

ZeraGuard™ DC100

Heavy-Duty Traffic Deck Coating

DESCRIPTION

ZeraGuard™ DC100 is a 100% solids, two-component textured flexible urethane- modified epoxy intermediate coating that is designed for heavy-duty vehicular traffic applications. It is resistant to the corrosive effects of de-icing salts, water, oil and petroleum.

ZeraGuard™ DC100 is typically used as a fully seeded multi-coat system on commercial or condominium parking garages that are subject to heavy vehicular traffic. It is to be used in combination with waterproofing membrane (ZeraDeck™ 98M) and ZeraTop™ E-100 highly abrasion resistant topcoat (tie-coat).

WHERE TO USE

- Waterproofing protection to structural slabs in parking structures
- Heavy duty non-skid broadcast coating

BENEFITS

- 100% solids, with very low odour, zero VOC's
- Fast setting to minimize traffic disruption
- Excellent impact and thermal shock resistance
- Outstanding adhesion properties to concrete and steel
- Highly skid resistance

HANDLING PROPERTIES @ 23°C (74°F)

Mixing Ratio, by volume	1 parts A: 1 part B
Viscosity (Mixed)	1500-2000 cps
Solids Content	100 %
Mixed Density.....	1.16 kg/L (9.7 lb./US gal)
Pot Life (working time).....	16 minutes
Recoat (over fully seeded)	2-3 hrs.
Vehicular Traffic.....	8 hrs.
Full Cure and Maximum Resistance	7 days

DATA – Cured Film

Tensile Elongation	38% @ break (ASTM D638-86)
Tensile Strength	24 MPa (ASTM D638-86)
Hardness (Shore D Scale)	68 (ASTM D2240-86)

SURFACE PREPARATION

ZeraGuard™ DC100 should be applied over clean, sound, dust free surfaces. For best results, the surface should be prepared as follows:

Concrete (New):

Shot blasting or equivalent to remove surface laitance, curing compounds or form oils. Concrete should be a minimum of 28 days old or have a 3% or less moisture content. Moisture content can be determined using test method ASTM D4263.

Concrete (Old):

Remove oil, grease, dirt and any unsound concrete using a combination of commercial degreasers, alkaline wash and shot blasting. Cracks and surface defects should be repaired prior to the application of the coating.

Steel:

Remove greases, oils and contaminants from surfaces and sandblast to white metals.

Waterproofing Membrane:

Apply within 24 hours over a clean and cured waterproofing membrane (ZeraDeck™ 98M).

AREA PREPARATION

For optimal performance, both the coating and substrate should be maintained at 18 to 30° C (68 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application, and cure.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to the expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded for 24 hours prior to the application, and remain shaded until after the initial set.

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 an equal amount of ZeraGuard™

DC100 Part A and Part B into a clean mixing container. A 'Jiffy Mixer' equipped with a slow speed drill is the preferred method of mixing. Mix the blended components for 2 minutes.

APPLICATION

Pour a workable amount of the mixed material on to the prepared substrate and spread it evenly over the surface with a notch squeegee. Using a lint free 5 mm nap roller, back roll the applied material to provide an even coat.

Immediately broadcast the selected aggregate (preferably Flint Silica 31 mesh, or Black Beauty aggregates) onto the wet coating to a full saturation and until no "wet spots" are visible. Coverage rate of aggregate is approximately 0.7 lb per foot.

When the coating has cured sufficiently to sustain working traffic (2-3 hours), any excess must be removed by sweeping followed by compressed air blowing or high powered vacuum.

The fully seeded surface must be sealed with ZeraTop E-100 to encapsulate the aggregate onto the coating yielding highly attractive durable deck surface.

LIMITATIONS

- Do not apply ZeraGuard™ DC100 if the substrate and ambient temperatures are below 15°C (65°F).
- Do not apply in areas where the humidity is greater than 85%.

Water Vapor and Slab-On-Grade:

ZeraGuard™ DC100 is not breathable. For slab-on-grade, it is recommended to test the moisture level in the concrete beforehand to ensure no issue with hydrostatic pressure from ground water (by vertical capillary action) that could cause delamination. Presence of vapor barrier beneath the concrete slab will prevent this problem.

COVERAGE

Based on 15 mils thickness per coat:

2.7 m²/litre (120 ft²/U.S. gallon)

PACKAGING

37.8 litre/10 U.S. gallon units

CLEAN UP

Clean all equipment and installation tools immediately with xylene.

SAFETY PRECAUTION

Consult Material Safety Data Sheet (MSDS) for specific instructions.

STORAGE

Store in a heated warehouse. Do not freeze.

SHELF LIFE

2 years from the date of manufacture if kept in original unopened containers.

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 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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