

CAT. No. FLR-14-2011

ISOPOX 327S

Heavy Duty Epoxy Floor Screed

ISOPOX 327S is a solvent-free three-component, trowel grade, heavy duty, floor screed consisting of epoxy resin, amine hardener and graded quartz filler. This system is characterized with excellent mechanical properties, high resistance to wear and a wide variety of chemicals. It is specially designed as a heavy duty screed for industrial floors 5 - 10 mm thick with pot life adjusted to suit tropical climate.

USES

ISOPOX 327S is specially formulated for use on industrial floors where a high degree of abrasion, chemical resistance and excellent mechanical properties are required. Typical floors suited for application with **ISOPOX 327S** are: chemical plants, machinery service areas, warehouse, dairies, garages, loading ramps, food processing plants, steel works etc.

ADVANTAGES

- Impact and abrasion resistant.
- Excellent resistance to chemical spills.
- High strength and proven durability.
- Non-slip surface to both pedestrian and forklift traffic.
- Non-tainting. Suitable for food processing areas.
- Longer pot life suited for tropical climate.

TYPICAL PROPERTIES

- Compressive strength (50x50 mm cube) ASTM C 109:

24 Hours	75 N/ sq. mm.
3 days	90 N/ sq. mm.
7 Days	100 N/ sq. mm.
- Tensile Strength @ 7 days ASTM D 638 16 N/ sq. mm.
- Flexural strength @ 7 days ASTM C 580 28 N/ sq. mm.
- Abrasion Resistance (ASTM C 779, Method C)
Depth of wear after 20 minutes 0.3 mm.
- Bond strength to concrete +3 N / sq. mm. (with primer)
(Greater than cohesive strength of concrete)
- Pot life @

-25°C	45 minutes
-35°C	30 minutes
Initial hardness, 25/35°C	8/6 Hours
- Full cure 7 Days
- Chemical Resistance Excellent to very good chemical resistance to dilute acids, alkalis, grease, petrol, detergents, etc. (Consult ACI for chemical resistance chart)

- Appearance Granular textured, impermeable, skid-proof surface, cement-grey color.
- Minimum laying temperature 10° Celsius

DIRECTIONS FOR USE

SURFACE PREPARATION

New concrete:

Concrete should be at least 28- day old and preferably cured with wet hessian / polyethylene plastic sheets. Finish concrete with wood or plastic float to achieve a slightly rough texture. Before priming, treat the floor with DISSOLVENT IS to remove laitance (see separate leaflet). Wet scrub with hard-bristled broom and wash with clean water. Allow to dry then remove any loose dust with industrial vacuum cleaner.

Old Concrete:

Old concrete should be free from oil, grease, coatings, curing compound, dirt and foreign matter. Light contamination of oils and grease can be removed using ISOLA CHEMICAL DEGREASER (See separate leaflet). Where areas are heavily contaminated with oil and grease (such as in garage, maintenance shops), mechanical cleaning methods such as captive shot blasting should be employed. Whatever cleaning method is employed, concrete should be washed with clean water, allowed to dry, then vacuum cleaned to remove any loose dust.

As a general rule, substrate should be clean, sound and dry (less than 5 % moisture by mass).

JOINTS

Expansion joints in the substrate should be carried through the epoxy screed and later sealed with appropriate sealant. Isolation joints should be installed where screed abuts restraining structures such as columns and walls. As a general rule, **ISOPOX 327S** should not span over joints.

PRIMING

Prime the prepared concrete substrate with ISOPRIME 30-S, a solvented epoxy primer. In applications where solvent vapors are undesirable, use ISOPOX IH 3010 LV solvent-free epoxy primer. ISOPRIME 30-S comes in pre-weighed 2 component pack. Each component should be stirred first before mixing the two together. It can also be mixed by volume using a 1:1 ratio. Mix the two components together for 5 minutes then apply onto the substrate using brush or roller at the rate of 4 to 6 square meters per liter. On porous floors, dry patches may appear. Apply another coat, let primer stand for at least 15 minutes to allow solvent to evaporate. After this period and while the primer is still tacky, apply **ISOPOX 327S**. ISOPRIME 30-S contains solvent and should be kept away from open flames or direct heat.

MIXING

ISOPOX 327S comes in accurately weighed packs. Under no circumstance should part mixing be allowed. First transfer the contents of Part B to Part A and mix for 3-5 minutes. Transfer the mixed liquid to a clean container. Add part C filler and mix using a slow speed electric drill fitted with a paddle (200-300rpm). Mix for 5 minutes or until uniform in color and the aggregates are evenly coated. Spread the mixed **ISOPOX 327S** onto the primed, tacky substrate at a uniform thickness. Compact the epoxy screed with a wood float. Final finish with a steel trowel and allow to cure.

SEALING

Although **ISOPOX 327S** is impervious, it is recommended to seal the surface especially if the floor will be used in a hygienic situation or when this will be subject to constantly wet operations. Consult ACI technical department for further details.

CLEANING

ISOPOX 327S can be cleaned off from tools and equipment while still wet with ISOKLEEN.

PACKING / COVERAGE

ISOPOX 327S is packed in 27 kg kit Parts A, B and C and will yield approximately 14 liters of epoxy mortar. Theoretical coverage is 2.8 square meters (5 mm thick) and 1.4 square meters (10 mm thick) per kit.

SHELF LIFE

Twelve months from date of manufacture stored in original container in dry, cool conditions below 35⁰ Celsius.

HEALTH / SAFETY

Some people are sensitive to epoxy resins. Users are advised to wear protective coveralls, rubber hand gloves, and eye goggles. Accidental splashes to the skin should be immediately cleaned with water and soap. Accidental splashes to the eyes should be washed with plenty of water and immediate medical attention sought. Epoxy resins are considered skin irritants.

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Technical information, data are to be considered as typical values and not sales specification. Actual measured values may vary due to factors beyond our control. Indications concerning function and application of the products are empirical. Although the information is believed to be accurate, there is no warranty by ISOLA. None of the recommendations becomes part of the warranted quality of the products. Due to the fact that the conditions of individual use are beyond ISOLA's direct and continuous control, ISOLA disclaims all responsibility in connection with the use of its products and does not warrant against any loss direct or consequential

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