

U-COAT 555 PEDESTRIAN & VEHICULAR TRAFFIC DECK SYSTEM



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U-COAT 555 PEDESTRIAN TRAFFIC DECK SYSTEM

SYSTEM DESCRIPTION

U-Coat 555 Pedestrian Deck System is a fast setting, rapid curing, 100% solids, polyurethane/polyurea, liquid applied, chemically cured, waterproof coating system. The system utilizes U-Coat Primer, a two-component epoxy primer, U-Coat 260, a two-component, non-gassing, thermal stable elastomeric basecoat and U-Coat 295, a twocomponent, solvent free, hybrid aliphatic polyurea topcoat.

U-Coat 555 Pedestrian Deck System is user friendly, low odor coating system that is specifically designed to be tough and durable enough to withstand light to heavy pedestrian traffic. It's high elongation elastomeric system properties allow it to expand and contract with normal structural movements. It can be applied to protect surfaces against spalling freeze/thaw damage and chemicals commonly encountered on vehicular decks. It will not soften in heat nor embrittle in cold. Recommended system coverage mil thickness: light pedestrian traffic, 36 dry mils and heavy pedestrian traffic systems 43 dry mils.

COLOR

U-Coat 260: Gray U-Coat 295: Dolphin Gray Custom colors are also available in minimum order of 250 gallons. Contact Umaco for more information.

PACKAGING

U-Coat 260

<u>5G Kit:</u> One 5G pail, net fill 4 gallons (15.12 liters) of Part-A and one 1 gallon (3.78 liters) can of Part-B. **U-Coat 295**

<u>4.40G Kit:</u> One 5G pail, net fill 4 gallons

of Part-A and one 1/2 gallon, net fill 0.4 gallon jar of Part-B.

TYPICAL USES

- Pedestrian traffic decks.
 - Balconies.

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- Walking decks.
- Stadiums.
- Stairs.
- Kennels.

BENEFITS

- Non-gassing.
- Can be applied at any thickness.
- Seamless.
- Solvent free.
- Very rapid setting and cure times.
- Recoatable
- Good thermal stability.
- God chemical resistance.
- Meets USDA criteria.
- Excellent low temperature flexibility.
- Coats green (vented) concrete.
- Environmentally safe.

APPLICATION

Substrate Preparation

Check area of application to ensure that it confirms to the substrate requirements. Prime all joints, cracks, flashings with approved primers as specified under PRIMER. Apply U-Coat 260 over all joints, cracks and flashing. Bridge joints, cracks and flashings with 4" Straight Jacket Tape pushing it into the U-Coat 260 with a trowel. Using U-Coat 260 as a caulking compound will shorten the curing time appreciably over conventional polyurethane caulks. Over reinforcement tape, apply a stripe coat of U-Coat 260 and taper it onto the adjacent surface. Allow the surface to cure for one to two hours.



LIGHT PEDESTRIAN TRAFFIC



HEAVY PEDESTRIAN TRAFFIC

PRIMER

Concrete should be primed with U-Coat Primer at a rate of one gallon/300 sq. ft.. Apply using a brush or phenolic core roller. This will result in a 4-5 dry mil thick membrane. Metal should only be primed with U-Coat Primer 2180 at a rate of one gallon/300 sq. ft.. Allow U-Coat Primer to become tack free before applying U-Coat 260. Note: For rough or porous concrete, use U-Coat Primer EBF-LV at an approximate rate of one gallon/200 sq. ft.; this rate may vary on the porosity of the substrate. Allow primer to become tack free before proceeding to basecoat application.



60 REAR NEWHALL STREET

PHONE: 978-453-8881

CURING/STORAGE

Curing

U-Coat 260 and U-Coat 295 cure best at 75 °F (24 °C) and 50% relative humidity. Allow each coat to cure for 2-4 hours before proceeding subsequent coats. Cure time will vary depending on temperature and humidity. If more than 24 hours passes between coats, re-prime the surface with U-Coat Primer before proceeding. U-Coat 295 is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes. Do not use U-Coat Hardener with U-Coat 295.

Storage

U-Coat 260 and U-Coat 295 have a shelf life of one year from date of manufacture in original, factory sealed containers when stored indoors at a temperature between 60 °- 95 °F (15-35 °C).

LIMITATIONS

- U-Coat 260 should be used as a membrane only. Topcoat must be applied.
- U-Coat 260 cannot withstand direct wear and abrasion.
- U-Coat 260 is a quick dry product. To slow the gel time, apply the product on the substrate as quickly as possible following mixing.
- Surfaces must be dry, clean and free of foreign matter.
- Surface may be slippery when wet.
- Containers that have been opened must be used as soon as possible.

The following conditions must not be coated with U-Coat deck coating systems or products: on below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces and asphalt overlays.

Coverage rate recommended are based on lab conditions, applied at 75 °F (24 ° C) ambient temperature and are intended to be minimum coverage rates on clean, smooth plywood and are exclusive of additional amounts needed

Technical Data (Based on draw down film)

U-Coat 555 Pedestrian Traffic Deck System	U-COAT 260	U-COAT 295
Mix Ratio	4A: 1B	10A: 1B
Coverage Rate (One Coat) At Dry Mil Thickness	1 gal/100 sq. ft. at 15 ±2 Dry Mils	1 gal/100 sq. ft. at 16 \pm 2 Dry Mils
Hardness, ASTM D-2240	64 ± 2 Shore A	85 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	230 ± 25 pli	300 ± 20 pli
Tensile Strength, ASTM D-412	1500 ± 100 psi	3200 ± 200 psi
Ultimate Elongation	1000 ± 100%	450 ± 50%
Total Solids by Weight, ASTM D-2369	100%	100%
Total Solids by Volume, ASTM D-2397	95%	100%
Volatile Organic Compounds, ASTM D-2369-81	0.46 lb/gal, 55 gm/liter	< 0.12 lb/gal, < 15 gm/liter
Pot Life at 75 ℉ (24 ℃), 50% R.H.	-	30 ± 10 minutes
Cure Time at 75 ℉ (24 ℃), 50% R.H.	-	2-4 hours
Adhesive Peel Strength on Primed Concrete	-	40 ± 10 pli
Water Absorption, ASTM D-471	-	1.3% by weight
Moisture Vapor Transmission, ASTM E-96	-	1.54 perms

Coverage Guide: U-Coat 555 Pedestrian Traffic Deck Coating System

Light Pedestrian Traffic = 36 dry mils

Primer	U-Coat Primer	Typically: 1 gal/300 sq. ft. = 4-5 mils
Basecoat	U-Coat 260	1.5 gal/100 sq. ft. = 24 mils DFT or 70 sq. ft./gal
Topcoat 1	U-Coat 295	0.75 gal/100 sq. ft. = 12 mils DFT or 133 sq. ft./gal
Aggregate	-	5-10 lbs./100 sq. ft. broadcast and backrolled

Heavy Pedestrian Traffic = 43 dry mils

Primer	U-Coat Primer	Typically: 1 gal/300 sq. ft. = 4-5 mils
Basecoat	U-Coat 260	1.5 gal/100 sq. ft. = 24 mils DFT or 70 sq. ft./gal
Topcoat 1	U-Coat 295	1.2 gal/100 sq. ft. = 19 mils DFT or 85 sq. ft./gal
Aggregate	-	10-15 lbs./100 sq. ft. broadcast and backrolled

to fill potholes, spalling, scaling, rough and irregular surfaces. Porosity and roughness of the substrate, aggregate size ad product temperature will affect coverage rates. Material mil thickness rates are calculated on theoretical coverage for a smooth substrate and do not account for the actual texture or substrate conditions in the field or at the time of application. Sample mockups on the projects are recommended to determine the exact coverage rates necessary to waterproof the deck to acceptable standards. Concrete must exhibit 3000 psi minimum strength. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to detrimental to coating application or function. New concrete must be cured for 28 days. U-Coat deck systems should not be subjected to rising water tables or hydrostatic pressure on slab-on-grade decks. The only acceptable grade of plywood is APA rated exterior grade or better. The appearance and physical

characteristics of the plywood and grade should be considered. Plywood should be new or cleaned and sanded. Coating should be applied at least 5 °F (3 °C) above the dew point. Equipment should be cleaned with a urethane grade, environmentally safe solvent, as permitted under local regulations, immediately after use. Uncured materials are sensitive to heat and moisture. The substrate must be structurally sound and sloped for proper drainage. Umaco assumes no liability for substrate defects. Field visits by Umaco personnel are for the purpose of making technical recommendation only and are not to supervise or provide quality control on the job site.

WARNING

This products in this system contain lsocyanates, Epoxy Resin and Curatives.

For technical assistance call 978-453-8881.

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LIMITED WARRANTY

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Umaco representative or visit our website for current technical data and instructions.

The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.

10/01/2012

DISCLAIMER

All guidelines, recommendations, statements and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller or manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Umaco makes no claim that these tests or any other test, accurately represent all environments.

• Concrete Patching & Repair Products

Masonry Waterproofing Products

• Acrylic Admixtures & Bonding Agents



- Decorative Masonry & Concrete Coatings
- Traditional & Synthetic Stucco Systems
- Flooring Underlayments & Resurfacers

U-COAT 555 VEHICULAR TRAFFIC DECK SYSTEM

SYSTEM DESCRIPTION

a fast setting, rapid curing, 100%

solids, polyurethane/polyurea, liquid

coating system. The system utilizes

U-Coat Primer, a two-component

epoxy primer, U-Coat 260, a two-

applied, chemically cured, waterproof

component, non-gassing, thermal sta-

ble elastomeric basecoat and U-Coat

U-Coat 555 Vehicular Deck System is

user friendly, low odor coating system

and durable enough to withstand light

to heavy vehicular traffic. It's high

elongation elastomeric system

contract with normal structural

properties allow it to expand and

that is specifically designed to be tough

movements. It can be applied to protect

surfaces against spalling freeze/thaw

encountered on vehicular decks. It will

not soften in heat nor embrittle in cold.

Recommended system coverage mil

thickness: light vehicular traffic, 43 drv

mils and heavy vehicular traffic sys-

Custom colors are also available in

5G Kit: One 5G pail, net fill 4 gallons

(15.12 liters) of Part-A and one 1 gallon

4.40G Kit: One 5G pail, net fill 4 gallons

of Part-A and one 1/2 gallon, net fill 0.4

minimum order of 250 gallons. Contact

tems 56 dry mils.

U-Coat 260: Gray

PACKAGING

U-Coat 260

U-Coat 295

gallon jar of Part-B.

U-Coat 295: Dolphin Gray

Umaco for more information.

(3.78 liters) can of Part-B.

COLOR

damage and chemicals commonly

295, a two-component, solvent free,

hybrid aliphatic polyurea topcoat.

TYPICAL USES

- U-Coat 555 Vehicular Deck System is Parking garages.
 - Ramps.
 - Parking lots. •
 - Warehouses.
 - Airport hangers.
 - Manufacturing plants.

BENEFITS

- Non-gassing. ٠
- Can be applied at any thickness.
- Seamless. Solvent free.
- Very rapid setting and cure times.
- Recoatable
- Good thermal stability.
- God chemical resistance. •
- Meets USDA criteria. •
- Excellent low temperature flexibility.
- Coats green (vented) concrete.
- Environmentally safe.

APPLICATION

Substrate Preparation

Check area of application to ensure that it confirms to the substrate requirements. Prime all joints, cracks, flashings with approved primers as specified under PRIMER. Apply U-Coat 260 over all joints, cracks and flashing. Bridge joints, cracks and flashings with 4" Straight Jacket Tape pushing it into the U-Coat 260 with a trowel. Using U-Coat 260 as a caulking compound will shorten the curing time appreciably over conventional polyurethane caulks. Over reinforcement tape, apply a stripe coat of U-Coat 260 and taper it onto the adjacent surface. Allow the surface to cure for one to two hours.



LIGHT VEHICULAR TRAFFIC



HEAVY VEHICULAR TRAFFIC

PRIMER

Concrete should be primed with U-Coat Primer at a rate of one gallon/300 sq. ft.. Apply using a brush or phenolic core roller. This will result in a 4-5 dry mil thick membrane. Metal should only be primed with U-Coat Primer 2180 at a rate of one gallon/300 sq. ft.. Allow U-Coat Primer to become tack free before applying U-Coat 260.

Note: For rough or porous concrete, use U-Coat Primer EBF-LV at an approximate rate of one gallon/200 sq. ft.; this rate may vary on the porosity of the substrate. Allow primer to become tack free before proceeding to basecoat application.



60 REAR NEWHALL STREET

LOWELL, MA. 01852 FAX: 978-453-2416

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CURING/STORAGE

Curing

U-Coat 260 and U-Coat 295 cure best at 75 °F (24 °C) and 50% relative humidity. Allow each coat to cure for 2-4 hours before proceeding subsequent coats. Cure time will vary depending on temperature and humidity. If more than 24 hours passes between coats, re-prime the surface with U-Coat Primer before proceeding. U-Coat 295 is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes. Do not use U-Coat Hardener with U-Coat 295.

Storage

U-Coat 260 and U-Coat 295 have a shelf life of one year from date of manufacture in original, factory sealed containers when stored indoors at a temperature between 60 °- 95 °F (15-35 °C).

LIMITATIONS

U-Coat 260

- U-Coat 260 should be used as a membrane only. Topcoat must be applied.
- U-Coat 260 cannot withstand direct wear and abrasion.
- U-Coat 260 is a very quick dry product. To slow the gel time, apply the product on the substrate as quickly as possible following mixing.
- Surfaces must be dry, clean and free of foreign matter.
- Surface may be slippery when wet.
- Containers that have been opened must be used as soon as possible.

The following conditions must not be coated with U-Coat deck coating systems or products: on below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces and asphalt overlays.

Coverage rate recommended are based on lab conditions, applied at 75 °F ($24 \circ$ C) ambient temperature and are intended to be minimum coverage rates

Technical Data (Based on draw down film)

U-Coat 555 Vehicular Traffic Deck System	U-COAT 260	U-COAT 295
Mix Ratio	4A: 1B	10A: 1B
Coverage Rate (One Coat) At Dry Mil Thickness	1 gal/100 sq. ft. at 15 \pm 2 Dry Mils	1 gal/100 sq. ft. at 16 ±2 Dry Mils
Hardness, ASTM D-2240	64 ± 2 Shore A	85 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	230 ± 25 pli	300 ± 20 pli
Tensile Strength, ASTM D-412	1500 ± 100 psi	3200 ± 200 psi
Ultimate Elongation	1000 ± 100%	450 ± 50%
Total Solids by Weight, ASTM D-2369	100%	100%
Total Solids by Volume, ASTM D-2397	95%	100%
Volatile Organic Compounds, ASTM D-2369-81	0.46 lb/gal, 55 gm/liter	< 0.12 lb/gal, < 15 gm/liter
Pot Life at 75 ℉ (24 ℃), 50% R.H.	-	30 ± 10 minutes
Cure Time at 75 ℉ (24 ℃), 50% R.H.	-	2-4 hours
Adhesive Peel Strength on Primed Concrete	-	40 ± 10 pli
Water Absorption, ASTM D-471	-	1.3% by weight
Moisture Vapor Transmission, ASTM E-96	-	1.54 perms

Coverage Guide: U-Coat 555 Vehicular Traffic Deck Coating System

Light Vehicular Traffic = 43 dry mils

Primer	U-Coat Primer	Typically: 1 gal/300 sq. ft. = 4-5 mils
Basecoat	U-Coat 260	1.5 gal/100 sq. ft. = 24 mils DFT or 70 sq. ft./gal
Topcoat 1	U-Coat 295	1.2 gal/100 sq. ft. = 19 mils DFT or 85 sq. ft./gal
Aggregate	-	10-15 lbs./100 sq. ft. broadcast and backrolled

Heavy Vehicular Traffic = 56 dry mils

Primer	U-Coat Primer	Typically: 1 gal/300 sq. ft. = 4-5 mils
Basecoat	U-Coat 260	1.5 gal/100 sq. ft. = 24 mils DFT or 70 sq. ft./gal
Topcoat 1	U-Coat 295	1.0 gal/100 sq. ft. = 16 mils DFT or 100 sq. ft./gal
Aggregate	-	10-15 lbs./100 sq. ft. broadcast and backrolled
Topcoat 2	U-Coat 295	1.0 gal/100 sq. ft. = 16 mils DFT or 100 sq. ft./gal
Aggregate	-	10-20 lbs./100 sq. ft. broadcast and backrolled

on clean, smooth plywood and are exclusive of additional amounts needed to fill potholes, spalling, scaling, rough and irregular surfaces. Porosity and roughness of the substrate, aggregate size ad product temperature will affect coverage rates. Material mil thickness rates are calculated on theoretical coverage for a smooth substrate and do not account for the actual texture or substrate conditions in the field or at the time of application. Sample mockups on the projects are recommended to determine the exact coverage rates necessary to waterproof the deck to acceptable standards. Concrete must exhibit 3000 psi minimum strength. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to detrimental to coating application or function.

New concrete must be cured for 28 days. U-Coat deck systems should not be subjected to rising water tables or hydrostatic pressure on slab-on-grade decks. The only acceptable grade of plywood is APA rated exterior grade or better. The appearance and physical characteristics of the plywood and grade should be considered. Plywood should be new or cleaned and sanded. Coating should be applied at least $5 \,^{\circ}\text{F} (3 \,^{\circ}\text{C})$ above the dew point. Equipment should be cleaned with a urethane grade, environmentally safe solvent, as permitted under local regulations, immediately after use. Uncured materials are sensitive to heat and moisture. The substrate must be structurally sound and sloped for proper drainage. Umaco assumes no liability for substrate defects. Field visits by Umaco personnel are for the purpose of making technical recommendation only and are not to supervise or provide quality control on the job site.

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DISCLAIMER

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• Concrete Patching & Repair Products

- Masonry Waterproofing Products
- Acrylic Admixtures & Bonding Agents



- Decorative Masonry & Concrete Coatings
- Traditional & Synthetic Stucco Systems

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