

TECHNICAL INFORMATION

PARQUET AND RESILIENT FLOORING INSTALLATION IN AREAS WITH IMPACT OF WATER (SO 1)

WHAT TO CONSIDER?

The basis for planning the floor construction is the specifications of the currently valid DIN 18534 "Abdichtung für Innenräume – Waterproofing for interiors". DIN 18534 primarily describes the application of waterproofing in combination with ceramic coverings. In Part 1 the requirements as well as the planning and installation principles are regulated. The scope of application of DIN 18534 Part 1 covers, among other things, bathrooms, shower rooms, shower facilities, commercially used kitchens, floor areas with drainage and production and commercial areas. The series of standards DIN 18531 to DIN 18535 largely replaces DIN 18195.

WATER EXPOSURE CLASSES

With the coming into force of the currently valid series of standards DIN 18531 to DIN 18535, the previously valid moisture exposure classes (Feuchtigkeitsbeanspruchungsklassen = FBK) are no longer valid and are replaced by the new water exposure classes (Wassereinwirkungsklassen = W).

✓ W0-I

Low exposure to water
Surfaces not frequently exposed to splash water such as, e.g. areas of floor surfaces in the domestic sector without drainage (e.g. kitchens, housekeeping rooms, guest toilets).

✓ W1-I

Moderate impact of water
Areas with frequent impact of splash water, not frequent impact of service water or intensification due to water accumulation, e.g. floor surfaces in domestic areas with drainage, floor surfaces in bathrooms with/without drainage without high water impact from shower usage

✓ W2-I

High water impact
Areas with frequent impact of splash water and/or service water with intensification through temporary water accumulation on the floor, e.g. floor areas in domestic areas with floor drain, floor areas with floor drains, floor areas in rooms with showers at floor level, floor areas sports or commercial facilities

✓ W3-I

Very high water impact
Areas with very frequently or prolonged impact of splash water and/or service water from intensive cleaning processes inten-

sified through accumulated water, e.g. areas such as surfaces in the area of swimming pool surrounds, areas of showers and shower facilities in sports or commercial facilities, areas in commercial facilities as commercial kitchens, laundries, breweries and so on.

The water impact class provides information on how the waterproofing has to be e.g. whether a standardised waterproofing system has to be used.

W0-I (low)	As long as sufficiently water-repellent surfaces are available no waterproofing in accordance with the standard is necessary
W1-I (moderate)	If water cannot penetrate into the subsoil even without appropriate measures, waterproofing that complies with the standard is not necessary in some cases.
W2-I (high)	Waterproofing in accordance with the standard is mandatory necessary
W3-I (very high)	Waterproofing in accordance with the standard is mandatory necessary

SUITABLE SUBSTRATES FOR PARQUET AND RESILIENT FLOORINGS ACCORDING TO WATER EXPOSURE CLASSES

In the water impact classes W0-I and W1-I all common professional subfloors may be used. In water exposure classes W2-I and W3-I, no moisture-sensitive substrates may be installed.

Water impact class	W0-I	W1-I	W2-I	W3-I
Suitable substrates				
concrete according to DIN 1045	✓	✓	✓	✓
cement screed	✓	✓	✓	✓
calcium sulphate screed	✓	✓		
mastic asphalt screed	✓	✓	✓	✓
gypsum (fibre) board	✓	✓		
cement based (fibre) board	✓	✓	✓	✓
chip- or OSB board	✓	✓		
other wood subfloors	✓	✓		

TECHNICAL INFORMATION

WHICH COVERINGS ARE POSSIBLE?

The fact that DIN 18534 primarily describes the use of waterproofing in combination with ceramic coverings makes it difficult for the parquet and/or flooring installer to evaluate. A parquet and/or flooring installation on a subfloor sealed according to DIN 18534 is a non-standard construction. The sealed subfloor is therefore only to be used in combination with ceramic tiles and therefore has to rely on the advice and information from the planner/architect. Should the planner require the installation of parquet and floor coverings, the executing craftsman is obliged to make reservations about the planning in accordance with § 4 Para. 3 VOB/B or § 633 BGB. In principle, the selection of the floor coverings to be used depends on the general suitability of the floor coverings for the respective purpose.

WHICH INSTALLATION MATERIALS SHOULD BE USED?

Installation materials should also always be selected according to the water exposure class. In class W0-I, installation materials that are resistant to occasional exposure to splash water may also be used. In water impact class W1-I, only „water-resistant“ installation materials should be used, i.e. products from the group of reactive installation materials based on silane, polyurethane or epoxy resin. In principle, it is recommended to pre-treat the subfloor against moisture from above with an epoxy resin or polyurethane primer in combination with STAUF PU Levelling Compound, in water exposure class W0-I as well as for seamless coverings in water exposure class W1-I.

SUMMARY

The implementation and updating of the DIN 18531 to DIN 18535 series of standards has changed little in practice for parquet and resilient flooring installer. There are mainly new definitions and more precise descriptions in the new standard series, which in combination with a new structure and interpretation attract attention. Nothing has changed for the parquet and/or resilient flooring installer when it comes to choosing the installation materials.

RECOMMENDED INSTALLATION MATERIALS

	W0-I	W1-I
PRIMERS		
STAUF VDP 160	✓	
STAUF VPU 155 S	✓	✓
STAUF VEP 195	✓	✓
STAUF WEP 180	✓	✓
LEVELLING COMPOUNDS		
STAUF GS-series	✓	
STAUF XP-series	✓	✓
STAUF FZ, STAUF RM, STAUF SSP Rapid	✓	✓
STAUF PU	✓	✓
PARQUET ADHESIVES		
STAUF M2A-series	✓	
STAUF SMP adhesives	✓	✓
STAUF SPU adhesives	✓	✓
STAUF PUK adhesives	✓	✓
RESILIENT FLOORING ADHESIVES		
STAUF dispersion based adhesives	✓	
STAUF R 105	✓	✓

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 carrying out sufficient testing of your own in order to determine whether the result is suitable for the intended purpose 062023