# *Plastica Ltd*

## Three-point survey
## Measuring instructions

1. First draw a free hand sketch of the pool.
2. Set up a datum line A-B, a minimum of 5’ away from the pool edge and approximately the pool length. Locate A and B with 4” nails driven into the ground. Show these on the sketch.

   **Note:** Line A-B must never intersect the pool and should be level (or nearly so) with the pool. If you cannot avoid the datum line intersecting the pool, please contact technical department.

3. Mark and number points inside pool edge at about 2’ intervals (or using coping joints). A Clearly defined position for point 1 should be chosen and where obstructions are, e.g. skimmer, inlets, handrails, slide legs, rocks, walls etc, these should be included in the sketch.

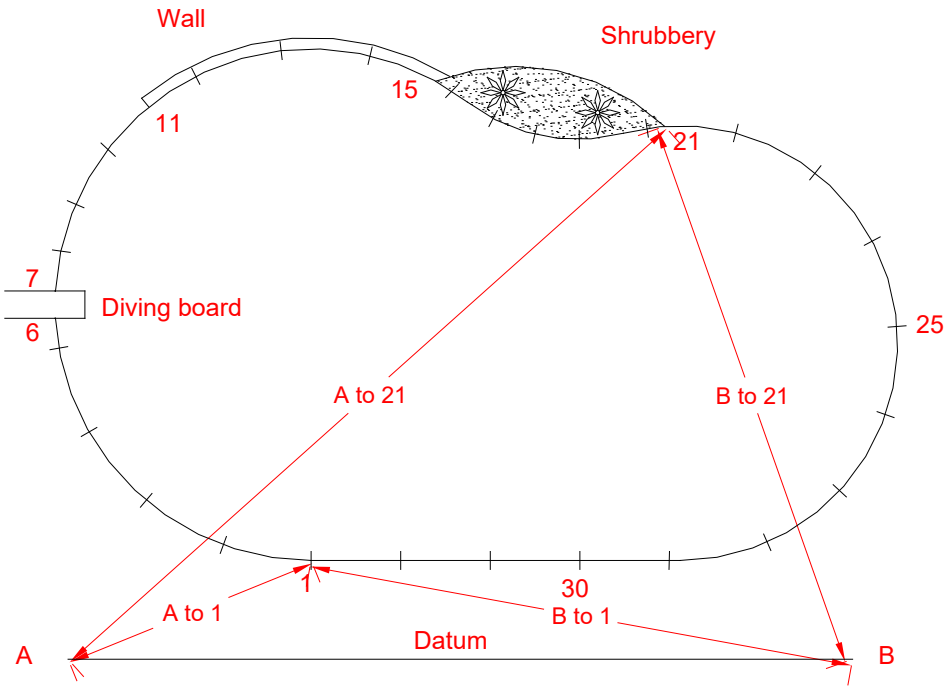
   **Note:** It is useful to always work in a clockwise direction around the pool.

4. Using a taut tape fixed onto the nails at A and B measure: -

   1. A to B.
   2. A to 1,2,3 etc
   3. B to 1,2,3 etc

   Measurements are listed in column form on page 5.

Example



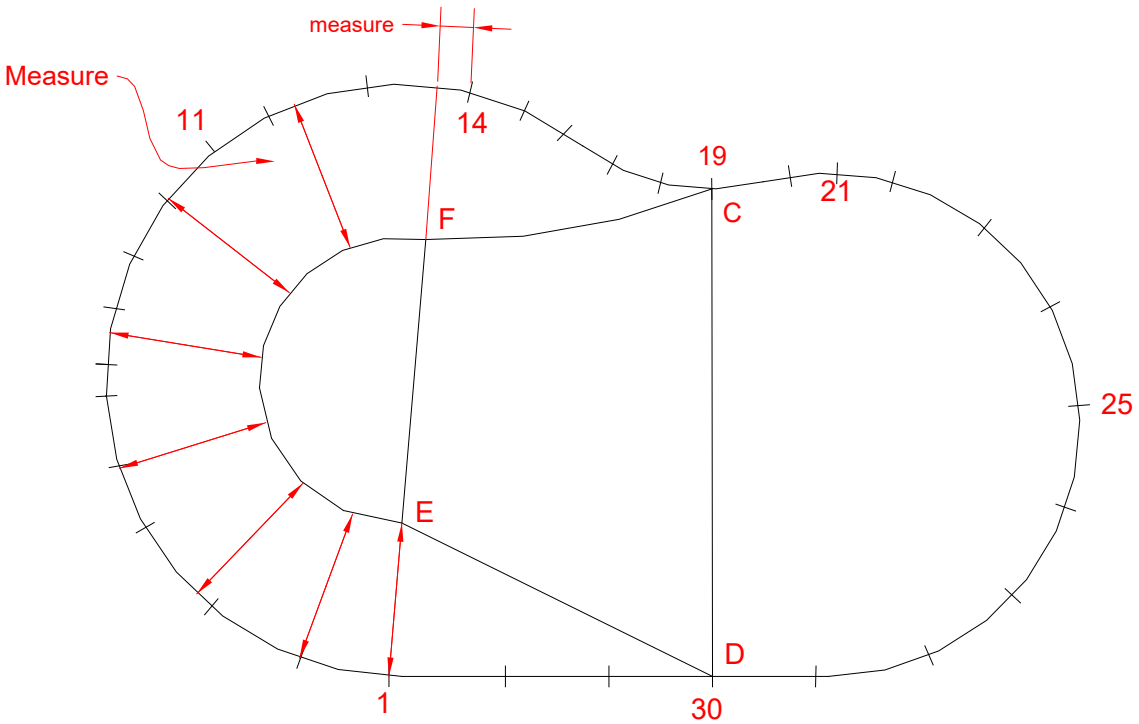
5. Having numbered all the coping joints around the perimeter of the pool, these numbers can now be used to help locate features within the pool structure.

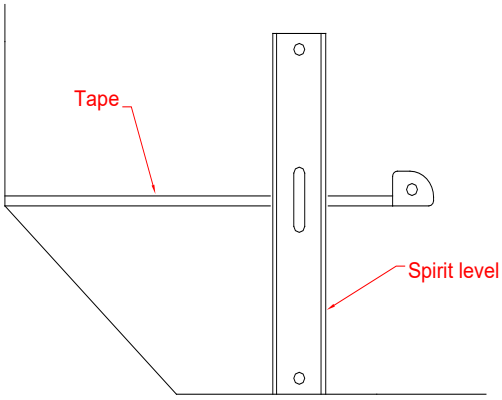
   For instance, the location of the top of the transition in our example can be shown by noting that it runs between joint numbers 19 and 30.
   If a feature does not line up exactly with a coping joint, then note which is the nearest joint and measure from the joint to the feature (as shown at the bottom of the transition in our example),

6. Having obtained a line across the pool, it is necessary to determine how far into the pool area each feature is located.
   In some instances this is easy, as this will be located against the wall, as this is the case at the top of the transition at points 19 and 30.

   However, at the bottom of the transition a measurement is required to locate the deep end hopper along the line 1-14.

   This is done using a tape and a spirit level. (N.B. it is important that all dimensions are taken in the horizontal and vertical planes only).

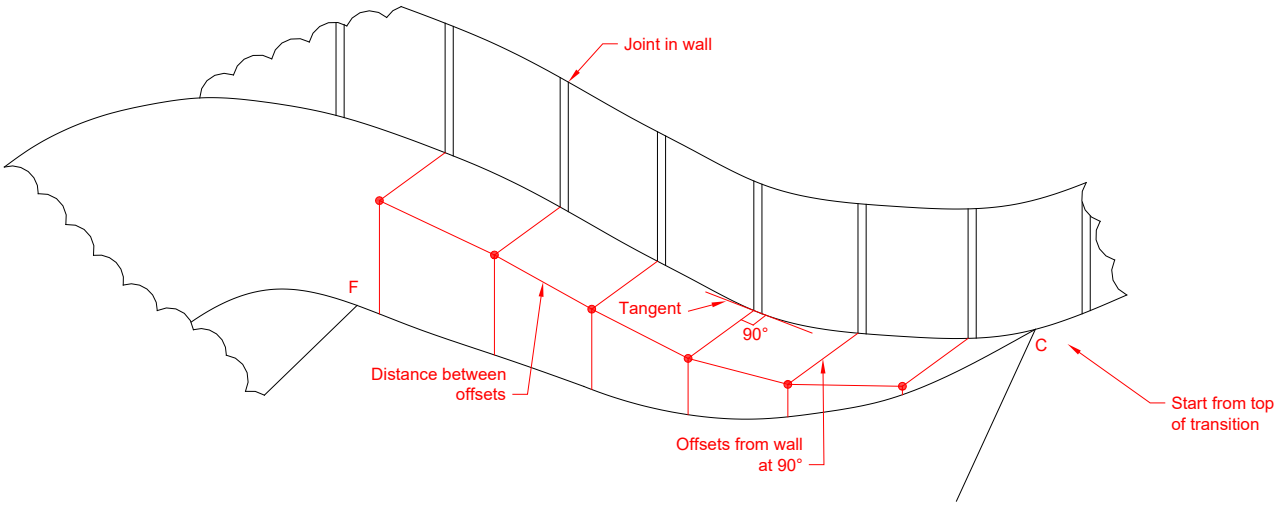





7. By this process, we have now located points C, D, E, and F.

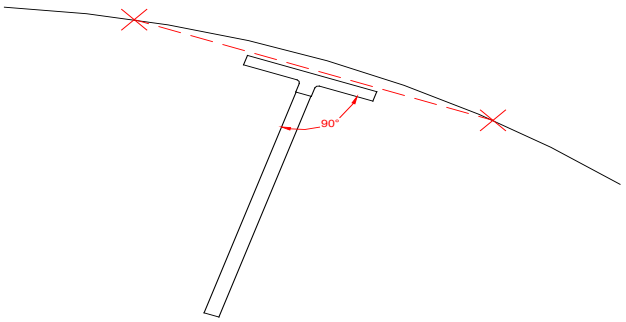
   If the lines between E and D, and curve F are straight, then no further work is required in the transition area of the pool. However, if either of these lines are curved, then it is necessary to indicate how this curve develops from the shallow end to the deep end.

   This is done by taking horizontal offsets from the wall joint, to the curve (see diagram). Give both the length of the offsets from joint to curve (horizontally) and the distance between the points on the inner curve you have used.




Measure like this around edge of shallow end to deep end.

**Note:** When estimating a 90° angle perpendicular from the curved pool edge, it is useful to use an object like a pool brush and the two adjacent points as a guide.



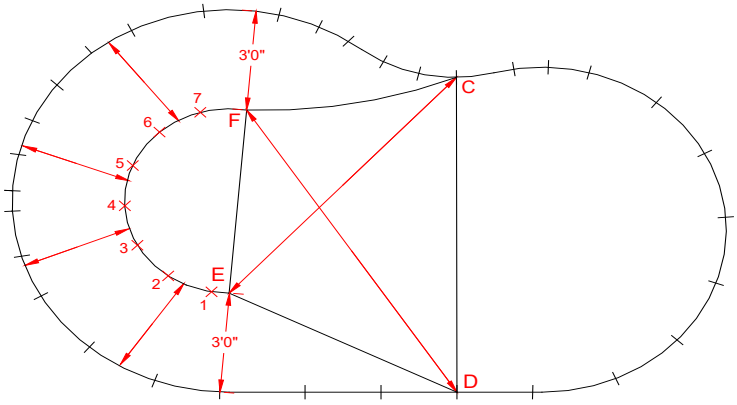

8. The final area to define is the hopper itself. If the batter is of a constant size all the way round, (in this example 3'), then no further work is required other than to measure the depths of the deep and shallow ends. If the batter is not constant, then it is necessary to define the shape of the hopper.

   This is most easily done by performing another three-point survey using points E and F as a datum line.

   Proceed as before, firstly by measuring the distance between E and F. Divide the 'D' up into 2' sections and record your results as before to each point from E and F.

9. Finally, it is necessary to measure the depths of the shallow and deep end. These must be taken to the same level at the top of the pool in both instances, either the level of the liner lock, or the top of the wall for overlap pools only.

   Check the wall height at 3' intervals or irregularities.




If you feel any further relevant information should be given then return it with your survey to Plastica, on fax number 01424 857807 or by post.

Taking some pictures of the pool, helps us get a general idea of how the pool shape looks, If this is possible they can be emailed to us on the below email address(s)

daniel.cranage@plasticapools.com and matthew.gerken@plasticapools.com

| No | A | B | wall height | No | A | B | wall height | No | A | B | wall height |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | 20 | | | | 39 | | | |
| 2 | | | | 21 | | | | 40 | | | |
| 3 | | | | 22 | | | | 41 | | | |
| 4 | | | | 23 | | | | 42 | | | |
| 5 | | | | 24 | | | | 43 | | | |
| 6 | | | | 25 | | | | 44 | | | |
| 7 | | | | 26 | | | | 45 | | | |
| 8 | | | | 27 | | | | 46 | | | |
| 9 | | | | 28 | | | | 47 | | | |
| 10 | | | | 29 | | | | 48 | | | |
| 11 | | | | 30 | | | | 49 | | | |
| 12 | | | | 31 | | | | 50 | | | |
| 13 | | | | 32 | | | | 51 | | | |
| 14 | | | | 33 | | | | 52 | | | |
| 15 | | | | 34 | | | | 53 | | | |
| 16 | | | | 35 | | | | 54 | | | |
| 17 | | | | 36 | | | | 55 | | | |
| 18 | | | | 37 | | | | 56 | | | |
| 19 | | | | 38 | | | | 57 | | | |

Plastica Ltd three-point survey measurement sheet

Dimensions from points A and B and wall height

Please supply freehand sketch



**Datum line A – B =**