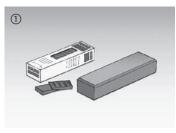
Installation instructions for laminate flooring with Top Connect

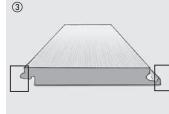
Attention: Read thoroughly from beginning to end before installation! Please always comply with the installation instructions that are enclosed with the cartons. The accompanying instructions are binding!



Installation tools required: Tapping block, distance spacers, pencil, saw.



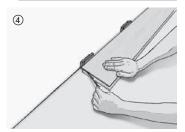
Start installation in the right corner of the room. Lay the first board **without removing the protective film**and fix it to the wall with distance spacers. The expansion gap to the wall should be 10--15 mm (0.4"--0.6"). Always align the boards with the tongue side parallel to the wall.



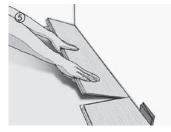


Profile/long side Tongue side / Groove side

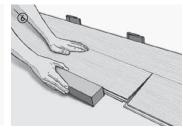




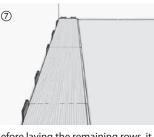
The boards of the first two rows are laid alternating without removing the protective film at first; when the surface is finished the first two rows are removed again and the protective film is removed. To remove it later on the plastic tongues must be removed from the short sides and kept stored.



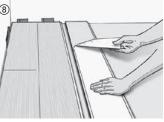
Cut the last board of the first row to the required length and fit it in. The $10-15 \text{ mm} (0.4_n --0.6_n)$ expansion gap to the wall must be included. Start the second row with the leftover piece from the first row. Always offset the end joints of the previous row by at least 50 cm (20_n). Waste is reduced considerably by using leftover pieces for the respective next row.



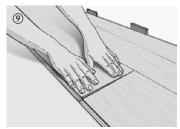
To lay the next boards of the second row (also with the protective film) the board is angled into the previous row along the long side by applying a small amount of force into the joint (groove). The long side is also tapped in lightly with the tapping block if required.



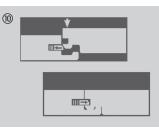
Before laying the remaining rows, it is important to ensure that the first two rows are exactly parallel to the wall! They must be aligned properly and the perimeter area must be fixed with distance spacers. The long side can also be tapped in lightly with the tapping block if required.



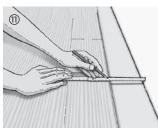
With the first board of the third row and with all others the protective film must be removed before laying. It should be peeled off at a slight angle to prevent it from tearing. The plastic tongues are no longer removed. Begin at the right and now turn the first board on the long side into the already laid first two rows and lower it. Continue like this with the next board. When lowering the remaining boards ensure that they are pushed flush.



By applying a small amount of force on the lateral bevel, the board permanently locks into the substructure. The long side can also be tapped in lightly with the tapping block if required. Our tip: To stabilize the connection between the board and the substructure we recommend you walk along the respective row after laying it.



Short side profile Interlocking



For the last row the boards are cut to size on the long side and fit in. The required 10-15 mm (0.4, -0.6,) expansion gap must also be included here.

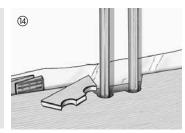


When the entire surface is finished the first two rows are removed again and laid without the protective film as described in points 8 and 9.





The removed tongue (see point 4) must first be inserted back into the short side joint. Please pay attention to the plastic bevel that faces up when replacing the tongue. The " split end " (see picture detail) will point to the long side of the groove if the tongue is positioned correctly.



If radiator pipes protrude from the floor, drill or saw a cutout into the board, leaving the required expansion space. As a rule, a fine saw must be used to cut a gap the thickness of a board in wooden door frames to allow the laminate floor to expand.





After installation the distance spacers are removed and the skirtings (with or without clip system) are fastened to the walls -- that's it.

Installation Instructions

Attention: Read thoroughly from beginning to end before installation!



Measures to take before installation

Do not open the cartons prior to installation. Store and climatise the unopened cartons inside. New constructions to be closed in with air conditioning or heating units during the winter months. Recommended room conditions for installation are 18 $^{\circ}$ C (65 $^{\circ}$ F).

Important: Prior to installation, inspect each Celenio tile in daylight for any visible faults or damage and also check colour and structure. No claims are accepted once the floor has been installed.

Elastic and textile floor coverings must be completely removed leaving no remains.

This Laminate Floor's movement tendencies can be compared with a floating TopConnect Laminate Floor surface. Talks should be carried out in advance with the technical department regarding the installation especially in case of permanent partial load due to heavy furniture (e.g. heavy kitchenette equipment).

Direction of installation:

The direction of laying normally depends on the main source of light fall in the room, e.g. French windows. The boards should run parallel with the entering light for best appearance. However, the proportions of the room can also be emphasised by skilled selection of the direction in which your parquet is laid. Light-colours make small rooms appear larger. An expansion joint must be allowed for with floating installation of the soft-tread Laminate Floor in large areas over 10 m (33 ft.) in length or width. Please keep the limited expansion behaviour in mind if heavy objects including kitchen appliances, wood-burning stoves, aquariums or water beds will be placed on a floor that has been floatingly installed. A separation of the floor sections should be considered.

Subfloor:

Suitable subfloors:

- Cement or poured cement floors
- Sanded anhydrite or anhydrite cast floors
- V100 (E1) installation boards or OSB boards
- Dry screed based on plaster or cement fibres
- Mastic asphalt floors
- Mineral subfloors

Subfloor testing and preparation:

The subfloor must be tested before laying according to the German standards VOB, Part C, DIN 18 365 "Flooring Works" and DIN 18 356 "Parquet Works." The subfloor must be dry, absorbent, clean and even, compression- and tension-proof, and free of cracks. Make sure the subfloor has been primed and cleaned thoroughly from oil, grease, wax, paint, plaster, dust and other deleterious substances that may prevent or reduce adhesion. To optimize the adhesive strength we recommend you treat mineral subfloors with HARO Primer CT.

Difficult subfloors, such as old mastic asphalt floors, very absorbent or sandy cement floors, old ceramic floors, etc., require special subfloor preparation to ensure a proper substrate for laying. In this case, prepare the subfloor with appropriate filler or compound according to manufacturer's specifications. With mastic asphalt floors, it is also essential to remove excess or loose siliceous sand with a disk sander and vacuum with an industrial vacuum cleaner.

Gluing on unsound subfloors, old PVC or glued-down felt carpeting is not possible. If in any doubt, do not hesitate to ask our technical service department (info@hamberger.de).

Note:

When working on fixed floors and components that are not covered with skirting, from a length of 150 cm (5 ft.) the expansion gap is no longer to be sealed with acrylic, but rather must be covered with a suitable moulding system.

Moisture check

The subfloor must be checked in a workmanlike manner by using a suitable measuring instrument (CM meter) in order to verify compliance with the required limit moisture content for laying the floor covering.

Limit moisture content without underfloor heating: Cement or poured cement floors \leq 2.0 CM (weight)%; anhydrite or anhydrite cast floors \leq 0.5 Cm (weight)%

Limit moisture content with underfloor heating: Cement or poured cement floors \leq 1.8 CM (weight)%; anhydrite or anhydrite cast floors \leq 0.3 Cm (weight)%

When laying your floor in rooms on or below grade, it is necessary that a stateof-the-art or DIN-compliant moisture barrier be installed.

Please observe the preparatory measures which you find on our web site and in the "Installation over Underfloor Heating" section of these Laying Instructions. Prior to installation, a signed Record of Preparatory Subfloor Heat-Up Phase must be submitted by the client.

The floor manufacturer's instructions are of crucial importance when testing for moisture, in particular on mineral subfloors.

Installation over underfloor heating:

When installing your floor over underfloor heating, the screed must be laid in accordance with the German DIN 1853 standard. Before you start the installation, please verify that the underfloor heating system has been installed in compliance with DIN EN 1264 Part 1-4 and that the proper preparatory heat-up phase has been completed once the professional installers have been coordinated. Detailed information and instructions are available from your local authorised dealer.

Care

Detailed instructions on care can be found in the Floor Care Guide.

Dry cleaning: It is usually sufficient to clean your HARO Laminate Floor dry using a dust mop, soft broom or vacuum cleaner. Any rubber marks from shoe soles or grease marks can be removed with acetone.

Damp cleaning: We recommend damp mopping your floor surface regularly with clean & green active diluted in water. Cleaning frequency depends here on the wear and tear your floor is subjected to.

Please note: Do not use soap-based detergents, abrasive cleaners, scouring powder, steel wool, wax or polish for cleaning and maintenance. Always avoid letting water stand on the laminate floor surface. Steam cleaning machines are not suitable for cleaning laminate flooring.

Indoor climate conditions

What is good for people is also good for your floor. At a room temperature of 20° C (68 °F), a relative humidity of about 30--60 % is felt to be pleasant. In order to keep the air humidity constant, especially during hot periods, we recommend you use a humidifier. This will prevent any extreme drying out of the floor. Air humidifiers should be switched on right from the beginning of the heating season. If air humidity falls below normal values, small gaps may appear, which generally close again after the heating period.

Additional preventive protection

To preserve the quality and beauty of your floor we recommend using Teflon furniture glides (PTFE) under chairs and furniture legs and doormats in entrances. Chair castors and office roller chairs must comply with German Standard DIN 12529. Use only lined rollers of type W (soft). For additional protection, we recommend placing polycarbonate mats under armchairs and office chairs.

Disposal and the environment:

Look for low-emission products when using glues. The best approach to removing flooring is to proceed in the reverse order of its installation. Disposal is carried out in compliance with national and local laws and regulations.

08/22 Subject to modification in the interest of technical development.