

Twin Clic installation

Important notice: prior to and during the flooring installation, please read the installation instructions completely!

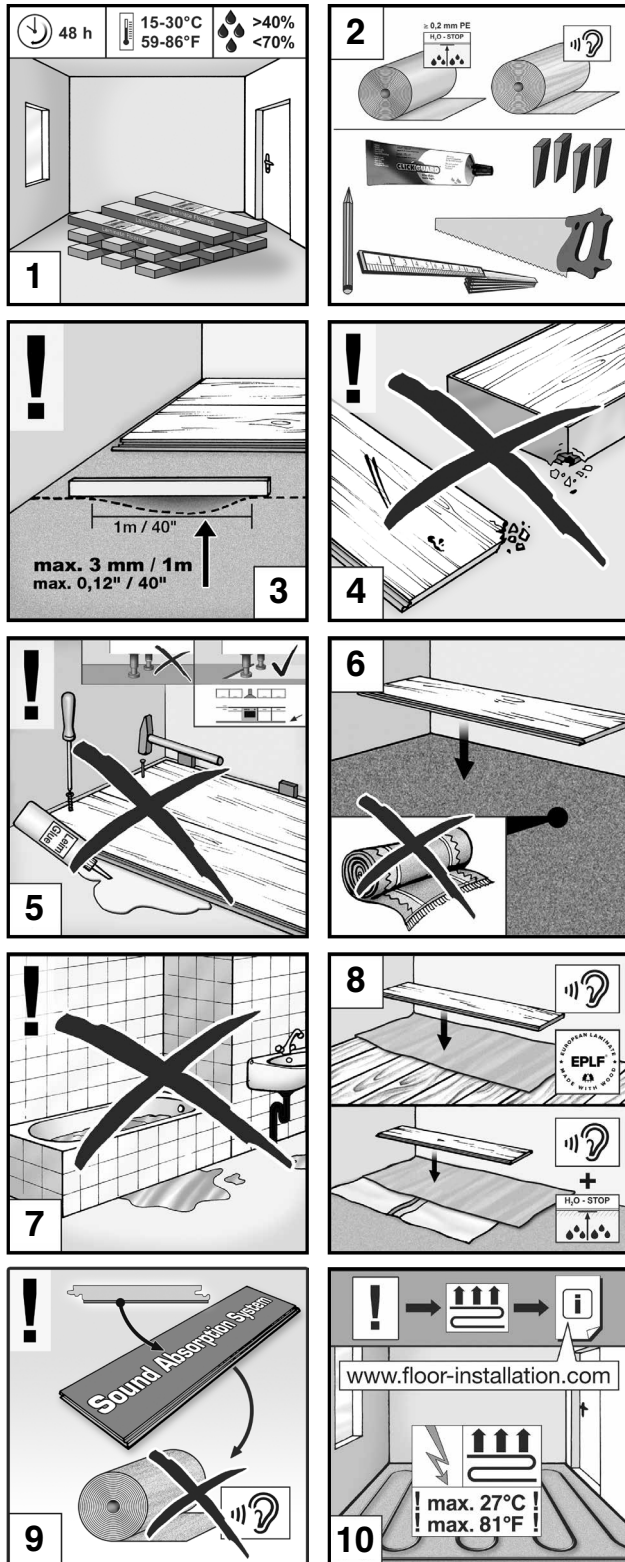
The flooring procedure is accomplished according to ATV DIN 18365, and further information can be found at www.EPLF.com

Follow these instructions precisely, in order to retain full claim privilege on the guarantee.

Various possibilities for installation are offered depending on the surface area to be used:

1. Quick and easy installation without glue

2. Installation with Clickguard™: for the installation of laminate flooring in commercially-utilized rooms, a sealing procedure must be carried out [11]. Clickguard™ protects the flooring from the top down for the long-term against the effects of moisture. The floor lamination can be removed later and newly installed. When using Clickguard™, please follow the installation instructions. In the event that a sealant is to be used, sufficient quantities of Clickguard™ are to be applied to the tongue-spring side [11] (1 layer lengthwise and 1 layer for the width). The excess Clickguard™ should be scraped off from the surface with a plastic spatula after max.15-20 minutes. Eventual remnants (residue) can be removed with household solvent cleanser.



Preparation: Please store the packets 48 hours prior to installation under the same climatic conditions (temperature and moisture) as the actual installation process [1]. Important pre-condition for proper fitting and long-term durability of the laminated flooring is a room temperature of 15 – 30°C and a relative humidity of around 40 – 70%.

Necessary Materials and Tools: polyethylene-foil, separation shims, fit-up aid, footfall sound insulation [2] if necessary: Clickguard™, joint sealing mass

The sub-surface that the laminate flooring will be applied to must be furnished in such a way that the laminate flooring can be installed as required by the manufacturer's instructions. Appropriate sub-surfaces are, among others, mineral sub-surfaces (such as floor screed, concrete, asphalt), particle-board sheets and timber floor boards. The sub-surface must be absolutely even, dry, clean and stable. Floor irregularities measuring more than 3 mm per 1 meter length must be evened out by a professional (according to DIN 18202) [3]. The evenness of the sub-surface can be best ascertained by means of a straightedge or a spirit level. When installing onto a mineral sub-surface such as concrete, cement-screed, anhydrite-screed or flagstone (among others), a moisture measurement must first be carried out. The following remnant-moisture levels in the screed may not be exceeded, prior to installation:

Cement-screed:	without underfloor heating	< 2,0% CM
Calcium sulfate screed:	without underfloor heating	< 0,5% CM

No offsets, steps or similar unevenness must be present. Construction rubble such as plaster residue or similar must be removed completely. Cracks in the ground must also be considered as critical. In order to assert full claims for damages, the provisions of ATV DIN 18365 and § 4 para. 3 VOB/B must be observed.

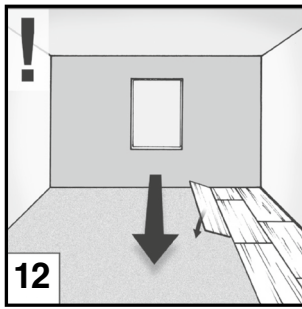
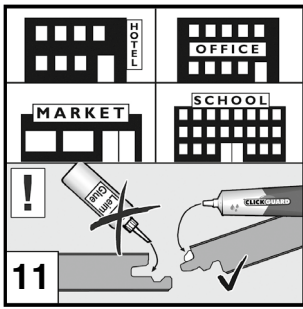
Check the panels under good lighting conditions for irregularities. Boards with visible defects outside the applicable tolerances, such as deviations in height, gloss, dimensional and color, must be sorted out and replaced free-of-charge [4]. For already-fitted or previously-worked panels, a reclamation claim from you is no longer possible.

Lamination flooring is installed under "floating" conditions and may not be glued, screwed, nailed, or in any other fashion fixed to the floor! The placement of very heavy objects, such as fitted kitchens, also has a fixing effect. It is recommended to install fitted kitchens and cupboards before laying and to lay laminate floor only up to behind the plinth panel. In the event of failure to comply with these requirements any claims for damages shall be excluded [5]!

Carpet flooring must be removed and is not suitable as a sub-surface for the lamination flooring. Due to the carpeting lying under the lamination, problems arise when the laminate is walked on in that a spring-motion occurs and considerable pressure is exerted on the lamination edges. This destroys the groove-tongue connection and leads to the formation of a gap. The carpet flooring must also be removed for hygienic reasons. Resulting moisture may result in mold and bacteria forming [6].

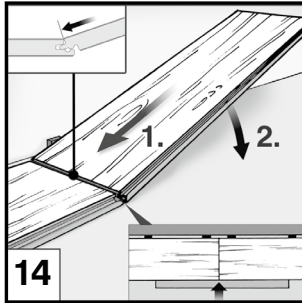
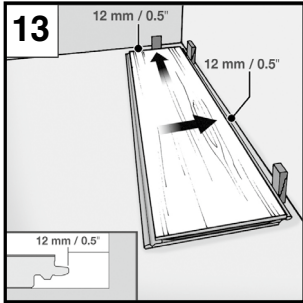
Please note that this laminate flooring is not suitable for wet-rooms (e.g. bath or sauna) [7].

In the case of a wooden sub-surface such as installed sheets or floorboards, no polyethylene foil may be installed. Prior to installing the laminate flooring on a mineral-based sub-surface, (concrete, screed, etc) it is crucial that a suitable vapour barrier sheet (PE-foil) is put down (with 1-2 centimetre 90° edging at the sides- like a shallow tub) as a protection against moisture. The tile channels are installed about 20 cm overlapping next to one another and fixed with special adhesive tape. A system-referenced footfall sound insulation is recommended for all sub-surfaces. The footfall sound insulation should be installed canted and not overlapping [8]. Make sure that the insulation underlay joints are not directly under the laminate joints. If the laminate flooring already has an integrated insulation inlay, no additional insulation material is necessary [9].



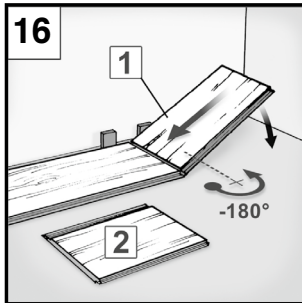
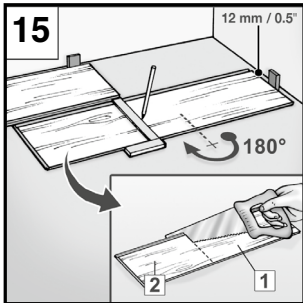
The use of underfloor heating (hot water / electric) is only possible if expertly laid and provided that the heating operates properly [10]. The supply and installation of the underfloor heating system must be state of the art and it must be commissioned by a specialist company in accordance with the relevant heating criteria. Accordingly, a signed heating-up and cooling-down protocol must be in place. Underfloor heating must be laid and operated across the full area of the room. Partial underfloor heating is not permitted. A temperature of 27°C on the surface adjacent to the underside of the flooring should not be exceeded at any time anywhere over the area. Any complaints in connection with the operation or the installation of a floor heating system is excluded if the requirements described above are not met. Claims can be asserted solely within the scope of our general warranty and guarantee provisions. For underfloors with or without underfloor heating, the specialist installer must perform and record the necessary CM measurement prior to installing the floor. The following limit values apply to residual humidity:

with cement screed	< 1.8% CM with underfloor heating
with calcium sulfate screed	< 0.3% CM with underfloor heating



For floating installation, the thermal resistance of the laminate floor and the insulating substrate must be observed. The total of the thermal resistance of all components must be $\leq 0.15 \text{ m}^2 \text{ K/W}$ in accordance with the requirements of DIN EN 14041. When using the insulating materials which do not come as part of the range of accessories, any warranty is excluded in the case of floating installation on heating screeds with regard to compliance with the effective maximum permissible thermal resistance of the overall construction.

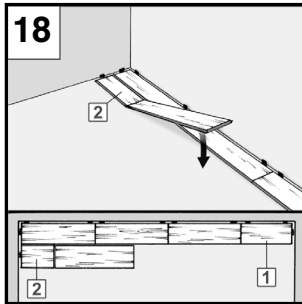
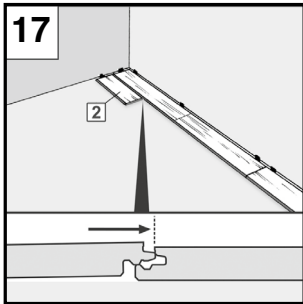
It is recommended that the panels be sorted according to the desired pattern lines and (if necessary) colour nuances prior to installation. You should start working with packages of laminate flooring immediately after opening!



Installation: It is recommended that you lay out the panels in the direction of the length and the source of light [12].

For non-straight walls, you must first transfer the profile of the wall-line to the first row of panels and saw the panels accordingly. Measure, prior to installation, the spatial dimensions of the room as well. In the event that the first row of panels proves to have a width of less than 5 cm, you must then evenly partition the remaining length (excess length) among the first and last row of panels in such a manner that both rows are cut to size with the same (symmetrical) panel-width.

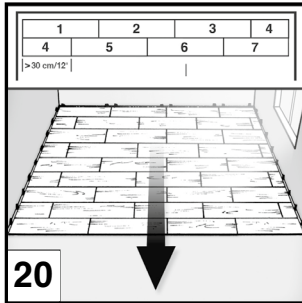
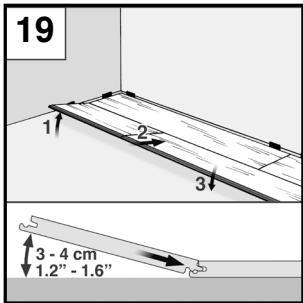
Begin your installation in the left corner of the room. Lay out the first panels with the tongue-spring side facing the wall and secure the edge separation (gap) with shims. It is important to retain a 12 – 15 mm edge distance (expansion gap) from the wall, heating pipes, posts, doorstep, etc [13].



Insert a second panel by the short side with an angle of 30° into the groove profile of the forward-positioned first panel [14] and then lay it out flat onto the floor. Be sure that the long edges lie in a row and that no misalignment appears and that a straight line is formed. This is necessary in order to be able to install the second-row panels without gaps into the length-wise profile.

Attach the remaining panels to the end of the first row.

Turn the last panel in the row [15] by 180° for fitting in / cutting to fit, then attach with the decorative side upwards next to the previously existing row (notch-side to notch-side) and wall side. Be careful to retain an edge gap of 12 – 15 mm along the short side. Mark the panel length and then saw off. In order to avoid the edges chipping off, the decorative side should be facing down when using either an electric jig-saw or a circular hand-saw. Otherwise, cut off from the panel upper-side. Begin each new row with the remnant piece (at least 20 cm long) of the previous row..

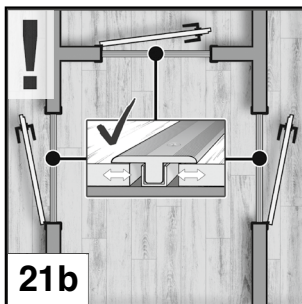
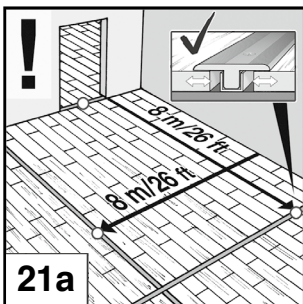


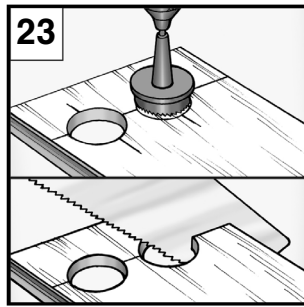
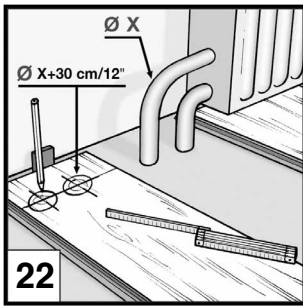
Begin the second row with a half panel or with a remnant from the first row [16, 17]. You must be careful here to make sure that the panel is no smaller than 30cm and no larger than 95 cm. The joint offset (transverse joint offset) must be at least 30 cm from row to row, respectively.

Lay out the panel piece of the second row in such a manner as to allow the panel long-sides of the 1st and 2nd row to lie parallel over one another, but not to be clicked in [17]. This means that the tongue-spring side of the first row lies on the groove side of the 1st row. Prior to clicking in place, further panels must be laid out to the end of the 2nd row. Then proceed in the same manner as for the 1st row [18].

Once the complete 2nd row lies next to the 1st row, it is then to be lifted up by about 3 - 4 cm on the left side on the long side (tongue-spring side) facing into the room [19].

The tongue-spring of the panels on the 2nd row slides, along the lifted-up section, into the groove of the 1st row. When laying the panels down again, the Click-Connection should then latch into place. Repeat this procedure along the whole length of the 2nd row (a kind of zippering system), until the 1st and 2nd rows are laid out with one another without gaps and without height displacement. When connecting the 1st and 2nd rows, take particular care that the panels are laid out with misalignment length-wise. The laying out of further rows is then carried out as in row 2 with consideration of sufficient transverse-joint offsetting [20].





For installation surfaces with more than 8 metre length or width, and for considerably angled rooms, expansion joints (at least 2 cm wide) are necessary [21a]. This allows the floor to respectively expand or contract during climactic changes. Keep this in mind also when making overlapping installation from one room to another. In this case, the surfaces in the area of the door frame must be interrupted. Expansion joints can be properly masked with corresponding profiles [21b].

For heating-radiator pipes, holes that are drilled 3cm larger than the pipe diameter must be avoided. A "fitting piece" should be cut out, glued, fitted in and fixed in place with a wedge until the glue has dried. Then cover the recesses with a radiator-sleeve [22, 23, 24].

Wooden doorframes should be shortened enough that a panel with footfall sound insulation including 2 – 3 mm gap can fit underneath [25, 26].

After installation, remove the separation wedges [28].

Then, for a perfect completion of your project, attach the baseboard cleats in intervals of 40 – 50 cm onto the wall and put the respectively cut baseboard in place [29].

Cleaning and Maintenance

Remove non-sticking dirt by sweeping or with a vacuum suitable for hard floors [30].

For the on-going care, use only the wiping materials recommended by the manufacturer of the laminate. The following are not suitable for the treatment of laminate flooring surfaces: polish and cleanser with treatment additives such as wax, oil, etc. The laminate flooring may not be polished [30].

Wipe up foot-prints and dirt with a thoroughly-squeezed and drip-free cloth. Standing water should be avoided in all circumstances [31].

Special care should be taken regarding flower pots, vases, etc that are standing on the laminate. Use a water-proof support underneath the object.

Stubborn spots should be selectively cleaned and removed with a suitable cleanser spray or acetone. Do not apply additional sealant onto the laminate flooring surface.

Attention! Protect the flooring from scratches or indentations! Use a sufficiently large dirt-magnet around the entry areas.

Furniture feet made of wood, metal or plastic must be furnished with felt-protectors. Office chairs with soft rollers (DIN 12529) only are to be used [32], or lay down a commercial quality protective matt. With consideration of these instructions, you will extend the longevity of your laminate flooring and be able to retain complete claim to the guarantee particulars.

Lifting or removing

It is possible to replace or remove panels that have been laid as floating flooring in living areas and commercial areas without causing damage by first releasing the whole row along the long side by angling it to free it from the locking mechanism [33]. Next, the panels, while lying flat on the floor on the head side, should be bent on the narrow side and released from the bonding [34]. Please be particularly diligent and careful when undertaking this work in order to avoid damaging the tongue-and-groove sections.

