



# Liner Order Form No.3

## 3D A-B Markouts

Please read the conditions marked with a ★ and fill out all details and tick boxes where applicable

QUOTE No: ..... PRICE \$ ..... DATE Required: .....

Your Name: ..... PH: .....

Your Client: ..... Order No: .....

Pool Wall Height: ★ Measure Vertical Depth from A - B height to each point. Record info over page ...

A to B Measurement: ..... mm Pool Length: ..... mm

Last Point Before B: ..... Pool Width: ..... mm

T/port Co: .....  P/up Perimeter: ..... mm

All fixing extrusions are in 3m lengths, list quantity of lengths required

Above Water: Retainer EXTRET ..... Capping EXTCAP .....

Below Water: W/line Male EXTWL3M ..... W/line Female EXTWL3F .....

### Colour

Dark Blue	<input type="checkbox"/>
Light Blue	<input type="checkbox"/>
Grenada	<input type="checkbox"/>
Pacific	<input type="checkbox"/>
Antique	<input type="checkbox"/>
Caribbean	<input type="checkbox"/>
Maldive	<input type="checkbox"/>
Coral Sand	<input type="checkbox"/>
Reef Pebble	<input type="checkbox"/>
Bahama	<input type="checkbox"/>
Casablanca	<input type="checkbox"/>
Costa Rica	<input type="checkbox"/>
Mosaic Tile	<input type="checkbox"/>
Maui	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

### NUMBERS ARE TAKEN AS CLOCKWISE FROM A

Please sketch pool

★ Pool Brand (if known) ..... Model .....

Shallow End

Vertical wall seam usually starts at A

### Top of Pool Points

Distance from Point A	Distance from Point B	Vertical Depth
1	1	0
2	2	0
3	3	0
4	4	0
5	5	0
6	6	0
7	7	0
8	8	0
9	9	0
10	10	0
11	11	0
12	12	0
13	13	0
14	14	0
15	15	0
16	16	0
17	17	0
18	18	0
19	19	0
20	20	0
21	21	0
22	22	0
23	23	0
24	24	0
25	25	0
26	26	0
27	27	0
28	28	0
29	29	0
30	30	0
31	31	0
32	32	0
33	33	0
34	34	0
35	35	0
36	36	0
37	37	0
38	38	0
39	39	0
40	40	0
41	41	0
42	42	0
43	43	0
44	44	0
45	45	0
46	46	0
47	47	0
48	48	0
49	49	0
50	50	0
51	51	0
52	52	0
53	53	0
54	54	0

### CHECK POINT OR DISH BASE DIMENSIONS YES, DISH LINER

Refer to instructions Diagram 5 for measuring details

★ These measurements are used to check the accuracy of the point measurements and can also be used for a dish. However, a dish is not common in pools with shaped walls.

Distance from:	Tight	Loose
Point No. A      Point No. B	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____
Point No. _____	_____	_____

★ A dished base liner will be supplied and charged for if the YES box has been ticked, or the loose measurement is more than 8% longer than the tight measurement.

Please supply one pool liner as per these specifications and conditions:

Signed ..... Date .....

Notes .....

★ All liners are custom made and hence are non-returnable. This form is to order liners with vertical walls and square wall/floor joins. For pools with tapered walls and/or are curved where the wall meets the floor, use ABGAL's 3D A-B Measuring System or ABGAL's 3D Laser Measuring System. Please refer to ABGAL's Inground Liner Manual for more information on measuring. Thanks...

ABGAL PTY LTD ACN010 151 578 ABN 78 033 608 597 ABGAL AUSTRALIA SUNSTATE PROD'S SUNYEAR PROD'S

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**Base Points** Last Point Before B: \_\_\_\_\_**Side Wall Points**

- Last Point Before B: \_\_\_\_\_

Distance from Point A	Distance from Point B	Vertical Depth	Distance from Point A	Distance from Point B	Vertical Depth
B1 _____	1 _____	1 _____	W1 _____	1 _____	1 _____
2 _____	2 _____	2 _____	2 _____	2 _____	2 _____
3 _____	3 _____	3 _____	3 _____	3 _____	3 _____
4 _____	4 _____	4 _____	4 _____	4 _____	4 _____
5 _____	5 _____	5 _____	5 _____	5 _____	5 _____
6 _____	6 _____	6 _____	6 _____	6 _____	6 _____
7 _____	7 _____	7 _____	7 _____	7 _____	7 _____
8 _____	8 _____	8 _____	8 _____	8 _____	8 _____
9 _____	9 _____	9 _____	9 _____	9 _____	9 _____
10 _____	10 _____	10 _____	10 _____	10 _____	10 _____
11 _____	11 _____	11 _____	11 _____	11 _____	11 _____
12 _____	12 _____	12 _____	12 _____	12 _____	12 _____
13 _____	13 _____	13 _____	13 _____	13 _____	13 _____
14 _____	14 _____	14 _____	14 _____	14 _____	14 _____
15 _____	15 _____	15 _____	15 _____	15 _____	15 _____
16 _____	16 _____	16 _____	16 _____	16 _____	16 _____
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18 _____	18 _____	18 _____	18 _____	18 _____	18 _____
19 _____	19 _____	19 _____	19 _____	19 _____	19 _____
20 _____	20 _____	20 _____	20 _____	20 _____	20 _____
21 _____	21 _____	21 _____	21 _____	21 _____	21 _____
22 _____	22 _____	22 _____	22 _____	22 _____	22 _____
23 _____	23 _____	23 _____	23 _____	23 _____	23 _____
24 _____	24 _____	24 _____	24 _____	24 _____	24 _____
25 _____	25 _____	25 _____	25 _____	25 _____	25 _____
26 _____	26 _____	26 _____	26 _____	26 _____	26 _____
27 _____	27 _____	27 _____	27 _____	27 _____	27 _____
28 _____	28 _____	28 _____	28 _____	28 _____	28 _____
29 _____	29 _____	29 _____	29 _____	29 _____	29 _____
30 _____	30 _____	30 _____	30 _____	30 _____	30 _____
31 _____	31 _____	31 _____	31 _____	31 _____	31 _____
32 _____	32 _____	32 _____	32 _____	32 _____	32 _____
33 _____	33 _____	33 _____	33 _____	33 _____	33 _____
34 _____	34 _____	34 _____	34 _____	34 _____	34 _____
35 _____	35 _____	35 _____	35 _____	35 _____	35 _____
36 _____	36 _____	36 _____	36 _____	36 _____	36 _____
37 _____	37 _____	37 _____	37 _____	37 _____	37 _____
38 _____	38 _____	38 _____	38 _____	38 _____	38 _____
39 _____	39 _____	39 _____	39 _____	39 _____	39 _____
40 _____	40 _____	40 _____	40 _____	40 _____	40 _____
41 _____	41 _____	41 _____	41 _____	41 _____	41 _____
42 _____	42 _____	42 _____	42 _____	42 _____	42 _____
43 _____	43 _____	43 _____	43 _____	43 _____	43 _____
44 _____	44 _____	44 _____	44 _____	44 _____	44 _____
45 _____	45 _____	45 _____	45 _____	45 _____	45 _____
46 _____	46 _____	46 _____	46 _____	46 _____	46 _____
47 _____	47 _____	47 _____	47 _____	47 _____	47 _____
48 _____	48 _____	48 _____	48 _____	48 _____	48 _____
49 _____	49 _____	49 _____	49 _____	49 _____	49 _____
50 _____	50 _____	50 _____	50 _____	50 _____	50 _____
51 _____	51 _____	51 _____	51 _____	51 _____	51 _____
52 _____	52 _____	52 _____	52 _____	52 _____	52 _____
53 _____	53 _____	53 _____	53 _____	53 _____	53 _____
54 _____	54 _____	54 _____	54 _____	54 _____	54 _____

**Measuring Instructions**

This measuring system is designed to replace the double and triple markout. The advantage of the "3D A—B" markout is, you only have one A and one B point to measure from. This makes things much simpler to measure and manufacture. The key to the system is the depth of each point measured and listing which point I.D.'s are before "B".

**This system is *not* designed for pools that have steps to be covered by the Pool Liner.** You must use the "3D Laser Measuring System" with data recorder for pools with steps or complex shapes. Also, **welded bead is not available for this style of liner** at this stage and has been omitted from the markout sheet for this reason.

To start, pick the A & B points at the top of the pool at each end. Usually the A point is in the shallow end so the liner can be unrolled from there. Using the 3D diagrams in the Abgal Inground Liner Manual as a reference guide, mark a line around the perimeter of the base of the pool about 2/3rd of the way down the cove. This line needs to be quite smooth and you can use a length of fixing extrusion as a flexible straight edge to trace your line. If the pool is rectangular, trace a vertical line down each corner. If the pool is a kidney or freeform shape, trace vertical lines at about 3m intervals. These intervals should coincide with a change in the shape of the pool where possible. On a kidney pool, these lines would be on the start and finish of the reverse curve, evenly spaced around each end and long side.

Once you have a perimeter line around the base and vertical lines, you mark the point positions along the lines and space them according to the pool shape. There is a chart in the Abgal Inground Liner Manual that indicates the distance between points based on the radius of the curve you are measuring. Remember, *more is better*. You need to have **at least 7 points in each corner** of a rectangular pool to aid in the making of the liner. The vertical lines should have **at least 6 points** including the base & the top markout. These points start off at the base at 100mm apart and increase to about 500mm apart at the top of the pool.

Start measuring the TOP of the pool and fill out the "Top" section on the front page of the markout sheet. You will notice the "Top" markout section already has the depth listed as "0". This is always the case and should not be changed.

Next, measure the base. Start with a new set of numbers and make sure you list the "Last Point Before B" on the "Base" section of the markout sheet. Now measure the depth to each base point vertically from the Top of the pool and write them on the sheet. You must measure each point and it must be from the Top of the pool.

Continue measuring the wall points and again start from number one (1). List the "Last Point Before B" for the vertical markout and then measure the vertical depth to each point from the Top of the pool.

Now take 3 to 4 check point widths across the base markout so we can double check the measurements when they are entered into our computer system.

Please fill out all the other relevant details on the markout sheet like "Quote Number", "Liner Colour", "Date required" etc.

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**Fax Order to 1800 808 786**  
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