

Expert Installers of Liquid Screed

Liquid Screed Preparation Guide



Liquid Screed Preparation Guide

Prior to Commencement

The building should be weather tight prior to commencement. The roof should be covered and all external doors and windows in place. Alternatively all openings are to be made weather proof with clear polythene. Remove all dust and debris from the floor surface and leave free from contamination.

Insulation

Usually the screed will be installed on top of some form of insulation. This is often Celotex, Kingspan or expanded polystyrene. Ensure that all high/low points are removed from the sub-base and that insulation boards are laid flat. The boards must be laid so that they are stable when walked on and should be tightly butt jointed with staggered joints. Where there are service pipes running across the floor, such as gas pipes, the insulation should be grooved on the underside to allow the pipes to sit within the insulation, rather than leaving the boards resting on top of the pipes.

Edge Strip

Once the insulation is installed, any vertical surface coming into contact with the screed, such as walls, stairs or pipes, should have a foam insulation edge strip stuck to it. This is to allow for any minor expansion once the screed is dry. There are various types of strip, but they are typically 8mm-10mm thick and come in rolls.

Tanking Membrane

The tanking membrane consists of reasonably heavy (500 gauge) polythene, which is placed on top of the insulation. The tanking membrane is not there to act as a damp proof membrane, but rather to stop the screed from escaping when it is poured. Care should be taken to make sure that all the joints are overlapped by at least 100mm and that all abutments are 100% water tight and fully taped. The polythene should be taken at least to the height of the edge strip up the face of any walls, pipes etc. and taped fully along the top edge. Ensure that all air pockets and voids are removed. Lay the polythene membrane ensuring that it is free from punctures and creases. Exposed edges such as door openings or level changes should be provided with temporary formwork. Please note that when installing liquid screed, it is imperative that the preparation is carried out to the highest standard. The pipes or cables for under floor heating should always be installed on top of the tanking membrane, not beneath it. The screws or staples used to hold the pipe or cable down will pierce the polythene, but seal the holes themselves, to eliminate leaks. Regardless of which system is used to hold down the cables or pipes, it should be installed so that there are no unfixed lengths of pipe or cable greater than 300mm long. If left unfixed, all under floor heating elements will float to the surface of the screed. Warm water systems should be filled prior to the application of the Screed to reduce the risk of pipes floating when the screed is poured. When setting out the floor areas consideration must be given to the minimum recommended thicknesses for a liquid screed as listed below.



- Unbonded on slip-sheet/polythene laid direct to substrate 30-35mm
- Floating on insulation (Domestic) 40-50mm
- Floating on insulation (Commercial) 45-50mm
- Cover over top of conduits/underfloor heating pipes 30mm
- Please make an allowance for tolerances and any isolated high spots in the substrate. These will dictate the minimum thickness of the screed and therefore impact upon the overall depth and material usage.

Setting the Levels

We will work from a place called a datum point. Typically, this will be from the stairs, but can also be from other areas such as a doorway or threshold. We will then set out leveling gauges called 'tripods' and, using a laser, will set them to the correct depth to make sure that the finished screed surface is level throughout the building.

Installing Screed

The screed will then be pumped in and poured to the depths set by the tripods. To make sure that it is smooth, without any tide marks or air bubbles, we will then agitate it using a dappling bar throughout the screed. Once this is done the tripods are removed and the installation is finished.

Drying the Screed

The screed should now be left untouched until it is solid, which usually takes 48 hours. During this time, all the windows and doors should be kept shut and nobody should walk on the screed. Once the screed has become solid, the windows should then be opened to allow evaporation to take place helping the final drying stages. For more information please visit our website: www.ejsfloorsolutions.com