

POLYFLOW

Self Levelling Polyurethane Flooring

Description

POLYFLOW is a medium duty, flow applied, smooth flooring based upon polyurethane technology, which provides a surface with excellent resistances to abrasion, chemical attack and other forms of physical aggression.

Composition

Water dispersed polyurethane resin system combined with reactive polyurethane hardener and graded silica aggregates.

Appearance

Seamless matt smooth finish with uniform colour.

Durability

Highest order of durability, resistance to abrasion, impact and chemical attack.

Thickness

Typically 2 - 3mm.

Typical Instalations

The POLYFLOW is ideally suited to areas subject to heavy duty use:

- Chemical processing
- Food processing/wet areas
- Brewing/dairy clean areas
- Engineering processing areas

Substrates

Concrete, polymer reinforced screeds, grano concrete, mild steel and water resistant ply board.

Colours Available

All standard CEMART colours except white, blue and magnolia.

Technical Data

Compressive strength to BS6319 Part 2	62.0 N/mm ²
Tensile strength to BS2782:320D	12 N/mm ²
Flexural strength to A.S.T.M. D790	40.0 N/mm ²
Elastic modulus to BS2782:320D	1530.0N/mm ²
Slant shear bond strength to BS6319	55.0N/mm ²
Abrasion resistance by Taber mg loss/1000 cycles/ 1 kg load with H18 wheel	900
TRRL slip resistance	65 Dry

Surface Preparation

To be assured of maximum adhesion and properties from CEMART resin products the correct surface preparation is essential. In order to ensure the finished system remains fully bonded to the sub-floor, it is recommended that the edges of the floor areas adjoining the walls are rebated to produce a cross-section of 20 mm deep by 6 mm wide, running at 150 mm from and parallel with the walls.

Application Conditions

5 - 30°C maximum moisture content of the substrate 10%.

Priming

Priming of all surfaces should be undertaken with EPOPRIME. The primer should be allowed to cure for a minimum of 16 hours prior to application of the POLYFLOW system. (Maximum over coating time at 20°C – 48 hours). In order to ensure a minimum film build of 2mm is maintained and also minimise wide variations in applied product film thickness, it is recommended that floors with notable variations in profile or level are scratch-coated prior to application of POLYFLOW.

Mixing

POLYFLOW is a three-component product. Pre-mixing of the coloured liquid component is recommended to ensure any light settlement is reincorporated. Thoroughly drain the contents of the brown hardener component into the liquid colour component and mix for a minimum of one minute or to provide a homogeneous mix. The resultant mixture should then be loaded into a rotary drum mixer and the aggregate component added in stages, mixing until a lump free, smooth mix is obtained.

Application Conditions

Apply to pre-primed areas, levelling to the required thickness with a steel trowel aided by a CEMART spiked roller. Spiked rolling should be effected within three minutes of application in order to avoid interfering with the flow and film gel times.

Coverage Rates

Nominal thickness	2.0mm	2.5mm
Coverage – kg/mtr ²	3.63	4.54

Specification Detail

EPOPRIME applied at 125g/m²
POLYFLOW at coverage rates quoted above.

Maintenance

Providing contamination is not allowed to build up, regular scrubbing and mopping will maintain these systems in serviceable conditions. Normal propriety cleaning agents in combination with pressure washing may be employed.

Cure Schedule

Usable Life of full unit/mix at 20° C	15 mins
Initial film gel time (joining up) at 20° C	20 mins
Cure time to light pedestrian traffic at 20° C	5 - 7 hours
Cure time to light wheeled traffic at 20° C	12 -16 hours
Cure time to heavy duty traffic at 20° C	24 hours
Full cure at 20° C	3 - 5 days

Chemical Resistance

Excellent resistances to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents.

Storage, Mixing and Application

The storage, mixing and application conditions can affect the quality of the finish produced.

Health and Safety

Avoid contact of the material with skin and eyes.
Wear appropriate gloves, overalls and eye protection during use. Please refer to material Safety Data Sheet for additional information, for specific advice regarding any aspect of this product, please consult our Technical Section. Please consult our Sales Department to confirm that this Data Sheet is the current issue.

General Guidance

This Data Sheet is for general guidance purposes only and may contain information that is inappropriate for certain conditions of use. Accordingly, all recommendations and suggestions are made without guarantee. Further information is available from our Technical Department.