

# PUMPABLE FLOORING SYSTEM FOR COMMERCIAL AND RESIDENTIAL BUILDINGS

## PRODUCT DESCRIPTION

CEMDECO 400 is a pumpable self smoothing screed formulated from High Alumina Cement. It is a pre-blended dry powder and in combination with CEMDECO AB, designed for decorative finishing.

## APPLICATIONS

CEMDECO 400 is designed for use as a top layer. After application of the decorative finishing it is suitable in domestic, residential and commercial buildings.

## INSTALLATION

CEMDECO 400 can be applied with an automatic continuous mixer pump. 48 hours after the drying, the surface can be finished with CEMDECO AB in the desired colour. Ultimately, immediately after drying of the CEMDECO AB the surface can be finished with the matte and transparent coating CB FLOORSEALER 2C.

CEMDECO 400 has a very good liquidity and provides a very smooth surface.

## TECHNICAL DATA

Water content 18%. 50% RH and temperature of 20°C during processing

Flexural strength	8 N/mm <sup>2</sup> after 28 days
Compressive strength	40 N/mm <sup>2</sup> after 28 days
Adhesion to subfloor	≥ 2 N/mm <sup>2</sup>
VOC-value	free from ammonia and formaldehyde
Particle size	max. 1 mm
Free shrinkage	< 0,55‰ (measured at 50% RH)
pH-value	approx. 11,5
Flow ring test (SS 923519 (diam.50x23mm))	150 - 155 mm
Water stability	water stable (expansion under water < free shrinkage)
Material consumption	approx. 1,75 kg per mm thickness/m <sup>2</sup>

## PROCESSING DATA

Water admixture	18% (4,5 liter/ 25 kg bag)
Min. floor temperature	+6 °C
Dry powder density	approx. 1,6 g/cm <sup>3</sup>
Wet density	> 2 g/cm <sup>3</sup>
Open time	approx. 15 minutes depending on temperature
Layer thickness	6-10 mm (max 30 mm)
Curing time	1-2 hours for foot traffic 24 hours for light traffic 1 week for full loads
Storage	6 months in dry conditions, max. 20°C and 50% RH

**SUBFLOOR AND PREPARATION**

CEMDECO 400 should be laid on a stable and well-prepared subfloor.

The surface to be treated must be hard, sound and free from surface contamination, all dust should be vacuumed from the surface. Concrete laitance and old coatings should be removed mechanically e.g. by enclosed shot blasting, scabbling or scarification. Concrete contaminated by oil or grease may require flame gunning and/or treatment with a proper degreaser. All loose parts and parts that can interfere with bonding must be removed and a bond strength of at least 1.5 N / mm<sup>2</sup> is required. Any joints, cuts and expansion joints should be repeated.

**MIXTURE**

CEMDECO 400 can be mixed in an automatic continuous mixer pump. Only use clean potable water with a max. temperature of +20°C at a rate of 4,5 liter per 25 kg bag. The mixed material should be used within 15 minutes.

Flowing lines and color nuances are a typical aesthetic aspect in pigmented cementitious floor systems.

**CLEANING**

All tools and equipment should be cleaned promptly with water.

**APPLICATION**

Door thresholds, stairs, drains and gullies should be isolated with foam barrier strips. Larger areas should be divided into bays. Normal width of the bay is 8 -12 metres, depending on the pump capacity.

It is advisable to provide an edge decoupling (edge strip of at least 5 mm) along walls, around columns and other fixed elements. After application, it must be filled with a compressible material

**POST-TREATMENT - MAINTENANCE**

It is recommended to protect CEMDECO 400 after curing (min. 48 hours) with our appropriate coating CB FLOORSEALER 2C. Applying a protection does not replace the daily maintenance of the floor.

**HEALTH AND SAFETY**



Contains cement, cement moist is corrosive. Protect eyes and prevent prolonged skin contact, keep out of reach of children. CEMDECO 400 does not contain casein or other protein bearing additives that develop ammonia during the curing process.

**Transport:** No classified product

**GENERAL**

The general information provided in the present technical description, application guidelines and other recommendations, is based on research and experience. However, the client is obliged to determine himself whether the products are suitable for use. The characteristics given here are average values, obtained at 20°C and 50 RH, and were drawn up according to the current state of technology. As of publication, the present technical descriptions will replace all previous ones.

Please take into account different local conditions such as ventilation, floor temperature and humidity.  
Do not process at temperatures below +10° C.  
High humidity and low temperatures slow down the curing.  
Do not add other products!

CEMDECO 400 is a rigid, non-structural topping. It is not possible to predict the appearance of micro-cracking in a non-structural topping and such overlayers may not be capable of restraining movement from the substrate. Reflective cracks may appear due to vibration, substrate flexure or existing joints and cracks.

CEMDECO 400 is designed as a wear surface for foot traffic or rubber wheeled traffic. The result of highly localized imposed loads, such as steel or hard-plastic wheeled traffic, heavy metal equipment, or pallets with protruding nails, may cause abrasion or gouging to the flooring surfaces.

Consult our web site [www.cemart.eu](http://www.cemart.eu) to download the latest version of our technical data sheet.



Cemart NV, Maatheide 76E, B-3920 Lommel



**EN 13813 CT-C40-F8 - Cementitious screed**

<b>Reaction to fire</b>	A2 <sub>FL</sub> -S1	<b>Wear resistance</b>	A9
<b>Release of corrosive substances</b>	CT	<b>Sound insulation</b>	NPD
<b>Water permeability</b>	NPD	<b>Sound absorption</b>	NPD
<b>Water vapour permeability</b>	NPD	<b>Thermal resistance</b>	NPD
<b>Compressive strength</b>	C40	<b>Chemical resistance</b>	NPD
<b>Flexural strength</b>	F8		

NPD = No Performance determined