



MiraTop UCS

Product Technical Data Sheet

MiraTop UCS is a state-of-the-art, three-component, aliphatic urethane-modified cementitious concrete sealer designed for use as a topcoat over MiraTop Flooring Systems. Due to excellent UV stability and color retention it is also ideal for use as a finish coat over Miracote MPC and MiraFlex Membrane C in fountains, water features and other aquatic environments. **MiraTop UCS** exhibits outstanding chemical and abrasion resistance, and offers superior performance in conditions where thermal shock, high heat, wet environments and existing elevated levels of moisture vapor transmission rates may lead to failure of vapor impermeable flooring systems.

MiraTop UCS is ideal for use on both new and existing concrete surfaces where restrictions on down time demand a rapid return to service upon completion of the work. **MiraTop UCS** is a fully reacted urethane cementitious coating technology that is non-flammable and nearly odorless during placement and cure. It complies with all Federal, State and Regional VOC requirements.

WHERE TO USE

- Production facilities.
- Food processing plants.
- Chemical processing areas.
- Pharmaceutical plants and warehouses.
- Commercial kitchens.
- Cleaning and sanitation areas.
- Water and wastewater treatment facilities.
- Fountains, water features and aquatic environments.

ADVANTAGES

- Tenacious adhesion to concrete and most substrates.
- Excellent chemical and abrasion resistance.
- Outstanding color retention and UV stability.
- LEED-compliant, low odor and fast cure time.
- Meets USDA, FDA, OSHA requirements.
- Does not support microbial growth.
- Very rapid cure and minimal down time.
- Withstands MVER exceeding 22 lbs./99% RH.

THEORETICAL COVERAGE RATES

Topcoat for Miracote MPC and MiraFlex Membrane C:
One Coat @ 310 – 370 sq. ft. per kit (10 – 12 mils)

Topcoat for MiraTop SL and TG:
One Coat @ 370 – 460 sq. ft. per kit (8 – 10 mils)

Protective Coating over Concrete:
Two Coats each @ 370 – 460 sq. ft. per kit (8 – 10 mils)

Actual consumption rates are dependent on many factors including, but not limited to, substrate profile and porosity, variations in applied thickness and typical allowance for waste.

PACKAGING and COLORS

Kit Size: 2.3 Gal
Component A: 1-gal unit
Component B: 1-gal unit
Component C: 10 lb. bag powder available in gray, red and neutral
Colors: 13 Standard Colors (refer to Color Chart L-528)
Mix Component A with ColorPax W (4 oz./unit) and neutral powder

MIX RATIO

Designed and packaged for mixing full kits only.

SHELF LIFE AND STORAGE

One year from the date of manufacture provided containers remain unopened and material is stored in a protected environment free from moisture, excessive heat, freezing temperatures, and direct sunlight.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)

Pot Life	20 minutes
Recoat Time	4 to 48 hours
Compressive Strength ASTM C579, minimum.....	7,800 psi
Tensile Strength ASTM C307, minimum.....	980 psi
Flexural Strength ASTM C790, minimum.....	1,965 psi
Hardness ASTM D2240, Shore D.....	80-85
Thermal Coefficient of Linear Expansion	1.4x10 ⁵ ASTM C531 9in/in/°F
Density ASTM C905, lbs./ft ³	120
Water Absorption , MIL-D-3134.....	0.58%
Flammability ASTM E648.....	>1.07 watts/cm ²
Adhesion ASTM D4541.....	>400 psi (100% percent failure in concrete)
Temperature Distortion	Crossfield Lab Passes (dry, wet and oil at 350°F)
Microbial Resistance ASTM G21.....	Passes Rating 1
Chemical Resistance	See Chemical Resistant Chart

OVERVIEW OF INSTALLATION STEPS

- **Surface Preparation** – All surfaces must be clean, sound, dry and free from any bond inhibiting substances including, but not limited to, grease, oil and any other contaminants or loosely adhered materials. For concrete substrates, a minimum surface profile of a CSP-3 or higher is required depending on overall substrate conditions and coating requirements.
- **Mixing** – **MiraTop UCS** components must be mixed mechanically using a low-speed drill (300-450 rpm) with a “Jiffy-type” or similar Miracote-approved mixing paddle until fully blended. It is important to pre-condition all components to a moderate or room temperature to facilitate adequate working time. Empty entire contents of the pre-mixed component A into a clean mixing vessel while scraping the sides and bottom to capture entire contents. Then add Component C powder and thoroughly mix into a smooth, lump-free consistency being careful not to entrap air into the mix. Next empty entire contents of pre-mixed Component B capturing entire contents by scraping the side and bottom and continue mixing for an additional 60 seconds. **Mixing MiraTop UCS and ColorPax W** - When using ColorPax W to pigment Neutral powder to produce the Miracote Standard Colors, first blend the ColorPax W into Component A and mix thoroughly into uniform consistency before adding Neutral Component C powder and follow remaining instructions as above. Once all components are properly mixed **MiraTop UCS** is ready to be applied to the receiving substrate.

MiraTop UCS

Product Technical Data Sheet

OVERVIEW OF INSTALLATION STEPS (continued)

- **Application** – Once mixed immediately pour out *MiraTop UCS* onto the substrate in long ribbons across the surface being top-coated. Spread evenly with a squeegee and pull material out at the required coverage rate and immediately back-roll with a high quality, phenolic core, industrial grade 3/16” to 1/4” maximum nap roller to achieve mil consistency. When applying newly mixed batches always work into and maintain a wet edge exercising care to place and back-roll at fresh material before previous materials begins to form a film. For enhanced slip resistance and traction lightly broadcast fine aggregate when back-rolling to increase surface coefficient of friction.

FOR BEST RESULTS

- Always install a minimum 4’ by 4’ test area site mock up for approval of acceptable color, texture, finish, adhesion, and any other critical requirement acceptable to the owner prior to proceeding with the installation.
- Verify and download current versions of product technical data sheets (PTDS), material safety data sheets (MSDS), and installation guides (IG) at www.miracote.com.
- Protect materials from excessive heat and cold, and pre-condition to room temperature as prior to use.
- Regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application rates are obtained.
- The proper application of this product is the sole responsibility of the end user. Job site visits by Miracote representatives are making recommendations, and do not assume any liability for supervision or quality control.
- Measure surface and ambient temperatures to ensure the material is only applied when temperatures are 45 F and rising during placement and cure time.
- *MiraTop UCS* being a aliphatic urethane cementitious technology is a fast-setting material which requires quick work during mixing and placement with strict attention to detail. This will require well trained personnel and properly manned crew size.

LIMITATIONS

- Extremely porous substrates may require a primer to reduce outgassing and pin-holing.
- Allow to cure a minimum of 48 hours cure before exposure to chemicals, and 72 hours prior to full immersion service.
- Not intended for use over flexible substrates.
- Minimum ambient/substrate temperature of 45F.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICES ARE MET.

Crossfield Products Corp. warrants to the purchaser of its products that such products are free from manufacturing defect. Crossfield does not warrant or guarantee the workmanship performed by any person or firm installing its products. Crossfield’s obligation under this warranty is limited solely to the original purchaser and solely to the remedy of replacement in kind of any product which Crossfield sold which may prove defective in manufacture within one year from date of installation, provided said product was stored correctly and installed within the product’s shelf life, by the original purchaser and which by Crossfield examination shall disclose to Crossfield’s satisfaction to be thus defective.

IN NO EVENT, SHALL CROSSFIELD PRODUCTS CORP. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON CROSSFIELD’S PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONJUNCTION WITH SALE OF A CROSSFIELD PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF CROSSFIELD’S PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION ABUSE OR MISUSE. CROSSFIELD PRODUCTS CORP. MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIAL NOT SUPPLIED BY CROSSFIELD PRODUCTS CORP., WHICH ARE USED IN CONJUNCTION WITH ITS PRODUCTS. THE TERM “ORIGINAL PURCHASER” IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM CROSSFIELD PRODUCTS CORP. SOLD ITS PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST CROSSFIELD PRODUCTS CORP. SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



Miracote Product Line
Crossfield Products Corp

www.miracote.com

East Coast Office
140 Valley Road
Roselle Park, CA 07204
P: (908) 245-2800
F: (908) 245-0659

West Coast Office
3000 E. Harcourt Street
Rancho Dominguez, CA 90221
P: (310) 886-9100
F: (310) 886-9119

MIRATOP UCS
4-14-2020