

ElastoCrete 5000

Intermediate Polyurethane Membrane



DESCRIPTION • *ElastoCrete 5000* is a liquid applied, two-component, flexible, solvent-free, aromatic polyurethane floor coating. *ElastoCrete 5000* provides an intermediate waterproofing membrane coat for parking decks and concrete floors.

USES • *ElastoCrete 5000* is suitable as an intermediate waterproofing coat for parking decks, balconies, roofs, industrial warehouses, chemical production areas, and mechanical room floors. *ElastoCrete 5000*'s high flexibility provides the crack bridging abilities that make it ideal as the intermediate coat in a multi-coat system for the roof slab on parking decks. It is recommended that *ElastoCrete 5000*'s be topped with an abrasion-resistant topcoat such as *ElastoCrete 4000* or *ElastoCrete 6500* (the latter for exterior applications).

COMPLIANCE • *ElastoCrete 5000* complies with ASTM D 412-98a and BSEN 12390.

ADVANTAGES •

- ✓ Low VOC.
- ✓ High impact resistance.
- ✓ Flexible under a wide range of temperatures.
- ✓ Available in a wide range of colors.
- ✓ Waterproofing properties.
- ✓ Easy to apply with a roller or brush.

LIMITATIONS • Never apply to new concrete surfaces before they have been allowed to cure for a minimum of 28 days. *ElastoCrete 5000* is only a fine coating; it should not be used to fill cracks, gaps or holes on the surface. Aromatic coating – should not be exposed to UV radiation.

PHYSICAL PROPERTIES •

Mixed Density @ 25°C	1.5510 g/cc
Pot Life @ 25°C	30 ± 10 minutes
Tack-Free Time	6-8 hours minimum
Percent Solids Content (ASTM D 1650)	100% (weight)
Hardness - Shore A (ASTM D 2240)	94
Tensile Strength (ASTM D 412)	21 N/mm ²
Percent Elongation (ASTM D 412)	140%

Adhesion to Concrete (ASTM D-903)	3 N/mm ²
Water Permeability @ 5 bar (BS EN 12390 Part 8:2000)	Nil
Impact Resistance (ISO 6272:1993)	No signe of cracking
Flash point	59°C

COVERAGE • Application rate will vary according to surface conditions, application technique and job conditions. Coverage rate of 2-3 m²/kg at 250 microns (DFT) is dominant when applied by roll, depending on surface porosity and texture. When used with *A-Z Quartz* for an anti-skid finish, apply quartz at the rate of 0.5-1.0 kg/m². Higher application thicknesses are possible with different application techniques such as with a trowel or gauge rake.

SURFACE PREPARATION • All concrete surfaces must be fully cured for a minimum of 28 days, sufficiently rigid, and clean of any surface contamination such as oil, dirt, grease, coatings, curing compounds, and laitance that may prevent proper adhesion. Dense, smooth surfaces, and those retaining excessive amount of form release agent can cause delamination from the base. Any painted or coated surfaces should be sandblasted and/or grinded to remove existing coatings. Use of detergents or soap is not recommended as they may leave a film that can cause bonding failure. The substrate should also be visibly dry. Concrete slabs, on or below grade, must have an efficient moisture/vapor barrier placed by the general contractor directly under the slab.

The concrete substrate should preferably be steel trowel finished. The surface must be prepared mechanically by grinding or shot blasting to achieve a rough profile and remove laitance, curing agents, and contaminants.

Use mechanical grinding along with patching to achieve the required surface level. Use only epoxy-based products for patching such as *MortCrete 3000 Multi-purpose Epoxy Mortar* and/or *EpoCrete 5000 Epoxy Screed*; cement-based patching products may require proper curing time before the coating can be applied.

Damaged areas, surface irregularities, and cracks must be repaired with *MortCrete 3000 Multi-Purpose Epoxy Mortar* prior to application. Remove all unsound concrete. Patches shall be flush with the surrounding surface and shall match the texture of existing surfaces.

Surrounding areas should be covered and protected from material spills and equipment contact. Rope off work area, remove surrounding vehicles, and close off to traffic.

Priming: Concrete surfaced must be primed with a coat of *EpoPrime 100 Solvent Free Epoxy Primer* or *EpoPrime EP1 Epoxy Primer* prior to application of the coating system. Please refer to the relevant CCC data sheet for application instructions.

MIXING • Lightly stir the contents of the A component (pigmented part) for 2-3 minutes using a jiffy mixing blade attached to a low speed drill (200-300 RPM). Ensure that the pigment is thoroughly and evenly distributed, eliminating any settlement that might have occurred in the container. Pour the contents of the B components (clear part) into the A component container, scraping the sides of the B component container to ensure that the entire contents of the container are used. Mix thoroughly to a streak-free color uniformity using a jiffy mixing blade attached to a low speed mixer. Due to the short working life, *ElastoCrete 5000* must be used immediately after mixing. Working time decreases with increasing ambient temperature.

APPLICATION • Allow the primer to become completely tack free (tack free time is approximately 4.0 hours depending on the ambient temperature) before coating over with *ElastoCrete 5000*. Once *ElastoCrete 5000* has been mixed, it must be used as soon as possible because of the short pot life. Use a short or medium haired roller to apply the *ElastoCrete 5000* to the floor.

A non-skid final surface may be obtained by sprinkling *A-Z Quartz* or equivalent graded silica sand to the *ElastoCrete 5000* coat while still wet at a rate of 0.5-1.0 m²/kg. Use spiked shoes during application. Allow to dry for 16 hours before removing excess quartz sand by lightly cleaning with a broom.

A-Z Quartz is available in three grades for antiskid surface finishing:

A- Z Quartz # 01 in sizes up to 0.3 mm

A- Z Quartz # 02 in sizes up to 0.5 mm

A- Z Quartz # 03 in sizes up to 0.85 mm

On interior applications, follow first coat of *ElastoCrete 5000* with a second coat applied with a short or medium haired roller. On exterior application, *ElastoCrete 5000* must be followed with a UV-resistant coat such as *ElastoCrete 6500* or *ElastoCrete 4000*.

Allow a minimum 48 hours of curing time before opening area to regular traffic.

CLEANING • Tools and equipment must be cleaned with an organic solvent.

STORAGE & SHELF LIFE • Product should be stored at 25°C in dry conditions away from direct sun light. Shelf life is approximately 12 months from date of purchase in original unopened container at specified storage temperature.

SAFETY PRECAUTIONS • **FLAMABLE** – do not expose to sources of open flame. Do not allow smoking during mixing or application. **KEEP AWAY FROM CHILDREN.** The application of material should be under good ventilation. Avoid inhalation of the vapors. Always wear protective clothing, goggles, vinyl gloves, and vapor mask. **DO NOT TAKE INTERNALLY, MAY BE FATAL IF SWALLOWED.** First aid: Eyes – flush with water and seek medical attention immediately. Do not use any solvents. Ingestions – give several glasses of water or milk and seek medical attention immediately. Contact with skin – wash affected area immediately. Inhalation – move to fresh air.

The product complies with environmental and occupational health & safety standards ISO 14001 and OHSAS 18001.

PACKAGING • 14.6 kg (12.5 L) pack.

Creative Concrete Concepts

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