



RIO-COAT UHW

High Solids Urethane, Gloss or Satin

PRODUCT DESCRIPTION

RIO-COAT UHW is a high solids moisture cured urethane coating. It can be applied clear or pigmented with no filler leaving a high gloss smooth finish, glass beads can be added to provide non-slip, better abrasion resistance with high gloss or aluminum oxide can be added to provide the highest abrasion resistance. The addition of more aluminum oxide will provide a satin finish while adding less will give a gloss finish.

RIO-COAT UHW must be applied to a primed or coated floor. For the best adhesion the basecoat should be applied within 24 hours and be sanded with an abrasive buffing disc typically carborundum 180 grit. RIO-COAT UHW must be applied no thicker than 4 mils. No puddles can be left as the material will gas and create a foam like appearance if thicker films are installed.

TYPICAL PROPERTIES

Mixed Components

	50°F	70°F	90°F
Working time (min):	30-40	20-25	15-20
Dry to Touch (hrs):	8-12	6-8	4-5

Maximum Re-coat must be buffed.

Floor installation temperature limits: 50°F - 90°F (min to max).

Odor:	Mild
VOC Content:	2 g/l (ASTM D7668-12)
Pencil Hardness:	5H (ASTM D3363)
Cross-Hatch Adhesion:	5B (ASTM D3359)
Tensile Strength:	110400%
Elongation:	16%
Pot life (once mixed):	75 min
Working time:	20 min

The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.

BENEFITS

- Excellent adhesion to substrates and abrasion resistance
- Excellent wetting properties, stain and chemical resistance
- Great choice for all applications where urethane topcoats are being installed
- Extremely low VOC (50 state compliant)
- Minimal to no odor
- User friendly application process
- Non-yellowing, UV stable 100% aliphatic urethane

PACKAGING & COVERAGE

Unit Size Kits: 4:1 ratio

- 1.5 Gal Kit
(Part A-Resin (1 Gal), Part B-Hardener (1 Quart))
- 6 Gal Kit
(Part A-Resin (5 Gal), Part B-Hardener (1 Gal))

Optional Additives:

If adding Gloss, 1 pint of colorant

If adding Satin (Part C), 1 quart (1.5 Gal Kit)

If adding Satin (Part C), 1 Gal (6 Gal Kit)

Coverage

1.25 Gallon Kit: 550-700 SF (450-550 SF / working gallon)

INSTALLATION STEPS

Before you begin:

Concrete should be tested for moisture transmission prior to installing any materials. Contact RIO for specific testing methods and ranges prior to installing these materials.

Preparation

Shot blasting or diamond grinding are the preferred methods on concrete. The concrete should be blasted or ground to a 10 to 20 grit sand paper finish. Any oils or contaminants must be removed prior to installation.

Mixing

The materials are packaged in a 1.5 or 6 Gal Kits. The prepackaged units should be mixed as follows: Open the Part A and pour Part B into pail. If Gloss is desired add color if applicable and mix for 2-3 minutes. If Part C Satin is being added add them into the vortex of the mixer and mix for an additional 2-3 minutes.

Temperature affects the pot life and working time of the materials. The higher the temperature the shorter the working time. Do not mix more materials than can be installed within the pot life period.

Application

- **NO FILLERS** - Immediately pour the mixed material on to the concrete floor and squeegee out the materials at maximum of 4 wet mils if no fillers are being added. The coating should then be back rolled with a chemical resistant roller cover to level the primer and eliminate any puddling. **CARE SHOULD BE TAKEN TO NOT LEAVE ANY PUDDLES.**
- **WITH FILLERS** - Immediately split the bucket into several buckets to be applied by dipping the roller into the pail. A 1-gallon lid with holes punched in it can be placed in the bottom of the pails. This keeps the rollers from touching the bottom of the pails where fillers will settle. Care should be taken to leave puddles or drip marks as they will cure differently.
- Buckets should be switched after several mixes as the material will begin to set up and make it more difficult to roll.

Curing

Mixed Components

	50°F	70°F	90°F
Working time (min):	30-40	20-25	15-20
Dry to Touch (hrs):	8-12	6-8	4-5

Maximum Re-coat must be buffed.

Floor installation temperature limits: 50°F - 90°F (min to max).

Cleaning

Any mixing and application equipment should be cleaned immediately upon completion of the job. Xylene can be used to clean all the equipment.

Coverage

Bucket rolled only if the glass beads or aluminum oxide powder is added. If it is being applied without any filler it can be squeegeed and back rolled with a chemical resistant roller cover. Can be applied at thickness 4 mils.

Humidity and Dew Point

RIO-COAT UHW is a moisture cure urethane. Do not install when humidity is below 50% or higher than 90% without contacting RIO. Condensation can occur on the surface of concrete or epoxy when the substrate is below the dew point. This condensation can cause a film of moisture to form on the substrate interfering with adhesion or causing a blush. Check dew point temperatures prior to applying any materials. Any hazing of the film or greasy feeling may indicate a blush contact RIO prior to proceeding.

Disposal

All materials should be disposed of in accordance with all Federal, State or Local regulations.

Storage and Shelf Life

All materials should be stored in original – unopened containers in an enclosed building out of direct sunlight. Ideally the materials should be between 60-80°F for 24 hours prior to installation. Installation of materials at temperatures outside of this range may make them difficult to install. The shelf life in unopened containers is a minimum of 1 year. Consult RIO Coatings if you have any concerns about materials.

Safety

Follow recommendations for ventilation. Avoid contact with eyes or skin. Skin contact requires washing immediately with soap and water. Eye contact requires immediately flushing eyes with water. Please consult physician. If clothes become contaminated remove and wash prior to wearing again. These materials are for industrial use only.