

Cemfloor SL2030

High performance self leveling epoxy flooring 2 - 3 mm. thickness system

Innovative products for your success

Description

Cemfloor SL2030 Range is high performance self leveling epoxy flooring system, consists of graded aggregates bound in a pigmented epoxy resin binder. It is supplied as a four component system, pre-weighed for on-site mixing. When laid it provides a smooth, light reflective surface. It is available for the application of 2.00 mm and up to 3.00 mm thickness with a range of standard colors.

Uses

Cemfloor SL2030 is designed to use for the industrial environments where high abrasion and impact loads are likely. It provides a dense, impervious, colored and chemically resistant floor surface which is hygienic and easy to clean. Typical the areas of such uses as the follows:

- Food factory in the food process plants
- Traffic aisles in factories or warehouses
- Underground MRT substations
- Manufacturing plants
- Pharmaceutical manufacturing areas.
- Automotive assembly areas

Advantages

- Enhance durability by providing excellent protection in industrial environments
- Minimize downtime due to fast application
- Hygienic and provides a dense, impervious seamless floor surface which is easily cleaned
- Excellent resistant to a wide range of industrial chemicals
- The availability of wide range of colors suits various working environment

Specification Clause

High Performance Self Leveling Epoxy Flooring System

The designated floor area shall be surfaced with 2-3 mm thick flow-applied epoxy resin floor topping. The topping shall achieve a compressive strength of 80 N/mm² and a flexural strength of 35 N/mm² at 7 days when tested to BS 6319. At 20°C, it shall be capable of accepting foot traffic at 24 hours and vehicular traffic at 48 hours.

Properties

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

Properties

	@ 25°C	@ 35°C
Pot Life		
Cemfloor SL2030 :	1 hour	20 mins
Cemfloor Primer 500 :	2 hours	1 hour
Physical properties	@ 25°C	@ 35°C
Compressive strength @ 7 days (BS 6319) :	80 N/mm ²	80 N/mm ²
Flexural strength @ 7 days (BS 6319) :	35N/mm ²	35 N/mm ²
Cure time -		
Foot traffic :	24 hours	16 hours
Vehicular traffic :	48 hours	36 hours
Chemical resistance :	7 days	4 days

Chemical Properties

Cemfloor SL2030 has an excellent resistance at ambient temperatures to a wide range of industrial chemicals and specific data is available on request.

Design criteria

Cemfloor SL2030 is designed for application at a nominal thickness of 2-3 mm. Substrates should be dry and not suffer, or be likely to suffer, from rising damp. If necessary, suitable damp-proof system should be installed to prevent and substrates should not have a relative humidity greater than 75% at the time of installation.

Instructions for Applications

Cemfloor SL2030 should be applied by specialist contractors who must follow the procedures laid down in the Product Method of Statement. Cemkrete works with a network of such applicators who have been trained for the correct installation procedures. The following steps are involved in the application which would normally take place over a 2 to 3 day period.

Surface Preparation

It is essential that Cemfloor SL2030 is applied to sound, clean and dry surfaces in order to achieve maximum bond strengths between the substrate and the flooring system. All dust and debris should be removed prior to application of the product or its primer.

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New Concrete Floors

New concrete, or cementitious substrates, should be at least 28 days old and have a moisture content not exceeding 5%. Laitance deposits on new concrete are best removed by light grit blasting, mechanical scrubbing or grinding.

Old Concrete Floors

Existing concrete floors which require refurbishment must be prepared to ensure a strong adhesive bond between the flooring system and the existing floor. Mechanical cleaning methods are strongly recommended particularly where heavy contamination by oil and grease has occurred or existing coatings are present. To ensure adhesion, all contamination should be removed. Proprietary chemical degreaser may be used on small areas of light contamination only.

Steel Surfaces

Steel surfaces should be degreased and grit blasted to SA-2½ immediately prior to application. The prepared surface should then be primed with one coat of Cemfloor Primer 500.

Priming

All surfaces treated with Cemfloor SL2030 should be primed with Cemfloor Primer 500, a solvent based epoxy resin primer designed for maximum absorption and adhesion to concrete substrates. Add the entire contents of the hardener tin to the base tin and mix the two primer components thoroughly for at least 2 minutes - under no circumstances should part mixing be considered. Once mixed, the primer should be applied immediately to the prepared substrate using stiff brushes and/or rollers. The primer should be well 'scrubbed' into the substrate to ensure full coverage, but care should be taken to avoid over unsightly application or 'ponding'.

Allow the primer to dry (see table below) before proceeding to the next stage. Do not proceed whilst the primer is 'tacky' as this will lead to unsightly marks in the finished surface. Porous substrates may require a second primer coat – when the first coat is directly absorbed into the substrate – but minimum over-coating times must still be observed (see data below).

The minimum over-coating times will vary slightly according to the porosity of the substrate. However, they should be in accordance with the following ambient application temperatures.

- | | |
|----------|------------|
| ▪ 25°C : | 7-11 hours |
| ▪ 30°C : | 6-8 hours |
| ▪ 40°C : | 4-6 hours |

Mixing

Cemfloor SL2030 flooring is supplied in four pre-weighed packs (base, hardener, aggregate and color pack) which are ready for immediate on-site use. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor, and would furthermore automatically invalidate Cemkcrete's standard product guarantee. Mixing should be carried out using either a forced action mixer or a heavy duty, slow-speed drill with proprietary mixing paddle attachment. All such equipment should be of a type and capacity approved by Cemkcrete. The components should be mixed in a suitably sized mixing vessel.

The colour pack should be added to the base container and mixed for 15-30 seconds, until homogeneous. Then add the hardener and mix for further 30 seconds, until an even color and texture is obtained. Thereafter, the contents of the graded aggregate pack should be slowly added and mixing carried out for a further 3 minutes until a completely homogenous material is obtained.

Application

The applicator should ensure that there are sufficient supplies of plant, labor and materials to make the mixing and subsequent application process a continuous one for any given, independent floor area. Once mixed the material must be used within its specified pot life - see "Properties" section. The material should be poured onto the prepared and primed substrate as soon as mixing is complete. It should be spread to the required thickness using a serrated trowel with care taken not to overwork the resin, spreading evenly and slowly.

Immediately after laying, Cemfloor SL2030 the material should be rolled, using a spiked plastic roller, to remove slight trowel marks, and to assist air release. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air, but should be prior to setting of the product.

Floor Joints

All existing expansion or movement joints should be followed through the new floor surface. Joint sealant & joint geometry should be compatible with the floor type used, intended exposure conditions and likely movement characteristics of the substrate - consult the local Cemkcrete office for more details.

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Cleaning

Cemfloor SL2030 and Cemfloor Primer 500 should be removed from tools and equipment with Solvent 100 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.

Technical Support

Cemkcrete offers a comprehensive range of high performance, high quality, flooring, jointing and repair products for both new and existing floor surfaces. In addition, the company offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance.

Estimating and Packaging

Supply

Cemfloor SL2030 : 23 kg. Packs

Coverage

Cemfloor SL2030 : 8.21 m²/pack @ 2 mm thickness

Cemfloor Primer 500 : 8-10 m² / kg.

Note: 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.

Storage

Shelf life

Cemfloor SL2030 has a shelf life of 12 months if kept in warehouse conditions at 30°C in the original, unopened pack.

Additional Information

Cemkcrete manufactures and supplies a wide range of those complementary products which includes:

- Waterproofing membranes & waterstops
- Joint sealants & filler boards
- Cementitious & epoxy grouts
- Specialized flooring materials
- Fireproof coating and systems
- Concrete admixture
- Repairing material

For further information on any of the above, please consult your local Cemkcrete office - as below.

Important Note: Cemkcrete warrants its materials free of manufacturing defects and produced as per standard specifications and sold under the terms and conditions of usages, whilst Cemkcrete endeavors to ensure that any advice, recommendation, or information, given through its products literatures are reflects of the R&D in-house lab test and practical sites experience and knowledge based feed backs, however, the products are being used under various conditions and applied beyond its control where or how either directly or indirectly at various locations and places at a different stages that of an intended purposes and uses. Therefore, Cemkcrete cannot hold warranty or responsible for resultant consequences, such as damages to the property or assets but the product itself.