



## GENERAL MEASURING GUIDELINES FOR ALL POOL SHAPES

- Measuring a pool will be easier if you have another person helping you.
- Draining the pool will also make the process of measuring your pool easier; however, it is not always necessary, as many pools can be measured with water in them.
- Never assume a pool is standard. All pools are different. Most importantly, measure the 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.
- When measuring pools, 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.
- Supply all measurements in feet and inches with appropriate marks (' and " ), rounding up to the nearest quarter-inch on liner-covered features, such as steps, ledges, and benches. Round up to the nearest half-inch on all other measurements. **Good Example: 17' 11 1/2"** - **Bad Example: 17.5**
- Follow the "step-by-step" measuring instructions carefully, referring to all diagrams to ensure accurate measurements.
- Remember to include your name, pool location address, phone and fax numbers, and email address on each page that you send to Doughboy Vinyl Technologies. You must also sign off on an approval drawing of the liner before we can begin building the liner.
- Remember to record all of your measurements and place them in the proper lines/boxes on the proper form(s). You may need to transfer measurements you have made on the "MEASURING INSTRUCTIONS" pages onto the actual measuring form.
- 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. Scan and send documents as PDF, and send pictures as necessary. You will need to refer to your copies if we have questions regarding your measurements.
- When in doubt, give us a call at (731) 345-4500.

DISCOVER THE DOUGHBOY DIFFERENCE

# MEASURING INSTRUCTIONS - STEP-BY-STEP NON-STANDARD OR COMPLEX POOL SHAPES

## OVERVIEW AND EQUIPMENT LIST

Equipment needed includes

- |                                    |                                     |
|------------------------------------|-------------------------------------|
| 1) 100' Tape Measure               | 6) Large Hammer                     |
| 2) Pen                             | 7) Duct or Masking Tape             |
| 3) Paper/Branded AB Measuring Form | 8) Combination Square               |
| 4) Chalk                           | 9) Camera (phone, digital, or film) |
| 5) Two 2' Stakes (Rebar)           |                                     |

### STEP #1: ESTABLISH TWO POINTS FOR POINT A AND B

When preparing to measure for a liner using the AB Method (Point-to-Point), you should first determine the best placement of the "A-B" line. It is recommended that it be on either side of the pool **length** and **parallel** with the **centerline** of the pool. The "A-B" line must be **at least 4' away** from the pool and **2/3 the length** of the pool; 20'-25' is a typical distance. If you are unable to make measurements 4' away from the edge of the pool, it is required to make your A-B points farther apart. To mark "A-B" points on a deck, use chalk; if "A-B" points are in grass or dirt, use stakes hammered into the ground. **RECORD THE MEASUREMENT FROM POINT A TO POINT B ON THE MEASURING FORM.**

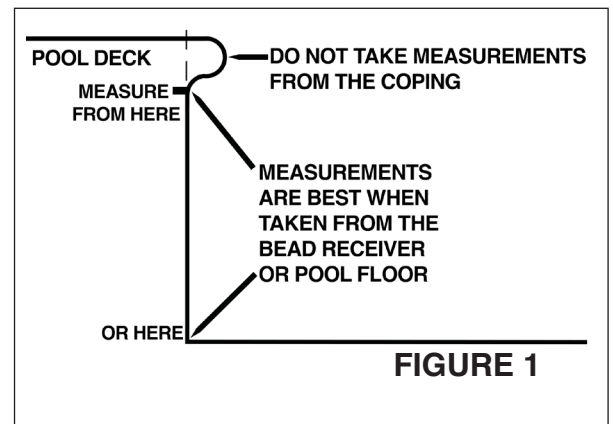
### STEP #2: MARK POINTS AROUND THE POOL

Using chalk or tape, mark and number points around the pool in one-foot increments. Be sure to also mark and number points for deep and shallow breaks, steps, and any other notable features needed to design the liner. Use a minimum of three points on radius corners or walls. If the deck cantilevers the pool wall, mark the deck appropriately to represent the pool wall. A combination square can aid in transferring marks to the coping.

### STEP #3: RECORD MEASUREMENTS FROM POINT A

Now that all the points have been established, record measurements from Point A to #1, then Point A to #2, and continue all the way around the pool. Be sure to **CIRCLE** break points for shallow and deep transitions on the MEASURING FORM. Measurements should be accurate to a quarter-inch.

Correct measurements are made at the bead receiver (where the liner snaps into the track) or at the pool floor, not at the edge of the coping (the edge of the pool deck). See Figure 1.



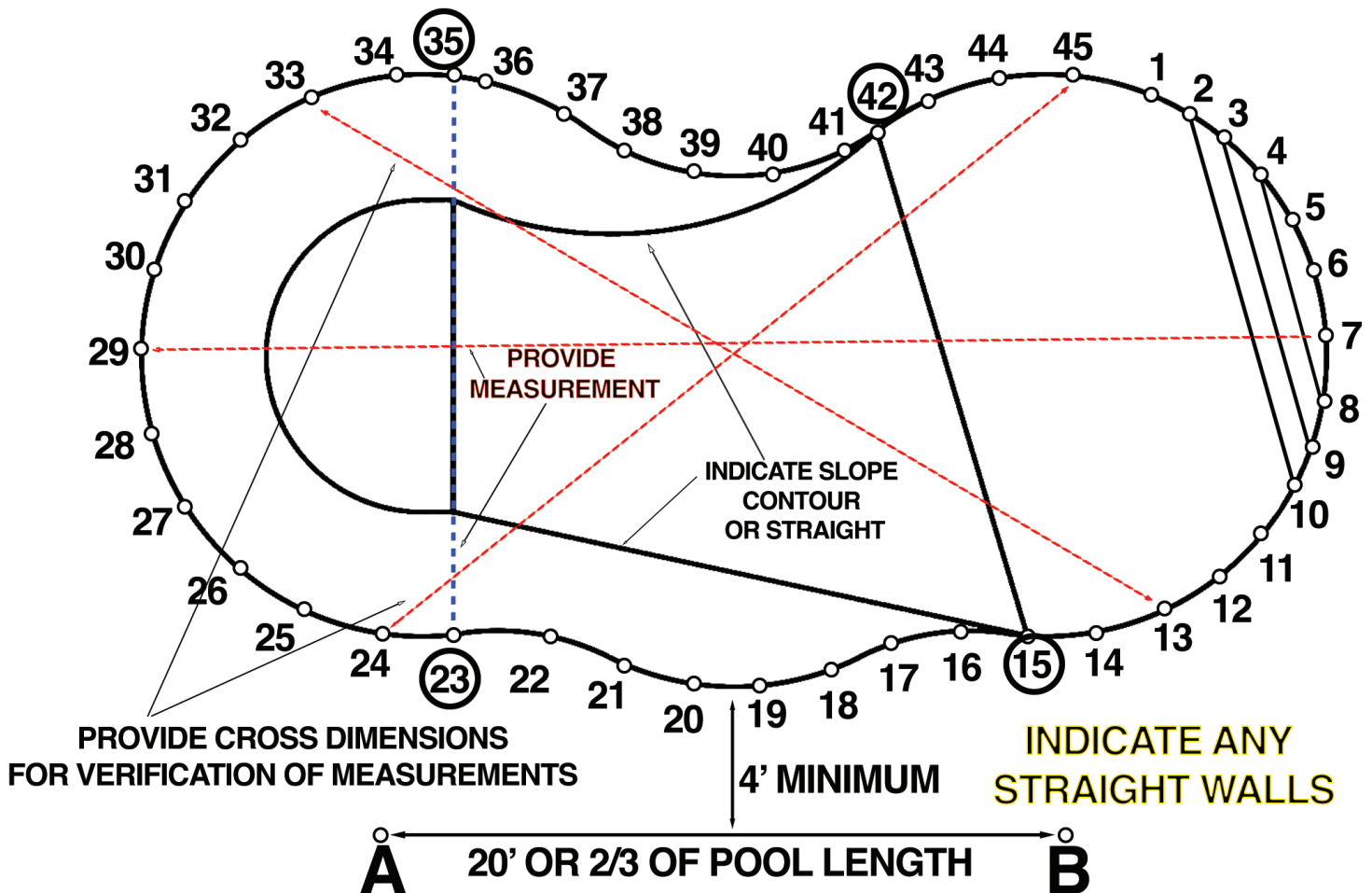
**RECORD MEASUREMENTS ON THE MEASURING FORM.**

## STEP #4: RECORD MEASUREMENTS FROM POINT B

When all measurements from Point A are complete, continue to record measurements from Point B in the same method. Continue all the way around the pool. Be sure to identify break points on the MEASURING FORM by CIRCLING the point numbers.

## STEP #5: DRAW A SKETCH OF THE POOL

Create a freehand sketch of the pool. Include the pool orientation, "A-B" line location, hopper, and steps on the final drawing. Cross dimensions are highly recommended to check the accuracy of the result and aid the CAD department in verifying accuracy.



## STEP #6: TAKE PICTURES OF THE POOL

Photos are often very helpful in identifying features designers can't see in person. They are REQUIRED for unusual bottoms and complex steps, benches, and ledges. Send these pictures in with your order.

# STEP #7: MEASURE THE WALL HEIGHT, DEPTH, AND INTERNALS (HORIZONTALLY AND VERTICALLY)

Choose the bottom contour of your pool from the illustration shown in Figure 5 to determine which measurements you will need to take.

## HOW DO I MEASURE THE BOTTOM OF THE POOL?

You will be able to make horizontal measurements of the pool bottom without entering the pool. Taking these measurements is easier than you may think when you use this easy-to-make measuring tool.

You will need:

- 1) A long, straight pole (telepole, pool pole, or equivalent)
- 2) String attached to the end of the pole
- 3) Some sort of weight tied to the other end of the string, such as a plumb bob
- 4) A measuring tape

Follow the instructions below, using your “fishing pole”, to make these measurements.

### Horizontal Bottom Measurements

Use your “fishing pole” to “fish” for a point on the bottom of the pool. With the pole parallel to the ends of the pool and the string vertical (allow no slack in the string), measure the distance from the edge of the pool (water’s edge) to the desired measurements based on the bottom contour of your pool. For example, to take measurement I or K, you would stand on one side of the pool, and “fish” for a corner of the hopper. You would then measure the distance from the edge of the pool (pool wall) to the end of the pole where the string is attached.

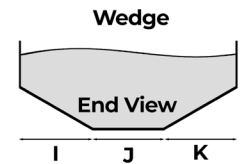
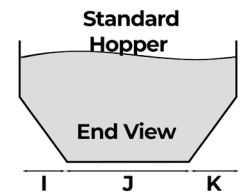
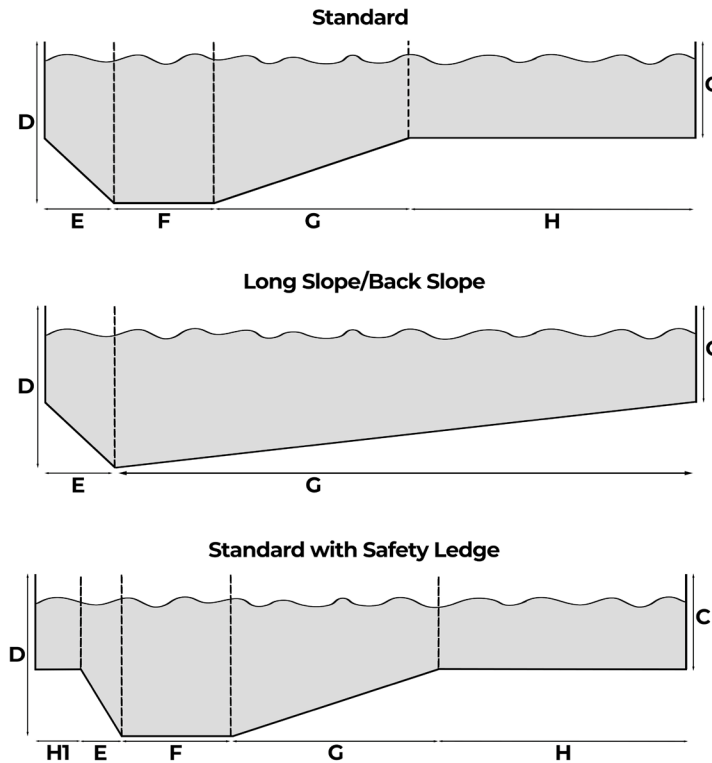
### Depth Measurements

When taking the depth measurements (C and D), 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.

Be sure you are NOT measuring a slope when taking horizontal bottom measurements. We only use measurements parallel to the deck.

## RECORD MEASUREMENTS ON THE MEASURING FORM.

**DOUBLE CHECK YOUR MATH TO ENSURE THE LENGTHS EQUAL MEASUREMENT B AND THE END VIEW MEASUREMENTS EQUAL A. IF THEY DO NOT, THE POOL AND/OR THE LINER WILL BE OUT OF SQUARE.**



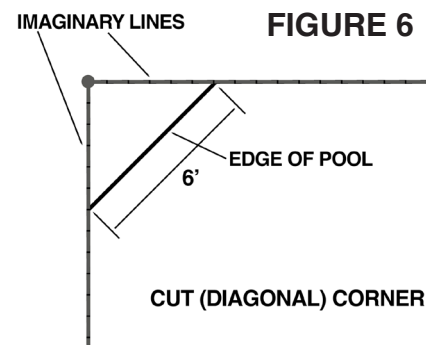
Record the measurements is as if you are in the shallow end looking at the deep end.

**FIGURE 5**

## STEP #8: MEASURE THE CORNERS (if applicable)

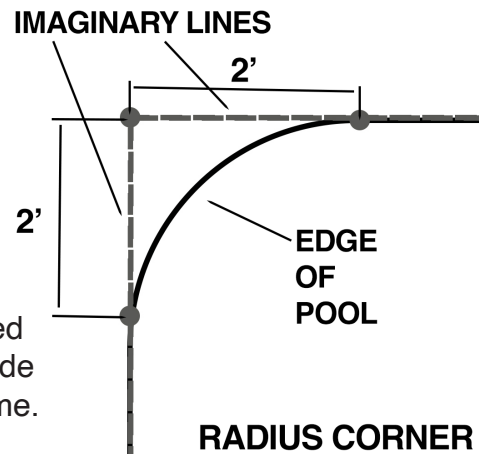
Corner measurements/indicators must be specified on the MEASURING FORM.

- Square corners do not require additional measurement.
- Cut (diagonal) corners must be measured. Refer to Figure 6.
- Radius corners must be squared. Use two straight edges to form an imaginary square corner, and mark where the edges meet as Point 1. Measure the imaginary corner (Point 1) to Point 2. Refer to the illustration in Figure 7.



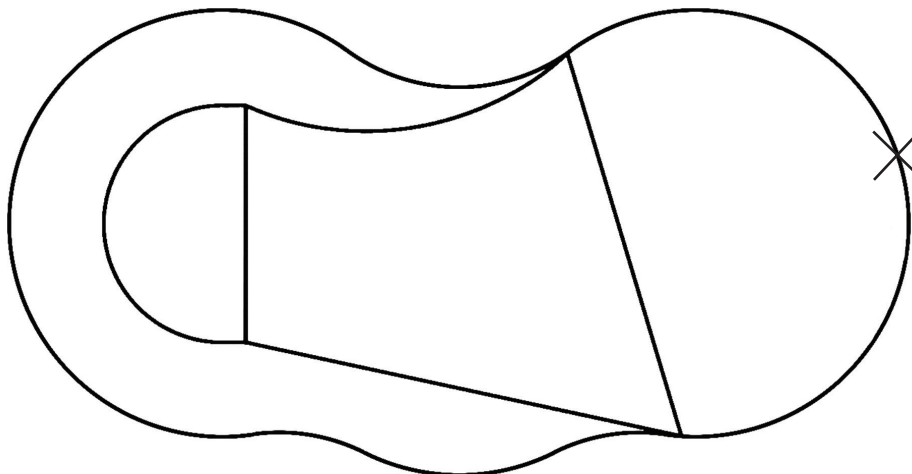
## STEP #9: MEASURE ANY FEATURES THAT WILL BE COVERED IN VINYL, INCLUDING STEPS, BENCHES, AND LEDGES.

If your pool has built-in steps, benches, or ledges that are covered with vinyl, you must complete the separate Measuring Form for Liner-Covered Features. Be sure to read our separate In-Ground Steps Measuring Guide for more details. Don't assume that all Risers and Treads will be the same. If you find variations, record all of them, or average them to the best of your ability. Always refer to our CAD department for help. Sending pictures with your measurements will help us see what you measure. If your pool has no liner-covered features, move to Step #10.



## STEP #10: INDICATE WALL SEAM PLACEMENT

By default, the wall seam placement is in the center of the shallow end. However, if the pool has steps in a different location, the wall seam can be placed in the center of the step. Indicate on the MEASURING FORM where the seam should be located if other than the center shallow end.



**RECORD MEASUREMENTS ON THE MEASURING FORM.**





# MEASURING FORM FREE FORM, LAZY L, ETC.

**COMPANY NAME:** \_\_\_\_\_

**EMAIL:** \_\_\_\_\_ **PHONE:** \_\_\_\_\_

**CUSTOMER/JOB NAME:** \_\_\_\_\_

**POOL LOCATION ADDRESS:** \_\_\_\_\_

**PATTERN:** \_\_\_\_\_ **BEAD TYPE:** \_\_\_\_\_

Point	Distance to A		Distance to B		Steps				Overall Dimensions	
	ft	in	ft	in	POINT		TO	POINT		
76					DISTANCE			RISER		A) Full Width
77					POINT		TO	POINT		B) Full Length
78					DISTANCE			RISER		C) Wall Height
79					POINT		TO	POINT		D) Depth
80					DISTANCE			RISER		E) Back Slope
81					POINT		TO	POINT		F) Hopper Length
82					DISTANCE			RISER		G) Slope Length
83										H) Shallow Length
84										I) Left Side Slope
85					POINT		TO	POINT		J) Hopper Width
86					DISTANCE			RISER		K) Right Side Slope
87					POINT		TO	POINT		
88					DISTANCE			RISER		
89					POINT		TO	POINT		
90					DISTANCE			RISER		
91					POINT		TO	POINT		
92					DISTANCE			RISER		
93										
94										
95					POINT		TO	POINT		
96					DISTANCE			RISER		
97					POINT		TO	POINT		
98					DISTANCE			RISER		
99					POINT		TO	POINT		
100					DISTANCE			RISER		

More Liner-Covered Features			
POINT		TO	POINT
DISTANCE			RISER
POINT		TO	POINT
DISTANCE			RISER
POINT		TO	POINT
DISTANCE			RISER
POINT		TO	POINT
DISTANCE			RISER
POINT		TO	POINT
DISTANCE			RISER

Slope Description	

CROSS DIMENSIONS	
POINT	
DISTANCE	
POINT	
DISTANCE	
POINT	
DISTANCE	

CORNER TYPE <small>(when applicable)</small>	
<input type="checkbox"/> Square (90°)	
<input type="checkbox"/> Cut (Diagonal) Size: _____	
<input type="checkbox"/> Radius (Rounded) Size: _____	

Pool Perimeter

If additional points are necessary, please see [doughboylvinyl.com](http://doughboylvinyl.com) for more sheets.

**MEASURER NAME:** \_\_\_\_\_

**CONTACT PHONE:** \_\_\_\_\_



# MEASURING FORM FREE FORM, LAZY L, ETC.

COMPANY NAME: \_\_\_\_\_

EMAIL: \_\_\_\_\_ PHONE: \_\_\_\_\_

CUSTOMER/JOB NAME: \_\_\_\_\_

POOL LOCATION ADDRESS: \_\_\_\_\_

PATTERN: \_\_\_\_\_ BEAD TYPE: \_\_\_\_\_

Illustrate the pool layout and AB line using the graph below. Be sure to include cross dimensions, slope information, tread lengths, tread widths, risers, locations, etc. below.

