

Installation & maintenance instructions

2-layer-engineered-parquet

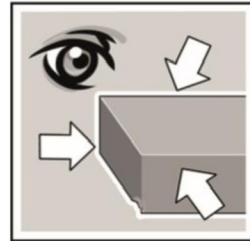
For optimum advice, fulfillment of all inspection obligations and professional installation, please contact an installation specialist. The specifications of the currently valid standards, the general rules of technology and the guidelines on the manufacturer's data sheets and instructions apply to the installation and subsequent use.

In order to obtain a warranty and the best installation results, the following installation and regulations must be observed without fail.

⚠ It is extremely important to read and understand this information completely prior to starting!

Before installation

Parkett multi-layer products may only be installed in rooms ready for living. Check the product for transport and material damage before installation. Always check and install in daylight or with sufficiently strong light sources. If defects become apparent during installation, stop further processing immediately so that the goods can be inspected or replaced if necessary. Later complaints will not be accepted.



Storage and acclimatization

The sealed packages must be stored or acclimatized in a standard room climate of **20° C** room temperature and **approx. 50 % relative humidity**. Give the unopened packages sufficient time to adjust to the climatic conditions in the room (at least 2 days). The original packaging must not be opened until immediately before installation. In case of longer interruption of installation, residual planks must be wrapped in foil again.

⚠ The manufacturer, accepts no responsibility for problems or faults that occur due to improper preparatory work or incorrect installation of the floor. The responsibility for compliance with climatic conditions is not incumbent on the manufacturer.

Preparation of the subfloor

The subfloor must be sufficiently even, resistant to compression and tension, free of cracks, clean, dust-free and permanently dry. If these guidelines are met, the following subfloors are considered suitable: Screeds (cement, anhydrite), mastic asphalt, wood-based material, or dry screed boards suitable for flooring. The screed **must be sanded over the entire surface** and vacuumed with an industrial Hoover.

Special attention must be paid to the permissible residual moisture of the subfloor as well as compliance with the room climate conditions, as moisture usually leads to irreparable damage. Heated screeds with hot water underfloor heating are suitable up to a maximum surface temperature of 28° C. As a check before installation, the installer must be presented with a completed "**heating protocol**" intended for this purpose!

The subfloor must therefore be checked for residual moisture or readiness for installation in accordance with the applicable normative specifications, the current guidelines (Federal Guild of Floor Layers) and the state of the art. The readiness of the subfloor for laying must be ensured before the parquet is laid.

Maximum permissible residual moisture values according to ÖNORM:

Cement screed: max. 2.0 % CM with underfloor heating, max. 1.8 % CM.

Anhydrite (flowing) screed or calcium sulphate (flowing) screed with and without underfloor heating max. 0.3 % CM. Maximum CM residual values for accelerated screeds, rapid screeds, cement flow screeds, etc. according to manufacturer's instructions.

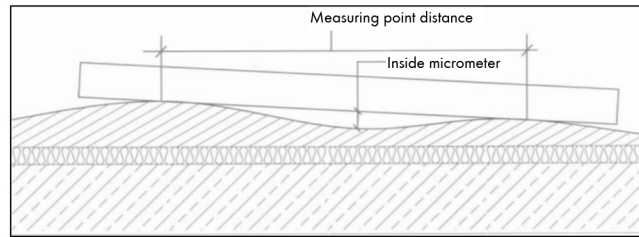
Wooden subfloors max. 12 % wood compensation moisture, wood-based materials max. 11 % of mass

⚠ Before each installation, a CM-reading is mandatory!



In addition to the moisture test, also observe the requirements for the flatness of the subfloor.

According to ÖNORM DIN 18202 "Tolerances in building construction", these are a maximum deviation of 4 mm at an inside micrometer of 1 m. With a measuring point distance of e.g. 1 m, the subfloor is to be allowed a maximum allowance of 4 mm according to the standard.



ATTENTION! – 3 mm for increased requirements. According to ÖNORM B 2218 "Installation of wooden floors" – the flatness tolerances according to ÖNORM DIN 18202 – table 3, line 4 "increased requirements" are specified for parquet elements from 20 cm length.

Depending on the type and condition of the subfloor, primers, fillers, etc. can also be used. In case of application, these materials must be authorized in writing by the respective system manufacturer.

Sufficient drying times (specifications of the respective manufacturer) must be considered. Irregularities in the subfloor can lead to an unsatisfactory appearance and even to the formation of significant gaps.

GUIDELINES:

- 1.) **INCREASED FLATNESS REQUIREMENTS (3MM) FOR ALL PARKETT 2-LAYER-ENGINEERED PRODUCTS.**
- 2.) For heated screed, insist on a complete, signed **heating protocol**, as no warranty is given for damage due to non-compliance with these measures!

RECOMMENDATION:

To control the room climate, we recommend an electronic data logger (Fidbox®) for rear installation. The recorded data can be read out conveniently using a smartphone app!

Floor cooling system: (not recommended)

In the planning phase, but at the latest when the floor layer carries out his inspection duties, approvals from the manufacturer of the floor cooling system must be available and must be complied with.

A disadvantage of these cooling systems is the somewhat lower cooling capacity compared to fan coils or air conditioning units. This is due to the smaller difference between room and water temperature. To prevent damage from condensation, the supply temperature must not be below **18° C** – a dew point sensor must be provided in any case. Underfloor heating without humidity management cannot tolerate colder temperatures.

The user is responsible for the operation of the system.

Monitoring systems must be installed for temperature and humidity, regarding the underflooring (such as for example Fidbox® or similar). In any case, a single dew point measurement on the flow pipe is not sufficient!

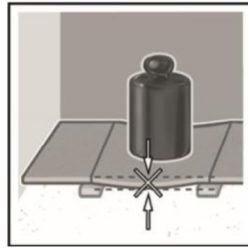
To arrive at 45–65% relative air humidity in the ambient air, it is recommended that the air should be dehumidified. The control system should be adjusted so that max. 65% relative air humidity at floor level is not exceeded; the cooling system must be switched off when the relative air humidity exceeds 75 % for several hours. If the ambient air humidity has already reached the max. 75%, the cooling system must not be switched on.

To acclimatize and regenerate the floor structure, the cooling phase should be interrupted regularly on a weekly basis!

Wooden substrates

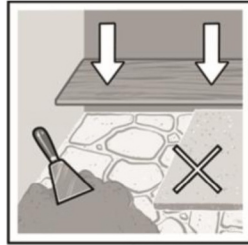
All wood and wood-mix panels without surface treatment are suitable, as long as they are even and free of structures (as is the case with plywood or OSB-panels, for example).

To prevent mold growth or similar, the wood moisture content of the substructure should not exceed 12% and cavities under the structure must be sufficiently ventilated. The installed level must not yield or vibrate under load. Fasten all loose parts permanently. The direction of laying must run at right angles to the old wooden floorboards.



Old flooring

2-layer parquet can be installed on most hard surfaces. Level the joints in ceramic tiles with suitable leveling compound or filler according to manufacturer's specifications. Remove all textile and other soft coverings before installation.



Ambient climate

Particular attention should be paid to the maintenance of an appropriate ambient climate with a relative air humidity of between **45–65 %** and a room temperature of approx. **18–22° C**. We should like to point out here in particular that the surface temperature of the floor may not exceed a maximum of **+28° C**. If there is too great a deviation from these values, either during or after the floor has been laid, this may lead to the formation of gaps and cracks or overlapping. Deformation and/or the lifting off the surface layer are possible.

In the case of a heated screed, it is essential to check that when there is more than one heating circuit in a single room the temperature control is the same for all of them.

Special note: expansion joints – we specifically recommend the installation of a Fidbox®!

Wooden floors can swell and shrink according to the air humidity level as a result of the natural properties of the wood. It is therefore necessary to maintain edge distances which lie between 10–15 mm, depending on the size of the room. Calculation: Room width in meters x 1.5 = ... mm edge distance, but at least 10 mm.

These gaps will be covered by means of skirting boards, transition rails or permanently elastic materials along all walls, transitions to other floors, door thresholds and frames, connections to pipes, pillars and stone slabs, in front of stoves etc. If expansion joints have been built into the overfloor during construction, these should be adopted and incorporated in the parquet floor.

Tools

Fine-toothed saw, hammer, special parquet hammer, overlapping hammering block, crowbar, spacers, angle, toothed spatula, straight edge or guideline.

Installation

The parquet must be bonded full surface!

The temperature of the subfloor during installation must be at least **15° C**, **max. 28° C**, and the relative humidity **45 – 65 %**. For full surface bonding, neither a PE-foil nor an insulating carpet pad is required. Mark the area to be glued on the first three rows using a chalk line to apply the glue after the elements have been reassembled. Proceed only after the initial rows are firmly fixed. Never apply more adhesive than you can process in the time specified by the manufacturer. Therefore, also avoid unnecessarily long interruptions during installation.

All processing guidelines can be found on the adhesive container and must be strictly adhered to. The surface temperature of the installed floor must not exceed 28° C at any point later. The heating capacity of the system must be adjusted accordingly by the heating specialist.

With the groove facing the wall, two rows (depending on the format approx. 15 cm + 1 cm distance from the wall) are installed away from the wall – aligned straight using a straightedge. The tongue and groove are not adhered. Cut the last rod of the row considering the expansion joint, insert it and secure it with wedges; start the next row with the remaining piece.

The rods of the following row are joined together by hand - better with special parquet hammer or tapping block and hammer - in tongue and groove.

Elements of the last row are measured and adjusted in width by sawing. Observe the expansion joint spacing. Finally, the two rows recessed at the start of installation are inserted and secured with spacer wedges. After the adhesive has dried (see manufacturer's instructions), remove wooden wedges and cover expansion joints accordingly (skirting boards, transition strips, ...)

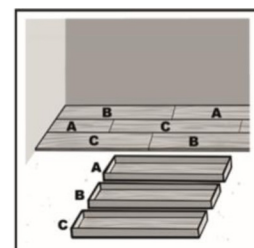
TIP: When installing a brick pattern, the elements should be installed in a direction parallel to the main incidence of light.

Herringbone – 2-layer-engineered-parquet distinguishes between right and left rods that makes possible a variety of design styles such as herringbone, etc.

Depending on the type of installation, angular or diagonal, a guide line is stretched through the center of the room or starting from a corner of the room, against which the elements are laid/aligned.

Front side of a right rod is joined at a right angle to the long side of the left rod. Glue the middle braid together with white adhesive. Along the straightedge, apply only as much glue as can be installed immediately and insert joined elements.

Starting from the center (guide line), install to the right and left towards the wall. Remaining elements are fitted along the walls by means of a 45° or 90° saw cut (observe expansion joint!).



The temperature of the subfloor during installation must be at least 15° C max. 28°C, and the relative humidity 45 – 65 %.

ATTENTION!:

In the event of major deviations from these above-mentioned climatic conditions, during and also after installation, joint and crack formation as well as deformation and/or cover slat detachment may occur. In the case of heating screed, it is essential to ensure that several heating circuits in one room are controlled at the same temperature. The surface temperature of the installed wooden floor must **not exceed 28° C at any point**. The heating capacity of the system must be adjusted accordingly by the heating specialist.

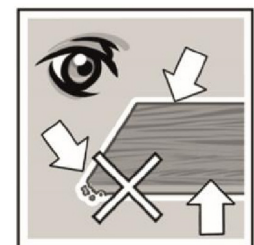
Laying the parquet floor over a hot-water underfloor heating

The cement or anhydrite screed must be sufficiently dry before the floor is laid. It is an essential prerequisite for the laying of the floor that the surface is completely prepared by heating the floor construction in line with the conditions of the interface coordination in the case of heated floor constructions. Appropriate heating and floor-preparation guidelines should be drawn up and handed over by the heating manufacturer. After completion of the heating process and the handing over of the preparation guidelines so that the floor is ready for laying, the bottom third of the screed should be measured at the designated/ marked measuring points by using the CM measuring method. If the permitted parameters are exceeded, the heating process must be carried out once more in order to reach the required state of readiness. A repetition of the heating process will be necessary if the completion of the last preparatory heating process took place more than 7 days before the floor is to be laid.

GUIDELINES:

- 1.) The installation of a Fidbox® is required, this records or registers the room climate under the wooden floor and can be conveniently read out with a smartphone app!
- 2.) Insist on a complete, signed heating protocol, as no warranty will be accepted for damage resulting from non-compliance with these measures!

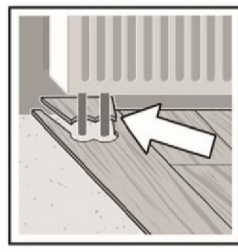
During the entire installation, the elements must be checked for material defects as well as color and structure deviations. Elements with visible material defects must not be installed. Installed elements with visible material defects are excluded from complaints!





Radiators (or rising elements in the surface): Add approx. 20 mm to the diameter of the rising element and cut the element accordingly. If necessary, glue separated elements together again with D3 white adhesive.

Doors: Mark the cut mark on the door frame using an element section or a turned element. Adjust the door frame accordingly using a suitable tool.



Cleaning and maintenance

Cleaning varnished wooden surfaces

Remove coarse dirt with a mop, hair broom or vacuum cleaner, fine dust with lukewarm water!

For sealed floors (to avoid graying of the surface) please use parquet cleaner. Application instructions are indicated on the product and must be followed. Wring out the cloth firmly and clean your parquet floor with a damp cloth only. Heavy soiling, stains or rubber marks can usually be removed by "erasing". To remove stains, solvents such as turpentine substitute, white gasoline or methylated spirits can also be used with caution.



ATTENTION!: Never use sharp or corrosive cleaners or sharp objects for cleaning. Never clean too wet or bring too much water onto the surface, as this could cause the floor to swell in the joint area.

Maintenance of varnished wooden surfaces

To sufficiently protect the surface, the floor should be maintained from time to time with **parquet care** (for varnished surfaces). The parquet care is applied very thinly to the dry, previously carefully cleaned parquet floor with a non-fouling cloth and spread evenly so that no streaks can form. Do not rub in! After approx. 30 minutes, a silk-matt layer is formed which protects the parquet. After drying, additional gloss can be created by polishing.

Once a year, it is advisable to remove the resulting layers with **Parquet Care Remover** and then use the care products to give the floor a new shine. Always observe application instructions!

Initial care of oiled wooden surfaces

Remove coarse dirt with a mop, hair broom or vacuum cleaner, fine dust with lukewarm water. Parkett recommends initial oiling with maintenance oil after installation to achieve an even better surface. This reduces the absorption of mop water over the edges of the parquet significantly. Then the entire surface is polished with a single-disc machine by the installer. In that way, the floor is optimally protected right from the start. The frequency of further care depends essentially on the use, the degree of soiling and your personal sense of hygiene.

Cleaning oiled wooden surfaces

If possible, the floor should be dry cleaned with a powerful vacuum cleaner. If adhering dirt can no longer be removed with dry cleaning, the floor must be damp mopped. To do this, mix lukewarm water with wooden floor soap. For 5 liters of water use about 50 ml of soap. With this lye and a wrung cotton mop, wipe the floor well. For larger areas or very heavy dirt, use a second bucket of clear water to wash out the wipe. Furthermore, you can use intensive cleaner in case of very heavy dirt.

Do NOT use too much water during cleaning, as this could cause the floor to swell in the joint area! Never use microfiber cloths on oiled surfaces, they will sand the surface.

Maintenance of oiled wooden surfaces

Clean the floor as previously described and allow to dry for at least 1 hour with good ventilation. Drip or spray the care oil onto the surface, then spread with a cloth to polish thinly and, if necessary, spread with a white pad to remove streaks. Depending on the size of the surface, the care oil is applied with a polishing cloth, stick and hand pad or single-disc polishing machine. Allow to dry for approx. 6 – 8 hours with good ventilation!

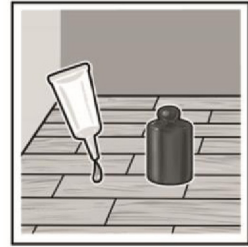
Repairs

The 2-layer-engineered-parquet can be easily repaired in case of damage. Damage in the edge area can be repaired, if necessary, by dismantling and inserting a new element. In case of damage in other places, we recommend the following procedure:

The center of the damaged element is cut out using a plunge saw and cutting rail.

Be careful around the edges of the element so as not to damage adjacent elements. Now remove the remaining element parts from the tongue and groove joint. To prepare the replacement element, carefully cut off the tongue on both the face and the long side so that the groove is not damaged.

Now apply the D3 white adhesive to the long and short sides of the prepared element and to the tongue and groove joints of the adjacent elements. Then insert the prepared element from the groove side to the tongue side and weigh it down until the glue has set.

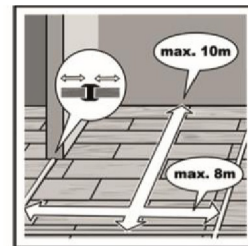


Room comfort climate

The optimal combination, i.e. the right interplay between relative humidity and temperature is the key to a healthy room comfort climate! Depending on the season, a relative humidity of **45 – 65 %** and a room temperature of **18 - 22° C** are recommended. In addition, the wood floor surface temperature of **max. 28° C** should NOT be exceeded. At these values or conditions, the natural wood physical properties such as joints, cracks or cupping will occur to a minor extent. Wood is a natural material, and changes its shape in case of prolonged deviation from these specified values (especially humidity). This means that deformations (cupping), cracks and even peeling of the wooden floor can occur. Apart from this, it can also cause health problems for the people living in the rooms.

Important Notes

When installing in several rooms, in L-shaped rooms, passageways and in large areas of 10x8 m or more, a movement joint profile must be used. Likewise, in the case of contiguous areas, e.g. with several heating circuits, the movement joints provided by the customer must also be incorporated in the surface covering. These can be closed with joint profiles (e.g. multi-part transition profile that does not clamp the floor). Care must be taken to ensure that the movement joints to rising structural elements, e.g. supporting pillars and walls, are functional. We recommend the use of cork edge strips or similar to fill these areas. Fixation of the floating construction by heavy objects, such as kitchen units, stove, aquariums, water beds, etc., must be avoided. If this is unavoidable, the flooring must be allowed to expand freely in all remaining directions from the point of fixation. Failure to do so may result, among other things, in joint openings, but certainly in an unsatisfactory overall impression.



General Tips

- When using swivel chairs, make sure they have suitable castors. The same applies to objects that can be moved on castors.
- Attach high-quality felt glides to all chair legs, tables and movable furniture. This will prevent scratches to the wooden floor. Please follow the manufacturer's instructions.
- Dirt-stop mats in the heavily used entrance area prevent dirt and wetness from causing the surface to wear away. This is an important measure, especially for colour-treated floors, to prevent footprints and running marks.
- The installation of a Fidbox for data recording is highly recommended.
- We highly recommend the use of a humidifier that is customised to the room, especially during the heating period!
- It is important to ensure that adhesive tape for covering material or similar is not applied directly to the surface, as this could damage the surface treatment.
- Note on sports floors: Adhesive tapes for line markings must be approved by Stöckl / Adler Lacke.
- If water or other liquids are spilt onto the floor, remove immediately as the floor could swell considerably.
- Fitness mats, carpets and other textiles should not contain softeners and must not accumulate heat when the underfloor heating is switched on.
- Steam cleaners or similar cleaning devices should never be used to clean the floor surface.

You will enjoy your unique wooden floor for years to come.

Wood is a natural product and unique in which there may be differences in color, structure and texture due to growth. Exposure to sunlight leads to a natural change in the color of the wood (darkening or lightening). Depending on the structural conditions, the color appearance of the parquet may be different in parts over time in the case of strong incidence of light, such as floor-to-ceiling windows.