



BOEN

**Installation Instruction
3-Layer Parquet
with Click profile
Floating installation**

General information

Boen Parkett produces its parquet floors according to the European parquet standard EN13489 and EN 14342, for use in interiors.

Depending on the format, the parquet elements are packed in a band of cardboard sleeve and sealed with a diffusion-inhibiting PE film.



Structure/ Plank formats

| | |
|---------------------|--------------------------------------|
| Length: | 2200 mm |
| Width: | 138/181/209 mm Plank 215 mm Strip |
| Thickness: | 13/ 14 mm |
| Toplayer thickness: | ca. 2,5/ 3,5 mm |
| Middle layer: | 8,8 mm Spruce |
| Under layer: | 1,7 mm Spruce |

The planks are manufactured lengthwise and crosswise with a positive connection profile (Click)..

Storage recommendation

Packages are wrapped in PE film and packed in cardboard boxes which must be handled carefully to avoid damage. It is essential to protect the packages from moisture during storage, transport and before installation. Packages should remain closed and stored 48 hours in the room of installation to allow for acclimatisation. Recommended storage temperature +18°C, 35 - 60% RH. Only open the packages immediately before installation.

Important installation instructions

Boen parquet floorboards have been individually checked and sorted by our quality controllers. However, if there are any complaints regarding the sorting and/or visual defects, it is important to inform us before installation. Complaints cannot be accepted once installation has started.

During installation, care must be taken to ensure batch uniformity and an even grading pattern. The more rustic the grading, the more packages must be opened to produce a uniform grading pattern. When laying, mix elements from several packages to create an optimal mixture from the natural color and grading spectrum. Please note that the result of the installed floor is the responsibility of the installer. The installation should according to the recognized technical rules and in compliance with the DIN standards - especially DIN 18365 "Floor covering work" and DIN 18356 "Parquet work", or the country-specific standards ÖNORM B 5236, SIA 253.

For an installation of Boen parquet flooring it is necessary that the rooms are dry and heated. All exterior windows and doors must be installed, all masonry and screed work must be completed a long time before the start of installation. We recommend that work that negatively affects the dry room climate (e.g. painting, tiling) be completed before the parquet is installed.

If the humidity in the room is too high, excessive moisture absorption may occur, resulting in swelling and dimensional changes of the parquet strips. Therefore, it must be ensured that the relative humidity is below 75% during installation. Therefore, it is important to ensure that the relative humidity is below 75% during installation, 35-65% RH would be optimal.

The room air temperature should be at least 18°C. The floor temperature should be approx. 18 - 22°C with underfloor heating. During the winter months, it must be taken into account that e.g. longer transports may cause the packages to cool down. The material temperature should then be adjusted to the room temperature before laying in the unopened package. If the material temperature is below 15° C, installation is not possible.

In general - but especially in new construction - it is always advisable to install the parquet as the last work step on the construction site. If this is not possible, the finished surface must be covered with paper, wool felt board or other suitable covering material for protection, but in no case with a diffusion-blocking foil.

Adhesive tapes for fixing covering material must not be glued directly onto the parquet surface, as this could damage the surface treatment..

Requirements for the subfloor

Boen parquet flooring can be installed on any properly prepared subfloor in accordance with DIN/EN standards or the country-specific ÖNORM B 5236 and SIA 253.

These include cement, anhydrite, mastic asphalt and dry screeds (mineral boards) as well as particleboard or plywood.

The subfloor must be professionally tested before starting installation in compliance with the applicable standards.

The substrate must meet the usual requirements for parquet installation (dry, level, solid, crack-free, clean, etc.).

If one or more of these conditions are not met, appropriate pre-treatments must be carried out.

| |
|---|
| <p>30-65% RH +18° - + 28° C (+64,4° - +82,4° F)</p> <p>← 2 m (6 3/4') → +/- 3 mm (1/8")</p> <p>Max: 0.1m= +/- 0.5mm (1/64") 0.6m= +/- 1.0mm (3/64") 1.0m= +/- 1.5mm (1/16") 1.5m= +/- 2.0mm (5/64")</p> |
|---|

Special attention must be paid to evenness in accordance with DIN/ÖNORM 18202, Table 3, Line 4 (increased requirements) or SIA 414/2. Deviations from this can lead to hollow and noises (cracking, creaking) when walking on them, because the parquet floorboards cannot be able to compensate for height.

Deviations in the evenness must be evened out with suitable leveling compounds before installation. We recommend always working in a manufacturer's system of primer and leveling compound. Existing resilient and textile floor coverings are not suitable substrates and must be completely removed.

Boen parquet floorboards are well suited for floating installation on underfloor heating. A prerequisite is the use of impact sound insulation with low thermal resistance.

It must be taken into account that due to the increased heat transfer resistance compared to full-surface bonding, the system reacts somewhat slower. The heat output of the heating system should not exceed 60W/m². **Possible occasional noises (cracking, crackling, creaking) when stepping on the parquet surface can only be avoided in the best possible way by professional, full-glued installation. .**

In very dry indoor climatic conditions, somewhat larger joints and cupping may occur in winter. Through humidification and maintaining a healthy indoor climate (20 to 22 °C and 35 to 45% humidity during the heating period) this phenomenon can be counteracted.

According to EN/DIN 1264, hot-water low-temperature underfloor heating systems are operated at a maximum of 29°C (Scandinavian markets 27°C, 80.6°F) as a limit value for the surface temperature, whereby this temperature must not be exceeded even in the peripheral zones. This also applies to electric floor heating systems with a gentle heating characteristic. Any kind of accumulated heat due to full-surface objects, e.g. shelves, futon, beds or carpets, should be avoided.

As a rule, significantly lower surface temperatures are advantageous and are desirable for ecological and health reasons. These can be achieved by precise dimensioning and adapted control technology of the heating system.

If a surface heating system is also used for cooling, any condensation must be excluded. Boen parquet planks must always be glued over the entire surface when surface cooling is used. In this case, please contact our Technical Support.

The residual moisture of the subfloor and the necessary readiness for covering must be checked in accordance with the applicable normative specifications of DIN / SIA/ ÖNORM and the state of the art.

Moisture values of screeds

Cement screed max. 2.0 CM% (1.8 CM% on underfloor heating)

Anhydrite screed max. 0.5 CM% (0.3 CM% on underfloor heating)

In principle, lower values should be aimed for.

For screed systems with chemical additives, e.g. accelerators, the respective manufacturer's instructions must be observed. Alternatively the corresponding humidity can also be measured for CM measurement according to working instructions, TKB data sheet 18 (Max. 80% unheated screeds, 75% on underfloor heating).

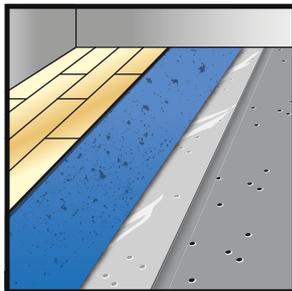
The functional heating and the heating of the floor covering must be carried out in accordance with the normative requirements and must be documented in the corresponding protocols as proof. In the case of screeds with chemical aggregates, the heating of the floor covering must be carried out in accordance with the manufacturer's instructions. In principle, for mineral substrates, regardless of age, as well as for laying on underfloor heating on underfloor heating, a tested, age-resistant vapor barrier made of e.g. 0.2 mm polyethylene film is mandatory. This should always be laid close to the floor, overlapping by at least 30 cm at the joints, and pulled upwards in a trough-like manner at the wall areas.

When using combination products (e.g. Boen Gard) consisting of impact sound insulation with vapor barrier, these must be installed in accordance with the manufacturer's specifications.

Suitable underlays (impact sound insulation)

The underlay should meet the minimum requirements in terms of static and dynamic load-bearing capacity as shown in the following table. Boen recommends using at least Boen Maxima for floating installation of Boen parquet flooring.

| For floating installation we recommend min. BOEN-Maxima. | |
|--|------|
| Property | KPI |
| Minimum requirements | |
| Dynamic load, EN13793 50 000 Cycles | DL25 |
| Static load, EN826 40 kPa | CS |
| Sustained static load, EN1606 5kPa | CC |



Installation on old wood substrates

Boen parquet flooring can be installed floating on plank floors or subfloors made of wood-based panels.

Preparation:

Visual inspection of the general condition. The floor must be level, solid, dry and free of cracks.

Checking the wood moisture content with an electronic measuring device:

The wood moisture should be max. 10% wood moisture. The strength of the subfloor must be given. Creaking boards must be re-screwed. Movable zones must be backfilled or underfoamed. The subfloor must be immobile everywhere.

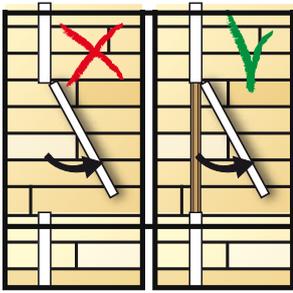
Check the evenness tolerances:

The same requirements apply as for installation on mineral screeds. Uneven surfaces can lead to strong creaking noises and must be evened out. Existing surface coatings must be removed by grinding, to prevent the formation of mold. Diffusion-open impact sound insulation must be used. Never use vapor retarders or similar be used. The laying direction should be diagonal or at least transverse to the direction of the substrate.

General installation instructions

Boen parquet planks are approved for floating installation on a base area of maximum 12 m length and 12 m width.

approved. The prerequisite is a continuous floor slab without construction joints (expansion joints). If such joints are present, they must be included in the top layer. Clearances to walls or other components should be dimensioned according to the room size and should be about 1.5 mm/m laying width, but at least however, at least 10 mm.

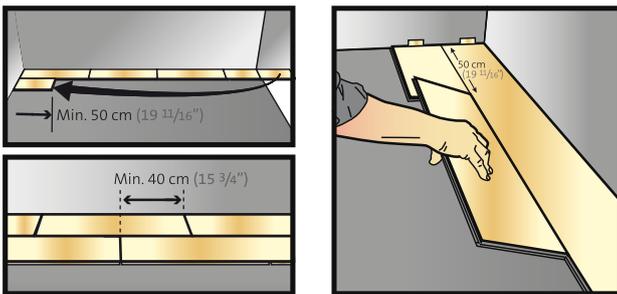


In the area of doorways, the floor must be separated with an expansion joint. This can be covered with suitable transition profiles.

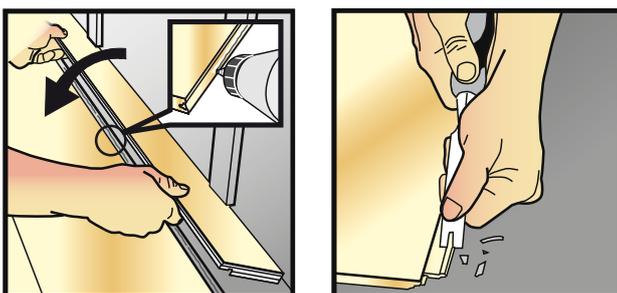
Parquet in narrow, long rooms, e.g. corridors should not be laid in the transverse direction, but always in the longitudinal direction. Furnishings or even door stops, skirting boards should never be attached to the parquet floor, as this prevents the natural movement of the floor due to fluctuations in room climatic conditions.

Heavy furnishings such as built-in kitchens, kitchen islands, built-in cabinets or even heating fireplaces should not be placed on a floating parquet floor, as there is a risk that the parquet floor will be jammed by heavy weights and prevented from moving.

A tapping block for light re-tapping is usually not necessary. Care must always be taken not to damage the top layer. Impacts on the top layer must be avoided at all costs. There should be sufficient offset of the earth joints of adjacent rows of planks. This should be at least 400 mm to ensure that the floor remains level in the event of fluctuations in the room climate. Cut-off end pieces of a row of planks can be used as a starting element in the following row. Here the length should be at least 500 mm.

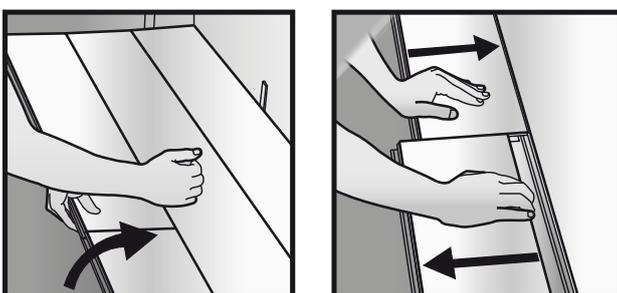


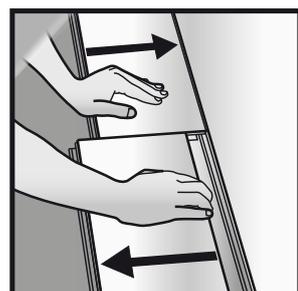
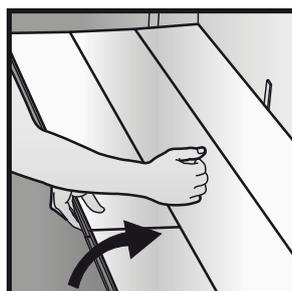
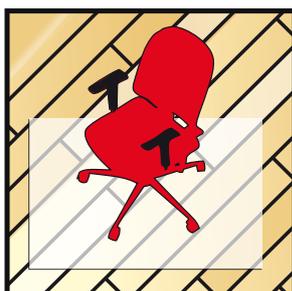
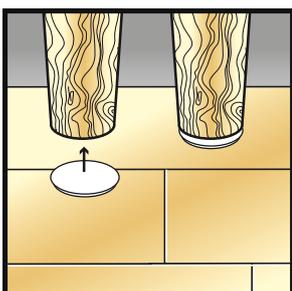
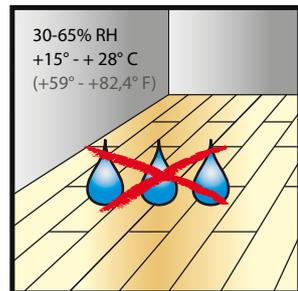
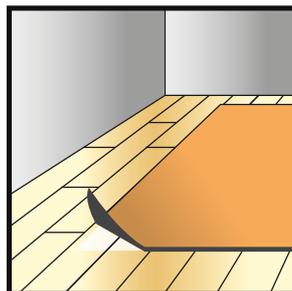
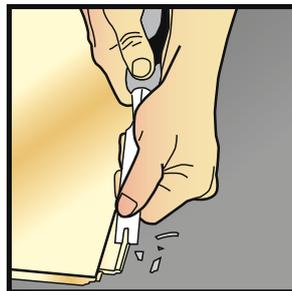
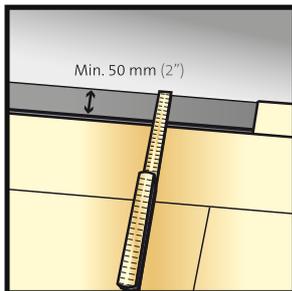
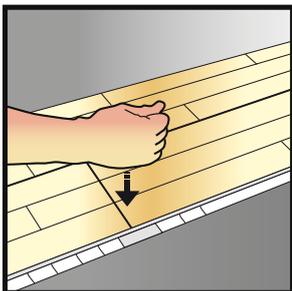
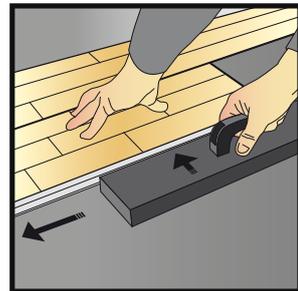
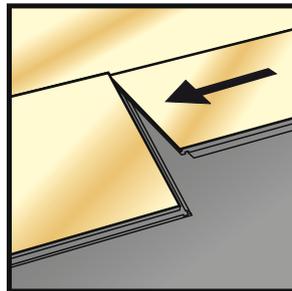
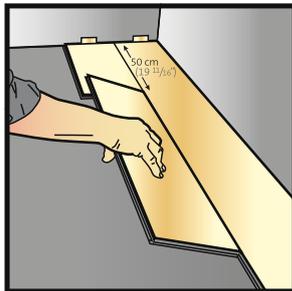
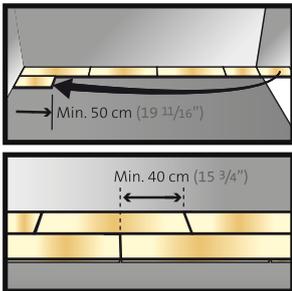
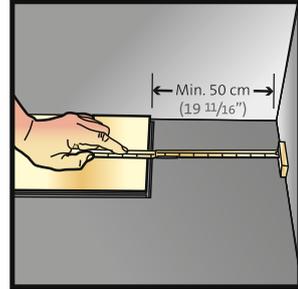
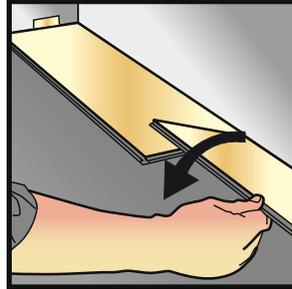
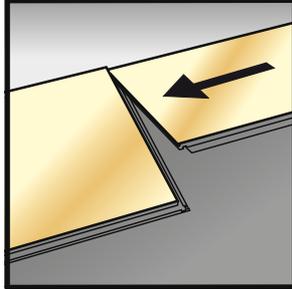
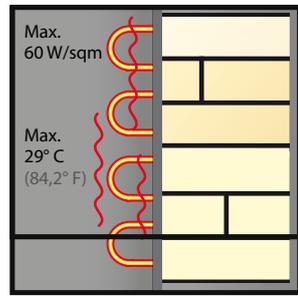
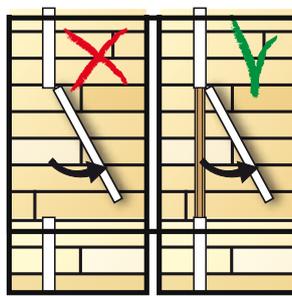
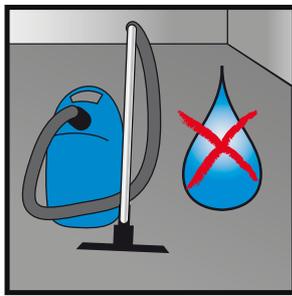
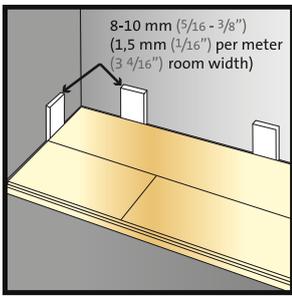
Boen parquet with click connection do not require glue indication on the profiles. In certain cases, e.g. in the event of a required the element can simply be pushed in by removing the tongue on the groove cheek. In this case, glue must be applied in this area using suitable parquet glue.



If it is necessary to remove or dismantle parquet planks, a complete row of planks must be clicked out upwards. The parquet planks can then be pushed apart flat against each other.

Do not lift the planks in the process, as this may damage the cross profile.





General notes

Wood is a natural product in which there may be differences in color and structure due to growth. Exposure to sunlight leads to a natural change in the color of the wood (darkening or lightening). In case of strong incidence of light, e.g. in the case of patio windows, these color changes can also occur partially. This process is particularly caused by the modern modern construction with floor-to-ceiling windows. Please ensure that the rooms remain at a constant temperature even after the installation is completed and that a constant room climate is maintained (see Installation on underfloor heating).

CAUTION! Carpet runners or bridges laid on the parquet, especially with insulating underlays (made of plastics, rubber, etc.), heat accumulation and discoloration may occur. **Look out for plasticizer-free products!**

Surface protection, cleaning and care

The surface of our Boen parquet floorboards are either sealed with Boen Live Matt, Live Matt Plus, Live Pure or oiled with Boen Live Natural. Our Live Matt, Live Matt Plus and Live Pure sealants are UV-cured, scratch-resistant and very durable. and very durable. Our oiled surface is oxidatively cured. The oil gives the surface a subtle silk-matt shimmer and ensures that it shimmer and ensures that it is water-repellent and dirt-resistant. Oiled floors require more intensive care than sealed floors.

Depending on the load, the parquet is subject to natural wear. After installation, you should care for the parquet flooring with Boen care products before using it for the first time. We recommend our special cleaning and care products for sealed and oiled Boen parquet (see Boen cleaning and care instructions).

<https://boen.com/technical/care-and-maintenance/>

Felt glides under furniture, table and chair legs, etc. prevent unnecessary scratches and impressions on the parquet surface. They must be periodically checked and if necessary cleaned or replaced.

