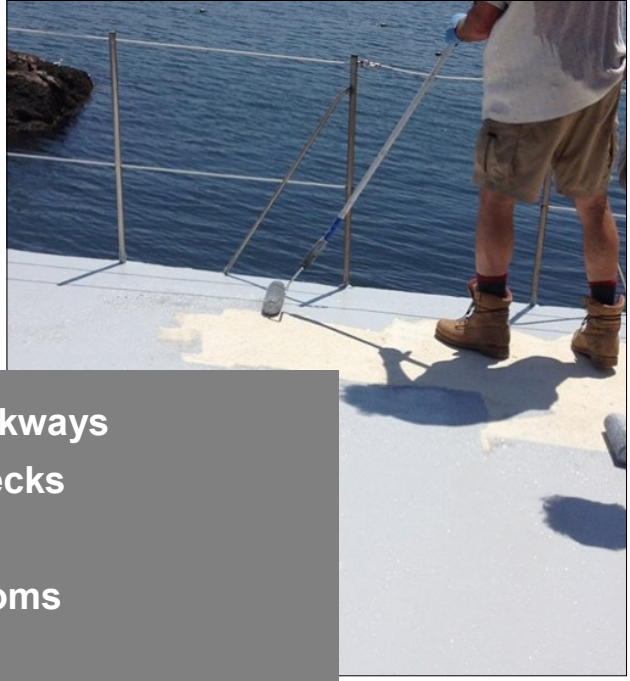
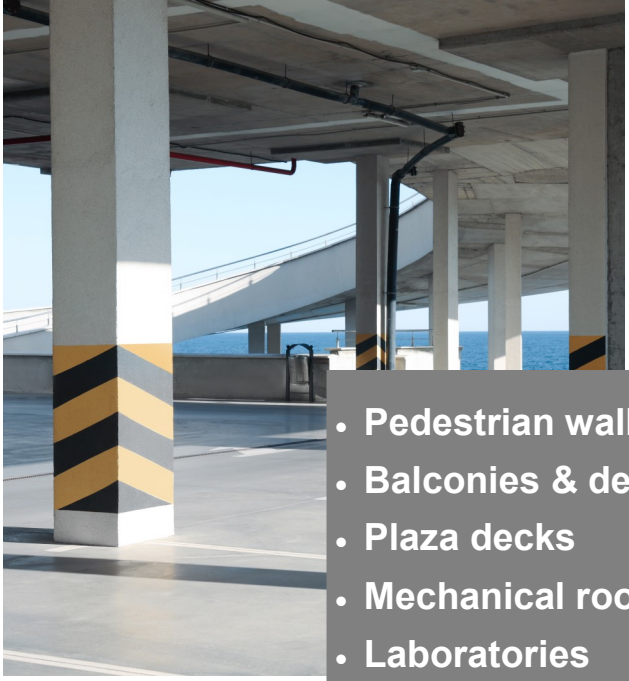
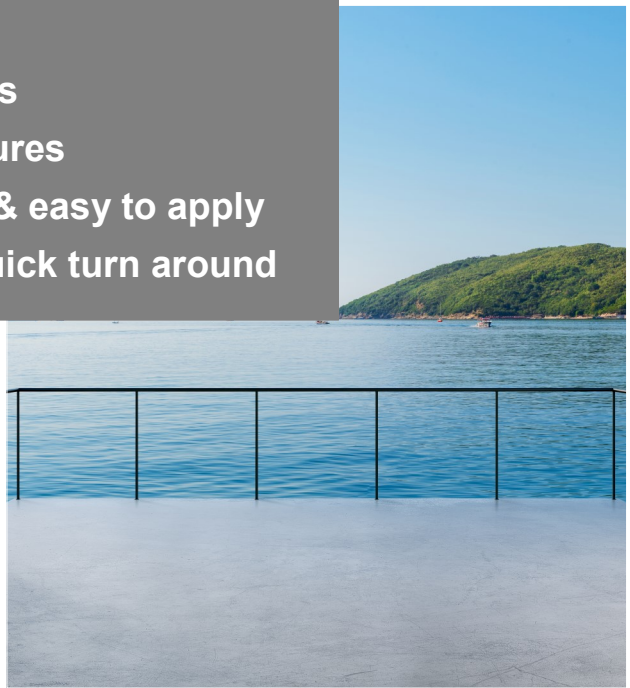


ULTRA-FLEX

MULTI-PURPOSE, WATERPROOF MEMBRANE SYSTEM



- Pedestrian walkways
- Balconies & decks
- Plaza decks
- Mechanical rooms
- Laboratories
- Loading docks
- Vehicular decks
- Parking structures
- Cost effective & easy to apply
- Fast-curing, quick turn around



MADE IN

U. S. A.

"The Professional's Choice"
UMACO
INC.

Toll Free: 800-442-5535
Phone: 978-453-8881
www.umaco.com

ULTRA-FLEX PEDESTRIAN & VEHICULAR DECK SYSTEM

SYSTEM DESCRIPTION

Ultra-Flex Deck System is a fast setting, rapid curing, 100% solids, polyurethane/polyurea, liquid applied, chemically cured, waterproof coating system. The system utilizes Ultra-Prime 125, a two-component epoxy primer, Ultra-Flex 700, a two-component, non-gassing, thermal stable elastomeric basecoat and Ultra-Flex 750, a two-component, solvent free, hybrid aliphatic polyurea topcoat. 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 pedestrian and vehicular decks. It will not soften in heat nor embrittle in cold.

Ultra-Flex Pedestrian Deck System is a user friendly, low odor coating system that is specifically designed to be tough and durable enough to withstand light to heavy pedestrian traffic movements. Recommended system coverage mil thickness is 20 mils.

Ultra-Flex Vehicular Deck System is a user friendly, low odor coating system that is specifically designed to be tough and durable enough to withstand light to heavy vehicular traffic. Recommended system coverage mil thickness is 40 mils.

COLOR

Ultra-Flex 700: Gray

Ultra-Flex 750: Dolphin Gray & Tan

PACKAGING

Ultra-Flex 700

5G Kit: One 5G pail, net fill 4 gallons (15.12 liters) of Part-A and one 1 gallon (3.78 liters) can of Part-B.

Ultra-Flex 750

0.88G Kit: One 1G can, net fill 0.80 gallons of Part-A and one pint, net fill 0.08 gallon can of Part-B.

4.40G Kit: One 5G pail, net fill 4 gallons of Part-A and one 1/2 gallon, net fill 0.4 gallon can of Part-B.

TYPICAL USES

- Parking garages
- Ramps
- Above grade substrates
- Pedestrian traffic decks
- Balconies
- Stadiums
- Stairs
- Kennels

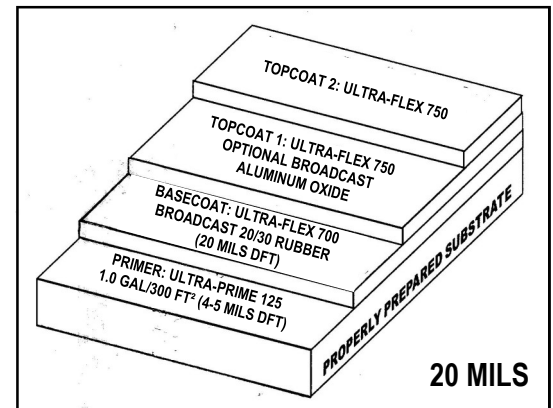
BENEFITS

- Non-gassing
- Can be applied at any thickness
- Seamless
- Solvent free
- Very rapid setting and cure times
- Recoatable
- Good thermal stability
- Good chemical resistance
- Excellent low temperature flexibility
- Environmentally safe

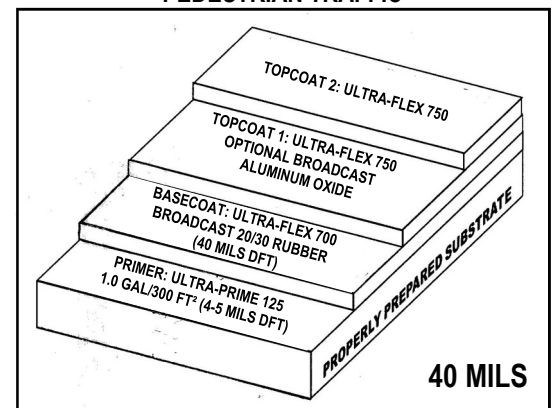
SURFACE PREPARATION

The concrete substrate must be clean, sound and dry. New concrete should cure for at least 30 days. The minimum pull off strength of the substrate is 200 psi. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces. The concrete must have a surface profile of CSP 3-5. Suitable preparation methods include dustless grinding, shot-blasting, scarification and etching using Umaco Ultra-Etch.

Check area of application to ensure that it conforms to the substrate requirements. Prime all joints, cracks, and flashings with approved primers. Apply Ultra-Flex 700 over all joints, cracks and flashing. Bridge joints, cracks and flashings with reinforcement 9.5" fiberglass mesh pushing it into Ultra-Flex 700 with a trowel. Using Ultra-Flex 700 (blended with rubber powder) as a caulking compound will shorten the curing time appreciably over



PEDESTRIAN TRAFFIC



VEHICULAR TRAFFIC

conventional polyurethane caulks. Over reinforcement 9.5" fiberglass mesh, apply a stripe coat of Ultra-Flex 700 and taper it onto the adjacent surface. Allow the surface to cure for one to two hours.

PRIMER

Concrete

Concrete should be primed with Ultra-Prime 125 at a rate of one gallon/300 ft². Apply using a brush or phenolic core roller. This will result in a 4-5 dry mil thick membrane. Allow primer to become tack free before proceeding to basecoat application.

Metal

Metal should only be primed with Ultra-Prime 165 at a rate of one gallon/300 sq. ft.. Allow primer to become tack free before proceeding to basecoat application.

APPLICATION

Umaco Ultra-Flex 700 can be applied using a 1/4" nap roller, brush, notched-trowel or serrated squeegee and back rolled. This product is best suited for application in temperatures between 20°F to 90°F. Maintain recommended temperature and relative humidity during application and curing process. If concrete conditions or over aggressive mixing causes air entrapment, an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating.

CURING

Ultra-Flex 700 and Ultra-Flex 750 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. Ultra-Flex 750 is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes.

STORAGE

Ultra-Flex 700 and Ultra-Flex 750 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

- Ultra-Flex 700 should be used as a membrane only. Topcoat must be applied
- Ultra-Flex 700 cannot withstand direct wear and abrasion
- Ultra-Flex 700 is a quick dry product. To slow the gel time, apply the product on the substrate as quickly as possible following mixing
- Ultra-Flex 750 is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time
- 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 Ultra-Flex deck coating systems or products: on below grade slabs, split slabs with buried membrane, sandwich slabs with

Technical Data (Based on draw down film)

Ultra-Flex Vehicular Traffic Deck System	ULTRA-FLEX 700	ULTRA-FLEX 750
Mix Ratio	4A: 1B	10A: 1B
Coverage Rate (One Coat) At Dry Mil Thickness	1 gal/100 sq. ft. at 15 ± 2 Dry Mills	1 gal/100 sq. ft. at 16 ± 2 Dry Mills
Hardness, ASTM D-2240	80 ± 3 Shore A	85 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	300 ± 25 pli	300 ± 20 pli
Tensile Strength, ASTM D-412	2500 ± 100 psi	3200 ± 200 psi
Ultimate Elongation	800 ± 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	0.02 lb/gal, 5 gm/liter	< 0.12 lb/gal, < 15 gm/liter
Pot Life at 75°F (24°C), 50% R.H.	-	30 ± 10 minutes
Cure Time at 75°F (24°C), 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

insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, light-weight concrete, asphalt surfaces and asphalt overlays

- Coverage rates 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 to fill potholes, spalling, scaling, rough and irregular surfaces.
- Porosity and roughness of the substrate, aggregate size and 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 coating application or function

- New concrete must be cured for 28 days
- Ultra-Flex 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 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
- Read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (SDS) 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

WARNING

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

**For technical assistance call
978-453-8881.**

www.umaco.com

LIMITED WARRANTY

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.

ELIGIBILITY FOR FIVE YEAR RENEWABLE WARRANTY

- Project must be 10,000 ft² or greater
- Application must be a minimum of 40 mils (Ultra-Flex 700) with 20/30 rubber granules broadcast into it
- Ultra-Flex 700 must have two coats of Ultra-Flex 750 applied over it with hard aggregate (aluminum oxide) broadcast into the first topcoat
- Ask your Umaco representative for more details

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.

04/01/22

- *Concrete Patching & Repair Products*
- *Masonry Waterproofing Products*
- *Acrylic Admixtures & Bonding Agents*



www.umaco.com

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