



1. OBLIGATORY TESTING AND EXERCISE OF DUE CARE

Laminate flooring from EGGER is produced in precise working steps in one of the most modern production sites. Both finished and semi-finished products are subjected to stringent on-going checks. Yet despite quality controls, damage to individual boards, for example during transport, cannot be totally eliminated, and we therefore commend checking laminate flooring elements before laying.

2. SUB-FLOORS

2.1 Generally speaking, it is the job of the flooring contractor, as part of his preparation work, to ensure that the sub-floor is in suitable condition prior to installation. Please consider the following points before starting to install laminate flooring manufactured by EGGER:

CHECK THE MOISTURE LEVEL IN THE SUB-FLOOR USING A CM DEVICE:

The following levels should not be exceeded:

- For cement-based concrete ≤ 2 CM % heated concrete ≤ 1.8 CM %
- For calcium sulphate concrete/calcium sulphate floating concrete ≤ 0.5 CM% heated concrete ≤ 0.3 CM%
- These values apply to concrete floors without additives. With the use of additives and in case of fast-setting concrete, the measurements and limits specified by the respective manufacturer shall apply.
- The test material must be obtained from the lower one-third of the concrete floor. During this process, the concrete floor thickness must be measured and documented.

CHECK THE SUB-FLOOR IF IT IS LEVEL:

The evenness test is based on common standards and takes place by placing a yardstick/straightedge on the high points of the surface and determining the gauge at the deepest location in relation to the bearing surfaces (measuring point intervals). Use a max. 2 mm gauge (deviation) at 100 cm intervals. Larger deviations should be handled with suitable measures (e.g., with self-levelling compounds).

CHECK THE LOAD CAPACITY OF THE SUB-FLOOR:

The sub-floor must be a sealed, self-supporting layer.

CHECK THE SUB-FLOOR IF IT IS CLEAN:

The sub-floor must be vacuumed clean.

CHECK ATMOSPHERIC CONDITIONS:

The following conditions should be met before, during and after laying:

- an air temperature of at least 18°C
- a floor surface temperature of at least 15°C
- a relative humidity of between 40% and 70%
- 2.2 Laminate flooring from EGGER installed as a floating flooring configuration can be installed on all sub-floors which meet the above described requirements. This includes in particular:
- all types of screed including hot water-heated screed
- chipboard constructions
- fibreboards
- floor coatings such as PVC, linoleum, natural stone slabs and ceramic tiles

UNSUITABLE SUB-FLOORS INCLUDE:

- textile floor coverings
- Sub-floors not prepared for installation in accordance with normal procedures and accepted tolerances within the flooring industry

SUB-FLOORS OF LIMITED SUITABILITY INCLUDE:

electric floor heating (controlling the surface temperature)

Electric floor heating systems are basically suitable as sub-floor when installed in the screed or concrete layer and thus not placed as foil heating on the concrete layer.

Electrical radiant sub-floor heating systems installed as a foil heating element may be used only if the manufacturer of the heating element can ensure that the surface temperature never exceeds 28°C.

ATTENTION! When installing on mineral sub-floors, it is absolutely necessary to install a moisture protection film with an SD value >75 m as vapour barrier prior to the insulation underlay, on the entire surface and extending up the wall. When using insulating layers which are not part of the EGGER accessories range, floating installation on concrete floors with in-floor heating systems voids all warranties in regards to compliance with the effective, maximum allowable thermal transfer resistance of the overall structure.

SCREEDS

If the laminate flooring system is installed over a concrete sub-floor, you have to consider that possible residual moisture in the sub-floor will seep to the surface of the sub-floor. Due to the above mentioned reason, all concrete sub-floors (with the exception of mastic asphalt) require, prior to the installation of a system-specific insulating layer (see point: **ATTENTION!** Underlay materials), a moisture protection film with an SD value > 75 m to be installed as vapour barrier over the entire surface and extending up the wall. Properly and professionally laid, the strips must overlap 20 cm in the jointing area.

SCREEDS WITH HOT WATER-FLOOR HEATING

Depending on the intended use, any floor with a radiant heating system requires planning and coordination of the radiant heating system and concrete floor in order to assure long-term, optimum functionality and integrity. Generally, existing floor coverings must be removed before the laminate flooring is installed. In addition to the standard sub floor tests, it is necessary to provide a certificate that the proper heating up and cooling down phases have been completed. Proper under-floor heating of the heated screed construction must be ensured throughout the year.

EXAMPLE THE HEATING UP AND COOLING DOWN PHASE

- Functional heating: In the event that the sub-floor is a cement-based concrete, do not start the heating-up phase before 21 days after the concrete has been installed. In the event that the sub-floor is a calcium sulphate concrete, do not start the heating-up phase before 7 days after the concrete has been installed. ATTENTION: Observe the manufacturer's specifications! Start the heating-up phase with a water temperature of 25°C, which must be held for three days. The water temperature is increased until the maximum water temperature is reached (max. 55°C). Hold the maximum water temperature over a period of 4 days without night-time shutoff.
- Floor curing heating: In the event that the sub-floor is a cement-based concrete, do not start the heating-up phase before 28 days after the concrete has been installed. In the event that the sub-floor is a calcium sulphate concrete, do not start the heating-up phase before 14 days after the concrete has been installed. ATTENTION: Observe the manufacturer's specifications!

Day 1 - start the heating-up phase with a water temperature of 25 $^{\circ}$ C and increase it by 10 $^{\circ}$ C per day.

Day 4 - the maximum water temperature is reached (max. 55°C).

Day 5-18 - hold the maximum water temperature.

Day 19 - floor curing test – CM measurement (continued heating is required if excessive residual moisture is detected).

Day 19-21 - lower the water temperature by 10°C daily until a water temperature of 25°C is reached.

Installation of the flooring elements once a surface temperature of 18°C is reached for the concrete floor.

During and 3 days after installation, hold the temperature specified above.

At the end of 3 days, the water temperature can be increased slowly if required.

ATTENTION! The surface temperature should not exceed 28°C. When installing on mineral sub-floors, it is absolutely necessary to install a moisture protection film with an SD value >75 m as vapour barrier prior to the insulation underlay, on the entire surface and extending up the wall. When using insulating layers which are not part of the EGGER accessories range, floating installation on concrete floors with in-floor heating systems voids all warranties in regards to compliance with the effective, maximum allowable thermal transfer resistance of the overall structure.

NATURAL STONE AND CERAMIC TILES

Possible residual moisture in the sub-floor may rise to the surface (see section: **ATTENTION!** Underlay materials), a moisture protection film with an SD value > 75 m must therefore be installed before the system-specific underlay as vapour barrier over the entire surface & extending up the wall.

WOOD CHIP AND FIBREBOARD

In order to improve the impact sound, a system specific insulating layer (see section **ATTENTION!** Underlay materials) must be used. A vapour barrier should not be laid.

INSTALLATION SUB-FLOORS/PREPARATIONS PRIOR TO INSTALLATION

WOOD BOARDS

Any loose boards should be properly screwed down. A specially designed insulating underlay is recommended (see section: **ATTENTION!** Underlay materials) to improve soundproofing. A vapour barrier should not be laid. There should be no obstructions to adequate ventilation. The laminate flooring boards must be laid at right angles to existing boards.

ELASTIC FLOORING SURFACES (PVC, LINOLEUM, VINYL)

The use of flexible floor coverings meets the damp-proofing requirements and thus eradicates the need for a moisture protection film. A specially designed insulating underlay is recommended (see section: **ATTENTION!** Underlay materials) to improve soundproofing.

WET ROOMS

ATTENTION! Laminate flooring from EGGER is not suitable for installations in liquid and wet rooms such as bathrooms, saunas or in similar rooms.

ATTENTION! UNDERLAY MATERIALS

A system-specific EGGER silenzio underlay should be used with EGGER laminate flooring. Alternative underlays are available at www.egger.com/flooring-information.

No separate underlay is required for soundproofing for EGGER laminate flooring with integrated underlay (silenzio).

On mineral sub-surfaces however, a moisture protection film with an SD value > 75 m always has to be installed first, over the entire area and extending up the walls.

Exception: When using EGGER silenzio DUO as underlay (combination mat with integrated moisture protection), no separate vapour barrier is necessary.

3. BEFORE THE INSTALLATION

ACCLIMATISING THE PANELS

The laminate flooring panels have to be stored/acclimatised in the room where they will be installed or in a room with the same climate conditions before starting the installation. They have to be acclimatised within the following guidelines:

- packaged
- for a period of at least 48 hours
- in flat position with a minimum distance of 50 cm from all the walls
- at an air temperature of at least 18°C
- at a floor surface temperature of at least 15°C
- at a relative air humidity between 40% and 70%

DIRECTION OF INSTALLATION

It is recommended to install a laminate floor with the panels parallel to the light direction. However, there are binding requirements for the direction of installation only for sub-floors made of board flooring, or strip parquet/wooden floors on ships. In those cases, installation must be done at right angles to the boarding or the direction of the strip parquet/wooden floor.

PLANNING THE FIRST ROW

First the room must be measured to determine whether the width of the first row of boards should be reduced. This will be necessary if the last row of boards to be laid is calculated to be less than 5 cm wide.

ATTENTION! The panel should be cut longitudinally starting from the tongue side (red strip).

PLANNING OF EXPANSION GAPS

Since laminate flooring from EGGER is made of organic materials, it is subject to a certain movement behaviour (shrinkage/expansion) due to changes in climate conditions. Movement of the finished, installed floor is not affected if allowance is made with sufficiently dimensioned expansion joints to all fixed objects.

Expansion gaps 8 mm to 10 mm wide to all fixed objects such as walls, door frames, pipes, pillars, stairs etc. should be observed.

PLANNING OF MOVEMENT PROFILES

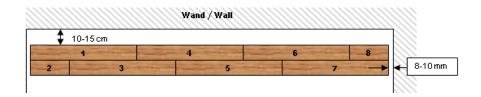
Movement profiles must always be incorporated in the following cases due to the specific movement of the laminate flooring:

- door thresholds
- passageways
- angled areas
- individual room lengths and / or widths of more than 10 m

4. INSTALLATION

- Check the panels for visible damage. Ensure you understand the difference between the tongue and the groove on the panel (Figure 1/Figure 2).
- Start installing the first two rows in a left-hand corner of the room with both tongue sides of the first panel facing the wall and both grooved sides facing the installer (Figure 1/Figure 2).

The elements of the first two rows may be installed simultaneously, that is, in constant alternation while observing the minimum offset of the short ends is at 20 cm (ATTENTION: In the case of the "LONG" longboard, an offset of 50 cm applies), as presented and described below.



Element 1 = Installation in left-hand corner of the room

Element 2 = Angling the long side of this element cut to length. For this purpose, place the longitudinal tongue at a slight angle from above into the longitudinal groove of element 1 and lower the element 2 until it reaches a flat position. (Figure 3)

Element 3 = Angling the long side and pressing in the short side. To begin with, return the longitudinal tongue at a slight angle from above into the longitudinal groove of element 1. Now push element 3 in this slanted position towards the front of element 2, until the short sides of both elements push against each other in perfect fit. Once again lock the longitudinal connection by lowering and at the same time the frontal connection by pushing until you can feel them snap into place. (Figure 4)

Element 4 = Opposite angling of the long side and pressing of the short side as above. Place the longitudinal groove at a slight angle under the longitudinal tongue of element 3. Push element 4 in this slanted position towards the front of element 1, until the short sides of both elements push against each other in perfect fit. Now once again lock the longitudinal connection by lowering and at the same time the frontal connection by pushing until you can feel them snap into place. (Figure 5)

Element 5 = Angling the long side and pressing in the short side (see element 3)

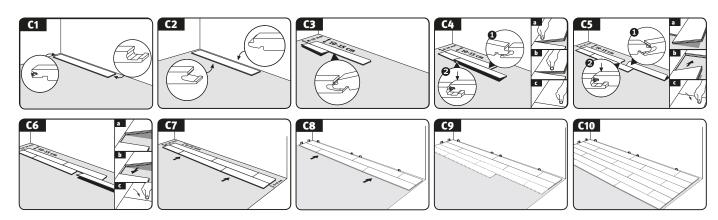
Element 6 = Angling the long side and pressing in the short side (see element 4)

Element 7 = Angling the long side and pressing in the short side (see element 3)

Element 8 = Angling the long side and pressing in the short side (see element 4)

Install all remaining panels for the first and the second row as described above. The last elements are cut to length. (Figure 6)

Finally, orientate the first two rows to face the walls, as required, while observing the wall distance (8-10 mm) to the wall and place the spacers. (Figure 7 to Figure 10)



INSTALLATION

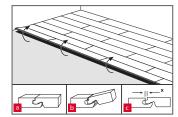
ATTENTION! Make sure that the short ends are staggered at least 200 mm/**Attention:** When installing longboards (2052 mm x 248 mm), the short ends must be staggered at least 500 mm. In case of products supplied with the bevel and/or with special pattern (e.g., tiles decor), ensure the offset is even according to the bevel and/or pattern.

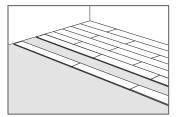
- You install the first element of the third row by inserting the longitudinal tongue side into the longitudinal groove of the second row at a slight angle from above. Then lower the panel until it is lying flat. To install the second panel of the third row, once again tilt the long edge with the tongue down and slide it into the groove on the long side of the second row. With the panel in this tilted position, now slide it towards the end of the first panel in the third row until the frontal connection mechanisms are above each other so they are perfectly fitting. Once again lock the long edge by lowering the panel and the front by pushing until you can feel the lock.
- Install all remaining panels for the third row as described above. The last panel is once again cut to length.
- All subsequent rows can be started with the remaining panel from the previous row, if it is at least 200 mm, or, in the case of longboards (2052 × 248 mm) at least 500 mm long.
- You can continue to lay board after board now.

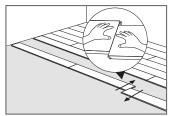
In order to prepare the last row of elements for installation, take the element and place it exactly on top of the row before last. By means of a residual panel (element width) it is possible to transfer the wall structures to the element within a pre-chosen distance.

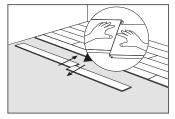
REMOVAL/DISMANTLING OF ELEMENTS

In order to replace installed panels without destroying them, you first have to unlock the entire row by tilting it and then offset the panels at the ends while they are laying flat. Proceed with due care in order to avoid damaging the tongue and groove.

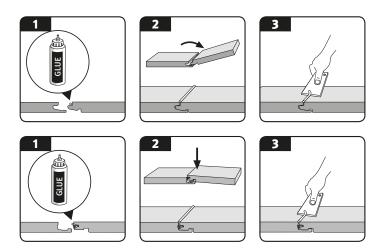








COMMERCIAL AREAS IN CLASSES 31, 32 AND 33



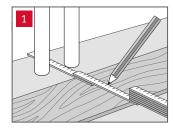
An above-average exposure to moisture must be expected in commercial areas. As a result, additional sealing with the system-specific sealing glue is mandatory for such applications. The sealing system must be applied on the length and the width of the tongue of the element to be newly installed, so that, when the elements are joined, it can ooze on top along the entire seams. Make sure that there is no gap in the flooring joints under the glue which has oozed out. Excess sealing glue is easy to remove from the surface immediately or after a short drying period.

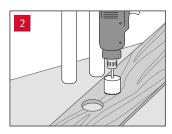
(ATTENTION! Because of the profile geometry make sure that you apply only well-measured doses of glue, in particular along the short side).

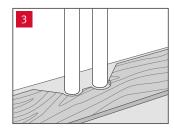
BUILT-IN KITCHENS/BUILT-IN CABINETS

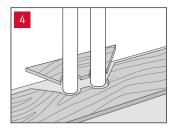
Built-in kitchens and built-in cabinets should be assembled prior to installation and the laminate floor should be placed only until under the plinth panel.

PIPES



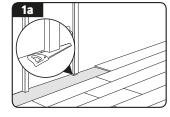


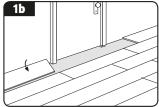


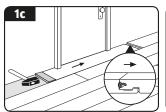


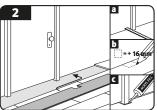
- Measure the position of the pipes and mark on the panel (allow for edge joint).
- Drill at least 16 mm more than the diameter of the pipe.
- Saw to the holes at a 45° angle.
- Fit and glue the sawn piece.

DOOR FRAMES









- If you have wooden door frames, we recommend undercutting them with the approval of the customer according to the thickness of the flooring and the underlay. (Figure 1a)
- Install the flooring underneath the door frame leave the necessary expansion gaps. In case the installation takes you to such a door frame, the respective element can be angled longitudinally and lowered. Subsequently, the element placed flat on the floor is pushed under the frame and the frontal connection is locked through horizontal knocking with a hammer and tapping block. (Figure 1b+1c)
- In the case of door frames that cannot be shortened, for example made of metal, the built-in walls/expansion gaps must be closed or covered with an elastic sealant or suitable end profiles. (Figure 2)

PROFILES

Install the required profiles as well as the skirting boards after the flooring has been installed in the correct way. Simple assembly instructions are enclosed with all the accessories.

ATTENTION! With most profile types, the base (sub-profile) to accept the cover profile must be installed prior to installing the laminate floor.

5. CLEANING AND CARE

- Use door mats (or rugs) in the entrance area in order to keep away coarse dirt, grit and stones from the floor.
- In the case of commercial applications where the laminate flooring area leads directly outside, an appropriately sized clean-off zone should be built into the floor structure.
- Always attach felt pads to the feet of chair and table legs, and to the bottom of other pieces of furniture.
- When moving heavy furniture, lift it, do not drag it across the floor.
- For chairs and other pieces of furniture fitted with castors, only use soft castors.
- Wipe damp or wet patches immediately.
- Do not use steam cleaners to clean the floor.
- Clean the floor with a damp cloth only.
- Never use abrasives or scouring agents on the floor.
- Do not use residue building cleaning products (we recommend our laminate flooring cleaner CLEAN IT from EGGER).
- Waxing and/or polishing is not necessary and not permitted.
- Sealing the laminated floor after installation is not necessary and not permitted.
- Use the hard floor nozzle when vacuum cleaning.

Detailed care instructions and a guarantee card are available from your stockist.

In the unlikely event of damage to the laminate flooring, slight defects can be repaired with the system-specific DECOR MIX & FILL from EGGER repair compound. If the damage is more serious, a professional installer will be able to replace an entire panel. Separate instruction on request.

For special installation instructions, for example how to deals with stairs, or other questions, please contact your stockist for expert advice.

^{*}The EGGER laminate flooring guarantee terms apply, which are available from your distributor or to download on the Internet.

www.egger.com



You would like to know more? Simply scan here and get detailed information.

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