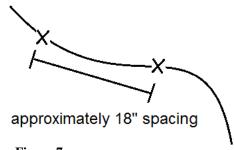
#### Step#3: Mark and measure from Pt#2 to A

Locate point #2 and use a chalk stick to mark it. If your pool has a shallow end step use the point right beside the step on the opposite side from point#1, at the bead receiver. If your pool has no step, then locate point#2 approximately 18" from point#1(see Figure 7). Measure the distance from point#2 to A. **Record the measurement on the measurement form in the column marked** <u>Distance to A</u> in the row numbered 2.

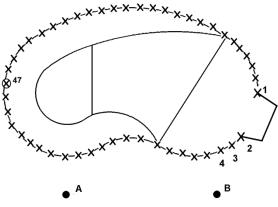
## Step#4: Repeat measurements for points around the pool perimeter

Repeat the process of marking and measuring from location A to perimeter points. Keep moving in the same direction around the pool locating each point approximately 18" from the previous point (see Figure 7). Mark the new point and measure the distance from the new point to location A (Figure 8). When marking and measuring around the deep end, select a point near the end of the pool and mark it with the current point count (ex. #47). You will need to refer to this point later in step#10.

Record each measurement on the Figure 8 measurement form in the column marked <u>Distance to A</u> in the row corresponding to the current point count.







#### Step#5: Measure distances from A to break-off points (S1, S2)

Locate the points on the edge of the pool where the shallow end stops and the slope down to the hopper begins. Mark and measure the distance from each point to A. These 2 points have been labeled S1 and S2 (see Figure 9).

#### Record each measurement on the measurement form in the appropriate boxes.

#### Step#6: Measure distances from A to hopper points (D1, D2)

Locate the points on the edge of the pool where the slope from the shallow end stops and the deep end hopper begins. Mark and measure the distance from each point to A. These 2 points have been labeled D1 and D2 (see Figure 9).

#### Record each measurement on the measurement form in the appropriate boxes.

#### Step#7: Measure the distances from location B to each marked point (steps 2,3,4)

Carefully detach the tape measure from stake A and

attach to stake B. Be careful to maintain the stake positions when re-anchoring them in the ground.

Starting at point#1, measure the distance from location B to each consecutive point marked with chalk previously. Be careful to maintain the same sequence (see Figure 10).

Record each measurement on the measurement form in the column marked Distance to B in the row corresponding to the current point.

#### Step#8: Measure distances from B to breakoff points (S1, S2)

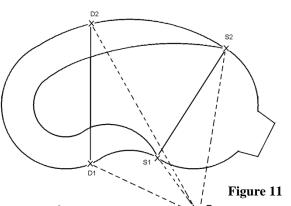
Locate the points on the edge of the pool where the shallow end stops and the slope down to the hopper begins marked previously in step#6 (S1

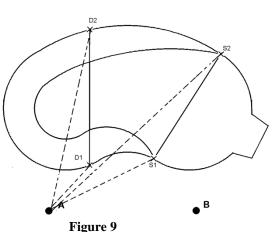
and S2). Measure the distance from each point to B (see Figure Record each measurement on the measurement form in the appropriate boxes.

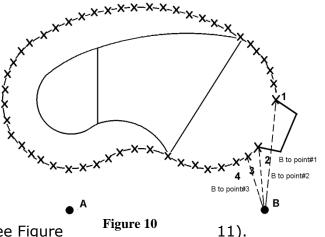
#### Step#9: Measure distances from B to hopper points (D1, D2)

Locate the points on the edge of the pool where the slope from the shallow end stops and the deep end hopper begins marked previously in step#7 (D1 and D2). Measure the distance from each point to B (see Figure 11). Record each measurement on the measurement form in the appropriate boxes.









#### Step#10: Measure the "length" of the pool

You will need the tape measure (remove from stake at location B and return the stake to its position – in case you need it again).

Use the 2 specially marked points, one at each end of the pool and measure the distance between them (see Figure 12). The example shown uses points #1 and #47. <u>Make sure that these correspond to real numbered points marked previously in steps #2 and #4.</u>

#### Record the measurement on the measurement form in the box labeled Pool Length.

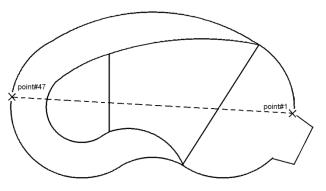


Figure 12

## Step#11: Measure the distances between S1/S2 and D1/D2

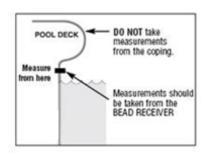
Using the break-off points marked in steps #5, #6, #8 and #9 measure the distances first between S1 and S2 and then D1 and D2 as shown (see Figure 13)

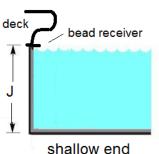
## Step#12: Measure the pool depth (K) and wall height (J)

When taking the depth measurements (K), be sure to measure from the bottom of the pool floor to the bead receiver. Do not measure to the top of the pool otherwise your measurement will be incorrect (see Figure 14).

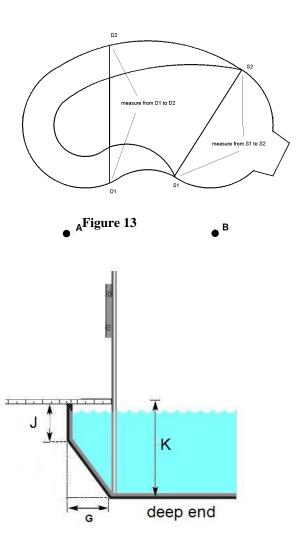
For the wall height measurement (J), measure from the bead receiver to the shallow end floor bottom.

# Record each measurement on the measurement form in the appropriate boxes.





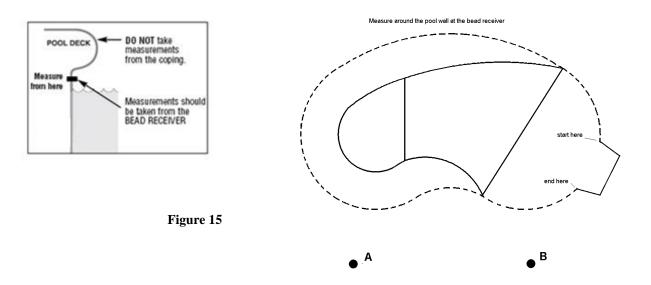




#### Step#13: Measure pool perimeter

If possible, measure the perimeter of the pool. The perimeter is measured at the bead receiver all the way around the pool. If there is a step do not include the distance from one side of the step to the other (see Figure 15).

Use the bead receiver, and not the pool deck or coping, to measure the perimeter. **Record the measurement on the measurement form in the box labeled Perimeter.** 



### In ground measuring form A-B Layout – Page 1

Na	ame	:																	
Name: Address:																			
	City: State/Prov: Zip/Postal Code:																		
	Phone: Home ()         Work ()																		
Fax: ()     Email																			
Di	star	nce fi	rom	A to	В_		ft.	·		i	n. (s	step#	1)						
Pnt	Dista	nce to A	Dista	nce to B	Pnt	Dista	nce to A	Dista	ance to B	Pnt	Dista	nce to A	Dista	nce to B	Pnt	Distan	ce to A	Dista	nce to B
	ft	in.	ft	in.		ft	in.	ft	in.		ft	in.	ft	in.		ft	in.	ft	in.
1					26					51					76				
2					27					52					77				
3					28					53					78				
4					29					54					79				
5					30					55					80				
6					31					56					81				
7					32					57					82				
8					33					58					83				
9					34					59					84				
10					35					60					85				
11					36					61					86				
12					37					62					87				
13					38					63					88				
14					39					64					89				
15					40					65					90				
16					41					66					91				
17					42					67					92				
18					43					68					93				
19					44					69					94				
20					45					70					95				
21					46					71					96				
22					47					72					97				
23					48					73					98				
24					49					74					99				
25					50					75					100			Pa	ge 8

### In ground measuring form A-B Layout – Page 2

Name:									
Address:									
City: State/Prov: Zip/Postal Code:									
Phone: Home () Work ()									
Fax: () Email									
Liner Description									
Pattern:	Gauge:	Bead Type:							
Deep end and Shallow end break-offs									
	Distance to A		Distance to B						
S1	ft i	n (step#5)	ft in (step#8)						
S2	ft i	n (step#5)	ft in (step#8)						
D1	ft i	n (step#6)	ft in (step#9)						
D2	ft i	n (step#5)	ft in (step#9)						
S1 to S2 Distance	ft i	n (step#11)							
D1 to D2 Distance	ft i	n (step#11)							
Pool Length, Depth, Wall Height									
Point used for length									
Pool Length [B]	ft i	n (step#10)							
Wall Height [J]	ft i	n (step#12)							
Pool Depth [K]	ft i	n (step#12)							
Pool Perimeter									
Perimeter	ft	in (step#13)							
Vinyl covered sto (Please fill out the Step Sec	•	P.O.#	Signature						
Comments									
		your measur	Your signature indicates that you have verified your measurements and that the information you have provided is correct.						

### In Ground Vinyl Step Measuring Form

Name:			
Address:			
City: Sta	ate/Prov:	Zip/Postal Code:	
Phone: Home ()	Wor	k ()	
Fax: ()	Email		
Back Corners: If non-squar distance from 1 to 2 Square Radius Size: in. Cut Size:in.		Top of Step Back Corner (may be square, radius or cut)	/all
B Recess Corner: If non-squa distance from 1 to 2 Square	are measure the	Pool Wall Recessed (May be square, radius or cut)	h
Radius   Size: in.     Cut   Size:in.			
Step Location: Measure X a Check the location box that		Square Radius C	ut
X: ft in Y: ft	in	Riser and Treads: Measu heights and tread depth	
Peep End		Riser Heights R2 R3 R4 M1+R2+R3+R4 MUST EQUAL WALL HEIGHT J	R1in R2in R3in R4in
Depth and Width: Measure the total step width and depth.	T1 T2 Depth	Tread Depths	T1in T2in T3in
Note that the depth includes the recess. Depthin Widthin	T3	<ul> <li>Do you need loops for secure the steps?</li> <li>Yes</li> <li>No</li> </ul>	r rods to