

The Champaca Standard

CHAMPACA

Installation Guide

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Cleaning & Maintenance Guide



Proper wood flooring installation is crucial for ensuring its longevity and avoiding future issues. Champaca has gathered essential information that must be understood and followed as outlined in this guidebook.

Before Installation

Worksite Preparation

Preparing the worksite appropriately for wood flooring installation is of paramount importance, and it is essential to follow the standards set by Champaca for a ready-to-install surface. The key aspects of worksite preparation for wood flooring installation are as follows:

1. Moisture

- The moisture content of the concrete should not exceed 4%MC or 12%EMC when measured with a standard moisture meter.
- If the moisture content is higher than 4%MC or 12%EMC, it is necessary to wait for the moisture level to decrease before starting the wood flooring installation. High moisture content beyond the standard value can potentially lead to future damages due to wood expansion/contraction.

Champaca recommends using a Moisture Barrier whenever installing wood flooring in high-risk areas, such as lower levels of buildings, areas prone to water exposure, etc.

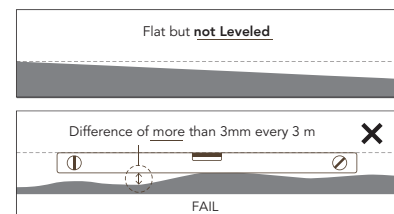
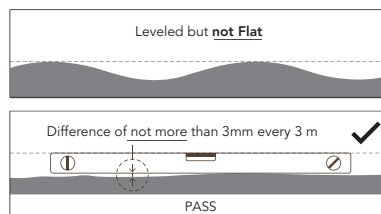
1. Flat & Levelled

- The subfloor level should be consistently flat, not sloping, and not deviate by more than 3mm every 3 meters. The floor level is measured using a Straight Edge Spirit Level, 3 meters in length.

If the floor level does not meet the above-mentioned standards, Champaca recommends using a Self-Levelling Compound to adjust the surface flatness.

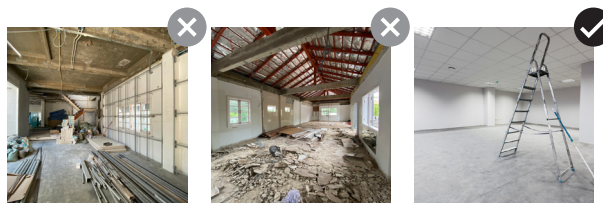
Standard Inspection protocol for Floor Level Check:

No.	Worksite Area	Inspection Points
1	General area less than 30 sqm	15-20 Points
2	General area 30-100 sqm	20-50 Points
3	General area 100-200 sqm	50-100 Points
4	Area near Door(s)	3 Points
5	Area near Sliding Door(s)/Panel(s)	Every 1 Metre
6	Areas of Material transition	Every 1 Metre



3. Clean Worksite

- The work area must be clean, free from cement debris, and any other materials that may obstruct or adversely affect the installation efficiency.



4. Subfloor Integrity

- All substrates must be sound and free from squeaks, spalling, cracking or vertical deflection.
- The concrete surface must have a minimum strength of 18 KSC (Kilograms per Square Centimeter) when measured using the Rebound Hammer Test with standardized equipment.



Rebound Hammer Test

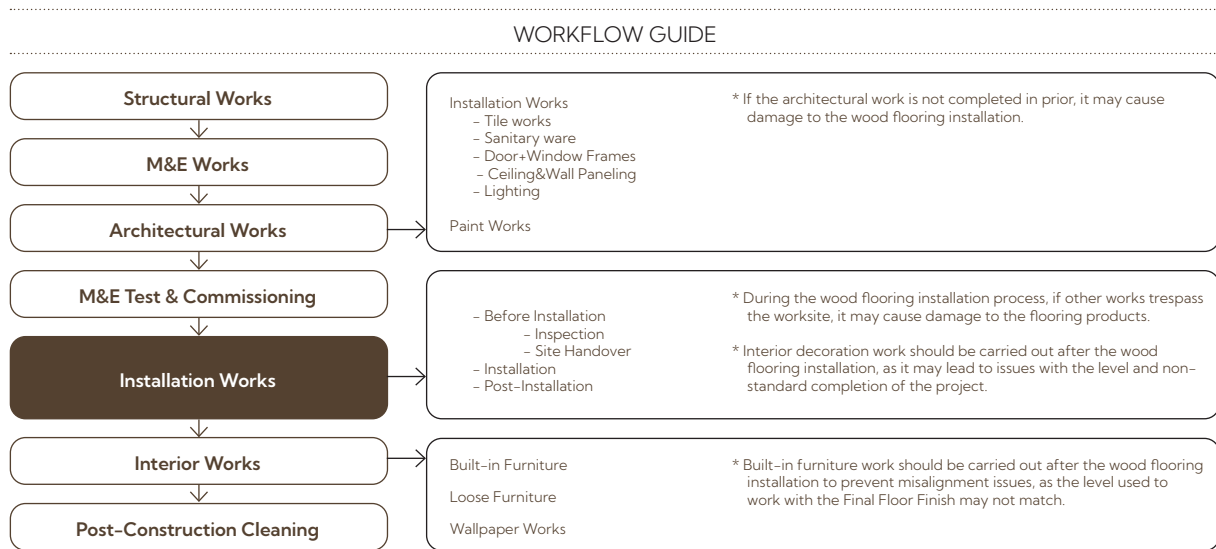
5. Termite and Insect Prevention

- The work area has been treated and protected against termites and insects before wood flooring installation to prevent potential damage that may occur in the future.



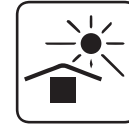
Other Key Factors for Successful Flooring Installation

- The planning and sequencing of construction activities have a significant impact on the quality of wood flooring installation. Champaca recommends organizing the sequence of wood flooring installation to align with other pre and post-installation tasks as follows:



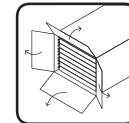
2. Correct Delivery and Storage of Wood Flooring:

Properly designate a suitable storage location for the wood flooring before delivery (preferably indoors and away from prolonged exposure to sunlight and rain). Store the wood flooring near the worksite before installation.



3. Acclimatisation of Wood Flooring Before Installation:

Open both ends of the packaged wood flooring to allow it to acclimate to the temperature and humidity of the installation site. It is advisable to let the wood flooring acclimate for 3-4 days before commencing the installation.



4. Clear Assignment of Responsibilities for Preparation and Inspection:

Clearly define the responsible parties for site preparation and the individuals responsible for inspecting and accepting the completed installation. This will have a direct impact on the smoothness and efficiency of the work.

Wood Flooring Installation Methods Comparison

Wood flooring installation has more than one recommended method, and each method may only be used with certain types of products. If unsure, please consult the our technical team before proceeding. Additionally, the installation may require some adjustments to suit the specific conditions of the site, and should be closely managed by professionals.



Details	Full Glue-Down	Glue-Assist Nail-down	Floating
1. Strength	★★★★★	★★★★☆	★★★☆☆
2. Elasticity	★★★★★	★★★★☆	★★★☆☆
3. Durability	★★★★★	★★★☆☆	★★☆☆☆
4. Floor Noise	★★★★★	★★★☆☆	★★☆☆☆
5. Moisture Control	★★★★★	★★★☆☆	★★★☆☆
6. Installation Speed	★★★☆☆	★★★★☆	★★★★★
7. Installation Labour Cost	★★★☆☆	★★★★☆	★★★★★
8. Installation Supplies Cost	★★★☆☆	★★☆☆☆	★★★☆☆



Installation Method : Full Glue-Down

This is the installation method that allows the wood flooring to bond most strongly with the concrete subfloor and can withstand the most expansion and contraction due to varying weather conditions and humidity.

1. Inspect the subfloor to ensure it meets all of the site preparation requirements; moisture, flat & leveled, clean, subfloor integrity, Termite treated (as stated in section Before Installation).
2. Unpack the wood flooring from the boxes and arrange them in a natural manner before installation, to spread out the natural variations of wood colours and grains (dry lay).
3. Use high quality Silane Base or PU (Polyurethane) adhesives for Champaca wood flooring
4. Use a notched trowel with a 6mm notch size to spread the adhesive evenly over the designated concrete subfloor area. Consider the working time of the adhesive. With full-spread adhesive, you can install approximately 1-1.2 square meters per 1 kg of adhesive (check with the adhesive manufacturer for specific instructions).

For wider planks, use a trowel with wider notches, or as per adhesive manufacturer's guideline to ensure better adhesion to the concrete subfloor.
5. Start installing the first row of wood flooring, leaving at least a 10mm gap from the walls to accommodate wood expansion.
6. Continue Installing the wood flooring on the applied adhesive and use a rubber mallet to ensure a snug fit between the planks.
7. If excess adhesive appears on the wood surface, clean it immediately with a damp cloth, as it may leave stains on the wood.
8. Install the last row with precision and check for any misalignments and or defects to ensure quality control.
9. Place sandbags or weights (approximately 15 kg) on top of the wood flooring, spaced at around 1 unit per 1 square meter, to help the adhesive set properly. Prepare some protection corrugated cardboard or cloth to protect the weights and prevent scratches and indentations on the wood. Leave the weights in place for at least 24 hours before removing them.
10. Finish the installation details with end caps, profiles or skirting as needed.
11. Seal any gaps or touch up defects with wood filler of matching colours, and/or silicone as needed
12. Clean the surface to remove any residues and use Wood-Specific Cleaner, such as Osmo Wash & Care to clean the surface thoroughly before handing over the installed work to the inspector.
Install protection materials, such as corrugated cardboard or MDF, to minimize the risk of damage from subsequent construction work.
13. Avoid prolonged exposure of the wood flooring to direct sunlight, as it may cause the surface finish to fade over time.

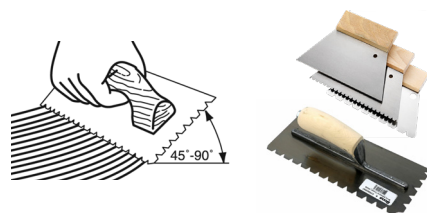
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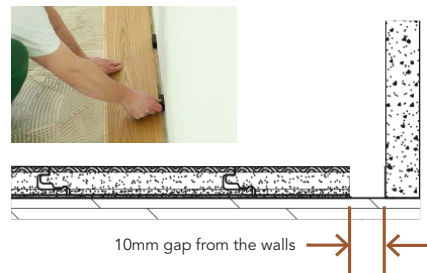
Silane Adhesive

Polyurethane Adhesive

3.



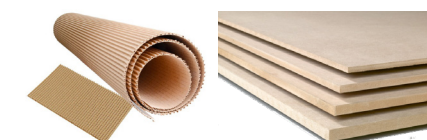
4./5.



6./9.



12.



14.



Installation Method : Glue-Assist Nail-Down

This is an installation method suitable for wood with a width not exceeding 190 mm. (For wider planks, it is advisable to use Full Glue-Down method).

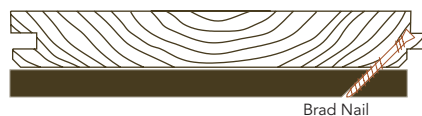
1. Inspect the subfloor to ensure it meets all of the site preparation requirements; moisture, flat & leveled, clean, subfloor integrity, Termite treated (as stated in section Before Installation).
2. Unpack the wood flooring from the boxes and arrange them in a natural manner before installation, to spread out the natural variations of wood colours and grains (dry lay).
3. Install sub-floor materials (Marine Plywood / Fibre Cement Board / OSB) using Silane Base or PU (Polyurethane) adhesive, and leave a gap of at least 10 mm between the boards to allow for expansion and contraction (installation should be done in a bricklaying pattern).
4. Use nails specifically for wood flooring installation (cleat/brad/blind nails).
5. Start installing the first row of wood flooring, leaving at least a 10mm gap from the walls to accommodate wood expansion.
6. Install each wood flooring plank, using a rubber mallet to ensure a tight fit between the planks.
7. Install subsequent rows of wood flooring by nailing the tongue at a 45° angle, with a minimum interval of every 15cm.
8. Install the last row with precision and check for any misalignments and/or defects to ensure quality control.
9. Place sandbags or weights (approximately 15 kg) on top of the wood flooring, spaced at around 1 unit per 1 square meter, to help the adhesive set properly. Prepare some protection corrugated cardboard or cloth to protect the weights and prevent scratches and indentations on the wood. Leave the weights in place for at least 24 hours before removing them.
10. Finish the installation details with end caps, profiles or skirting as needed.
11. Seal any gaps or touch up defects with wood filler of matching colours, and/or silicone as needed
12. Clean the surface to remove any residues and use Wood-Specific Cleaner, such as Osmo Wash & Care to clean the surface thoroughly before handing over the installed work to the inspector.
13. Install protection materials, such as corrugated cardboard or MDF, to minimize the risk of damage from subsequent construction work.
14. Avoid prolonged exposure of the wood flooring to direct sunlight, as it may cause the surface finish to fade over time.



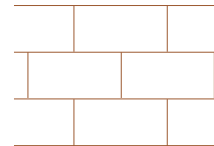
11.



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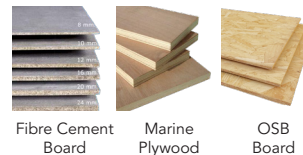


Brad Nail



Install Subfloor with Brick Pattern

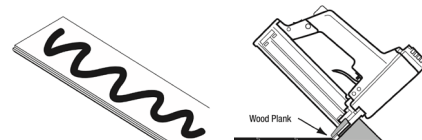
3.



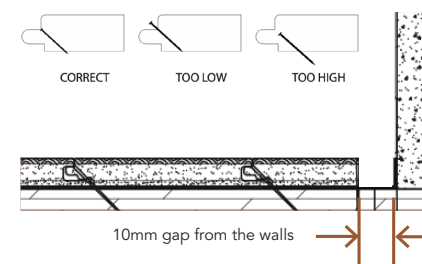
Fibre Cement Board

Marine Plywood

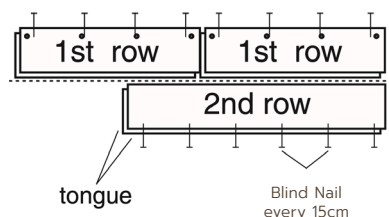
OSB Board



4.



5./8.



13.

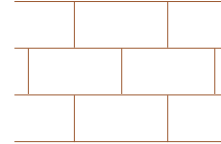


Installation Method : Floating

Installing wood flooring suitable for boards with a width not exceeding 190mm and a length not exceeding 1800mm (For wider planks, it is advisable to use Full Glue-Down method).

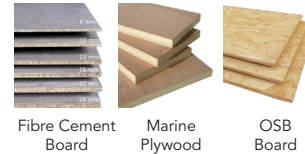
1. Inspect the subfloor to ensure it meets all of the site preparation requirements; moisture, flat & leveled, clean, subfloor integrity, Termite treated (as stated in section Before Installation).
2. Unpack the wood flooring from the boxes and arrange them in a natural manner before installation, to spread out the natural variations of wood colours and grains (dry lay).
3. Install sub-floor materials Marine Plywood / Fibre Cement Board / OSB) using Silane Base or PU (Polyurethane) adhesive, and leave a gap of at least 10 mm between the boards to allow for expansion and contraction (installation should be done in a bricklaying pattern).
4. Install a suitable underlay, such as EVA foam (2-3 mm thick)
5. Start installing the first row of wood flooring, leaving at least a 10mm gap from the walls.
6. Apply PVAc adhesive (Moisture Resistant) on the tongue of the wood flooring to improve adhesion.
7. Install each wood flooring plank, using a rubber mallet to ensure a tight fit between the planks.
8. Install the last row with precision to ensure a finished installation.
9. Finish the installation details with end caps, profiles or skirting as needed.
10. Seal any gaps or touch up defects with wood filler of matching colours, and/or silicone as needed
11. Clean the surface to remove any residues and use Wood-Specific Cleaner, such as Osmo Wash & Care to clean the surface thoroughly before handing over the installed work to the inspector.
12. Install protection materials, such as corrugated cardboard or MDF, to minimize the risk of damage from subsequent construction work.
13. Avoid prolonged exposure of the wood flooring to direct sunlight, as it may cause the surface finish to fade over time.

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Install Subfloor with Brick Pattern

3.



Fibre Cement Board

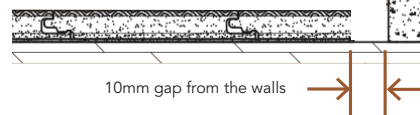
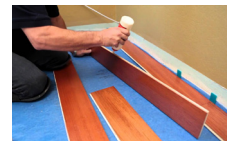
Marine Plywood

OSB Board



EVA Foam Underlay

4.



10mm gap from the walls

5./6.



10.



12.

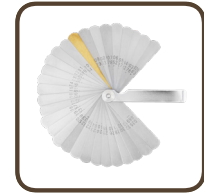


Standard for Wood Flooring Post-Installation Inspection

The inspection should be conducted approximately 48 hours after installation is complete (to allow the adhesive to cure thoroughly), or earlier if installed using a floating method. If the inspection cannot be done at this time, proper care must be taken to maintain the wood in suitable conditions. This includes keeping the air conditioning at a temperature of 20–25°C during the daytime for at least 4 hours per day and opening the room to allow ventilation for approximately 2 hours per day (except during rainy periods) to prevent rainwater from damaging the wood.

1. Variations of Colour, Wood Pattern, Wood Grain, or Wood Characteristics are considered natural beauty of the wood and are not considered as product and or installation defects
2. The gap between wood panels should be measured with a standard Feeler Gauge. The acceptable margin of error for :

Engineered Wood and Compound Solid Wood is not more than 0.3 mm in length and width.
For Solid Wood, it should not exceed 0.5 mm in length and width.
3. The difference in height between panels should not exceed 1.0 mm when measured with a standard Depth Gauge.
4. Nail head marks should be filled with Wood Filler as specified in the installation guideline.
5. Corner joints should have a smooth finish as specified in the Post-Installation section.



Feeler Gauge



Depth Gauge

The gap between wood panels and height differences between panels may change over time due to usage conditions and environmental factors such as humidity and temperature. Proper usage and maintenance can help preserve the wood's beauty for a longer time (more information in the Maintenance & Cleaning section).

Cleaning & Maintenance

User Care

1. Do not use chemicals that may be harmful to the wood floor, such as laundry detergent, nail polish remover, alcohol-based products, or other substances with high acidity or alkalinity (non-PH Balanced cleaners).
2. Place rubber or felt pads under furniture or materials that are placed on the wooden floor, such as cabinets, beds, and tables, at all contact points to prevent from scratches.
3. When moving around furniture, lift it off the floor instead of dragging it to prevent damages and scratches.
4. Avoid wearing shoes with metal soles or high heels on the wooden floor, as it may cause scratches and dents on the wood.
5. Do not expose the wooden floor to continuous sunlight for an extended period, as it may cause the wood to change colour.
6. Do not keep the room closed for extended periods, as it may result in poor air circulation. It is recommended to open the room for ventilation at least 2–3 hours a week.
7. If liquids are spilled on the wooden floor, immediately use a dry cloth to wipe it up. Allowing liquids to sit may cause them to seep into the wood joints and potentially damage the wood.
8. Regularly inspect and maintain plumbing in the area to prevent leaks or seepage onto the wooden floor.

Cleaning

Cleaning is an important aspect to consider as wood floors require regular maintenance to retain their beauty. Cleaning should be done as needed, based on usage and the specific area. For instance, high-traffic areas like entrance foyer floors endure the most use in a household, so they require more frequent cleaning. We recommend using wood-floor-specific cleaning products, especially suitable for wood floors coated with UV Oil Wax.

1. For dry cleaning, use a microfiber mop or a broom.
2. For wet cleaning, avoid soaking the floor and use a damp cloth or a cleaning solution mixed with a minimal amount of water. Wring out

Guideline For Cleaning Intervals

Light Usage Areas: Bedrooms, Reading Rooms, etc.
Moderate Usage Areas: Entrances, Hallways, Kitchens, etc.
Heavy Usage Areas: Retail Spaces, Showrooms, Hotels, etc.

	Light Usage Areas	Moderate Usage Areas	Heavy Usage Areas
Regular Cleaning	Every 2-3 Weeks	Every Week	Every 3-4 Days
Deep Cleaning	1 / Year	2 / Year	Every 3-4 Months

Wood Floor Cleaning Method:

Use wood floor care and cleaning products suitable for mop cleaning. Dilute the wood floor cleaning product with water and then immerse the mop into the prepared solution.

Wring the mop to remove excess water and then proceed to clean the wood floor thoroughly. Regular use of this method will help the surface of the floor resist dirt and wear.



Cleaning Method & Instructions

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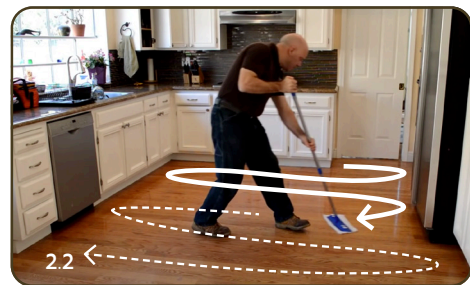
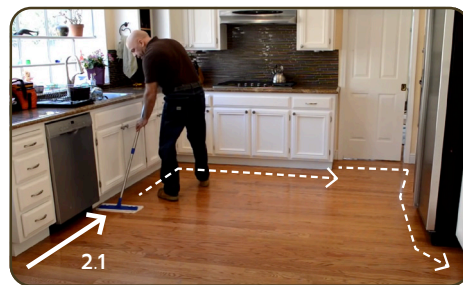
Dry Cleaning Method:

Dry cleaning can be done using the following methods:

- 1.1 Microfiber dust mop.
- 1.2 Disposable static dust mop.
- 1.3 Broom.
- 1.4 Dry vacuum cleaner with a rotating brush and rubber wheels.

When using a dust mop, it's important to sweep in one direction and avoid back-and-forth sweeping, as it may cause scratches on the wood floor.

- 2.1 Start by sweeping the perimeter of the area.
- 2.2 Then, continue by sweeping the interior area in an "S" pattern as shown in the diagram.
- 2.3 If there is a significant amount of dust on the floor, repeat step 2 (2-3 times) or until the area is free of dust.



Wet Cleaning Method:

DO NOT USE A SOAKING-WET MOP ON THE FLOOR.

Wet cleaning can be done using:

- 1.1 Microfiber mop and a dry bucket.
- 1.2 Mop and a bucket with a water filtration system.
- 1.3 Mop and two buckets – one for clean water and one for rinsing.

Prepare the area for wet cleaning:

- 2.1 Open doors and windows for ventilation 2-3 hours before and after cleaning.
- 2.2 Ensure the floor is free of dust by dry cleaning it before proceeding with wet cleaning.

Prepare a clean water solution in the bucket. You can use a wood cleaning solution mixed according to the bottle's instructions. Adjust the cleaning solution dilution ratio as needed. If you don't have a bucket with a water filtration system, prepare a separate bucket of clean water for rinsing.

3.1 Use a damp or well-wrung mop (squeeze out excess water) to apply the water or cleaning solution.

3.2 Mop the floor in an "S" pattern.

3.3 After the mop cloth is dry or dirty, soak it in the clean water prepared in step 2.1 and continue mopping.

3.4 If some areas are still not clean, repeat steps 3.1-3.3 (2-3 times) until the entire floor is clean.

In cases of stubborn stains, adjust the dilution ratio of cleaner concentrates at a ratio of 1:5-1:1 in a small container (like a spray bottle). Spray the solution on the stained areas and use a microfiber cloth to wipe in the direction of the wood grain or along the length of the planks.

