

# Indian Green Building Council M E M BE E R

# **FLORGARD SL PU**

# 3K SELF LEVELLING, SOLVENT FREE POLYUREATHANE BASED FLOORING

#### **Product Description**

**FLORGARD SL PU** is three components solvent free self levelling high abrasion and chemical resistant antimicrobial polyurethane resin floor finish and top coated with polyurethane waterbased *FLORTHANE WB* to give excellent anti –scratch, dust free matt finish flooring.

#### **Features**

- · Excellent mechanical properties
- · Excellent crack bridging property
- Outstanding life expectancy and performance
- · Good chemical resistance
- Very high abrasion and impact resistance
- · Excellent flexibility and tensile property
- Finds applications in chemical and fertilizer processing and storage areas, servicing and assembly areas.

# **Green Building Compliance**

This product has following distinct advantages

- Eco-friendly
- Low VOC
- Solvent free with a high level of mechanical, chemical and water resistance,
- Low odour
- Antimicrobial
- Low maintenance
- Easier cleanability
- LEED compliant

#### Uses

**FLORGARD SL PU** is recommended for use where abrasion, chemical resistant and dust free environment is required. It is ideally suited for floors which require crack bridging property.

Specific applications include:

- Chemical and Fertilizer Processing
- · Warehouse & Storage Areas,
- · Automobile Servicing and Assembly Areas,
- Medium to Heavy Engineering Industries

# **Properties**

Average Film Thickness : 2-3 mm

Application : Serrated Trowel

Finish : Matt

Pot Life @ 30 °C : 20-25 mins

Flexural strength (ASTM C 580) : 20 MPa

Tensile strength (ASTM C 307) : >15 MPa

Bond strength to concrete (ASTM D 4541) :

Bond strength to concrete (ASTM D 4541) : (Elcomete pull of test) Exceeds Tensile strength of concrete

Taber Abrasion Loss/1000 Cycles : 20 mg (H-22 wheels) (ASTM D 4060)

Impact resistance : Passes as per DIN55 669

Erichsen Impact Test @0.908 kg /80cm

Slip resistance: Classified 'Satisfactory' Under BS 8204 Part 2: 2002(9), Wet and dry

Elongation at break: >=100%

Crack bridging (ASTM C836): >2 mm

Curing Time

Initial Cure 8 hours,
Full Mech. Cure 48 hours
Ready for use To walk – 24hrs
To light traffic 48 hrs

To light traffic 48 hrs Full Chemical Cure 7 days

Mixing Ratio - As supplied.

The values given above are average figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

# Coverage

FLORGARD SL PU: 2.76 kg/m<sup>2</sup> @ 2 mm thickness.











# **Method of Application**

APURVA's system should be installed by approved contractors. Following information should be used as a guideline

#### Inspection and Surface preparation

The long term durability of the applied **FLORGARD SL PU** topping is dependent upon the adhesive bond achieved between the flooring material and substrate. It is most important therefore, that substrate surface is correctly prepared prior to application.

- New concrete or cementitious substrates should have been placed for at least 28days and have a moisture content of less than 5% before topping with FLORGARD S PU.
- Before application, the surface to be coated should be free from loose particles, rust, oils, grease or earlier coatings and should be thoroughly dry.
- After surface is dry, all repair work like sealing of joints, cracks filling of cavities and crevices should be carried out.
- 4. The self levelling action is very localised and does not eradicate irregularities of level present in the original substrate. It is most important, therefore, that adequate surface preparation and repair is undertaken prior to application of *FLORGARD SL PU* flooring systems.

Concrete defects such as voids, bug holes, excess porosity, and physical and chemical damage are usually filled or repaired prior to the installation of the F/C system. (Materials such as slurries, mortars, and polymer concrete are used to level, smooth and patch concrete surfaces).

The laitance (A thin, weak, brittle layer of cement and aggregate on concrete surface) on in-situ bases and any surface sealer or curing membrane should be entirely removed by suitable mechanised equipment, e.g. shot-blasting, panning or grinding, to expose cleanly the coarse aggregate.

Old Concrete surfaces: All surface contamination, e.g. oil, paint and rubber, should be removed and adequate mechanical preparation carried out to achieve a sound and stable surface with exposed coarse aggregate. (Existing floor paints should be removed by mechanical abrasion or contained shot blasting. When clear of all surface contamination, the concrete should be prepared mechanically to remove all laitance and expose a fresh surface).

After surface preparation all loose debris and dirt should be removed by vacuum- equipment.

#### Priming:

For use over a concrete surface, *FLORPRIME WB / FLORPRIME EP* primer is recommended depending on substrate condition to ensure maximum product performance.

#### Laying of FLORGARD SL PU

**FLORGARD SL PU** shall be mixed and applied only by specialist flooring contractors who have been trained in the correct application procedures. Detailed method of statement is available on request

# Mixing:

Pack components are pre-weighed for optimum performance. Never split packs. Empty contents of Base into a mixing container and pre-mix to assure the suspension of solids. Add Curing Agent and continue to mix to a uniform consistency for 1-2 minutes. Add the quantity of aggregates supplied and mix for 1-2 minutes. Mix with slow speed drill and helical spinner head for 2 minutes. Avoid high speed mixing that will entrain air into the mix.



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#### Special conditions

#### Colours

We shall always endeavour to supply the material in the colour shade ordered. However exact matching will not be possible.

Batch to batch colour variation may occur. Ensure that materials for final application are always drawn from the same batch.

Where colour matching is required over more than one order or delivery. Apurva's Technical department must be contacted prior to placing the order(s) and the requirement stated clearly on all orders relating to the project(s).

# **Substrate Requirements**

- Must be of sufficient strength to support loads applied through the topping.
- Must be free from rising damp.
- All contamination must be removed to give a clean dry textured surface.

# **Substrate Movements**

All moving joints must be carried through the **FLORGARD SL PU** and properly sealed. Construction joints and cracks may be covered but if substrate movement occurs, the **FLORGARD SL PU** will reflect the crack.

## Repairs & Levels

Concrete floors are generally laid to a levels tolerance of +/- 3mm under a 3 metre straight edge. Whilst **FLORGARD SL PU** has excellent local levelling properties, overall level deviations will not be eliminated by laying a self smoothing topping of 2-3mm.

When applied on old floors, all damaged areas of the floor should be made good and upto level using epoxy mortar.

# Packaging

FLORGARD SL PU is available in 9.7 kg pack size.

# Shelf life

# Storage conditions

Store in dry conditions between 5°C and 30°C, away from sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced

# **Handling & Safety**

Keep the containers tightly sealed when not in use. Avoid skin contact and inhalation of fumes (if any). While spraying it is advised to wear a mask. If it comes in contact with the body, wash affected parts with plenty of water. In case of persistent irritation, contact a physician.

Disclaimer: The manufacturer reserves the right to change the specifications. Apurva India Limited products are guaranteed against material manufactured and are sold subject to the company's Terms and Conditions of Sale. Whilst we endeavour to ensure that advice, specifications, recommendations and information given is correct, we cannot have control over how our products are applied and will not accept liability, directly or indirectly, arising from application of our materials.



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