

MONO DECKCOAT 30

High build solvent free epoxy floor coating

Description

MONO DECKCOAT 30 is a high build, hard wearing, three- component, solvent free, epoxy resin coating, designed to provide a hard, gloss coating to concrete floors.

Applications

MONO DECKCOAT 30 is used as protective, decorative, high chemical resistance and hard wearing floor coating system for a wide range of applications including:

- Aircraft hangars.
- Car parks.
- Soft drink and beverage production areas.
- Dairies production areas.
- Show rooms.
- Production, maintenance and assembly areas.
- Warehouses.
- General food processing and manufacturing plants.

ADVANTAGES

- High chemical and mechanical resistance.
- Available in a wide range of attractive colours.
- Cost effective.
- Easy application.
- High build.
- Hydrocarbon resistant.

STANDARDS

MONO DECKCOAT 30 complies with BS 476, Part 7:1987, Class 1 Spread of Flame.

Method of Use

SUBSTRATE PREPARATION

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminants. A clean surface will ensure maximum adhesion between the substrate and the coating.

Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 80% (max. moisture content of 4%), relative humidity can be measured using a hygrometer. Concrete relative humidity should be less than 80% for concrete 28 days old or more.

Technical Properties

Compressive strength: ≥ 68 MPa @ 25°C

BS 6319, Part 2:1983

Flexural strength: ≥ 35 MPa @ 25°C

BS 6319, Part 3:1990

Tensile strength: 15 MPa @ 25°C

BS 6319, Part 7:1985

Bond strength: 2.0 MPa (concrete failure)

ASTM D4541

Solid contents: 100%

Pot life: 60 min @ 25°C

30 min @ 35°C

Minimum time

between coats: 12hr@25°C 6hr @ 35°C

Maximum time

between coats: 36 hr @ 25°C 18 hr @ 35°C

Full curing time: 7 days@ 25°C 5 days @ 35°C

Mixed density: 1.4 ± 0.05 g/cm³ @ 25°C

Water absorption: < 0.1%

ASTM D570

Taber abrasion 70 milligram

resistance: abrasion

(1000 g, 1000 cycle) ASTM D4060, weight loss

CS17 wheel

VOC: < 20 g/ltr (comply with LEED)

ASTM D2369

SURFACE PREPARATION

Unsound layers and contaminated concrete surfaces must be prepared using mechanical surface removing equipment. Acid etching can be used only in well ventilated areas. Areas deeply

contaminated by oil or grease, such areas should be treated by hot compressed air.

Priming

MONO DECKCOAT 30 is designed to be used without a primer. However, for highly porous substrates, Strongcoat Primer S is recommended.

Mixing

To avoid inconsistent workability and pot life, make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures, for at least 24 hours prior to application.

Prior to mixing, stir individual components of Resin, Hardener and colour pack. Add the entire contents of the colour pack into the base container and mix with heavy duty drill for 2 minutes till a uniform colour is achieved. Add the entire contents of the hardener container to the mixed colour pack and base and mix thoroughly for at least 3 minutes.

Coating

Use brush or lambs wool roller, or airless spray machine to apply the mixed Strongcoat HB onto the prepared surfaces. To get a film thickness of 400 microns, apply 2 coats of Strongcoat HB at 3.5 m²/kg per coat, second coat should be applied at a right angle to the first coat. The second coat may be applied as soon as the first coat has initially dried.

When **MONO DECKCOAT 30** is used at a rate of 5 m²/kg, it will give a dry film thickness between 120 - 150 microns with a clear yellow glossy finish.

Antislip Application

The base coat should be applied at a minimum film thickness of 250 microns and then fully blinded with the chosen Antislip Aggregate. Once the base coat has reached initial cure, all excess aggregates should be removed before a further application of **MONO DECKCOAT 30** coat.

The top coat should be applied at a minimum film thickness of 400 - 750 microns depending on Antislip Aggregate size used.

Occasional Spillage

Chemical Resistance after full cure (7 days @ 25oC),
ASTM D1308 (Spot - test @ 1 hr)

Organic Acids

Oleic Acid sat.	RS
Citric Acid 25%	RS + SS
Inorganic Bases	
Sodium Hydroxide 50%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R

Aqueous Solutions

Sodium Chloride sat	R
Tap Water	R
Chlorinated Water	RS
Dead Sea Water	R

Solvents

White Spirit R Xylene	R
Toluene R Acetone R Ethanol	R
Ethyl Acetate R N Propanol	R
Methoxy Propanol	R

Oils & Fuels

Benzyl Alcohol	R
Brake Fluid RS Engine Oil	R
Diesel R Kerosene	R
Detergents & Soaps	R

Inorganic Acids

Sulphuric Acid 25%	RS
Phosphoric Acid 20%	RS
Hydrochloric Acid 10%	RS
Nitric Acid 10%	R

Remarks

MONO DECKCOAT 30 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 85%.

- Strongcoat HB should not be applied onto surfaces known to suffer from rising damp.
- In case of spray applications, airless spray machines should be used.

Cleaning:

Tools and equipment can be cleaned with STARKE Solvent when it is wet. Dried **MONO DECKCOAT 30** may be removed mechanically.

Coverage

Standard coverage:

MONO DECKCOAT 30: 5 m²/kg.

MONO DECKCOAT 30(base coat): 0.30 kg/m².

MONO DECKPRIME 30 (top coat): 0.30 kg/m².

Antislip coverage When used with Antislip Aggregate #2 to achieve medium texture:

MONO DECKPRIME 30: 5 m²/kg.

MONO DECKCOAT 30 (base coat): 0.37 kg/m².

Antislip aggregate #2: 2.0 – 4.0 kg/m².

MONO DECKCOAT 30 (top coat): 0.6 kg/m².

Approximate system thickness: 2.0 mm.

Antislip coverage When used with Antislip Aggregate #3 to achieve fine texture:

MONO DECKPRIME 30 S: 5 m²/kg.

MONO DECKCOAT 30 (base coat): 0.37 kg/m².

Antislip aggregate #3: 2.0 – 4.0 kg/m².

MONO DECKCOAT 30 (top coat): 0.5 kg/m².

Approximate system thickness: 1.25 mm.

Storage: Store in a dry area out of direct sunlight at temperatures between 5°C and 35°C.

Chemical Resistance (3 Days Immersion)

Hydrochloric Acid (HCl) 15% R

Sodium Hydroxide (NaOH) R 15%

R: Resistant

RS: Resistant with slight discoloration

SS: Slight softening

Shelf Life

MONO DECKCOAT 30 has a shelf life of 12 months from date of manufacture if stored in proper conditions and un-opened packs.

If these conditions are exceeded, STARKE Technical Department should be contacted for advise.

Cautions

Health and Safety

MONO DECKCOAT 30 should not come in contact with skin and eyes.

In case of accidental splashes to the eyes, rinse thoroughly with clean water and seek medical advise. Suitable protective gloves and goggles should be worn.

Do not use solvent to clean **MONO DECKCOAT 30** from skin.

For further information refer to the Material Safety Data Sheet.

Fire: **MONO DECKCOAT 30** is nonflammable. Strongcoat Primer S and STARKE Solvent are flammable. Ensure adequate ventilation. Do not use near a naked flame and do not smoke during use.

Flash Point:

SARKE Solvent: 37°C.

More from starke construction chemicals A wide range of construction chemical products are manufactured by STARKE which include:

Concrete admixtures.

Surface treatments

Grouts and anchors.

Concrete repair.

Flooring Coating

Sealants.

Waterproofing.

Adhesives.



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