




KÖSTER CT 228 Flex

Technical Data Sheet CT 228

Issued: 2020-03-18

2-component, viscoplastic, brushable, rollable and sprayable epoxy resin for heavy-duty corrosion protection of concrete and steel surfaces

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 20 CT 228 EN 1504-2: 2004 Surface Protection Surface - Coating EN 1504-2: ZA. 1f
Abrasion resistance	AR 0.5
Capillary absorption and permeability to water	$w < 0.1 \text{ kg (m} \cdot \text{h)}$
Impact resistance	No cracks or delamination, Class 1
Water vapor permeability	$SD \geq 7.3 \text{ m}$ (Class II)
Adhesive tensile strength	$\geq 2.0 (1.5 \text{ N/mm}^2)$
Reaction to fire	Class E fl

Features

KÖSTER CT 228 Flex is a two-component epoxy resin product which, due to its tough elastic properties, can be used for the mechanical and chemical surface protection of concrete and steel. The material is characterized by its high surface hardness and is able to bridge cracks forming in the ground. The material has excellent adhesion to mineral substrates (except gypsum), as well as to steel and stainless steel.

Technical Data

Consistency (+ 20 °C)	ca. 1600 mPa·s
Density	ca. 1.2 kg/l
Mixing ratio (A:B)	3:1
Pot life (+10 °C, + 20 °C)	60 min, 40 min
Color	Similar to pebble grey, RAL 7032 (further colors on request)
Adhesive tensile strength Standard concrete C25	$\geq 1.5 \text{ N/mm}^2$
Steel (DIN EN ISO 12944-4, Ry 50 > 4 N/mm ² µm)	$\geq 1.5 \text{ N/mm}^2$ (failure in concrete)
Can be overworked after	approx. 24 h

Fields of Application

KÖSTER CT 228 Flex serves as a protective coating for surfaces made of concrete and steel and can be applied to both horizontal and vertical surfaces (with the addition of 6% KÖSTER KB-Pox Thickening

Agent). In addition to its use in industrial plants and agricultural structures (wastewater treatment plants, biogas plants), KÖSTER CT 228 Flex is suitable for surface protection for heavily loaded industrial floors. If higher slip resistance than R9 is required, KÖSTER CT 228 Flex can be structured with a variety of kiln-dried broadcast materials or as a scratch coat by stirring in kiln-dried fillers.

Furthermore, KÖSTER CT 228 Flex is suitable as a chemically and mechanically resistant top sealer for sprinkled epoxy resin compounds or can serve as a top seal for thick-layered surface protection systems of trafficked areas over a scraped fill.

Substrate

Concrete: dry, free from loose particles. When applying to floors, the substrate is mechanically prepared by means of shotblasting or grinding and subsequent shotblasting, whereby detail and edge areas which are not exposed to a strong mechanical traffic load can be prepared by grinding alone. The substrate is vacuumed off to obtain a dust-free surface. Strong subsurface roughness of mineral surfaces may be treated with a scratch coat primer or an epoxy resin screed, for example with KÖSTER Construction Resin or with KÖSTER leveling compounds (such as KÖSTER SL Protect or indoors with all KÖSTER SL types). If the concrete substrate shows cracks, they are flush-sealed with KÖSTER KB-Pox IN through saturation and then broadcast with fire-dried quartz sand, if necessary. In wall areas, the concrete surface is mechanically prepared by sandblasting to obtain a rough surface free of adhesion-reducing substances.

The adhesion values of prepared concrete surfaces must not be less than 1.5 N / mm². Damaged concrete surfaces are to be removed down to healthy concrete. The surfaces must be free of acids or other contamination. The prepared concrete surface must be primed with KÖSTER construction resin (up to 4% residual concrete moisture), KÖSTER CT 121 or KÖSTER LF-BM (up to 6% concrete residual moisture), with KÖSTER CT 226, or with a scratch-troweled primer until it is even and free of voids. Prepare area.

If moisture from behind the slab is to be expected, prime with KÖSTER VAP I 2000.

Steel: dry, free from loose components, free from oil and grease. Steel surfaces must be prepared in accordance with DIN ISO 12944-4 by means of blasting to a degree of purity of at least SA 2 ½, (mean roughness of at least 50 µm) or in the case of manual removal by means of a steel brush to SA 3. Weld beads and seams must be

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removed. Edges must be smoothed by grinding and can optionally be revised with KÖSTER CT 228 Flex (with the addition of 6% KÖSTER KB-Pox Thickening Agent). Dust etc. must be removed without leaving any dry residue.

KÖSTER Spiked Roller
KÖSTER KB-Pox IN
KÖSTER SL Premium

Prod. code CT 914 001
Prod. code IN 231
Prod. code SL 280 025

Application

The processing temperature must be at least +3 ° C above the dew point (see KÖSTER dew point table at www.koester.eu). The components must have a temperature between + 15 ° C and + 25 ° C, and are mixed intensively with a mechanically operated stirrer (≤ 300 rpm) until homogenous consistency is reached. After a mixing time of approximately 2 minutes, the material is repotted and remixed for another minute.

For concrete substrates, the application is carried out by means of a notched trowel, which is adjusted to the planned layer thickness. For layer thicknesses above 0.5 mm, roll with a spiked roller in two directions. As a top coat, rewind with a short-napped epoxy grade roller (such as a KÖSTER Resin Roller 250 mm) in two directions. The minimum consumption coating works is 600 g / m².

Steel: For steel, the material is applied with a PE foam roller, spray application, or brush in at least two layers. The waiting time between layers may not exceed 24 hours and before the application of the second layer the first layer must be tack-free. Optionally, the first layer can be installed with KÖSTER Corrosion Protection, if increased anti-rust protection is required. For the coating of vertical surfaces, 6% KÖSTER KB-Pox Thickening Agent is mixed in before application.

Consumption

min. 600 g/m²

Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner.

Storage

Store frost free between + 5 °C and + 25 °C. In originally sealed containers it can be stored for a minimum of 12 months.

Safety

Avoid breathing vapors and skin contact. Wear protective gloves and safety glasses as well as other suitable protective. Observe the hazard warnings on the containers and the safety advice on the safety data sheets. Observe all governmental, state, and local safety requirements when installing the material.

Other

Liquid polymers react to temperature fluctuations by changing their viscosity and/or curing behavior. Application should only be carried out during falling or constant temperatures. Low temperatures will slow the reaction; high temperatures and mixing large volumes will increase the reaction rate. Protect the coating from moisture of all kinds during application and curing.

Related products

KÖSTER VAP I 2000	Prod. code CT 230
KÖSTER VAP I 2000 FS	Prod. code CT 233
KÖSTER Corrosion Protection	Prod. code CT 283 006
KÖSTER KB-Pox Thickening Agent	Prod. code CT 764

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