

### AREAS OF USE FOR VAPOUR BARRIERS RATHER VAPOUR RETARDERS (UG 9)

Vapour barriers or retarders can only be used on cement screeds or concrete floors that are insensitive to moisture. Gypsum-based systems (anhydrite or calcium sulphate (self-levelling) screeds) cannot be sealed off under any circumstances. After a "barrier" coating or vapour-tight surface coverings (ceramic, elastic coverings, parquet) have been created, the stability of these screeds is massively impaired by the enclosed water. This can lead to a total loss of the entire floor structure. For gypsum-based systems, therefore, only a longer drying time or accelerated drying is possible. In the case of underfloor heating, this can be done by heat curing. Electric dryers should be used for artificial drying of buildings; for faster drying, the screed must always be sanded down shortly after installation.

#### PROBLEMS WITH NON-DRY OR NON-DRYING SCREEDS

In the case of cement screeds, it is increasingly noticeable that its readiness for covering (= below 80% r.h. or 75% r.h. for heated screeds) is not achieved even after a lengthy lying time. On the one hand, this is due to accelerated construction processes, which do not allow sufficient time for complete drying out of the shell. On the other hand, the change from the previously used CEM-I cement types to CEM-II-type cements was assumed to be the cause. In most cases, the causes are a combination of factors such as unfavourable climatic conditions, higher layer thicknesses or water content of the screed during installation and accelerated screed systems.

#### STAUF SYSTEMS:

##### STAUF WEP 180

Deeply penetrating and hardening epoxy resin. Preferably for use on mineral screeds under STAUF SMP, SPU and PUK adhesives and, sprinkled with sand or primed with VDP 160, under STAUF levelling compounds

- ✓ Excellent stabilisation of screeds
- ✓ Efficient inhibiting effect where a high residual moisture is present
- ✓ Vapour retarder against residual moisture for cement screeds up to 95% r.h. (4,0 CM%), with floor heating up to 92% r.h. (3,5 CM%)
- ✓ Direct bonding with STAUF SMP, SPU and PUK adhesives within 72 hours
- ✓ Sprinkled with sand, or alternatively primed with STAUF VDP 160, also for use under levelling compounds.
- ✓ Tools can be cleaned with water

##### STAUF VEP 195

Coat forming 2-component epoxy resin primer, trowel or roller application, for use under STAUF SMP, SPU and PUK adhesives and, sprinkled with sand or primed with VDP 160, under STAUF levelling compounds

- ✓ Very good inhibiting effect where high residual moisture content is present
- ✓ Stabilises the screed surface
- ✓ Cement screed up to a residual moisture content of 98% r.h. (5 CM% or 6% by weight for concrete), up to 92% r.h. (3.5 CM%) for cement screeds with underfloor heating
- ✓ Bonding agent on non-absorbent, smooth substrates
- ✓ Direct sticking with STAUF SMP, SPU and PUK adhesives within 72 hours
- ✓ May also be applied under sprinkled STAUF levelling compounds
- ✓ Alternatively, use with STAUF VDP 160 as an adhesion promoter under STAUF levelling compounds without sprinkling with sand.

##### STAUF VPU 155 S

Coat forming 1-component PU resin primer, trowel or roller application for use under STAUF SMP, SPU and PUK adhesives and sprinkled with sand under STAUF levelling compounds

- ✓ The first trowelled or thinly rolled on layer can be overcoated after approx. 1 hour.
- ✓ Vapour retarder against residual moisture for cement screeds up to 92% r.h. (3,5 CM%), with floor heating up to 85% r.h. (2,5 CM%)
- ✓ Direct sticking with STAUF SMP, SPU and PUK adhesives within 48 hours
- ✓ May also be applied under sprinkled STAUF levelling compounds

##### STAUF VDP 160

Coat-forming dispersion-based (bonding agent) primer, roller application for use with many

- ✓ STAUF adhesives\* and STAUF levelling compounds.
- ✓ Levelling with thick layer application (vapour retarder), preferably with STAUF GS
- ✓ Vapour retarder against residual moisture up to 90% r.h. (3,0 CM%) (cement screed only without floor heating)
- ✓ Bonding agent on non-absorbent, smooth substrates
- ✓ Special feature: Also suitable as a subsequent adhesion primer for filling on top of an otherwise not directly levelable barrier primer (STAUF VEP 195). The time-consuming and labour-intensive sprinkling with sand of epoxy resin primers can be dispensed with as a result.

## TECHNICAL DATA SHEET

### **STAUF SMP 950, SPU 570 and SPU 510**

1-component wood flooring adhesives according to ISO 17178

- ✓ Can be used on cement screeds with a residual moisture of up to 95% r.h. (4,0 CM%) using STAUF No. 12 special adhesive notch
- ✓ No further primer necessary as vapour retarder
- ✓ Particularly economical since dispenses with a two-layer vapour retarder

## TECHNICAL DATA SHEET

### STAUF PRIMER APPLICATIONS:

Residual moisture	Requirement	Work steps	Suitable products	Vapour retarding properties Total quantity
<b>Up to 90% r.h.</b>	Direct sticking	VDP 160, rolled approx. 150 g/m <sup>2</sup>	SMP*, SPU* and PUK adhesives	at least 300 g/m <sup>2</sup>
	subsequent levelling	VDP 160, rolled approx. 150 g/m <sup>2</sup>	STAUF GS	at least 300 g/m <sup>2</sup>
<b>Up to 92% r.h.</b>	Direct sticking	VPU 155 S, thinly troweled or rolled approx. 150 g/m <sup>2</sup>	SMP, SPU and PUK adhesives	approx. 350 g/m <sup>2</sup>
	subsequent levelling	VPU 155 S, thinly troweled or rolled approx. 150 g/m <sup>2</sup>	All STAUF levelling compounds	approx. 350 g/m <sup>2</sup>
<b>Up to 95% r.h.</b>	Direct sticking	WEP 180 (diluted 1:1 with water), applied generously with a roller approx. 200 g/m <sup>2</sup>	WEP 180 undiluted, applied with a roller approx. 200 g/m <sup>2</sup>	approx. 400 g/m <sup>2</sup>
	subsequent levelling	WEP 180 (diluted 1:1 with water), applied gener- ously with a roller approx. 200 g/m <sup>2</sup>	Quartz sand  VDP 160, rolled thinly	
<b>Up to 98% r.h.</b>	Direct sticking	VEP 195, applied generously with a roller approx. 400 g/m <sup>2</sup>	VEP 195, applied generously with a roller approx. 200 g/m <sup>2</sup>	approx. 600 g/m <sup>2</sup>
	subsequent levelling	VEP 195, applied gen- erously with a roller approx. 400 g/m <sup>2</sup>	Quartz sand  VDP 160, thin rolled	approx. 600 g/m <sup>2</sup>

\* Plasticiser-containing adhesives such as STAUF SMP 930 and STAUF Multilayer are not recommended for direct bonding. See technical data sheets of all parquet adhesives (suitable primers).

The information provided above corresponds to the current status of development. The information is purely indicative and non-binding, since we have no control over the laying process and because the actual laying conditions on site vary. Therefore 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.