

Name _____
Address _____
City _____ St. _____ Zip _____
Phone (Home) _____
Phone (Work) _____

AUTOMATIC POOL COVER SYSTEM MEASURING FORM

Dear Pool Owner,

The purchase of an automatic pool cover system is a long-term investment, not only in your pool, but, more importantly, in the safety of your family. Each system is manufactured to meet the exact specifications of your pool and its surrounding deck. It is important that you fill out this form completely and accurately to ensure the system fits your pool properly. We ask that you take a few minutes to look over the following instructions carefully before starting.

Mail or fax us the completed form. We will then provide you with a free price quote based on your information. Once ordered, the system will be manufactured to your specifications and delivered to your home within approximately two or three weeks.

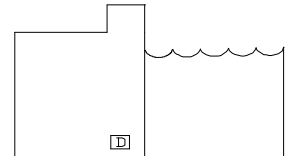
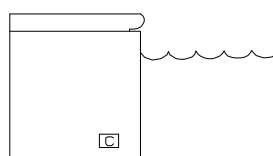
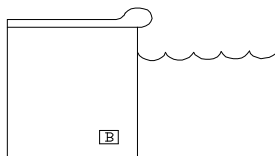
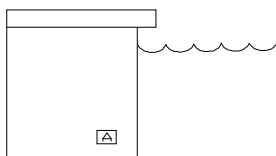
Thank you,

Pool Cover Specialists National, Inc.

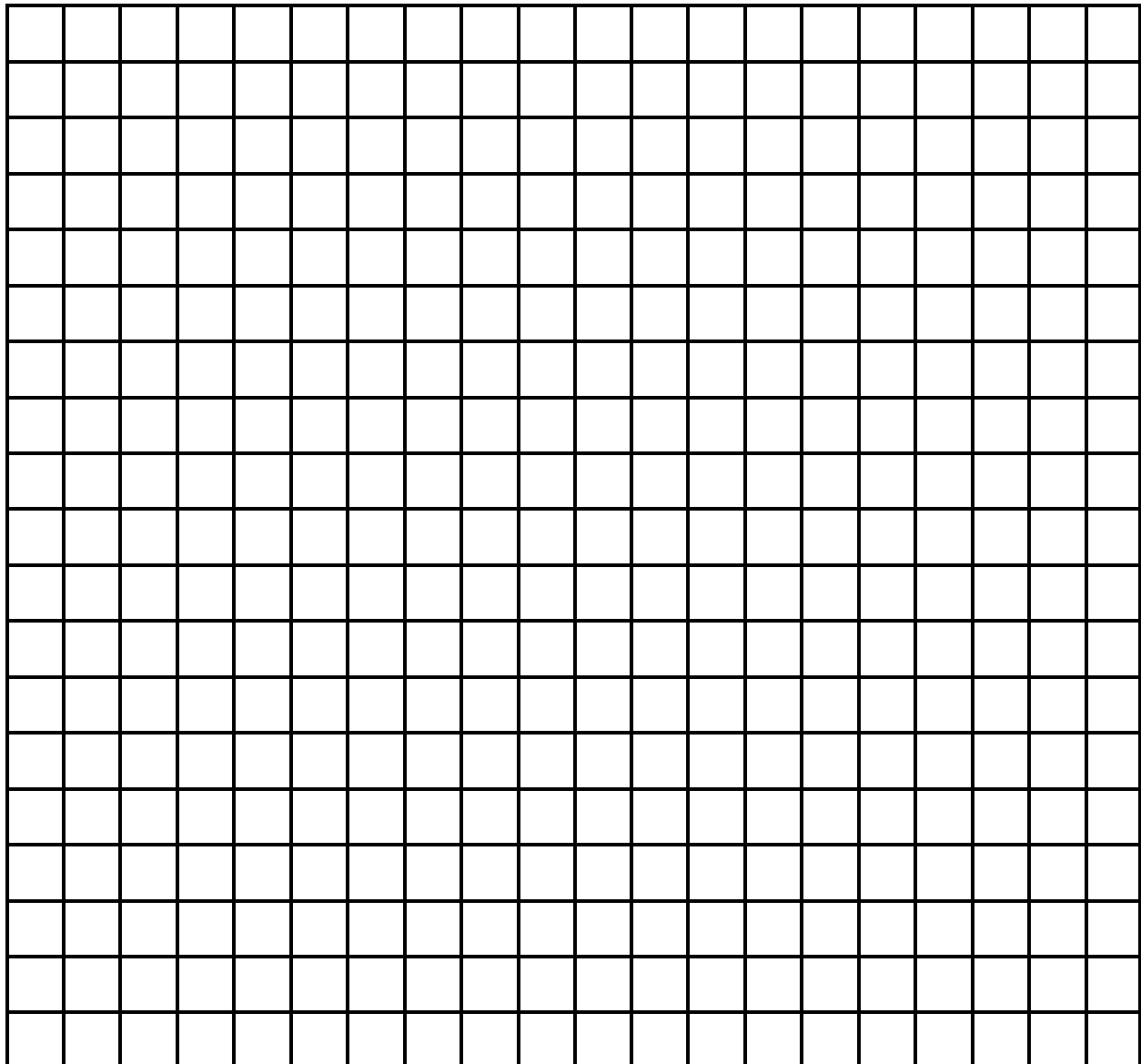
PLEASE READ EACH OF THE FOLLOWING INSTRUCTIONS CAREFULLY AND FILL OUT THIS FORM COMPLETELY.

STEP #1. Obtain the following equipment to get started: (1) A chalk line, (2) A 50' (or longer) measuring tape, (c) a permanent marker, (d) a pocket calculator (with a square root function).

STEP #2. Examine your coping and determine which type below best represents it. Circle the appropriate drawing and fill in the diagram letter here _____.

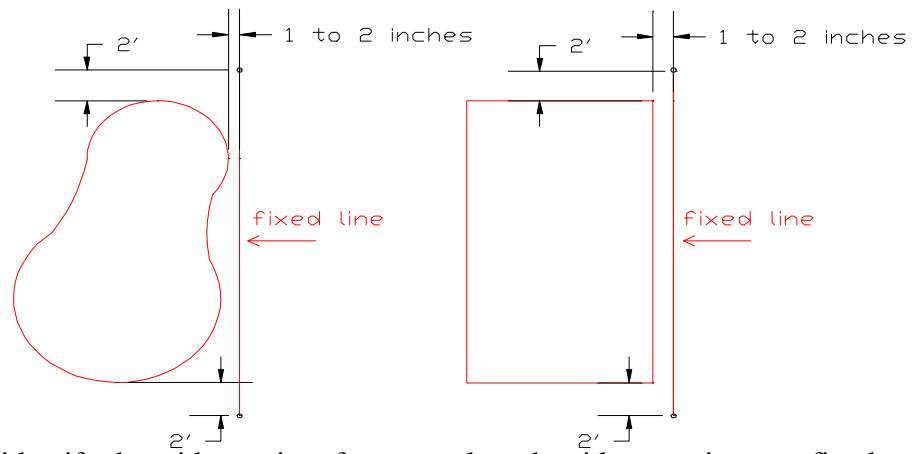


STEP #3. Draw an accurate sketch of your pool and deck on the graph below, indicating the inside pool dimensions (coping to coping). Include overall pool width and pool length as well as pool deck dimensions on the drawing.

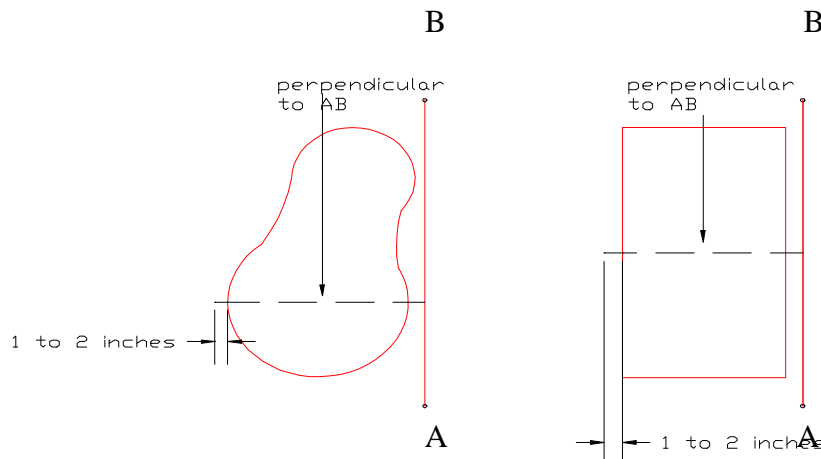


Now that you have sketched your pool, the next step will be to determine the anticipated position of the “tracks” on each side of your pool. Regardless of whether your pool is rectangular or free-form, the tracks must run parallel to each other and be “square” to the roller-mechanism. Simulating the actual track positioning (by snapping chalk lines) in advance of placing an order is an essential step in determining the following information: (a) feasibility of track installation (without deck modification) and (b) accuracy of sizing (so that the cover system can be priced and manufactured to exact specifications). The process of creating a “true rectangle” around your pool should take you and an assistant approximately thirty minutes. You will need the following tools: a chalk line, a 50' (or longer) measuring tape, a permanent marker pen, and a portable calculator (with a square root function). The good news is that once you have formed the chalked rectangle around your pool, when your pool cover system arrives, the most technical part of the entire installation process, determining track positioning, will have already taken place, speeding up the installation considerably.

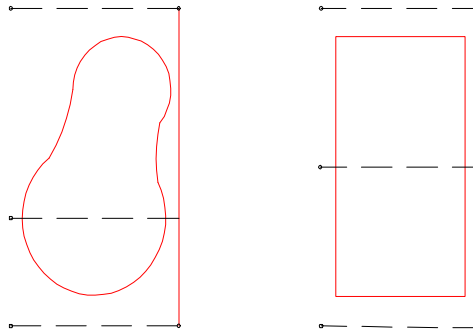
STEP #4. The first step in forming a chalked rectangle of your pool is to designate one side of the pool as a “fixed-line side” (See drawings below). The “rule of thumb” for track positioning is to place the track on each side of the pool with a set back of around 1" to 2" from the pool edge at the widest point of the pool; however, the track must be anchored to a flat surface on the coping or deck; consequently, if you identified coping “B,” “C,” or “D” in STEP #2 (“raised” or “rounded” copings), you will need to “snap” your chalk line (simulating track positioning) away from the coping edge far enough to eliminate coping interference and permit the 2 ½" wide track to anchor to a flat surface. With your assistant holding one end of your chalk line, “snap” a line down the side of your pool designated to be the “fixed-line side” from widest point to widest point as shown below. Remember, the line will be set back an inch or so from the pool edge (unless a farther setback is deemed necessary to avoid interference from a raised coping or rounded coping-edge (See STEP #2). In anticipation of “snapping” the line, position yourself and your assistant far enough back from each end of the pool so that the line you snap will extend beyond both ends of the pool for a distance of at least two feet as shown below.



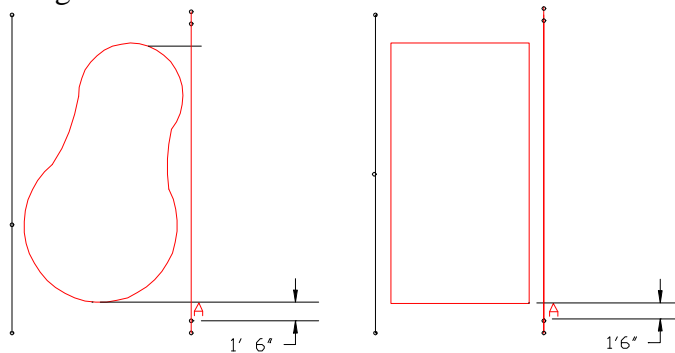
STEP #5. Now identify the widest point of your pool on the side opposite your fixed line. Measure the distance across the pool from your fixed chalk-line to this widest point as shown below. NOTE: When extending your measuring tape across the pool, remember to continue beyond the actual pool edge for an inch or two just as you did on the fixed-line side—and if necessary, extend the tape an inch or two even farther out from pool edge to avoid conflict with a “raised” segment or “rounded” edge of the coping. Also, try to extend the tape across your pool in a manner that is perpendicular to the chalked line. **WIDEST-POINT MEASUREMENT:** _____ ft. _____ in.



STEP #6. In STEP #5, you established an anticipated “track width” dimension, which will be used to manufacture and, later, to install the cover system. Measure across your pool at both ends and in the middle, marking this exact track-width dimension clearly on your deck in all three places as shown below.



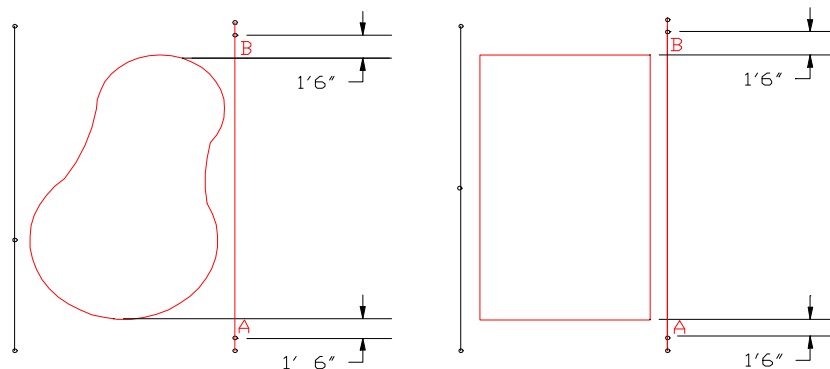
STEP #7. Carefully, snap a chalk line along the three marks established in STEP #6 as shown below, creating a line parallel to your original chalk line. NOTES: (1) If your marks were accurate, the chalked line should contact all three marks—if it doesn’t, correct your error and re-chalk the line. (2) Don’t forget to extend your chalked line a couple feet past each end of the pool as you did with the original chalked line.



MECHANISM END OF POOL

STEP #8. Determine at which end of the pool the mechanism will be placed. At the the “mechanism end,” establish a clear mark on one of the two parallel chalked lines approximately 1 ½' out from the pool edge as shown above and identified as point “A.”

STEP #9. On the same chalked line on which you established 1' 6" mark at the mechanism end of the pool, establish a second mark 1' 6" out from the opposite pool end as shown below. At the conclusion of this step, you should have two clear marks on the same chalked line, each mark 1' 6" beyond the end of the pool.



STEP #10. In STEP #9, when you established points A & B, each mark 1' 6" beyond the pool end, you created an anticipated "Track Length," which will be used, first, to manufacture the cover and, later, to install the track during the installation. With your assistant holding the end of your 50' measuring tape precisely at point A, extend the tape to point B, noting the exact distance between A and B. Since the track length is likely to include both feet and inches, it will be necessary to convert feet to inches (unless your tape measures incremental inches). If your tape measures incremental feet, then you must convert feet to inches. This is accomplished by (a) using your calculator to multiply the number of feet by 12 and then (b) adding any inches that remain. For example, if your A to B measurement were 18 feet and 3 inches, you would (a) multiply 18 by 12, which would convert 18 feet to 216 inches and then (b) add the remaining 3 inches, resulting in a total of 219 inches. **YOUR ACTUAL TRACK LENGTH (DISTANCE BETWEEN A & B) CONVERTED TO INCHES: _____.**

STEP #11. Now that you have identified the Track Length, identify the Track Space by measuring the exact distance between the two parallel lines. Just as you did in STEP #10, it will be necessary to use your calculator to convert feet to inches if your tape does not provide you with incremental inches. **ACTUAL TRACK SPACE (DISTANCE BETWEEN THE TWO PARALLEL LINES) CONVERTED TO INCHES: _____.**

STEP #12. Locate your calculator again. You will be performing a couple of basic multiplication functions, using your calculator. Don't worry. You don't have to be a mathematician to perform these calculations. And don't be intimidated by the following equation: $A^2 + B^2 = C^2$. "A" represents the **Track Space** (calculated in STEP # 11). "B" represents the **Track Length** (calculated in STEP #10). Let's practice working with the equation for a minute: If your Track Space were 240 inches, then "A²" would be determined by using your calculator to multiply 240 x 240, which would yield a product of 57600. If your Track Length were 480 inches, then "B²" would be determined by using your calculator to multiply 480 x 480, which would yield a product of 230400. Now, look one more time at the equation $A^2 + B^2 = C^2$. In order to determine the value of C², you would find the sum of A² + B². In our example, C² would be 288000 (or 57600 + 230400). What you are ultimately looking for is a value of C, a number which, when used in a later step, will help you form a true rectangle around your pool. Ok. Let's use the real numbers this time.

a. Using your calculator, multiply the Actual Track Space you determined in STEP #11 by itself. In other words, find the value of A². **A² (in inches) = _____.**

b. Using your calculator, multiply the Track Length you determined in STEP #10 by itself. In other words, find the value of B². **B² (in inches) = _____.**

c. Add the two numbers you derived from steps a. and b. above. In other words, find the sum of A² + B², which will yield the value of C². **C² = _____.**

d. The next step is to convert C² to C, or, stated another way, you need to calculate the square root of C². This is a "one-button" operation on your calculator. Locate the square root symbol on the face of your calculator ($\sqrt{\quad}$). Punch in the value of C² and then depress the square root key. That's it! You now converted C² to C (i.e., using the "practice" numbers from STEP #12, C² was 288000. The square root of 288000 or "C", calculated by keying 288000 into your calculator and then punching the square root key, is 536.65) **THE ACTUAL VALUE FOR "C" (SQUARE ROOT OF C²) IS: _____.**

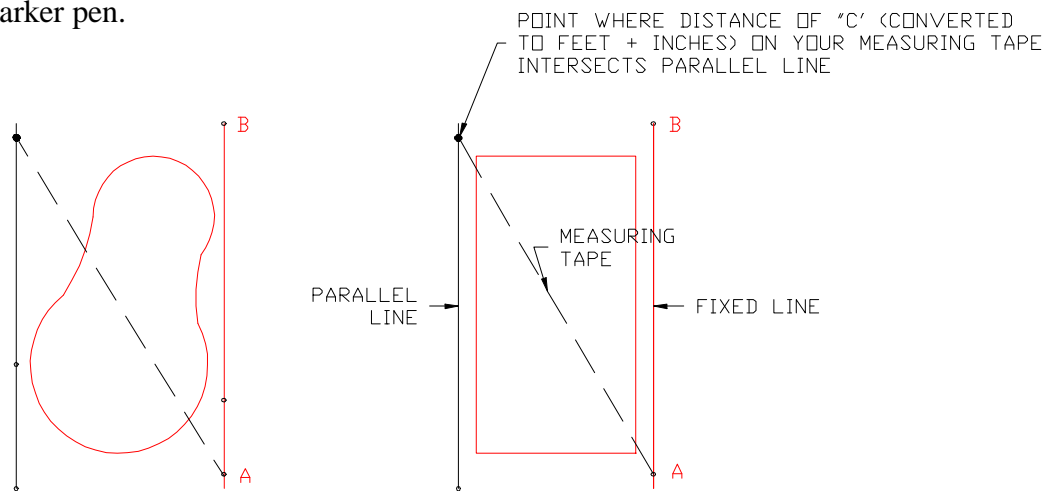
e. One more operation and you'll be finished with your calculator!! Take the value for "C" which you calculated above in step d. and, using your calculator, divide the number by 12, which will convert inches back into feet. Your answer will most likely contain a decimal. This

decimal now must be converted to inches. Use the chart below to convert the decimal to inches. For instance, using our “practice value” for “C,” 536.65, you would divide that number by 12 to convert inches back to feet: 44.72 feet. Now, look at the chart below and convert .72 feet into inches. The answer: 44 feet 8 ½ inches. Using your real value of “C” (calculated in step d..) convert inches back to feet. **“C” (in feet):** _____.

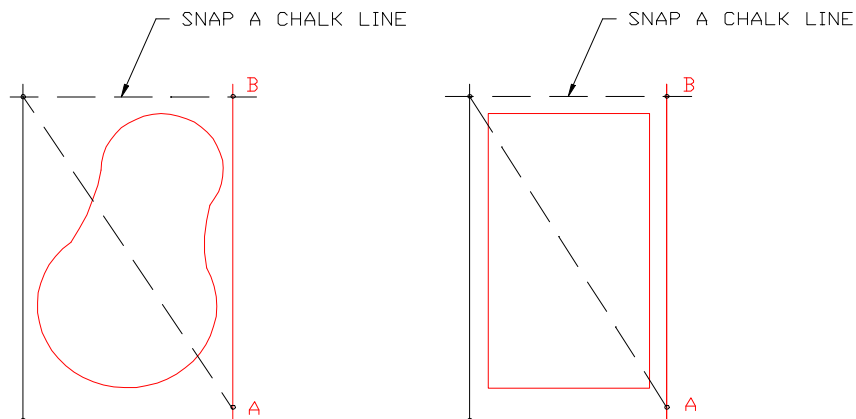
DECIMAL CONVERSIONS TO INCHES

½" =.04	2 ½" =.21	4 ½" =.38	6 ½" =.54	8 ½" =.71	10 ½" = .88
1" =.08	3" =.25	5" =.42	7" =.58	9" =.75	11" =.92
1 ½" =.13	3 ½" =.29	5 ½" =.46	7 ½" =.63	9 ½" =.79	11 ½" =.96
2" =.17	4" =.33	6" =.50	8" =.67	10" =.83	

STEP #13. You’re almost finished! And you are through with the calculator!! Locate your measuring tape. Make note of your value for “C”, which you calculated in STEP #12. Instruct your assistant to hold the end of the measuring tape on point A. Extend the tape diagonally across the pool to the precise point where your tape intersects the chalked line on the opposite side at the distance of “C” as shown below. Make a clear mark on the deck at that exact point with your marker pen.

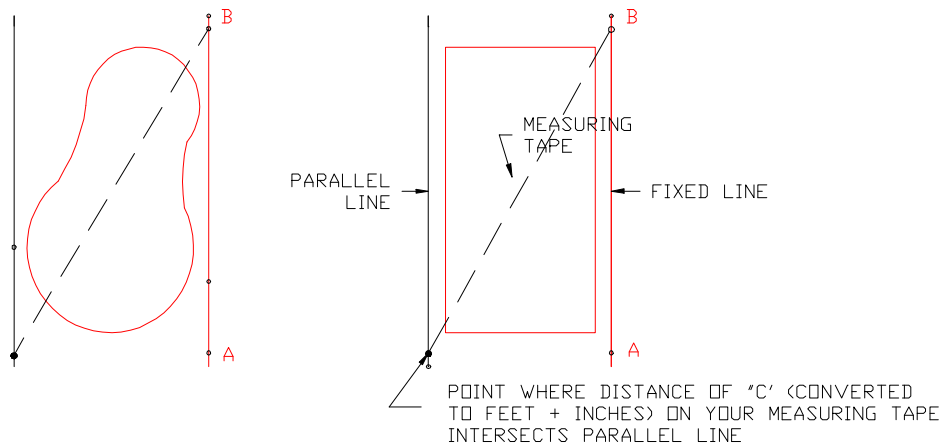


STEP #14. Locate your chalk line. With your assistant holding one end of the chalk line, snap a line from the point you just established in STEP #13 across the pool deck to Point B as shown below. At the completion of this step, you will have formed the third side of your perimeter rectangle.

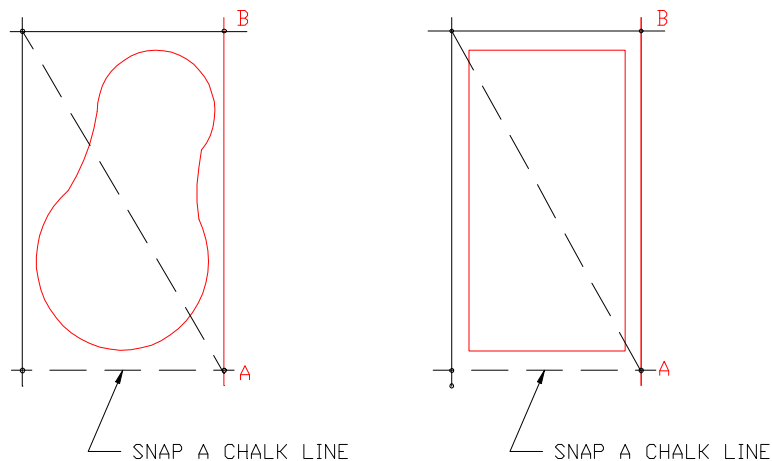


STEP #15. Instruct your assistant to hold the end of the measuring tape on Point B. Extend

the tape diagonally across the pool to the precise point on your tape where your tape intersects the chalked line on the opposite side at the distance of “C” as shown below. Make a clear mark on the deck at that exact point with your marker pen.

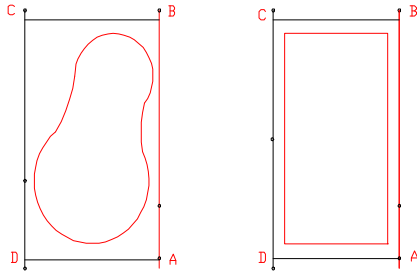


STEP #16. Locate your chalk line. With your assistant holding one end of your chalk line, snap a line from the point you established in STEP #15 across the pool deck to Point A as shown below. At the completion of this step, you will have formed the fourth side of your perimeter rectangle.



STEP #17. Test the true-ness of your rectangle one final time by re-checking the diagonal measurements, A to C and B to D (Refer to the diagram in STEP #18). If the adjacent sides of your chalked-out rectangle form “right angles,” then the two diagonal measurements will be identical ($AC = BD$). If your actual diagonal measurements confirm that $AC = BD$, then use your permanent marker to clearly indicate the four corners of your rectangle in anticipation of the installation of your cover system. (Your chalk lines will fade or wash away, but your four permanent-marker corner points will remain visible on your deck, pending your installation.)
NOTE: If your diagonal measurements differ from each other more than one inch, either your length/width measurements or your “right angles” are untrue. First, check your width measurements by confirming the following equation: $AD = BC$. If your measurements support this equation, then check your length measurements by confirming the following equation: $AB = CD$. If your measurements support this equation, then repeat STEPS #13 through #16 to make certain you created a “true” right angle. When the corrections have been made, check your diagonals one more time. If you were careful, they should now be within an inch of each other. If you are having trouble creating a true rectangle around your pool, contact our Customer Support Line for assistance: 1-800-369-5152.

STEP #18 Now that your “chalked rectangle” has been completed, add the rectangle to your pool sketch in **STEP #3**, including the width and length dimensions of the rectangle surrounding the perimeter of your pool. Use the diagram below to help you fill in the three blanks underneath the diagram.

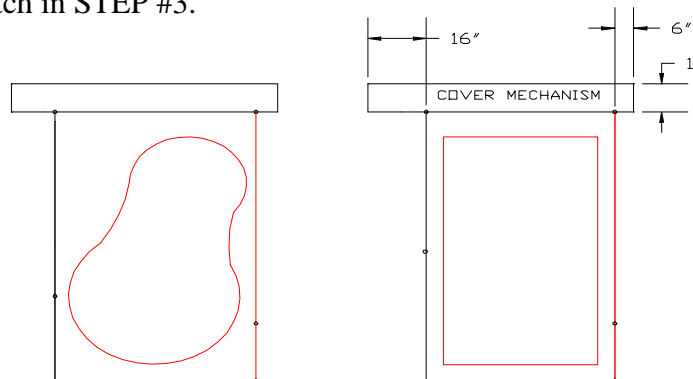


YOUR AB MEASUREMENT (track length) = _____
 YOUR AD MEASUREMENT (track width) = _____
 YOUR AC MEASUREMENT (diagonal) = _____

STEP #19. List and describe any obstructions that appear inside the chalked rectangle around your pool (i.e., skimmer, pool ladder, slide, fill spout, diving board, etc.) Also, show the position of any obstacles listed below in your pool sketch from **STEP #3**):

1. _____
2. _____
3. _____
4. _____

STEP #20. Identify the “Mechanism End” of your pool. Examine the drawing below. Notice the long box placed at one end of the chalked rectangle and identified as “Cover Mechanism.” The “motor side” of the mechanism requires a sixteen-inch (16”) extension beyond the track. The “non-motor side” requires a six-inch (6”) extension beyond the track. In addition, the width requirement for the mechanism is one foot (1’). It is not necessary, during this “measuring phase,” to chalk out the position of the mechanism on your deck; however, you must note any obstructions on your deck that may interfere with placement of the mechanism. Examine your pool. List and describe any obstructions that appear within the area required for the mechanism. **NOTE:** The motor side of the mechanism is non-specific; therefore, the sixteen-inch extension for the motor side may appear on either side of your pool. Show the position of any obstructions identified below on your pool sketch in **STEP #3**.



1. _____
2. _____
3. _____

STEP #21. A four-to-six inch (4" to 6") area is required outside the two long sides of your chalked out rectangle which simulate track positioning. This is the area where the wheel assemblies will roll down the sides of your pool during cover operation. Examine the chalked rectangle around your pool. List and describe any obstructions within four-to-six inches (4" to 6") outside the two lines reflecting track positioning. Show the position of any obstructions listed below on your pool sketch from STEP #3.

1. _____
2. _____
3. _____
4. _____

STEP #22. Please answer each of the following questions accurately.

1. Do you have a concrete deck? YES _____ NO _____
(If NO, please specify the type of deck (i.e., brick, wood, synthetic stone, etc.) _____)
2. If a diving board exists, is the elevation of the bottom of the board a minimum of thirteen inches from the deck? YES _____ NO _____
(If NO, what is the height from the deck? _____)
3. Is your deck in good condition with little cracking or settling? YES _____ NO _____
4. Are there varying deck levels? YES _____ NO _____
5. Is there anything unusual about the construction of your pool or its surrounding deck that is not indicated in your drawing or in the answers to any of the previous questions?
YES _____ NO _____
(If YES, please explain or send a photo.)

STEP #23. Congratulations! You have completed the Measuring Form and established the installation lay-out around your pool, the most technical task of the entire installation. Shake your assistant's hand and mail (or fax) this form to the following address:

Pool Cover Specialists National, Inc.
8553 South 2940 West
West Jordan, UT 84088
Phone: 1-800-369-5152
Fax: 1-801-568-6955
Web Addresses: www.poolcovers.com
www.powertrakcovers.com