

Ucrete[®] UD200

Heavy Duty Polyurethane-Concrete Floor Finish System

PACKAGING

Part 1 and 2: 3 liter jugs filled to provide the proper ratio
 Part 3: 59.1 lbs. (26.8 kg) bag
 Part 4: 1.1 lbs. (.5 kg) pigment pack

YIELD

For coverage rates, refer to the Ucrete Contractor Installation Guideline.

COLORS

Ucrete UD200 base color: Red, Gray, Cream, Blue, Green, Charcoal

SUBSTRATE

- Over new and existing concrete surfaces and toppings; when applying over other substrates, contact Master Builders Solutions Technical Service.

STORAGE

Store and transport in unopened container in a clean, dry area at stable temperatures approximating 40 to 86 °F (5 to 30 °C). Must be protected from frost.

SHELF LIFE

Part 1: 9 months when properly stored
 Part 2: 1 year when properly stored
 Part 3: 9 months when properly stored
 Part 4: 2 years when properly stored

WHERE TO USE

- Meat, Poultry and Seafood Plants
- Dairy Plants
- Beverage and Bottling Facilities
- Pharmaceutical Plants
- Commercial Kitchens and Restaurants
- Chemical Processing Plants
- Freezers and Coolers

LOCATION

- Interior or exterior applications
- Some color instability in direct UV exposures.

DESCRIPTION

Ucrete UD200 is a four-component polyurethane-concrete system. This trowel applied floor system is installed at a finish thickness of 1/4" to 1/2" (6–12 mm). The thickness is determined by the service and cleaning temperatures and the severity of traffic expected. The UD200 floors are extremely tough and have many physical properties that exceed those of typical concrete. It provides a lightly textured protective floor finish suitable for applications in wet and dry process environments.

FEATURES	RESULTS
Thermal stability	Resists steam or continuous hot-water cleaning
Fast curing, in temps as low as 50 °F / 10 °C	Minimized down time
Solvent free	Low odor; VOC compliant
Can be applied to 7–10 day old concrete	Accelerates work schedules
Chemical resistant	Tolerates organic and inorganic acids, alkalis and salts
Unaffected by freeze/thaw cycles	Handles wide temperature fluctuations
Wide temperature in-service range	Exceeds that of typical epoxy overlays
Excellent impact abrasion resistance	Handles heavy traffic
For the use in facilities operating HACCP	Can be used in food and beverage facilities

Technical Data Composition

Ucrete UD200 is a four-component polyurethane concrete system.

TEST DATA

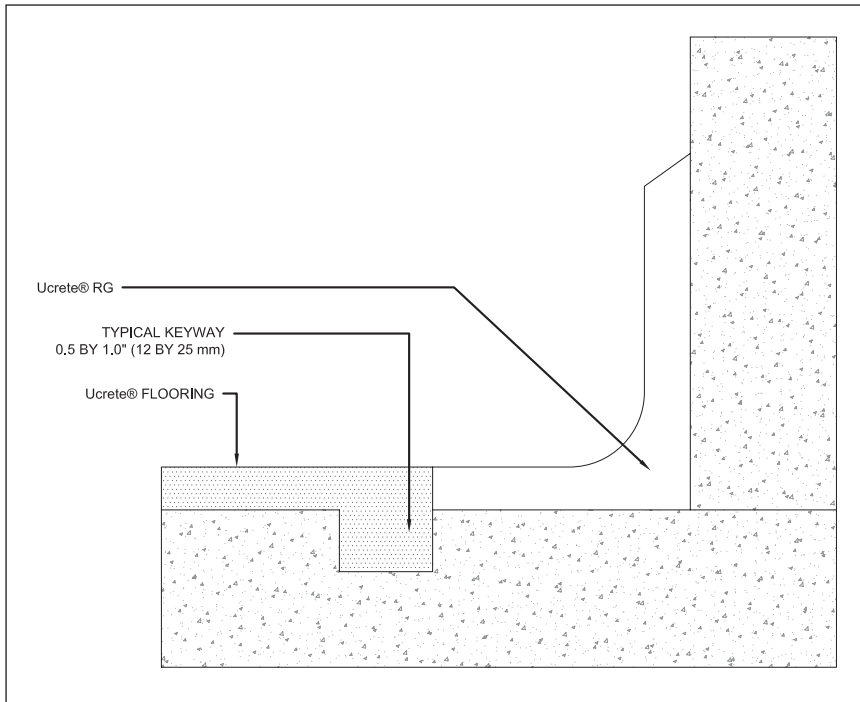
PROPERTY	RESULTS	TEST METHOD
Compressive strength, psi (MPa)	7792 / 7387 psi (53.7 / 50.9 MPa)	ASTM C579, Load rate 2/1
Tensile strength, psi (MPa)	845 psi (5.82 x 109 Mpa)	ASTM C307
Density, lb./ft ³ (g/cm ³)	130.47 lb. /ft ³ (2.1 g/cm ³)	
Impact resistance	IR>4	EN 13813:2002
Compressive modulus, psi (MPa)	.0004 psi (3250 MPa)	BS 6319: Pt 6
Flexural strength, psi (MPa)	2030.53 psi (14 MPa)	ASTM C580
Water absorption,	0	CP. BM2/67/2

Chemical Resistance

Ucrete UD200 offers exceptional resistance to a wide range of chemical aggressors. For example, Ucrete is resistant to the following commonly encountered chemicals:

- Acetic Acid, 50%: Spirit vinegar is widely used in the food industry, indicative of resistance to vinegar, sauces, etc.
- Concentrated Lactic Acid @ 140 °F (60 °C): Indicative of resistance to milk and dairy products.
- Oleic Acids, 100% @ 140 °F (60 °C): Representative of the organic acids formed by oxidation of vegetables and animal fats widely encountered in the food industry.
- Concentrated Citric Acid: As found in citrus fruits and representative of the wider range of fruit acids which can rapidly degrade other resin floors.
- Methanol, 100%: Representative of alcohols and the wider range of solvents used in the pharmaceutical industry.
- Resistant to a wide range of mineral oils, salts and inorganic acid.

NOTE: Full chemical resistance is achieved after curing for 7 days. For chemical resistance to a specific compound, consult the Chemical Resistance Guide. Some staining or discoloration may occur with some chemicals, depending upon the nature of the spillage and the standards of housekeeping employed. Contact your local Master Builders Solutions representative for more information



HOW TO APPLY

Ucrete systems are installed by approved contracting firms who have completed the manufacturer's training workshops. Ucrete is a globally branded product line with industry synergies around the world.

The following is only a summary of the installation techniques used by your Ucrete approved contractors. Refer to the Ucrete Contractor Installation Guideline for more information.

SURFACE PREPARATION

1. Floors must be structurally sound and properly cured.
2. Repair concrete as necessary.
3. Use commercial degreaser to clean floors of oil, grease and other bond-inhibiting materials.
4. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
5. Mechanical surface profiling is the method of surface penetration for both new and existing floors. Mechanically profile the floor to a minimum CSP 4-5 as described by the International Concrete Repair Institute.

6. Apply at least a 100 square foot test in an inconspicuous area that meets the owner's expectations for appearance, slip resistance, and performance.

APPLICATION

1. Open jugs of Part 1, Part 2 and Part 4 liquid pigment pack.
 2. Mix the 3 components using a mechanical mixer. The materials are supplied in premeasured containers.
- If using the Ucrete Accelerator, reference curing table for recommended dosage (per kit). Varies by room temperature.
- Ucrete Accelerator should be added to mixture of Part 1, Part 2 and Part 4. Proceed normally.
3. Add the powdered Part 3 and continue mixing for another 2-4 minutes (temperature dependent). Scrape sides at least once. Do not mix by hand.
 4. Immediately discharge the product and place material on substrate to be coated. Mix subsequent batches immediately.
 5. Spread mix evenly and close with a clean steel trowel. Install to a thickness of 1/4" to 1/2" (6-12mm) depending on requirements.

6. Immediately after troweling, back rolling of a short nap roller will provide a more even finish. The roller should not pass over the surface more than twice.

NOTES:

Do not use a short nap roller to flatten out the surface of a poorly troweled floor.

Do not back-roll into partially cured material, as it will be visible in the floor finish. Avoid excessive build up of resin on the roller by rolling out immediately in front of the wet edge, or on a piece of cardboard.

The use of a short nap roller will reduce the slip resistance and care should be taken that the correct degree of slip resistance versus ease of cleaning is produced in line with the end user's requirements. Excessive use of the roller can lead to the inclusion of air into the surface of the floor resulting in pinholes.

CURING TIME

The floor can be returned to full service after 12-24 hours at 70 °F (21 °C).

If using Ucrete Accelerator, reference table to understand accelerator requirements at various room temperatures and corresponding cure times. Material should be conditioned at 70 °F (21 °C) for optimal cure results and workability.

TEMPERATURE	1 OZ	2 OZ
70 °F	2hrs	Not Recommended
60 °F	4hrs	3hrs
50 °F	5hrs	4hrs
40 °F	Not Recommended	6-7hrs

MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance and reduce any tendency to retain dirt. UD200 is readily cleaned with industry standard cleaning chemicals and equipment. UD200 will withstand steam-cleaning, high pressure hot-water wash-downs along with a wide range of decontamination and degreasing materials.

FOR BEST PERFORMANCE

- The owner and architect should discuss joint details with the flooring contractor before the job starts.
- Substrates must be structurally sound, clean, dry, and free of any foreign matter that could inhibit adhesion.
- Do not apply at temperatures below 40 °F (5 °C) or above 86 °F (30 °C) or if the relative humidity is above 85%.
- Do not apply directly to unreinforced sand cement screeds, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, aluminum, existing coatings, epoxies, or polyesters. For optimal performance, apply directly to concrete. Consult with your Ucrete representative for advice.
- UD200's variations in thickness will affect the system's thermal and impact resistance. Thicker systems will provide the highest level of thermal shock and impact resistance:
 - *1/4" UD200 floor is suitable for freezer temperatures down to -13 °F (-25 °C).
 - *3/8" UD200 floor is fully resistant to high temperature spillage and discharge up to 248 °F (120 °C) and is fully steam cleanable. Suitable for freezers down to -40 °F (-40 °C).
 - *1/2" UD200 floor is fully resistant to high temperature spillage and discharge up to 266 °F (130 °C) and occasional spillage up to 302 °F (150 °C) and is fully steam cleanable. Suitable for freezer temperatures down to -40 °F (-40 °C).
- Master Builders Solutions representatives and flooring specialists are available to assist you in the selection of the proper flooring system. Call 1-800-243-6739 for in-house and field technical assistance.
- Make certain the most current versions of the product data sheets and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not supervising or providing quality control on the jobsite.

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.com/en-us, e-mailing your request to mbsbscst@mbcc-group.com or calling 1(800)433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

LIMITED WARRANTY NOTICE

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