

DATASHEET

Servoplan EM 580

fast setting screed mortar

- according to EN 13813 CT-C30-F5
- optimised processing properties
- coordinated grain structure
- ideal for renovation and refurbishment
- ready for foot traffic after approx. 8 hours
- ready for installation from approx. 24 hours
- as bonded and unbonded screed
- for indoor, outdoor, and underwater use
- for layer thicknesses from 10 to 60 mm



PRODUCT DESCRIPTION

Ready-mixed rapid screed mortar according to EN 13813 for the installation of a rapid screed with designation CT-C30- F5 according to DIN 18560. A screed made with **Servoplan EM 580** reaches the minimum strengths specified in DIN 13813 after approx. 24 hours. For screed laid as a floating or separating layer, a residual moisture of ≤ 2.0 CM-% (unheated) and ≤ 1.8 CM-% (heated) or ≤ 75 % RH must be achieved before laying the top coverings. This is to be determined with a CM measurement according to the documentation FBH-AD "CM measurement" (interface coordination for heated floor constructions)(read off after 10 minutes). After reaching optimal working conditions, start laying the covering immediately. The general guidelines for cement screeds DIN 18560 apply to working with the product.

SUBSTRATE PREPARATION

The substrate must be inspected and ready for installation in accordance with the respective regulations of the individual countries as well as the current state of technology.

Observe all relevant standards, regulations and trade rules, especially DIN 13813, DIN 18560 and DIN 1264, Part 4. Waterproofing must be determined by the building planner and made before the screed is installed (see DIN 18531 (all parts) to DIN 18534 (all parts)). Provide and install dummy joints and expansion joints as with conventional cement screeds. Anchor screed connections or partial areas against each other with round steel.

Determine the size of the work surfaces so that they can be completed within the processing time.

When used as a bonded screed, prime the substrate with **Okamul 71** diluted with water in a mixing ratio of 1 : 3. Then, with this liquid, stir **Servoplan EM 580** to a slurry and apply it. Apply the rapid cement screed wet-on-wet onto the fresh slurry.

PROCESSING

In order to mix the mortar, use common screed mixers, such as Putzmeister Mixokret or similar. When looking to work efficiently, continuous mixers (380 V) or free-fall mixers can also be used. **Servoplan EM 580** mix to a stiff-plastic screed mortar. Do not add any other admixtures or cements. Avoid direct sunlight and air draught during drying. If work is interrupted for longer than 40 minutes, clean the machine and hoses immediately.

Use on underfloor heating

Heat the heating screed made with **Servoplan EM 580** at the earliest 3 days after application. Start the functional heating with a flow temperature of + 25 °C, which must be maintained for 3 days. Then set the maximum flow temperature and hold for another 4 days. This process must be recorded.

SPECIFICATIONS

| | |
|-------------------------|--|
| Color | grey |
| Application | indoor, outdoor, underwater |
| Thickness | min. 10 mm - approx. 60 mm bonded: min. 10 mm - approx. 60 mm unbonded layer: min. 35 mm - approx. 60 mm unbonded on insulating layer: min. 40 mm - approx. 60 mm |
| Grain size | 0 - 4 mm |
| Application temperature | +5°C - +25°C (substrate) |
| Water demand | approx. 2.0 litres / 25 kg powder |
| Processing time* | approx. 2 hours |
| Walkable* | after approx. 8 hours |
| Ready for installation* | after a residual moisture of ≤ 2.0 CM-% (unheated) and ≤ 1.8 CM-% (heated) or ≤ 75 % RH Tiles after approx. 24 hours (carry out CM or RH measurement) parquet after approx. 48 hours (carry out CM or RH measurement) |
| Floor heating system | suitable (please observe notes) |
| Fire classification | A1 - not flammable |
| GISCODE | ZP 1 - low in chromate, in accordance with TRGS 613 |
| EMICODE | EC1 ^{Plus} according to GEV |
| Storage | store dry in the correct manner; can be stored for approx. 12 months from manufacturer date |

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

** Minimum layer thickness according to DIN 18560 Part 2 and Part 4, Table 1 for concentrated loads ≤ 1 kN and ≤ 2 kN/m² surface loads with normal stresses for living rooms and spaces.

For higher loads, the minimum layer thickness is to be determined by the responsible planner.

IMPORTANT NOTICE

Expansion, movement or building separation joints already present in the substrate are to be adopted at the same location through the entire cross-section of the system.

Connection joints, connections to rising building components or penetrations must be professionally formed with a suitable edge insulation strip.

Screeds on separating layer

Suitable separating layers, such as two-layer PE foil, must be used. Separation layers must be laid "crease-free" and with a joint overlap of at least 10 cm.

Bonded screeds

Substrates must be carefully cleaned. Layers that reduce adhesion, such as mortar residues or binder accumulations, must be removed mechanically beforehand if necessary. Coarse defects in the substrate must be levelled out in advance by suitable measures. Absorbent substrates must first be provided with a bonding slurry, made of **Okamul 71**.

Screeds on insulation layers (heated and unheated)

Insulation layers must be laid professionally, with offset joints and free of cavities. Insulation layers must be suitable and sufficiently dimensioned for the application and subsequent use. Insulation layers must be covered with a suitable separating layer, e.g. with a two-layer PE foil. Separation layers must be laid "crease-free" and with a joint overlap of at least 10 cm. For heated constructions, the floor heating system must be suitable and sufficiently dimensioned for the application and subsequent use. In heated constructions, the floor heating system must have been installed professionally. The leak test must be carried out in advance. In heated constructions, sufficient measuring points must be marked by measuring points for the subsequent taking of samples.

Safety

Product reacts strongly alkaline with moisture/water. Therefore, protect the eyes and skin. In case of contact, always rinse with water. In case of eye contact, consult a doctor immediately.

Further information in the safety data sheet at www.kiesel.com.

COVERAGE

approx. 20.0 kg/m² powder per 10 mm layer thickness

CLEANING

Clean tools and machines immediately with water.

PACKAGING

42 x 25 kg paper bags



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.

Revised: 15.01.2024/ag

Kiesel Bauchemie GmbH u. Co. KG
Wolf-Hirth-Straße 2
D-73730 Esslingen
Phone: 0711 93134-0
Fax: 0711 93134-140
www.kiesel.com
Stuttgart District Court HRA 210806

CEO:
Beatrice Kiesel-Luik
Dirk Schulze
Dr. Matthias Hirsch

Personally liable partner::
Kiesel Verwaltungsges. mbH
Stuttgart District Court HRB 210484
Registered Office of the company:
73730 Esslingen