

DATASHEET

Servoplan E 500

Hydraulic binder for cement screeds

- ready for light traffic after approx. 3 - 4 hours
- ready for installation after approx. 1 day
- for stability type ZE 20
- as a binder for drainage systems under porcelain and natural stone tiles on balconies and terraces
- as bonded screed
- as floating screed
- for interior and exterior applications



PRODUCT DESCRIPTION

Special cement with pozzolan additive for a quick curing screeds and drainage systems, stability type ZE 20 according to DIN 18 560 and 18 353 (German industrial standard). **Servoplan E 500** screed reaches the minimum stability indicated in DIN 18 560 after 1 day if sand of type 0/8 according to DIN 4226, consisting of a grain composition in a preferred and usable range of A8 to C8 according to DIN 1045, is used and the mixture does not contain excess water. The installation readiness for floating or over separator installed screed is calculated by 2.0 CM compound using CM measuring method. Conduct CM measurement for 1 minute and read result. Start installation immediately when required value is reached.

The installation process is to be conducted according to the guidelines for cement screed DIN 18 560 and DIN 18 353.

Pay attention to fast curing properties.

SUBSTRATE PREPARATION

Servoplan E 500 as a screed

Provide control joints and expansion joints as with installation of conventional cement screeds. Use screed rods or other anchored system. Prime substrate with **Okamul 71** diluted with water in the ratio of 1:3 to 1:4. Apply slurry mixture of **Servoplan E 500** in a wet on wet procedure

Servoplan E 500 as a drainage system

To create drainage mortar on balconies and terraces create a slope to a minimum of 1.5%. Use waterproofing membranes: **Servoflex DMS 1K Plus SuperTec** or **Servoflex DMS 1K-schnell SuperTec** and follow corresponding TDS. On balconies and terraces over liveable space use bitumen sealing according to DIN 18 195 is required (follow local building codes). The horizontal installed drainage system can be applied with designed drainage mat (Follow manufacturer's instructions).

PROCESSING

For mixing the mortar, use conventional screed mixers. **Servoplan E 500** screed mix with sand or fine gravel and water to form a moist screed mortar. Do not add any other additives or other cements.

100 liter mixer:

As conventional screed use 20 kg **Servoplan E 500** (1 bag) + 80 kg of sand, grain size 0-8 mm (12 shovels) + 8.0 liters of water, depending on the moisture of the sand .

As drainage mortar use 20 kg **Servoplan E 500** (1 bag) + 100 kg of gravel / crushed stone, granulation 2-5 mm, 2-8 mm or 4-8 mm (15 shovels) + 8 liters of water, depending on the humidity of the mixture.

200 liter mixer:

(e.g. Putzmeister, Mixocred) as conventional screed 60 kg **Servoplan E 500** (3 sacks) + 240 kg of sand, grain size 0-8 mm (36 shovels) + 24 liters of water, depending on the moisture of the sand.

As drainage mortar 40 kg **Servoplan E 500** (2 bags) + 200 kg aggregate gravel or crushed stone 2-5 mm, 2-8 mm or 4-8 mm (30 shovels) + about 16 liters of water, depending on the humidity of the mixture. During any work, machinery halt clean hoses immediately. Avoid direct exposure to sun and air breeze.

Hydronic radiant floor heating:

Servoplan E 500 can be heated after minimum 3 days from the installation. Begin heating at 25° C for a period of 3 days. Then set the temperature of the water flow to a max. 55 ° C and hold for another 4 days. After completion of the heating protocol, the screed is ready to perform (follow heated floor constructions and methods) as documented in FBH D4 "protocol for curing and heating the screed".

Servoplan E 500 can be used as heating screed up to 55 ° C.

As a drainage mortar:

Use sand/gravel particle size 2-5 mm, 2-8 mm or 4-8 mm and mix with suitable screed mixers. There must be a presence of a wettable and moist consistency. The selection of the screed depends on the intended thickness, drainage capacity and expected load bearing capacity.

Drainage mortar must be applied with a wet on wet application using Okamul over appropriate drainage mats. Minimum screed thickness is 30 mm, over drainage mats at least 60 mm. The tile installation can be executed after approximately 24 hours. Use **Servoflex-Trio-SuperTec** or **Servoflex- Trio-schnell SuperTec** (quick set). Provide contact layer using mortar and then install your covering material providing full mortar transfer (use appropriate trowel sizes, back-buttering method is required).

If installing tiles using wet on wet method use **Servoflex-Trio-schnell SuperTec** (quick set) and follow the same guidelines as above)

SPECIFICATIONS

Color	grey
Application	Interior, exterior, submerged
Fire classification	A1 nach EN 13501-1
Application temperature	+5°C to +25°C (substrate)(41 °F to 77 °F)
Mixing ratio	Screed: Servoplan E 500: sand (0.8mm) 1:4
	Drainage system: Servoplan E 500 : gravel / crushed stone (2-5 mm, 2-8 mm, 4-8 mm),1:5
Water demand	approx. 8l / 20 kg powder, approx. 2,1 US gal./45 lbs powder depending on moisture of sand
Processing time*	approx. 60 minutes
Walkable*	after approx. 3 hours, drainage mortar after approx. 4 hrs.
Ready for traffic*	after approx. 24 hours - with wood floors after approx. 48 hours
Floor heating system	suitable, follow the instructions!
GISCODE	ZP 1 - low in chrome according to TRGS 613
Storage	store in a dry place for up to 6 months

* At 68°F (+20 °C) and 65% relative humidity. Higher temperature and low humidity decreases, lower temperature and high humidity increases this value respectively.

COVERAGE

approx. 4,0 kg/m²
powder per 10 mm (1/2") thickness

CLEANING

Clean tools with water immediately after application.

PACKAGING

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Product description	Item no.	Item no.
54 x 20 kg (45 lbs.) paper bags	42018	4015705420189

The aforementioned information, especially the proposals for processing and utilizing our product, is based on our knowledge and experience. We recommend that you carry out your own tests in every case to ensure the suitability of our products for the intended process and processing purposes because of the different materials and the working conditions which lie beyond our area of influence. No liability can be derived from this advice or from verbal advice, unless we are responsible for (criminal) intent or gross negligence in this respect.

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