



Customer Instruction Manual

UCoat® Epoxy Floor Coating Application

Includes:
Installation Instructions
Product Descriptions



For assistance, call 1-800-UCoat-It (800-826-2848) or visit our web site at www.UCoatIt.com

UCoat It Instruction Manual

Your UCoat Kit

Please take a moment to familiarize yourself with the contents of your UCoat Kit. This kit has been assembled in our plant to deliver to you the finest floor coating materials and to enable you to achieve the best results with the right tools for the job.

The following items are included in every UCoat Kit:

- 1 Five gallon (5 gal) shipping/mixing pail.....
- 2 One quart cans (0.20 gal contents) UCoat Part A Activator
- 2 One gallon cans (0.80 gal contents) UCoat Part B Base Color
- 1 Container of UCoat Part C Co-plastimer.....
- 2 ½" nap x 9" wide roller covers.....
- 1 9" wide roller frame.....
- 1 12" graduated stir stick.....
- 2 2" disposable paint brushes.....
- 1 Container UTex™ anti-slip aluminum oxide
- 1 Pair safety glasses.....
- 1 Pair disposable latex gloves.....
- 1 Mixing mat/waste disposal bag
- 1 How-to Instructional DVD
- 1 UCoat Installation Guide (this document).....



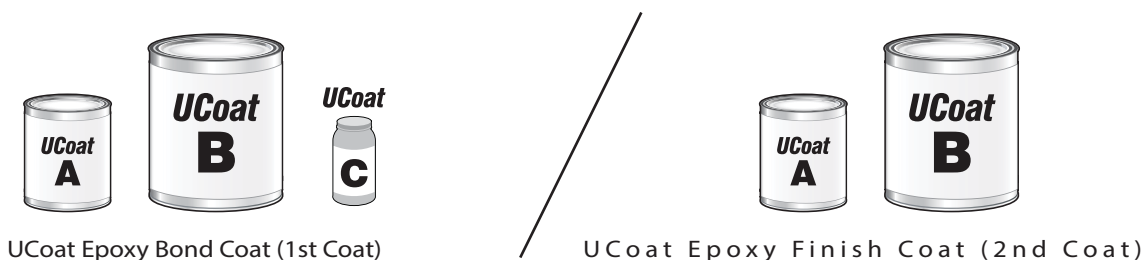
The UCoat Kit provides the materials, tools, and disposable utensils generally required to finish up to a 24' x 24' area — the equivalent of two coats over 576 sq.ft. As with all coatings, coverage is dependent on the condition and porosity of the substrate (concrete, wood, etc.) as well as color used.

If your area is larger than 576 sq. ft. or appears that it will require additional UCoat material, extender packs are available. It is always better to have extra materials on hand to ensure the proper completion of a job. Call UCoat It at 1-800-826-2848 to speak with a customer service representative for help determining the amount of material required for your area.

Soap and water clean-up will save some of the items from this kit for other handy uses around your home.

Reviewing Your Materials

UCoat epoxy is applied in two coats: the Bond Coat and Finish Coat. UCoat is mixed as follows:



Please note UCoat cans are not filled to entirety: UCoat Part A (0.20 gal) and UCoat Part B (0.80 gal). UCoat Part C is used only in the first coat. If you have a larger area and have purchased multiple packages of UCoat, do not mix more than one gallon of material at a time. When using a single pack extender pack, it may be necessary for you to use 1/2 of the contents of one container each of UCoat Part A and B for both the UCoat Bond and Finish coats. When mixing smaller amounts always maintain the proper mix ratio of one (1) part UCoat Part A to four (4) parts UCoat Part B.

MIXING UCOAT IT MATERIALS: When mixing UCoat It floor coating materials in smaller or partial quantities, consult the product fact sheet for proper mix ratios. It is important that the proper ratios are kept when mixing smaller batches to assure optimum performance and hardening of the coating. NOTE: Do not mix up more material than you intend to apply within the allotted pot life of that product. Once mixed, unused product will harden and become unworkable after the pot life has expired.

Planning Your Project

1. Before you begin, open all your UCoat It packages and review the contents of your purchase. Familiarize yourself with the mixing and application process and review the UCoat It Instructional DVD included with your kit. Identify and separate your coating materials according to application and store in a convenient place.
2. If planning on coating sections of the area at different times, we recommend doing the back half (or least accessible area) first, or you might divide the application following a natural seam in the floor (such as a saw-cut or troweled expansion joints). If no natural seams are present, use a professional quality painter's tape to mask areas. UCoat It coating materials can be easily split-up and mixed in smaller quantities to provide only the material needed to coat a specific area, eliminating waste.
3. Consider the weather and temperature extremes. Air or room temperatures between 50°-90°F (10°C-32°C) are an ideal range. Colder temperatures will delay the drying time of your coating. Warmer temperatures will hasten the drying time of your coating as well as shorten pot life. All published dry/cure times are based on 68°F (20°C). Humidity, like colder temperatures, will lengthen curing times. At higher levels, however, catalyzation (pot life) and curing times will be accelerated. Also, it is important not to coat your floor if rain is forecast within 8-12 hours after application.
4. Always take special care when replacing items after the coating has been applied. Coatings that are freshly applied are softer than fully cured coatings. Damage may result from dragging and scuffing. UCoat floors can be ready for light foot traffic in as little as 12 hours (24 hours for vehicles). Full cure may take up to 7-10 days.

Items to Consider Before Starting

As you prepare to coat your floor, please go through this checklist to ensure none of the following conditions apply.

- Temperature Extremes — The ideal temperature range when working with UCoat is 50°F-90°F (10°C-32°C). Warmer temperatures can shorten pot life. Cooler temperatures will require longer cure times. We do not recommend applying UCoat when the temperature remains under 50°F (10°C) for full 24 hour periods or longer.
- High Humidity — Humidity can greatly affect the outcome of your floor and must remain within acceptable limits during application and curing. Relative humidity of less than 75% is ideal. As humidity increases, so also does the chance of shortened pot life, blushing or dulling of the finish, and lengthened cure times. Darker colors are more susceptible to these effects. It is highly recommended to coat your floor when relative humidity is expected to be below 75%. Do not coat the floor if rain is in the forecast within 8-12 hours after application.
- Rough, pitted or spalled concrete surfaces can be the first indication that the cement is soft. Soft or chalky concrete is not an ideal substrate for UCoat and must be properly prepared prior to coating. Soft concrete must be stone ground before coating. This will help smooth out the surface while removing the soft fines (particles) from the surface. Once prepared, UCoat It systems can help stabilize and reinforce soft concrete surfaces making them harder and less easily damaged.
- Soft Concrete — To determine if your concrete is soft, check it with a standard, flat-bladed screwdriver. Using the screwdriver, apply pressure and try to 'dig' at the surface. If the floor flakes, scratches, loosens or otherwise appears dusty, do NOT coat the floor until this issue is resolved. This can usually be accomplished by grinding the surface of the concrete with an EDCO® surface grinder available for use at most rental yards.
- Silicone (Tire Dressings) — If you have used, or suspect anyone has used a silicone sealer or tire dressing including silicone on or over your concrete, it is recommended to remove the top layer of concrete with an EDCO grinder prior to finishing with UCoat It products.



Tips for using an EDCO® grinder: We suggest an EDCO grinder with carbide stones. Wet the floor prior to grinding the surface to lessen the amount of dust in the air. After each use of the grinder, perform a water test to determine if the surface has been adequately prepared. If water continues to bead or film, regrind and test again. After the floor has been adequately ground, immediately rinse the entire floor to remove any residue or concrete debris from your floor. Any concrete dust left to settle back on the surface will act like soft/chalky concrete preventing UCoat from achieving permanent adhesion. After grinding, continue with the bare concrete preparation including soap and water wash, water test and acid wash. This procedure will resurface the substrate down to a suitable surface for coating. Please note, this procedure will make your floor more porous and therefore may require additional UCoat It materials for adequate coverage.

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Getting Ready to UCoat It

Good floor preparation is essential and will ensure that your UCoat It floor will look great and last for years. You will need the following items to prepare your floor:

- ★ 4 Quarts of UPrep-CLC (sold separately) or 1 gallon of Muriatic Acid for every 500-600 sq.ft.
- ★ Stiff-bristled broom
- ★ Standard threaded broom handle or paint roller extension pole
- ★ 1 roll of high quality masking tape
- ★ Garden hose with a spray nozzle

These items may be purchased at most local hardware stores.

IMPORTANT NOTE REGARDING ACID WASH — The muriatic acid solution is used to neutralize the alkalinity of the concrete, lowering the pH levels helping ensure the UCoat bond coat acquires proper adhesion to the substrate. The acid wash is required of all uncoated concrete floors, new or old:

- ★ Use only the recommended amounts / mix ratios from this manual.
- ★ Do NOT use a commercially available combination acid etcher/degreaser.
- ★ The acid wash must be applied and rinsed thoroughly just prior to the UCoat bond coat application.
- ★ The acid wash is NOT used to clean the substrate. Cleaning is done prior to the acid wash using a good quality degreaser or detergent

Preparing your floor — new or old concrete

1. Remove all items from the floor being coated and thoroughly sweep and rinse out all dust and dirt. Pretreat the floor by wetting thoroughly with water. The concrete should accept the water rinse evenly and consistently across the entire surface to be coated.
2. While the floor is clean and damp, identify any problem areas. Using the warranty card at the back of this book as a guide, carefully examine the floor and check off any conditions that may apply. Areas where there are signs of water beading or filming on the surface indicate a contaminant, such as oil or silicone, is present.
3. Oil spots and stains are the most common conditions encountered. To determine whether a stain will present a problem, perform the Water Test. Using a garden hose, mist water over the stain. If the water beads or appears to film on the surface, this means the stain will act as a barrier preventing your UCoat material from bonding with the cement. Treat the stain with USolv[®], UDegrease[®] or another high-quality, water-washable degreaser. In some cases, dishwasher detergent may be used to adequately clean the surface. Oven cleaner may be used in heavily oil-stained areas. Scrub the area with a stiff bristled broom to agitate the stain. Rinse the area and inspect again. Discoloration is generally not a problem, however if water continues to bead on the surface, re-treat the stain and scrub again until water no longer beads on the stain.
4. After cleaning and degreasing the surface, you will rinse the area with a mild acidic solution to neutral pH levels and promote bonding of the UCoat epoxy material. Fill your empty UCoat bucket $\frac{3}{4}$ full of fresh water and add $\frac{1}{2}$ gallon of muriatic acid or two (2) quarts of UPrep-CLC and stir the solution lightly. Refer to the UPrep-CLC instructions for more details. Take proper care when handling the acid solution, using safety goggles and gloves. When mixing with water, always pour the water in first then add the acid. Pre-rinse your concrete floor and pour the mixed solution over the area being prepared using your stiff-bristled broom to gently agitate the solution. Rinse and then repeat this step once more over the entire floor.
5. Rinse the floor two or three times thoroughly with fresh water to further neutralize the chemicals and flush away the soils and debris. Soak up any standing water and puddles. If unable to saturate thoroughly with fresh water, sprinkle the floor with baking soda to promote neutralization of the acid, and rinse clean. In enclosed areas (such as basements) without floor drains, a mop and bucket may be used.
6. Final preparation includes masking off walls, door thresholds, drain plates or any other permanent fixtures.

These instructions apply to a previously uncoated concrete floor in good general condition with only minor cracks and oil stains. If your evaluation indicates any problems other than minor oil stains or small cracks, refer to the Special Procedures section on the following page for how-to tips or call us at 1-800-826-2848 to speak with one of our UCoat It representatives for advice.

Special Preparation Procedures

Preparation of the floor is the difference between a successful or unsuccessful application. Always test the floor for sealers, cure/hardening compounds or other existing coatings that might prevent UCoat from penetrating the surface of the concrete. To test, pour ¼ oz. of muriatic acid (full strength) directly onto the concrete floor in an inconspicuous area. The reaction of the acid solution should be positive and display an effervescence or foaming on the surface. If no immediate reaction occurs, you can be certain of a cure compound or sealer being present. We recommend removal of any existing coating to ensure optimal bonding with the substrate, however previous coatings that show no signs of failure can be coated over.

Previously Coated Concrete (NOT peeling or lifting)

If your floor has a previous coating that is not worn through to the cement or dull from wear, and not peeling or flaking, scuff or sand the surface with a 60-80 grit sandpaper to prepare the surface for a mechanical bond. Chemically clean, then rinse. Proceed with UCoat bond coat and finish coat application.

Previously Coated Concrete (flaking, peeling, or worn through)

If previous coatings are not adhering, are loose, or the bonding integrity to the cement is in doubt, remove the coatings from the cement by power washing, mechanically sanding, grinding, or chemically stripping. Most existing coatings can be removed with a heavy-duty epoxy/urethane paint stripper available as a semi-paste. Apply the stripper to an area and cover with a plastic sheet for 1 to 2 hours. This helps keep the stripper effective for a longer period of time. Remove the old coating by scraping down to the concrete. Clean and rinse any remaining residues with a quality degreaser. Optional methods exist to remove coatings and sealers. Abrasive sanding or grinding, as well as chemically cleaning, may also be effective. Once the previous coating has been completely removed, proceed with the standard UCoat preparation and application procedures.

Large Cracks or Concrete Gaps

Most concrete floors have joints and seams which allow for movement and expansion. UCoat will not bridge or fill these voids. If these are to be filled, the use of UPatch® or UFill™ is recommended. For best results, apply the UCoat Bond coat first, before filling any cracks. Proceed with the UCoat finish coat application when the filler materials have cured according to their respective instructions. Call 1-800-826-2848 or visit www.UCoatIt.com for more information regarding UPatch® epoxy floor patch or UFill™ elastomeric urethane crack filler.

Rough or Irregular Surfaces

Surface wear, imperfections in finishing and pouring techniques may leave areas of the floor rough. UCoat will not necessarily fill in rough spots or provide a level surface when the substrate is irregular, but present no special problem for the adhesion or performance of UCoat. If a smoother surface is desired, consider using UClad® self-leveling, high-build epoxy in conjunction with UCoat. Call 1-800-826-2848 or visit www.UCoatIt.com for more information regarding UClad®.

New/Fresh Concrete

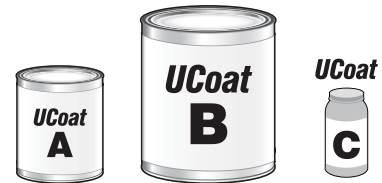
Freshly poured concrete should be allowed to cure for 30 days. Do not apply any sealers or curing agents to the floor. Hand-troweled smooth, bare untreated concrete is ideal. After 30 days proceed with normal UCoat preparation and application instructions, including acid wash.

The UCoat Bond Coat (1st coat)

The UCoat Bond Coat is a water-based 3-part epoxy mixture and should be applied to a damp, wet concrete surface. The bond coat is not intended to completely hide the floor or create a uniform color, however a thin even coat over the floor will penetrate and seal off the surface.

To apply the UCoat bond coat you will need the following items from your UCoat Kit:

- ★ UCoat mixing bucket (clean and dry)
- ★ Garden hose with spray nozzle
- ★ One quart can (0.20 gal) of UCoat Part A Activator
- ★ One gallon can (0.80 gal) of UCoat Part B Base (in the color you chose)
- ★ One bottle (400 ml) of UCoat Part C Co-plastimer Additive
- ★ One container of UTex™ aluminum oxide anti-slip additive
- ★ Mixing paddle/stir stick
- ★ One 2" trim brush
- ★ One 9" roller handle with new ½" nap cover (extension handle recommended)



1. Hand shake each can to overcome possible settling of the component solids, then open and stir well.

2. In the clean mixing pail add the contents of one container each UCoat Part A, then UCoat Part B and UCoat Part C and stir for one minute with one of the provided stir sticks. Once mixed, you must use all of the material within allotted pot life (see chart at right) or it will become thick and congeal in the pail becoming unusable. Warmer temperatures and higher humidity will increase the rate at which the mixed materials cure, thereby decreasing working time. See the chart at the right for additional details.

Pot Life				
Temperature	Rel. Humidity			
	52%	70%	80%	90%
70°F	60	50	35	20
80°F	55	45	30	5
90°F	45	35	20	
100°F	20	10		

Working times shown in minutes

3. Weather conditions may require you to re-dampen the floor area before you begin or as you progress through the bond coat application. Remember, it is important that the UCoat bond coat be applied to a damp floor to properly penetrate deep into the concrete surface.

4. With the 2" trim brush provided in your kit, begin coating by trimming along wall edges and around objects where they meet the floor. If you have a helper, he or she can trim ahead of you as you begin to roll out the floor. Keep a wet edge.

5. Attach the 9" roller handle with cover to your threaded extension pole so that you may easily apply mixed UCoat material directly from the pail. Dip the attached roller into the pail and saturate the roller with the mixture. Withdraw it from the bucket and roll it out in a thin even coat, spreading it over the floor in an "M" & "W" pattern.

6. If you require a non-slip floor, broadcast the UTex by hand as heavily or lightly as desired as you are rolling out the bond coat. DO NOT MIX the UTex in the bucket with the UCoat material as it will not remain suspended in the mixture and will not be evenly distributed onto the floor. Remember, UTex is meant to provide grip. Applying too much UTex may make wiping or mopping your floor very difficult. Use it sparingly.

7. Allow for 4-6 hours for the UCoat bond coat to dry before applying the UCoat finish coat. For proper bonding, do not wait longer than 48 hours to apply the UCoat finish coat.

Application Tips

General Tips: DO NOT apply coating if rain is forecast within 12 hours. Due to its high mineral content, well water is not recommended for use as a thinner or diluent with UCoat. DO NOT thin UCoat unless working in high temperatures (greater than 80°F) and/or low humidity (less than 70%). You may choose to mix smaller quantities of material: simply follow the 1:4 mix ratio using the ruler (stir stick) provided to measure the material as it is poured into the bucket (for example, with ruler standing against inside edge of mixing pail, pour ¼" of UCoat Part A and add 1" of UCoat Part B for a total of 1¼" of product).

For Step 1 — If you purchased your kit more than 6 months prior to using it, you may need to have the materials (individual cans) mechanically shaken.

For Step 2 — If applying the UCoat Kit with an additional Single Pack for a larger area (such as a 3 car garage), reserve 1/3 of Part C for the single pack portion of the bond coat. For example, first mix one (1) can UCoat Part A, one (1) can UCoat Part B and 2/3 bottle UCoat Part C and apply. This will provide enough material to complete approximately 2/3 of your bond coat. Then mix one half can UCoat Part A, one half can UCoat Part B and the remaining 1/3 bottle of UCoat Part C to finish your bond coat. When coating larger areas, never mix more than one can each of UCoat Part A and UCoat Part B at a time. In extremely warm temperatures, the pail containing the mixed UCoat may be placed into a larger tub or container filled with ice and cold water to prolong working time, or you may simply work during cooler hours of the day (early mornings, evenings, etc.)

For Step 3 — If the weather is extremely hot or dry and the concrete appears to be drying out too quickly, you may add water (up to ½ of the empty UCoat Part A can) to the mixture BEFORE applying any of it to the floor. DO NOT add water after you've started to coat your floor.

For Step 5 — DO NOT pour the UCoat mixture onto the floor, even if it appears to be excess material. The coating will be too thick in the area in which it is poured and will not cure properly.

APPLICATION NOTE: Since the UCoat bond coat material is designed to soak into the substrate, it is not uncommon to see color inconsistencies, shadowing and/or roller marks after the UCoat bond coat has dried. View our web site for additional details and technical information.

The UCoat Finish Coat (2nd coat)

The UCoat Finish Coat is applied when the bond coat is dry to the touch (4-6 hours at 68°F). You may choose to wait up to 48 hours after applying the bond coat before applying the finish coat. However, if you are applying the finish coat more than 48 hours after the bond coat, you must scuff the bond coat with 60-80 grit sand paper or screens, then vacuum and tack rag the entire floor just prior to applying the finish coat to ensure a proper bond. To apply the finish coat, you will need the following from your UCoat Kit:

- ★ UCoat mixing pail (clean and dry)
- ★ One quart can (0.20 gal) of UCoat Part A Activator
- ★ One gallon can (0.80 gal) of UCoat Part B Base (in the color you chose)
- ★ One stir stick
- ★ 2" trim brush
- ★ 9" roller handle with new 1/2" nap cover and extension handle



If you purchased the UFlek-AF, UFlek or UltraLife top coat options, you will be applying the UFlek decorative chips onto the UCoat Finish Coat (this coat) while it is still wet. Hand broadcast the colored flakes onto the freshly rolled UCoat material while still tacky, working in sections as you roll it out. Consult the UFlek or UFlek-AF instructions for details on this procedure.

1. Hand shake each can to overcome possible settling of the component solids, then open and stir well.

2. Add the contents of UCoat Part A and UCoat Part B into the mixing pail and stir for one minute.

3. With the trim brush provided in your kit, begin coating by trimming along wall edges and around objects where they meet the floor. If you are working by yourself, you will want to trim only small areas at a time before rolling out the floor in that area. If you have a helper, he or she can trim ahead of you.

4. Using the 9" roller handle with the new 1/2" nap cover, apply the mixed UCoat material directly from the pail. Dip the roller into the pail and saturate the roller with the mixture. Withdraw it from the bucket and roll out in an even coat, spreading the material over the floor in an "M" and "W" pattern. Unless you are planning to apply a tinted UGloss-AF® top coat (sold separately), be sure to smooth out any roller marks as you work, as this will be the final color coat.

5. The finish coat will dry to the touch in 4-6 hours (at 68°F). You should allow at least 12 hours before walking on the floor or replacing any items on the floor. Coatings will cure to full strength within 7 days at 68°F and 52% humidity. Be sure to wipe-up any incidental chemical spills during this time to avoid staining or discoloration.

Pot Life				
Temperature	Rel. Humidity			
	52%	70%	80%	90%
70°F	60	50	35	20
80°F	55	45	30	5
90°F	45	35	20	
100°F	20	10		

Working times shown in minutes

Enjoy your new UCoat It floor and remember...U Did It, with UCoat It!

If you are applying any UCoat It top coats or decorative options (UGloss-AF, UGloss, UFlek-AF, UFlek, UltraLife), you will find the continuation of the application instructions in those kits. If you have opted for the standard UCoat finish, we thank you for using UCoat It and look forward to serving your future floor coating needs. Waste can be disposed of properly by resealing opened cans and bottles, then depositing into the waste bag provided in your kit. Please dispose any waste material in accordance with local, state, and federal laws. Thank you for choosing UCoat It!

Application Tips

General Tips: DO NOT apply coating if rain is forecast within 12 hours. Due to its high mineral content, well water is not recommended for use as a thinner or diluent with UCoat. DO NOT thin UCoat unless working in high temperatures (greater than 80°F) and/or low humidity (less than 70%). You may choose to mix smaller quantities of material: simply follow the 1:4 mix ratio using the ruler (stir stick) provided to measure the material as it is poured into the bucket (for example, with ruler standing against inside edge of mixing pail, pour ¼" of Part A and add 1" of Part B for a total of 1¼" of product).

For Step 1 — If you purchased your kit more than 6 months prior to using it, you may need to have the materials mechanically mixed.

For Step 2 — In extremely warm temperatures, the pail containing the mixed UCoat may be placed into a larger tub or container filled with ice and cold water to prolong working time, or you may simply work during cooler hours of the day (early mornings, evenings, etc.). If your floor is near the high end of the recommended coverage rate (576 sq.ft./gallon), you may choose to add water to the finish coat to thin the mixture slightly. Add no more than ½ of an empty UCoat Part A can (16 oz.) for each gallon/quart mix. DO NOT add water if the relative humidity is higher than 70%.

For Step 3 — DO NOT pour the UCoat mixture onto the floor, even if it appears to be excess material. The coating will be too thick in the area in which it is poured and will not cure properly.