



KÖSTER UC 200

Technical Data Sheet CT 252 020

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Self-leveling, temperature resistant, abrasion resistant, chemically resistant polyurethane cement floor covering

Features

KÖSTER UC 200 is a 3 component aromatic urethane cement flooring system. It is highly abrasion resistant and is also resistant to aggressive chemicals. It is resistant to impacts and temperature shock. KÖSTER UC 200 is applied in layers between 3 and 9 mm.

The following characteristics distinguish KÖSTER UC 200:

- Superior adhesion
- Superior impact resistance
- Superior chemical resistance
- Easy maintenance
- Good thermal shock resistance
- Can be applied to 7 day old concrete
- Generally no primer necessary
- One coat system

Technical Data

Color	Pebble grey, other colors available
Mixing ratio	pre-measured kit
Pot life at + 23 °C	approx. 15 min.
Application temperature	+ 5 °C to + 25 °C
Density	1.3 g / cm ³
Application thickness	3 mm - 9 mm
Compressive strength (7 days)	> 40 N / mm ²
Flexural tensile strength (7 days)	> 10 N / mm ²
Tensile strength (7 days)	> 2 N / mm ²

Fields of Application

KÖSTER UC 200 is a floor covering with high abrasion resistance and can be applied on cement based floors, (minimum tensile strength of the substrate 1.5 N / mm²). For decorative applications KÖSTER UC 200 can be pigmented in various colors using KÖSTER UC Pigment Paste, decorative color chips, or colored quartz. KÖSTER UC 200 is suitable for the food industry, bakeries, pharmaceutical industry, cleaning and filling areas, bottling facilities, multi-function halls, production facilities, garages, driving lanes in industry and storage facilities, sanitary facilities, agricultural structures such as silos and feed alleys, and many other areas.

Substrate

The substrate must be dry, free of loose particles, as well as free of oil and grease. Contaminated, machine-troweled, and unstable surfaces must be removed down to a coatable layer. The surface is prepared by shotblasting. A surface roughness comparable to an ICRI CSP of 4-6 is suggested. Dust must be completely removed using an industrial grade vacuum cleaner. Cracks and surface defects greater than 5 mm are opened and cleaned down to a solid layer and are filled with KÖSTER LF-BM mixed with kiln dried silica sand. Surface cracks and absorbent substrates can be primed with KÖSTER UC 300. Substrates with high vapor drive are treated with KÖSTER VAP I 2000 FS. It is the responsibility of the owner or their representatives to examine the substrate for contaminants and moisture content. Please contact the

KÖSTER technical department for additional details and guidelines concerning testing.

Application

Planning the installation

Proper planning is essential to achieve a uniform appearance. Join lines will show in the finished floor. Lay out the installation in sections so that the full width of the area can be coated in 15 minutes or less in order to avoid placement lines. Work must be planned so that each successive batch can be worked into the previous.

Edge details

If the coating is to end in an open area, such as before the begin of a carpeted area, at an expansion joint, on at a doorway, a 3 mm wide and 3 mm deep groove is cut into the floor so that the KÖSTER UC 200 can mechanically key into the surface.

Treating cracks and defects in the substrate

Defects in the substrate are filled with KÖSTER LF-BM mixed with kiln dried sand. Larger cracks should be opened and filled with KÖSTER LF-BM filled with kiln dried sand. Elevations should be ground flat before installing KÖSTER UC 100.

After defining the dew point the components are mixed. The surface and room temperature must be at least + 3 °C above the dew point during and for 12 hours after application.

Mixing

KÖSTER UC 200 consists of three components. All components must be brought to a temperature between + 15 °C and + 25 °C before application. Always mix complete containers, and empty the individual containers completely. Never mix partial containers. Choose a suitable area for mixing, and cover it with a tarp or PE foil to protect it from splashed material. Do not mix and apply in direct sunlight or at temperatures greater than + 25 °C. Plan for multiple clean mixing vessels and rotate their use as to reduce waiting times between mixing. Before mixing make sure all preparation work has been done and all required machines and tools are ready. Once installation has commenced it may not be interrupted. The mixing cycle is to be timed with a stopwatch. The A component is mixed into the B component and mixed for approx. 30 seconds with a resin stirrer, for example the KÖSTER Resin Stirrer, with approx. 300 rpm. When coloring the the material, the KÖSTER Pigment Paste is then added and mixed in. Only after mixing the A and B component is the powder mixed in using a double paddle mixer such as the KÖSTER Double Paddle Mixer. Slowly add the powder and mix for 2 minutes. Make sure material sticking to the side of the mixing vessel is completely mixed in. Re-pot the material and mix for a further minute. Properly mixed material is easily spreadable and achieves a homogenous, smooth surface.

Incomplete mixing shows in a reduced spreadability and can lead to blistering of the surface. Poorly mixed material must be immediately removed from the surface and discarded.

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

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Remove material from the mixer by letting it spin free at a high rpm and by wiping clean. Clean the mixing vessels regularly so as not to have old material mixed in with the new. This could lead to irregular curing and blister formation.

Install mixed material without delay.

Important:

- Mix only as much material as can be applied within 15 minutes
- Never try to re-mix the material after it has begun to stiffen
- A difference of + 3 °C is to be kept from the dew point. Install the material during stable or falling temperatures

Application method

Pour all mixed material onto the floor in a ribbon and distribute it in the desired thickness with a gauging rake. Use a trowel to distribute material along edges, floor drains, and installations with constant pressure while holding the trowel at a slight angle. Be sure to quickly work fresh material into previously installed material to avoid visible work edges. Ensure tools are dry before they come into contact with KÖSTER UC 200. Check the layer thickness regularly during application to insure that the tools and application methods are delivering the desired layer thickness.

Failure to follow instructions may leave variations in surface texture and color. Coarse kiln-dried sand may be broadcast into the surface to increase slip-resistance. Back-roll slightly after broadcasting to lock the aggregate into the coating. Excessive back-rolling over broadcast aggregate may reduce slip resistance.

Clean the trowel regularly with solvent to prevent material build-up. Ensure that the trowel is dry before it comes into contact with KÖSTER UC 200.

Layer thicknesses > 10 mm

Pea gravel may also be added in applications where KÖSTER UC 200 needs to be installed at layer thicknesses > 10 mm. Larger areas that require pitching, sloping, or repair may be completed using KÖSTER Repair Mortar NC with 20 % KÖSTER SB Bonding Emulsion substituted in the mixing water.

NOTE

Keep moisture from coming into contact with KÖSTER UC 200 during installation and curing. Water may alter the surface appearance. Allow the material to fully cure. A minimum of 8 hours curing time at + 23 °C, 24 hours at + 10 °C is required before allowing foot traffic. Longer curing time is required before fully loading the floor.

The product is best installed at temperatures between + 15 °C and + 25 °C. Exposure to UV light will change the hue of KÖSTER UC 200. Sunlight and metal halide lamps will cause yellowing without affecting performance. Slight batch-to-batch color variations may occur. When ordering to match a previous color, inquire if the same batch number or quality control number is still available. KÖSTER UC 200 can be slippery when oily. Do not apply to un-reinforced sand cement screeds, asphalt or bitumen substrates, glazed tile, nonporous brick and tile, magnetite, copper, aluminium, polyesters, or elastomeric membranes.

Consumption

1.3 kg / m² / mm layer thickness

Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner. Cured material can only be mechanically removed.

Packaging

CT 252 020

20 kg combipackage

Storage

Store the material in a dry environment between + 5 °C and + 25 °C. In originally sealed containers it can be stored for a minimum of 6 months. After partial removal and further storage, the containers must be closed immediately (do not mix up the caps) and turned "upside down" once to seal the closures from the inside.

Safety

Contains diisocyanate. When working with the material, work clothing that covers arms and legs or a protective suit must be worn. When working in confined spaces or in the "overhead area" hoods or covers must be worn. Wear suitable protective gloves (e.g., nitrile gloves) and protective goggles. Obey all local, state, and federal safety regulations when processing the material.

Related products

KÖSTER VAP I 2000 UFS	Prod. code CT 234
KÖSTER UC 100	Prod. code CT 251 026
KÖSTER UC 300	Prod. code CT 253 010
KÖSTER Spiked Roller	Prod. code CT 914 001
KÖSTER Gauging rake	Prod. code CT 915 001
KÖSTER Resin Roller 250 mm	Prod. code CT 916
KÖSTER Resin Roller 150 mm	Prod. code CT 917
KÖSTER Universal Cleaner	Prod. code X 910 010

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