



SUPERELASTIC

HydroBlocker Superelastic is a single-component sealant without solvents which is used for sealing and waterproofing of horizontal and vertical surfaces.

PROPERTIES

- Suitable for momentary use (single-component)
 - Low viscosity
 - Does not contain solvents
 - Does not contain isocyanates
 - Sealant workability is excellent; it can be applied in only two layers
 - Vapour permeable
 - Stable at temperatures ranging from -40°C to +80°C
 - Good adhesion to numerous surfaces, i.e. materials (concrete, wood, ceramics, metals...) – even without a primer
 - Good adhesion both to old and wet surfaces, i.e. materials
 - Resistant to rain as soon as 2 hours after application (at 23°C and 50% rel. humidity)
 - Good bridging over cracks
 - Resistant to a wide spectre of chemicals
 - Resistant to UV and atmospheric influences
 - It may be painted over
 - It hardens under room conditions
 - It may be applied at temperatures ranging from +5°C to +40°C
 - It has a short curing time
 - The surface is not adhesive after curing
 - Consumption: ca. 1.4 kg/m² (for ca. 1 mm layer)–2 kg/m² (for ca. 2 mm layer with felt).
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TESTS AND CERTIFICATES

EN 1504-2: 2004 Concrete surface protection system

CE mark

AREA OF APPLICATION

- For sealing grooves, pipe cuffs, roof windows and domes, with different penetrations, edges around chimneys...
- For sealing various leaks, cracks on roofs and walls
- For waterproofing of external and internal joints
- For protection of wooden constructions
- For adhesion

The liquid membrane is not suitable for use on surfaces where still water has been present for a long time.

TECHNICAL INFORMATION

Uncured sealant		
Base		hybrid polymer
Appearance		(liquid) grey sealant with low viscosity
Curing mechanism		with moisture
Specific weight		1.4-1.5 g/cm ³
Skin formation time	23°C/50% rel. hum.	20-40 min
Curing time	23°C/50% rel. h. ca.	3 hours (1 mm layer)
Application temperature		from +5°C to +40°C
Cured sealant		
Hardness Shore A	ISO 868 25-30	
Volume change	ISO 10563	< 3%
Elongation at break	ISO 37 part 1	280-380%
Tensile strength	ISO 37 part 1	1.0-1.2 N/mm ²
Tensile strength	(100%) ISO 37 part 1	0.6-0.7 N/mm ²
Waterproofness	DIN 1048 waterproof	
Treading	P2 (constant)	
Temperature resistance		from -40°C to +80°C

TESTING RESULTS ACCORDING TO SIST EN 1504-2:2004

Products and systems for protection and repair of concrete structures – part 10:
Quality and compliance assessment – part 2: Concrete surface protection systems

Relative diffusion resistance of water vapour (Sd): 5.11 m

[according to SIST EN ISO 7783:2012 – request for Grade II: $5 \text{ m} \leq S_d \leq 50 \text{ m}$]

Water mobility (W): 0.008 kg/m²h^{1/2}

[according to SIST EN 1062-3:2008 – request: $W \leq 0.1 \text{ kg/m}^2\text{h}^{1/2}$]

Relative diffusion resistance CO₂ (Sd): 62.3 m

[according to SIST EN 1062-6:2003 – request: $S_d > 50 \text{ m}$]

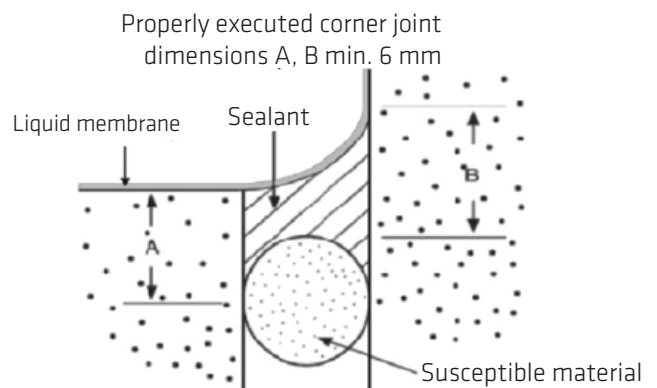
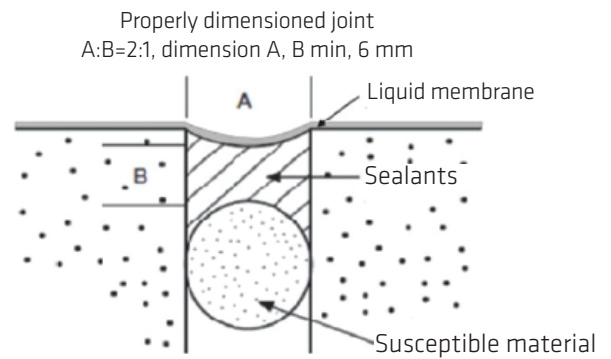
INSTRUCTIONS FOR USE:

- The surface must be solid and without dirt (dust, grease). Remove all loose and poorly connected parts.
- The liquid membrane has excellent adhesion to numerous surfaces such as concrete, cement screed, glass, ceramics, tiles, wood, metal (aluminium, steel, zinc, copper...). However, we recommend performing an adhesion test before its use.
- The liquid membrane may be used without a primer and on several wet surfaces, although not in the presence of still water.
- Mix the liquid membrane before use. Apply it with a brush or roller in two layers until total thickness of ca. 2 mm. The second layer may be applied over the first one only after it is completely cured (after ca. 3 hours at 23°C, 50% rel. hum.). After ca. 12 hours (at 23°C, 50% rel. hum.), the workable surface should be dry and ready for further work. Temperature and air moisture decrease, i.e. poor air flow, may significantly affect the liquid membrane curing speed. Consumption: 1.4-2.0 kg/m².
- In order to achieve optimal characteristics of dilatation joints, they must previously be properly dimensioned. A suitable surface material must be used and it must not adhere to the liquid membrane (e.g. foam polyethylene). For achieving optimal elastic properties of the sealant, we advise preparing a dilatation joint with the width/depth ratio of 2/1, i.e. maximum 1/1 (minimum joint width is 6 mm; maximum joint width is 20 mm).
- Tools and the uncured sealant may be cleaned with Teka cleaner or alcohol. The cured membrane may be removed mechanically.

• For improving mechanical properties of the cured membrane, we recommend prior laying of non-woven felt to the first layer of the uncured liquid membrane, and immediately after that reapplying the liquid membrane to the felt layer (felt quality 120 g/m²). When laying felt on larger surfaces, we recommend that felt layers cover each other at least 3–5 cm. Reinforcements for interior and exterior angles, as well as for penetrations, must previously be carved out of felt and placed on the first layer of the uncured membrane, before the felt is placed on main horizontal, and/or vertical surfaces.

Material	Hydroblocker Superelastic
Steel	5K
Copper	5K
Painted steel	5K
PVC	3A
Polycarbonate	5K
Wood	5K
Glass	5K
Polyester	2A
Ceramics	5K
Aluminium	5K
Concrete	5K
Bitumen (aged)	1A
Styrofoam	3A
ABS	5K

K – cohesion, A – adhesion
 1 (poor), 5 (excellent)
 (Bitumen may cause membrane painting)



PACKAGING

Doses: 0.7 kg with or without felt, 5 kg and 10 kg (ALU bags)

STORAGE

12 months in a dry place at a temperature between 5°C and 25°C in originally sealed packaging. Keeping after the date printed on the packaging does not necessarily mean that the sealant is unusable. In that case, it is necessary to check the properties of the sealant for the desired use.

HEALTH, SAFETY, HANDLING AND DISPOSAL INFORMATION

Additional information on safety, instructions for safe treatment, personal protection equipment, as well as disposal information, are located in the safety data sheet. The safety data sheet may be received upon request. You may also receive a copy from your TTK sales representative.

WARNING

Instructions were given based on our research and experiences, however, due to special requests, specific conditions and manners of work, we recommend that testing be done for each case of use.



HydroBlocker

SUPERELASTIC

Relative diffusion resistance for CO₂
Relative diffusion resistance of water vapour
Capillary absorption and water mobility
Adhesion strength
Thermal compatibility
Flammability grade
Hazardous substances

Sd > 50 m
Grade II: 5 m < Sd < 50 m
W ≤ 0.1 kg/m²h^{0.5}
≥ 0.8 (0,5) N/mm²
NPD
Grade F
Corresponds to request 5.3

CE

16

TKK d.o.o.

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HYDROBLOCKER SUPERELASTIC

DOP 5817578

EN 1504-2

Surface protection product

Coating