

Cipcem SLU

High strength cementitious underlay



CEMENTITIOUS SELF SMOOTHING FLOORING

Description

Cipcem SLU is a one part, free flowing and self levelling cementitious composition designed for application over concrete substrates and underlays for subsequent placement of floor toppings such as vinyls, carpets, wooden floorings, tiles etc. It is suitable for use as repair and levelling course and can be applied at thickness from 3mm to 5mm. Cipcem SLU is a one part system, consisting of selected cements, plasticizers, additives and graded aggregates which requires only the addition of water for mixing and laying.

Uses

- Ideal for use for unlevelled concrete and cement sand screeds for overlaying resilient floorings.
- It provides a durable, self smoothing floor surface which protects the substrates from mild chemical attack
- Ideal as levelling course over which all types of floor coverings like vinyls, ceramic tiles, wooden laminates, glue down hardwood and carpeting.

Key features

- Single component
- High strength
- Minimum shrinkage
- Excellent adhesion to various substrates
- Pumpable through standard equipment
- Low emission
- Self smoothing and crack resistant



Performance data

Pull off adhesion test : ≥ 2 MPa for M20 grade
ASTM D 7234-2022 concrete or Concrete
failure

Compressive strength
ASTM C 109
3 day : ≥ 6 MPa
7 days : ≥ 18 MPa
28 days : ≥ 35 MPa

Flexural strength
ASTM C 580-2018 : 10 N/mm²
(28 days)

Tensile strength
ASTM C 307-2018 : 2 N/mm²
(28 days)

Impact resistance : 8.8 Joule
ASTM D 2794-1993
Falling weight - 1 kg.

Pot life after mixing : 25 minutes
with water

Setting time ASTM C 191
Initial set : 70 minutes
Final set (hard dry) : 2 - 3 hrs

Abrasion resistance Max 62 mg loss
ASTM D 4060-2019
(CS 17 Wheel - 1000
cycle, 1 kg)

Density of the screed : 2.10 gm / cc

Flow life : 25 minutes

Note : The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary, dependent on actual site conditions

Cipcem SLU

High strength cementitious underlay

APPLICATION INSTRUCTIONS

The long-term durability of the applied Cipcem SLU is dependent upon the adhesive bond achieved between the flooring material and substrate. It is most important therefore, that substrate surfaces are correctly prepared prior to application. Ensure that the residual moisture level in the concrete is below 5%. All substrates should be sound and free from contamination such as mortar and paint splashes, curing compound residue, oil, or grease. Excessive laitance should be removed by light mechanical scrubbing, grinding or grit blasting. Oil and grease contamination must be completely removed by grinding down to sound, clean concrete. Alternatively, blasting techniques can be used to provide the required substrate.

Priming :

Prepared substrates to be treated with Aquoxy 50. Primer should be mixed in the proportions supplied by adding the entire contents of hardener can to the base can. Once mixed, Aquoxy 50 should be immediately applied in a thin, continuous film using stiff brushes or rollers. Over application and puddles should be avoided. Porous floors may require two coats of primer. It should be allowed to become tack free prior to application. Primer coverage will depend on the texture and porosity of the substrate and the application thickness. Overcoating window time should not exceed 24 hours. In case overcoating window exceeds 24 hours, recoating of primer is necessary.

Mixing and application :

CIPCEM SLU is supplied in pre-weighed packs ready to use on site. Mixing of Cipcem SLU powder and water should be done in a clean mixing bowl with the aid of paddle mixer. Add the appropriate amount of water (5 Litres) for 25 kg bag and then add the powder component slowly under stirring. Mix for a minimum 3 minutes until a lump free fluid mortar is produced. Do not add more than 5.5 litres of water. Solvent or thinners should not be added. A forced action mixer with a paddle fitted into a heavy duty, slow speed electric hand drill is recommended for mixing. The material is poured onto the primed substrate and spread to the required thickness with a roller. Allow to cure overnight. Allow trafficking after 48 hrs.

Limitations

Self-smoothing is a term used in the flooring industry to describe a composition which after being spread to a uniform layer of appropriate thickness, develops a smooth, resin-rich surface. This self-smoothing action is very localized 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. It is not compatible for application over asphalt, unmodified sand-cement screed or PVC tiles and sheets. CIPCEM SLU coated floor will be scratched due to nails or sharp objects protruding from machinery, packings, or trolleys moving on the floor. Presence of sand will also cause abrasion. The product is not advised to be applied below 15°C as the flow reduces. While applying the product above 35°C, there can be a problem of low pot life etc., and it will be difficult to apply the material. Cured product is not suitable for exposure to sub-zero temperatures and above 65°C

Curing and finishing

Cipcem SLU will self smoothen after application and the trowel marks will disappear. No curing is required although protection should be given to prevent rapid drying out. In hot, dry conditions, cure with water and wet hessian sheets for two days. Protection from pedestrian traffic is required at least for a minimum of 48 hours and can be overlaid with floor coverings after 48 hours.

Coverage

Coverage depends on various factors like porosity, absorptions and undulations. Typically a coverage rate of 4.8 sq m @ 3mm thickness and 2.5 sq mt @ 5mm is recommended with 1 bag (25 kgs) of Cipcem SLU.

Packaging and storage

Cipcem SLU is supplied in 25 kg units with a maximum shelf life of 6 months provided it is stored under cover, out of direct sunlight.

Cipcem SLU

High strength cementitious underlay

Storage and handling

The product should be stored in accordance with national regulations. It should be kept in a cool, well ventilated area, away from heat, direct sunlight, sparks and children. Handle with care.

Health and safety precautions

Please refer to MSDS. Observe reasonable care and employ ordinary hygienic principles such as washing the hands with soap and water before eating or smoking. It is recommended to wear gloves, goggles and nose masks while application. In case of splashes on the skin, dampen the cloth with thinner PUT 503 and wipe the hands with the cloth. Wash then with soap and water. Dried film is non toxic. In case of contact with eyes, rinse with plenty of water and seek medical advice. In case of continuous exposure to vapour, the applicator should be immediately moved to get fresh air. The disposal of excess or waste material should be carried out in accordance with the local legislations.

Other Products Categories available

Dr.Cipy brings you the widest range of Flooring Systems

