

ULTRA-FLEX 750

A TWO-COMPONENT, FAST-SETTING, FAST-CURING, SOLVENT-FREE, HYBRID ALIPHATIC POLYUREA ELASTOMERIC MEMBRANE TOPCOAT

ULTRA-FLEX 750 is a two-component, fast-setting, fast-curing and solvent-free, high solids, hybrid aliphatic polyurea elastomeric membrane. Ultra-Flex 750 can be applied to properly prepared interior or exterior concrete, plywood and metal surfaces. It is suitable for single or multiple applications in temperatures as low as 20°F (-6.67°C) and is insensitive to moisture. Ultra-Flex 750 is the recommended topcoat for Ultra-Flex 700.

FEATURES

- Non-gassing
- Seamless
- Solvent free
- Quick cure
- High solids
- High tensile strength
- Meets USDA criteria
- Environmentally safe

TYPICAL USES

- Topcoat for Ultra-Flex 700
- Vehicular & pedestrian traffic areas
- Sundecks, balconies & roofs
- Mechanical rooms
- Stalls, wash racks & kennels

PACKAGING

4.4 gallon kit: One 5 gallon (net 4 gallons) pail of Side-A and one 1/2 gallon (net 0.4 gallon) can of Side-B.

COLOR

Dolphin Gray and Tan

SURFACE PREPARATION

Concrete or plywood substrates must be free of all contamination that may impair proper bonding. Substrates must be sloped a minimum of 4" per foot for drainage, and must be primed with the applicable primer prior to application of the membrane and surface protection materials.

Concrete

The surface of concrete substrates must be clean and free of standing water. All holes, joints and cracks must be pointed flush with Portland Cement mortar and all high spots cut or ground off to provide a smooth, even surface. Before the material is applied, the substrate must be clean and free of dust or foreign material. Paint, grease and oil must be removed either by grinding or sandblasting and concrete surfaces must be shot-blasted or water-blasted. Control joints should be cut per standard concrete construction practices and caulked. Concrete must exhibit 3000-psi minimum. 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 and Old Concrete

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shot-blasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely.

Surface Preparation Reference

ASTM D4258

Standard practice for cleaning concrete

ASTM D4259

Standard practice for abrading concrete

ASTM D4260

Standard practice for etching concrete

ASTM F1869

Standard test method for measuring

moisture vapor emission rate

ICRI 03732

Concrete surface preparation

Plywood

Plywood should be new or cleaned and sanded. Plywood must be exterior grade plywood, having either tongue-and groove edges and ends perpendicular to supports. The plywood will be 19/32" or 21/32" thick. Plywood should be installed with a maximum of 1/16" space between the plywood sheets and laid over joists on 16" centers. Plywood sheets must be screwed down securely or nailed with coated annular ring or screw shank nails. If the underside of the joists is covered, the floor/ceiling cavity must be vented to aid in drying and to minimize moisture buildup in the deck structure. Damaged panels will be repaired/ replaced before coating. Old plywood must be cleaned and sanded before priming with Ultra-Prime 125 at a rate of 1 gallon per 300 ft² prior to coating application. The only acceptable grade of plywood is APA rated, exterior grade with exterior glue or better. The appearance and physical characteristics of the plywood and grade should be considered. The plywood grade is called out in compliance with the American Plywood Association's Standard. Plywood grading which does not reference APA markings may not be a suitable grade.



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

PRIMING

Surfaces to which Ultra-Flex 750 will be applied must be properly prepared and then primed with the appropriate primer. Read primer data sheet for instructions regarding mixing and application.

Concrete/Plywood.....	Ultra-Prime 125
Existing Urethane.....	Ultra-Prime 150
Metal.....	Ultra-Prime 160

MIXING

Before application, pre-mix Side-A of Ultra-Flex 750 using a mechanical mixer at slow speed. Add Side-B of Ultra-Flex 750 and continue mixing until a homogenous mixture and color is obtained. Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life. Do not mix in an up and down motion.

APPLICATION

Apply Ultra-Flex 750 evenly, over the entire deck using a 10:1 ratio machine or mixed material, then squeegee or notched trowel over the entire deck. Requires a continuous coating application to minimize lines and/or streaking. Apply up to 1.5 gallons/100 ft² (23 mils) in a single application. To obtain proper adhesion between coats, it is imperative that re-coating be done within 8-12 hours.

COVERAGE

The approximate coverage is 1 gallon/100 ft² (0.41 l/sqm) or 100 ft² /gallon. Coverage rate will depend on surface roughness and porosity.

CURING

At 75°F (24°C) and 50% relative humidity, allow each coat to cure for 2 to 4 hours. Cure time will vary depending on temperature and humidity. If more than 24 hours passes between coats, re-prime the surface with Ultra-Prime 150 proceeding. Allow a minimum of 16 hours before permitting light pedestrian traffic and at least 60 hours before permitting heavy pedestrian or vehicular traffic on the finished surface. 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.

EQUIPMENT CLEANUP

Equipment should be cleaned with an environmentally safe solvent as permitted under local regulations immediately after use.

STORAGE

Ultra-Flex 750 has a shelf life of one (1) year from date of manufacture in original factory sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

LIMITATIONS

- Surface must be dry, clean and free of foreign matter
- Clear coating may turn opaque and cloudy due to moisture penetration especially in exterior applications
- Do not open until ready to use
- Containers that have been opened must be used as soon as possible
- Do not dilute under any circumstance
- Any off ratio mixing of the product will affect the properties and the product may not cure.
- Surface may be slippery when wet
- Do not apply over split slabs, buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, non-structural light-weight concrete, asphalt surfaces and asphalt overlays
- A moisture-vapor transmission test should be performed for on grade slabs prior to application

TECHNICAL DATA

Dry Film Thickness per Coat

15 ± 2 mils (381± 50 microns)

Mix Ratio by Volume

10A:1B

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

Hardness, ASTM D-2240

85 ± 5 Shore A

Tear Resistance, Die C, ASTM D-624

300 ± 20 pli (52.6± 8.8 kN/m)

Tensile Strength, ASTM D-412

3200 ± 200 psi (22.1 ± 1.4 MPa)

Ultimate Elongation, ASTM D-412

450 ± 50%

Adhesive Peel Strength on Primed Concrete, ASTM D-903

40 ± 10 pli (7.0 ± 1.7 kN/m)

Moisture Vapor Trans., ASTM E-96

1.54 perms

Water Absorption, ASTM D-471

1.3% by weight

Total Solids by Weight, ASTM D-2369

94 ± 2%

Total Solids (Volume), ASTM D-2697

94 ± 2%

VOC's, ASTM D-2369-81

< 0.12 lb/gal (<15 gm/liter)

U.V. Stability, Q Panel Weather O-Meter, (No cracking or crazing; no physical damage)

2000 hours

WARNING

This product contains Isocyanates and Solvent

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. (2021)

Umaco, Inc.
60 Rear Newhall Street
Lowell, MA 01852



Toll Free: 800-442-5535
Phone: 978-453-8881
Fax: 978-453-2416