

ElastoCrete 4000

Aromatic PU Traffic Coating



DESCRIPTION • *ElastoCrete 4000* is a liquid applied, two-component, flexible, solvent-free, aromatic polyurethane coating used as the top layer in a traffic deck coating system. *ElastoCrete 4000* provides excellent gloss and color retention and a hard but elastic surface which gives excellent skid resistance and reduces tire noise in high-build traffic deck systems.

USES • *ElastoCrete 4000* is used as the topcoat applied over *EpoPrime 100 Solvent-Free Epoxy Floor Primer* or *ElastoCrete 5000 Heavy Duty PU Coating waterproofing membrane*, or as basecoat for *ElastoCrete 6500 Aliphatic PU Topcoat* in exterior UV resistant traffic coating systems. *ElastoCrete 4000* is suitable for pedestrian and vehicular traffic and may be used for underground car parking, ramps, external traffic driveways, concrete balconies, parking bays, and pedestrian walkways.

COLORS • *ElastoCrete 4000* is available uncolored (clear glossy) or colored. Please refer to CCC's Resins Color Chart.

COMPLIANCE • *ElastoCrete 4000* complies with ASTM D 638, ASTM C579 and ASTM D4060.

ADVANTAGES

- ✓ Excellent abrasion resistance.
- ✓ Flexible with excellent crack-bridging ability.
- ✓ Excellent chemical resistance.
- ✓ Excellent resistance to Chlorides and Alkalis.
- ✓ Excellent waterproofing properties.

LIMITATIONS • Never apply to new concrete surfaces before they have been allowed to cure for a minimum of 28 days. *ElastoCrete 4000* is only a fine coating; it should not be used to fill cracks or holes in the surface. *ElastoCrete 4000* must be applied at a minimum dry film thickness (DFT) of 200 microns. Do not apply when ambient temperature is below +10°C. Do not apply on wet or damp surfaces. Do not apply if rain is expected in the proceeding 8 hours.

PHYSICAL PROPERTIES

Solid content	100%
Gloss retention	Very good
Elongation (ASTM D 638)	>79%
Tensile Strength (ASTM D 638)	9 N/mm ²
Adhesion Strength (ASTM D 4541 – to concrete) Value Failure Mode	3.46 N/mm ² Within substrate

Abrasion Resistance (ASTM D 4060), 1000 cycles Loss in Specimen Weight	223 mg
Chemical resistance: @ 50°C, 96 hours, Sodium Chloride 3% Avg. Loss in Weight	0.25%
Tear Strength (ASTM D624-12)	20.0 MPa
Crack Bridging Ability (ASTM C1305 / C1305M-16)	1.2 mm
Solvent resistance	Good
Water resistance	Very good
Drying Time	6 - 8 hrs.
Pot Life (max. @ 21°C)	1 hr.

COVERAGE • Application rate will vary according to surface conditions, application technique and job conditions. Coverage rates of 2-2.5 m²/liter at 400-500microns DFT over a single coat are dominant.

SURFACE PREPARATION • All concrete surfaces must be fully cured for a minimum of 28 days and have a moisture content of less than 5%. The relative humidity at the surface should not be more than 25% as per BS8201:1981. Concrete surfaces must be sufficiently rigid, clean of any surface contamination such as oil, dirt, grease, coatings, curing compounds, and free of 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*; rapid-curing products based on special hydraulic cements such as CTS's *Cement All®* and *Mortar Mix Plus®* may also be used.

Damaged areas, surface irregularities, and cracks must be repaired with *MortCrete 3000 Multi-Purpose Epoxy Mortar*, *Cement All®* or *Mortar Mix Plus®* prior

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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 for 2-3 minutes using a jiffy mixing blade attached to a low-speed drill (200-300 RPM) for five minutes. Ensure that the components are thoroughly and evenly distributed, eliminating any settlement that might have occurred in the container. Pour the contents of the B components 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 4000* must be used immediately after mixing. Working time decreases with increasing ambient temperature.

CLEANING • Tools and equipment must be immediately 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 • Protective clothes such as coveralls, goggles and respiratory masks shall be worn. If spilled into eyes, wash with plenty of water immediately and if irritation persists seek medical treatment.

DANGER, HIGHLY 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 • 14.5kg kit (11 Liter approx.)

Creative Concrete Concepts

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