

# ElastoCrete 6500

## Aliphatic Polyurethane Topcoat



**DESCRIPTION** • *ElastoCrete 6500* is a heavy duty, UV-resistant, liquid applied, two-component, flexible, aliphatic polyurethane floor coating for interior and exterior applications.

**USES** • *ElastoCrete 6500* is suitable as a UV-resistant topcoat in multi-coat systems for parking decks, balconies, roofs, and mechanical room floors where a heavy duty, high abrasion resistant top coating is required on exterior applications.

**COMPLIANCE** • *ElastoCrete 6500* complies with, ASTM D – 1499, ASTM D-903, ASTM D-412, ASTM D-624.

### ADVANTAGES

- ✓ UV resistant – suitable for exterior applications.
- ✓ High impact resistance.
- ✓ Hard wearing and durable.
- ✓ High abrasion resistance.
- ✓ Available clear or in a wide range of colors.
- ✓ Flexible coating.
- ✓ 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 6500* is only a fine coating; it should not be used to fill cracks, gaps or holes in the surface.

### PHYSICAL PROPERTIES

Mixed Density @ 25°C	1.17 ± 0.05
Pot Life @ 25°C	2 hrs.
Cure Time	6 hours minimum
VOC	< 450 g/L
Hardness (Shore A) ASTM D-2240	80
Tensile Strength ASTM D-412	14.0 N/mm <sup>2</sup> ± 2
Percent Elongation ASTM D-412	81% ± 5%
Adhesive Peel Strength on Primed Concrete ASTM D-903	350 psi cohesive failure
Water Absorption BS En 12390	Nil
Impact Resistance ISO 6272	No sign of cracking
Moisture Vapor Transmission	3.9 gm/m <sup>2</sup> /day

ASTM E-96	
Abrasion Resistance ASTM D-4060-95 300 dry micron film, C-17 wheel, 1000 gm weight loss after 1000 cycles	2 mg. wt.
Tear Resistance ASTM D-624	14.5 N/mm
U.V. Stability ASTM D-1499 Q Panel Weather – O - Meter	1,000 hrs No discoloration
Flash point	23°C

**CHEMICAL RESISTANCE** • Fully cured *ElastoCrete 6500* samples have been tested for chemical resistance to ASTM D 1308 and found to have no discoloration, change in gloss, blistering, softening, or swelling to the following materials:

- Ethanol (50% vol.)
- Vinegar (3% Acetic Acid)
- Alkali Solution (pH 11.5)
- Acid Solution (pH 2.0)
- Soap Solution
- Acetone
- Vegetable Oil
- Tea
- Coffee
- Lubricating Oil
- Distilled Water (cold and hot)

**COVERAGE** • Actual application rate will vary according to surface conditions, application technique and job conditions. Theoretical coverage rates of 2-3 m<sup>2</sup>/L at 200 microns (DFT) are dominant, depending on surface porosity and profile.

**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 should be prepared mechanically by grinding or shot blasting to achieve a rough profile and remove laitance, curing agents, or 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:** *ElastoCrete 6500* is intended as the topcoat in multi-coat systems, therefore, a priming layer of *EpoPrime 100* or *EpoPrime EP1* prior to application of the coating system should be applied as necessary - please refer to the relevant CCC data sheet of the different components of the system. When applying as a final top coat on another coating, insure that the surface is dry, clean, and free of any loose dirt or dust.

**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). Insure 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 6500* must be used immediately after mixing. Working time decreases with increasing ambient temperature.

**APPLICATION** • Priming is recommended for porous concrete surface by using *EpoPrime100* or *ElastoCrete 202* – please refer to the relevant CCC technical data sheet. Apply the primer to the dry substrate at the rate of 6–8 m<sup>2</sup>/kg by using a medium or short hair roller. 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 6500*. Once *ElastoCrete 6500* has been mixed, immediately pour over the surface and spread to an even coverage using a squeegee, then back-roll using a roller to break air bubbles.

*ElastoCrete 6500* must be applied in a minimum of two coats when used alone. Or it may be used as the final coat in a system containing an under coat of *ElastoCrete 5000*, *EpoCrete 250*, or equivalent.

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** • 18-liter pack.