

Rapid cement

# UZIN SC 960

Ternary binder for creation of rapid cementitious screeds in interior and exterior areas with a drying time of 1 to 7 days, CT-C25-F4 to CT-C40-F7

**MAIN APPLICATION FIELD:**

- ▶ creation of a fast curing cement screed that is quickly ready for covering with strength class CT-C25-F4 up to CT-C40-F7 according to DIN EN 13 813

**SUITABLE ON / FOR:**

- ▶ bonded screeds according to DIN 18 560 - part 3
- ▶ unbonded screeds according to DIN 18 560 - part 4
- ▶ screeds on insulating layer according to DIN 18 560 - part 2
- ▶ heated screeds on insulating layer according to DIN 18 560 - part 2



**PRODUCT BENEFITS/FEATURES:**

UZIN SC 960 is a rapid cement binder according to class SZ-T, TKB leaflet 14, with better water binding properties compared to regular portland cement. Ready for covering after 1 day due to accelerated curing and drying. For interior and exterior use

- ▶ ready for covering after approx. 1 day
- ▶ high strength
- ▶ water and frost resistant
- ▶ for all screed constructions



**TECHNICAL DATA:**

Packaging	paper bag
Pack size	25 kg
Shelf life	min. 6 months
Mixing ratio	1:4, 1:5, 1:6 parts per weight
Water / cement value	max. 0.45
Consumption	see "Application Chart"
Working time	40 - 60 minutes*
Ready for foot traffic	after 3 - 5 hours*
Functional heating	3 days after installation*
Ready for covering	from 24 hours*
Minimum application temperature	5 °C at ground level

\*At >10 °C and max. 80% relative humidity, depending on screening line and w/z value.



## SUBSTRATE PREPARATION:

Test the substrate in accordance with applicable standard or notices and report any deficiencies. Possible deformations in the substrate should be inhibited as far as possible.

### Bonded screeds:

Depending on condition, brush, abrade, grind or shot-blast the substrate, remove loose material and thoroughly vacuum the surface. Install UZIN Foam Espansion Strip 8/100 at all rising building elements. Dampen the concrete several times. Create a bonding slurry (4 parts UZIN SC 960, some screed sand and 1 part water) and apply it onto the damp or properly primed concrete using a hard broom. Apply the screed mortar immediately "wet in wet".

### Unbonded screeds or screeds on insulating layer:

Install UZIN Foam Espansion Strip 8/100 at all rising building elements. Properly clean the supporting substrate and install the separating membrane crease-free and with sufficient overlapping at the joints. Install insulations with sufficient dynamic stiffness and lay flat. Pay professional attention when covering heating pipes, as well as Foam Expansion Strips, bay joints and movement joints.

The datasheets for other used products have to be observed.

## APPLICATION:

- Mix UZIN SC 960 with washed screed sand 0/8 (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".
- 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 not to mix too thin.
- Mix only as much mortar as can be applied within approx. 1 hour. During work breaks, empty and clean out the mixer, pump and hoses immediately. Deliver, distribute, compact and smooth the screed very quickly. Take rapid setting into account.
- Check the residual moisture using the CM test equipment according to current BEB bulletin. Test duration 10 min., 50 g net sample weight.

## READY FOR COVERING:

Bodenbelag	Belegreifewert	Belegreife in Tagen
Ceramic tiles	≤ 3.5 CM-%	after approx. 1 day*
Textile floor coverings	≤ 3.0 CM-%	approx. 2 days*
Resilient floor coverings, PUR coatings	≤ 2.5 CM-%	approx. 5 days*
Wood flooring	≤ 2.0 CM-%	approx. 7 days*

With wood flooring always wait for 2.0 CM-%.

\*At >10 °C and max. 80% relative humidity, with shock ventilation and screed thickness from 40 - 55 mm on insulating or separating layer.

### Mixing ratio for 200 l pump with 300 kg screed sand:

Festigkeit	MV	Verbrauch / Mischung	Verbrauch / m <sup>2</sup>
CT-C25-F4	1 : 6	2 bags (50 kg)	2.6 kg/m <sup>2</sup> /cm
CT-C35-F6	1 : 5	2.5 bags (62.5 kg)	3.2 kg/m <sup>2</sup> /cm
CT-C40-F7	1 : 4	3 bags (75 kg)	4.0 kg/m <sup>2</sup> /cm

Example for screed thicknesses according to DIN 18 560 for cement screeds corresponding to CT-C35-F6 (mixing ratio 1:5) for vertical loads ≤2kN/m<sup>2</sup>:

Konstruktionsart	Mindestschichtdicke
Bonded Screed	2.5 cm
Screed on separating layer	3.5 cm
Screed on insulating layer	4.0 cm
Covering of heating pipes	4.0 cm

## IMPORTANT NOTES:

- ▶ A shelf life of 6 months when stored in dry conditions, in the original packaging. Carefully and tightly reseal opened packaging and use the contents as quickly as possible.
- ▶ Best applied between 15 - 25 °C and relative humidity below 65%. Low temperatures, high humidity, little air circulation, dense substrates and large thickness will delay the setting and drying time. Whilst high temperatures and low humidity, strong air circulation and absorbent substrates will accelerate setting, drying and readiness for covering. In summer, store in cool conditions and use cold water.
- ▶ The technical properties of the on-site mixed screed have to be pre-tested and repeated periodically by the screed installer. If there are changes in the starting material, the pre-test has to be done once again.
- ▶ Heat drying: Refer to separate heating protocol when used as a heated screed. The protocol can be downloaded from the internet.
- ▶ Use a mixing ratio of 1:4 under coatings. 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/mm<sup>2</sup>.

- ▶ Re-moisture does not occur under normal site conditions. Avoid exposure to moisture.
- ▶ In wet or exterior areas, e.g. bathrooms, prior to installation of ceramic tiles or natural stone, a suitable seal-coat of a suitable codex product has to be installed. Obtain technical advice if necessary.
- ▶ 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.
- ▶ Not suitable for use in underwater locations.
- ▶ 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.
- ▶ Do not mix with different screed cements or additives.
- ▶ Follow the generally acknowledged rules of the trade and technology for the installation of wood flooring and floor covering in respective of the applicable national standards (e.g. EN, DIN, OE, SIA, etc.)

## SEALS OF QUALITY & ECOLABELS:

- ▶ Low chromate content acc. Regulation (EC) No. 1907/2006 (REACH)
- ▶ EMICODE EC 1 PLUS / Very low-emission

## COMPOSITION:

Special cements, mineral aggregates, redispersible polymers and additives.

## 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. Use protective gloves. When mixing wear a protective dust-mask. 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.

## DISPOSAL:

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