

Tiled Swimming Pool Installation Guide for New Build Pools

Please read all notes, installation graphics, pictures and video above prior to ordering materials.

Material thicknesses provided within the standard kit:

3mm Thermapool Insulation Adhesive.

75mm Thermapool Insulation Board.

6mm Thermapool Render and mesh.

1mm Thermapool Tanking.

Total thickness 85mm

Pre Installation Notes

Construct the swimming pools shell as per the architect's or your swimming pool builders traditional construction methods, to a fully tanked waterproofed structure. Consideration should be given to the detail at the top of the swimming pool, in essence there are three options.

If the swimming pool shell is being constructed using concrete blocks, turn the last block through 90 degrees so that it overhangs the rest of the wall by 85mm this is to allow the coping stones and automatic cover to be secured to a solid concrete surface. See technical images 12 form 21 for details.

Concrete formwork, shuttered swimming pools, pour the concrete and make formwork to replicate technical images 12 form 21 for details.

Alternatively bond the insulation panel to the top of the swimming pool shell wall, then cut insitue a triangular section from the top of the insulation board as per technical video player.

All swimming pool fittings will need to protrude past the waterproofed pool shell by 85mm to allow for the Thermapool system, plus the thickness of the tile adhesive and tile.

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Mix the Thermapool Insulation Adhesive using **ONLY** the liquid additive provided. A slightly wetter mix is preferable to assist in bonding the boards. If the mix starts to set re-mixing will bring it back to it's original state.

Apply Thermapool Insulation Adhesive to both the swimming pool structure and the back of the Thermapool Insulation Board. Apply the adhesive with a floor tiling trowel. The trowel ridges on the panels and pool walls or floor should be at opposite direction (90 degrees) to each other when bonded together. Push them firmly together ensuring you achieve a 100% adhesive bed. A good

method to assist in achieving this is to move the insulation boards from side to side whilst applying pressure.

Starting at the bottom of the pool walls apply the insulation panels in a brick bond fashion with insulation lines running horizontally along the swimming pool walls. Butter the joints between the insulation panels using the Thermapool Insulation Adhesive and Render ensuring adhesive joints are very small.

When the walls are finished apply the insulation panels to the floor in the same fashion, working back toward the point you wish to exit the pool.

Before applying the render coat each of the boards should be checked to confirm they have adhered correctly, this is done by tapping each board in several places with a rubber mallet. Any boards that have not been adhered correctly will give off a distinctive hollow sound compared with the rest of the boards. Any boards sounding hollow when tapped should be chopped out and re-bonded.

Before applying the insulation render coat ensure that the insulation surface including the grooves are clean and free from any dirt or dust.

Mix the Thermapool Insulation Render using the Thermapool liquid additive provided.

Use a steel trowel to apply an 6mm coat of Thermapool Insulation Render on to the insulation, ensuring the render is well compacted and forced into the insulation groove lines.

Whilst wet, lay the Thermapool Reinforcing Mesh into the render from the top of the swimming pool wall down. The mesh should be used to assist with the levelling of the render, embed the mesh just below the render surface using a clean steel trowel, smooth out the mesh working from the centre out. This will assist in levelling off the render and iron out any creases in the mesh.

Ensure the mesh is fully embedded into the render before applying the next mesh run. It is important to make sure there is render between the two mesh layers at the overlapping joints. Overlap vertical joints by 100mm. Direction joints (Like floors to wall or wall corners) should be double meshed over the joint, double meshing should extend 150mm each side of the joint.

Wait until the insulation render has started to go off, then use a clean steel trowel to finish the render. A fine water mist or damp trowel may be applied to the render to help level the render. It is recommended to only pass the trowel once or twice over the render to finish else the render will start to liven back up.

When the render is dry apply two coats of Thermapool Tanking liquid using a roller.

Apply Thermapool swimming pool tile adhesive.

Apply chosen tiles.

Apply Thermapool swimming pool grout.

Swimming Pool Radius Corners

Radius corners should be formed on top of the insulation prior to applying the render coat. See technical pool diagrams.

Firmly press the Thermapool Insulation Tile.

Concrete Swimming Pool Steps

We recommend the steps are built on top of the insulation prior to applying the Thermapool insulation render coat. This negates the need to insulate them individually.

If already built the steps should be insulated in the same fashion at the rest of the pool, with the insulation being applied to the risers first, then the step itself. Consideration should be given to the height of the step after the insulation has been fitted and any consequences this may have. Insulation of a reduced thickness can be supplied if the standard width of 75mm is going to make the steps too high, again we will need to know this at time of order placement.

Swimming Pool Hand Rails and Rail Steps

Cover the swimming pool walls using the Thermapool insulation boards as above, where the rail is to be attached cut out the insulation where the rails are to be fixed and then refill with concrete so the rails are secured to the concrete. See technical pool diagrams.

Automatic underwater swimming pool covers

Automatic swimming pool covers and their wall fixing are installed in the same way as pool ladders and pool hand rails are detailed above.

Drainage

We recommend that all swimming pools using Thermapool have a site drainage solution installed into the soil prior to the swimming pool construction taking place.

The simplest method is to dig channels out of the soil prior to installing foundations or the swimming pool base. These channels are then filled with shingle which allows any rain water or ground water to be easily removed from under the swimming pool structure. These channels need to continue past the pool walls and a hole (well) should be dug 500mm deeper than the lowest point of the swimming pool. A drainage pipe of 200-300mm in diameter (large enough to allow a submersible pump to be lowered down) should be installed into this hole. This allows at any point either during construction or years later to drain the soil around the pool prior to emptying the swimming pool. Thermapool insulation has buoyant properties and this is the most cost effective way to install as an easy solution to avoid any water table issues that may occur.

These swimming pool installation guides are applicable for all types of new swimming pools including:

Above ground swimming pools

In ground swimming pools

Indoor swimming pools

Outdoor swimming pools

Garden swimming pools

Tiled swimming pools

Swimming pool design

Tiled Jacuzzis spas

Swimming pool construction