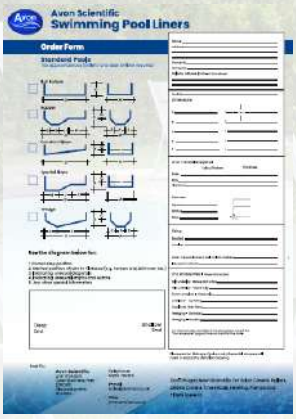
Avon Scientific
Measuring the Pool

Pool Measuring

Apart from free form and kidney shaped pools, all pools can be measured by referring to the Avon Scientific order form. As well as providing essential information for us and the manufacturer, it is invaluable as a checklist for whoever is measuring the pool. Copies of the order forms are available from Avon Scientific upon request, photocopies can be used or downloaded from our website - **www.avonsci.co.uk**



It is easy to arrive on site without a vital piece of measuring equipment so a checklist of essential equipment is a good idea. Such a list would include: tape measure, pencil, paper, chalk and/or wax crayon, long spirit level, stringline and plumbline. It is sometimes possible to measure a pool while it is still full of water. However, Avon Scientific always recommends that the pool is drained and the old liner removed. Measuring a pool is easier with two people, but it is quite possible for one person to carry out the operation. There are various ways of fixing the tape measure in place, one method is by using cable clips. The following sequence is recommended for all rectangular pools.

Rectangular Pool

1. All measurements unless otherwise specified must be horizontal or vertical, not sloping.

2. Measure the length of the pool along each side.
Where corners are rounded or mitred, measure to the theoretical square corner i.e. where the side and end wall lines would intersect. Make sure that the length is the same at the top and bottom of the wall (either by measuring or using a spirit level).

3. Measure the width of the pool as (2) above.

4. Check the diagonals as (2) above (corner to corner).

5. Mark out the “changeover” points using chalk or wax crayon. It may be beneficial to extend these up the sidewall using spirit level or plumbline.

6. When measuring a hopper base do not assume that it is square or indeed central in the pool.

7. Measure sidewall depths at several points from the
pool floor up to the mouth of the linerlock (or top of wall if overlap).

8. Measure the maximum depth by pulling a stringline taught across the pool and draping the tape measure over it. Take care not to allow the string to sag and remember to deduct the coping to linerlock dimension. Alternatively use the method outlined in number 12 on the next page.

9. When completing the order form make sure that all the dimensions tally, e.g. G+H+J+K must equal B (the total length).
If there is a discrepancy, it must be resolved before the order can be processed.

10. Does the pool have radius corners? If so, what radius? Or are the corners square or mitred?

11. Is there a base to sidewall radius or cove? If so what radius?

12. Do the sidewalls lean out (or in)? If so, by how much?

13. Is the liner to be fixed by beading into linerlock or by overlap?

14. Use the order form as a checking mechanism to ensure that no details (dimensions, fixing, colour and thickness of material, corner profiles etc.) are omitted.

15. Be consistent and clear with measurements, i.e. do not mix metric and imperial measurements, do not provide some measurements in feet and inches (3’4”) and some other in whole inches 34”.

16. Do all the above before leaving site.
For instructions for measuring 'Kidney' or other complex shaped pools please see next pages

Avon Scientific
Unit 101 Aston
Down Business Park
STROUD
Gloucestershire
GL6 8GA

Telephone:
01285 760199

E-mail:
sales@avonsci.co.uk

Web:
www.avonsci.co.uk

Don't Forget Avon Scientific For Solar Covers, Rollers, Debris Covers, Chemicals, Heating, Pumps and Filters System!

Avon Scientific
Measuring the Pool

Kidney Pool Measuring

The following method requires the pool to be empty with the old liner (if applicable) taken out. You would then need to get into the pool to perform the measuring.

Plotting the perimeter

1. Pick two points at random, at opposite ends of the pool. Call one A and the other B. Mark these points with chalk or wax crayon. Measure and record the distance in a straight line between A and B.

2. Divide the pool perimeter at approximately 2' intervals. The intervals are not important and don't need to be consistent. Around tighter curves the points need to be closer together than around longer curves.
Mark these points with chalk or wax crayon and number them.

3. Measure in horizontal straight lines from A to each of the points around the perimeter. Note all measurements A1, A2, A3 etc.

4. Measure in horizontal straight lines from B to each of the points around the perimeter. Note all measurements B1, B2, B3 etc.

5. Some points may not be accessible from one side of the reference points. For example, in the diagram shown, some points may not be accessible from B these could be measured from a third reference point such as V.
In which case note all measurement V11, V12, V13 etc.

6. You will now have two or three columns of measurements from which a scale drawing of the pool perimeter can be drawn.

Internal dimensions

7. Locate points X and Y (the ends of the shallow end break-over line) on the perimeter – as defined by measurements from A & B. It is usually easiest to incorporate these points into your original numbered points (see 2 above). In the example shown in figure 4 you would make X the same as point 4 and Y the same as point 17. See figure 4.

8. Locate points W and Z and by extending the straight line that joins them, establish points U & V on the perimeter. As with points X & Y above, it is best to incorporate these points onto your original numbered points (see 2 above). In the example shown in figure 4 you would make U the same as point 14 and V the same as point 7. Stand with your line of sight vertically above point U and look across the pool through points Z & W to V. Make sure they all line up in a continuous straight line (the dotted line on the drawing). Do the same exercise looking across from point V. See figure 4.

9. Measure to U & V from points A & B.

10. Using a pole and a spirit level, measure the horizontal distance W to V – see figure 5. Using the same method measure from Z to U. In the same way, at various points around the deep end measure the horizontal distance from the curve R to the perimeter (e.g. using figure 6, at points 8, 9, 10, B etc round to U) – use as many or as few as necessary. If you're lucky these horizontal measurements will be the same indicating that the hopper radius and the deep end perimeter radius are concentric. If they are not equal then you will have provided enough measurements to construct a scale drawing.

11. Check sidewall depth at several places.

12. Check deep end depth in the normal way. Use the method outlined above (see 10 and figure 5) in reverse, i.e. have the spirit level horizontal and the measuring pole measuring the drop from the bottom of the side wall to the pool floor (or if easily done, measure the total depth from the linerlock to the floor in this way.)

Double checking

13. Take three double check measurements at random e.g.: 20-4, 13-5 etc.

14. Take care, if sidewalls lean out or in, to take measurements from the top and bottom of side panels.

Post To:

Avon Scientific
Unit 101 Aston
Down Business Park
STROUD
Gloucestershire
GL6 8GA

Telephone:
01285 760199

E-mail:
sales@avonsci.co.uk

Web:
www.avonsci.co.uk

Don't Forget Avon Scientific For Solar Covers, Rollers, Debris Covers, Chemicals, Heating, Pumps and Filters System!

Avon Scientific
Measuring the Pool

Kidney Pool Measuring

Fig. 1

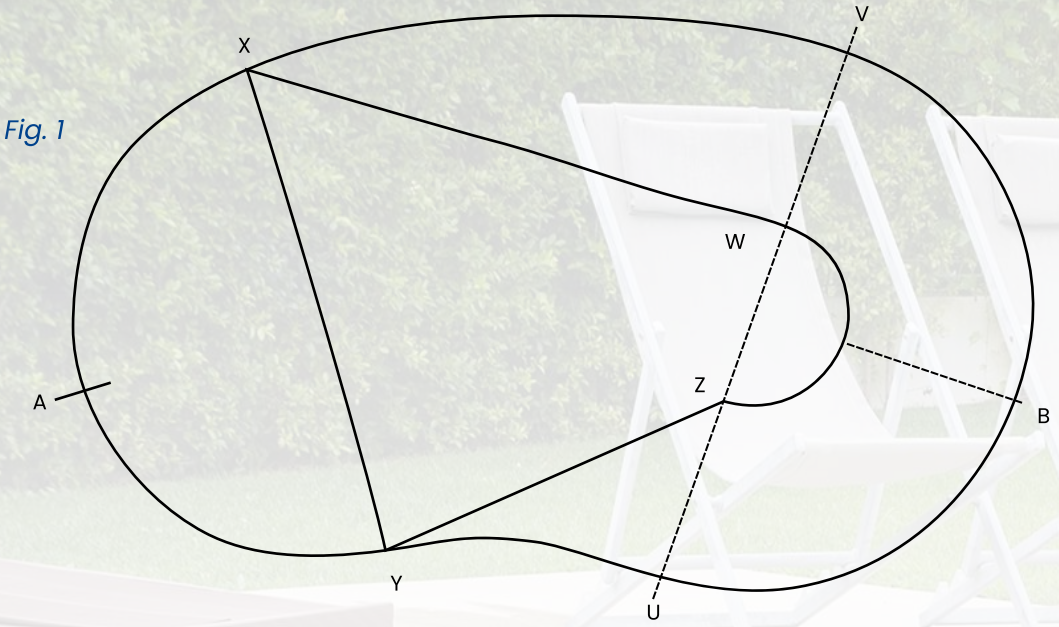
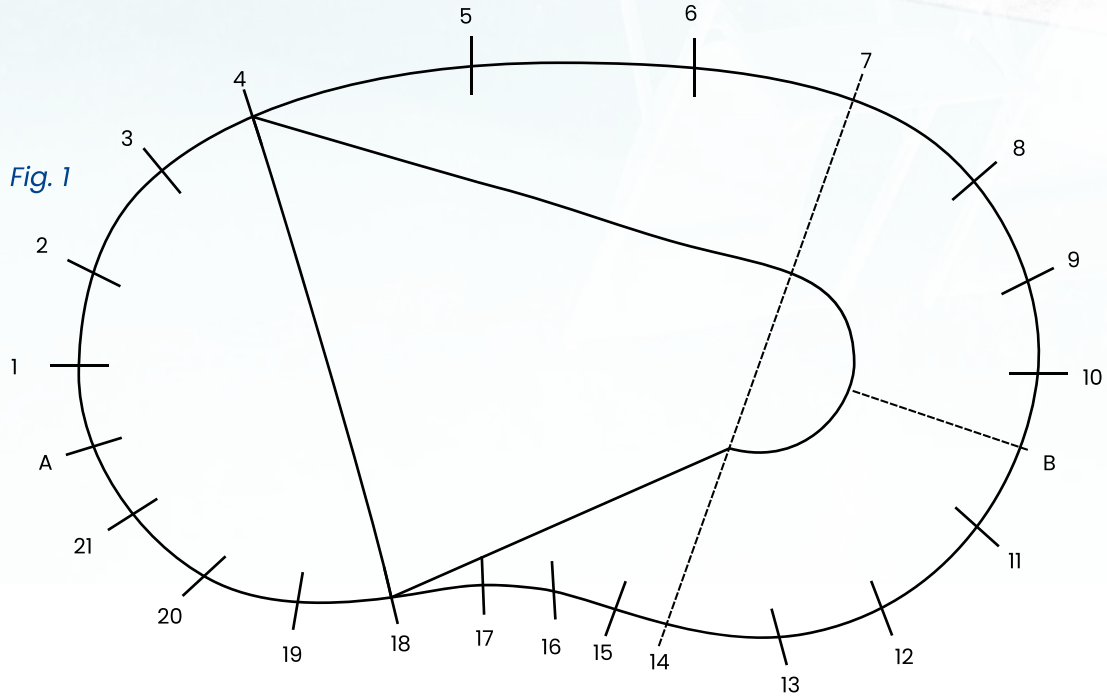


Fig. 1



Post To:

Avon Scientific
Unit 101 Aston
Down Business Park
STROUD
Gloucestershire
GL6 8GA

Telephone:
01285 760199

E-mail:
sales@avonsci.co.uk

Web:
www.avonsci.co.uk

Don't Forget Avon Scientific For Solar Covers, Rollers, Debris Covers, Chemicals, Heating, Pumps and Filters System!

Avon Scientific
Measuring the Pool

Kidney Pool Measuring

Fig. 4

	A	B
1	850	11650
2	1540	11390
3	2100	10990
4	2460	10650
5	2850	10090
6	3200	9890
7	3540	9640
	ETC	ETC

Fig. 4

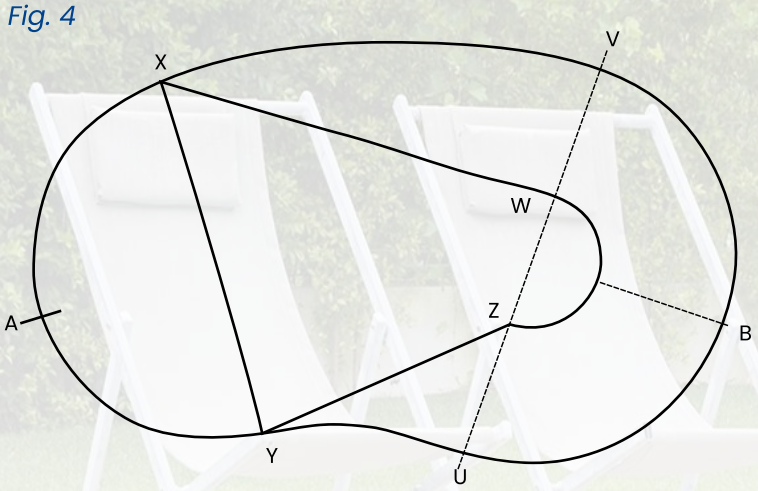


Fig. 5

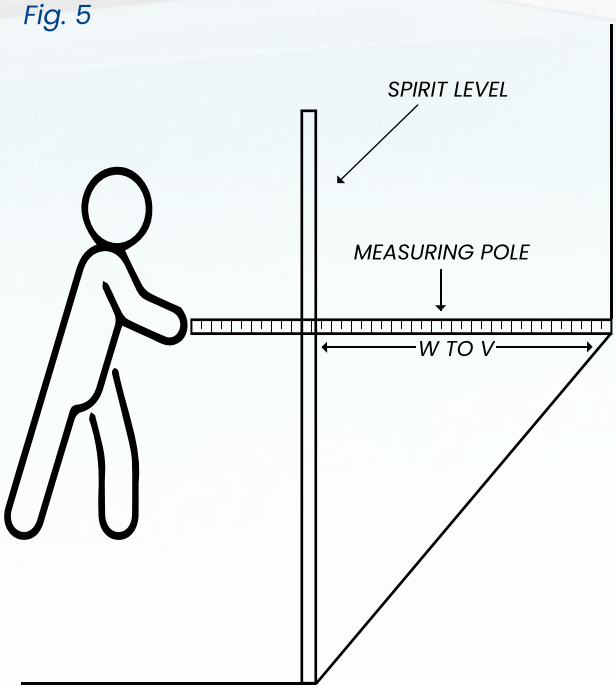
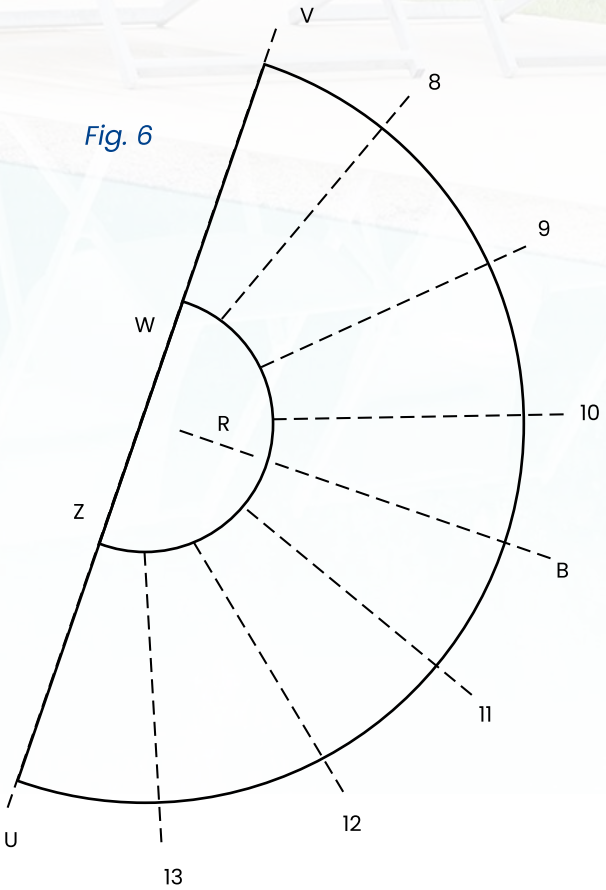


Fig. 6



Post To:

Avon Scientific
Unit 101 Aston
Down Business Park
STROUD
Gloucestershire
GL6 8GA

Telephone:
01285 760199

E-mail:
sales@avonsci.co.uk

Web:
www.avonsci.co.uk

Don't Forget Avon Scientific For Solar Covers, Rollers, Debris Covers, Chemicals, Heating, Pumps and Filters System!