ElastoCrete 5000S

Polyurethane Floor Screed



DESCRIPTION • *ElastoCrete 5000S* is a high-performance, three-component, polyurethane flooring screed composed of a two part PU binder and high abrasion resistance graded silica aggregates. Applicable in up to 10 mm thicknesses in a single pass, *ElastoCrete 5000S* provides a flexible and tough screed overlay that protects the floor from moisture penetration and high abrasion.

USES • *ElastoCrete 5000S* is ideal for application where a highly durable and abrasion resistant surface with excellent waterproofing and chemical resistance properties is required. *5000S* is suitable for bottling plants, workshops, steel plants, car parking decks and roofs, chemical plants, and cold rooms such as freezers and cold rooms.

ElastoCrete 5000S provides a hard wearing, easily-cleanable and attractive floor coating in areas where high resistance to chemical attack is required.

ADVANTAGES •

- ✓ Hygienic, seamless, and impervious surface.
- ✓ Non-slip finishing.
- ✓ High impact resistance.
- ✓ Excellent waterproofing properties.
- ✓ Wide application temperatures ranging from -40°C to 100°C.
- ✓ Hard wearing and durable.
- ✓ High abrasion resistance.
- ✓ Solvent free.
- ✓ Available in wide range of colors.

LIMITATIONS • Never apply to new concrete surfaces before they have been allowed to cure for a minimum of 28 days. UV radiation will cause discoloration, an aliphatic PU top coat is recommended where exposed to sunlight.

PHYSICAL PROPERTIES •

Solids Volume	100%	
Tack Free Time	6-8 Hours at 20°C	
	4-6 Hours at 35°C	
Shore D Hardness (ASTM D 2240)	80	
Full Cure	7 days at 20°C	
Compressive Strength	60 N/mm ²	
ASTM C 6319-Part 6		
Tensile Strength ASTM D 412	10 N/ mm ²	
Water Penetration (BS EN 12390)	Nil	
Adhesion Strength to Concrete (ASTM D 4541)	Substrate Failure	

CHEMICAL RESISTANCE • Fully cured *ElastoCrete* 5000S samples have been tested for chemical resistance to the following chemicals for 7 days @ 25°C:

•	Gasoline	Excellent
•	Petrol	Excellent
•	Diesel	Excellent
•	White Spirit	Excellent
•	Brake Fluid	Excellent
•	Sulfuric Acid 10%	Excellent
•	Hydrochloric Acid 35%	Excellent
•	Acetic Acid 5%	Excellent
•	Lactic Acid 20%	Excellent
•	Ammonia 30%	Excellent
•	Sod. Hydroxide 25%	Excellent

COVERAGE • Application rate will vary according to surface conditions, surface profile, application technique and job conditions. Coverage rates of 2.4 m²/pack at 5 mm DFT are dominant.

SURFACE PREPARATION • All surfaces should be clean, dry and free from dust and other contaminants. Wet substrates should be sponge dried to remove all free surface water then dried. Treat oil or grease contamination with degreaser followed by water or steam cleaning.

New concrete floors: should be at least 28 days old 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. Excessive laitance should be removed by mechanical methods. Dust and other debris should be removed by vacuum cleaning.

<u>Old concrete floors:</u> damaged areas or surface irregularities should be repaired with *MortCrete 3000*.

MIXING • The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes. Use a heavy duty slow speed power drill with a jiffy mixing blade. Mix the two components in the quantities supplied taking care to ensure hardener container is scraped clean. Do not add solvent thinners at any time.

APPLICATION • Priming is recommended for concrete surfaces by using epoxy primers such as *EpoPrime 100/EP1* – please refer to the relevant CCC technical data sheet for application instructions.

ElastoCrete 5000S should be applied to prepared surface by using a steel trowel. Apply sufficient pressure to compact and level the surface. ElastoCrete 5000S may be applied in thickness ranging from 5 to 10 mm in a single application.

ElastoCrete 5000S Polyurethane Floor Screed



Application in higher thicknesses may require much longer curing time.

For applications where sunlight exposure is anticipated, it is recommended to apply a UV resistant topcoat such as *ElastoCrete 6500* or *ElastoCrete 222*. Otherwise, a top sealing coat, such as *EpoCrete 150* or *ElastoCrete 212*, is generally recommended for easy cleaning. Insure that the PU screed has fully cured overnight before application of the top coat.

Allow the flooring system to reach its full mechanical properties after a curing period of 7 days before subjecting to high abrasion and chemical exposure.

CLEANING • Tools and equipment must be cleaned with an organic solvent such as *SolvCrete 100*.

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 • KEEP OUT OF REACH OF CHIDREN. DO NOT TAKE INTERNALLY, HARMFUL OR FATAL IF SWALLOWED. The application of material should be under good ventilation. Avoid inhalation of the vapors. Use goggles and vinyl gloves. In case of contact with eyes, rinse immediately with plenty of clean water, do not use solvent and seek medical attention immediately.

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

PACKAGING • *ElastoCrete 5000S* is supplied in a 23.56kg, 3-part kit composed of the following:

- Part A (base resin): 2.16 kg
- Part B (hardener): 0.9 kg
- Part C (filler): 20.5 kg