Installation Engineered Flooring

Our guide is in line with British Standard BS8201.

The installation method will be determined by the type of flooring you are buying and also by the type of sub floor you have.

There are 3 common categories for subflooring:

- Concrete or cement/screed
- Wooden-Plywood, Chipboards
- Floor Joist or battens

Please note that vinyl floors, glued-down carpets, and other existing flooring types are not suitable as subflooring (especially for wood floors) and must be removed. Before installing any type of flooring, it is important that you get down to the solid, flat and dry subfloor.

Wood and Beyond has summarised below the following information about subfloors and the flooring types and installation methods you can use:

Subfloor	Flooring Type	Installation Method
Concrete	Solid	Nailed onto Battens, Glue-Down
	Engineered	Floating, Glue-Down
Plywood, T&G	Solid	Nail-down, Glue-Down
	Engineered	Floating, Glue-Down
Particle Board	Solid	Glue-Down
	Engineered	Floating, Glue-Down

Preparation Steps

Make sure the room is completely free of any obstacles such as your old carpet or wooden floors so you can concentrate on installing rather than moving furniture around. Ensure the surface is clean from any debris and other reminisces of the previous floor.
Please Follow our Page 5 **Important Note** and **Site Condition Requirements.**

Pre- installation Instructions

Please read these installation guidelines thoroughly before starting to install the product and strictly follow the instructions herein during installation. The final responsibility for the installation lies with the installer. The installer must be suitably trained and knowledgeable with wood flooring installations. Any damages or losses which may occur due to failure to comply with these instructions shall not be covered under warranty.

PREPARATION OF THE FLOOR AND INSTALLATION CONDITIONS

When examining the flooring, the following points should be observed, and the subfloor must be prepared in accordance with these factors:

1. Fitting of the floor should start 7 to 10 days after plastering and painting the walls.

2. Windows doors before fitting should be sealed.

3. The wood floor boxes should be stored sealed in the middle of the room for at least 48hs if there is no UFH installed. Boxes have to be laid flat and opened only on the day of the fitting.

4. If UFH is installed should be commission before fitting for 10 days with the engineered wood floor boxes in the middle room.

5. UFH thermostat gradually increases temperature till maximum of 26°c degrees and reduce to 18°c before fitting.

PLEASE NOTE

If the wood flooring is not acclimatized in the above way and you install the floor on a cold surface and then increase the temperature, the heat can cause "shock" to the wood flooring and could cause lifting, bowing or the top layer of the engineered boards can be delaminating.

6. Leave gaps to walls of 10-15mm.

7. Screed should be level, dry and clean.

IMPORTANT NOTES TO FOLLOW:

New screed floating or gluing down engineered wood floor	**Before fitting the engineered wood floor**
Permitted moisture content for the laying of hardwood floor	**<2%**
Thickness of screed 65-75mm	**100 day to dry**
DPM	**1-2 Layers**
RH in the rooms during and after installation	**40-65%**
If UFH	**2 Cycles of 3 weeks** (*please look on UFH section - page 6)
Underlay	**Low tog and damp-proof membrane**
Ideal room temperature	**18°c**

8. Liquid DPM should be applied.

9. Once wood floor fitted should not be cover for long periods of time if the floor is cover over 2-3 weeks it is necessary to lift the cover for at least 2-3 days to allow the floor to breath and to evaporate any excess of humidity.
10. Open boxes only when needed during installation.

11. If unevenness of the subfloor exceeds ± 3mm over 2mm or ± 1.2mm over 0.25mm the floor must be leveled first.

12. To ensure proper drying of the new screed before the wood floor arrive the room within the 100 days of the dry out the UFH must be on in 2 cycles of 3 weeks (1 week off 3 weeks on).

Floating Installation

Floating Installation is the easiest DIY installation method because it requires the least amount of skill or prior experience in installing floors for the newbie builder.

This is when you PVA glue the tongue and groove together. An underlayment is required with a floating installation to prevent contact between the floor and the subfloor and more importantly to serve as a moisture barrier and insulation.

Quality underlayment to deaden the sound of walking on the floor can make a huge difference. If you've saved on the process so far by buying your hardwood floor online, make sure to install high quality underlayment.

PLEASE NOTE
Due to the movement of a solid wood floor it is not recommended for floating installation.

Glue Down Installation

While this guide is likely to give you all the information you'll need for Glue-down installation, always read the information which came with the floor or contact the seller if unsure.

Glue-down installation requires the use of a bonding agent or adhesives applied directly onto the subfloor and can be laid onto both concrete and wooden sub-floors.

PLEASE NOTE
Always read the health and safety recommendations when working with agents.

If you are laying over a concrete subfloor you will first need to put down a two part epoxy damp proof membrane to ensure no damp rises up into your new floor.

Glue-down installation can be very stable when done properly, although it does take some time before you can actually walk on your floors. The adhesives will need to bond to the floor, and can be quite messy especially when done by a less skilled installer.

Nail-down Installation

Nail-down installation is recommended for solid and engineered flooring with minimum thickness of 18mm. Any floor below 18 mm thickness should not be nailed down, should be floted or glued down.

Nail-down installation is the most straight-forward of all solid wood floor installation methods, and is only advised if you have a wood subfloor and plenty of time to focus on the work.

When installing over plywood the direction you choose to lay the planks does not matter; however, if you are going to nail down a new floor over an existing floorboards you must face the planks of the new floor in the opposite direction of the floorboards, essentially making a criss-cross pattern.

Solid wood floors are thicker; hence, they need to be nailed down in order to stay in place so consider hiring a nailer for large surfaces otherwise it might take couple of days.

Typically when nailing down an 18mm-22mm solid floor you will want to use 2" long nails.

Generally, people regard nail-down installation as being very exacting and time-consuming. It requires you to use specific tools and equipment, which can be hard for a DIY job. There is also a certain skill and level of knowledge needed for this type of installation.

Under Floor Heating (UFH) Installation

INSTRUCTIONS FOR INSTALLING WOOD FLOORING IN A PLACE WITH UFH IN LINE WITH BRITISH STANDARD BS8201.

Key instructions to be followed :

- UFH Elements either Electrical(Cables) or Water (pipes) must not be in direct contact with the wooden floor.

- When UFH systems either Electrical or Water fitted on top of the screed in special mounted panels, a distribution board must be fit on top to ensure even spread of the heat flow under the floor.

- You must have "flow" control valves to ensure that the temperature never exceeds 26 degrees Celsius.

1. There must be sufficient insulation below the UFH and also a good DPM (Dump Proof Membrane) to prevent heat loss and moisture being drawn up through the screed.

UFH system install under screed:

• Where UFH system embedded in new screed it is vital to commission the system for at least 3 weeks prior engineered floor delivered to site.

• Once system commission we recommend to gradually increase and build up the heat to highest level for few days. Than after allow the system to cool down in few days till its off. This Interval should take place once again, so in total at least two cycles should take place.

• The purposes of this exercise is to try releasing any moisture trapped in the screed (as well as testing the UFH system).

• Once the above completed , the screed floor has to "rest" for few days (at least four days) without any artificial drying support (such as UFH, Humidfiers, blowers or else)

• Only than proper MC Test and reading can be take. A true MC reading must not take If one of the above artificial system is on. This is very important as a true value of MC needed, to ascertain the screed condition.

2. Commissioning an UFH system before installing a wooden floor. You must never install a wooden floor before commissioning the system as set out below.

3. Hot water radiant underfloor heating system must be installed in conjunction with the manufacturer's guidelines.

4. The screed must have a moisture content less than 1.8% before the underfloor heating system is started up. If the screed is 75mm then in normal weather conditions this will take at least 75 days to cure and dry out.

Acclimatization of wooden flooring to be laid on top of UFH

Before starting the installation, engineered floor boards need to be brought into the room where they will be installed after the 21-day initial running period, and exposed to the climatic conditions when the UFH surface temperature is 21-22 degrees Celsius.

The acclimatisation will comprise:

- all wet trades must have finished and screeds dry with moisture levels below 1.8% and humidity below 55%
- leaving the boards in their cartons
- storing the boards for at least 7-14 days
- the boards should be laid flat at least 300mm from the nearest wall
- there must be some battens under the bottom layer of cartons so that air can circulate
- the room temperature must be at least 21-22 degrees Celsius for 7-14 days
- the floor surface temperature must be a minimum of 21 degrees Celsius
- the air relative humidity must be between 40% and 65%

Critical | The surface temperature of the screed must never exceed 26 degrees Celsius.

Electrical UFH Must be up to 150W/m2. Wooden Floor must not touch the system but been separated by UNDERLAY, SCREED or else.

Important | Moisture levels in newly built premises are often still high when parquet floors are installed.

To avoid damage it is important that the relative humidity during and after installation is below 60%. The floor boards may be permanently deformed if their relative humidity exceeds 60%.

This could occur if the floor is installed in newly built premises with inadequate or no ventilation, e.g. during holiday periods.

Before fitting the floor on UFH System

the surface temperature should be reduced to 15-18 degrees Celsius and then the fitting can start. After the completion of fitting the heating system should go back on in a controlled way, the temperature should be increased only few degrees Celsius per day over 7 days.

Please take note if the wood flooring is not acclimatized in the above way and you install the floor on a cold surface and then increase the temperature, the heat can cause "shock" to the wood flooring and could cause lifting, bowing or the top layer of the engineered boards can be delaminating.

IMPORTANT NOTE

Site conditions are extremely important and make all the difference to a timber floor. Site check before starting installation ensure moisture conditions required met is vital. Wood flooring will perform best when the domestic relative humidity range between 40%-65% and a temperature range of 21-24 degrees. Wood is a moisture absorbent material and its moisture level varies with air humidity and temperature. The subfloor moisture should not exceed 1.8%. Also for glue down and floating installation (non-underfloor heating) please make sure that you leave a gap of 10mm-15mm to any solid surface (wales, concert, and other) and if you have underfloor heating you should leave a gap of 15mm-20mm.

FOR EXAMPLE

A. 50% air humidity and 20°C temperature average Oak floor will have 9% moisture content.
B. 30% humidity and 25°C temperature the same Oak floor will have 5% moisture content. As air humidity changes so does the dimension of the wood.

The overall fabric (walls & floors) of a building should be thoroughly dry (so there are no visible signs of moisture or condensation when heating is on) before bringing in any timber.