

tuscan

engineered wood floors

# **Installation Instructions**

**For**

**Tuscan Engineered 5GS**

**Wood Floors**

# **Installation Instructions for your new Tuscan Engineered 5GS 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 Tuscan Engineered 5GS Wood Floor.

- Acclimatisation and Storage of Boxes
- Sub Floor Requirements

## **Section 2 – Installation Methods**

- Method 1 – Floating Floor
- Method 2 – Full Glue Down Installation

## **Section 3 – Installation Over Underfloor Heating Systems**

- Prior to installation
- Following installation

## **Section 4 – Care & Maintenance**

## **Section 5 - Warranty Information**

## INSTALLER RESPONSIBILITIES

The installer has **full responsibility** for checking suitability, quality, moisture condition and flatness of the sub floor that they are installing the flooring onto. 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, humid or damp rooms such as bathrooms, saunas, laundries, etc, or outdoors.

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

### Acclimatisation & Storage of Boxes

Flooring packs should be stored horizontally on multiple bearers in the room they are going to be laid in for 48 hours without opening the packaging. The storage conditions must be appropriately dry and the storage room environment must have a humidity of 45% - 60% and temperature range of 18 – 24 deg C. The box / packaging should only be opened on the day of installation.

### Sub Floor Requirements

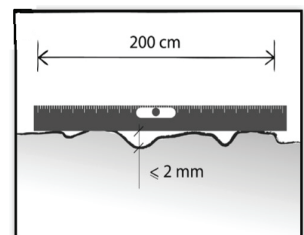
Tuscan engineered 5GS flooring may be laid on any dry, clean, resistant and flat surface. Prior to installing your flooring the moisture content of the sub floor must be checked with an appropriate moisture meter, and readings of a maximum of **2% moisture content for a concrete sub floor, 8% moisture 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.

Should there be any doubt as to the appropriate dryness or ongoing dryness of the sub floor then have the sub floor checked by an appropriate professional or install an appropriate damp proof membrane over the sub floor **before installing the flooring**.

Unsuitable levels of moisture or air humidity are the most common cause of wood floor movement issues resulting in cupping, distortion and expansion or lifting of boards.

The flatness of the sub floor surface should be measured with a minimum 2 metre long straight edge or spirit level.

**The level difference should not exceed 2mm over 2 linear metres of the floor**. If the difference is larger it is vital that the sub floor is levelled to within the stated tolerance.



## INSTALLATION METHODS

Tuscan Engineered 5GS flooring can be installed by one of two methods:

### Method 1 - Floating Floor Installation

#### Tools Required

- Hammer (1000g)
- Tape measure
- Fine hand saw or electric saw
- Wooden wedges / spacers
- 5GS locking tool for final row of boards.

#### Underlay

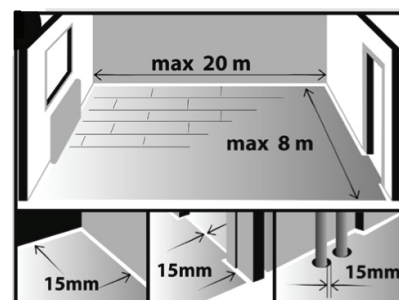
Use a 4mm foam underlay that has a **polythene damp proof membrane incorporated into its design** to eradicate the risk of sub floor moisture or humidity penetrating the underside of the boards.

Overlap the & tape, with a vapour tape, the polythene edges of the underlay to seal the joints.

#### 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.

The maximum floor size without additional in field expansion gaps is 8 lin mt across the widths of the boards and 20 lin mt along the length of the boards.

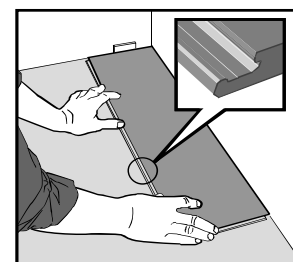


Having established the direction, the width of the room should be measured. This number should then be decreased by 30mm (ie an expansion gap of 15mm at either side), and divided by the board width of the chosen product. This will then give the number of rows of boards to be assembled and the width of the final row.

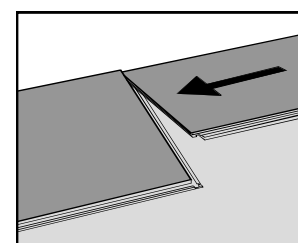
If the final board width is narrower than 70mm, then the first row of boards should be width trimmed accordingly to ensure the last row of boards exceeds 70mm in width.

#### First row

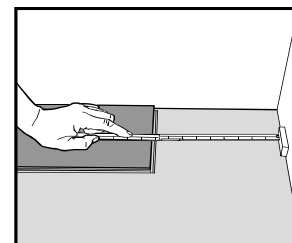
Following installation of the recommended combination damp proof membrane / underlay, insert spacers of 15mm thickness against the starting wall or skirting board to ensure a **15mm expansion gap** is left. The first row of boards should be laid tongue facing the wall and butting up to the spacers on both the long edges and short edges.



The individual boards should be joined at their shorter ends by locating together the profiled 5GS elements of the header joint onto the previously laid board.

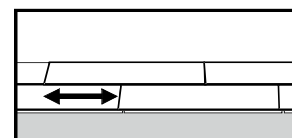
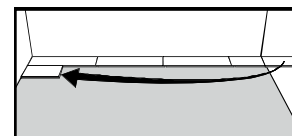


The last floorboard in the row should be length cut to suit and located onto the previous board end, remembering to maintain a row end **expansion gap of 15mm** into which wooden wedges/spacers should be inserted.

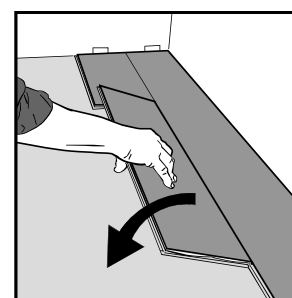


### Second & following rows

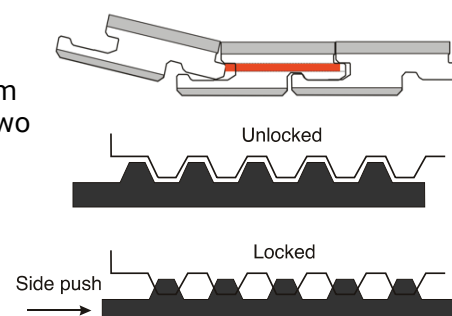
The following row of boards should commence with the cut-off section of the board remaining from the first row, provided its length exceeds 30cm. **It is important to maintain a minimum of 50cm overlap between the ends of boards in the adjacent rows of flooring.**



The cut off section of board from the first row should be located into the grooved long edge of the previous row by inserting its tongue into the groove to commence the next row and pressed downwards by hand towards the floor. If needs be a tapping block may be used to fully locate the long edges of the boards. Once this board is located correctly into the groove of the adjacent board the next new board can be placed and located in the same manner and finished by folding down the board fully to locate the header joint.



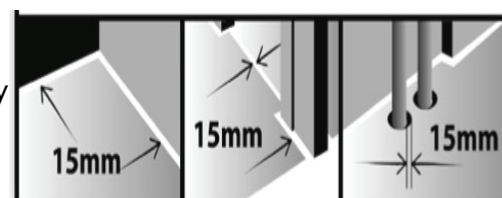
When locating the long tongue edge of the boards into joint grooves of the previous row of boards the PVC locking strip of the 5GS system is automatically pushed across and locks the header profiles of the two previously laid boards together.



The subsequent rows of boards should be installed in the same manner ensuring that the 15mm expansion gap is left at all perimeter edges of the flooring and around pipes or any other obstacles. This is to accommodate normal seasonal movement of the product.

**ATTENTION:** No assembling belts or straps should be used when assembling the floor.

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.

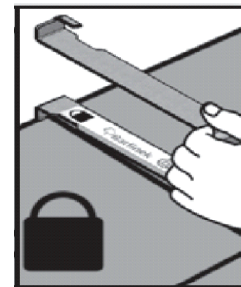


Separate individual rooms at doorway threshold points and any "off square", ( ie L,F,T & H shaped ) sections of flooring, by use of an expansion T moulding profile to accommodate any varying movement between adjoining floor areas or flooring in different rooms.

### Final row

The final row of boards should be carefully width measured and cut prior to laying. The boards should be located on their long joints in the same manner as previous rows and the header 5GS PVC locking strip is locked into place using the 5GS locking tool.

A 15mm expansion gap must remain between the edge of the final row of boards and the wall or skirting boards.



Having laid the floor, all spacers / wedges used must be removed and the remaining expansion gap should be covered with either skirting boards or an appropriate edge trim or scotia bead. These must always be fastened to the wall or skirting - NEVER to the floor surface.

Immediately after installing the skirting or edge trims, the new floor is ready for use.

### **Additional Installation Notes**

The following climatic conditions should exist within the end use room both prior to and following installation:

- Air temperature - 18-24°C
- 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/shade 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 not grounds for complaint.

### Method 2 – Full Bond Glue Down Installation

#### **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: 2011 / B.S. 5325:2001 & B.S. 8203:2001.

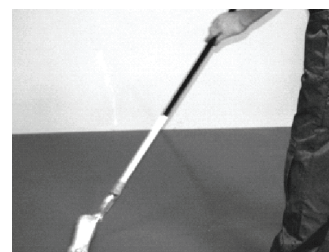
Check for any unsound concrete surface "laitance" layer that may be present as a fine laitance on the concrete surface can give a weak surface layer which compromises the bond adhesive strength.

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

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

If the appropriate moisture content of the sub floor can not be determined or guaranteed, **install an appropriate liquid damp proof membrane that is compatible with the adhesive to be used.**

Failure to protect the boards from unsuitable levels of moisture can



result in the flooring lifting, cupping, expanding and distorting.

The sub floor should also comply with the following resistance requirements:

- Peel strength min. 1Mpa
- Compression strength min. 25Mpa

### **Adhering the Boards**

**Note! A moisture dispersion cure adhesive must not be used.** If in doubt confirm the curing action of the chosen adhesive with the adhesive manufacturer prior to installation.

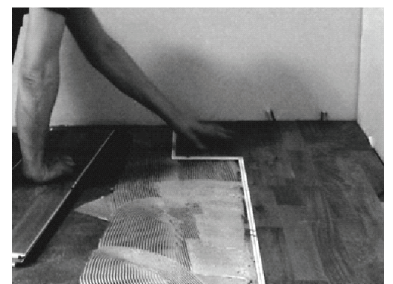
Visit the Tuscan flooring website – [www.tuscanflooring.co.uk](http://www.tuscanflooring.co.uk) for recommended engineered wood flooring adhesive type to be used and follow the manufacturer's recommendations for it.

The glue should be applied and spread evenly with the recommended trowel.

The boards should be laid and located together the same manner as the floating floor method previously advised.



Locate the profiles of the boards and firmly press into the adhesive ensuring that a minimum even contact of 60% of the reverse of the board is in full contact with the adhesive. If necessary weight any boards that may have a slight bow or springiness in them.



It is important to avoid getting adhesive onto the surface of the boards, and any adhesive or "finger dabs" of adhesive that do get on the surface of the boards should be removed **immediately** (while uncured) with an appropriate adhesive cleaner. Contact your adhesive supplier regarding the appropriate adhesive cleaner before installation commences.

The freshly-laid floor may be walked on after the recommended curing time of the adhesive used has been reached. Please refer to the adhesive manufacturer's instructions in this respect.

**Note!** Due to many adhesives containing solvents and active chemicals during curing, when adhering Tuscan flooring directly to the sub floor the installation room should be well-ventilated. Seek advise from your adhesive manufacturer prior to commencing installation.

It is also common good practice to use protective rubber gloves and to refer to the health and safety information given by the adhesive manufacturer.

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 or any fixed objects within the floor area.

If the flooring is being adhered to a sub floor that contains a **radiant heat underfloor heating system**, then the chosen adhesive **must** be compatible for use over such heating systems.

**Please check or clarify the suitability of the chosen adhesive BEFORE commencing the installation.**

## **INSTALLATION OF TUSCAN ENGINEERED 5GS FLOORING OVER UNDERFLOOR HEATING SYSTEMS**

### **CAUTION**

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

Tuscan engineered flooring is suitable for use over both water and electric underfloor heating systems that are equipped with electronic temperature controls.

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 more sensitive to heat is also possible, so please clarify any queries in this respect prior to purchasing or installing your chosen Tuscan engineered flooring.

Special attention should be paid to evenly distributing either the heating matting 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 patches within the laid floor.

Avoid the use of rugs laid onto the flooring after installation over an UFH system as if rugs are laid over the flooring hot spots can be created under them as they insulate the floor beneath and this can result in the flooring being heated excessively and board movement or distortion can occur.

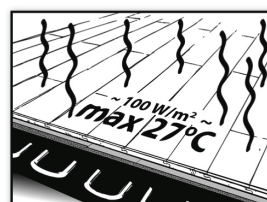
### **Prior to Installation of the Flooring**

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

21 days prior to installation, switch on the normal heating cycle / programme for the underfloor heating system, and gradually increase the temperature setting to achieve 21°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 be stored/acclimatised in the heated and appropriate temperature conditions of the end use environment for 48 hours prior to switching off the UFH system.

**NOTE! The maximum recommended underfloor heating unit power output is 100W/m<sup>2</sup>. Do NOT under ANY circumstances raise the temperature of the flooring surface above 27°C as this may induce movement and distortion of the boards.**





## 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, (less than 27 deg C),.

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 ENGINEERED 5GS FLOOR**

Correct care and maintenance of your Tuscan 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.

Tuscan engineered floors are available in the following finishes:

- Lacquer, hardened with UV rays
- Oiled, hardened with UV rays

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

UV lacquer & UV Oil finished products –

Clean the floor with **“Bona” Wood Floor cleaner**, taking care to comply with the manufacturer’s instructions on the container.



A **Bona floor cleaning kit & spray mop** is also available to make cleaning of your floor easier.

Water, fluids, grit and sand are some of the most common items that can spoil a wooden floor. In order to protect the floor and minimise wear and damage it is recommended to:

- **Position protective mats** at the entrances to the property
- **Adhere protective felt pads** to the feet of all furniture items in contact with the floor surface

- **Use workstation protective mats** when using office furniture, e.g. chairs on casters or where continual foot fall occurs, as this will avoid premature localised wearing of the floor in these areas.
- **Keep pets claws trimmed**
- **Occasionally move the positions of rugs or mats, (do not use rugs over underfloor heating installations),** to avoid patches occurring under them or around their edges as the colour shade of the floor naturally changes over time. This is particularly important where the flooring is laid directly behind glass doors or windows, as UV ageing due to strong sunlight may accelerate colour change in these areas.

If the relative air humidity in the room drops below 40% (eg in the heating season), air humidifiers should be utilised to keep the relative air humidity between 45–60%. Small domestic room hygrometers are commonly available for monitoring air humidity at a relatively small cost.

## **WARRANTY INFORMATION**

Your Tuscan engineered 5GS flooring has a limited 25 year residential warranty against manufacturing defect. A copy of the warranty is available to download from the [www.tuscanflooring.co.uk](http://www.tuscanflooring.co.uk) website.

To maintain the validity of your warranty, your Tuscan flooring must be installed, cleaned and maintained strictly 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 contact your supplier of the product and advise them of your concerns in the first instance.

-----

### **Disclaimer:**

We reserve the right to amend any of the information contained within these instructions without prior notice.  
E&OE.