

SPASA FACT SHEET No. 13

CONCRETE POOLS

STEEL FIBRE / STEEL BAR

WHAT IS THE DIFFERENCE?

The basic difference between a steel fibre and a steel bar swimming pool is the way in which the concrete is reinforced.

Steel fibre pool

In a *steel fibre* pool the reinforcement is provided by means of thousands of tiny steel needles pre-mixed in the concrete prior to being sprayed. These needles are probably best described as looking like a pin with a head at both ends.

Steel bar pool

In a *steel bar* pool the reinforcing is provided by a grid of shaped steel rods over which the concrete is sprayed. The steel bars used are generally about as thick as a man's finger.

IS STEEL FIBRE CONCRETE NEW?

No. It has been used in swimming pool construction for the last fifteen years or so, and has been used extensively in other forms of construction for more than twenty years.

SUITABILITY FOR POOL CONSTRUCTION

Both steel fibre and steel bar reinforced concrete are suitable for domestic swimming pool construction and the Australian Standard **AS 2783-1992 Use of reinforced concrete for small swimming pools** provides details of the amount of reinforcement material and minimum concrete strength for both forms of pool construction.

Both methods of construction, when completed in accordance with the Standard, will provide a good, strong swimming pool shell. Under NSW State legislation the Contractor must provide a seven year structural warranty on the pool shell, it is therefore very rarely that anyone, particularly a SPASA member, builds a pool to anything less than the Standard requires.

SPECIAL CIRCUMSTANCES

In some areas and in certain circumstances, a change to normal construction requirements may be required. Things like the pool being partly out of ground, or in reactive (clay) soils, or perhaps the site is subject to mine subsidence. In all of these cases either form of construction may be used, as long as the pool meets the engineering requirements imposed by the conditions. This may include the thickening of the walls, the addition of extra reinforcing and/or piling. This will be determined by the contractor's Engineer.

For further information on building, renovating or maintaining a pool, contact;

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