



ZeraDeck™ 99M

Polyurethane Waterproofing Membrane

DESCRIPTION

ZeraDeck™ 99M is a high solid two components amine-cured polyurethane waterproofing membrane.

WHERE TO USE

ZeraDeck™ 99M is primarily designed to waterproof and protect structural suspended slabs in most types of parking structures. This application will also require ZeraFlex HB-WC textured fully seeded flexible epoxy coating and ZeraGuard TC99 topcoat for interior or ZeraBrite TC for exterior application. The use of an epoxy primer ZeraPrime 95DS is recommended. Please refer to the individual datasheet for more details. **ZeraDeck™ 99M is not needed or recommended for slab-on-grade application.**

ZeraDeck™ 99M may also be used for mechanical (boiler) rooms in combination with non-slip ZeraFlex™ HB.

BENEFITS

Ease of Application:

Due to the fact that our membrane technology is non-isocyanate, and therefore, not affected by humidity during the application and throughout the cure, it produces a bubble-free impervious membrane surface that is superior to other leading products on the market. Furthermore, unlike conventional isocyanate-based membrane products, ZeraDeck™ 99M has a long pot life (working time), and is easily applied at 20 - 30 mils in one coat application.

Low Odor & Safe:

ZeraDeck™ 99M has a very slight odor with minimum disruption to the living or working environment. It contains no “Hazardous Air Pollutant” solvents (HAP’s free) and is free of hazardous MDI or TDI isocyanate-based materials commonly utilized in some leading competitive materials. This will ensure safety and long-term health protection for your workers.

Effective Long Term Performance:

ZeraDeck™ 99M adheres strongly to properly prepared deck surfaces to form an impervious barrier to water and/or chloride penetration. It remains flexible over a wide temperature range, does not harden with age, and can accommodate minor movement of the concrete. It retains its integrity even if substrate movement causes hairline cracks up to 1.6 mm (1/16"). The membrane is normally used in conjunction with wearing surfaces/topcoats in order to provide long-lasting protection against weather and traffic abrasion.

HANDLING PROPERTIES

Mix Ratio, by volume	4 parts A: 1 part B
Viscosity(Mixed) @ 25°C (77°F)	2500-3000 cps
Solids Content, by volume.....	99 %
VOC’s (ASTM D-6886)	24 g/L
Mixed Weight (Density) 1.2 kg/litre(10.2 lb./US gal)	
Pot Life @ 25°C (77°F)	2-3 hours
Foot Traffic @ 25°C (77°F)	16-24 hours
Vehicular Traffic @ 25°C (77°F)	5 days
Full Cure and Maximum Resistance	7 days

DATA - Cured Film

Tensile Elongation	300% @ break (ASTM D412)
Tensile Strength	8.5 Mpa (1230 psi) (ASTM D412)
Hardness (Shore A)	42 (ASTM D2240-86)
Tensile Adhesion to Concrete	3.2Mpa (450 psi) (ASTM D4541)

Note: The above information is representative of actual production runs. Independent test results may vary from the above by approximately ±10%.

SURFACE PREPARATION

New concrete must be cured for a minimum of 28 days before applying ZeraDeck™ 99M. All surfaces must be

primed using **ZeraPrime™ 95DS** prior to application of **ZeraDeck™ 99M**. Refer to the datasheet for instructions. The substrate must be above 10°C (50°F) and must be free of all dirt, waxes, previously applied coatings, oil, grease, laitance, and any foreign matter that may interfere with the bond of the coating to the substrate. Cracks and surface defects should be repaired prior to the application of the coating. All concrete and steel surfaces to be coated should be shot blast, water blast or mechanically cleaned to provide a clean tooth for the coating.

DETAILING

Joints or cracks should be repaired prior to application of **ZeraDeck™ 99M**. Cracks and cold joints less than 1.6mm (1/16") wide should be coated over with the **ZeraDeck™ 99M**. All cracks and joints greater than 1.6mm (1/16") wide must be routed and sealed with an approved polyurethane sealant. **ZeraDeck™ 99M** must be extended a minimum distance of 50mm (2") on either side of all sealed cracks, cold joints, and control joints to yield a total film thickness of 20-30 mils dry.

MIXING

The mixing equipment used to mix the coating must be clean and free of any contaminants that may be present in the equipment from previously used products. Mix component A first to eliminate the possibility of settlement. Pour all of the liquid from Part A and Part B into the mixing equipment. A 'Jiffy Mixer' or a mud mixer blade on a slow-speed drill is the preferred method of mixing. Mix the blended components for a minimum of 2 minutes.

APPLICATION

Apply **ZeraDeck™ 99M** to an even thickness using a squeegee and further level using a lint-free 6 mm nap roller (designed for epoxy and urethane), to achieve a total thickness of 20 mils. Allow the membrane to cure overnight before applying **ZeraFlex™ HB-WC** and **ZeraGuard™ 99TC** topcoat.

LIMITATIONS

Do not apply **ZeraDeck™ 99M** if the substrate and ambient temperatures are below 10°C (50°F).

COVERAGE

Based on 20 mils thickness per coat:
2m²/litre (80 ft²/U.S. gallon)

PACKAGING

18.9 litre/ 5 U.S. gal. units

CLEAN UP

Clean all equipment and installation tools immediately with VOC compliant, low odor solvent, xylene.

STORAGE

Store in a heated warehouse. Do not freeze.

SHELF LIFE

Two years from the date of manufacture if kept in original unopened containers under normal heated warehouse conditions.

SAFETY PRECAUTIONS

Read Material Safety Data Sheet (MSDS) prior to use.

WARRANTY

"The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from the use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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