PRODUCT DATA SHEET

Virtually free from all shrinkage and deformation

Low-Shrink Rapid Cement

UZIN SC 980

Accelerated special cement for producing low-shrinkage, dimensionally stable screeds for interior and exterior use

Applications:

Calcium aluminate cement, category SZ-T according to TKB-Technical Briefing Note 14 for the production of rapid screeds that are quickly ready for covering, largely shrink-free and with low-stress properties, dimensionally stable, without dishing and no setting at edges, even at larger areas. Predetermined breaking points are often not necessary because the tendency to cracking is extremely low. Depending on the mixing ratio and quality of the screed sand mixed in at the construction site cementitious screeds of the strength classes CT-C25-F4, CT-C35-F5 or CT-C40-F6 according to DIN EN 13813 can be produced. For interior and exterior use.

Suitable for:

- bonded screeds
- screeds on separating membranes
- screeds on insulation (floating screeds)
- heated screeds
- screeds in outdoor locations followed by standard installation with tiles or natural stone
- very high traffic loads in residential, commercial and industrial areas, e.g. factory halls, etc. with all top floor coverings
- as system component in rapid construction

Product features & properties:

UZIN SC 980 can be mixed and pumped using normal screed techniques and is especially easy to work thanks to its smooth consistency. The rapid screed binder is the absolute problem solver in construction work with tight deadlines.

GEV-EMICODE EC 1 PLUS very low emission

Composition: Special cements, mineral aggregates, redispersible polymers and additives.

- Rapid cement class SZ-T (TKB-Technical Briefing Note 14)
- Free from deformation and low-stress
- Large areas without joints up to 200 m²
- Heat drying after 3 days
- Very easy to work
- High strength
- Quickly ready for covering, even during unfavourable weather conditions
- Waterproof
- Low chromate content acc. Regulation (EC) No. 1907/2006 (REACH)
- EMICODE EC 1 R PLUS/very low emission

Technical Data:

Packaging:	paper sack
Pack size:	25 kg
Shelf life:	min. 6 months
Mixing ratio binder/sand:	1 : 4, 1 : 5, 1 : 6 parts by
Required water quantity:	18 – 22 litres (according to sand)
Water/cement value:	max. 0.45
Colour:	grey
Consumption:	see "Applications Chart"
Working temperature:	+5 °C/41 °F to 25 °C/77 °F at floor
Mixing time:	2 – 3 minutes
Working time:	60 – 90 minutes*
Set to foot traffic:	after 12 hours*
Heat drying:	3 days after installation
Ready for covering:	after 24 hours*

* At >10 °C/50 °F and max. 80 % relative humidity.
See also "Application table as well as ready for covering".

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Substrate preparation:

Test the substrate in accordance with applicable standards and bulletins and report any deficiencies. Possible deflections of the substrate must be completed as much as possible.

Refer to the product data sheets for the products used.

Bonded screed:
Depending on condition, brush, abrade, grind or shot-blast the substrate, remove loose material and thoroughly vacuum the surface. Dampen the concrete several times. As a bonding agent, make a slurry using 4 parts UZIN SC 980, a little screed sand and 1 part water. Adjust consistency by adding water. Brush the slurry onto the pale damp or properly primed concrete using a hard broom. Apply the screed mortar immediately "wet in wet".

Screed on separating membranes or insulation:
Incorporate the separating or insulating layer without folds and with adequate overlap at the joints. Install insulating materials with adequate dynamic rigidity and that lie flat. Ensure that covering of heating pipes as well as the provision of edging strips, bay-joints and movement joints are carried out professionally.

Example for screed thicknesses based on DIN 18 560 for cement screeds corresponding to CT-C35-F5 (mixing ratio 1 : 5) for vertical loads ≤ 2 kN/m²:

Bonded screed:	min. 2.5 cm
Screed on separating membrane:	min. 3.5 cm
Screed on insulation:	min. 4.0 cm
Screed covering heating pipes:	min. 4.0 cm

Application:

1. Mix UZIN SC 980 with washed screed sand 0/8 mm (A/B 8 in accordance with DIN 1045-2) and water using screed pump or compulsory mixer. Choose cement / sand mixing ratio according to quality required, see "Application table".
2. The required amount of water (note w/z value of max. 0.45) depends on the sand moisture content. Mortar consistency should be between 'wet earth' and 'plastic', make sure no to mix too thin.
3. Only mix as much mortar as can be applied within approx. 1 hour. At breaks in work, immediately empty and clean out mixer, pump and hoses. Deliver, distribute, compact and smooth the screed very quickly. Take rapid setting into account.
4. Check the residual moisture using the CM test equipment according to current BEB bulletin. Test duration 10 min., 50 g net sample weight.

Application table:

Mixing ratio for 200 l pump with approx. 300 kg screed sand:			
Strength	**Mixing ratio**	**Consumption / mix**	**Consumption/m²**
28-day value			
CT-C25-F4	1 : 6	2 sacks (50 kg)	2.6 kg/m²/cm thickness
CT-C35-F5	1 : 5	2.5 sacks (62.5 kg)	3.2 kg/m²/cm thickness
CT-C40-F6	1 : 4	3 sacks (75 kg)	4.0 kg/m²/cm thickness
3-day value			
CT-C30-F4	1 : 4	3 sacks (75 kg)	4.0 kg/m²/cm thickness

Readiness for covering:

Mixing ratio 1 : 4	**Ready for covering value[1)]**	Experiential values of readiness for covering in days[2)]
Ceramic tiles, slabs	**≤ 3.5 CM-%**	approx. 1
Textile and resilient covering, e.g. PVC, linoleum, rubber, coatings	**≤ 3.0 CM-%**	approx. 2
Wood flooring, cork, laminate	**≤ 2.0 CM-%**	approx. 3

Mixing ratio 1 : 5	**Ready for covering value[1)]**	Experiential values of readiness for covering in days[2)]
Ceramic tiles, slabs	**≤ 3.5 CM-%**	approx. 1
Textile and resilient covering, e.g. PVC, linoleum, rubber	**≤ 3.0 CM-%**	approx. 3
Wood flooring, cork, laminate	**≤ 2.0 CM-%**	approx. 5

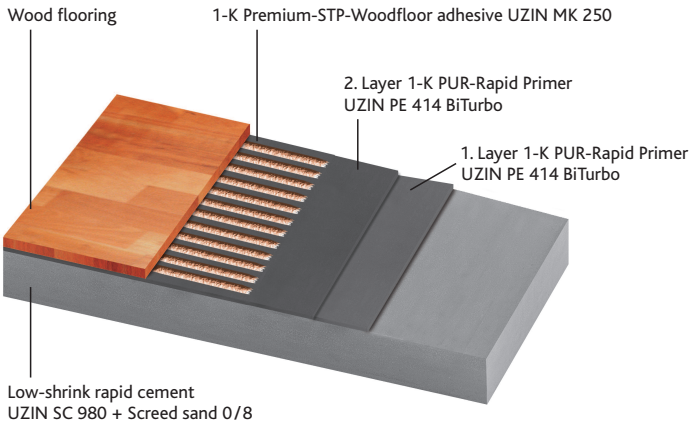
Mixing ratio 1 : 6	**Ready for covering value[1)]**	Experiential values of readiness for covering in days[2)]
Ceramic tiles, slabs	**≤ 3.5 CM-%**	approx. 2
Textile and resilient covering, e.g. PVC, linoleum, rubber	**≤ 3.0 CM-%**	approx. 5

[1)] At >10 °C / 50 °F and max. 80 % rel. humidity and a screed thickness of 40 – 55 mm insulation or separation layer.

[2)] Our experience of many years has shown that the "Days until readiness for covering" are reached at customary construction site conditions.

Applications:

Installation of wood flooring on rapid screed cement with UZIN SC 980 with max. residual moisture of 3.5 CM-% (e.g. screed 2 days old) with mix ratio 1 : 4 or 1 : 5:



UZIN SC 980

Important notes:

- Shelf life at least 6 months in original packaging when stored in dry conditions. Tightly re-seal opened packaging and use the contents as quickly as possible.
- Heat drying: Refer to separate heating protocol when used as heated screed. Refer to the Internet at (www.uzin.com or www.codex-x.com).
- Under coatings use the mixing ratio 1 : 4.
- According to BEB specification sheet 9.1 „surface line- and tensile bond strength of floors" the surface line strength of screeds covered with reaction resins in combination with driving load is at least 1,5 N/mm².
- Under wood flooring use the mixing ratio 1 : 5.
- In outdoor locations prior to installation of tiling or natural stone a seal-coat, e.g. of codex NC 210 or codex AX 220 must be applied.
- For surfaces exposed to constant freeze-thaw conditions, in outside locations as well as for surfaces that will be used without a covering or protective coating, technical advice should be obtained.
- UZIN SC 980 is not suitable for use in under-water locations.
- Low temperatures, high humidity and greater thickness will delay whilst high temperatures will accelerate setting, drying and readiness for covering. Protect freshly installed screeds from strong draughts, direct sunlight and sources of heat.
- The temperature of room, substrate and additive must not fall below +5 °C and not exceed +25 °C.
- Install screeds only in dry and closed rooms as well as protected against draughts.
- To ensure a higher screed quality where there is uncertainty as to sand quality or moisture content, for the same amount of binder add a little less sand (approx. 4 shovels) and less mixing water to the mixing container. Do not completely fill the mixer.
- Quality factors: Readiness for covering and strength depend, amongst others, on the amount of water used. With a lower water quantity the screed mortar has a stiffer consistency but with good compaction a higher strength and quicker readiness for covering. Too much water reduces the strength, delays drying, increases shrinkage and the risk of cracking.
- Follow the generally acknowledged rules of the trade and of technology for screed installation of the respective applicable standards (e.g. EN, DIN, VOB, Ö-Norm, SIA, etc.) The following standards and bulletins represent supporting information and are recommended for special attention.
  - TKB-Technical Briefing Note 14 "rapid cement screeds"
  - DIN EN 13 813 "Screed material and floor screeds"
  - DIN 18 353 "Screed works"
  - DIN 18 195 „Waterproofing of buildings – Vocabulary"
  - DIN 18 534 „Waterproofing for indoor applications"
  - DIN 18 560 "Screeds in the building industry"
  - ZDB bulletin "Pipes, cables and cable ducts on bare floors / ceilings"
  - "Interface coordination with heated floor constructions"

Protection of the Workplace and the Environment:

Contains cement low in chromate acc. Regulation (EC) No. 1907/ 2006 (REACH). Cement produces strong alkaline on reaction with water. Avoid contact with skin and eyes. In the event of contact, rinse immediately with water. In the event of skin or eye irritation, seek medical advice. When mixing wear a protective dust-mask. Use protective gloves. Presents no physiological or ecological risk when fully cured.

Basic prerequisites for best possible indoor air quality following floor covering work are conformity to standards of the working conditions, as well as thoroughly dry substrate, primer and smoothing compound.

EMICODE EC 1 R PLUS – very low emission.

Disposal:

Where possible, collect product residues and re-use. Do not allow dispersal into drains, sewers or ground. Empty paper packaging is recyclable. Collect waste material, mix with water and allow to harden, then dispose of as Construction Waste.