



Oak Floors Online

"When You Supply Such High Quality Products... You Can Afford To Be Very
Transparent About Your Business"

Information Pack

Storage

Acclimatisation

Subfloor Preparation

Fitting Methods

Maintenance



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A Guide To Storing & Fitting Your Oak Floor

Fitting a wood floor is probably more straightforward than you may think, and can be laid over practically any existing dry subfloor such as concrete, tiles, and existing boards or joists. But... the word to emphasise here is DRY.

You may have your own ways of successful installation but here are a few pointers that you may find useful for consideration.

Before Delivery of Your Flooring

The building should be sealed with all external windows and doors already fitted, and all wet work such as plastering, plumbing, and decorating should be completed and dry. The heating system should be operating as normal and will have been doing so for at least 14 days.

The subfloor over which the flooring is to be installed must be dry (see below), the temperature in the room 15-22 degrees and the relative humidity should be between 35-65%.

Subfloor Conditions

All subfloors must be clean and dry, and any residues effecting this should be scraped off and swept or vacuumed up.

The subfloor must be free of cracks and latency, whilst being flat and level within + or – 3mm over any 3 metre length.

High points should be scraped or ground off and hollows should be filled with a suitable levelling compound or layering shims.

All subfloors should be tested in accordance with BS8201:1987 with the correct use of a relevant and suitable moisture meter. Moisture is a new Oak floor's worst enemy, so this preparation is vital for successful installation.

Wood subfloors should have a moisture content of less than 12%.

Sand/cement subfloors should not exceed a moisture content of 5%, less is preferable.

Where there is doubt about suitability of a subfloor, the necessary test procedures must be completed. In some situations a moisture barrier or Damp Proof Membrane will be required.

We recommend Sonic Gold Excel as an underlay because we believe it's the best available and incorporates an excellent moisture barrier and good acoustic properties, whilst being simple and easy to lay.

Acclimatising Your New Floor Boards

Before installation, you must leave your floorboards in the room where they are to be fitted for a period that allows them to reach equilibrium with the surroundings. This is called acclimatising, which generally means that you are allowing the floor to reach the same level of moisture content as the room where it's to be fitted, so that no excess movement happens after installation.

Some fitters will say to leave them for a week, some for a fortnight but there is no definite way of being sure unless a moisture meter is used. It could take a few days or it could take a few weeks. Sometimes it can even take months, especially with new concrete subfloors that dry at 1mm per day average.

When all this preparation is considered on the grand scale of things, there is no point trying to cut corners and rush installation at this stage because the risk is too high. If a new floor is fitted above a subfloor with excess moisture, that new floor will 'take on' that moisture itself and expand, so creating massive problems for you in the near future along with high expense.

The packs of flooring should be stacked and stored in a way that allows the air to circulate around them because this then allows the flooring to shrink or expand as they acclimatise to the normal temperature, humidity and moisture of the room.

Never stack or store your new flooring near sources of heat, large windows, or glazed doors because this can create a false environment for the flooring.

Moisture levels of the wood flooring and the subfloor should be checked, measured and noted before any installation commences.

In an effort to emphasise just how important this procedure is, and as an example of what can happen if fitted too quickly, a 130mm solid oak plank, when fitted at 9% moisture content onto a subfloor that's 15%, can increase in size by more than 3mm.

For a room that requires 25 planks in width, that will mean the floor will want to expand by over 75mm! (See the table in FAQ for more info).

Protecting Your New Floor From Damp and Moisture.

As mentioned before, Oak flooring is a natural material and it will absorb any moisture available from its surroundings, causing it to swell or distort. Therefore any concrete or plastering (and any other wet trade work) should be completely dry before installation begins.

It can take several months for a concrete floor to dry sufficiently, and even then in some cases it must be sealed with a DPM.

The liquid DPM system we recommend is Sika Primer MB, which is a 2-part resin based primer and moisture regulator.

The other option we recommend (if your chosen fitting method is a floated floor) is a high performance underlay like Sonic Gold Excel.

Preparation for Installation – 10 Steps

1. Always moisture test the subfloor, record the results, and only proceed if satisfactory.
2. Determine the finished floor height by using the overall dimension of your chosen fitting method and cut the bottoms of the doorframes and architraves to enable a snug fitting of the wood floor beneath.
3. When the direction of your new floor is decided, measure the width of the room and divide that distance by the width of the board. This will determine the width of the final row and if this results in a dimension less than $\frac{1}{4}$ of the face, you must reduce the width of the first row by cutting along its length.
4. Select a number of the longest, straightest boards to use in the first 3 rows and this will reduce the risk of 'twisting' the floor. Always work from 3-4 open boxes at any one time, so that you get an even mixture of colour, grain and shade.
5. Lay the first 3 rows down without fixing and implement wedges for the expansion gap between floor and wall. For solid oak the expansion gap should be 3mm for every linear metre in width, ensuring a minimum of 15mm at all times and for an engineered oak board it should be 1.5mm per linear metre.
6. Joint spacing should be random and no closer than 200mm in any adjacent row.
7. The first and last plank in any row must be more than 200mm.
8. Once assembled, use a string line to make sure the flooring is straight and adjust if not with the expansion wedges.

9. When happy that the floor is straight, mark the floor edge on the subfloor and carefully lift, stacking them in order as you do so (for a timber subfloor, use sacrificial blocks of wood screwed to the floor after row 3).
10. Now you can begin to install your floor in the method that is most suitable (see below for options).

Fitting Methods

Nail Down Method (Fixing onto battens over a concrete base or onto joists)

One of the most common fitting methods is to secret nail (explained later) into treated battens that are fixed down onto the concrete subfloor. The battens can be drilled and screwed down or glued with a strong adhesive. With this method, we recommend that you incorporate a DPM to guard against the risk of moisture reaching the flooring.

The biggest drawback with fitting in this way is that the finished floor height is raised by the thickness of the battens.

When fixing directly onto floor joists in a similar way, a DPM **MUST** be used, especially when fixing to ground floor joists.

After preparation as above 1-10, fix the 3rd row up tight against the sacrificial blocks by secret nailing, remembering to apply a bead of joint adhesive to the end of each plank. The boards should then be nailed 50-75mm from each end and at 200-250mm along the length (less if using a board thinner than 18mm).

Continue to install the whole floor like this until you almost reach the opposite side wall. If using a Porta Nailer you will have to stop sooner because you won't be able to get to the required position to use it. At this point you must pre-drill a 3mm hole and secret nail the planks by hand, using a punch to make sure the nails are in far enough to not impede the next plank.

Measure and cut the final row and face nail it by drilling a 3mm hole every 150mm along its length and nailing as before.

Now the sacrificial blocks can be removed from the edge of row 3 and rows 2 and 1 can be fitted in the same way.

Floating Method

This method can be used for a concrete or timber subfloor but we only recommend using an engineered board and not a solid for a floated installation.

Lay out a good quality underlay on the subfloor (make sure it has a moisture barrier on a sand/cement subfloor) and tape the joints as specified by the manufacturer. The Sonic Gold Excel has a 200mm overlap and a double vapour barrier, which ensures excellent moisture protection after installation.



Position the first 3 rows without adhesive as previously described and check with a string line that they are straight and true with the use of expansion wedges. Expansion gap for engineered oak should be 1.5mm per linear metre. When satisfied, carefully take the 3 rows apart and stack in order.

Now apply a bead of joint adhesive along the full length of the first plank and at the end of the second, continuing like this for fitting the first row. Using a tapping block, install the second and third rows but always remember to only tap against the tongue to prevent damaging the face of the board.

Allow the joint adhesive to set for 45 minutes and then continue to install the whole floor. When you reach the last board, after cutting it to the required width (remembering to allow for the expansion gap), install it and use the wedges to tighten the floor. Once completely set, remove the wedges and fit your skirting boards.

Stick Down Method

A big advantage of gluing your new floor directly to the subfloor is that the finished floor height is kept to a minimum. A flexible flooring adhesive must be used and we recommend the following;

1. Full Surface Bonding with SikaBond T54

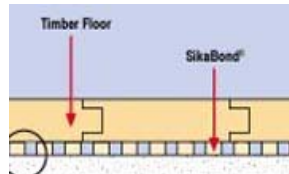
SikaBond T54 is a flexible, elastic adhesive that is poured out and spread over the floor to accept the wood flooring.

After preparation as 1-10 above, spread the adhesive with the correct notched trowel to the marked area and place the first boards into the adhesive, making sure that they are tight against the expansion wedges.

Remember to apply a bead of joint adhesive to the grooved end of each plank before fitting the next one. Locate the T&G and press down to ensure good adhesive contact and continue like this for the first 3 rows, often testing the floor is straight using a string line. Continue to install the rest of the floor in the same way, remembering to only apply as much adhesive as is possible for you to use before it 'skins' over.

Always remove any excess adhesive from the face of the board as soon as you can.

When you reach the opposite wall, measure and cut the last plank (remembering to allow for the expansion gap) and use the wedges to tighten the floor. Once the adhesive is set, simply remove the expansion wedges and fit your skirting boards.

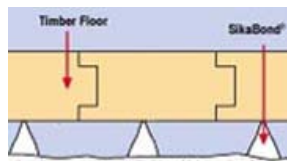


2. Liquid Batten System

This method uses beads of SikaBond T2 that are applied using a mastic gun at 150mm centres to the subfloor.

After the preparation as 1-10 above, the boards are pressed into the beads in the same way as the Full Surface method, so that a good adhesive contact is achieved.

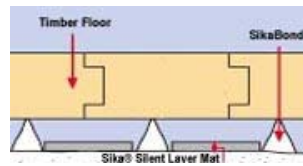
This system is ideal for fitting to subfloors that have slight surface irregularities to a maximum of 5mm. This really is as simple as it sounds.



3. Sika AcouBond System

This method is very similar to the Liquid Batten System except that it incorporates a sound dampening mat called Sika Layer Mat that has slits cut into it, and so acts as a template for applying the beads of SikaBond T2 adhesive. Again the same fitting method is used for the floorboards as the Full Surface and the Liquid Batten methods.

This system is ideal for use where high reduction of impact and ambient noise is required, so perfect for residential accommodation, blocks of flats or apartments, offices, etc...



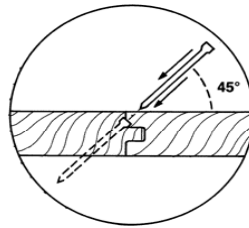
Why Must We Use A Flexible Adhesive?

It's very important to use a high quality, flexible adhesive that's been designed for wood flooring because the floorboards will subject the adhesive to high levels of stress from their natural movement. These stresses caused by dimensional movement of a natural product will be greatest next to sources of heat like radiators, open fires, or over un-insulated pipes. The flexibility within the adhesive allows the wood to expand and contract and so causes no damage to the floor.

A rigid adhesive should never be used because it can cause the board to crack or even break away completely because it has no flexibility. Although the rigid adhesives are often cheaper than the flexible ones, the damage that they can cause is simply not worth the risk.

Secret Nailing Method Explained

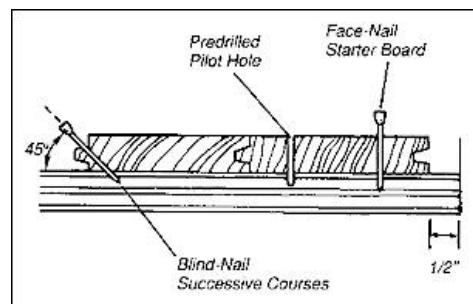
This is the most common method used for solid wood flooring, where special L-shaped nails are driven through the tongue of the board at a 45 degree angle into the subfloor. Some people prefer to use screws instead of nails because they can be removed more easily.



So that the next board can slide over the tongue and hide the nail, the head of the nail must be punched in a way that it is flush or below the surface. Some nail holes will need to be pre-drilled if nailing through a hard knot or tight grain.

Countersinking and screwing with long thin screws achieves a good strong fixing, and also allows for easy removal of the boards if they require lifting in the future.

The first board can be face fixed and secret nailed but the last cannot because you can't get to the required angle. This must be face fixed only, so make sure that sufficient fixings are used.



Using a Porta Nailer for Secret Nailing

A power nailer or Porta nailer can be used to simplify and speed up the secret nailing process. It allows for quicker installation by driving each nail at exactly the right angle and leaving it flush with the tongue to accommodate the next board.

Most professional floor fitters use these because they are so effective with saving time but they are quite expensive. If you are planning to install your floor in this way, to save money you can simply hire one from us.



Surface or Face Nailing

We recommend that floor boards over 130mm wide are fixed through the surface or face, so that a stronger attachment is achieved to prevent the boards from 'cupping' or distorting over time.

It is usual to put two nails into the board where it crosses each batten or joist (3 for really wide boards).

Lost head nails can be punched under the surface and filled, or cut nails can be left to sit on the surface for the authentic look.

Surface Screwing and Plugging

Again for extra wide boards, we recommend screwing down through the face of the board with 2 or 3 screws per joist to prevent excess movement. These can either be countersunk to leave the screw head flush with the surface or countersunk deeper for accepting an oak plug. The plug is normally glued in and then sanded flush afterwards, which again provides a really authentic appearance when finished.

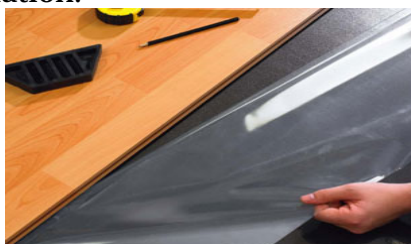


Stick Down 'Floating' Method

You may be thinking, "How can you stick the floor down and float it at the same time?" Well, this is a relatively new method that uses an adhesive underlay with a peel-off protection film.

The underlay is laid in 1m widths at 90 degrees to the flooring. The flooring is then installed a row at a time. The peel off film is then pulled off the underlay beneath the wood flooring ensuring a strong and even bond. Should your new wood floor expand or contract at any time, the underlay will expand and contract with it, helping to eliminate unsightly gaps in the boards.

Be careful when using this method though because once the flooring touches the adhesive that's it. If it's not in the right position it's useless. We advise to 'practice' with a few old planks before the actual installation.



This method saves time and money due to its fast installation and simplicity. When you actually do this yourself you'll be amazed at just how simple it is. There's no need for messy adhesives, and this type of underlay is available both with and without moisture protection barrier.

Additional Work and Considerations

Expansion Strip

When fitting a wood floor of any kind or species, especially a solid wood floor, you must leave sufficient gap around the room to allow for dimensional movement of the boards. 3mm per linear metre for solid oak is recommended and 1.5mm for engineered oak.

Skirting Boards

It's best practice to remove the existing skirting boards from the room before installation of your new floor and then to re-fit them afterwards. This will normally cover the expansion strip and give a more professional finish. If the skirting is left in place during fitting, the floorboards can only be laid up to the edge of the skirting. An expansion strip is still required so a strip of scotia or beading must then be laid around the room to cover this, which most people don't like.

If you are concerned about damaging your skirting boards when removing them, we can supply new ones for you, and even machine them out of oak if you want them to match your new floor.

Filling

Depending on individual taste and also the grade and quality supplied, any knots in the oak can be filled with a suitable filler, or simply left for that more character effect.

Filling should be an expected and acceptable process with any natural wood flooring but the choice is completely personal and individual. Usually this will only be an issue when fitting our unfinished boards because the prefinished flooring is just that... prefinished.

Sanding

Our unfinished oak flooring is already planed to a smooth finish but it can still be sanded after fitting to make it even smoother and to take of any slight ridges between boards. This again is a personal choice, some preferring to simply oil it because they believe that the minor imperfections give that rustic effect but we recommend a light sanding to 'take off any 'highs'.

Sanding can be done with a standard belt sander or by hiring an upright floor sander to save the backache, and we can supply you with either for a small hire charge.

Staining

If a desired shade is required that's a little 'out of the ordinary', then we supply many different kinds of oils and finishes that are simply applied by brush, cloth, or sponge. We can supply different colours too should you want a contemporary look for your office. For a prefinished coloured floor, we can supply this but availability is more than 6 weeks and it can become a little expensive.

Sealing and Finishing

For general home use with normal household 'traffic' we recommend either a lacquered finish or an oiled finish that both provide a hardwearing surface that also repels water and most stains.

If you want a really natural looking floor with enhanced grain and character, take a look at our brushed and oiled products available in solid and engineered.

Finishes Available

We can supply you with an Unfinished floor to finish yourself 'on-site' or a prefinished floor to save having to finish it yourself. This is often preferred because there is less work involved and the floor is virtually ready to walk on within hours of being installed.

We supply a **Lacquered Finish** that provides a hard, smooth, shiny and polished finish. One drawback to this finish is that it can become scratched with heavy wear and tear, which can be considered to add character or require repair. Repairing a small area of a lacquered floor is very difficult to do without making it stand out from the rest of the floor, so usually any serious damage will mean the whole floor will need refinishing.

We also supply a **Brushed & Natural Oiled Finish**, which simply means that the softer fibres of the face are brushed out before oiling. When oiled, this gives a beautiful natural finish that really enhances the grain of the oak. This will require re-oiling every 9-12 months depending on 'traffic' and a couple of advantages of this finish is that small areas can be repaired without the need to refinish the whole floor and normal usage scratches are not so obvious.

We also stock a **Double Brushed & Dark Oiled oak**, which goes through the brushing process twice to really enhance the grain before being dark oiled to give a rich, textured finish that rarely shows scratches or scrapes. This is very popular for high traffic areas like pubs and restaurants, as well as barn conversions that want an antique type finish. We call it our 'Marmite' oak because 50% of the people that see it love it, and 50% hate it!

FAQ Section

Why Do I Need To Leave My New Floor Boards To Settle Before Fitting?

Because wood flooring is a natural, hygroscopic material, when they are introduced to a room that has a higher or lower moisture content they will either 'take on' or 'give off' moisture until they reach the same level as the room.

Depending on the extent of the moisture and temperature levels, the degree of movement will vary accordingly.

This dimensional change will not change or reduce the durability and appearance of the boards other than the size.

What you certainly want to avoid is your floor wanting to expand or contract after installation has been completed.

Although the flooring we supply has already been kiln dried to between 8-12%, which is considered as the 'typical house moisture level', some homes and offices will have a slightly different atmosphere and humidity to that of the kiln in which the boards were dried. Older properties are likely to be colder, damper and draughtier, whilst more modern properties may be warmer and drier.

By allowing the air to flow around the boards (for several weeks in some cases), they are given time to fully acclimatise themselves to the room, so after they are fitted their settlement and dimensional movement will be significantly reduced.

Although some people will tell you that 1 week is sufficient or 2 weeks is plenty, it's always best practice to actually test the wood flooring and the subfloor with a moisture meter to make sure that conditions are suitable.

The following chart illustrates the dimensional changes that can occur when an oak floor is introduced to a subfloor with higher moisture content;

Initial MC	Final MC	Initial Width mm	Final Width	Change in MM
9%	10%	130	130.52	0.52
9%	11%	130	131.05	1.05
9%	12%	130	131.57	1.57
9%	13%	130	132.1	2.1
9%	14%	130	132.62	2.62
9%	15%	130	133.15	3.15
9%	16%	130	133.67	3.67
9%	17%	130	134.2	4.2

MC = Moisture Content MM = Millimetres

What Else Can I Do To Reduce Dimensional Movement?

Although wide solid boards give a more traditional look to the floor, any shrinkage or 'cupping' will be more noticeable across the face unless face fixed properly. If this is a concern, it may be advisable to order narrower boards or go for an engineered board instead. It's worth emphasising here that our 189mm wide engineered boards offer much greater stability than any similar width solid and that you should have virtually no dimensional movement because of its construction method.

To avoid significant movement of wide solid boards they should be screwed and plugged through the face, so securely fixing down the centre of the boards as well as the sides. This is a traditional method of fixing that dates back many years, so although it will take longer to fit and so be more costly, you will achieve a more authentic and natural appearance.

These extra costs and concerns can all be avoided by using our engineered oak design because of the extra dimensional stability that it offers, although being 189mm wide. From the surface it will still appear as solid oak and the 21mm (with 6mm wear layer) provides as much lifespan and durability as a solid board anyway.

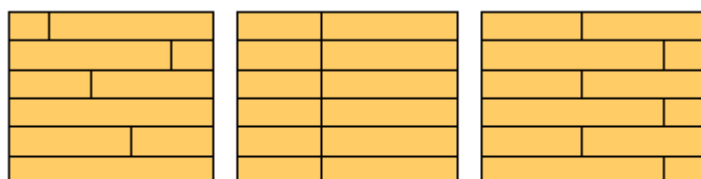
The 21mm board is recommended for use in rooms with underfloor heating and in rooms that may have varying levels of heat, humidity, and moisture (within reason). This thickness board is also ideal for high traffic areas because of the 6mm wear layer.

What Layout Should I Use When Fitting The Boards?

All wood flooring looks most authentic and natural after installation when the boards are cut and laid in a random layout.

If the boards are similar length to begin with, it's best to cut and stagger the position of boards in order to achieve the correct effect, although our solid range is supplied in varying lengths to encourage this anyway.

These diagrams show how the boards should be fitted...



The engineered board we supply usually comes in packs that have 75% of full lengths at 1830mm and 25% of 610mm, 915mm, and 1220mm, so encouraging the person fitting the floor to be aware of the need to stagger joints.

What About All The Other Things We Need?

No problem. We want to take away all the stress and confusion for you when dealing with us. Choosing an oak floor and all the accessories can be very confusing, so we can supply you with the full package and also the service to go with it.

You simply choose your oak flooring and we can also supply;

- Underlay with DPM
- Adhesives for gluing down and for joints
- A selection of finishes, including oils, lacquers, and waxes
- All the tools you will require (to hire or buy)
- Bespoke machined goods like skirting boards and architraves
- A suitable Underfloor Heating System

Because we are also a complete builders and timber merchant, we can machine and supply just about whatever timber product you require, as well as any fixings or adhesives.

How Do I Best Maintain My New Floor?

The most important thing to remember with maintaining your wood floor and keeping it in the best condition is that its greatest enemy is moisture. Wood is very thirsty and will want to soak up any excess moisture available, which in turn makes it expand.

Any damp spills should be cleaned up immediately and if you choose to mop your floor make sure that the mop isn't too wet, and try to use a dry mop afterwards to soak up any excess.

Usually, to keep your new floor clean, regular vacuuming or sweeping will remove any grit from the floor that might otherwise scratch the surface when walked upon. Felt protector pads can be used under furniture for further protection.

For general cleaning, we recommend Blanchon Lagoon, a 'ready-to-use' spray-on cleaner that preserves the original finish of wood floors.

If you use mats or rugs, make sure you move them around quite often to avoid varying shades of colour developing within the floor through the effect of natural light.

Important Information

Hardwood flooring is a product of nature and therefore each plank should be expected to vary in shade, colour, and grain pattern. These features are what makes a wood floor so beautiful when installed but please understand that your oak floor may differ from the original sample seen.

Prior to every installation, the Fitter/Owner must determine that the site conditions, especially the subfloor, are suitable for accepting and accommodating a natural hardwood floor.

Because every installation is different, the Fitter/Owner have or has final inspection and acceptance responsibility as to grade, quality, finish, and suitability of the product

supplied. He, she or they must use reasonable selectivity to decide upon suitability of each board, and the use of stain, wax, or filler for defect correction should be accepted as normal procedure during installation.

Depending on site conditions and layout, 6-10% should be added to the exact quantity required to allow for cutting, wastage, and selection. If an individual piece or part of the flooring supplied is at all doubtful with regards to grade and quality, that piece should not be used.

As the supplier of a pre-packed, pre-machined and often pre-finished product, we cannot and will not accept responsibility for defective or unsuitable pieces being used, nor will we accept any finish or appearance complaints after our product has been installed. No liability for labour costs, or any other related costs incurred, will be the responsibility of the supplier.

Contact Us...

Please call us directly on 0845 459 3073, or call Will Morris directly on 07838 167593 with your enquiry.

Email us at: sales@OakFloorsOnline.co.uk

Or simply go to;

www.OakFloorsOnline.co.uk and click on the 'Contact Us' link to complete a simple online webform.

The logo for Oak Floors Online features the company name in a white, serif font, centered within a dark blue rectangular background. A thin white horizontal line is positioned directly beneath the text.

Oak Floors Online

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