

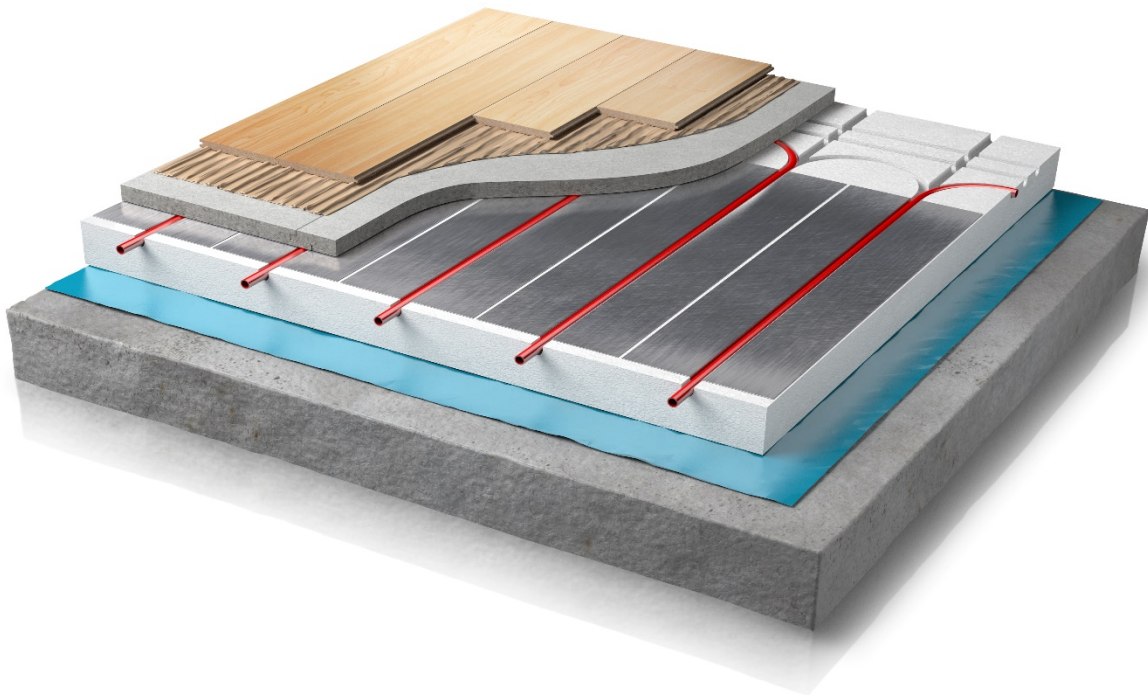


Engineered Wood Flooring and Under Floor Heating Systems How to reduce installation and screed drying times.

There are numerous hot water systems available in the market place and we do not recommend any particular manufacturer or installation company. Our only interests are in the quality and makeup of the systems and that they have the necessary controls in place to prevent the surface temperature exceeding 27 degrees. A good way of monitoring this so that if anything does go wrong is to fit a “Fidbox” when installing the flooring.

We have been testing our different engineered wood floors with the two systems below and can confirm that they both work very well and disperse heat across the complete floor better than cradle type systems that use a plywood top layer rather than a cementitious board like the system below.

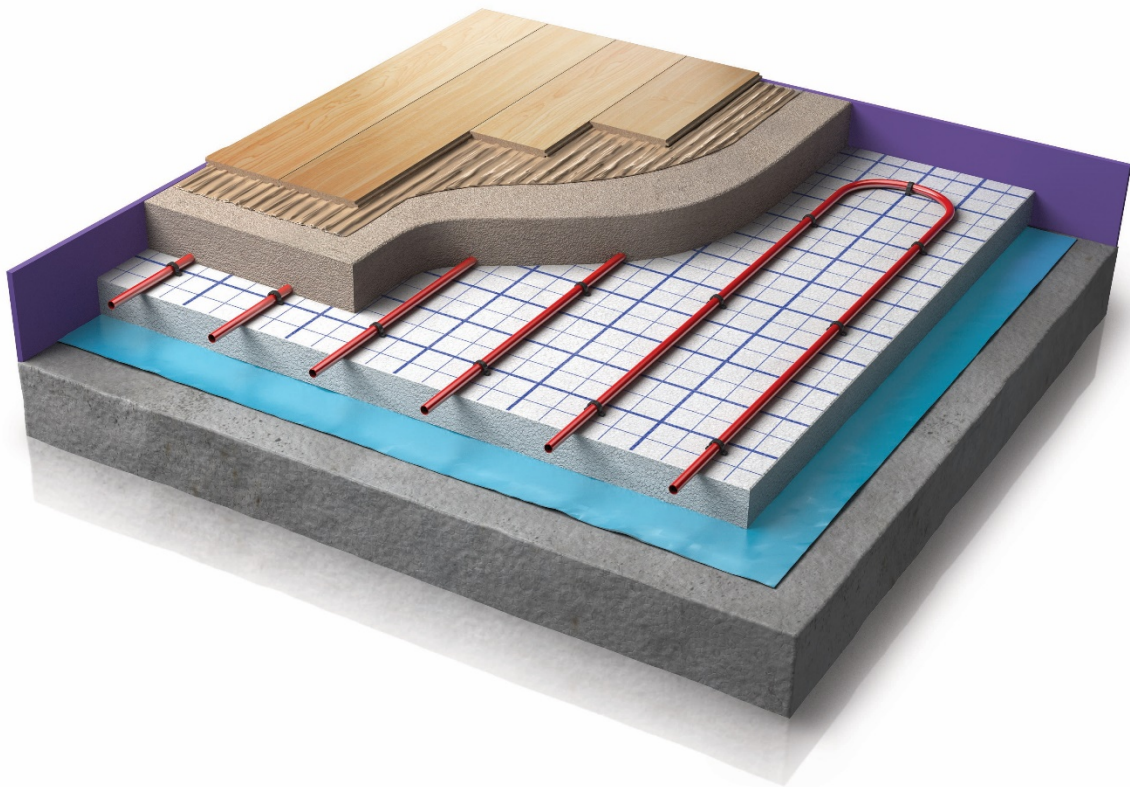
Dry Cementitious board system: this system can be installed on any concrete slab subfloor or on a void type subfloor if required due to floor levels. The thickness of the insulation can be increased or decreased according to the specification as can the top layer of cementitious board, subject to a minimum thickness for the best heat dissipation over the complete surface of the floor. This means that for new build high rise apartment buildings internal fit out downtime can be reduced considerably as this is a dry system with no pouring of any screed or drying times required. Once installed the timber floor can be fully bonded direct to the cementitious board. As can be seen in the diagram below the board is designed to be “locked” together.



The spreader plates make sure that the heat is evenly dispersed across the complete floor removing the possibility of any hot spots. By using the cementitious board we get a product that naturally

spreads the heat and can be very efficient, much better than systems that use plywood or chipboard.

Sand and Cement system: Here the insulation is installed and then the pipes clipped on according to the required spacing which is normally 200mm centres. Whereas the previous system has the spreader palter within pre-cut grooves for the pipes to be pressed into. This is a very typical system where a 60mm to 75mm thick screed is laid over the pipes once they have been pressure tested and signed off.



The problem with this type of installation is additional weight, and more importantly for budget and installation time the downtime required for the screed to dry down to 2% moisture.

A sand and cement screed should always be used as there are problems with Calcium Sulphate and Anhydrite screeds that should dry quicker but can have moisture trapped within them. The other is accurate moisture readings as the screed will dry by about 1mm per day, but to measure the final moisture content is difficult the thicker the screed is.

Wood flooring should never be fitted unless the moisture level is 2% or below. Many developers have had problems with wood floors after several months or even a couple of years because of screeds that have not been installed correctly. You can see our advice document on Anhydrite screeds in the technical library in the under floor heating section.

We hope this documents helps all our clients and please feel free to call us on 01666 504015 for further information and any help.

The Solid Wood Flooring Company hope to be of service to you and your partners in both small and large developments.