

Floorgard® SLT

A MULTI PURPOSE EPOXY RESIN FLOORING SYSTEM

DESCRIPTION

Floorgard SLT consists of fillers bound in a pigmented epoxy resin binder. It is supplied as a four component system (base, hardener, colour pack & filler), pre-weighed for on-site mixing.

When laid, it provides a smooth, durable surface. It is available in a wide range of standard colours, and non-slip finishes.

Complies to EN1504 Part 9 and EN1504 Part 2

- Principle 5 : Increase in Physical Resistance (PR).
Method 5.1 - Overlays or Coatings.
- Principle 6 : Resistance to Chemicals (RC).
Method 6.1 - Overlays or Coatings.
- Principle 8 : Increasing Resistivity (IR).
Method 8.3 - Overlays or Coatings.

USES & ADVANTAGES

Floorgard SLT is designed for use in a wide range of industrial environments where a lasting solution to floor maintenance problems is required. It should be used by qualified experienced professionals.

Floorgard SLT provides a dense, impervious, coloured and chemically resistant floor surface which is hygienic and easy to clean. Typical applications include clean rooms, laboratories, food processing, plant rooms and light industrial plants.

Advantages include:-

- Suitable for use in food preparation areas.
- Non toxic.
- Suitable for coating in contact with potable water.
- Applied from 1 - 4 mm thickness.
- High flow characteristics combined with an attractive self smoothing finish.
- Fast application - minimizes downtime.
- Chemically resistant - good resistance to a wide range of chemicals.
- Durable - good abrasion resistance.
- Hygienic - provides a dense, impervious, seamless floor surface which is easily cleaned.
- Attractive - available in a wide range of colours to enhance the working environment.
- Available with fast cure hardener for low temperature application or for where early service of the floor is required.
- Solvent free-non taint.

DESIGN CRITERIA

Floorgard SLT is designed for application at a nominal thickness of 1 - 4 mm. Substrates should be dry and not suffer, or be likely to suffer, from rising damp or ingress of water. Protect from moisture by the use of an integral waterproofer or high quality waterproof membrane. For old floors with moisture problems use **Floorgard Moisture Barrier** or **Floorgard EB** screed system. Substrates should not have a relative humidity greater than 75% at the time of installation. In all cases consult Cormix International Limited's Technical Service Department.

PROPERTIES

The values given below are typical figures achieved in laboratory tests at 23°C. Actual values obtained on site may show minor variations from those quoted.

Pot Life: 45-60 mins.

Compressive Strength: >75 MPa

ASTM C579

Bond Strength: >2 MPa

ASTM D4541

(Concrete failure)

Shore D Hardness: >80

ASTM D2240

Heat Resistance: Upto 60°C

ASTM D648

Potable water Contact :

Comply to the requirement as per APHA & AWWA

Complies to the united states food and drug

administration (FDA) policy guides 7117.06 and 7117.07 (12/12/95)

Flexural Strength: ≥45 N/mm²

ASTM D648

Specific Gravity : Approx. 1.65-1.70 kg/ltr

Cure Time: Foot Traffic 24 hrs

Vehicular Traffic 48 hrs

Chemical Resistance 7 days

Mix Ratio: COMP (A : B : C : D) (by weight)

@ 1-4 mm thickness

Green/Red/Yellow/Grey/Light Grey

2 : 1 : 0.12 : 4

COMP A : Base

COMP B : Hardener

COMP C : Colour pack

COMP D : Filler/aggregates

Chemical Resistance

Citric Acid 10%	Excellent
Tartaric Acid 10%	Excellent
Acetic Acid 5%	Satisfactory
Nitric Acid 25%	Good
Hydrochloric Acid 25%	Excellent
Sulphuric Acid 50%	Very Good
Sodium Hydroxide 50%	Excellent
Diesel Fuel/Petrol	Very Good
Sugar Solutions	Very Good
Lactic Acid	Very Good
Hydrocarbons	Very Good
Phosphoric Acid 50%	Very Good

Chemical Properties:

Floorgard SLT has excellent resistance at ambient temperatures to a wide range of industrial chemicals. Specific data is available on request.

Note: it is especially important that spillage is cleaned up since very much higher concentrations of chemicals may occur on evaporation.

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SUBSTRATE PREPARATION

Floorgard SLT should be applied by specialist contractors recognised by Cormix International Limited who must follow the procedures laid down in the Product Application Guide. Cormix works with a network of such applicators who have been trained in the correct installation procedures. The following steps are involved in the application which would normally take place over a 2 to 3 days period.

- Thoroughly prepare the floor surface. Correct surface preparation helps to achieve the necessary adhesive bond between the substrate and the new floor.
- Mechanically scarifying or captive blasting is the normal suggested method.
- All existing expansion or movement joints should be followed through the new floor surface. Joints should be cleaned and prepared.

PRIMING

Apply 1 to 2 coats of the recommended primer by Cormix and allow to cure.

MIXING

- Add slowly the COMP C : colour pack into the COMP A : base component stir until homogeneous and no lumps.
- Add gradually one bag of the **Floorgard SLT** COMP D : fillers into the mixture of the base and colour pack.
- Continue mixing with a Festo type electric mixer.
- Add the COMP B : hardener and continue mixing entire mix for a minimum of 3 minutes once all components have been added.

Note: Mix in an efficient manner to ensure no colour pigment streaking is visible and scrape the side walls of the mixing vessel with a long bladed spatula to dislodge any unmixed material.

PLACING

- To apply the **Floorgard SLT** topping the material is poured on to the primed surface and spread with a steel trowel to achieve a 1 - 4 mm seamless topping.
- Using a spiked roller, remove entrained air and allow to cure.
- **Floorgard SLT** may also be applied as a built up system using Cormix filler aggregates 0.1-0.3 mm & 0.4-0.7 mm.
- Install the most appropriate Cormix joint sealant. This will depend on the anticipated movement accommodation factor and the end use of the new floor. For further advice, consult Cormix International Limited.

Installation times will vary according to site conditions and the size of the area involved.

LIMITATIONS

Floorgard SLT should not be applied on to surfaces known to or likely to suffer from rising damp conditions or have a relative humidity greater than 75%.

Where moisture movement exists incorporate **Floorgard Moisture Barrier** into the system.

Floorgard SLT is not a "floor leveling" product and will follow the contours of the sub-floor. If the floor requires levelling, consult Cormix International Limited for further advice.

In certain conditions a light oily film may appear on the surface of the floor during curing. This may be removed easily after curing for a minimum of 48 hours by washing with a mild detergent floor cleaner and water. **Floorgard SLT** does not produce a mirror finish, some imperfections in the finish are always present.

Floorgard SLT is designed as a rapid installation, seamless floor. Some floor areas, especially the darker coloured **Floorgard SLT**, may show slight 'dimpling'. This is common and should be expected. It has no effect on the end flooring project being seamless and hygienic. In areas where significant thermal shock is likely to occur, consult Cormix International Limited. **Floorgard SLT** is not suitable for areas subjected to steam cleaning or freezing conditions. Use **Floorgard PUHD** & consult Cormix.

Floorgard SLT should not be applied to asphalt, weak or friable concrete, unmodified sand cement screeds, PVC tiles or sheet or substrates known to move substantially e.g. steel walkways. For information on other substrates, consult Cormix International Limited

Floorgard SLT should not be installed at temperatures below 10°C.

COVERAGE RATE

Floorgard SLT

- 1 mm thickness: 1.50 kg/m²
- 2 mm thickness: 3.00 kg/m²
- 3 mm thickness: 4.50 kg/m²
- 4 mm thickness: 6.00 kg/m²

Floorgard Primer 903: 5 m²/litre (0.22 kg/m²)

The coverage figures given are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced. Typically, an additional 10% should be allowed for surface irregularities and wastage although this will vary with site conditions.

CLEANING

Floorgard SLT and associated primer should be removed from tools and equipment with Cormix Cleaner immediately after use. Hardened material can only be removed mechanically.

MAINTENANCE

The service life of a floor can be considerably extended by good housekeeping. Regular cleaning may be carried out using a rotary scrubbing machine with a water miscible cleaning agent at temperatures up to 50°C.

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PACKAGING

Floorgard SLT is supplied in packs containing pre-weighed components consisting of base, hardener, colour pack and fillers, which when combined produce the following quantity of mixed product.

Floorgard SLT @ 1-4 mm thickness : Green / Red / Yellow / Grey / Light Grey 30.48 kg packs

Floorgard Primer 903: 27.70 litre (30 kg) packs

Cormix Cleaner: 4 and 20 litre drums.

STORAGE & SHELF LIFE

All products have a shelf life of 12 months if kept in a dry store in the original, unopened packs. Store in dry conditions between 5°C and 30°C, away from sources of heat and naked flames. If stored at high temperatures the shelf life may be reduced.

HEALTH & SAFETY

Floorgard SLT, Floorgard 903 and Cormix Cleaner should not come in contact with the skin and eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used.

The use of barrier creams provide additional skin protection.

If poisoning occurs, contact a Doctor. If swallowed, do not induce vomiting-give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

If any adverse reaction to contact with these or any industrial chemicals, patient should be transported immediately to a doctor or hospital.

Fire:

Floorgard SLT and Floorgard 903 are non-flammable. **Cormix Cleaner** is flammable. Keep away from sources of ignition. No smoking. In the event of fire, extinguish with CO₂ or foam. Do not use a water jet.

DISPOSAL

Spillages of component products should be absorbed onto earth, sand or other inert material and transferred to a suitable vessel. If possible, add the other components and mix and allow to cure. Disposal of such spillages or empty packaging should be in accordance with local waste disposal regulations.

ADDITIONAL INFORMATION

Floorgard SLT is suitable for use in food processing areas, where "taint" is important.

Cormix International Limited manufactures a wide range of products specifically designed for the specialist flooring industry. These include liquid-applied chemically resistant coatings, self-levelling epoxy toppings and trowel applied highly abrasion-resistant screeds. Among them, are products suitable for use in the food and beverage industry, the pharmaceutical industry and in areas subjected to heavy industrial use. In addition, a wide range of complementary products are available. These include joint sealants, waterstops, waterproofing membranes and specialised products for the repair and refurbishment of damaged reinforced concrete.

For further information about products or publications, contact Cormix International Limited.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2015 verified by TUV Nord.

ISO 14001 : 2015 verified by Lloyd's Register International.

DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.

Cormix does not take responsibility nor need to defend others testing that does not achieve the published data.

The user must test the products suitability for the intended application and purpose. Cormix reserves the right to change the properties of the product.

Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advice offered.

CONTACT DETAILS

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