

LAYING INSTRUCTIONS FOR NATURAL WOOD FLOORS

General prerequisites for laying

The floor should be laid only after all wet works (such as painting and tiling) have been completed. The rooms must have no extra moisture from building work, as the wood floor acclimatised to normal conditions could otherwise absorb moisture. The subfloor must be checked to ensure that it is ready for laying (screed quality, flatness and residual moisture). As a matter of principle, we recommend a meeting with the screed installer, floor layer and construction manager prior to laying the screed and floor. This is because technical details, such as type of screed, screed joints, difference in level etc., depend on the parquet flooring to be laid and/or the subfloor requirements.

Whilst laying, room temperature should be approx. 20 degrees Celsius with relative humidity between 40 and 60 per cent. The floor should be acclimatised for at least 24 hours before laying. Open the packages just before laying. Installation should be carried out by a specialist company in accordance with the laying guidelines. The specialist must check the parquet material for wood moisture content (as per Standard ÖNORM B 2218), fit and damage. Obviously damaged or deficient parquet elements which are laid shall be considered accepted and cannot be rejected subsequently. For laying, we recommend the following tools: tape measure, pencil, angle bar, hammer, crowbar, hardwood or plastic hammering block, heel bar, jigsaw or circular saw, spacer wedges, tensioning straps and plastic notched trowel.

In order to achieve a harmonious and natural appearance, always open several packages at a time and sort the floorboards according to colour and structure. Whilst laying, the floorboards should be deliberately mixed.

Checking and preparing the subfloor

We recommend installing onto cement screed, calcium sulphate or anhydrite screed of quality class E300 or higher. The minimum requirements listed in the **technical overview table** with respect to adhesion values and subfloor flatness must be met.

Screed for warm-water underfloor heating must be heated correctly, and a signed heating protocol must be provided. Two days prior to installation, the underfloor heating must be switched off and/or the surface temperature must be reduced in winter. Whilst laying, the surface temperature of the screed should be approx. 15 to 20 degrees Celsius. It may only be increased again at the earliest 72 hours after installation has been completed.

Due to the wide variety of screed types, the parquet manufacturer cannot specify reliable, generally applicable threshold values of residual moisture. Therefore it is necessary to ask the screed manufacturer to confirm in writing the equilibrium or residual moisture level at which the screed is ready for installing the parquet. In the event that the parquet manufacturer refers in writing to the residual moisture according to the Austrian Standard 2236:2009, with cement screed we recommend falling below the residual moisture level specified in this standard by at least 0.3 CM per cent.

With regard to the moisture measurement, we refer to the currently applicable "guideline for determining the moisture content of screeds of the Standing Committee of the Federal Professional Group for Floor Layers", which corresponds with the issue of May 2014 at the time of the publication of this document. This guideline can be downloaded at www.parkett-agentur.at.

For full-surface bonding: Before laying, clean by sanding, and thoroughly remove the dust by vacuum cleaning. For full-surface bonding on calcium sulphate

or anhydrite screeds, as well as in the case of solid wood flooring (Massivholzböden) and three-layer chateau planks 20mm (Schlossdielen 20mm), we recommend using the subfloor primer specified in the **technical overview table**. As a rule, a correct application of the primer will improve the adhesion value by up to 0.3 N/sqmm.

If necessary, a moisture barrier must be employed before installation in order to prevent subsequent moisture of the subfloor e.g. in old buildings or rooms without a cellar. If using smoothing compounds to even out irregularities, or primers to temper the subfloor, please ensure that they are compatible with the parquet adhesive and are processed professionally.

If the screed does not meet the necessary requirements for the full-surface bonding of the parquet flooring (adhesion values etc.), as may be the case in problematic subfloors, for example during a renovation, the top floor layer can be decoupled from the subfloor. The correct application of Wildbrett decoupling fleece (Entkoppelungsvlies) will considerably reduce any tensile and shear forces, which in the long run will protect the subfloor. Owing to the many factors at play, only the specialist on site can determine whether this is necessary, or whether a full-surface bonding of the parquet floor using Wildbrett decoupling fleece is even possible. For more information on the subject of decoupling, please refer to the section "Full-surface bonding on screed".

If a full-surface bonding is not carried out on cement or calcium sulphate screed, but on dry screed, particleboard flooring or other subfloors, the specialist dealer or laying company should be consulted on the suitability of the subfloor before laying. Screwing solid wood floors onto wood substructures should be carried out in keeping with Standard ÖNORM B 2218.

Laying on warm-water underfloor heating

Our natural wood floorings are perfectly suited for full-surface bonding on warm-water underfloor heating. On account of their optimum thermal conductivity, we recommend using multi-layer flooring up to a material thickness of 15 mm or solid oak wood floors up to a thickness of up to 20 mm.

In the case of full-surface bonding for material thicknesses exceeding this, please take into account that there will be an efficiency loss of the underfloor heating due to the increased heat transfer resistance.

Full-surface bonding on screed

We recommend full-surface bonding on the subfloor as a matter of principle, since this method offers many advantages over floating installation, especially in the case of larger areas, underfloor heating as well as heavily used floors. The type of parquet adhesive to be used depends on which type of parquet is laid, and on which screed. We recommend the parquet adhesive specified in the **technical overview table**, and using the recommended notched trowel. The recommended adhesive quantity should be observed strictly. The notched trowel should be replaced after approx. 80 sqm of area laid. Please follow the application guidelines of the adhesive manufacturer exactly. In the case of three-layer parquet, an additional professional H-bonding using water-tight parquet glue is required.

Make sure to weigh down the parquet elements sufficiently for at least eight hours after laying or knocking into the adhesive bed, especially in edge and transition zones. During this hardening phase, the newly laid parquet surface should be walked on as little as possible. It is therefore advisable to work away from the parquet area. The continuously laid surface should be a maximum

of 10 metres across the floorboards, and should not exceed a maximum of 12 metres lengthwise. In addition, correct expansion joints or expansion profiles should be placed in the parquet surface.

Expansion joints of at least 10 mm should be considered on walls, cladding, radiator pipes, etc. Functional gaps in the substructure, such as building expansion joints and movement joints, must be included in the parquet surface. Screed drying joints, connection joints and construction joints must either be included in the parquet surface or be force fitted if permitted by the rules of the profession.

When gluing the parquet floor on 1 mm Wildbrett decoupling fleece (Entkopplungsvlies) (on problematic subfloors, for example) we recommend a full-surface bonding of the decoupling fleece to the screed using Wildbrett Kompakt 2-K PU parquet adhesive and the B3 notched trowel, applying approx. 1 kg per sqm. In the process, place the fleece mats in the adhesive bed run across the floorboard, at least 2 mm apart, and use a suitable tool, such as a paint roller, to rub well and evenly. Make sure that the parquet adhesive does not move through the fleece when rubbing. After twelve hours, the parquet flooring can be glued on the full area of the decoupling fleece. As regards the parquet adhesive, the notched trowel and the quantity applied, please observe the types and quantities mentioned in the **technical overview table**.

Please measure the room before laying the first rows of floorboards. Align the first row of floorboards with the groove to the wall, and cut to size in such a way that the wall connections appear in the optimum position in each room. Mark the width of the first two to three rows of floorboards on the screed, and apply adhesive up to this mark. Subsequently place the floorboards in the adhesive bed, use a hammering block to tap (it is imperative that you avoid knocking on the cover layer), align straight and weigh down suitably.

Please use spacer wedges to align the first rows and to keep to the prescribed distance to the wall. The section of the last floorboard of a row can be used as a starting point on the opposite side. Please make sure to lay the floorboards with an offset to the front side as large as possible of at least 40 cm. Cut the last row of floorboards in such a way as to maintain the necessary wall distance, and use spacer wedges for fixing.

Floating installation

Three-layered floorboards with a material thickness of approx. 14 to 15 mm, a maximum width of 195 mm and a maximum floorboard length of 2400 mm are the only ones suitable for floating installation. All other types and formats of parquet must have full-surface bonding. If heavy items of equipment, such as kitchen units, cooking islands, counters, et cetera, are to be placed on the parquet surface, the floor must have full-surface bonding. Full-surface bonding is also recommended for laying on a warm-water underfloor heating.

"Floating installation" of three-layer parquet requires professional laying on vapour-blocking footstep sound insulation. Tongue-and-groove elements must be glued with waterproof parquet glue. The glue must be applied to the upper groove side on the front side as well as on the long side. The floorboards should be tapped with a hammering block of at least 30 cm in length first on the face side and then on the longitudinal side. It is important to avoid knocking the cover layer! For a floating installation, the laying dimension across the floorboard should be 6 metres maximum, and should not exceed a maximum of 8 metres lengthwise. Expansion joints of at least 10 to 15 mm should be considered on walls, cladding, radiator pipes, et cetera.

Please measure the room before laying the first rows of floorboards. Align the first row of floorboards with the groove to the wall, and cut to size in such a way that the wall connections appear in the optimum position in each room. Glue, tap and align the first rows of floorboards. Please use spacer wedges to align the first row and to keep to the prescribed distance to the wall. The section of the last floorboard of a row can be used as a starting point on the opposite side. Take care to lay the floorboards with an offset to the front side as large as possible of at least 40 cm. Cut the last row of floorboards in a room in such a way as to maintain the necessary wall distance, and use spacer wedges for fixing.

Skirting boards

Remove the spacer wedges when the parquet adhesive has hardened (approx. 24 hours). The skirting boards are attached to the wall (not to the wooden floor). Dowels and screws or nails and construction adhesive can be used for installation.

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TECHNICAL OVERVIEW TABLE

type of parquet		format (dimensions in mm)			requirements on the screed		recommendation primer & application quantity			recommendation parquet glue, notched trowel & amount of glue			
		product group	structure	thick-ness	width	length	adhesion values minimum	maximum subfloor unevenness	on cement screed	on calcium sulphate screed	recommended amount applied	recommended parquet glue	notched trowel
1-strip plank	Landhausdiele	3-layer	11-15	148-250	up to 2,400	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
triple oak plank	Gutsboden	3-layer	14	140-240	up to 2,400	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
1-strip plank XL	XL Breitdiele	3-layer	15	260	up to 2,200	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
long-strip	Langriemen	3-layer	10-15	120-180	up to 2,400	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
3-strip flooring	3-Stab Schiffsboden	3-layer	14-15	189-204	up to 2,245	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
chateau plank 15mm	Schlossdiele 15mm	3-layer	15	190-250	up to 6,500	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
chateau plank 20mm	Schlossdiele 20mm	3-layer	20	190-394	up to 8,000	1.2 N/sqmm	1 mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Hartelastisch weichmacherfrei 1K	PK8 (B17)	1.8 to 2.0 kg/sqm
reclaimed wood flooring	Altholzboden	3-layer	18-19	112-412	up to 5,000	1.2 N/sqmm	1 mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Hartelastisch weichmacherfrei 1K	PK8 (B17)	1.8 to 2.0 kg/sqm
herringbone	Fischgrät	2 & 3-layer	10-15	70-140	up to 840	1.0 N/sqmm	1 mm over 1 metre	-	PU-Express	100 to 150g/sqm	Elastic Silan 1-K	PK5	1.2 to 1.3 kg/sqm
solid plank	Massivholzdiele	solid	14/20	100-220	up to 2,300	1.2 N/sqmm	1 mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Hartelastisch weichmacherfrei 1K	PK8 (B17)	1.8 to 2.0 kg/sqm
herringbone solid	Fischgrät Massiv	solid	14/20	100-140	up to 840	1.2 N/sqmm	0.5mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Hartelastisch weichmacherfrei 1K	PK8 (B17)	1.8 to 2.0 kg/sqm
parquet board solid	Tafelparkett Massiv	solid	20	680-970	up to 970	1.2 N/sqmm	0.5mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Universal Silan 1-K	PK8 (B17)	1.8 to 2.0 kg/sqm
chateau solid 20mm	Schlossdiele Massiv	solid	20	140-240	up to 5,000	1.5 N/sqmm	0.5mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Hartelastisch weichmacherfrei 1K	PK8 (B17)	1.8 to 2.0 kg/sqm
chateau solid 27mm	Schlossdiele Massiv	solid	27-35	240-400	up to 15,000	1.8 N/sqmm	0.5mm over 1 metre	PU-Express	PU-Express	100 to 150g/sqm	Spezial MS-K88	FK8	2.8 to 3.0 kg/sqm

The requirements on the subfloor as well as the components to be used depend on the type of parquet. The adhesive systems mentioned (primer, parquet glue, amount of glue applied and notched trowel) were developed especially for our parquet floorboards. For this reason, we recommend taking into consideration the requirements mentioned, and to apply the adhesive system recommended competently.