# **CN 85** TURBO

## **Binder for screeds**

Hydraulic binder, for the production of cement-based screeds, with fast hardening - thickness up to 80 mm

#### FEATURES

- For inside and outside
- Fast hardening
- ▶ Passable after 6 hours
- Recommended for renovation work
- Can be covered after 24 hours
- Parquet coating after 5-7 days (depending on thickness, temperature and application method)
- ► Machine application possible





#### FIELDS OF APPLICATION

CN 85 is a cement-based binder Screeds prepared with CN 85 have a fast hardening and reduced shrinkage. For indoor and outdoor use Floating or adhesive screeds can be prepared with strengths from CT-C20-F4 to CT-C30-F5 in accordance with SR EN 13 813. For the production of screeds that are subsequently covered with parquet, PVC, carpet and ceramic tiles. It can also be used for screeds in which underfloor heating systems are embedded. For renovations, especially for the restoration of existing cement-based screeds that need to be used in a short time. For the production of quick-setting screeds used as a support in the case of cladding with natural stone, marble or granite, thus avoiding staining of the tiles.

#### PREPARATION OF BASE SUERFACE

The support surface must have a rough appearance, with open pores and good adhesion. The support must: have no structural defects, no hollow-sounding, have adequate resistance to compression (>15 N/mm<sup>2</sup>) and stretching, be permanently dry (humidity < 2% CM), without cement milk on the surface, without contamination and traces of adhesives, paint , wax, oils or traces of plaster, which could impair the adhesion. Hollow-sounding and friable surfaces must be removed. The support surface must be cleaned, we recommend sanding with the monodisc, and then the dust should be vacuumed.

#### **APPLICATION MODE**

CN 85 can be prepared with machines or in a concrete mixer on site. Depending on the desired resistance class, CN 85 is used in a 1:8 ratio with 0-8 mm granulation aggregates, of which 70% are aggregates of 0-4 mm and 30% gravel of 4-8 mm. The mixture ratio for a 100 I mixer is: 20 kg

CN 85, 140 -160 kg aggregate and 8 to 10 l of water depending on the humidity of the aggregate). The application of the screed is done in a continuous process: preparation, application, levelling (manual or mechanized). After starting the setting, it should be no longer diluted with water or mixed with fresh material. It is recommended that during application, the screed be compacted by pressing. For large areas, it should be worked on portions that can be covered while the mixture is still workable. Do not mix with any other additives, binders or other cement-based products. Do not mix the CN 85 with fine sand, but only with the recommended one, i.e. aggregates with granulometry of 0-8 mm. The screed will be applied while the mixture is still wet. Do not prepare more screed than can be used during the working time mentioned in this technical sheet (max. 40 minutes). Passable after 6 hours . Underfloor heating can only be used 7 days after application, with previously checking the humidity and gradually increasing the temperature (pre-heating).

The heating pipes will be covered with a screed layer > 20 mm; the thickness of the final layer must be greater than 60 mm. The screed produced with the CN 85 Turbo binder can be helicoptered.

**Cladding with natural or artificial stone**: For cladding with natural stone tiles where staining must be avoided, the consistency must be adjusted so that the mortar must be plastic-slurry (mixture ratio 1:8 binder/sand 0-8 mm).

The tiles should be applied wet-on-wet on a 3-5 cm thick layer of mortar, depending on the thickness of the tiles. The mortar must be applied according to the usual methods used in the construction site.

A brush should be used to cover the back of the tiles with an adhesive paste made from a mixture of CN 85 with CC 81.

Excess material can be washed off with water while it is still wet, but once hardened can only be removed mechanically.

In the case of floating screeds with a thickness of 45-80 mm, it is recommended to reinforce the Ceresit CN 85 with welded mesh. Perimeter joints of 1 cm will be provided.

The mixture of water and binder aggregates is poured onto the substrate over which a polyethylene film or any other waterproofing material has been previously applied. If the support is deformable (expanded polystyrene, mineral wool, etc.), it is necessary to reinforce the screed (with welded metal mesh).

In the case of application directly on concrete (in adhesion), thickness 15-60 mm, the surface is primed with a mixture (spray) of Thomsit R 777 + Ceresit CN 85 in a ratio of 1:1 (undiluted primer R 777). The application of this mixture will be done with the brush. If the support is made of helicoptered concrete and it is desired to pour directly on the concrete (in adhesion), then it is necessary to grind the support (with the monodisc). In the case of this application method, the screed drying time is prolonged (it is influenced by the hydration of the support when applying the "cement milk").

**Attention!** The substrate must not be excessively moistened, because residual moisture adversely affects the drying of the screed and initial adhesion. The screed will be applied on the wet primed surface. If there are expansion joints in the floor, the pouring of the screed must be stopped right next to them. Special profiles or strips will be used in those areas. CN 85 can be used in dry conditions and at temperatures between +5°C and +30°C. It is recommended to apply self-levelling screeds over the CN 85 to reduce consumption of adhesives used for subsequent finishes. Please consult the Henkel specialists for recommendation of suitable self-levelling screeds for the desired coatings.

CN 85 contains cement and, and in reaction with water, it produces an alkaline solution. Therefore, skin and eyes must be protected. In the case of contact with the skin, rinse with water, and in the case of contact with eyes, consult a doctor immediately. During the pouring of the screed, it is recommendable to cut joints at 12 - 15. All data presented here are obtained at a temperature of +23°C and relative humidity of 50%. Under different conditions, hardening can be slow or accelerated.

#### **OTHER INFORMATION**

This Technical Data Sheet shows how to use the product, as well as how to apply it, but all of this also depends on the professional training of the user.

The mentioned properties are based on practical experience and practical checks. The specific conditions of the object, but also the correct and successful use of our products are not within our sphere of influence. For this reason, if you have any doubts, the quality of the product must be verified by your own experiences. By issuing this technical sheet of observations, all previous ones lose their validity.

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EN 13813:2002			
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Hydraulic binder, for the production of cement-based screeds for use for indoor and outdoor			
EN 13813 CT – C30 – F5			
Reaction to fire: Emission of corrosive substances: Water permeability: Water vapor permeability: Compression strength: Bending strength: Wear resistance: Noise isolation: Noise absorption: Thermal resistance: Chemical resistance:	A1fI CT NPD C30 F5 NPD NPD NPD NPD		

#### STORAGE

6 months from the date of manufacture in dry conditions and in undamaged packaging.

#### PACKAGING

20 kg paper bags with ultrasonic closure.

### **TECHNICAL DATA**

Base:	combination of cement with synthetic resins and high-quality additives (low chromium content <2 ppm)		
Bulk density:	approx. 0.9 kg/dm³		
mixture ratio:	one part CN 85 to 8 parts aggregate 0-8mm 20 kg (one bag): 140 - 160 kg aggregate and 8 to 10 l of water depending on the humidity of the aggregate).		
Mixing time:	5–10 minutes		
Application time:	40– 60 minutes		
Consumption, for information only 2-2.5 kg/m²/cm thickness			
Passable after	6 hours		
Residual moisture after 24 h: ≤ 3,5% CM			
Time after which finishes can be applied	24 ore for ceramic tiles. 5-7 days in the case of massive		
parquet Operating temperature:+5 to +30°C			

The product is classified CT-C30-F5 according to EN 13.813

