

INSTALLATION & CARE GUIDE

Guide for three-layer Swedish floorings, manufactured by
Timbart (Looks Wood Kft.).

Thank you for choosing our three-layer engineered Swedish flooring (hereinafter referred to as "Swedish flooring"), made exclusively from natural wood materials and treated with Odie's 100% natural oil. We hope that you will be satisfied with the natural beauty of our product once it is installed. However, in order to enjoy the original beauty of your wooden floor for years to come, it is important to follow some basic rules during installation and maintenance. We are here to assist you in this regard.

Storage

Our Swedish flooring is made from natural wood material, which affects its properties. The moisture content of our product is adjusted to the climatic conditions of a completely dry living space, which is essential for the health of the occupants. Therefore, we kindly draw your attention to the fact that the Swedish flooring, like any wooden floor, should only be stored in a controlled, adequately dry place. To prevent dimensional changes, store the Swedish flooring in a room whose climate (temperature and humidity) corresponds to the future inhabited conditions of the area to be covered. Keep the room, the Swedish flooring, and the adhesive at the optimal room temperature and humidity (approximately 20-22°C and 45-55% relative humidity) for at least 48 hours before installation and permanently after installation.

Requirements for the Subfloor

Proper preparation of the subfloor significantly affects and is closely related to the subsequent installation process. Therefore, it is essential to entrust the preparation of the subfloor to a professional installer who will be laying the Swedish flooring. The subfloor should be dry, solid, smooth, free of cracks, and clean. The preparation of the subfloor should begin after completing the last wet works (such as tiling, painting, etc.). It is necessary for the moisture content of the subfloor concrete to be maximum 2% CM, which should be measured and recorded in the installation log before starting the installation work.

If the measured value is higher than 2% CM but not higher than 3.5% CM, the work can continue after applying a moisture barrier epoxy layer (e.g., Artelit EB-270 Epoxy Primer). As a bonding bridge on the epoxy layer, we recommend using quartz sand or Artelit WB-280 Primer. It should be noted that the residual moisture in the subfloor concrete should decrease to 2% CM, which depending on the environment, may take several months (generally a minimum of 6 months). If you wish to install wooden flooring sooner, we recommend using Knopp Contopp concrete additives, which can reduce the waiting time to 1-2 weeks.

In the case of subfloor concrete with moisture content not exceeding 2% CM, it is still important to ensure that the dry subfloor is smooth and level. If the unevenness exceeds ± 2 mm/2 m, it should be leveled with a self-leveling compound. Careful consideration should be given when selecting a self-leveling compound. Choose a product specifically recommended by the manufacturer for wooden flooring (such as Artelit LC-715 or Artelit LC-760). If no epoxy coating has been applied to the subfloor, use a primer under the self-leveling compound to enhance its adhesion (such as Artelit WB-280 or Artelit WB-290). After proper subfloor leveling, we recommend a waiting period of 4-8 days, with ventilation,

to allow for the normalization of humidity conditions in the room. All types of our three-layer parquet flooring can be used with underfloor heating. For underfloor heating systems, the moisture content of the subfloor concrete must not exceed 1.5% CM, and the guidelines for the simultaneous use of underfloor heating and parquet flooring must be followed. To obtain the document containing the guidelines for underfloor heating and parquet application, please contact info@timbart.hu.

Installation

We strongly recommend using a primer that promotes better adhesion of the adhesive when installing on smooth, dry concrete, and even on a self-leveling compound (such as Artelit PB-230). The installation of the Swedish floor should begin approximately 10-15 mm away from the wall, and it is advisable to temporarily secure this distance with wedges. As adhesive options, we recommend a two-component polyurethane adhesive (such as Artelit PB-890) or an environmentally friendly, one-component Hybrid polymer adhesive (such as Artelit HB 810 1K). The adhesive requirement will depend on the quality of the subfloor and the type of adhesive used, typically ranging from 1.0-1.3 kg/m². Always start the installation with the tongue side facing the wall, and preferably in the direction of the main incoming light. Apply the adhesive to the subfloor with a toothed trowel, spreading it evenly in a thin layer. Only apply the adhesive to an area that can be covered with floorboards within a few minutes. Place the Swedish floorboards on the subfloor using a sliding motion, ensuring that they form a continuous closed surface. For a homogeneous appearance, we recommend leaving a gap between the elements at least twice the width of the floorboards. Lightly tap the installed elements with a tapping block to ensure they are properly embedded in the adhesive. Maintain a distance of 10-15 mm around hot water or steam pipes. After installation, allow the Swedish floor to rest for 24-48 hours, depending on the adhesive used, to allow the adhesive to cure and the flooring to acclimate to the microclimate of the room.

Usage, Cleaning, Maintenance

General recommendations: Surface-treated Swedish wooden floors, like any flooring, naturally wear over time and require regular maintenance and cleaning as needed. To prevent severe damage, place appropriate felt or wool pads under the legs of tables and chairs, as well as rough and heavy objects. Be cautious, as even though our Swedish wooden floors are made of hard wood, high-heeled shoes can leave marks on them! Natural wooden parquet floors are sensitive to changes in the relative humidity of the air. We recommend setting up a humidifier or air conditioning to avoid excessive drying or swelling of the parquet elements. It is important to maintain a continuous average relative humidity of 45-55% at a temperature of 20-22 degrees Celsius.

Maintenance of our surface-treated Swedish flooring

The surface treatment was done in two- or three-layers using Odie's company's 100% natural composition oils. The first and possibly second layer harden and color the surface of the Swedish flooring, while the final layer (hard wax oil) gives it a silky sheen and creates a protective wear layer.

After laying, dust the surface with a broom, vacuum cleaner or soft cloth. During the manufacturing process, the product is provided with a layer of a strong wear and protection layer (ready to use) but 7-10 days after laying are required for this layer to fully harden. Therefore, we kindly ask you to be gentle with your flooring during this period and, if possible, avoid wet cleaning.

Daily cleaning

Dusting with a feather duster, vacuum cleaner, or a soft cloth. If the surface is dirty, clean it with a well-wrung mop. Only use pH-neutral detergent in the mop water!

Repair

During use, it is possible for larger damage to occur on the oiled surface (e.g., a furniture leg may scratch it). The surface can be repaired using color-matching oils, which are available in smaller quantities (266 ml) from the manufacturer. For more detailed information about Odie's products, please visit <https://odiesoil.eu/>.

For any further questions or potential issues, we are at your disposal.

Timbart — Looks Wood Kft.

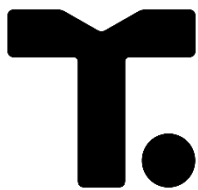
1077 Budapest, Wesselényi utca 16.

E-mail: info@timbart.hu

Warranty

The product you have purchased corresponds to the international standard in terms of quality classification, and the differences between these classes solely arise from the structure of the materials used. There should not be significant variations in the size, design, moisture content, or usability of individual components beyond the allowable limits. Therefore, we kindly ask you to inspect the purchased product before installation. In case of any observations or complaints, please communicate them to our company in writing, preferably accompanied by photographs, using the contact information provided above, and await our response. We do not assume any responsibility for faulty pieces after installation, and no costs will be covered in such cases. Our laminate flooring is made purely of wood, a natural product that naturally varies in structure and color. Structural and color variations are inherent to the characteristics of the raw materials and do not serve as grounds for complaints. After the handover of the flooring, our company does not accept responsibility for color or shape changes, as well as mechanical damages resulting from improper or neglected maintenance, the use of inappropriate cleaning products, or an unsuitable environment. The responsibility for damage caused by improper handling of the flooring and resulting in a shortened lifespan lies with the buyer. Only size, color, shape, and surface changes originating from the manufacturing process can be subject to complaints.





WARRANTY TICKET

General warranty conditions for three-layer Swedish floorings
manufactured by **Timbart** (Looks Wood Kft.).

Looks Wood Kft., Timbart provides a warranty for all their three-layer Swedish floorings with factory surface treatment. The warranty covers the surface treatment for 5 years from the installation date (for normal residential use) and the structure for 20 years, subject to the following conditions being fully observed, provided that no more than one year has passed between the purchase and installation.

Delivery, Storage until Use

- The product is transported in a closed (weather-protected) vehicle.
- The storage area used prior to installation must have a temperature and air humidity that can be proven to allow for 8-10% equilibrium moisture content (at a temperature of 20-22 °C, relative humidity of 45-55%).
- If storage before installation exceeds one year, the warranty period will be reduced by one year for each year of storage.

Installation of three-layer Swedish floorings and the conditions surrounding the installation under normal circumstances

- The installation guide is followed in its entirety.
- The subfloor does not have level differences greater than 2 mm per meter, and the moisture content of the subfloor and walls does not exceed 2% CM.
- Adequate expansion gaps are left around walls and other building structures according to the size of the room.
- Wood, as a material, reacts to changes in the relative humidity of the environment, so for larger surfaces, it is necessary to incorporate expansion joints during installation. For three-layer Swedish floorings, considering the installation direction, expansion joints should be included every 18-20 meters in the width of the floor.
- They are not used in wet areas.
- They are used only in rooms with normal residential use, exposed to average loads and other physical stresses, at a temperature of 20-22 °C and relative humidity of 45-55%.

Installation of three-layer Swedish floorings and the conditions for installation in the case of underfloor heating

- The installation guide specific to underfloor heating is followed in its entirety.
- The subfloor must not have level differences greater than 2 mm per meter, and the moisture content of the subfloor and walls must not exceed 1.5% CM.
- Adequate expansion gaps are left around walls and other building structures according to the size of the room.
- Wood, as a material, reacts to changes in the relative humidity of the environment, so for larger surfaces, it is necessary to incorporate expansion joints during installation. For three-layer Swedish floorings, taking into account the installation direction, expansion joints should be included every 18-20 meters in the width of the floor.

During the use, cleaning, and maintenance of three-layer Swedish floorings

- The instructions specified in the Care Guide are followed completely.
- Cleaning is done using a slightly damp (dampened with mist), lint-free cloth.
- Wet mopping is strictly avoided.
- Chemicals and organic solvents are avoided. Recommended cleaning products by Timbart or equivalent commercially available products specifically designed for the purpose are used after testing them on a small area.
- Protective felt pads are used under furniture legs, and protective mats or coasters are used under rolling chairs and furniture with casters.
- The surface is not subjected to concentrated, point-like, or heavy loads. A doormat is placed in front of the entrance to capture larger, abrasive-type dirt particles.

Causes that may result in the loss of the full warranty

- Improper installation.
- Water reaching the Swedish flooring or the surrounding structures due to wet mopping, pipe leaks, flooding, or water spills.
- Moisture infiltration from the building structure.
- Use of aggressive cleaning agents or excessive mechanical stress.
- Shrinkage due to extremely dry climate.
- Swelling due to extremely high humidity.



Other conditions

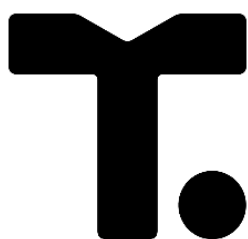
The engineered Swedish flooring is made entirely of wood, so it reflects the natural diversity and structural variations inherent in wood, even within the same assortment. Therefore, guaranteeing uniformity in grain structure, pattern, and exact color match is not applicable. After unpacking, please inspect the flooring planks and only install those that are suitable. If you are not satisfied with the product and it does not meet your order requirements or if installation is likely not possible, we will exchange them free of charge. We do not provide a guarantee for any non-concealed defects in flooring that have been installed without prior selection. The warranty does not cover damage caused by high-heeled shoes, heavy furniture or equipment, rolling chairs, pets, impacts, scratches, or sharp objects. The surface coating serves as a protective layer for foot traffic. The wear of the surface coating depends on the intensity of use, and its replenishment is necessary according to the instructions provided in the Care Guide. The occurrence of problems due to wear of the surface coating or failure to perform periodic maintenance is not covered by the warranty. We cannot be held responsible for damages caused by exceptionally high temperatures, high humidity, dry climate, or rapid changes in these factors, as well as discoloration resulting from sunlight exposure or natural aging of the wood (such as color variations that may occur on covered surfaces). If any of our Swedish floorings or parquet floors do not meet the typical requirements, we reserve the right to investigate the complaint on-site, and if justified, to rectify the issue or replace them with our own materials at our own expense. However, we do not assume responsibility for any incidental costs or loss of use associated with it. Our warranty extends throughout the lifespan of the product, as long as it remains continuously in the possession of the original end-user. In the case of a product purchased from a reseller, the invoice issued by the reseller to the end-user must be in the name of the end-user.

To submit a warranty claim, the following documents are required

- A copy of the completed warranty card.
- The original purchase receipts.
- In the case of installed Swedish flooring, the construction and installation log detailing the installation process.
- Photographs of the identified issue(s) with a minimum resolution of 2 megapixels.
- A brief description of the issue and its development process.

The warranty claim should be sent to Looks Wood Kft., preferably in electronic form, to the email address info@timbart.hu, or by mail to the following address: 1077 Budapest, Wesselényi utca 16.





APPLICATION OF UNDERFLOOR HEATING & PARQUET TOGETHER

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When installing parquet flooring on a subfloor integrated with underfloor heating, there are additional requirements beyond the usual installation requirements for traditional wooden coverings. Both the requirements for the covering materials and the installation techniques differ from the usual practices. We aim to assist you in meeting these requirements.

The requirements for the combined use of underfloor heating and wooden floor coverings

We summarize the regulations to be followed during planning, implementation, and operation. These regulations naturally apply to systems manufactured in Hungary, using plastic pipe-based, water-based underfloor heating with poured screed layer. The requirement system for the combined use of underfloor heating and floor coverings can be divided into three parts: design, implementation, and operational requirements.

Requirements for the design of wooden flooring with underfloor heating

During the design phase, it is important to consider that parquet flooring is primarily an insulator. Therefore, the use of softwoods and pines thicker than 15 mm and with poor thermal conductivity should be avoided. The most suitable type of parquet flooring is multilayered parquet. We do not recommend using solid or multilayered parquet made from beech, European maple, or hornbeam wood species for underfloor heating. No foil or insulating felt should be placed between the concrete and the parquet, which is a requirement for traditionally installed parquet flooring. All auxiliary materials used must be heat-resistant and resistant to aging at operating temperatures. The distance between the heating pipes should not exceed 150 mm to achieve a more favorable distribution of surface temperature on the parquet. The heating pipes should be laid across the entire surface, even if the heat demand does not justify it. Since the heat output of the floor is limited, additional insulation of the room may be necessary. The insulation values should meet the minimum requirements for thermal protection in newly constructed buildings. The heating system should be designed so that the supply water temperature does not exceed 45-50°C, even on the coldest days. We recommend installing a heat exchanger in the system. The surface temperature of the parquet (floor temperature) should never exceed 28°C as a physiological limit. The minimum thickness of the screed layer above the heating pipes should not be less than 45 mm, and it is recommended to use 60 mm.

Implementation requirements

Most problems arise from installing the parquet on insufficiently dried screed. According to literature, the moisture content of the screed should not exceed 1.8%. Based on our experience, 1.5% is the optimal level. The heating can be started after the completion of concrete curing following the installation of the screed. The heating should be carried out at a minimum of 50°C or at the maximum value allowed by the designer, as described in the attached instructions. After turning on the heating, the water temperature can be raised by 10°C per day. Adhering to the parquet flooring significantly reduces the thermal bridge formed between the concrete screed and the parquet. In the case of adhesive installation, solvent-based,

flexible (rubber-containing), polyurethane, or hybrid polymer adhesive should be used. After adhesion, the resting time specified in the adhesive's instructions must be observed. The thermal bridge is small, so we recommend applying a self-leveling underlayment on the dried screed layer. After its drying, a completely flat and thermally conductive surface is obtained. Expansion gaps must be left between the wall and the screed or between the wall and the parquet, as well as in rooms larger than 50 m².

Conclusions, Recommendations

Underfloor heating and flooring materials form a unified system and should not be examined separately. Any changes in one component will affect the other. This should be considered during the design and implementation phases. Underfloor heating and wooden flooring can be compatible with each other. However, it is important to consider that parquet will be installed on the surface. The installation of parquet in such a construction requires expertise and should only be carried out by knowledgeable professionals. In general, heated floor surfaces can be covered with parquet, but only with suitable types. The heat emanating from the concrete screed does not damage the parquet. During our observations, we have not detected any damage when the regulations were fully adhered to.

Preparation for Underfloor Heating

We recommend creating a protocol for the preparation with the following content:

- o Client:
- o Location of implementation:
- o Thickness of the concrete layer: [mm]
- o Completion of concrete works: year-month-day
- o Start of heating after concrete curing: year-month-day

Description of Heating Process

Day 1: Heating at +20 °C forward water temperature.

Day 2: Heating at +30 °C forward water temperature.

Day 3: Heating at +40 °C forward water temperature.

Day 4: Heating at +50 °C forward water temperature (or the maximum value allowed by the designer).

From Day 5 to Day 15: Continuous heating at the maximum allowed forward water temperature without any nighttime breaks.

Day 16: Decrease heating to +40 °C forward water temperature.

Day 17: Decrease heating to +30 °C forward water temperature.

Day 18: Decrease heating to +20 °C forward water temperature.

Day 19: Moisture measurement (for concrete layers, 1.8% according to the CM method).

For moisture measurement using the CM method, seek assistance from the flooring professional responsible for the installation. The designer should designate moisture measurement points based on the size of the surface, and the samples for CM measurement should be taken from these specified locations.

If the heating pipes are in the middle of the concrete layer, a 5-day break must be taken after the cooling phase. After this, the heating procedure needs to be repeated. The following heating and cooling process was carried out according to the prescribed instructions between days 1-4 and 16-18.

When the condition suitable for laying the parquet is reached, the work can begin at a concrete temperature of 18°C (with a forward flow water temperature of 25°C) and with air humidity below 65%. If the concrete moisture is not appropriate, heating should be continued with a forward flow water temperature of 40°C until the suitable condition for installation is achieved, with repeated moisture measurements.

In the case where there is a break of more than 7 days between the completion of the cooling phase and the start of parquet installation, the heating process must be repeated with a forward flow water temperature of 40°C for at least 2 days. After this, moisture measurement should be repeated. During the heating and cooling process, brief ventilation should be conducted at regular intervals.

During the drying process, there was no construction material or other covering material on the concrete surface. The procedure applies to a maximum 80 mm thick concrete layer. The described drying process includes the minimum time required to reach a safe moisture content. Extending the drying process improves the desired level of safety. When using underfloor heating, the maximum permissible temperature for the parquet surface is 28°C. Exceeding this temperature threshold will result in significant damage to the hardwood surface. It is important to operate the heating system continuously, without significant temperature fluctuations. If it is necessary to turn off or reduce the power of the heating system, the reheating should only be done gradually. During the heating season, please pay increased attention to ensuring proper humidity in rooms covered with natural wooden flooring, which can be achieved using various humidifying devices.

Low humidity below 45% leads to harmful drying of the wood material. As a result, gaps form between individual elements or lamellas. In more severe cases, the lamellas can even separate. Low humidity also has detrimental effects on health. During the heating season or at any time when the humidity consistently rises above 60% due to any reason, moisture should be extracted from the room's air, as prolonged high humidity can cause wood swelling, deformation, and, in extreme cases, warping of the parquet. Due to the above reasons, we recommend placing a humidity meter in the room with parquet flooring!

For any further questions or potential issues, we are at your disposal:

Timbart - Looks Wood Kft.

Wesselényi utca 16, 1077 Budapest

Email: info@timbart.hu

