CN 82

Cement flooring for manual and mechanical application

For floor underlays from 10 to 80 mm thick

CHARACTERISTICS

- mechanical and manual application
- for producing floorings and floor underlays (including heated ones) for
- producing falling and pressing layers
- high compressive strength of C20
- low contraction
- pedestrian traffic just after 24
- hours tile laying just after 7 days
- frost and waterproof for indoors
- and outdoors
- easy to use

APPLICATION

The Ceresit CN 82 is used to produce floor underlays:
– bonded to the cement substrate, with a thickness of 10 to 80 mm,
– on a separating layer (e.g. foil, paper), with a thickness of 35 to 80 mm,
– "floating" on the thermal or acoustic insulation layer, with a thickness of 45 to 80 mm,
– with water heating, with a thickness of 45 to 80 mm. Increase the minimum thickness of 45 mm by the outer diameter of the heating pipes.

The Ceresit CN 82 can be used to produce floorings in individual garages, utility rooms, cellars, flats, in public facilities such as schools, kindergartens, offices, hospitals, etc. The mortar can be used for repairing floorings and concrete elements. The Ceresit CN 82 is resistant to water and frost. It can be used to produce falling and pressing layers on balconies and terraces.

The mortar mixed with water has a thick-plastic consistency that allows falls to be formed. It can be used to produce unreinforced or reinforced floorings, both inside and outside buildings. The Ceresit CN 82 mortar screed can be used as an underlay for ceramic tiles, panels, floorboards not bonded to the substrate or for Ceresit self-levelling or poured mortar floorings. The CM 82 can be used in ecological and energy efficient buildings as well as in passive buildings.

SURFACE PREPARATION

The substrates to which the Ceresit CN 82 floor underlay will be bonded must be firm, rough, dry and free from substances that reduce adhesion (such as grease, bitumen, dust):
– concrete (not earlier than 3 months after casting, moisture content ≤ 4%),
– cement screed (more than 28 days old, moisture content ≤ 4%). Remove contamination, existing paint coatings, adhesive residues and low-strength layers mechanically, e.g. by shot blasting or milling.

It is recommended to execute screeds on a separating layer in case of moist, oily, otherwise contaminated or low-strength substrates. Level the substrate for this purpose, and chisel off any protruding, sharp fragments. Cover the levelled substrate tightly, e.g. with building foil, maintaining a 10 cm overlap and extending it over the walls. Lay the insulation boards on the levelled substrate in the case of "floating" underlays. Fix the boards tightly fitting to each other, in a single plane, maintaining a staggered pattern of the vertical joints. Cover the insulation layer tightly with building film.

Use a reinforcement mesh made of 4 mm diameter steel bars with a spacing of 10x10 cm, 15x15 cm or 6 mm diameter steel bars with a spacing of 20x20 cm when producing a reinforced flooring.

CERESIT
CN_82_KT_10.2

PERFORMANCE

Mix the Ceresit CN 82 with water at a ratio of 2.1 l to 2.4 l water for 30 kg of mortar. The mortar should have a thick-plastic, semi-dry consistency when mixed with water. Mix and apply the Ceresit CN 82 using suitable mixing and pumping units.
When applied manually, pour the contents of the package into a measured amount of 3.6 l of clean, cool water and mix with a drill mixer until a homogeneous, lump-free mixture is obtained. With a larger scope of work, the mortar can be mixed in a counter-rotating concrete mixer.
Lay the mortar on the contact layer in the case of bonded layers. Vacuum the substrate and then moisten it with plenty of water without creating puddles. Apply the contact layer to the moistened substrate, made as follows: dilute 1 part by volume of the Ceresit CC 81 emulsion with 2 parts of clean, cool water. Mix the resulting solution with the Ceresit CN 82 dry mix (0.75 l of solution per 3.5 kg of mortar) using drill mixer. Distribute the contact layer evenly with a brush as the work progresses. In areas that are difficult to reach, it can be applied with a brush generously. Spread the finished mixture on the wet contact layer.
Drag down the Ceresit CN 82 mortar with a batten along pre-prepared, mortar-embedded, levelling guides (e.g. tubing or metal angles) or drag down with a two-metre levelling batten maintaining the appropriate level or fall. The guides can be left in the Ceresit CN 82 or removed immediately after levelling the flooring and the resulting cavities filled with mortar and smoothed.
The Ceresit CN 82 has a thick-plastic consistency and requires thickening. Tamping with a trowel is possible, but for larger areas compact the mortar with a vibrating batten and rotary trowels. Trowel the Ceresit CN 82 manually with a trowel or with mechanical trowels after a time to allow the surface to be worked.

CAUTION

Mixing the Ceresit CN 82 mortar with a larger amount of water will result in a decrease in the strength parameters and an increase in the contraction of the flooring. Perform the work in dry conditions, with air and substrate temperatures between +5°C and +25°C. Fresh mortar contamination can be washed off with water and hardened mortar can be removed mechanically. Ceresit CN 82 contains cement and is alkaline when mixed with water. Protect your skin and eyes. In case of contact with eyes, rinse thoroughly with plenty of water and seek medical advice. Chromium (VI) contents below 2 ppm by the best before date.

RECOMMENDATIONS

Protect the finished flooring against too rapid drying caused by draughts or strong sunlight. If necessary, treat the Ceresit CN 82 e.g. by sprinkling with water, covering with foil, etc. If there are expansion joints in the substrate, these must be recreated in the underlay layer. Cut the anti-contraction joints at least every 6 m and at the thresholds of the rooms. The achieved rectangular areas must not exceed for indoor applications 36 m_2. If the flooring will be applied outdoors or will be exposed, e.g. to large temperature fluctuations, strong sunlight, etc., the expansion area should not exceed 25 m_2. Maintain proportions close to a square when taking the length and width of the areas. The ratio of length to width of the area must not exceed 1.5-2.0. When the underlay is exposed to temperature fluctuations, cut it completely with expansion joints at the maximum sizes of expansion joints as above. Perform also perimeter expansion joints around walls, columns, etc. with a width of 0.5 to 1.0 cm. After 5 days from execution, mineral insulations can be applied on the underlay. After 7 days, ceramic tiles can be fixed with Ceresit CM mortars or Ceresit self-levelling mortars can be poured. In the case of heated underlays, the heating can be switched on no sooner than 28 days after the underlay is made, increasing the temperature by no more than 5°C per day until the maximum working temperature is achieved, which must be maintained for 3 days. Then the temperature of the underlay can be reduced, but not faster than 10°C per day. At the time of fixing ceramic tiles or pouring self-levelling masses, the temperature of the underlay must be between +15°C and +18°C.

STORAGE

Up to 6 months from the production date, when stored on pallets, in dry conditions and in the original, undamaged packaging.

PACK SIZE

30 kg bag

TECHNICAL DATA

Base:	ready dry mixture based on hydraulic binders, modifiers and mineral fillers
Bulk density:	approx. 1.8 kg/dm_3
Mixing proportions:	–mechanical application: 2.1-2.4 l of water per 30 kg –manual application: 3.6 l of water per 30 kg
Working time:	up to 60 min
Pedestrian traffic:	after 24h
Compressive strength:	C20
Bending strength:	F4
Contraction:	–0.80 mm/m
Reaction to fire:	class $A1_fl$
Volatile organic compound emissions:	The CN 82 can be used in rooms of category A and B intended for permanent human residence, according to the Ordinance of the Minister of Health and Welfare of 12.03.1996. The time necessary to achieve the permissible concentrations – as soon as the required mechanical characteristics of the flooring are achieved.
Approximate yield:	–CN 82 mortar: approx. 2.0 kg/m_2 for each mm of thickness –contact layer: approx. 0.25 l CC 81 + 3,5 kg CN 83 + 0,5 l of water

–The product has a National Technical Assessment No. ITB-KOT-2018/0618 1st edition.

Any technical advice can be obtained from the telephone numbers:
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