

KNOWLEDGE m²

The smart guide to wood flooring installation

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PREPARATION:

MAKE SURE THE SUBFLOOR IS UP TO THE JOB

Preparation of the subfloor is vital to ensure that the flooring is laid properly.

A subfloor that isn't within the specification of the floor fitting instructions is likely to develop problems over time.

1

Subfloor must be smooth, level, clean, permanently dry, and structurally sound. Level to 3mm over 2m.

Note: The £1 coin rule! A pound coin is almost 3mm in thickness. If you can fit it under a 2m straight edge that's laid across the subfloor then your floor needs levelling.

2

If the floor is not level - nail or screw floorboards, use ply board, or a levelling compound to bring your subfloor within specification for the floor being laid.

3

If there is a risk that the subfloor isn't permanently dry, an appropriate moisture barrier must be used.

- DPM for mineral subfloors
- Bitumen Moisture Barrier Paper for timber subfloors

For more detailed guidance please see our Atkinson & Kirby subfloor guidance in the downloads section of our website:

<https://akirby.co.uk/storage/1500/phps8uz10>



PREPARATION: CHOOSING THE CORRECT UNDERLAY

By offering a range of underlay choices, Atkinson & Kirby can ensure that the flooring system is tailored to the specific needs of the site and will support the desired performance and durability.

Underlay is laid beneath flooring, choosing a high quality underlay will extend the life of your new flooring. Underlay improves insulation and offers sound proofing qualities, ensuring cushioning and comfort underfoot. Choosing the correct underlay will also help to ensure that the flooring system can comply with relevant industry standards and regulations.

THE CORRECT UNDERLAY FOR SOLID FLOORING

An underlay should not be used together with a solid hardwood strip type flooring as our solid wood flooring should be secret nailed or stuck down to the subfloor.

THE CORRECT UNDERLAY FOR ENGINEERED FLOORING

Different underlays are available to suit the site. Choice is dependent on the condition of the subfloor, moisture levels, acoustic needs, whether there is underfloor heating present.



PREPARATION: CHOOSING THE CORRECT HARDWOOD FLOOR TYPE FOR EVERY APPLICATION

Inspirational floors to enhance every project. From homes to hotels, museums to restaurants, Atkinson & Kirby flooring is selected for projects all over the world in various applications:

1. Residential homes: Popular choice for living rooms, bedrooms, hallways, and other areas of the home due to its natural beauty and durability.



2. Commercial spaces: Hardwood flooring can add warmth and sophistication to offices, restaurants, and other commercial spaces.



3. Retail spaces: Hardwood flooring can create an inviting and upscale atmosphere in retail stores, particularly in high-end boutiques and speciality shops.



4. Hospitality industry: commonly used in hotels, resorts, and other hospitality establishments due to its durability and elegant appearance.



5. Public buildings: public buildings, including museums, libraries, and government buildings, where it can create a classic and timeless look.



6. Sports facilities: dance studios, and other sports facilities due to its shock absorption and durability.



7. Educational facilities: Hardwood flooring is used in schools, universities, and other educational facilities due to its low maintenance and long lifespan.



For inspiration a selection of our customer projects and case studies can be viewed on our website <https://akirby.co.uk/case-studies?loaded=1&type=all>

PREPARATION:

CHOOSING THE CORRECT INSTALLATION METHOD

Choosing the correct installation method based on the specific conditions of the site will help to ensure that the flooring system will support the desired performance and durability.

INSTALLATION METHODS

Subfloor type	Hardwood flooring type	Fitting options
Wood based subfloor	Solid flooring	Full stick down (no underlay) Secret nail (no underlay)
Wood based subfloor	Engineered flooring	Float on underlay Full stick down Secret nail*
Concrete based subfloor	Solid flooring	Full stick down (no underlay)
Concrete based subfloor	Engineered flooring	Float on underlay Full stick down

Underfloor Heating (UFH)

If underfloor heating is present then “full stick down” installation gives best heat transference.

Full stick down gives better performance and is the method recommended for commercial applications.

It is important to note that solid flooring should not be used with underfloor heating systems and it is important to always check the specific product specification to ensure the product is suitable for use with underfloor heating (UFH) systems.

*Applies to T&G engineered only, not click-fit systems

PREPARATION: STORAGE AT SITE



Acclimatisation: Hardwood flooring should be stored and acclimatised at the site, in the original packaging, for a minimum of 48-72 hours prior to installation. This means that the flooring should be delivered to the site and left in the room where it will be installed. This allows the flooring to adjust to the temperature and humidity of the room.



Climate control: The room where the flooring is stored must have climate control set to the conditions that will be present after installation. This means maintaining a temperature of around 17-21°C and a relative humidity of 45-65%. The heating/air-conditioning should be operational for ten days prior to the flooring being delivered and stored. Underfloor heating systems should be on whilst acclimatising flooring.



Proper storage: The hardwood flooring should be stored in a dry, clean, and flat area. The flooring should be stacked on a flat surface, such as the subfloor. It should be left in its original packaging and can be covered with a breathable material, such as a tarp, to protect the flooring from dust and debris. Flooring should not be stored outside. Flooring should not be leant against a wall.



Protection from moisture: Hardwood flooring should be kept away from areas with high moisture levels, such as bathrooms, basements, sheds, garages and laundry rooms. Moisture can cause the flooring to warp, cup, or buckle. The site should be wind and watertight and be ventilated to prevent excessive humidity building up. Do not store in damp or humid conditions.

By following these guidelines for storing hardwood flooring at the site, you can help ensure that the flooring is properly acclimated and protected, which can lead to a successful and long-lasting installation.

PREPARATION: FITTING



Subfloor: The subfloor must be absolutely level, dry, clean, firm, and structurally sound in order for the flooring to be laid. Any unevenness in the floor over a set span must be properly evened out.



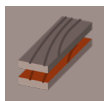
Expansion gaps: A 15mm expansion gap must be left around the entire perimeter including kitchen cabinet legs or heavy objects, radiator pipes, newel posts and door frames.



Doorways: At doorways the floor should be broken with an expansion gap. The expansion gap should be covered with twin or ramp moulding which will allow the floor in individual rooms to naturally expand and contract within their own areas.



Underfloor heating: Always refer to the specific product information for product and UFH suitability. The maximum temperature of the subfloor 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.



Selection: Working from several packs at the same time can help achieve an even distribution of colour/finish. Note: For engineered flooring made with a real wood top layer, the natural characteristics of the tree such as knots and colour variation will be seen from plank to plank. Any pieces which are deemed to look unattractive should be used as a rip or cut, or placed in an inconspicuous area such as may be covered by furniture.

Full fitting instructions are here:

<https://akirby.co.uk/storage/1500/phps8uz10>

INSTALLATION:

SOLID HARDWOOD FLOORING

1

Ensure the subfloor is clean, flat, dry, secure, structurally sound and level.

2

Solid hardwood flooring should not be installed where UFH is present.

3

For concrete floors and mineral based subfloors use a DPM.

4

Keep the flooring in the room where it's going to be fitted for at least 48hrs before fitting (see page 8).

5

Check that timber based subfloors are securely fixed prior to laying the new floor.

6

Leave an expansion gap of 15mm round the whole floor.

7

Industry-standard moisture and humidity checks should be taken from both the site and the product to be laid, prior to installation.

Full fitting instructions are here:

<https://akirby.co.uk/storage/1500/phps8uz10>



INSTALLATION: ENGINEERED FLOORING

1

Ensure the subfloor is clean, flat, dry, secure, structurally sound and level.

2

Use foam, XPS or 4-in-1 underlay.

3

Any underfloor heating must stay below a surface temperature 27°C.

4

For concrete floors and mineral based subfloors use a DPM.

5

Keep the flooring in the room where it's going to be fitted for at least 48hrs before fitting (see page 8).

6

Check that timber based subfloors are securely fixed prior to laying the new floor.

7

Leave an expansion gap of 15mm round the whole floor.

8

When installing cabinets over flooring, the stuck down method should be used.

9

Industry-standard moisture and humidity checks should be taken from both the site and the product to be laid, prior to installation.



MAINTENANCE:

LOOKING AFTER THE FLOOR

Regular maintenance and cleaning is the easiest way to help keep the flooring looking good for decades. Here are a few useful tips to keep the flooring at its best.

1

A soft brush or vacuum cleaner is the best way to remove surface dust. Never use steel wool, scouring pads, abrasive cleaners or steam mops/cleaners as they can damage the flooring.

2

Use a well wrung damp cloth for general cleaning. Excessive moisture can damage the floor.

3

Where flooring is installed above underfloor heating, do not use rugs.

4

Felt pads under furniture will protect the floor, and are strongly advised. Moveable furniture should be on plastic mats or soft castors.

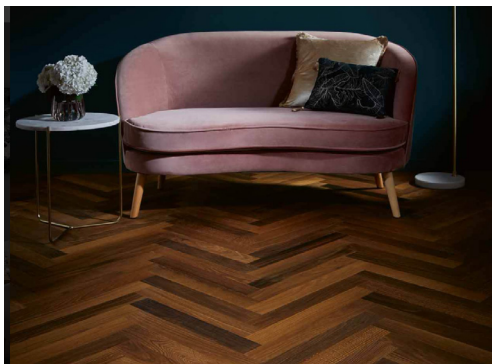
5

Door mats inside and outside external doorways prevent grit being carried across the floor, and protect surfaces from excessive wear or damage.

6

Take care and wipe spills up as soon as possible.

For specific cleaning products for your floor type, please refer to the appropriate WOCA maintenance guide



TROUBLESHOOTING: COMMON ISSUES

It is important to remember that hardwood flooring is a natural product which will expand and contract based on seasonal temperature and humidity changes in the environment where the flooring has been fitted. Where the environment is not suitable for hardwood flooring it can lead to a number of issues including but not limited to cupping, splitting, bridging, creaking and gapping.

For guidance on the 20 most common post installation problems:

<https://akirby.co.uk/storage/1499/phpsHNprT>

Cupping

Cupping is where the board becomes concave with the edges of the board curving up. This is not because the product is faulty, rather it is caused by a moisture imbalance in the board.

Cause: This happens when there is a moisture imbalance in the boards, typically caused by site conditions.

Solution: This occurs because there is a problem with dampness in the subfloor. Checks must be made before fitting to ensure the subfloor is permanently dry and stable. Extreme variations in temperature and humidity can severely reduce the products longevity. Steady environmental conditions and a suitable moisture barrier will help to eliminate cupping.



TROUBLESHOOTING: COMMON ISSUES

Splitting

Splitting or cracking are the opening up of small gaps within the structure of the timber, usually along the length of the grain. Rustic and Super Rustic grades may contain small splits and checks which are considered a feature of this grading.

Cause: Low levels of humidity combined with underfloor heating are one of the most common causes of splitting. Heat dries out the timber so the flooring can become over dry and shrink. Excessive humidity can cause timber to expand. Constant changes result in the wood continually expanding and contracting, and eventually splitting.

Solution: Minimising variations in heat and humidity is the key here. Humidity can be monitored and humidifiers employed to even out changes. Splits should be filled with a suitable flexible filler.



TROUBLESHOOTING: COMMON ISSUES

Creaking

Although creaking can be common in timber flooring, it can be quite random, occurring in some areas of the floor and not others.

Cause: Creaking or squeaking is a result of excessive vertical movement, so that the joints move against each other and friction causes the noise. It could be that the joist battens are too far apart, or if the floor is laid on a timber base, the base is too thin and is flexing. It could be that the subfloor is uneven or even that the floor has been installed directly onto existing flooring. It could also be caused by a lack of expansion.

Solution: First of all make sure the floor is not installed on top of existing flooring. If the problem occurs across a large proportion of the floor then it may require a more stable subfloor be installed. Minimal issues of creaking may be corrected by injecting adhesive to fill the gaps between the floor and subfloor. Further work with secret nailing could also help cure localised faults.



TROUBLESHOOTING: COMMON ISSUES

Bridging

Bridging is where sections of the flooring have separated from the subfloor. Cupping often occurs at the same time.

Cause: Bridging or lifting is usually caused where expansion gaps are too small. Moisture can cause the timber to expand, and when this is more than the expansion gaps can cope with the flooring lifts, and bridging occurs. Vinyl flooring can also expand, usually as a result of a rise in temperature.

Solution: With solid, engineered or laminate floors, it is necessary to find the cause of excessive moisture. When that is sorted out the flooring can be refitted.

With floating floors, where sufficient expansion gaps weren't made during fitting, the solution is to trim the boards to create a larger expansion gap.



TROUBLESHOOTING: COMMON ISSUES

Gapping of Joints

Gapping between floorboards can be caused in several ways.

Cause: Incorrectly prepared or below specification subfloor.

Incorrect type or fitting of underlay.

Incorrect fitting of flooring.

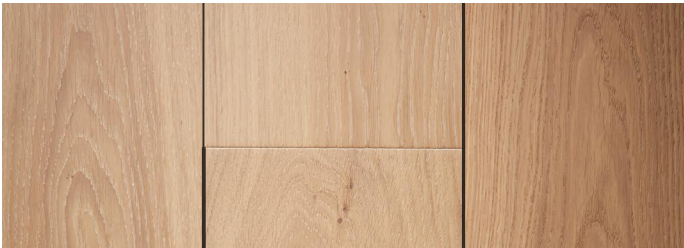
Debris or dirt between planks.

Excessive expanding and shrinking of the floor due to variations in moisture or temperature.

Heavy items of furniture can prevent floors from making the small, natural movements of expanding and shrinking.

Solution: Firstly the cause of the problem has to be found and rectified. The floor may need to be unfitted, any damaged planks replaced, then refitted according to fitting instructions.

If there are only one or two instances of gapping it may be possible to tap the boards together with a block and mallet, using a bead of glue in the gap before closing if required.



AFTERSALES & SUPPORT

Inspirational floors to enhance every project. From homes to hotels, museums to restaurants, Atkinson & Kirby flooring is selected for projects all over the world in various applications. To discuss your requirements and any support you may need pre and post installation please contact our passionate team of experts:

Customer services: 01695 573234


customer.service@akirby.co.uk

WARRANTY

To register the warranty on your Atkinson & Kirby flooring please complete the warranty card and return to:

Or download a warranty card here:

<https://akirby.co.uk/storage/1518/php7euaQZ>


**Atkinson
& Kirby**

Floors that define your space

Thank you for choosing Atkinson & Kirby to fulfil your flooring needs

This warranty card contains all the details and conditions that apply to the granting of the warranty by Atkinson & Kirby. All installation and maintenance guides referred to in the warranty T&Cs should be fully read and understood before proceeding with any installation of Atkinson & Kirby flooring products. All guides can be downloaded from www.akirby.co.uk

Warranty Card

Date of purchase: _____






Seller: _____

Order number: _____

Product name: _____

Product code: _____

Installation address: _____

In the event of any product complaint a photocopy of this warranty card, together with proof of purchase should be presented to the seller or directly to Atkinson & Kirby

www.akirby.co.uk

V1 July 2018

Seller's signature and stamp



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for the environment
by recycling



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