

LVT Installation and Maintenance Instructions

Please read these installation guidelines thoroughly before starting to install the product and strictly follow the instructions herein during installation. Any damages or losses which may occur due to failure to comply with these instructions shall not be covered under warranty.

Inspection and preparation of the floor and installation conditions

When examining the flooring, the following points should be observed and the subfloor must be prepared in accordance with these factors.

- The surface of the floor should be flat, dry, clean, crack-free and non-porous.
- There should be no paint, wax, varnish, oil, solvent, varnish, putty, adhesive, heavy foreign materials or residues on the floor.
- There should be no undesirable height differences at the transition points between the floors that the planks will be laid and adjacent floors. You can measure potential differences in height with the help of a marking gauge.
- It should be checked if the temperature and humidity of the installation area are within the standards or variable.
- If there is a subfloor-heating system in the area of installation, the temperature of the heater must be controlled, as the temperature of the floor must be in accordance with the allowed temperature of the LVT material, and a heating system must have instructions that allow it to be used together with a flooring system.
- If the application floor is elevated or on floors with steel construction, it should be checked whether the bottom surface is exposed to air circulation.
- The possible curvatures on the floor should not be more than 2 mm. (can be measured with a steel ruler).
- Perfect laying of flexible floor planks requires a relative humidity of less than 70% with an ambient temperature of at least 18°C and a base temperature of at least 15°C. In any case, measure the moisture content of the floor before continuing. If you are not sure, consult an expert.
- Not only the ambient temperature, but also the temperature of the floor coating and the lining and adhesive should be at least 18°C.
- All floors except for cast asphalt have a certain maximum admissible moisture content (also known as structural moisture content). CM unit is one of the reliable tools to determine the moisture content. The measured values should be reported in writing to the client.

Sub-Floor Acceptable Moisture Values

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|--------------------------|---|
| Subfloor compounds | : Permitted moisture content for the laying of synthetic floor tiles. Values were measured using CM unit. |
| Concrete (Sand / Cement) | : < %2,5 |
| Anhydrite | : %0,3 - %0,5 |
| Magnesite | : < %0,3 |
| Xylolite | : %8 - 12 |
| Cold bitumen | : < %2 |

- Do not use methods that require drilling holes in the floor to measure moisture content (eg CM unit) on sub-heated floors. Holes can damage the heating system. Locations with subfloor heating usually have operating instructions or a heating protocol. The humidity content can be measured easily by following these rules.
- It is the responsibility of the installer to check the surface quality. If the surface quality is not suitable for flooring, installation should not start unless adequate quality is sustained.
- For dry-back products, the flooring should be resistant to pressures and tensions. Check the surface hardness for dry-back application. Scratch horizontal and vertical lines at a distance of 1 cm from each other, over an area of approximately 100 cm². If there happens to be no break in the surface layer within the area of this 100 cm², you can assume that the hardness is sufficient.

Floor Conditions for subfloor heating systems:

- In case of flooring on a subfloor heated surface: there must be a heating protocol showing that it is appropriate to lay tiles on the floor. In principle, the principles specified in EN 1264-2 (Ground Heating Systems and Components) should apply.
- Temperatures between 18°C and 22°C should be taken into account when flooring with subfloor heating systems. During the months that the heating system is used, the system must be operated between 18°C to 22°C at least 72 hours before and after the laying of the new tiles. Fast or noticeable temperature changes can lead to openings or creeps at joints.
- The maximum temperature must not exceed 27°C during normal use after laying and waiting times have elapsed.

Pre-operations to be done if the subfloor is not smooth

If the flooring is not suitable, it should be underlined and smoothed. If the floor is not leveled, even the smallest curvature in the bottom will be striking to the eye. You can contact the supplier of adhesive or underliner regarding this subject. Underlining and leveling should be made in accordance with the instructions provided by the manufacturers of the products used. This ensures permanent adhesion of the upholstery to the bottom layer, prevents cracks and provides sufficient compressive strength. For rolled loads, the minimum thickness of the leveling compound is 1.5 to 2 mm. When using dispersion adhesives, non-absorbent dense subfloors should be leveled with a leveling compound with a sufficient thickness (at least 2 mm).

Preparing of the environmental conditions and ambient temperature before installation;

- If the floor coating used is a click product, the tiles should be kept in small stacks for at least 24 hours in the room where they will be laid. If the product to be used is a dry-back type, the adhesive that will be used should be kept in the room where they will be applied together with the flooring material for 48 hours.
- The ideal room temperature is about 18°C and the humidity should not exceed 70%. Thus, the coatings will adapt to room temperature and ambient conditions. If these conditions are not present, various problems may occur during the assembly process. If the temperature is too low and/or the humidity is too high, it will be difficult to install the flooring and the holding power of the adhesive will be weak.
- During the adaptation of the products to the ambient conditions, the LVT floor coverings should be kept horizontal and flat so that deformations are prevented.
- Gaps may occur if floor linings are not left in the ambient conditions a sufficient amount of time for adaptation or if improper adhesives are used.

Observation of floor coatings, prevention of color discrepancies

Floor coatings are carefully controlled before leaving the factory. Nevertheless, perform a visual inspection of the floor covering before beginning the installation process. Any possible deficiencies can only be corrected before assembly. After the assembly, only the problems that couldn't be seen at first can be solved.

All flooring components to be used in the same room should be checked if they are from the same lot during the order, delivery and installation process. Please read the information on the packaging label.

Color discrepancies from production must be tolerated in these controls. In case of unacceptable discrepancies, the delivered product should be

returned to the supplier. After the flooring is done, the products can not be returned due to any color difference, surface structure and defects related to the patterns.

Specific information such as your billing number and order number will be required for complaints to be processed as required.

Flooring plan

LVT floor tiles can be laid as parallel, vertical or curved as standard.

When installing LVT flooring tiles, place the floor panels that make up the floor covering to match the textures to minimize the need to cut parts of it. Before starting the installation; we recommend that you plan a layout of how you will place the flooring tiles in the room.

Direction of the flooring

Depending on the series of LVT floor coverings, some or most of the flooring pieces come with signs indicating the laying direction. An arrow on the back of the floor covering indicates the direction in which the coating will be laid. The orientation of the flooring elements should be determined and laid depending on the size of the room and its geometry. It should be observed that all coating elements point at the same direction. If the shape or patterns you want to create require you to not comply this direction marks, you can lay the pieces in different directions other than the ones shown on these marks. It is advisable to lay the tiles in the direction of the entrance of the room and also the lighting.

Installation process (For Click and Dry-Back products)

Do not tile the floors with referencing the walls. The walls may not always be flat. It is advisable to start the installation by taking the plane with the help of a rope.

For the LVT Click floorings, the flooring should be laid by leaving 10 mm. working space from the wall base. If the flooring is to be laid on a long plane, a dilatation profile should be placed at each 15 meters. The space between the materials to have the dilatation profile should not be less than 7 mm. Before assembly, the joints of all Click products should be checked with the aid of a miter and ruler, no tiles that could create an angular or installation problem should not be assembled.

Click ground materials should start to be used after at least 24 hours of waiting time after finishing the laying process.

For LVT Dry-Back bonding floor tiles, the flooring should be laid by leaving 5 mm. working space from the wall base on the floor. It is recommended that the adhesive material to be used is of the brand specified by the company.

(Adhesives: UZIN DENLAKS: PU99, KE-2000S, HENKEL: Thomsit K188, Thomsit K188E, Thomsit R710. You can get the technical documentation of the adhesives, from their labels and the internet sites of the manufacturers.) (UZIN-DENLAKS PU99 adhesive is suitable for cold climate conditions; it can withstand up to -20 degrees temperature and highly recommended to use in flooring applications.)

Adhesives can only be applied to industrial floors and only after special pretreatments (eg. underlining and leveling). Before doing this, please apply the adhesive according to the instructions of the recommended adhesive company. Solvent-free, dispersion adhesives can be used only for PVC floor coatings.

Dry-Back products must not be used or stepped on for at least for 48 hours after the laying process has been completed by means of adhesives.

It is necessary for the tiles to unite with each other with a full 90° angle. Possible irregularities inevitably lead to buckling and swelling caused by compressions.

Likewise, the climate, temperature effects and changes (eg. from subfloor heating, from excessive sunlight), floors, pre-treatments applied to the floors, adhesives and the way they are applied have a significant effect on the formation of gaps in the joints.

Cutting procedure

LVT flooring tiles must be cut to perfectly fit with each other. We recommend the use of trapezoidal laying knife, veneer lathe, lower edge cutting and severing tools and a steel ruler.

Inadvisable installations:

It is not advisable to use LVT Dry-Back products together with wooden floor covering (laminat parquet, solid parquet, laminated parquet etc.).

CLEANING AND MAINTENANCE

Upper surfaces of our tiles are coated with a durable polyurethane layer. Such protective layer ensures protection during transportation, handling, installation, and afterward, against damages, contaminations and spots. After installation, post-installation cleaning should be conducted. Afterward, cleaning may be conducted with a vacuum cleaner and an appropriate cleaning agent.

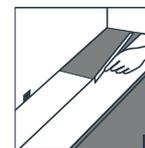
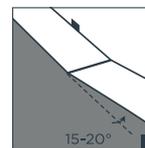
Protective maintenance

- It should be paid attention to using robust mats not made of rubber at the door entrances to prevent ingression of significant amount of contaminant.
- Suitable pads with no sharp edges should be placed under the legs of furniture and chairs. Office chairs should have type W wheels as per the requirements of EN 12529 for use on flexible floor coverings. These wheels are of smooth, light colored roller wheels within certain sizes.
- The floor should be wiped with a piece of damp cloth (at least once a week) for maintaining its quality of appearance. The cleaning periods may vary depending on the usage frequency and the level of contamination.
- Abrasive cleaning agents should be avoided. These types of cleaning agents may damage the floor coverings. A list of recommended cleaning agents is made available upon your request through your authorized dealer.
- Pets with sharp claws may cause scratches on the floor coverings.
- Pointed and/ or metal heel shoes may also damage the surface of the floor coverings; please be cautious.
- The floor coverings should not be exposed to prolonged and direct sunlight. Any direct exposure on the floor coverings at the peak times of sunlight should be minimized by means of using curtains and sunshades. Most of the types of floor coverings is prone to color changes when exposed to direct sunlight. In addition, high temperatures may also have negative effects on the flexible floor coverings.

Regular maintenance

- Food stains must be cleaned with a suitable cleaning agent (recommended cleaning agents should be considered) as soon as possible to prevent the formation of a stain. Use of abrasive materials (rubbing salts, soft soap, bleaches, acetone, alcohol and solvents etc.) should be avoided for cleaning and maintenance.
- Liquid stains may be easily cleaned with a cleaning agent suitable for flexible floor coverings.
- In removal of bonded stains, a recommended cleaning or maintenance material suitable for flexible floor coverings should be included into the cleaning water. Cleaning frequency should be adjusted depending on the level of contamination.
- After the installation of our floor coverings, the contamination that may usually occur during the installation process should be cleaned. In case of any accidental formation of deep scratches, the respective part of the floor coverings may need to be replaced.

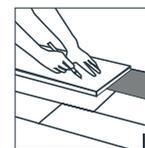
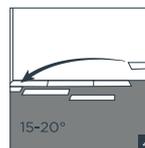
Installation Click



Start by laying the plank in the left corner of the room. Take the first plank so that the front edge faces the left wall. The distance from the wall must be 10 mm.

Then the next board is inserted at the head end at an angle of about 15-20 degrees and pressed down until it clicks into place and rests on the ground.

Continue in the same manner until the end of the row is reached. Take the last piece of a complete plank turn it upside down to cut it to the required length. Then turn the section of the plank around again and add it to the end of the row.

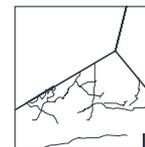
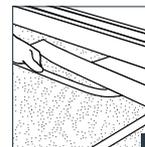
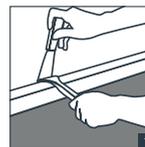


The remaining portion of the plank can be used to begin the next row. The offset should be a minimum of 20 cm.

The second plank in the second row is firstly clicked into the head side at an angle of about 15-20 degrees in the plank. Here you lift the first plank slightly so that the board can be inserted into the groove of the first one. Then press the whole thing with a slight downward pressure.

For the last row, trim all planks within the size of the remaining space. Remember to maintain a distance of at least 10 mm. from the wall. Also note that, for a space with a width or length of 15 m. or more, an expansion joint must be created.

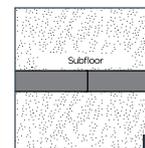
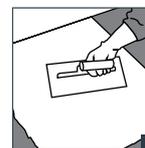
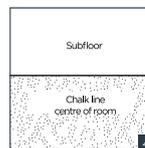
Installation Dry Back



Before your measure, remove baseboard on the room to see how match flooring to purchase. To this total surface you will need to add 10 percent for trimming

If necessary strip the exiting flooring. If exiting floor surface is solid and fairly smooth you may choose to skip this step.

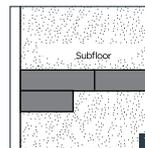
Use a patching compound to fill in any crack and holes in your subfloor. Work the compound into hole with a putty knife and level it off.



Planks are to be installed parallel to the wall that is the main line of sight in the room (usually this is the wall opposite to the room's main entrance). Measure to determine the center of the room and adjust the center point so that planks are evenly distributed on each side.

Spread the adhesive with the recommended notched trowel. Recommended adhesives and closely follow instructions for their use. Wait the appropriate time according to the manufacturer's directions before commencing to lay flooring.

Starting on your centerline, be very careful to line up the first plank perfectly straight since all the remaining planks will key off the first.



Cut a vinyl plank in half to begin your second row. Use a vinyl plank cutter (recommended) or a utility knife and square to cut the plank at a 90-degree angle to its length. Staggering the vinyl planks creates a more authentic appearance; commence subsequent rows using the cut-offs from previous rows, alternating them randomly.

Use a floor roller to ensure all the planks are firmly bonded to the floor and install moldings. Locate any gaps between planks; if any, use a putty knife to fill gaps with wood putty and wipe away any excess.

Should there be adhesive residues on the surface of the floor, use a clean white cloth dampened with water if adhesive is wet and acetone or mineral spirits if it is dry to wipe it away.