Technical Data Guide





Ucrete® RG

Heavy Duty Polyurethane Concrete for forming Cove Bases and Renovating Walls

PACKAGING

Part 1 and 2: 1.2 liter jugs filled to provide the proper ratio

Part 3: 22 lbs. (10 kg) bag

Part 4: 1.1 lbs. (.5 kg) pigment pack

YIELD

1/4" (6 mm): 21– 22 sq ft 3/8" (9 mm): 15–16 sq ft 1/2" (12 mm): 10–11 sq ft

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

COLORS

Ucrete colors: Red, Gray, Cream, Blue, Green, Charcoal.

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

DESCRIPTION

Ucrete RG is a unique Heavy Duty Polyurethane thixotropic resin mortar designed for vertical applications, such as forming cove bases and renovating walls. It has exceptional resistance to aggressive chemicals, heavy impact and temperatures up to 248 °F (120 °C).

Ucrete RG provides a heavy duty cove base for vertical applications in wet and dry process environments. It is dense and impervious providing the ideal finish for applications in the food and beverage, pharmaceutical and chemical industries.

Ucrete Industrial Flooring has been widely used throughout industry for more than 50 years, many of the older floors are still in service.

FEATURES	BENEFITS	
Thermal stability	Resists steam or continuous hot-water cleaning	
Fast curing	Minimized down time	
Solvent free	VOC Complaint; no odor	
Can be applied to 7 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	
For the use in facilities operating HACCP	Can be used in food and beverage facilities	
• Dust	Low Dust	

SUBSTRATE

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

LOCATION

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

WHERE TO USE

- Cove Base Applications for any Ucrete System
- To protect drains, tank bases, sumps containment pits, curbs and other vertical surfaces
- Pharmaceutical Plants
- · Commercial Kitchens and Restaurants
- · Chemical Processing Plants
- · Freezers and Coolers
- Dairy Plants
- · Meat, Poultry and Seafood Plants
- · Beverage and Bottling Facilities

TECHNICAL DATA COMPOSITION

Ucrete RG is a four-component polyurethane concrete system.

TEST DATA

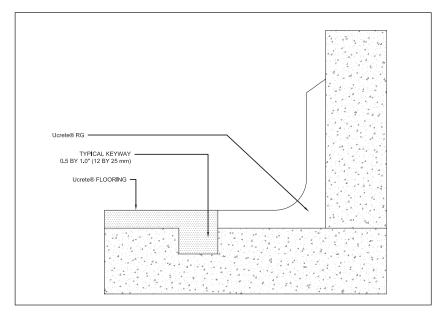
PROPERTY	RESULTS TEST	METHODS
Compressive strength, psi (MPa)	6527 psi (45-52 MPa)	EN13892
Tensile strength, psi (MPa)	1015 psi (7 MPa)	BS6319 part 7
Density, lb./ft³ (g/cm³)	130 lb /ft.3 (2.1 g/cm3)	
Flexural Strength, psi (MPa)	2176 psi (15 MPa)	EN 13892

Chemical Resistance

Ucrete RG offers exceptional resistant to a wide range of chemical aggressors. For example, Ucrete is resistance 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 trained 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. Repair concrete as necessary.
- 2. Use commercial degreaser to clean floors of oil, grease and other bond-inhibiting materials.
- 3. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions. For RG at 1/8", profile to ICRI CSP 3-4. For RG at 3/16", profile to ICRI CSP 4-5. For RG at 5/16", profile to ICRI CSP 5-6.

PRIMING

Prime surface with Primer FS apply Ucrete RG to the primer while still tacky (in lieu of Primer FS, apply a coat of Ucrete RG and wait until tacky.

APPLICATION

- 1. Open jugs of Part 1, Part 2 and Part 4 liquid pigment pack.
- 2. Mix the 3 components in a forced action mixer. Refer to Installation Guidelines for mixing times. * Ideal mixer is a drill (<350 RPM) equipped with Jiffler paddle. Mix for 30–60 seconds.
- 3. Add the powdered Part 3 and continue mixing for another 2–3 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.Apply Ucrete RG by trowel to the required thickness in a single layer. Special coving trowels are available and can be used. Stainless steel or plastic trowels will minimize the risk of trowel burn, especially with lighter colors.
- 6. A short nap roller can be used to obtain a more even finish.

CURING TIME

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

MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance and reduce any tendency to retain dirt. Ucrete RG is readily cleaned with industry standard cleaning chemicals and equipment. Ucrete RG will withstand steam-cleaning, high pressure hotwater 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.
- For porous substrates, Ucrete Primer FS should be used to limit pinholes or other surface defects.
- 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.
- Ucrete RG 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:

- 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 Health, Safety and Environmental, 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.

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