peyond expectation

WATER DEFENSE TECHNOLOGY

Made in Austria







Meet the revolutionary fashion-forward flooring solution, allowing you to enjoy your space worry free!

WATERPROOF

Water Defense Technology ensures your floor performs its best. Features include:

- Surface water and swell protection.
- Fully organic, free of PVC & sourced from
- sustainably managed forests.
- Steam moppable '

Limited lifetime residential warranty, 10-year light commercial warranty⁺¹ • Anti Bacterial Comfort¹² · Pet friendly · Light- resistant and colorfast, no fading if exposed to sunlight^{*}³ · Especially durable surface protects the floor against microscratches · Bevelled edges for Real life texture • Surface water protection thanks to moisture defense technology • Extra tight Angle Tap locking system locking system.





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Installation profile Angle/Tap

Storage:













The cartons should be laid flat and unopened and a minimum of 3 feet away from the walls where they will be installed and from any A/C or heat vents. Do not store in sheds or garages, or directly on concrete. If they must be placed on cement, lay down a layer of plastic tarp to protect from moisture, and elevate to allow for air circulation. The cartons should remain in this condition for a minimum of 48 hours before beginning installation, (96 hrs. in very dry or very humid climates). It is important that the HVAC system be run-ning and maintain a Relative humidity range of 35-65%, a temperature range of 60-85°F and a subfloor temperature of at least 59°F during product acclimation. <u>These ranges</u> must be maintained during and after the installation for the lifetime of the flooring.

Storage before installation:

The panels should be stored unopened in the middle of the room. Please store the unopened Laminated Flooring packs at a room temperature of at least 18°C (64,4°F) and a relative humidity of \leq 70% for min. 48 hours.

Needed installation tools:

- Vapour barrier: Floor area +10% - Sound underlay: Floor area +5%, compressive strength (CS) > 90 kPa
- Saw
- Hammer: at least 500 gr.
- Pull Bar Spacer
- Measuring device
- Pencil

No fixing with the subfloor

The flooring is laid without the use of any adhesives or other means of attachment - the tongue and groove are mechanically locked together. Except where instructed, <u>Under no</u> circumstances must the panels be glued, nailed, or otherwise fixed (e.g., heavy objects, aquariums, etc) to the subfloor.

REQUIRED EXPANSION SPACE

Room sizes up to 26'(8m) in width and 26' (8m) in length require a perimeter expansion of 1/2"(12mm) around the flooring and all fixed vertical objects. Room sizes up to 50'(15m) in width and 50'(15m) in length require a perimeter expansion of 3/4" (19mm) around the flooring and all fixed vertical objects. We do not recommend installing EF Laminate in rooms larger than 2500 sq. ft. without expansion transitions. Laminate flooring consists largely of wood. Wood is a hygroscopic material and always adapts to the ambient humidity, which in turn results in a change in dimension. The expansion can reach up to 1/16" on 3'(2 mm/m). This fact should be considered from a construction viewpoint when laying the flooring. Expansion joints of at least 1/2'(12 mm) must be provided in doorways. These expansion joints can be covered with special profiles. This flooring must be installed as a floating floor and will require using T-moldings in any doorways that are less than 32-inches wide or in the case of changes in plank direction between rooms, regardless of doorway width. T-moldings are also required in rooms with a continuous run of 50 feet or longer in width or length. <u>Please note: the ability of the floor to float must</u> not be constrained by any hardware such as nails, screws, or other fixed obstructions, including glue.

Subfloor requirements

Dry, level, firm and clean sub floor.

Evennes

The sub-floor must be even to a max. 3 mm/m (1/8" on 3'). Small differences in floor level can be adjusted with an underlay. Differences in floor level of more than max. 3 mm/m (1/8" on 3') must either be sanded down or filled in with filling/leveling compound Existing Subfloors

Existing fixed carpets, Needle felt carpets are unhygienic and too soft for installing laminate flooring over and must be removed.

An installation over PVC and linoleum - can only be done if the floor is flat and even and is glued down and has no loose areas and if there is no underfloor heating. Cleanness

The subfloor must be absolutely clean and free of any debris before installing the laminate flooring.

New Construction:

A freshly poured concrete floor should be dry for at least 1 week for every 3/8-inch thickness up to 1-1/2 inches. Any thicknesses that are over 1-1/2 inches will require double the drying time. For Example: a 2-1/2-inch concrete subfloor will need to dry for a minimum of 8 weeks before flooring can be installed over it.

Installation on concrete/mineral compound subfloor

When using a calcium chloride moisture test for concrete subfloors (ASTM F1869), values must be \leq 5 lbs/1000ft²/24-hr or <80% RH with an In Situ probe (ASTM F2170).

The time it takes for drying depends on the climate conditions, any stated drying times should be considered guidelines. To be certain of the moisture content, the concrete should be tested using an appropriate measuring device e.g. - CM method (calcium carbide method). Base Drying Period Remaining Humidity

- CM-concrete c.f.1 week/cm 2.0%
- anhydrate c.f. weeks/cm 0,3%
- pureed asphalt from 18 supo/supC
 magnesia c.f. humidity balance
- mineral filler product Instructions

Subfloor

1.PE Film: A PE film (polyethylene film) or similar of at least 0.2 mm thickness must be laid as a vapour barrier against rising moisture. Allow the PE film to overlap by 20 mm (1"). Glue joints together. Pull the film 4-5 cm (11/2 - 2") up the wall.

2. Impact Sound Insulation: Apart from the acoustic properties, the impact sound insulation system must has a sufficient Compressive Strength. Requirement: $CS \ge 90 \text{ kPa} \triangleq$ 9to / m². We recommend products made of the material XPS (extruded polystyrene hard foam). A combination of impact sound and vapor barrier can also be used. The high-quality Kaindl Sound System pad 2.2 is perfectly matched to your new floor. Vapour barrier, airborne- and impact sound in one.

Installation on wood subfloors

Wooden constructions must be sufficiently ventilated (4cm²/sup_ ventilation area per each m²/sup_ of flooring). Principally subfloors consisting of wood (chipboard, hardboard, and floorboard etc.) must not be covered with airtight materials as beneath the covering the microorganisms find ideal conditions to exist thereby ruining the floor. The moisture content of the wood may not exceed 12%. Since sufficient ventilation must be allowed, in sections of the installation near the wall

wooden strip must be adjusted to allow for ventilation to pass through floor construction, including after the floor is installed.

It must be presumed that the existing hollow/space underneath the construction will be constantly dry, to guarantee the balance of moisture of the wooden construction inde-pendent of the seasons, and thereby PE film as vapor absorption will not be needed.



Laving Direction

Recommended installation direction is lengthwise to the main light source. Flooring consists of several individual boards. The single planks can always be seen in strong light.

The joints are more visible crosswise than lengthwise to the light source. Because of the panel format there are less joints in the length than in the width. This is only recommended because there are also other influences.



Installation in conjunction with underfloor heating

Laminate flooring can be installed trouble-free in conjunction with hot water underfloor heating systems. In case that laminate flooring should be installed in conjunction with electric underfloor heating. Please also see the information sheet on underfloor heating.

Panel mixing

Prepare at least 4 packs of flooring. Mix panels from different packs during installation. We recommend alternate fitting of the panels from four different packs at the same time, paying attention not to lay planks with the exact same design, adjacent or connecting to each other. Keep alternating the panels across the entire floor area. This guarantees the best possible appearance of your flooring product.

Check for defective panels

Always carefully inspect the panels for visual damage before installation. Including for: Color, decor, edge profile milling and small damages or visual imperfections on the surface. Panels with minor damage can be used in situations where the panels have to be cut. The installation must be done using daylight or equivalent good lighting because it can be possible that small damages cannot be recognized without proper lighting. No complaints can be accepted in the case of panels with visual defects which have already been installed.

First panel row parallel towards the wall

Please insure a minimum of > 50 mm (> 2'') width of the first and last row.

The panels must follow the course of the wall; unevenness 5 mm (1/5") must be marked on the first row of panels using a spacer. The panels must be sawn lengthways following the marking. The last row of panels at the opposite wall should not be less than 5 cm (2") wide, if so, the width of the first row of panels should be cut down lengthways to avoid this. Please make sure that there is a min. distance to the wall of $1/2^{"}$ (12 mm) - $3/4^{"}$ (19 mm). Keep this in mind when calculating the last row.

Installation start

Remove the tongue of the first panel row and lay it against the wall.

First row

Insert the panel at an angle of approx. 25° degrees and lower the panel to lock into place. Connect the panels of the first row on the short side. Insert the panel into the groove of the first panel at an angle of 25° degrees; and lower the panel to lock it into place. Ensure that the row is straight. Please see also in the installation video.

Offset installation

Mark length, of last panel in each row to allow for minimum offset to the following rows. For accurate cutting of the last panel in the row, rotate this through 180° degrees; and with the pattern side upwards, place beside the already installed row. Allow for distance from wall at end of panel. Mark out offcut and saw off.

Always saw from the upper surface of the panel (to avoid splintering the edges) only when using an electric jig saw or a hand-held circular saw should the patterned side be placed facing downwards. Start each row with the left-over piece from the preceding row. The transverse

shocks must be set in an appropriate offset. Because of the offset there is stability in the floor.

(Longitudinal connection) Angle / Tap:

Place the panel lengthwise at an angle of approx. 25° and angle it in. Shift the panel already now to the short side of the first panel. Push the panel down gently so that the pretension profile locks in neatly.

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ly aligned.

Once the plank is lying flat, place the tapping block on the profile and use a hammer to gently tap so that the tongue and groove have a tight connection. Please note that the tapping block should be positioned properly on the tongue so damage does not occur.

(Diagonal connection) Angle / Tap:

To start the second row, place the plank lengthwise and angle at approx. 25° before dropping the plank down. Install the next plank by angling the long side at approx. 25° and dropping down, keeping in mind the short side should be 2-3mm away from the end of the previous plank. Pay attention to the positioning of the short sides to ensure the profile pieces are perfectly aligned. Once the plank is lying flat, place the tapping block on the profile and use a hammer to gently tap so that the tongue and groove have a tight connection. Please note that the tapping block should be positioned properly on the tongue, so damage does not occur.

Installation with stair-stepping offset:

The panels are laid according to the numbering in the image. (Trim the first row if neces-sary, as described in Figure 10.) In this sequence, the first 3 rows are laid out in the room. This way of laying ensures that the rows are connected in straight lines. The pre-installed rows are then pushed against the wall. The distance between the wall and the panel rows (12mm min) is fixed with space wedges. After that, the laying can be continued row by row. Be sure to stagger the panels randomly to eliminate the effect of a "Stairstep look".

No possibility to angle the panels

Special cases: If you are not able to angle the panels (e.g., under a door frame or low If you are not able to angle the panels (e.g., under a door frame or low fitted radiator) cut away the locking edge, Glue and tap the panels tight together. If you are not able to angle the panels (e.g., under a door frame or low fitted radiator) you must cut away the locking edge of lip of the bottom groove by using a wood chisel or a small block plane. Run a bead of glue on the modified tongue and groove. Tap the panels tight together by using a hammer and push block or pull-bar. If necessary, fix it with an adhesive tape.

Installation towards heating pipes (Minimum distance 1/2" (12 mm) 3/4" (19 mm))

Position the panel row so that a transverse joint coincides with the pipe. Join up the sawn-off piece again tightly behind the heating pipe (using the spacer). Position the panel row so that a transverse joint coincides with the pipe. First cut the panel to the correct length. Then lay the panel section beside the actual position, measure the recesses with the ruler and draw in.

Installation towards wooden door frames

Minimum distance 1/2" (12 mm) - 3/4" (19 mm)

Lay a panel next to the door frame (with the patterned side facing downwards) Cut into the door frame with the straight back saw. Then slide the panel under the frame with the patterned side upwards Do not forget to allow for expansion space here 1/2" (12 mm) - 3/4" (19 mm).

Installation towards metal door frames

Minimum distance $1/2^{\circ}$ (12 mm) - $3/4^{\circ}$ (19 mm) Mark the measurements of the metal door frame on the panel, remember the necessary Expansion space of 1/2" (12 mm) - 3/4" (19 mm) on each side. Now saw out the marked section.

Place the panel and make sure, that the freedom of movement is given 1/2" (12 mm) -3/4" (19 mm).

The final panel row

Lay a panel exactly on the previous row. Lay a second panel (original width) on the top of it and draw an exact line for cutting. Cut away excess wood. Join the panel lengthways. Minimum expansion gap 1.5 mm/lm (1/16" on 3')

Measure the exact width of the last panel row.

To do this lay a panel on the previous panel row. Then lay a second panel on the panel to be measured with the tongue to the wall and use as a straight edge. Cut away excess wood.

Minimum expansion gap 1.5 mm/lm (1/16" on 3'). Insert the panel lengthways and lower down.

If the installation is to take place in an area that is susceptible to spills or liquid getting behind skirting (molding) boards, the perimeter of the room must be completely sealed. A 13mm (3/8") compressible polyethylene (PE) foam backer rod should be inserted into all expansion spaces. Then the backer rod should be completely covered with 100% silicone sealant around the entire perimeter of the installation. An acrylic sealant should not be used. A small silicone bead should be applied where the skirting (molding) meets the floor, creating a perimeter barrier to prevent any spills or liquids from getting underneath or behind the skirting. Any fixed objects, door frames, toilets, etc. should be sealed in the same way using a 100% silicone sealant.

Care

No wet cleaning. Use felt protectors for furniture feet. Maintain optimum room climate. The laminate floor is very hygienic and easy to care for. Please, however, give the following

rules your attention: For daily care, sweeping or vacuuming will suffice. Footprints and dirt can easily be removed with damp cloth. Please use a well-wrung out; damp cloth. Under no circumstances should the floor be cleaned with a wet cloth or mop or be soaked with liquid. Hardened glue-residue can be removed with acetone or a special glue solvent or usual household cleaners may be used, please avoid scouring agents, wax or polish. Larger soiling and persistent stains like color, glue, nail varnish or oil can easily be removed using acetone or any other alcohol containing solvents.

Maintenance

Put flowerpots on water resistant mats. Furniture legs ought to be fitted with felt gliding



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Repair of small damages

Should minor damages such as cracks or indentations occur, you can take care of it yourself with the color coordinated repair-set.

This won't reduce the quality of the floor. Greater damage, however, should be repaired by a trained professional.