

Our Installers Guide to Wet UFH Overlay Board Systems

Installing a Wet Underfloor Heating system may seem a little daunting as there are a few things that need to be taken into consideration. To help we have detailed below step-by-step installers guide to help get you through the process.

Overlay Underfloor Heating systems are a great solution for retro fitting underfloor heating allowing depths from as thin as 2cm. These are used as alternatives to screed or concrete. The installation removes downtime associated with wet screeds and concrete due to curing and drying times.

Install for an overlay board system:

- 1. Making sure the area to be laid upon is flat. It is crucial for a successful installation of this type of system, as the boards (either Gypsum or insulation) are brittle and tend to snap when undulating. We recommend using a rotary laser to record the differences in levels, if discrepancies are identified use a self-levelling compound to make good the subbase.
- 2. Ensure the area is dust free. This is paramount to the success of the install as adhesives will be required for fixing.
- 3. When setting out it is crucial to plan and mark out where the flows and return pipes are entering and exiting each room / zone. The overlay system requires plenty of consideration to determine where pipes are going to run. We recommend starting from the room the where the first port on the manifold is flowing too or the last port and work your way forwards/backwards with the loops. This will avoid crossovers with the flows and return pipes.
- 4. Fixing the boards in position is made easier once you have a plan for where the boards are going to fit (much like a large jigsaw) we recommend two ways of fixing them in place. The first is to use a spray adhesive glue. The tried and tested way to do this is to spray the floor first (let it dry for 30 seconds) then spray underneath the boards (let dry again) then place the board onto the glued floor area. Please note that once the boards are glued to the surface, the only way to remove them is by breaking them into smaller sections. The second way of fixing is using screws and penny washers. We recommend the use of two screws & washers at the top of the boards, two in the middle, and two at the bottom. Pilot holes and raw plugs in to concrete subbases maybe required dependant on the board type. For best results, we recommend a combination of both fixing methods.
- 5. Installing the manifold. The manifold should be installed according to any CAD drawing that may have been provided. Typically, the manifold is installed in the centre of a property or close to the heat source (such as a boiler or ground source heat pump). When installing a manifold to a wall or temporary structure, we advise that it should be installed level and at a minimum height 600mm from the surface to aid pipe connections.
- 6. Installing the underfloor heating pipes. Once the manifolds are mounted in position and the overlay boards are fixed securely. The underfloor heating pipes can start to be installed. All pipe circuits should be cut to lengths stated on the CAD drawing (if provided) remember to allow some extra pipe to make the connections to the manifolds. We recommend 2m extra at each end.
- 7. After the underfloor heating pipes have been installed and connected to the manifold at both ends, the system needs to be tested for leaks and/or damaged pipes. Make sure that all the Eurocon bolts and valves are installed correctly and tightened. Then remove the caps surrounding the flow meters, and un-tighten the meters a couple of turns. This will allow water or air to be passed through the flow pipes to the return points at the manifolds. We recommend using an air compressor as this provides a more accurate reading when pumping up to the required 5 bar of air pressure (PSI). If this option isn't available, then attach a

hose pipe to the fill and drain port on the manifold and pressure the system with water. Please be aware that using water will solely rely on the water pressure being fed into the system. Ensure the system holds pressure for at least 1 hour without noticeable pressure drops.

Note: If pressure testing using water, we recommend this be drained from the system after testing to eliminate the risk of freezing within the pipes as this will result in pipes splitting due to expansion caused when melted.

8. Once the overlay system has been installed, we recommend the use of a compatible self-lever to fill any gaps in the boards where pipes have not been installed and in areas without boards. Sometimes gaps are unavoidable usually these occur at the ends of tight runs in some designated areas. Once the self-leveller has cured, floor finishes are applied.