

Engineered Wood Flooring Over Underfloor Heating INSTALLATION GUIDE

This guide is designed to complement the current British Standard BS8201 and should only be used in conjunction with current building regulations and official codes of practice.

Please note: Responsibility for the installation lies with the installer, who should be trained and knowledgable in the safe and correct installation of wood flooring.

Subfloor conditions

The subfloor must be clean, sound with no friable areas and flat to a tolerance of +/- 3mm over a 2m span across all points of the subfloor.

Laitance must be mechanically removed from screeds by abrading or grinding.

The subfloor must be dry. This is tested using a hygrometer. A moisture reading of between 45-65% Relative Humidity (RH) must be achieved. A DPM can only be used when this reading is achieved.

Screeds typically dry at 1mm per day up to 40mm thick when exposed to an average air temperature of 20C and relative humidity of 65%. The drying time can be reduced. Please speak with our office for advise on this.

New screeds or dusty, brittle screeds should be primed first. Please speak with our office for advise on the type to use.

Underfloor heating

Underfloor heating systems must be commissioned prior to the introduction of wood flooring. Speak with the manufacturer for details on this.

Avoid using the underfloor heating to dry out the screed as this can lead to the poor cohesive strength of the screed.

Do not allow the surface temperature of the wood flooring to exceed 27c. We advise the use of floor temperature sensors to monitor this.

Do not use the underfloor heating for at least 48 hours after the flooring has been installed to give the flooring adhesive time to fully cure.

Sudden temperature changes affect the wood floorings dimensional stability. Avoid turning your heating suddenly on or off. Do not turn the heating to its maximum temperature setting. Whenever turning on your heating, always set it to 1c above the ambient room temperature and increase by 1c each day until the desired temperature is achieved.

Electrical underfloor heating systems should be overlaid with a fibre reinforced levelling compound to a minimum of 5mm thick.

Avoid the use of rugs over underfloor heating. These will cause the surface temperature to exceed 27c during use.

Installation and acclimatising can be carried out with the UFH on but the surface temperature must not exceed 18c.

Acclimatising your floor

Wood flooring should only be brought on to site once all of the above subfloor conditions have been met, and all wet works are complete and dry. Room conditions must ideally be between 18c and 22c degrees with a relative humidity between 45% and 65%.

The wood flooring should be ideally stored in the area it is to be installed, out of direct sunlight, away from direct heat and on battens for a minimum of 7 days.

Installation

Installation should only begin once all of the above criteria have been met.

An allowance of 10% should be added to the required quantity of flooring to allow for wastage.

Extremes in temperature and humidity must be avoided during the lifespan of the flooring.

Use boards mixed from several packs to ensure an accurate grade representation is achieved, and check each piece for defects before installing.

Decide the direction the flooring is to be laid. This is typically determined by the shape of the room or the dominant direction of natural light fall, but is ultimately discretionary.

Calculate the size of external cuts to ensure, where possible, they are of equal width and are no smaller than 50mm. Header joints should be a minimum of 300mm apart but ideally 500mm plus.

All timber fixtures, including door linings, architraves and kitchen end panels should be removed or under cut where possible. We do not advise undercutting anything structural like newel posts or timber beams. Beading or flexible filler should be used in these areas.

For areas up to 5m wide by 10m long, a minimum expansion gap of 15mm must be employed to the perimeter of the flooring to allow for natural seasonal movement, and an additional 3mm of expansion gap should be employed for every 1m in width. This can be achieved by introducing spacers between each board (glue down installation only), creating an accumulated expansion gap across the width of the flooring. Spacers and wedges should not be removed until the adhesive used has fully cured.

As not all walls are straight or square, we recommend dry laying several rows before fixing to ensure the flooring is laid straight. Once done, mark the floor with a line to work from once you are happy with squaring the flooring.

We advise bonding your flooring to the subfloor when UFH is present. Floating installation is acceptable, providing a compatible underlay is used, but UFH systems perform more efficiently using a bonded installation method.

Once setting out has been completed, apply a bed of adhesive using a suitable notched trowel. We recommend Bona R848 Silane Based Adhesive. Every effort must be made to avoid gluing the tongue and grooves together.

Flooring clamps and weights should be used in general, but are advised for use over night where installations can not be completed within one day.

The first 48 hours after installation are important. Excessive temperature and/or moisture change during this period can lift the flooring, undermining its adhesion to the subfloor.

Protection

We advise that you install our wood flooring once all other building work and decorating is complete. Should this not be possible, floor protection may be required.

Our wood flooring is finished to order, and takes approximately 1 week after installation to fully cure. Any protection applied to the flooring during this period will increase this curing time.

Only breathable protection should be used. We recommend the use of a fleece protection.

Floor protection does not guarantee that the wood flooring will remain undamaged, so care must be taken when working over a newly install floor.

UFH must remain off when protection is present.

This installation guide was written by Eden Clay. All information contained in this installation guide was correct at the time of writing and publication. Eden Clay reserves the right to change this installation guide at any time without prior notice to third parties. Information conveyed in this installation guide is for reference only. No rights can be derived from this information.