PRE INSTALLATION GUIDANCE

– WOOD FLOORING

Subfloor Guidance

PREPARATION: MAKE SURE THE SUB-FLOOR IS UP TO THE JOB

Preparation of the sub-floor is vital to ensure that the flooring is laid properly. A sub-floor that isn't within the specifications of the floor fitting instructions is likely to develop problems over time.

Sub-floor must be smooth, sound, flat, clean, and permanently dry.

BS 8203:2017 "Code of practice for installation of resilient floor coverings" outlines the tolerance levels for subfloor preparation that are required to ensure a suitable base for the installation of resilient floor coverings.

Specifically, the standard states that the maximum allowable deviation in the subfloor level for a 2-meter run is 3mm. This means that the surface of the subfloor should not vary by more than 3mm over a distance of 2 meters.

To level a concrete or wood-based subfloor to meet the requirements of BS 8203:2017 "Code of practice for installation of resilient floor coverings", the following steps can be taken:

1. Assess the subfloor: Before beginning any work, it is important to assess the subfloor to identify any areas of unevenness or damage that may need to be repaired. This can be done by using a straight edge or laser level to check the surface for deviations from the required tolerance level.
2. Clean the subfloor: The subfloor should be cleaned thoroughly to remove any dust, debris, or other contaminants that may affect the adhesion of the levelling compound.
3. Install a suitable underlayment on a wood-based subfloor. If the wood-based subfloor is particularly uneven or damaged, it may be necessary to install an underlayment. The underlayment can be made of plywood, cement board, or another suitable material.
4. Levelling compound: On a concrete-based subfloor. Once the subfloor is prepared, a self-levelling compound can be mixed and applied to the surface. The compound should be mixed according to the manufacturer's instructions and poured onto the subfloor in a thin layer. It should be spread evenly to ensure that the surface is level.

   The levelling compound should be left to dry for the recommended amount of time, typically 24-48 hours, before installing the resilient floor covering.

It is important to note that the specific steps for levelling a subfloor will vary depending on the type of subfloor and the condition of the surface. It is recommended that a professional installer be consulted to ensure that the subfloor is levelled properly and meets the requirements of BS 8203:2017.

To ensure that a concrete or wood-based subfloor is permanently dry enough to meet the requirements of BS 8203:2017 "Code of practice for installation of resilient floor coverings", the following steps can be taken:

1. Check the moisture content of the subfloor: It is important to check the moisture content of the subfloor to ensure that it is dry enough. This can be done using a moisture meter or by performing a calcium chloride test. The concrete subfloor reading should be below 65% relative humidity (RH) or 0.5% moisture content for concrete. For wood-based subfloor the readings should not exceed 10% moisture content (MC).
2. Identify and repair any sources of moisture: If the subfloor is found to be too high in moisture, it is important to identify and eliminate any sources of moisture. This may involve fixing leaks or repairing damaged drainage systems.
3. Install a vapor barrier: A vapour barrier can be installed over the subfloor to help prevent moisture from seeping up from the subfloor. This can be a damp proof membrane, a liquid-applied membrane, or a combination of both.
4. Allow the subfloor to dry: If the subfloor is too moist, it may be necessary to allow it to dry naturally before proceeding with the installation of the resilient floor covering. This can be done by increasing ventilation in the room, using dehumidifiers or fans, or by applying a drying agent to the surface.
5. Test the subfloor again: Once the subfloor has been allowed to dry, it is important to test the moisture content again to ensure that it meets the requirements of BS 8203:2017. This can be done using a moisture meter or by performing a calcium chloride test.

By following these steps, the concrete or wood-based subfloor can be made permanently dry enough to meet the requirements of BS 8203:2017 "Code of practice for installation of resilient floor coverings". It is important to note that the specific steps will vary depending on the condition of the subfloor and the type of resilient floor covering being installed.

It is important to note that these are minimum requirements, and that in some cases, it may be necessary to achieve a tighter tolerance level in order to ensure a suitable base for the installation of resilient floor coverings.

Expansion Gaps Guidance

PREPARATION: INSTALLATION EXPANSION GAPS

- Expansion gaps. Leave adequate expansion gaps as per manufacturers guide. This means at 100% of the perimeter of the flooring to be laid. This includes around pillars, pipes, newel posts, stair risers…any vertical surface.
- The perimeter of the area should not be filled with any type of sealant or adhesive, as this will prevent the hardwood flooring from expanding and contracting properly. Instead, a

suitable trim, such as a skirting board, scotia, quadrant beading or end profile should be installed to cover the gap and provide a finished look.

- Door facings should be undercut so the flooring can be installed underneath them whilst still leaving the recommended expansion gaps and a finished look.
- Expansion at doorways. Each room should be installed separately as site conditions can vary from room to room causing inconsistent expansion and contraction from one area to the next. Use a threshold at doorways or similar to break larger areas up.
- Expansion. Plan ahead. If heavy objects are to be placed in a room such as kitchen islands or grand pianos. One, use a thicker floor of 18mm+ to provide extra support of the weight. Two install the flooring using a full stick down method opposed to floating. Stick down installation will prevent any noticeable movement.

PREPARATION MATERIALS AND TOOLS

- Use materials such as underlays, fixings, adhesives, cleaning and maintenance products which are compatible with hardwood flooring. If in doubt ask the supplier. Make sure you have the right type of tools which are clean and ready such as, hardwood flooring nailer, nails, spacers, saws, moisture meters, trowels etc.
- Check the delivery note, the labels on the packs prior to installation. Is this the correct product for the area you are installing in. Once laid it is deemed as accepted.
- Check the appearance and grade of the material with the client prior to installation. Once laid is deemed as accepted.
- The installer is normally the last person to see the plank prior to it being fixed down. The installer is responsible for inspecting the planks and making sure they are defect free. If in doubt do not install or use in an inconspicuous area such as a cupboard or corner of room.
- Work from several packs at a time and plan the plank layout with regards to length, overlap (200mm minimum) of staggered boards. The plank layout should be planned out to ensure the best use of material and the most aesthetically pleasing appearance.
- Door clearance should be checked to ensure that the hardwood flooring will not interfere with opening and closing doors. Can the doors be cut?

Underfloor Heating Guidance

PREPARATION: UNDERFLOOR HEATING

Check underfloor heating (UFH) requirements before installation and refer to UFH manufacturer's guidance where applicable.

- Check the underfloor heating is working and there is no loss of pressure (water system)
- Switch on the underfloor heating and let it run
- Acclimatize the hardwood flooring as above for 48-72 hours with the UFH on
- Ready to install? Switch off the underfloor heating and leave off for 24 hours prior to installation
- Install the floor to completion
- Leave the underfloor heating off for 48 hours
- Turn the underfloor heating on, important turn the underfloor heating up around 2 degrees C per day to gradually increase the heat

- Underfloor heating should be used as an ambient constant heat. Turning the heating up and down too quickly may damage the hardwood floor.
- We would not recommend using under flooring heating with solid wood flooring.
- We would not recommend certain species in engineered boards with underfloor heating as these species are too unstable. Canadian Hard Maple, Beech, Jatoba, Hickory, Pine, Bamboo.

Note:

The British Standard BS 8201:2011 "Code of practice for flooring of timber, timber products and wood-based panels" recommends that the maximum temperature of the floor surface for hardwood flooring installed over underfloor heating (UFH) systems should not exceed 27°C (81°F). This is to prevent the wood from drying out, shrinking, warping or cracking.

It's important to note that the actual temperature of the floor surface may be higher than the air temperature of the room due to the heat transfer from the UFH system. Therefore, it's recommended to use a temperature sensor to monitor the floor surface temperature during and after installation.

It's also important to use the correct type of hardwood flooring for UFH systems, such as engineered hardwood flooring, which is designed to withstand the temperature changes and moisture associated with UFH systems. Additionally, the hardwood flooring should be installed according to the manufacturer's recommendations and the BS 8201 standard.