



ACC WBU Waterborne Urethane

USGBC Leed, EQ Credit 4: Low – Emitting VOC Compliant Materials

Product Description -

ADVACOAT ACC WBU Waterborne Urethane is a 62% solids water based aliphatic urethane. ACC WBU displays UV weathering characteristics and is abrasion and chemical resistant. This product has been specifically formulated as a topcoat for existing coating systems, as a standalone floor coating or sealer.

ACC WBU is a thin mil coating (under 5 mils), that can be layered with multiple coats to achieve a thicker build.

Uses -

ACC WBU Waterborne Urethane adheres extremely well to concrete substrates, steel, wood and plastic surfaces. The high abrasion and wear resistant properties of ACC WBU allows this product to be used as a topcoat for existing coating systems. ACC WBU is an ideal topcoat to enhance gloss (Gloss), or to decrease gloss using the matte finish (Matte). The excellent wetting characteristics of this product make it an ideal sealer for stained or dyed floors, without the solvent smell of typical sealers.

ACC WBU can be used in conjunction with ADVACOAT's Antimicrobial additive where bacteria control is required.

Advantages -

- Quick Tack Free Time
- Excellent UV Stability
- Zero VOC's
- Color Stable
- Excellent Adhesion Properties
- Almost Odorless
- Cost Efficient
- Anti Graffiti Properties
- High Gloss or Matte Finish
- USDA, FSIS and CFIA Acceptable
- Easy Application
- Spray, Roll or Brush Application

Ideal Applications -

- Concrete Sealer
- Food Processing Areas
- Laboratories
- Animal Enclosures
- Chemical Plants
- Balconies
- Topcoat over Existing Coatings
- Hospitals
- Antimicrobial

Limitations-

Surface & ambient temperatures must be 40°F and rising. Do not apply to frozen concrete substrates or with high moisture content, as this will affect coating adhesion and long term performance. Low temperature applications will extend drying time. Product temperature cannot reach below 40°F at any time. Must be stored in a warm area as to not damage material.

Surface Preparation -

This product requires a dry substrate. Any moisture vapor transmission test revealing over 3.5 pounds per 1000 feet/24 Hours requires a moisture barrier system installed prior to using this product.

Concrete Substrate: A profile of CSP 1 is recommended for most system applications using ACC WBU directly over concrete, although a profile is not required as long as substrate is free of contaminants. Due to the low viscosity, this product is self priming. When applying ACC WBU directly to concrete, too aggressive of a profile may show through as this is a thin mil coating.

Over Coatings: ACC WBU may be applied over existing, or new coatings. Typically, any coating that has been applied, and let dry over 18 hours should be sanded with a floor machine, using 120 grit sanding screens. A mechanical bond on existing coatings is not required, as long as the surface is free of contaminants and debris. Wiping surfaces with denatured alcohol will ensure no loose dust particles are present.

Steel: ACC WBU may be applied over steel surfaces and does not require a surface profile, so long as surface is free of contaminants. For specific information please contact Advantage Chemical Coatings technical staff.

Surface Inspection-

This product requires a dry substrate. Concrete substrates should be clean, dry and free of grease, oil, paint, curing agents or any contaminants that may inhibit proper adhesion of coating. Concrete should be cured at least 28 days before applying coating system.

Proper testing procedures should be practiced in regards to alkalinity and moisture vapor transmission. A pH reading should be taken to ensure concrete is neutral, and has a reading between 5 and 9 using a pH paper test. Any testing can only give a snapshot in time of results, meaning future readings may be different. Long term results may vary.

Moisture vapor transmission is a major cause of coating failure. Using a calcium chloride test to find the vapor emission rate of the concrete substrate gives a reading for the 72 hour period. Follow procedures of calcium chloride test manufacturer for accurate results. Readings of 3.5 lbs/1000 square feet during a 24 hour period are acceptable for applying coatings. Higher results should receive a moisture mitigation system. Contact Advantage Chemical Coatings for more details. Testing procedures are the responsibility of the coatings applicator.

Coverage Rates -

Coverage of Square Feet Per Gallon: Theoretical. Added distilled water based on 1 Gallon mixed material. (1 Gallon WBU + 20% Distilled Water = 1.2 Gallons Total Mix)(1Gal/1 Mil = 1604 Sq Ft)

Added Distilled Water %	WFT	DFT	Mix Sq Ft
20%	5	4	384
60%	5	3	512
100%	5	2.5	640

Packaging -

Clear - Gloss or Matte Finish:

- 3 Gallon Kit: 1 gallon of 'A' side and 2 gallons of 'B' side
- 15 Gallon Kit: 5 gallons of 'A' side and 10 gallons of 'B' side

Pigmented - Gloss Only:

- 4 Gallon Kit : 1 gallons of 'A' side and 3 gallons of 'B' side
- 20 Gallon Kit: 5 gallons of 'A' side and 15 gallons of 'B' side

Shelf Life -

One year, in original, unopened factory containers, under normal storage conditions of 55°F to 95°F.

Colors -

Basic colors from ADVACOAT solid Color Chart as standard colors. Tan, Cantilever Tan, Ostrich feather, Dark Gray, Light Gray, Black, Yellow, White, Tile Red and Mocha.

Custom tinting on request. Consult Advantage Chemical Coatings. Two week turn around time is required, although not standard.

Mixing -

Before application, Pre mix A side and B side separately in their individual containers.

Clear - Mixing ratio is **1 Part A to 2 Parts B**. Measure one part of "A-Side" and two parts of "B-Side" and pour into a separate container with sufficient space to mix without spilling. Measure desired part of distilled water, which should be a minimum of 50% volume of A and B combination, add to A and B mixture. Mix thoroughly with jiffy mixer for three minutes, making sure material is a water like consistency. Be sure to scrape sides and bottom of mixing container so no unmixed material remains.

Pigmented - Mixing ratio is **1 Part A to 3 Parts B**. Measure one part of "A-Side" and three parts of "B-Side" and pour into a separate container with sufficient space to mix without spilling. Measure desired part of distilled water, which should be a minimum of 50% volume of A and B combination, add to A and B mixture. Mix thoroughly with jiffy mixer for three minutes, making sure material is a water like consistency with even color. Be sure to scrape sides and bottom of mixing container so no unmixed material remains.

Clean Up -

Cured product may be disposed of without restriction. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Product containers that are "drip free" may be disposed of according to local, state and federal laws.

Application -

ACC WBU Waterborne Urethane adheres well to several sound substrates including concrete, steel, and wood. All surfaces should be free of loose particles and contaminants. To achieve a higher build system, multiple 5 mil coats should be applied.

Roller: It is recommended that this product be applied by using a pump sprayer and lightly misting surface in a east-west pattern, and back rolled north-south. A cross hatch technique should be used immediately after this step in a east-west pattern. Do not exceed a 5 mil thickness at any time. When using ACC WBU directly over concrete as a primer, it should be cut 50-100% with distilled water. Any subsequent coats should be cut 50-60% with distilled water. Do not apply ACC WBU with a squeegee, as inconsistencies and improper thickness might occur.

Top Coating: ACC WBU may be top-coated after it has become tack free. Do not recoat without sanding prior coating of ACC WBU after 8 hours cure. Typically all coats of ACC WBU should be applied within respective recoat window to ensure proper inter-coat bonding.

As a Sealer: ACC WBU may be used as a sealer over acid stained or dyed floors by cutting first coat 100% with distilled water. Subsequent coats should be cut 50-60% with distilled water.

Maintenance -

ACC WBU Waterborne Urethane has anti graffiti properties, which will inhibit floor finish products from adhering to the cured surface. Due to the high wear and abrasion resistance of the ACC WBU, sacrificial coatings are not necessary. To clean the cured surface, use warm water and a mild detergent with a mop.

Technical Notes -

As the ACC WBU is a water based material, temperature and relative humidity play a large roll in working, tack free and dry times. Note that in cooler temperatures, the ACC WBU may set very slowly (Water evaporation). Temperatures between 50-60°F may prolong dry times as much as 300%. This material should not be used in temperatures under 50°F.

Technical Services -

Sales and Customer Support 1-877-830-2628, or contact your local sales representative or distributor. Visit www.Advacoat.com for any relative information on products.

Warranty - ADVACOAT will refund the price of or replace, at its election, product it finds to be defective provided the product has been used properly. Except as expressly stated above, the Company makes no warranty of merchantability and no warranty of fitness for any particular purpose, nor does it make any warranty, expressed or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, for loss of use, for indirect, special or consequential damages, or for any charges or expenses of any nature incurred without its written consent.

Physical Properties -

Cured Film Properties	Test Method	Typical Value
VOC	ASTM D3960	Zero
Solids Content		62%
Tensile Strength, psi	ASTM D638	4400-7200 Psi
Tear Strength (lbs/in)	ASTM D624	150-300
Modulus of Elasticity, kpsi	ASTM D638	3 - 5%
Taber Abrasion, mg wt loss (1000 g, 1000 revs, H-18)	ASTM D4060	260
(1000 g, 1000 revs, CS-17)		25
Gloss, 60 Spec	ASTM D523	85
Matte, 60 Spec	ASTM D523	35
Pot Life		45 Minutes
Working Time (77°F)		15 Minutes
Tack Free		1 - 2 Hours
Walk On		5 Hours
Return to Use		16-24 Hours
Full Cure		7 Days

Chemical Resistance -

ASTM D3912 - Modified 21 day immersion exposure

The information in this chart is intended only as a guide. This information has been compiled from various sources believed to be reliable. To verify compatibility or suitability of this product in specific applications, the product should be tested under the specific service conditions. The ratings are for resistance at 77° F unless otherwise noted. Recommended Conditional means there will be some effect: swelling, discoloration, cracking. Wash down within one hour of spillage to avoid effects.

R = Recommended

RC = Recommended/Conditional

NR = Not Recommended

Test Media:	Result:
Acetic Acid, 10%	R
Ammonium Hydroxide, 14%	R
Clorox 10%/water	R
Diesel Fuel	R
Gasoline	R
Hydrochloric Acid (10%)	R
MEK	RC
Betadine	R
IPA	RC
Sodium Hydroxide 50%	R
RC – coating will recover its Integrity once the chemical is removed.	