

INSTALLATION GUIDE - WOOD FLOORING

Product quality & grading

Our solid and engineered hardwood flooring has been manufactured to highest quality in accordance with internationally accepted standards nevertheless the wood flooring is a natural product, therefore it is almost perfect. Wood flooring quality and humidity must be checked before laying, possibly just after delivery. Our company does not accept any complaints regarding product quality after the flooring is installed. Problems resulting from natural behaviour of wood do not constitute legal basis for complaint. If visible defects are found during installation, the elements should be put aside and the sales representative should be contacted to verify the defect. The floor elements with the aforementioned defects which were installed are not subject to complaint.

Our products has been divided for visual appearance into 4 grades.

SELECT: no knots, no splits, no sapwood on face side, plain grain pattern, very narrow colour variation

PRIME: minimal knots, no splits, no sapwood on face side, natural plain grain pattern, narrow colour variation.

NATUR: some small knots, minimal natural splits, minimal sapwood appearance on face side, medium colour variations,

CLASSIC/RUSTIC: sound knots allowed, sapwood allowed, natural splits and holes allowed, wide colour variation.

Above grades can also be mixed (**MIXED GRADE**). According to international standards and due to hand selecting process every grade can include up to 2% of the lower grade.

Delivery & storage

We protect our products as best as we can but extra care must be taken when transporting and storing every wooden floor. The parquet must be stored in original undamaged packs insulated from the ground (on the pallet, cardboard or similar). Storage temperature must be in range of 18-22°C and air relative humidity on the level of 45-60%. Packs can be opened immediately before installation. It is NOT recommended to acclimatize unsealed packs before installation.

Pre-installation

Filled and Approved **Site Report** (see page 4) should be provided to floor fitter before installation. Installation can be carried only if substrate, walls and air readings meet described requirements. Packaging should be removed directly before

laying. During works relative air humidity must amount to ca. 45% - 60%, and the air temperature must range from 18°C to 24°C. We advise to double check site moisture and temperature readings prior to installation. Engineered & Solid wood flooring are the products subject to very careful treatment. Wood humidity should amount to 5-9% (engineered) and 8-10% (solid), which should be verified prior to laying the floor. The substrate must be dry, strong, flat, free of holes and cracks. It is important to follow instruction of used adhesive system. If necessary all particles and dust must be remove. When fitting on the Plywood, chipboard or OSB particle boards the moisture of these substrates should range between 10-12% . Every type of the substrate must be protected from moisture penetratation. Additional liquid DPM mambrane can be applied. If necessary we recommended to grind the floor prior to laying wood flooring, in order to improve key for adhesive and avoid unevenness, it also helps to remove any stains, plaster patches etc. Before installation the substrate should be carefully vacuum cleaned. If necessary, suitable primer (e.g. Ball P131, Wakol PU280, Bona D501 or other) should be applied on smooth floor, free of any cracks and irregularities, as per recommendations of the primer producer. The primer should be applied with a roller avoiding pools and patches. Hardwood flooring should NOT be glued down earlier than after 24h from primer application on the floor.

Underfloor heated substrates (UFH)

Due to its insulating properties and risk of cuping and bending **solid wood flooring is NOT recommended to use over underfloor heated substrates**. A few basic issues must be remembered when fitting engineered wood flooring over underfloor heating systems. The floor surface temperature cannot exceed 27°C. Prior to laying the floor, you must be sure that the substrate is dry (concrete screed humidity <1.8% ; anhydrite <0.3%). **UFH Report along with Heating/Cooling Process (see page 5) must be completed by UFH operator**. All recommendations of the UFH system's producer/installer must be applied. In case of all wood species, the occurrence of small gaps should be taken into consideration. Jatoba wood should be avoided to install over UFH. Special attention should be paid to install some species e.g. Ash Thermo, Ash Smoked, Oak Thermo, Oak Smoked (risk of discoloration) as the temperature of the floor surface must NOT exceed 27°C. When UFH is on, higher temperature acts on the wood and room environment, the result of which is lower relative air humidity, therefore use of air humidifiers is strongly recommended. It is NOT recommended to use carpets or rugs on the top of the hardwood flooring fitted over UFH due to risk of temperature cumulation and the floor damage.

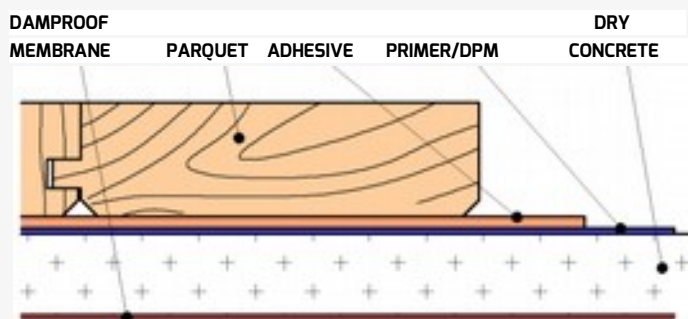
Installation

It is strongly advised to finish all „wet“ works on site (plastering, painting, etc.) at least 1 week before parquet installation. WE DO RECOMMEND TO USE EXPERIENCED PARQUET SPECIALISTS TO INSTALL AND FINISH THE FLOOR. FOR RECOMMENDED SPECIALIST IN YOUR AREA PLEASE CALL US OR EMAIL. The floor fitter is the most important person. He finally decides how the finished floor will look overall. Therefore, it is most important he works from several packs at the same time (2-3 boxes recommended). This enables fitter to decide on a correct colour and grain structure mix, and so achieve the best looking floor possible. Discoloured or imperfect blocks must be discarded at the fitter's discretion. Wood is a beautiful product of nature, but due to the intrinsic volatility of most species, it is always a possibility that up to 5% of the product may not be usable for its intended purpose.

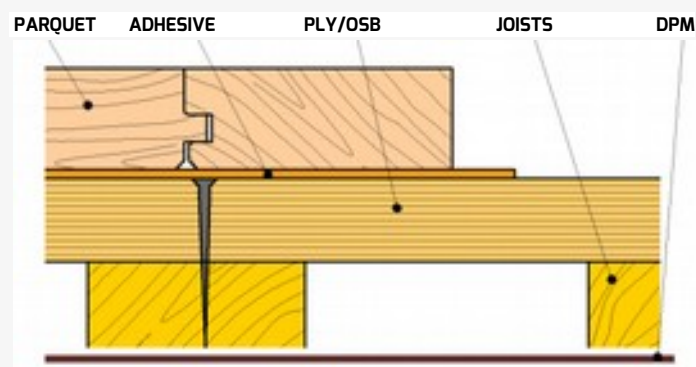
Before laying the fitter should plan the pattern for each room and consider using wood sections under the doors separating floors by expansion gap.

We recommend to use GLUE DOWN installation method as this is the most secure and durable way of fitting hardwood flooring. It also helps to improve noise reduction. Other methods e.g. NAILING or FLOATING should be considered after professional advise by hardwood flooring specialist.

GLUE DOWN OVER THE CONCRETE



GLUE DOWN OVER THE PLYWOOD / CHIPBOARD / OSB



The amount of adhesive applied on the substrate should match the size of glued elements as per the glue manufacturers recommendations. The adhesive should be applied with care, evenly with a v-notched trowel only on the substrate surface. The adhesive should comprise at least 70% of the wooden element's bottom surface. We recommend to use polyurethane synthetic or silane adhesives. **CAUTION! Use of dispersion (water-based) adhesives is forbidden.** Wood is a living material, which therefore requires a gap (known as an expansion gap) of 10-15mm between the floor and the walls. This also applies to door thresholds, pipes, stairs, and up against fireplaces, tiles or stone floors or any other permanently fixed constructural element. Door frames should be secured and carefully trimmed on the bottom to slide the wood flooring under. Expansion gap must be left also from the wall behind door frame element.

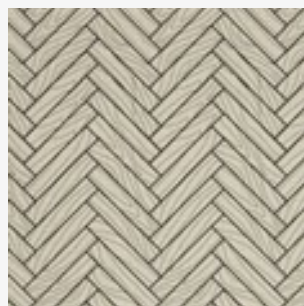
STRAIGHT / BRICK PATTERN



When laying in the straight / brick pattern fitter should start from the corner of the room. The first row should be precisely straight and checked with a horizontal line/string and secured by utilizing suitable wedges.

Next rows should be connected closely by using wooden/fitting block and a rubber hammer. Use the block and a hammer with care to avoid floor elements top section damage. As a general rule, expansion joint of 1.5mm per one metre of the floor laid is applicable. After binding the adhesive on the whole floor all distance wedges should be removed and the expansion gap should be covered with a skirting board.

HERRINGBONE / SQUARE PATTERN



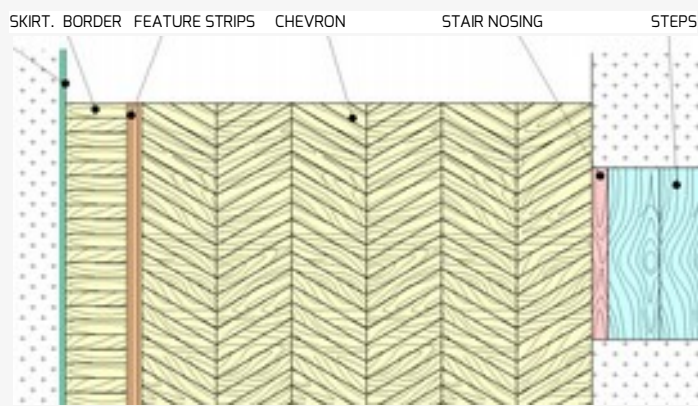
When laying in the herringbone / square / double herringbone / dutch / basket weave or chevron pattern fitter should start from the centre axis of the room. It is recommended to lay first 10-20 blocks loosely (without the glue) and check if the pattern result is satisfied. The adhesive should be

applied only on the area of currently fitted blocks. The first herringbone should be laid precisely as tight and straight as possible and left for 6-24h to dry adhesive. Attention should be paid to lay suitable blocks for every site; left blocks to left site, right blocks to right site of the herringbone/chevron. Next rows

should be laid accordingly on both sides of the room axis towards the walls. After fitting all fully sized elements floor should be left to settle / walk dry adhesive. All elements that need to be trimmed to specific size to fit around perimeter of the room should be fitted after 6-24h. After binding the adhesive on the whole floor all distance / securing wedges should be removed and the expansion gap should be covered with a skirting board.



TYPICAL PARQUET FLOOR LAYOUT (top view)



Finishing Hardwood Flooring

Unfinished / Untreated Floor

Unless the flooring is presanded (and bevelled) it is REQUIRED to sand the hardwood floor after curing time of the adhesive. Most of the adhesives allow to sand the floor 24 hours after installation. However we recommend to leave the floor for 3-5 days that adhesive can completely cure and the floor can 'rest' in the conditions (humidity, temperature). Hardwood floors need to be sanded down to eliminate possible stains, glue marks, scratches, height differences utilizing heavy belt sanders progressively up to 120 grit. We recommend to hire experienced floor sanding experts with dust free sanding machines. After the floor has been sanded for best result use of the resin filler (eg. Lecol 7500) mixed with fine sanding dust to fill all required gaps and knots. For the best result the floor should be finally polished with the buffer with attached fine sanding screen. For the edges of the floor special edge sander should be used. This can be omitted if the antique look of the floor is preferred. Various wooden finishes can be used to seal the floor (oils, waxes, hardwax oils, lacquers). The floor can be also stained to require colour prior to application of the final treatment. For regular maintenance dry cleaning method is advised. To remove stains and marks only suitable for specific finish wood flooring cleaner should be used (not waterbased).

Pre-lacquered or Varnished Floor

The floor is coated at production line with several layers of hardwearing finish and UV or air dried. After laying, the floor can be additionally protected with special agent sealant that fills the joints preventing water penetration. This treatment may be applied as the last stage of works by floor fitters. For regular maintenance dry cleaning method is advised. To remove stains and marks only suitable for lacquered wood flooring cleaner should be used (not waterbased).

Oiled or Hardwax Oiled Floor

The floor is coated at production line with a number of oil / hardwax oil layers, hardened by oxidation. After laying the floor should be additionally protected using maintenance oil to seal the joints preventing water penetration. Only suitable products can be used to do this treatment. This treatment may be applied as the last stage of works by floor fitters using buffing machine or other suitable method. The Oiled / Hardwax Oiled floor is only lightly protected against wearing so use of maintenance oil should be repeated frequently accordingly to the foot traffic level. For regular maintenance dry cleaning method is advised. To remove stains and marks only suitable for oiled wood flooring cleaner should be used (not waterbased).

Maintaining good environment in the room

Good climate is important for both people and quality of the wood flooring. Wood is the hygroscopic (absorbing moisture) material which, owing to its mechanical and physical properties, changes its dimensions and size along with the change of the temperature and relative air humidity. The reaction of wood to ambient changes results in contraction or swelling of elements. This reactions are rarely visible when responsibly using the floor. Higher relative air humidity may result in wood swelling and pose the risk of curling elements. Lower humidity may result in shrinking of wood, occurrence of bigger or smaller gaps between the elements, cracking of the surface layer and mechanical damage of the load-carrying layer, which cannot be the reasons for any claims. Rooms in which the wooden floor will be used should be equipped with: room thermometer, moisture meter and air humidifier. Rooms should be aired regularly (this not apply to winter season) and the relative humidity should be kept at constant level required for hardwood flooring, 45%-60% at the air temperature of 18°C to 24°C. In the winter season (heating on) air humidifiers must be used in order to keep the required relative air humidity as this is warranty condition. The humidifier can also have health benefits for the people who live or work in the same environment as the flooring.

SITE CONDITION REPORT

for hardwood flooring installation

Date Job Reference

Contractor / Site Manager

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Site address

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Hardwood flooring in

- basement ground floor first or higher floor
(make this report separately for every floor)

Type of substrate

- concrete anhydrite other;

Underfloor Heating (UFH)

- installed (**follow UFH Report**) not installed

Notes and objections

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SUBSTRATE READINGS

Average moisture level %
measure utilizing CM Method (Required; for concrete; max 2% or 1.8% with UFH, Anhydrite; max 0.5% or 0.3% with UFH)

Substrate strength N/mm²
measure utilizing PressoMess (required; 2 N/mm² ± 0.5)

Surface discrepancies to mm
measured utilizing 2m level (required; 2 to 3 mm)

WALL READINGS

Average moisture level %
measure utilizing CM Method (Required; max 3%)

AIR READINGS

Average humidity level %
measure utilizing air moisture reader (Required; 45-60%)

Average temperature °C
measure utilizing thermometer (Required; 18 to 24 °C)

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CONTRACTOR / Site Manager

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date & signature

APPROVED BY

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date & signature

UNDERFLOOR HEATING REPORT

for hardwood flooring installation

Date Job Reference

Contractor / Site Manager

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Site address

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HEATING – COOLING PROCESS

(must be completed before floor covering installation)

Start date:			
	UFH System Temperature	Notes	Signature
Day 1	Warm up to 20°C		
Day 2	Warm up to 30°C		
Day 3	Warm up to 40°C		
Day 4	Warm up to 50°C		
Day 5-15	Warm up to max°C		
Day 16	Cool down to 40°C		
Day 17	Cool down to 30°C		
Day 18	Cool down to 20°C		

Type of UFH

water electric other

Type of substrate

concrete anhydrite other;

SUBSTRATE INSTALLATION COMPLETION DATE

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Day 19	Air humidity check %	
Day 19-23	UFH SYSTEM OFF		
Day 24	Warm up to 20°C		
Day 25	Warm up to 30°C		
Day 26	Warm up to 40°C		
Day 27	Warm up to 50°C		
Day 28	Cool down to 40°C		
Day 29	Cool down to 30°C		
Day 30	Cool down to 20°C		
Completion date:			

CONTRACTOR / UFH System Operator

APPROVED BY

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 completion date & signature

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 date & signature