

INSTALLING 8 MM SOLID PARQUET FLOORING (PK 4)

WHAT IS 8 MM SOLID PARQUET?

DIN EN 13488 lists 8 mm solid parquet as wood flooring - mosaic parquet elements and is defined as small parquet elements, whose edges (narrow sides) are machine-smoothed and which, when assembled flat into certain laying units (panels), produce patterns of various types. The length of the strips may be up to 165 mm with a maximum width of 35 mm. The individual strips are fixed to one another by means of a backing glued to the underside, e.g. a coarse-meshed fabric or perforated paper.

SPECIFIC CHARACTERISTICS OF 8MM SOLID WOOD FLOORING?

Despite the low thickness of the 8 mm solid parquet, the individual parquet strips show good dimensional stability, which is attributable to the strip geometry with favourable, i.e. large thickness/width ratios and thickness/length ratios. Due to the precise arrangement of individual strips into large units that can be laid quickly, larger dimensional changes can occur within the parquet flooring surface.

The parameters responsible for the dimensional changes of 8 mm solid parquet are:

Wood type:

Wood types with large differential swelling and shrinkage dimensions and short wood moisture exchange times, such as beech or maple, show relatively large and rapidly occurring dimensional changes when changes in moisture occur.

Cuts:

Where strips are obtained with a tangential cut (perpendicular to the growth rings), dimensional changes and cupping are likely to be more pronounced than with strips obtained with a radial cut (parallel to the growth rings).

Manufacturing process:

The time of cutting and finishing the wood in the drying process as well as the type of drying influence the extent of dimensional changes in the event of wood moisture variability.

Dimension:

The size of transverse cupping that occurs depends on the strip width

Laying pattern:

With installation patterns with parallel arrangement of the in-

dividual strips (parallel pattern, English pattern), the horizontal expansion of the parquet surface can become quite extensive, as a swelling pressure builds up in only one direction.

NOTES ON BONDING 8 MM SOLID PARQUET

- ✓ When dispersion parquet adhesives are used, the wood is moistened on the underside. A wood moisture gradient builds up across the thickness of the strip. The consequence of this wood moistening is the expansion of the parquet strip and the formation of minor cupping in the transverse and longitudinal directions. The wood moisture gradient is reduced within a few days, so that cupping and horizontal expansions partially recede during this time.
- ✓ The extent of these changes depends on the parquet-specific parameters of the type of wood, the type of wood cut (annual ring position), production process, dimension, installation pattern (see above) as well as on the type of adhesive, the trowel notching used, the amount of adhesive applied, the absorbency of the subfloor and the ambient climate conditions:

Type of adhesive:

Dispersion adhesives cause more or less strong wood moistening. Since reactive resin adhesives do not contain water or any other volatile solvents, they do not result in wood moistening.

Substrate:

Non-absorbent substrates (e.g. mastic asphalt) result in greater moistening of the underside of parquet strips when dispersion based adhesives are used and therefore promote dimensional changes.

Ambient climate:

At high relative humidity, water is absorbed by the top surface of the installed parquet, the moisture content of the top surface increases and the parquet expands horizontally. At very low humidity of the air, the top surface of the parquet is dried out and, at the same time, the moisture content of the underside of the wood increases, and the transverse and longitudinal cupping intensifies due to the adhesive.

- ✓ The total expansion of the area is also strongly determined by the arrangement of the slats. Due to a parallel laying pattern, a growth in width only takes place in one direction when the wood is moistened. Since this increase in width can lead to pronounced horizontal shifting of the parquet surface, in the case of large surface areas, we recommend dividing the surfaces up accordingly, and to start laying in the centre and then lay to the right and left of this with a time delay.

TECHNICAL DATA SHEET

- ✓ The time between laying the parquet and sanding should be at least 3-5 days if dispersion adhesives are used. If sanding is carried out too early, excessive matter is sanded off in the edge area with the result that the parquet is later convexly cupped (the strips appear 'rounded'). If reactive resin adhesives are used, the floor can usually be sanded after only 1 day, as these adhesives do not cause wood moisture due to the absence of water and solvents in their composition.
- ✓ PU reactive resin parquet adhesives
STAUF PUK types
- ✓ SMP reactive resin parquet adhesive
STAUF SMP 950, (SMP 930)
- ✓ SPU reactive resin parquet adhesive
→ STAUF SPU 570, SPU 555, SPU 460

SUITABLE ADHESIVES FOR BONDING 8 MM SOLID PARQUET:

Depending on the arrangement of the parquet strips, the type of wood and the type of subfloor, almost all parquet adhesives from the STAUF range in the table below may be used for 8 mm solid parquet bonding:

- ✓ Dispersion parquet adhesives
STAUF M2A types

ADHESIVE SELECTION:

Subfloor	8mm solid parquet checkerboard/basketweave/herringbone pattern	8mm solid parquet pattern*
absorbent substrates such as: ✓ Cement screed ✓ Calcium sulphate (self-leveling) screed ✓ Cement-based levelling compounds ✓ Chipboard, OSB	✓ STAUF M2A 720 ✓ STAUF PUK 446/455 ✓ STAUF SMP 930/950 ✓ STAUF SPU 460/555/570	✓ STAUF M2A 720 ✓ STAUF PUK 446/455 ✓ STAUF SMP 950 ✓ STAUF SPU 460/555/570
Non-absorbent substrates such as: ✓ Mastic asphalt	✓ STAUF PUK 446/455 ✓ STAUF SMP 950 ✓ STAUF SPU 460/555/570	✓ STAUF PUK 446/455 ✓ STAUF SMP 950 ✓ STAUF SPU 460/555/570

* For wood types with large differential swelling dimensions and short wood moisture change times (e.g. red beech, Canadian maple), the use of a solvent-free and water-free reactive resin adhesive is generally recommended for laying English or parallel patterns.

ADHESIVE APPLICATION:

- ✓ Trowel notch size to be used: STAUF No. 3 (TKB B7)
- ✓ The quantity of adhesive to apply depends on the density and is approximately 850 - 1100 g/m².

The information provided above corresponds to the current state of the art. The information is purely indicative and non-binding, since we have no control over the installation process and because the actual installation conditions on site vary. Thus no claims can be made based on this information. The same is true for the commercial and technical advisory services that are provided without obligation and free of charge. We therefore recommend that you carry out sufficient tests yourself in order to determine whether the result is suitable for the intended purpose.