

# A J FLOORING

Timber Flooring Experts

## PREVENTING THE MOST COMMON ISSUES WHEN INSTALLING AN ENGINEERED TIMBER FLOOR



## INTRODUCTION

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In Australia, timber remains one of the most popular flooring materials. According to the Australasian Timber Flooring Association (ATFA), timber flooring represents approximately 25% of the flooring market – a figure that is steadily growing. Engineered timber flooring specifically has become more popular as it offers several advantages over solid timber, including its inherent stability and durability.

However, installation issues with engineered timber flooring can occur without the right level of skill, experience, and preparation. This can be attributed to several factors such as the varying quality of engineered timber flooring products; the choice of installation methods (some of which have a small or no margin for error); and the detriment of site conditions including uneven sub-floor and excess humidity, moisture, or heat.

Products not suitable for the application or poorly installed engineered timber flooring can create a headache for clients, installers, and suppliers. Moreover, problems can occur at any point during an installation – at the beginning, middle or end of the process. Sometimes installation issues only become apparent sometime after installation, leaving clients with little recourse for dealing with the defective floor.

It is critical that all involved in the selection of the engineered hardwood flooring -- from architects, interior designers, specifiers, builders, and installers -- each understand the factors that contribute to issues during engineered timber flooring installation and how to prevent such issues from occurring.

## THE COSTS OF POOR FLOORING INSTALLATION

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The impact of a poorly installed engineered timber floor should not be understated. Poor installation can lead to underperforming, uneven and unattractive looking floors. Predicaments that can easily be avoided when professionalism, knowledge and attention is given to the installation process to avoid careless and unnecessary pitfalls.

Some of the issues that can be avoided include floorboards swelling, bouncing, squeaking, warping, and twisting, cracks, and separation between floorboards, buckling in the floor, and inconsistent colour and appearance.





## **MOST COMMON INSTALLATION ISSUES: CAUSES AND WARNING SIGNS**

### **Ability of the installer**

It is mandatory for installers to have the required skills and experience in engineered timber flooring. Without the relevant skills and experience, installation will often run into the issues and concerns mentioned above. Not only should installers have general experience with all types of timber floor installation, but they should also be experienced in the specific product being used and the installation method needed for the project.

Some installation methods, such as parquetry installation, have no margin for error.

### **Poor planning and preparation**

Poor planning and preparation will cause problems.

The installer also needs to understand how humidity, direct sun light and heat in the space can affect the product.

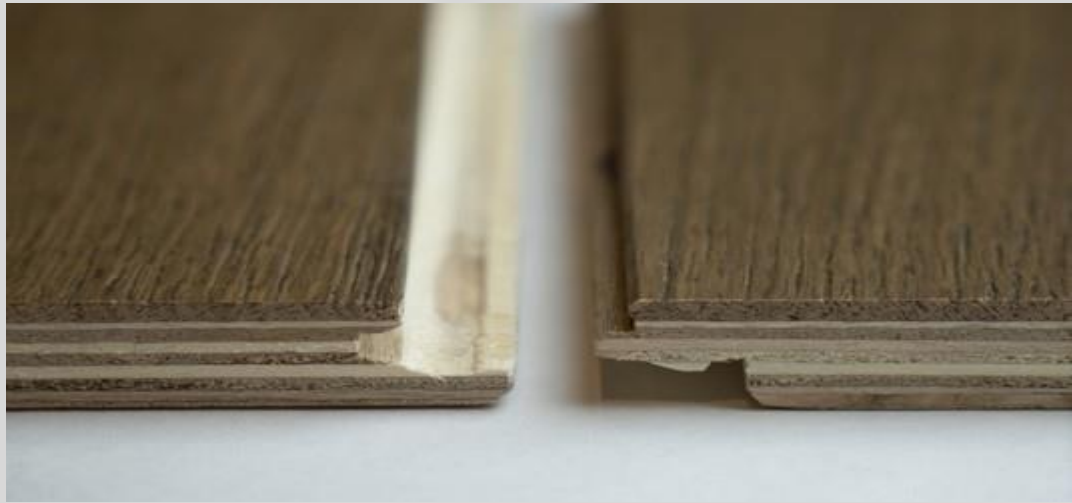
Conditions such as humidity, high temperatures and excess moisture can cause timber flooring to swell, warp and/or buckle. While engineered wood is more resistant to temperature and moisture fluctuations, poorly prepped sub-floors and products ill-suited for the installation conditions will lead to issues during and post installation.

### **Inferior flooring product**

Inferior or poorly specified products will also contribute to installation problems. Products must be sourced from known and reputable suppliers to ensure the product is up to the required Australian standard and fit for purpose.

### **Client expectations**

If installation expectations are not managed from the onset, the client may receive an unsatisfactory floor even if the product itself is not defective. The client should be made aware that colour variation can occur. There can also be natural colour variation between boards of the same species. It is also of great importance that the client understands that a character grade timber will have varying size knots and general features such as gum vein, sapwood, and cracks. Such characteristics are a part of nature and not to be regarded as defective material.



## **AVOIDING THE PITFALLS: KEY CONSIDERATIONS BEFORE INSTALLATION**

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Before selecting and installing engineered timber flooring products, reference should be made to **ATFA's *Engineered Timber Flooring Industry Standards***. This publication provides a manual for the installation of engineered timber flooring laid as floating floors or by direct adhesive fix to structural sub-floors. Below are some of the key considerations to be made before installing engineered timber flooring.

### **Choosing the right product**

There are a variety of engineered timber flooring products on the market, including straight plank, herringbone, or chevron floorboards. There are no standard board sizes and widths as they vary between manufacturers.

When selecting a flooring product, its performance profile and material properties should be carefully assessed. Key characteristics include the product's stability in humid conditions and the amount it expands and contracts depending on changes in the environment. Compliance with the National Construction Code should be checked, particularly whether the product meets the relevant fire performance and slip resistance requirements.

Most engineered timber flooring is prefinished in the factory, resulting in a high standard finish. Some products are available unfinished, meaning they can be sanded and coated on site.

Product grade, features and colour variation should also be considered. "Grade" refers to the size and number of features present on the boards. "Features" refer to gum veins, knots, borer activity and other natural markings present on the floorboards.

Whether the flooring product is to be installed as a floating floor or by direct stick fix, it is important to note the type of installation as it will impact other considerations such as the preparation of the sub-floor. Engineered timber flooring is available in different profiles, such as click-and-lock joint systems ideal for simple and quick floating installation or tongue and groove profiles specially designed to enable fast, quality direct fix installation.

### **Choosing an accredited installer**

A lack of correct site preparation and incorrect installation may void the product warranty. It is advised to choose an ATFA-accredited installer, who will have the requisite skill and experience in engineered timber flooring to reduce the risk of installation issues.

