INSTALLING PARQUET AND FLOORING ON OSB (UG 3)

WHAT IS OSB?

OSB = Oriented Strand Board (wood-based board from oriented flat chips) is a wood-based panel that is increasingly coming onto the market and competing with chipboard and plywood. OSB is used in various designs in construction and decorative applications.

- 3-layer structure of flat chips ('strands'). Of the total chip volume, 25% is used for each of the two top layers, and 50% for the middle layer, whereby the chips in the middle layer are oriented at right angles to those of the top layers (plywood principle!). Used as an installation panel, it is ground on both sides and provided with a tongue and groove on 4 sides.
- In the OSB, pine strands are processed without bark. As a rule, only fresh wood is processed, i.e. no dry, recycled or old wood. In general, less binder (usually phenolic resin) is required for bonding the large-format strands than in the production of chipboard, and therefore reduced formaldehyde emissions are to be expected.
- The construction using large-sized strands results in good mechanical machinability and higher edge strength.
- Due to the size of the chips, the surface structure of OSB is rougher than that of conventional chipboard and therefore results in higher adhesive usage compared to conventional chipboard.
- In the EN 300 OSB boards are subdivided into the categories OSB/1 to OSB/4. Because of their coated surface, OSB/1 boards can´t be used directly for the installation of flooring. A so called Conti-finish can be removed easily by sanding and has to be removed also when using the categories OSB2 to OSB 4. Therefore OSB boards should always be sanded before an installation. The higher the number the better the product. For interior OSB2 and OSB3 should be used. OSB4 is usually used for high impact areas, i.e. bathrooms. OSB boards, like Chipboards, are usually delivered with 5-13% moisture content and a longer acclimatization on site can be a good idea.

NOTE WHEN LAYING OSB:

- OSB in the form of installation panels is produced in (conventional) thicknesses of 15, 18 and 22 mm. To accommodate parquet, it is recommended that the OSB is fully bonded or firmly screwed together.
- For floating installation (prefab screed), two panels of at least 15 mm thick should be glued and screwed together at right angles to each other. The overall thickness should be1.5 times, better 2 times the thickness of the massive parquet.
- Gluing of the boards in tongue and groove is done with cold glue of D3 quality, i.e. STAUF Cold glue L. If the boards are glued fully, i.e. to the screed, no gluing in tongue and groove is necessary.
- OSB-boards have to be installed with 2-3 mm distance to walls per meter room length, but with minimum 10-15 mm distance.
- A proper ventilation has to be installed while working with floating installations, i.e. with special skirtings. Otherwise the system can be damaged by moisture.
- The boards are screwed on sleepers with a distance of 20-30 cm. Distance and thickness of the sleepers have to be planned by an architect and/or a building planner.
- In floating installation of OSB panels, and when bonding them to wood types (e.g. maple, beech) and/or to parquet dimensions (e.g. 10 mm solid parquet, 22 mm strip parquet and solid planks) which are sensitive to swelling pressure, it should be noted that if high swelling pressure (e.g. high humidity) occurs, strong tension can build up on the parquet surface which can result in the floor construction welling up.

Flooring	Installation	layer / thickness
Elastic flooring	Screwed on sleepers	single, 22 mm
	Floating	single, 22 mm
Parquet	Screwed on sleepers	double, 12 mm
	Floating	double, 15 mm

TECHNISCHE INFORMATIONEN

INSTALLING FLOORING AND PARQUET ON OSB:

- ✔ OSB is generally well suited for resilient and textile floor coverings and parquet. However, the rather coarse surface structure of the installation panels can become apparent when resilient floor coverings are installed. Levelling with a self-levelling compound is usually required.
- ✔ When bonding parquet to OSB, as with chipboard, increased wood swelling must be expected due to its relatively low absorbency in comparison with bonding to screed.
- ✔ A surface covered with OSB constitutes a relatively even and level substrate. The risk of cavities forming during parquet laying is therefore generally much lower than with laying on cement screed, for example.

APPLICABLE PRIMERS FOR LEVELLING COMPOUNDS ON OSB

	STAUF XP 40[1) 2)] STAUF XP 10[1) 2)]	STAUF GS[1)]
STAUF VDP 130	✔	
STAUF D 54 [3)]	✔	✔
STAUF VDP 160 [3)]	✔	✔
STAUF VPU 155 S + STAUF quartz sand	✔	✔
STAUF WEP 180 + STAUF quartz sand	✔	✔
STAUF VEP 195 + STAUF quartz sand	✔	✔

1) Add STAUF reinforcement fibres.
2) The maximum thickness of a cement based levelling compound should never exceed 5 mm.
3) Diluted 1:1 with water.

APPLICABLE ADHESIVE SYSTEMS

	STAUF flooring adhesives[1)]	STAUF Dispersion-based wood flooring adhesives	STAUF reactive resin adhesives	Substrate preparation
Textile floorings	✔			Clean the substrate well; depending on its condition and requirements, prime and fill.
Resilient flooring	✔			
Linoleum	✔			
Laminate flooring (full-surface bonding)			✔	
Solid wood flooring		✔	✔	
Multi-layer parquet		✔	✔	
Wood block	Bonding in general not possible, please contact us.			

1) As a rule, a levelling compound is required and recommended for floor coverings

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