

**Installation Instructions For
Tuscan Terreno Multiply
18mm & 20mm
Engineered Wood Floors**

Installation Instructions for your new Tuscan Terreno Multiply Engineered Wood Floor

The key to long term performance of any floor is the quality of the installation and the immediate and ongoing care and maintenance procedures used on the floor.

To help ensure correct installation, care and maintenance for this floor please ensure this guide is fully read and adhered to by your floor installer prior to commencing installation.

Section 1 – Installer Responsibilities

Important points for the correct installation of your Engineered Wood Floor

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PRODUCT SUITABILITY & INTENDED USE

The key to long term performance of any floor is the suitability and quality of the installation and the immediate and on going care and maintenance procedures used on the floor.

This product is suitable and **intended for use in normal domestic / residential property rooms only (excluding wet rooms, bathrooms, and areas of high humidity.**

The product is intended for domestic use only and is not intended for, and therefore not guaranteed, for use in any type of commercial environment.

To help ensure correct usage, installation, care and maintenance for this floor please ensure this guide is fully read and adhered to by your floor installer prior to commencing installation.

SECTION 1 - INSTALLER RESPONSIBILITIES

Real wood engineered flooring is manufactured from natural material which is a product of nature and therefore not perfect. This engineered wood flooring is manufactured in accordance with accepted industry standards, which permit defects not to exceed 5%. These defects may be of a manufacturing or natural type with effects such as knots of varying sizes, shade / colour variance, sapwood & mineral streaks, use of Filler, slight bow and grain variance etc all being normal for this product.

The installer has **full responsibility** for checking the suitability, quality, moisture condition and flatness of the sub floor that they are installing the flooring onto and that the jobsite environmental conditions are suitable for storing and installing a natural wood flooring into.

The manufacturer will reject any claims of product failure that are a result of unsuitable sub floor conditions, environmental moisture conditions, incorrect installation and / or maintenance methods or non compliance with the instructions and recommendations provided.

The flooring must not be laid in unheated, excessively humid or damp rooms such as bathrooms, saunas, laundries, etc, or outdoors.

As any small sample pieces or display boards viewed prior to purchase cannot convey the full look of a fully fitted floor the owner and installer must satisfy themselves of the suitability of the flooring product following the initial inspection of it immediately prior to installation.

If there are any concerns at this point do not start or continue the installation and clarify your concerns with your supplier before proceeding.

The boards must be individually checked both immediately before and during the laying of the floor to identify any visual natural or manufacturing faults. The installation of boards with clearly visible defects of any kind will invalidate manufacturing fault claims. If there are any doubts as to the quality of the boards, clarify your concerns with your flooring supplier **before** commencing or continuing the installation.

Pre Installation Procedures

Installation site inspection

Prior to installation of any hardwood flooring product, the installer must determine that the job site environment and the sub surfaces involved meet or exceed all applicable

industry and British standards. Recommendations regarding the construction of the materials used as well as local codes must be followed. These instructions recommend that the construction and sub floor be suitably dry, stiff, of suitable load bearing strength and flat. The manufacturer and distributor declines any responsibility for job failure resulting from or associated with sub-surface, sub flooring or job-site environmental deficiencies or lack of or incorrect sub floor preparations.

The use of stain, filler or putty stick for touching up and minor gap filling during installation should be accepted as a normal finishing procedure with real wood floors

The building / room should be closed in with all outside doors and windows in place. All concrete, masonry, framing timber, drywall components, plasters, paint and any other "wet" trades must be completed and thoroughly dry.

The wall coverings should be in place and painting completed.

This product is **intended for use in domestic / residential property rooms only (excluding wet rooms, bathrooms, and areas of high humidity).**

The product is intended for domestic / residential use only and is not intended for use in any type of commercial environment.

Basements and crawl/void spaces must be appropriately dry and well ventilated check all sub floor void vents or air bricks are clear of debris and not obstructed.

Exterior ground works should be complete with surface drainage offering a minimum drop of 75mm over 3.0 lin mt to direct the flow of water away from the structure. All gutters and downspouts should be in place.

Storage & acclimatisation of Boxes

Your flooring packs should be stored horizontally on at least three level height bearers in the room they are going to be laid in for a minimum of 48 hours **without opening the packaging.**

The box / packaging should only be opened on the day of installation. If the boxes are opened prior to installation and the humidity conditions unsuitable then bowing of the boards may occur and expansion of the tongues may also occur making it difficult to locate the tongues into the grooves during installation.

The storage environmental conditions should be the same in which the installed flooring is expected to perform in that permanent air conditioning and heating systems should be in place and operational. The installation room should have a consistent room temperature of between 15 - 24 degrees celsius and a relative humidity environment of 45-60% R/H for 14 days prior to, during and following installation to allow for proper acclimatisation.

Sub Floor Requirements

CLEAN

Scrape, hoovered or brushed clean, and smooth. Free of wax, paint, oil, sealers, surface coatings, old adhesives, curing agents and other debris.

Check any sub floor surface coating that cannot be removed for adhesive compatibility when installing the floor in a stick down manner. Consult the adhesive manufacturer for advice and recommendations before installing the flooring.

Note: Unclean or contaminated sub floors can result in adhesive bonding failure.

LEVEL/FLAT

Within +/- 2mm of over 2 lin metres. Sand high areas or joints. Flatten low spots with layers of plywood for wooded sub floors and use the recommended Sika levelling compound for concrete sub floors.

Note: Uneven sub floors can result in popping, squeaking, hollow spots and premature failure of the floor.

STRUCTUALLY SOUND

Nail or screw any loose wooden sub floor boards or panels to ensure soundness and no deflection of the sub floor beneath.

Note: Deflecting loose sub floor boards or panels can also result in popping, squeaking, hollow spots and premature failure of the floor.

Appropriate Sub Floor Moisture condition checks

Prior to installing your flooring the moisture content of the sub floor must be checked with an appropriate sub floor Hygrometer / moisture meter, and readings of **a maximum of 75% R/H** for a concrete sub floor, 12% moisture content for wooden or wood based sub floors and 0.5% for an anhydrite sub floor obtained.

B.S. Guidelines, relating to sub floor checking and suitability, are contained within B.S. 8201:1987 / B.S 5325:2001 & B.S. 8203:2001.

Recommended Sub Floor Surfaces

Floating installation:

- **Existing T&G wooden floorboards** that are sound, flat, level and under 12% moisture content.
- **Plywood minimum 18mm thickness** that is sound, flat, level and under 12% moisture content.
- **Concrete** that is sound, flat, level and under 75% Relative Humidity when checked with the correct equipment as per the above B.S guidelines.
- **Vinyl / resilient tiles** that are sound, flat, level.
- **Chipboard minimum 18mm thickness** that is sound, flat, level and under 12% moisture content.
- **O.S.B (Oriented Strand Board) minimum 18mm thickness** that is sound, flat, level and under 12% moisture content.
- **Water piped encased in screed radiant Heat sub floors ONLY (NOT ELECTRIC MATTING UFH SYSTEMS)** following the manufacturers recommendations for heating wood flooring and ensuring the flooring surface temperature **does not exceed 27 deg Celsius**

Note ! When installing the floor as a “floating” floor always use an underlay that incorporates a polythene Damp Proof Membrane into its design to eradicate any risk of post installation sub floor humidity or moisture affecting the wooden flooring.

Nail down installation

- 18mm CDX grade (minimum) plywood moisture content less than 12%.
- 18mm OSB PS2 rated underlayment moisture content less than 12%.
- Existing 18mm solid wood flooring that has been checked for stability, dryness and soundness & moisture content less than 12%.
- Wooden joists or battens as per B.S. 8201:2011 (Maximum 400mm centres) & moisture content less than 12%.

DO NOT nail the flooring to a CHIPBOARD OR FIBREBOARD sub floor as these type of materials do not have sufficient nail holding capacity to hold nails long term.

Full bond Glue Down Installation: using the Recommended Sika adhesives:

- **Concrete** that is sound, flat, level and has been correctly moisture and humidity checked as per the recommendations above.

Note ! If any doubts exists in relation to the appropriate moisture content of a concrete sub floor or its ongoing dryness install the recommended Sika Rapid DPM (Damp Proof Membrane) product to eradicate the risk of post installation sub floor humidity or moisture affecting the wooden flooring or employ a professional to assess the sub floor moisture condition correctly.

- **Plywood minimum 18mm thickness** that is fixed down, sound , flat, level and under 12% moisture content
- **Chipboard minimum 18mm thickness** that is fixed down, sound, flat, level and under 12% moisture content.
- **Ceramic, terrazzo & marble** that is fixed down, sound, flat, level and appropriately dry. De gloss / abrade if necessary any shiny surface to be adhered onto to aid adhesion of adhesives.
- **Vinyl / resilient tiles** that are fixed down, sound, flat, level.
- **In screed/concrete water piped radiant Heat sub floors** (following the manufacturers recommendations for heating wood flooring and ensuring the flooring surface temperature **does not exceed 27 deg Celsius**)

As flooring manufacturers / distributors we are unable to evaluate each sub floor system and therefore the responsibility for the appropriateness of the sub floor lies with the installer of the flooring.

Tools & Accessories for Installation

Tools:

Note: It is extremely important to use the correct tools for installation as this will result in an easier installation and quality of the finished floor.

Floating or nail Installation:

- Broom
- Hammer
- Chalk line
- Hand saw / power saw
- Undercut or jamb saw
- Heel Iron / Bar
- Wood PVA adhesive (floating install).
- Mechanical flooring nailer (nail down installations) 50mm & 38mm flooring cleat nails
- Tape measure
- Safety glasses
- Recommended Wood floor cleaner
- Moisture meter (wood, concrete or both)
- Square
- Spacers / Wedges
- Tapping Block

Full bond glue down installation: Tools as above, (excluding the PVA adhesive & nailer).

- Appropriate adhesive trowel to suit Sika adhesive.
- Recommended Sika Wood floor adhesive.
- Recommended Sika adhesive cleaner or wipes.
- Recommended Sika levelling compound if required.
- Recommended Sika Damp Proof Membrane if required.

(Refer to the Tuscan Flooring Website, www.tuscanflooring.co.uk, for the recommended Sika products).

Accessories: -

DPM Underlay – (Floating floor installation only)

The flooring must be installed over a foam underlay that incorporates a polythene Damp Proof Membrane into its design on its underside face. This is to protect the flooring from sub floor humidity & moisture changes.

Bitumen barrier moisture paper to B.S. 1521

For laying over a wooden sub floor, joists or battens prior to nail down installation of the boards

Vapor tape – For taping / sealing the joints of bitumen barrier paper.

Combistar 3 in 1 profile

Colour blended 3 in 1 multi purpose edge profile that allows for expansion gaps and a smooth transition between different floor coverings within your home.

Veneer wrap scotia

Edge trim used to conceal the expansion gap between the edge of the floor and the skirting board.

Sika wood flooring adhesives.

Adhesives specifically designed for use when installing wood flooring in a full bond stick down manner.

Sika Damp Proof Membranes.

Liquid damp proof membrane products for sealing and protecting your floor from un checked / unsuitable moisture laded sub floors.

“ Bona ” Wood floor cleaner. (For U.V. Lacquered or U.V. Oiled floors)

Floor cleaner specifically designed for use on U.V. Lacquered or U.V. oiled finish floors.

Bona floor refresher products. Available for occasional refreshing of the floor finish.

All of these recommended items should be available through your flooring supplier.

Owner / Installer Checklist

Important points for correct installation.



Tick

- Check the product carefully. Ensure it is the correct product, acceptable colour shades, character, acceptable sizes, length spec, etc.
- Read the instructions in full before commencing installation.

If you have any concerns at this stage contact your supplier of the goods and clarify any concerns before opening any further boxes and installation of the boards. Claims for the product being unacceptable in any way that is apparent before or during installation will not be accepted.

- Make sure the sub floor is checked for appropriate flatness, soundness, and moisture content using the correct moisture testing equipment. Where installing over a concrete or mineral based sub floor moisture content compliance to current British Standard BS.8201: should be ensured. Recommendations for wood based sub floors can be found within the fitting instructions supplied.
- If a “floating floor” installation method is to be used install a DPM backed underlay first !
- If nail down installing the boards onto a wooden sub floor, wooden joists or battens install a bitumen moisture barrier paper conforming to BS 1521: with joints overlapped & taped to give the boards protection from beneath against seasonal moisture or sub floor humidity variances .
- Use the correct tools – Having the appropriate tools makes the job easier and results in a better finish !
- Make sure the correct minimum 15mm perimeter expansion gap facility is built into the floor as per the recommendations made within the fitting instructions.
- Maintain the floor correctly ! – Correct post installation and ongoing maintenance will greatly enhance the performance of you new floor. Leave the enclosed maintenance details with the owner of the floor.

Note ! – Claims for product failure will not be accepted if the cause of failure relates to poor sub floor preparation, sub floor moisture or performance deficiencies, environmental moisture fluctuations, incorrect acclimatisation, incorrect installation or maintenance methods.

Section 2 – Installation Methods

General Installation Tips

- The boards should be selected and mixed from several open boxes as this will ensure good colour / shade blending.
- Overlap the ends of the boards by at least 200mm as this will ensure a more favourable overall appearance to the floor and will avoid weak spots where end joints at adjoining boards are too close together.
- Use an appropriate tapping block to avoid damage to the board edges when tapping together joints.
- Only open the boxes on the day of installation but store the unopened boxes within the end use room for a minimum 48 hours prior to installation **in normal heating conditions with the environment conditions being 15 – 24 deg C temperature & 45 – 60% relative humidity.**
- Make sure both the long and short edges are glued correctly with wood PVA adhesive when installing **as a floating floor**. The PVA adhesive must be applied onto the top of the tongue **NOT** into the groove of the boards.
- Wipe off any excess adhesive squeezed from the joint during location of the boards immediately using a damp cloth.
- Use an appropriate flooring nailer and correct length nails for secret nail down installation.
- Ensure the recommended **minimum 15mm expansion gap** is left at all perimeter edges of, and obstacles within, the laid flooring.
- Always separate adjoining flooring at all door threshold points using a T moulding floor break profile.
- A combined polythene DPM / underlay **must be used** over the sub floor for a **floating floor installation.**
- After the floor adhesive has fully cured, clean the floor with the recommended cleaner.

When assembling the floorboards, it is recommended that the maximum laid single room /floor area without additional in-floor expansion facility is 8 linear metres across the width of the laid boards, and 20 linear metres down the length of the boards.

If the boards are to be laid in the same direction as existing floorboards **over ply the existing boards** with a minimum 6mm plywood to avoid sub floor sagging and cross strengthen the sub floor. The plywood should be fixed to the sub floor as per B.S 8201: guidelines.

The following atmospheric conditions should exist within the end use room prior to and during the acclimatisation period, during and following installation:

- Air temperature – 15 -24 Degrees Celsius.
- Relative air humidity - 45-60%

Damage to the flooring caused by incorrect assembly or excess moisture / damp does not constitute grounds for complaint. Noises due to natural seasonal movement or heating cycles when using the floor are a natural feature of wooden flooring and should be regarded as such and therefore they also do not constitute grounds for complaint. Colour variation and change of hue (darkening) - which is the result of exposure to light & sun rays is also a natural feature of wood and as such is also not grounds for complaint.

Engineered wood flooring can be installed using one of the three following methods subject to having an appropriate sub floor to suit the method:

Method 1 - Floating Floor Installation

The direction in which the boards are to be laid is normally determined by the dimensions of the room. If none of the sides of the room exceed 8 linear meters, it is recommended that the boards are laid parallel to the longest wall.

Having established the direction, the width of the room should be measured. This number should then be decreased by 30mm (ie the expansion gap of 15mm at either side), and divided by the board width of the chosen product. This will then give the number of rows of boards to be assembled and the width of the final row. If the final row board width is narrower than 70mm, then the first row of boards should be width trimmed accordingly to ensure the last row of boards exceeds 70mm in width.

Following any necessary sub floor preparations, and where preferred, undercut any door frame and architrave bases to suit the thickness of the flooring to be laid.

Install the advised **combination damp proof membrane / underlay** over the entire area of sub floor the flooring is to be laid ensuring that any polythene joints are overlapped, taped and or sealed correctly as per the underlay manufacturers instructions.

Insert multiple spacers of 15mm thickness against and along the starting wall to ensure a 15mm expansion gap is left at the edge of the first row laid. Check that the first row to be laid will be square to the opposite wall and snap a chalk line against the front of the spacers along the starting wall of the floor to give a straight edge to place the first row of boards used. Adjust the spacers as necessary to support the first row of boards against the chalk line making sure a minimum 15mm expansion gap is left at all points.

Starter row of boards

The first row of boards should be laid long groove facing the starting wall.

Lay the first board to the left hand corner of the starting wall grooved edge against the spacers at both walls. Apply a bead of PVA adhesive to the top of the tongue of the following starter row boards on the short tongue edges at the ends of the boards only. Locate the board joints together and securely support the long back edges of the first starter row of boards with spacers against the starting wall, leaving the 15mm expansion gap.

Cut the final starter row board to length, allowing for the 15mm expansion gap and fit the final board in the same manner. Use the heel iron or bar to fully locate the end tongue of this board into the end groove of the previously laid board.

Second and following row of boards - Apply a bead of PVA adhesive to the top of the tongue of the first starter row of boards. Use the off cut of the last section, (if it is 400mm or longer), of starter row board as the starting board for the second row. If the off cut from the previous row is less than 400mm cut a full board in half and use one half to start the new row, (the half that has the groove on the right hand end of the board).

Locate this board (long grooved edge) onto the previously glued tongue of the starter row board, leaving the 15mm expansion gap at the wall end of the board, and tap up to close the long joint. Wipe off any excess adhesive with a damp cloth before it cures on the surface of the boards.

Select the next board and apply a bead of adhesive to the top of the tongue on the short end of the board. Locate this board onto the previously glued tongue of the previous row and tap up both the long & short joints to fully locate the board.

Continue the installation of all rows in this manner until the final row is left to install.

In the case of having to overcome an obstacle, such as central heating pipes, a fragment of the board needing additional manoeuvring or facilitating ought to be marked and appropriately cut out whilst remembering to maintain the 15mm expansion gap around the element to be avoided. The resulting gap between the pipes and the floor may be covered with a pipe rosette.

At door thresholds install an appropriate **"T" mould expansion profile** to accommodate any varying movement between floors in different rooms.

Final row installation

Measure / scribe and cut to width, allowing the 15mm expansion gap, the final row of boards to be installed. Apply adhesive to the tops of the tongues as previous and locate the trimmed boards pulling them in tightly using the heel iron / bar and wedging as necessary to hold them tight until the adhesive cures.

Leave the fully completed floor for a minimum of eight hours before **removing all edge spacers and or wedges.**

Complete the job

Clean the floor using the recommended floor cleaner and install any edge trim or threshold profiles as necessary. **Note ! edge trims or profiles should always be fixed to the skirting boards not to the flooring itself as the floor will need to move naturally beneath them during the seasons of the year.**

Door threshold T mouldings or ramps should be fixed to the sub floor and allow a minimum 15mm expansion gap to the edge of the flooring.

Method 2 - Full Surface Bond Glue Down Installation Using Sika adhesives.

Sub Floor Checking and Preparation

The sub floor must be checked for suitability in all respects as per the information previously stated above - including flatness, soundness and suitable moisture content - with the appropriate equipment and as per guidelines given in B.S. 8201: 1987 / B.S. 5325:2001 & B.S. 8203:2001.

The moisture content of the sub floor should be checked carefully with an appropriate moisture meter or humidity box as per the B.S references above and should have a relative humidity value of less than 75%.

If the appropriateness of the moisture content of the sub floor cannot be determined or guaranteed, install an appropriate liquid damp proof membrane that is compatible with the adhesive to be used i.e Sika DPM.

Take appropriate measures to resolve any sub floor issues prior to installing the flooring.






Note! An unsound or un level sub floor could result in the flooring deflecting excessively, and squeaking or creaking of the joints may occur.

Failure to protect the boards from unsuitable levels of moisture can result in the flooring cupping, expanding and distorting.

The adhering of the boards directly to the sub floor does not eradicate the occurrence of natural movement of the wood flooring. Therefore the recommended 15mm expansion gaps must be retained at all perimeter edges of the flooring.

Installation Using Sika adhesives ** Full Surface Bonding only method as highlighted below **

Key Benefits of Sika Wood Floor Bonding Systems

- 
Reduction of construction period
SikaBond® elastic adhesive systems save time as they are all 1-component products and do not require any priming. They do not contain water so do not cause the wood to swell.
- 
Lasting beauty of wood floor
SikaBond® elastic adhesive systems do not limit architects and house owners in their choice of different woods. **SikaBond®** bonds them all – as well as ceramic tiles, stone, metals etc. – to basically all different substrates.
- 
Maximum walking comfort
SikaBond® elastic adhesive systems dampen every step and thus take care of your joints and musculature.
- 
Sound radiation reduction (airborne)
 Hard wood floor surfaces generate sound with every step. **SikaBond®** elastic adhesive systems reduce sound radiation and reflected airborne noise.
- 
Sound radiation reduction (impact)
SikaBond® elastic adhesive systems reduce impact sound travelling to properties below by up to 25 decibels.

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A Guide to Fitting Solid Wood Floors using SikaBond® Adhesive Systems

Installation of Solid Wood Floors using SikaBond® Elastic Adhesives

POINTS TO CONSIDER

Is your floor dry less than 2% water by weight

Does it need a damp-proof membrane?



Sika® Primer MB is a roller applied damp-proof membrane

POINTS TO CONSIDER

Is your floor level and flat (+/- 3mm over 3m straight edge)

Does it need levelling?



Sika® Levelling Compound

POINTS TO CONSIDER

Is your floor clean and free of surface contaminants such as floor polish paint etc.

Is it dusty?



For in depth installation instructions please consult the latest technical data sheet.

Bead Application Liquid Battens



Preparation

- 1 Vacuum substrate properly
- 2 Pierce inner seal on cartridge
- 3 Pre-cut nozzle as shown to give a V shaped profile approximately 10 mm high x 8 mm wide.

Gunning out

- 1 Holding nozzle at right angle to the substrate, extrude a triangular-shaped bead of adhesive approx. 10 mm high x 8 mm wide at 200 mm centres.

Placing Wood

- 1 Within 1/2 hour, place the wood into the **SikaBond®** adhesive
- 2 Firm to line and level using a mallet and block if required.

Full Surface Bonding Application



Preparation

- 1 Vacuum substrate properly.
- 2 Pierce inner seal on cartridge ensuring that wood is placed before surface skin has formed (approx. 30 mins).

Trowelling out

- 1 Using a notched trowel spread the adhesive evenly at a minimum consumption of 0.7 kg/m².

Placing Wood

- 1 Place the wood without delay to required line and level, adjusting with a mallet and block if required.

Sika®AcouBond-System Application Silent Floor - SikaBond® T53 and Silent Layer Mat



Preparation

- 1 Vacuum substrate properly.
- 2 Pierce inner seal on cartridge.
- 3 Pre-cut nozzle as shown to give a V shaped profile approximately 10 mm high x 8 mm wide.

Laying Mat and Gunning out

- 1 Roll out **Sika® Layer** mat so slots are at right angles to the proposed direction of the wood.
- 2 Extrude triangular shaped beads of **SikaBond® T53** adhesive approx. 10 mm high x 8 mm wide into all of the cut-out slots.

Placing Wood

- 1 Place wood within 1/2 hour to required line and level, adjusting with a mallet and block if required. Ensure a gap of 12-15 mm is maintained around perimeter.

Method 3 – Secret Nail Down Installation.

STEP 1 – MOISTURE BARRIER & DOORWAY AND WALL PREPARATION

Install the advised moisture barrier paper conforming to BS 1521 and tape all joints with vapour tape.

As necessary, undercut door casings / frames **allowing for the minimum 15mm expansion gap**. Remove any existing base or doorway thresholds. These items can be replaced after installation.

Insert an expansion facility at all doorways by use of a complement “T” moulding strip or reducer profile.

STEP 2 - ESTABLISH A STARTING POINT. WALL TO WALL INSTALLATION

Installation parallel to the longest wall is recommended for best visual effects. However the floor should be installed perpendicular to flooring joists unless the sub floor has been specifically reinforced.

A 15mm minimum expansion gap must be left at all walls and any fixed item within the floor area. Using this 15mm measurement, in at least two places, measure out and snap a chalk line.

STEP 3 - INSTALLING FIRST ROWS BY MANUAL FACE NAILING.

Align the groove of the first board against the chalk line. The groove should be facing the starting wall.

Pre-drill nail holes 25mm from the back (groove) edge, 25–50mm from each end, and at 200 - 250mm intervals along the back edge of the board. Also then pre drill at a 45 degree angle down through the nailing "pocket" on top of the front edge tongue again at 200 – 250mm intervals. (If nailing into joists or battens the maximum spacing of the joists or battens is 400mm)

Before commencing nailing, check for and identify any pipe work or electrical wiring that exists immediately beneath the sub floor surface, or cut into joists, and avoid nailing directly over such pipe work.

Manually face nail the back edge / groove side where pre-drilled using a 38mm length nail for this initial fixing. When complete, manually nail at a 45 degree angle through the pre drilled front edge tongue of the first row using 50mm barbed cleat nails.

Continue installing the **first initial rows of boards only**, using this manual nailing method, to the point where the flooring nailer can be used and **then stop installing the boards and follow step 4 as below** prior to commencing installation of the rest of the boards with the flooring nailer.

STEP 4 – DRY LAYING / RACKING THE FLOOR

"Dry" lay (rack) the remainder of flooring to cover approximately two thirds of the room. **This is to give a final visual check of the flooring for quality and suitability and to ensure the correct header joint spacing's (min 400mm) are achieved and to avoid installing unacceptable or inappropriate boards.**

Begin dry laying (racking) the boards and visually inspect each board before locating it with the previous laid boards.

As wood is a natural material minor blemishes or objectionable natural characteristics may be present within the board veneer. Minor dimensional changes can also occur following production of the boards therefore this dry laying of the boards is a further quality check for any unacceptable elements of the boards. It is standard good installation practice to trim or remove objectionable board elements or boards before commencing fixing of them.

Avoid locating boards too tightly together during this procedure, as they must be able to move freely and be fully located properly when fastening begins.

Use any trimmed or cut boards for starting and finishing rows after the objectionable characteristics have been cut out / removed.

Mark the final board in each row and cut to suitable length **allowing for the 15mm expansion gap.**

STEP 5 - INSTALLING THE FLOOR. SECRET NAIL DOWN METHOD.

Fasten a sacrificial Piece of board to the sub floor/joists. This is to check for surface damage, correct air pressure or manual hammer pressure setting, nailer tongue damage etc. before proceeding with the rest of the installation. Make all necessary adjustments and corrections to your nailer before installation begins. Once proper adjustments have been made remove and destroy this piece of board.

Check again for, and identify, any pipe work or electrical wiring that exists immediately beneath the sub floor surface and avoid nailing directly over such pipe work.

Begin installation of the dry laid rows, **in the order that the boards were checked and dry laid**, using the nailer with minimum 50mm barbed cleat nails, fastening each full length board with at least four nails, proportionally more depending of board length, Nail spacings into a solid wooden sub floor should be 200 – 250 mm apart and at least 38 mm from the ends (to avoid splitting). Nail spacings into joists or battens should be to suit the joist spacings which should be 400mm maximum. Continue nail installing all dry laid boards until the nailer cannot continue to be used.

STEP 6 – Final Rows

The last 1-2 rows will need to be face nailed where clearance does not permit secret nailing with the nailer. Pre drill and face nail, using 38mm nails, the tongue edge and face of the final board/s following the nailing pattern used for the first manually nailed rows. Measure and cut/Rip the final row of boards to fit, (allowing for the final 15mm expansion gap), and face nail the final row of boards using 38mm nails.

INSTALLATION OF ENGINEERED FLOORING OVER WATER PIPED IN SCREED/CONCRETE UNDERFLOOR HEATING SYSTEMS

CAUTION

There are many types and manufacturers of water piped underfloor heating systems, so please ensure that the suitability and recommendations of the particular manufacturer of your system are sought and adhered to BEFORE commencing installation of your engineered flooring.

This engineered flooring is **ONLY** suitable for use over **water piped in screed or concrete heating systems** that are equipped with electronic temperature controls. Relevant British Standards should be adhered to which includes the B.S. recommendation that **the surface of the engineered wood flooring used over radiant heat sub floors must not exceed 27 degrees Celsius.**

This recommendation must be adhered to as if the flooring is heated in excess of this temperature then distortion of the boards may occur.

The heating pipes should not be in direct contact with the underside of the boards.

You should **always** consult the manufacturer or supplier of your heating system to confirm its suitability in terms of laying a wooden floor over it, and to confirm if any specific commissioning processes in relation to your specific system should be employed - both when turning on the system for the first time, and for its use after the flooring has been installed.

Wood species of high contraction coefficient react more to temperature and air humidity changes, which, when combined with a light colour species of wood, may create or emphasise gaps more than other species.

Accelerated colour change of some light species, such as, but not limited to, beech maple & birch, which are more sensitive to heat may occur so please clarify any queries in this respect prior to installing your chosen engineered flooring.

Special attention should be paid to evenly distributing either the heating mat or water pipe work under the entire surface of the floor. This will help prevent any irregular heating of the flooring, and therefore avoid any issues relating to board movement between heated and unheated areas of flooring and cold or hot patches within the laid floor.

The intention to use **mats or rugs over your wood flooring over floor heating systems** should also be carefully considered as hot spots can be created under such floor coverings due to the insulating nature of them and may affect the stability and colour change of the flooring beneath them.

Any product failure claims relating to the effects of excessive hot spots under such floor coverings cannot be accepted.

Prior to Installation of the Flooring

These instructions must be followed in conjunction with the heating system manufacturer's commissioning instructions.

15 days prior to installation, switch on the normal heating cycle / programme for the underfloor heating system, and gradually increase the temperature setting to achieve 18°C on the surface of the sub floor for the remainder of the specified period. Then switch the heating off for 48 hours prior to commencing installation of the flooring.

The flooring should then be located in the end use environment for 48 – 72 hours subject to it being as per the temperature and humidity conditions for acclimatisation stated above.

Installation of the flooring can then commence.

NOTE! The maximum recommended under floor heating unit power output is 100W/m².

Following Installation

Re-introduce the heating system beneath the flooring in a **slow, controlled manner**, using incremental staged increases of temperature.

Switch the system on in normal operating mode and at a low operating temperature (less than 18°C). Gradually increase the temperature to 18°C at the installed floor

surface and leave at this temperature for a minimum 48 hours. Then, if required, gradually increase the temperature by 1 or 2°C a day until your normal / optimum temperature has been reached.

Do not raise the temperature of the flooring surface above 26°C as this may induce movement and distortion of the boards.

Regardless of the heating system within the property / room, the atmospheric relative humidity in the room should be kept between 45– 60% at all times. Small, inexpensive room hygrometers are widely available to monitor this.

CARE & MAINTENANCE OF YOUR TUSCAN MULTIPLY ENGINEERED WOOD FLOOR

Correct care and maintenance of your engineered wood floor will greatly enhance the performance and look of the floor.

For normal, everyday maintenance simply brush the floor as needed or vacuum using a soft head attachment. **Do not use a metal framed vacuum head or vacuum with hard brush / beater bars as this may damage the floor surface.**

Spillages of liquids should be removed immediately as liquids can damage and stain the floor.

Engineered floors are available in the following finishes:

U.V. cured Lacquer finish.
U.V. cured oil finish.

Specific or periodic cleaning of the floor can be undertaken using the following cleaning product:

UV lacquer or U.V Oiled finished products - clean the floor with "**Bona wood floor cleaner**", taking care to comply with the manufacturer's instructions on the container.

Bona wood floor refresher products are also available for occasional refreshing of the floor finish.

These maintenance products should be available through your flooring supplier.

Water, fluids, grit and sand are some of the most common items that can spoil and accelerate wear of a wooden floor. In order to protect the floor and minimise wear and damage **follow these simple "Do`s & Don't`s"**

Things to "do" and be aware of:

Do - Make use of **door mats** at all external entrances and over high traffic areas of the floor as this will significantly help to avoid dirt and grit being walked on to the floor.

Do - Use **furniture protection pads** under all furniture legs and feet as this will avoid damage being caused by the movement of furniture across the floor.

Do - **Use workstation mats** at desks and under desk chairs and in front of any furniture where footfall is continual in a small specific area to avoid damage and excessive wear from castors and continual footfall in these areas.

Do - Try to keep the **relative humidity** within the room between 45 - 60% as this will minimise the floor's natural tendency to move during the seasons on the year. Small

humidity meters can be purchased via many online companies and should be relatively inexpensive.

Do - Protect your floor from constant direct sunlight where possible as areas subjected to constant sunlight will age and discolour at an accelerated rate compared to shaded areas of the floor particularly areas immediately behind glass doors.

Be aware - If mats or rugs are laid on the floor occasionally **reposition them** to avoid discolouration forming beneath them and at their edges as the flooring ages.

Be aware - That your floor is a natural product and as such will show signs of movement i.e minor gapping, occasional creaking etc, during the various seasons of the year as it reacts normally to its environmental conditions.

Be aware - That shade and colour variance is also a normal feature of wooden flooring and that **"blending" of the boards** is a normal part of the wood floor installation process to ensure an overall blended acceptable appearance is achieved when fitted.

Very Important "don'ts" and things to avoid:

Don't - "Wet mop" or "Steam Mop" the flooring as this may cause excessive expansion of the floor and possible damage to the lacquered and or oiled surface finishes.

Don't - Walk on the floor in **narrow hard, or stiletto type, heels** as this may damage the surface of the flooring.

Don't - Slide heavy furniture or objects across the floor as this may also damage the surface.

Don't - Use ammonia based cleaners, acrylic finishes, wax based products, detergents, bleaches, polishes, abrasive soaps or cleaners, or any acidic based cleaners. These types of cleaners can etch or pit the surface of your flooring.

Avoid - Letting **pets with claws** run across the flooring and always keep pets claws trimmed as animal claws may scratch the surface of the floor.

Avoid - Letting sunlight shine on the floor for long periods of time as this will accelerate ageing of the floor particularly if your room has large windows or patio doors. The use of curtains & blinds is recommended to reduce the effect of U.V. light ageing the floor.

What to do if you have any problems.

Should any problems be apparent with your engineered Wood floor upon checking the boards prior to, or at the point of installation, you should immediately contact your supplier and advise them of the problem. **If you have concerns of any kind do not start installation of the floor until your concerns have been clarified satisfactorily.**

If any problems with your floor arise **after installation** then firstly contact your installer to discuss. Your installer should be able to remedy the problem if it is installation related, or alternatively report the matter to his / your supplier of the flooring for further assistance.

WARRANTY INFORMATION

Your Tuscan engineered flooring has a limited 25 year domestic / residential warranty against manufacturing defect.

To maintain the validity of your warranty, your Tuscan flooring must be installed, cleaned and maintained in accordance with the published care & maintenance advice.

Please Note! Any long term renovation of your floor involving sanding and re-sealing will render the original warranty invalid.

Should you encounter a problem with your Tuscan engineered flooring then firstly contact your supplier of the product and advise them of your concerns as your installer

/ supplier should in the first instance investigate your concerns and who can liase with their supplier of the goods in relation to your problem.
A copy of your Tuscan warranty is available via the Tuscan flooring website – www.tuscanflooring.co.uk

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