KOSTER UC 200

Technical Data Sheet CT 252 020

Issued: 10-19-18

Trowel applied urethane cement flooring system

Features

KOSTER UC 200 is a trowel applied, three-component aromatic urethane cement system. It is a pigmented, heavy duty flooring system. KOSTER UC 200 is typically applied between 1/4-in and 3/8-in thick. It is designed to withstand chemical attack and thermal shock while providing high abrasion resistance. KOSTER UC 200 can be applied to concrete slabs with relative humidity up to 100% RH.

Technical Data

Property	Data
Mixing ratio	Pre-measured 3 component kit
Pot life, 70°F	15 – 20 min
Working time, 70°F	15 min
Dry time, 70°F	6 to 8 hr
Spread rate	18 sq ft/kit at 1/4-in
VOCs	0

Physical Properties

Property	Test Method	Result
Hardness (Shore D)	ASTM D-2240	80D
Compressive Strength	ASTM C-579	8500 psi
Tensile Strength	ASTM D-638	950 psi
Flexural Strength	ASTM D790	3,300 psi
Adhesion to Concrete	ASTM D-4541	>400 psi
Impact Resistance	ASTM D-2794	>160
Water Absorption	ASTM D-570	≤0.04%
Flame Spread	ASTM E-684-14	Class I, NFPA 101
Abrasion Resistance	ASTM D-4060	50 mg loss
Coefficient of Friction	ASTM D-2047	0.8 (wet) 0.9 (dry)
Gloss (60 Degrees)	ASTM D-523	10-15

Fields of Application

- Chemical processing plants
- Food processing plants
- Cooking/cooling/refrigeration areas
- Pharmaceutical plants

Substrate

Substrates to receive KOSTER UC 200 must be sound, solid, profiled, and free of materials or contaminants that may act as bond breakers. ICRI CSP 4 - 6 is recommended.

Application

Mixing:

KOSTER UC 200 is delivered as a three-component kit. Each kit includes: A component (resin), B component (hardener), and C component (cement and aggregate). Do not mix this product in direct sunlight or when temperatures exceed 90°F. Ensure all components are between 50°F and 90°F. Exposure to high temperatures will greatly reduce the working time. Make sure all necessary tools, mixing and measuring containers, etc are ready. Do not mix until ready for immediate use. Transfer the A-component into a 5 gallon bucket. Add the B-component into the bucket. Mix the A and B component with a forced circulation pail mixer for approx. 10-15 seconds. (Do not use a Jiffler or dispersion mixing paddle.) Then, add the C-component over a period of approx. 30 seconds. Once the entire C-component has been added, mix for approx. 45 seconds until a homogenous consistency is achieved. Do not mix for more than 90 seconds in total. Move the blade up and down, scraping the bottom and sides of the pail while mixing. Thorough mixing is mandatory. A properly mixed batch is easy to trowel and has a uniform surface appearance. Clean the mixing paddle and mixing buckets regularly to avoid mixing fresh material with residues from prior batches. Apply the mixed material immediately. Mix only what can be applied in 10 minutes. Never re-temper the mortar after it begins to set.

Planning the application:

Proper planning is essential to ensure a seamless appearance of the finished floor. Cold joints will show in the finished floor. Lay out the installation in sections so that the full width of the area can be coated in 20 minutes or less in order to avoid placement lines.

Edge Details:

Cut keyways 1/4 to 1/2-in wide by 1/4 to 1/2-in deep at all free edges, doorways, wall perimeters, expansion joints, columns, drains, equipment pads, and terminations to other flooring systems. Keyways are recommended to control shrinkage and transitions to other floor systems.

Slope and Pitch:

KOSTER UC 200 may be installed on sloped floors pitched up to 0.5 in/ft. KOSTER UC 200 may be used on smaller areas to complete pitching and finishing in one install by adding KOSTER Quartz Q25 or 1/4-in or 3/8-in pea gravel to prevent slumping. Such aggregate may also be added in applications where KOSTER UC 200 needs to be installed thicker than 1/2-in. Larger areas that require pitching, sloping or repair may be completed by using KOSTER Repair Mortar mixed with 20% KOSTER SB Bonding Emulsion added to the mixing water.

Crack repair and patching:

Cracks or voids up to 1/2-in by 1/2-in can be filled or overcoated with KOSTER UC 200 at the time of installation. Larger cracks or deeper holes may be primed with KOSTER UC 300 and filled with KOSTER UC 200 with additional sand added to create a drier mix. Allow the patched area to harden before applying KOSTER UC 200.

Application:

Pour the entire mixed batch on the floor in a ribbon and spread the material to the desired thickness using a trowel. Alternatively, use a screed box to install the material evenly. Immediately finish the material

KOSTER AMERICAN CORPORATION | 2585 Aviator Drive | Virginia Beach, VA 23453
Phone (757) 425-1206 | Fax (757) 425-9951 | info@kosterusa.com | www.kosterusa.com

with a 4-in by 12-in steel trowel. Apply sufficient pressure on the trowel at an angle of approximately 60° to level KOSTER UC 200. Level the material as much as possible. Ensure that the material is at the desired thickness prior to finishing the floor. Pull the trowel in sweeping motions over the freshly placed material to ensure the surface of the floor is fully closed and level. Surfaces which were not properly finished may have surface defects such as pinholes and blowholes. Do not use alcohol or solvent on the finished surface. The finished surface will follow the contour of the concrete substrate. Shining a bright light over the surface from behind the applicator will reveal trowel marks. Lightly roll the surface with a clean 3/8-in nap roller to eliminate trowel marks and bring liquids to the surface. KOSTER Anti-Skid Broadcast (Medium or Coarse) or KOSTER Broadcast Sand 40 may be broadcast into the liquid on the surface to enhance slip resistance. Back roll slightly after broadcasting to lock the aggregate in the coating. Excessive back rolling over broadcast aggregate may reduce slip resistance. Clean trowel regularly with solvent to prevent material build up. Ensure that the trowel is dry before it comes into contact with KOSTER UC 200. Check for correct layer thickness frequently. Keep moisture from coming into contact with KOSTER UC 200 during installation and curing. Water contact may alter the surface appearance. A minimum curing time of 8 hr before light foot traffic at 75°F (or 24 hr at 50°F) must be observed. 72 hour curing time must be allowed if early traffic is heavy.

Coverage
1 kit yields approx. 18 sq ft at 1/4-in

Cleaning
Clean tools immediately with xylene (or similar). Cured material can only be mechanically removed.

Packaging

CT 252 020	53.5 lb. combipackage: Component A 4.5 lb., Component B 4 lb.; Component C 45 lb.

Storage
Store all components dry between 50°F and 90°F. Protect the A and B components from freezing. Do not use open or partial bags of aggregate.

Safety
Consult Safety Data Sheet. Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed.

Limited Warranty
KOSTER warrants that its product shall be in accordance with the specifications published in the current revision of the products data sheet. KOSTER covenants that in the event any of its products fail to meet their published specifications, KOSTER shall replace those products proved to be defective. KOSTER shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, KOSTER's sole liability hereunder shall not exceed the cost of the defective product originally purchased. EXCEPT AS SET FORTH ABOVE, KOSTER MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.

Related products

KOSTER VAP I 2000 FS	Art.-Nr. CT 233
KOSTER VAP I 2000 UFS	Art.-Nr. CT 234
KOSTER VAP I 2000	Art.-Nr. CT 235
KOSTER UC 100	Art.-Nr. CT 251 026
KOSTER UC 300	Art.-Nr. CT 253 010
KOSTER MPE	Art.-Nr. CT 261
KOSTER MPE-F	Art.-Nr. CT 262
KOSTER MPE-F-Color	Art.-Nr. CT 264
KOSTER UTC	Art.-Nr. CT 321
KOSTER Color Quartz	Art.-Nr. CT 486 050
KOSTER Skid-Resistant Broadcast-Medium	Art.-Nr. CT 486 055
KOSTER Skid-Resistant Broadcast-Coarse	Art.-Nr. CT 487 055
KOSTER Spiked Roller	Art.-Nr. CT 914 001
KOSTER Gauge Rake	Art.-Nr. CT 915 001
KOSTER Universal Cleaner	Art.-Nr. X 910 010
KOSTER Double Paddle Mixer	Art.-Nr. X 992 001

KOSTER AMERICAN CORPORATION | 2585 Aviator Drive | Virginia Beach, VA 23453
Phone (757) 425-1206 | Fax (757) 425-9951 | info@kosterusa.com | www.kosterusa.com