PlusFloor®

Installation Guide

Formation Herringbone

Prior To Installation

It is crucial to thoroughly inspect and check the product for any damage, defects, or variations before proceeding with the installation. This inspection should be conducted under adequate lighting conditions. Here are the key points to consider:

Color and Quantity Check: Verify that the colors of the panels correspond to those ordered and ensure that the quantities are correct. Additionally, inspect the boxes for any visible damage. If there are any discrepancies or visible damage, it is important to address them before installation.

Visual Inspection During Installation: While installing the panels, carefully examine them for any visible defects. If you notice any imperfections such as scratches, chips, or inconsistencies, do not proceed with installing those panels. It is recommended to set aside and avoid using panels that display any visible defects.

Use Materials from a Single Production Batch: To ensure a consistent shade and appearance, it is advisable to use materials from a single production batch for each installation. Different batches may have slight variations in color, so using panels from the same batch helps maintain a uniform look.

Natural Variation: Some designs may naturally exhibit variations within the pattern. It is important to be aware of this characteristic and consider it during installation. Mixing or shuffling the panels from different boxes can help distribute any inherent variations more evenly across the floor.

Please note that if defects are visible prior to installation, PlusFloor will not assume responsibility for the costs associated with removing and reinstalling the flooring. By proceeding with the installation, it is understood that the installed product is accepted.

Careful inspection and adherence to these guidelines will help ensure a satisfactory installation and minimize any issues or discrepancies.

Suitability

Formation Herringbone flooring can be installed on various types of subfloors, including concrete, cementitious screed, anhydrite (calcium sulfate), timber, and ceramic tiles, provided they have been properly prepared according to the floor preparation guidelines.

When installing on raised access flooring according to EN12825, it is important to note that the level of flatness described in the standard may not be sufficient to achieve the best aesthetic results for Formation Herringbone flooring without using a permanent adhesive. Increasing the flatness of the raised access floor beyond the standard requirements will enhance the overall appearance. It is recommended to have a pre-installation meeting with all involved parties to agree on the tolerances and ensure a satisfactory outcome. Formation Herringbone flooring is compatible with traditional water-based underfloor heating and cooling systems. However, it is crucial to ensure that the subfloor surface temperature does not exceed 27°C to prevent any potential damage.

It's important to note that Formation Herringbone flooring is intended for indoor installations only and is primarily designed for temperature-controlled office spaces. It is recommended to maintain the air and floorcovering temperature between 15°C and 27°C. Avoid rapid temperature increases of more than 5°C per 12 hours to prevent any adverse effects on the flooring.

In areas where extreme temperature fluctuations and/or heavy traffic and loads are expected, it is necessary to fully adhere the Formation Herringbone flooring using recommended dispersion or 2-component epoxy/PU adhesive. This ensures optimal performance and durability in such demanding conditions. Detailed instructions on adhesive selection and application can be found in the relevant section.

Construction, and Quality of the Subfloor

Understanding the Formation Herringbone and construction of the subfloor or base is essential for ensuring a successful flooring installation. It provides crucial information to assess factors such as acceptable humidity levels, flatness, compressive strength, and tensile strength of the subfloor.

By knowing the characteristics of the subfloor, you can determine the appropriate floor preparation techniques and materials required for the installation process. This may include the use of leveling or smoothing compounds to achieve a smooth and even surface, as well as the need for moisture barriers to prevent moisture-related issues.

If there is any uncertainty or ambiguity regarding the quality or composition of the subfloor, it is recommended to consult local installation standards and guidelines. Additionally, seeking advice from floor preparation experts or suppliers of leveling compounds can provide valuable insights and recommendations specific to your situation.

By ensuring that the subfloor is properly prepared and meets the necessary requirements, you can create a suitable foundation for the installation of your flooring material, promoting longevity and performance.

National Regulations and Standards

It is crucial to adhere to the relevant national regulations and installation standards when it comes to site and installation conditions. These regulations and standards are in place to ensure the safety, quality, and compliance of the installation process.

If there is a conflict between the manufacturer's recommendations and the national standard or regulation, it is important to prioritize the more stringent requirement. This means that if the national standard or regulation imposes stricter guidelines or specifications than the manufacturer's recommendations, the stricter requirement should be followed.

By following the most stringent requirement, you can ensure that the installation meets the highest standards and complies with all necessary regulations, ultimately providing a safe and reliable outcome. It is advisable to consult and refer to both the manufacturer's recommendations and the applicable national regulations to ensure compliance throughout the installation process.

Subfloor Preparation

Irregularities in the Subfloor

Indeed, proper preparation of the subfloor is essential for a successful installation of Formation Herringbone flooring. The quality and condition of the base directly impact the final appearance and performance of the finished floor. Here are some key points to consider:

1. **Subfloor Requirements**: The subfloor should be hard, structurally sound, flat, smooth, clean, and dry. It should be free from defects and suitable for the intended purpose. Any old adhesives, loose levelling compounds, and chemical substances should be removed.
2. **Subfloor Evenness**: It is recommended to ensure that the unevenness of the subfloor does not exceed 2mm over a width of 200cm. This helps to achieve a visually pleasing and level surface.
3. **Suitable Materials**: Select suitable materials for floor preparation, such as plywood and levelling compounds, based on the occupational use of the area. Consult with the supplier of preparative materials and the flooring contractor to ensure the compatibility and compliance with national standards for resilient floorcoverings.
4. **Raised Access Flooring**: Formation Herringbone is suitable for installation on all types of raised access flooring according to EN12825. However, to achieve the best aesthetics, it may be necessary to increase the level of flatness beyond the standard requirements. This can be achieved by using a permanent adhesive.
5. **Pre-Installation Meeting**: It is recommended to have a pre-installation meeting with all involved parties to discuss and agree upon the tolerances and requirements. The type of design, finishing, and aesthetic considerations should be taken into account during these discussions.
6. **Design Considerations**: Designs with color variation, heavier structure, and pronounced bevels are generally more forgiving on irregular subfloors compared to designs with uniform colors, little structure, and no bevels. Consider these factors when selecting the Formation Herringbone flooring design for a particular subfloor condition.

By ensuring proper subfloor preparation and considering design factors, it is possible to achieve an excellent and aesthetically pleasing finish for the Formation Herringbone flooring installation. Always follow manufacturer's recommendations and comply with national standards to ensure a successful installation.

The Moisture Content of the Subfloor

In the UK, specific moisture requirements exist for different types of subfloors when installing Formation Herringbone flooring. Here are the recommended moisture levels for various subfloor types:

1. Unheated Cementitious Screeds: The moisture content of unheated cementitious screeds should be less than 2.0CM% (Carbide Method) and the relative humidity (RH) should be below 75%.
2. Underfloor Heated Cementitious Screeds: For underfloor heated cementitious screeds, the moisture content should be less than 1.8CM% (Carbide Method) and the relative humidity (RH) should be below 75%.
3. Unheated Anhydrite (Calcium Sulphate) Screeds: The moisture content of unheated anhydrite screeds should be less than 0.5CM% (Carbide Method).
4. Underfloor Heated Anhydrite (Calcium Sulphate) Screeds: Underfloor heated anhydrite screeds should have a moisture content of less than 0.3CM% (Carbide Method).

For direct-to-earth concrete and stone subfloors, it is essential to have an effective Damp Proof Membrane (DPM) in accordance with national standards for resilient floorcovering installation. This helps to prevent moisture from the ground seeping into the subfloor and potentially damaging the Formation Herringbone flooring.

Subfloor Preparation

It's important to follow these moisture guidelines and ensure that the subfloor conditions meet the recommended moisture levels before proceeding with the installation of Formation Herringbone flooring. Adhering to these requirements helps to prevent issues such as moisture-related damage, warping, and adhesive failure, ensuring a successful and long-lasting installation.

Note: Before installing Formation Herringbone flooring, the installer must thoroughly evaluate the subfloor and installation environment. This assessment involves checking for flatness, smoothness, moisture levels, structural integrity, contaminants, and defects. Factors like subfloor type, installation method, and flooring requirements should also be considered. By conducting a comprehensive assessment, the installer can address any necessary floor preparation, ensuring suitable installation conditions. This minimizes the risk of problems like unevenness or adhesive failure, resulting in a durable and high-quality flooring.

Acclimatisation

Prior to installation, it is essential that the Formation Herringbone flooring is allowed to acclimatise in the designated room or a similar space for a minimum of 24 hours. This time is necessary for the product to reach the appropriate ambient temperature, which should fall between a minimum of 18°C and a maximum of 27°C.

To facilitate a gradual acclimatisation process, it is advised to store the planks or tiles in straight piles, ensuring they are kept away from any sources of heat, cooling, or direct intense sunlight. This precautionary measure will help achieve the desired gradual adjustment of the flooring material to its surroundings.

Temperature Condition Before Installation

Before proceeding with the installation, it is important to ensure that the ambient temperature in the room falls within the range of 18°C to 27°C. Additionally, the temperature of the subfloor should be maintained above 15°C. These temperature conditions are necessary for the proper installation of the Formation Herringbone flooring.

Temperature Condition During and After Installation

During and after the installation process, it is crucial to maintain a consistent temperature that does not deviate by more than 5°C per day. The room temperature should not fall below the recommended 18°C, while the subfloor temperature should remain above 15°C. This temperature stability should be upheld for a minimum of 24 hours prior to installation and throughout the entire installation process.

Underfloor Heating

Formation Herringbone flooring is compatible with traditional water-based underfloor heating systems, in accordance with standard EN 1264 part 1 to 5. However, it is not recommended to use wired electrical systems unless they are encased in a minimum of 9mm of suitable levelling compound. It is important to avoid direct contact between the flooring and electrical wired heating systems. The surface temperature should never exceed 27°C. If you have any doubts or questions, it is advisable to seek additional advice.

After the installation is completed, it is necessary to gradually increase the temperature of the underfloor heating system over a period of 72 hours. This should be done in increments of 5°C per day until it reaches the standard operating temperature conditions, with a maximum operating temperature of 27°C. It is important to refer to the manufacturer's instructions to ensure the suitability of the system.

Please note that the following information is specific to the installation on PlusFloor looselay self-adhesive underlays. While some infrared heating panels may be suitable, caution should be exercised as certain systems can generate sudden heat gain, which is not recommended. Regardless of the circumstances, the surface temperature must not exceed 27°C. If you have any doubts, it is recommended to seek further advice.

Installation of the Patterns

Underfloor Cooling

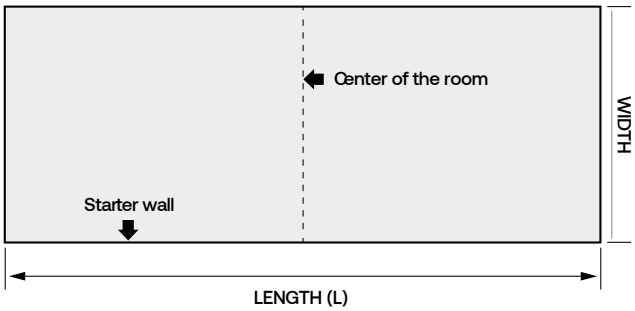
Formation Herringbone flooring is suitable for installation over floor cooling systems. However, it is important to ensure that the supply temperature of the cooling water does not fall below the dew point temperature. To prevent condensation and potential damage to the adhesive and floor covering, it is recommended to maintain the temperature of the subfloor at least 3 degrees above the dew point. Keeping the subfloor temperature above the dew point helps to avoid the Formation Herringbone of moisture on the surface. It is crucial to adhere to these guidelines to maintain the integrity of the installation and the longevity of the Formation Herringbone flooring.

Required Expansion Gap

Formation Herringbone flooring is compatible with floor cooling systems. However, it is essential to ensure that the supply temperature of the cooling water does not drop below the dew point temperature. Maintaining the subfloor temperature at least 3 degrees above the dew point is crucial to prevent condensation. Temperatures below the dew point can lead to moisture accumulation, which can be detrimental to the adhesive and the floor covering. To protect the integrity of the installation and preserve the quality of the Formation Herringbone flooring, it is vital to adhere to these temperature guidelines.

Installation

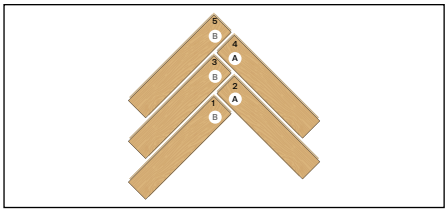
1. Measuring the room



Define the wall from where you intend to start the installation. Mark out the center of the room.

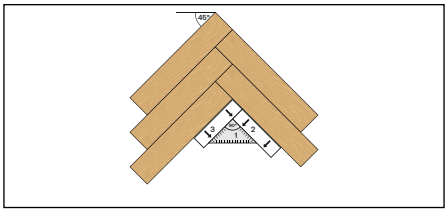
2. Build starting triangles

Step 01



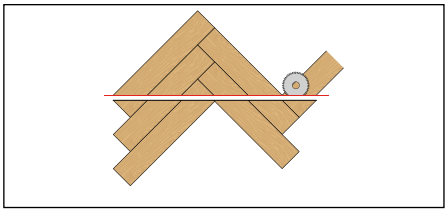
Take B-strips and A-strips and position them as shown above.

Step 02



Install the strips precisely and in the order indicated by the numbers on the strips. Carefully check the joints between the strips after every strip that is added.

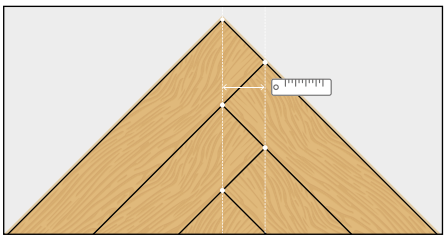
Step 03



Cut the triangle according to the indicated red line. Depending on the kind of saw you use, it may be useful to dismantle the triangle before sawing.

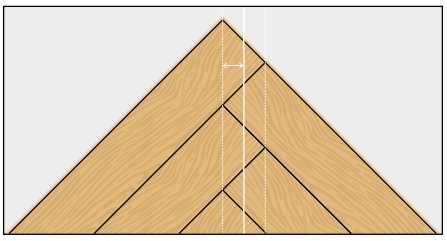
3. Calculating the number of triangles

Step 01



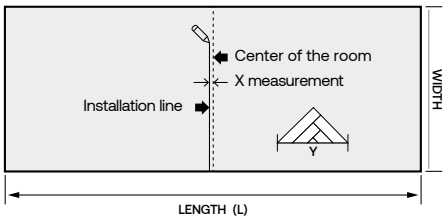
Measure the distance between the two straight lines, originating from the corners of the strips.

Step 02



Divide this number by two, and get the **X measurement.**

Step 03



Drawing the installation line. Start from the center of the room. Parallel offset the line using the **X measurement** as distance.

Step 04

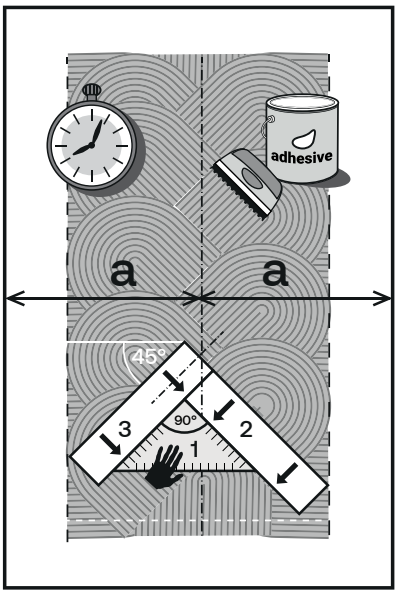
$$\frac{L + X}{Y} = \text{Quantity}$$

Calculate the number of needed starting triangles with the formula to the left.
Note! Round up to the next full number.

Installation

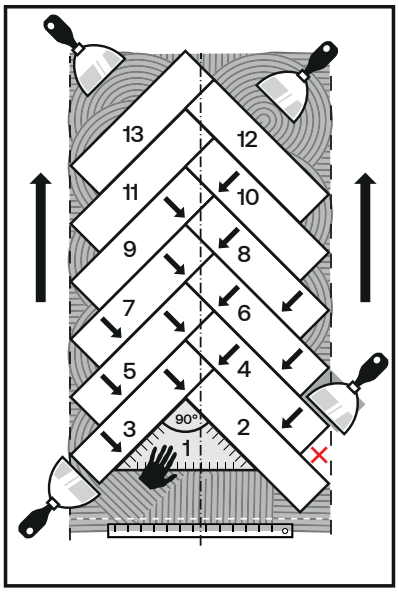
4. Start Installation

Step 01

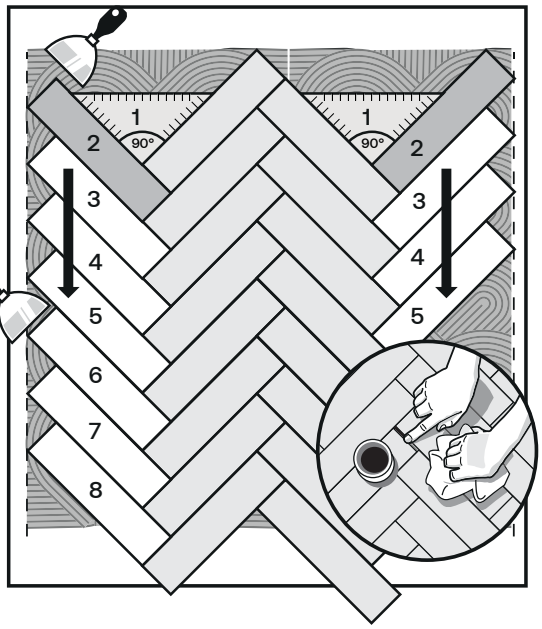


The boards need to be glued using PlusFloor recommended adhesive.

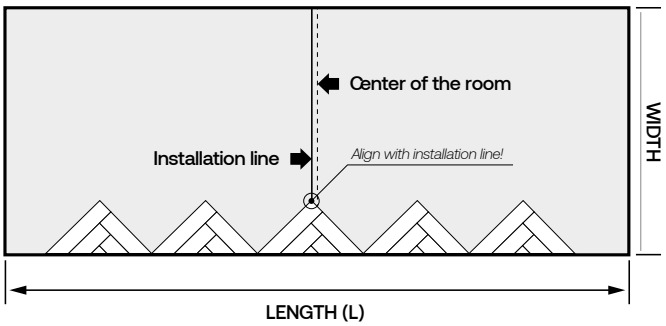
Step 02



Step 03

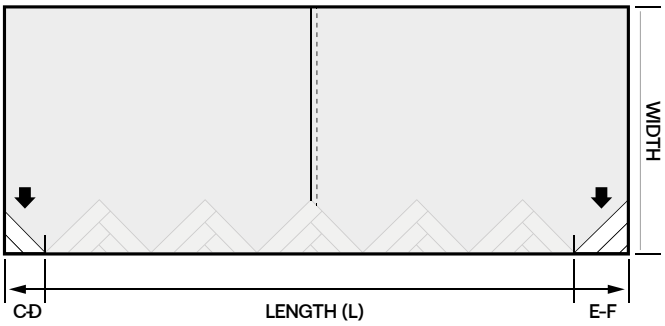


Push down firmly. Start in the corner and work towards the end of the board.



Lay out the triangles with their long side towards the starting wall. **Align the center triangle top with the installation line.**
Make sure the underlay material is installed beforehand and the installatin line remains visible.

Note! Use expansion wedges for the expansion gap.

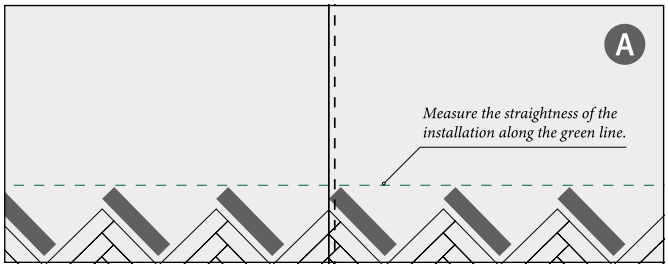


Now cut the distances C-D and E-F from the remaining triangle (s), and position them.

Note! In case you have calculated and built an uneven number of triangles, leave the outer two triangles aside. For the case that you have built an even number of triangles, lay one aside.

Installation

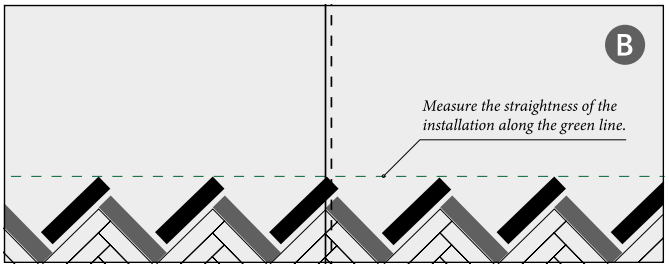
Step 04



Install **A-strips** to connect all triangles. The joints between the A-strip and the triangle need to be checked very carefully. No protruding edge may be felt!

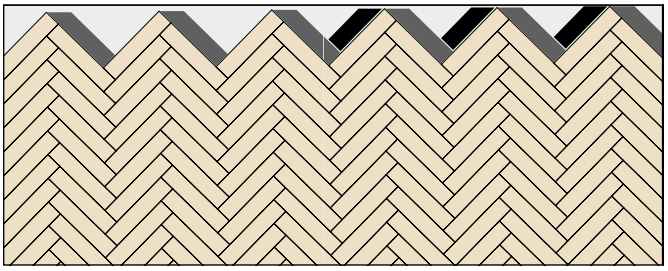
Cut the most left piece to fit into the room, considering an expansion gap. Measure the straightness of the installation along the green line. Repeat that measuring with the straight edge progressively throughout the installation. Deviations need to be corrected, should they occur.

Step 05



Now install **B-strips** and cut the most right piece to size.

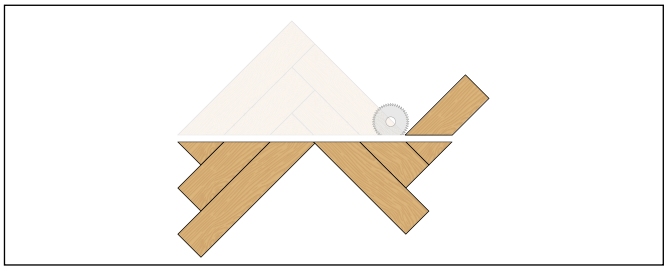
Last row installation



This altering installation of A-strips and B-strips continues throughout the whole room. It is important to check frequently that:

- all expansion wedges remain in their position
- all joints are closed and the strips are glued and locked one another.
- you follow the installation line.
- the tops of the strips in one line remain straight and perpendicular to the installation line.

Note! Measure approx every fifth row.



Execess pieces from starting triagles:

Dismantle the exess material from the starting triangles. Use it to close the open gaps to the finishing wall. Use the leftover from strips 1, 2 etc. consecutively and cut to size if necessary.

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