BESPOKE HARDWOODS

### Installation Guide- Engineered Wood Plank

### Optimal Material Delivery, Storage, and Subfloor Preparation for Fórte Flooring Engineered Timber Flooring

At Fórte Flooring, we take immense pride in offering the finest engineered and solid wood flooring solutions. Our commitment to excellence extends beyond the manufacturing process and installation; it also encompasses the crucial aspects of material delivery, storage, and subfloor preparation. With our extensive expertise and industry-leading knowledge, we ensure that each step is meticulously executed to guarantee the longevity and beauty of your wood flooring investment.

# Material Delivery & Storage: Caring for Craftsmanship

The journey of Fórte Flooring Engineered Timber Flooring begins with careful material delivery and storage. We recognize the significance of handling these exquisite materials with utmost care. Every package should remain unopened until installation to preserve the integrity of the wood. Additionally, it is vital to store Fórte Flooring timber in dry conditions and elevate it at least 100mm off the ground floor concrete slabs. This preventative measure safeguards the wood from moisture, preventing warping or other damage.

Creating an environment that mirrors the in-service conditions of the completed building or dwelling is pivotal. If the structure is typically air-conditioned or heated during the installation season, replicating these conditions before and after installation is advised. For instance, maintaining indoor temperatures around 20 degrees Celsius and relative humidity between 40% to 60% creates a moderately dry environment, ideal for installation. Focusing on comfort while mimicking real-life conditions guarantees a flooring installation that lasts.

# Subfloor Preparation for Direct Stick Installations: A Foundation for Excellence

When it comes to direct stick applications, a diverse range of subfloors can be utilized if they meet certain criteria. Structural soundness, compliance with relevant construction standards, and adequate resistance to expansion forces are all essential factors. Prior to installation, thorough assessment and correction of any subfloor issues that could affect the performance or appearance of the engineered floor are necessary.

Flatness is a fundamental requirement for any subfloor. For concrete subfloors, the deviation should not exceed 3 mm beneath a 3 m long straight edge, in any direction. In cases where concrete subfloors aren't sufficiently level, levelling compounds or grinding might be required. Timber subfloors may demand packing of joists or sanding of sheet subfloors to achieve the desired flatness.

It's crucial that the subfloor surface is free from any contaminants that might hinder adhesive effectiveness, such as waxes, grease, paint, and sealers. Preparing a suitable surface might involve sanding or grinding of concrete slabs to eliminate any existing substances. When using levelling compounds on concrete slabs, it's essential to follow the manufacturer's recommendations and ensure that sealers under the compound are entirely covered to prevent adhesion issues.

For optimal results, the tensile strength of the levelling compound must accommodate the expansion forces generated by the adhered flooring. Utilizing levelling compounds with adequate tensile strength is imperative to ensure the durability of the adhesive-fixed floors.

# Moisture Content Considerations: Concrete Slabs, Timber, and Sheet Subfloors

Moisture content is a critical aspect to evaluate before installation. For concrete slabs, moisture should not exceed 6% according to a concrete moisture meter test and 80% according to an inslab relative humidity test. These tests help ensure that the conditions are suitable for adhesive application.

With timber and sheet subfloors, attention should be given to the drainage system around the dwelling to prevent moisture buildup. Subfloors must be dry and free from debris. Additionally, in-service moisture content should not exceed 11%-12% on average.

# Direct Stick Installation: Precision and Expertise

At Fórte Flooring, direct stick installation is a testament to precision and expertise. Before laying the timber flooring, a thorough inspection is carried out to identify any manufacturing imperfections that might affect the finished floor. Ensuring the structural integrity, quality, and moisture content of the boards is a top priority.

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To achieve a harmonious aesthetic, the installer is responsible for strategically placing boards based on color and length distribution. Proper spacing of end joints (staggered ends) at a minimum of 100-300mm apart is recommended to avoid clustering and ensure stability.

Expansion allowances are a vital consideration for long-term flooring integrity. A minimum of 10mm expansion allowance at skirting boards and around fixed objects is necessary. In the case of joinery cupboards, a 5mm expansion gap allowance is permitted only with a direct stick installation. Fórte Flooring provides the flexibility for joinery installation over direct stick timber flooring, enhancing the seamless integration of design elements.

## Unrivalled Expertise in Installation: Crafting Perfectly Laid Fórte Flooring Engineered Timber

At Fórte Flooring, our mastery in wood flooring installation extends to every facet of the process, ensuring that you're flooring not only exudes elegance but also stands the test of time. With a commitment to delivering excellence, we guide you through the intricacies of installation, considering all aspects from expansion gap allowances to subfloor preparation. Our meticulous attention to detail and unparalleled knowledge are the cornerstones of our reputation as leaders in the wood flooring industry.

## Precision in Expansion Gap Allowances: A Mark of Excellence

In line with our commitment to perfection, Fórte Flooring recognizes that expansion gap allowances play a pivotal role in preserving the structural integrity and aesthetics of your wood flooring. In regions characterized by tropical climates, coastal proximity, or elevated humidity levels, greater expansion gaps may be warranted. Furthermore, internal expansion allowances in both length and width should be considered for areas susceptible to extreme fluctuations in temperature and humidity.

As industry leaders, we emphasize the importance of internal expansion joints to account for differential movements. It is vital to ensure that appropriate expansion joints are established at doorways, mirroring subfloor expansion joints and construction joints. We are dedicated to upholding the integrity of your installation by meticulously addressing every detail, down to the strategic placement of expansion joints to safeguard against potential issues.

#### A Comprehensive Approach to Installation

Before embarking on the installation journey, Fórte Flooring leverages its expertise to guide you through a comprehensive assessment of factors such as on-site storage, acclimatization, subfloor conditions, safety measures, and required equipment. This meticulous planning phase ensures that the installation process unfolds seamlessly, delivering flawless results.

Fórte Flooring endorses the use of the MS30 Adhesive with all Fórte Flooring Premium Engineered Timber Flooring installations when the subfloor's moisture content falls within specified parameters. For instances where moisture content exceeds these limits, a moisture vapor retarder compatible with the adhesive must be incorporated to safeguard against potential issues.

#### Impeccable Execution: Direct Stick Installation

In direct stick installations, the precision of execution defines the outcome. Fórte Flooring's expertise shines as we guide you through each step:

- We set a string line at an appropriate distance from the starting wall, considering factors like board width and expansion allowances. This meticulous planning ensures a flawless alignment that accounts for potential undulating walls.
- The first rows of boards are meticulously installed, ensuring the groove edge aligns with the string line and the tongue edge faces the starting wall. This precision sets the foundation for a seamless installation.
- During laying, our experts ensure that the end T&G joint engages with the side T&G joints, minimizing displacement of adhesive and avoiding potential pullback.
- 4. The installation progresses, maintaining alignment and staggered appearance while adhering to expansion gap allowances.
- Traces of adhesive are cleaned off promptly during laying, preventing adhesive haze on the board surface.
- Throughout the process, Fórte Flooring experts employ tapping blocks, pull bars, and clamps designed for timber flooring installation to ensure tight joints without surface damage.

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- The final row of boards is meticulously cut lengthwise to provide an even expansion gap.
  Wedges are employed to secure the final row as the adhesive cures.
- Our installation encompasses the placement of internal expansion joints, joints at doorways, and appropriate trims to facilitate expansion and contraction movements.
- Once the installation is completed and the adhesive has fully set, the floor is thoroughly cleaned using recommended products from the Fórte Flooring Maintenance Guide.

## Installation Over Existing Timber Flooring: A Seamless Transition

Fórte Flooring's prowess shines through in our installation over existing timber flooring. We understand that a successful installation begins with a thorough assessment of the materials. At the commencement of laying, our experts meticulously inspect the timber boards for any manufacturing imperfections, such as grade discrepancies, board shape irregularities, coating imperfections, damage, and moisture content issues. Should any concerns arise, our dedicated team is here to guide you through the process and determine the best course of action.

The artistry of installation lies in the strategic placement of each board. Our installers take into account color and length distribution to ensure a harmonious blend that enhances the aesthetics of your space. We are attuned to the nuances of design, avoiding sharp contrasts that disrupt the overall appeal. To maintain structural integrity and prevent clustering, we recommend staggering end joints at a minimum of 100 – 300mm apart, providing the balance and stability that defines a premium installation.

We prioritize expansion allowances, allowing your timber flooring to breathe and adjust with changing conditions. Our meticulous approach extends to joinery cupboards, where a 5mm expansion gap allowance is permitted, enhancing the integration of design elements with the flooring. In areas prone to tropical or humid conditions, our seasoned professionals advise on greater expansion gap allowances, ensuring the longevity of your flooring investment.

## Direct Stick/Direct Bond Over Particle Board or Sheet Flooring: Mastering the Substrate

When installing over particle board or sheet flooring, Fórte Flooring demonstrates its prowess in mastering substrates. Just as with existing timber flooring, our craftsmen embark on the installation process with a comprehensive examination of the timber boards. We assess grade, shape, damage, coating imperfections, and moisture contents to ensure a flawless finish.

The precision of installation remains the cornerstone of our work. The strategic placement of boards in terms of color and length distribution remains paramount to achieving a polished aesthetic. In line with our commitment to expansion allowances, we guide our clients towards maintaining a minimum of 10mm at skirting boards and fixed objects, ensuring durability and long-term stability. We empower you with the freedom to incorporate joinery cupboards with a 5mm expansion gap allowance, a testament to the versatility and quality of Fórte Flooring's installation methods.

We understand that each project is unique, and the need for internal expansion allowances may vary. Our skilled team carefully assesses the length and width required for internal expansion based on your specific area, accommodating fluctuations in humidity and temperature levels. The integration of expansion joints, both internal and at doorways, ensures that your flooring adapts to changing conditions while maintaining its elegance and structural integrity.

## Underfloor Heating Installation: Integrating Warmth with Beauty

Fórte Flooring's expertise extends to underfloor heating installation, marrying warmth and elegance seamlessly. The intricacies of integrating timber flooring with a heated slab require unparalleled attention to detail. We adhere to strict guidelines, ensuring that board width and thickness are within the parameters to maintain the veneer structure and core integrity.

Moisture content and temperature regulations are pivotal in underfloor heating installations. Our seasoned professionals oversee the entire process, ensuring the concrete subfloor moisture content is maintained at <3% before heating application. We provide meticulous guidance on the gradual increase of temperature on the subfloor surface, preserving the timber's integrity throughout the heating process.

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#### Conclusion

At Fórte Flooring, our reputation as a premier wood flooring company in Ireland stems from our unwavering commitment to quality, expertise, and craftsmanship. We handle every stage of the process with utmost care, from material delivery and storage to subfloor preparation and installation. With our vast knowledge and dedication to excellence, we ensure that your engineered timber flooring not only meets but exceeds your expectations. Our approach is driven by a passion for creating timeless interiors that reflect your unique style and uphold the standards of luxury that Fórte Flooring stands for.