

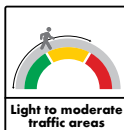
Polydeck 4000

Solvent free epoxy non-exposed area coating system

High performance, durable, easy to clean floor and wall coating

CHARACTERISTICS

- ▶ Excellent resistance to a wide range of chemicals
- ▶ Hygienic. Provides an impervious and seamless surface which is easy to clean
- ▶ Durable and hardwearing
- ▶ Easy to apply
- ▶ Available in a wide range of colors
- ▶ Solvent free, therefore odorless and can be applied in confined spaces
- ▶ Complies with class 2 of surface spread of flame as per BS 476
- ▶ Non exposed areas
- ▶ Light to moderate traffic areas



DESCRIPTION

Polydeck 4000 is a versatile, two component solvent free epoxy resin-based floor and wall coating system that provides a durable and impervious coating which is easy to clean and have excellent resistance to a wide range of chemicals. This system may be applicable even in the cases of covered car park with light to moderate traffic.

FIELDS OF APPLICATION

- warehouses and factory floors
- internal lining of storage tanks
- pump & generator rooms
- showrooms
- food and pharmaceutical industries
- parking decks, garages and car wash areas
- workshops and fabrication units.

SYSTEM COMPONENTS

Polyprime EP is a two-component solvent free epoxy resin based primer and sealer for epoxy and polyurethane based coatings and toppings. Polyprime EP can also be applied as a scratch coat with the addition of graded quartz sand.

Polypoxy FC is a high performance, durable, two component solvent free epoxy resin based coating.

OR



1. Substrate
2. Polyprime EP
3. Polypoxy FC/SL

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Polypoxy SL is a three component, solvent free, epoxy resin based self levelling floor topping which provides a seamless, tough, chemical resistant and hygienic floor surface.

APPLICATION INSTRUCTIONS

The application temperature should be between 5°C to 35°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the coating system is as follows:

Surface preparation

Surface preparation plays a vital role in determining the durability of any floor coating. Therefore, proper care should be taken while executing it. The surface should be dry, free of any cement laitance, oil and grease, curing compound and any other contaminants, which may affect the bonding. Light mechanical scabbling, grit/captive blasting or grinding is recommended for cleaning the surface of such contaminants. New concrete surfaces should be 28 days old and the moisture content on the surface must be less than 5%. Refurbishment of existing or old floors must be done with a suitable repair mortar, in order to ensure that the bond between the old substrate and the new flooring system is very good. Surface irregularities and blow holes shall be repaired with Polypoxy BF (Epoxy resin based blow hole filler and skimming mortar) or polycrrete ST (cementitious repair mortar). Alternatively, an epoxy resin based scratch coat can be used

when repairing larger areas (> 0.5m²). The surface should be vacuumed after carrying out the necessary cleaning for removing the dust debris left over after the cleaning process.

Priming

Prime the prepared surface with Polyprime EP @ 4-5m²/L. The coating is applied when the primer is dry. However, in all circumstances, the coating shall be applied within 24 hours of application of the primer. If the primer surface is left open for more than 24 hours, then a fresh coat of primer has to be re-applied.

Mixing – Polypoxy FC

Mix part A (resin) and part B (hardener) separately for 1 minute using a slow speed drill fitted with a paddle. Then add Part B into Part A and mix thoroughly for 2 - 3 minutes to achieve uniform consistency. Apply immediately after mixing.

Mixing – Polypoxy SL

POLYPOXY SL is supplied in three pre-weighed packs (Resin, hardener and fillers). The components are just to be mixed at site and used. However, part mixing is strictly prohibited. Take a suitable container and pour the resin (A) into it. Add the hardener (B) into the resin and mix thoroughly with a paddle mixer.

Use of a slow speed drill is recommended to reduce the formation of air bubbles. Then slowly add the filler (C) into the container and mix thoroughly for a few minutes.

Application– Polypoxy FC

Polypoxy FC can be applied using a brush/roller/air less spray/squeegee the product can also be poured and spread evenly on the floor with a squeegee. The coating will then be finished by rolling the surface with a roller. When the first coat achieves initial cure (i.e. after 24hours) apply second coat at right angles to the first.

After application the coating must be back rolled to reduce surface irregularities and improve bonding. Care should be taken to ensure that a continuous film is achieved. For a non slip finish, broadcast non slip Aggregate No 3 into the primer coat or first coat of Polypoxy FC @ 0.3kg/m² and remove excess prior to application of next coat.

Application – Polypoxy SL

Ensure sufficient labor and material is available at site to ensure a smooth continuity of the application of the flooring. Apply the Polypoxy SL topping, by pouring on to the primed surface and spread with a steel notched trowel to achieve a 0.75mm to 7mm seamless topping depending on the grade being used. Once the material is evenly spread, continuous spiking with a spiked roller is to be done to remove all entrapped air. Spiking adjacent layers is recommended to be done at 50% overlaps.

Cleaning

Tools and equipment should be cleaned immediately with Polysolvent. Hardened materials can be removed mechanically only.

COVERAGE

Polypoxy FC - 4 m²/L per coat for 250 microns Dry Film Thickness on smooth surface. Number of coats shall be determined as per the required final thickness.
Polypoxy SL - 1L/mm/m²

STORAGE & SHELF LIFE

Store all material in a cool, covered dry place. Do not expose the pails to direct sunlight and keep away from all sources of heat. In tropical climatic conditions, the product has to be

stored in an airconditioned environment and protected from high humidity. The shelf life of the product is 12 months in unopened condition if stored as per the recommendations. Exposure to high temperature and humidity will result in considerable deterioration of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

SUPPLY

Polyprime EP	5L & 15L kit
Polypoxy FC	5L & 15L kit
Polypoxy SL 20	15L Kit
Polypoxy SL 40	20L kit
Polypoxy SL 50	20L kit

TECHNICAL SPECIFICATION - POLYPRIME EP

PROPERTIES	VALUES	TEST STANDARDS
Colour	Amber	
Solid content, [%]	100	ASTM D 1644
Density, [g/cc]	1.05±0.05	ASTM D 1475
Application life, [minutes]	30	
Initial cure, [hours]	6-8	
Bond strength	Greater than the cohesive strength of concrete	ASTM D 4541
Application temp, [°C]	5 to 35	

TECHNICAL SPECIFICATION - POLYPOXY FC

PROPERTIES	VALUES	TEST STANDARDS
Colour	Grey (other colours available upon request)	
Density, [g/cc]	1.5±0.05	ASTM D 1475
Solid content, [%]	100	ASTM D 2369
Pot life @ 30°C, [minutes]	30	ASTM D 2471
Touch dry, [hours]	6	
Over coating time, [hours]	24	
Compressive strength		
@7 days, [N/mm ²]	> 65	ASTM C 579
Flexural strength		
@7 days, [N/mm ²]	> 19	ASTM C 580
Tensile strength		
@7 days, [N/mm ²]	> 15	ASTM C 307
Bond strength		
@7 days, [N/mm ²]	> 2.5	ASTM D 4541
Abrasion resistance,		
[100cycles] [mg]	<50	ASTM D 4060
Initial cure, [hours]	24	
Full cure, [days]	7	
Shore D Hardness	80±5	
Application temperature, [°C]	5 to 35	

All values given are subject to 5-20% variation

TECHNICAL SPECIFICATION - POLYPOXY SL20

PROPERTIES	VALUES	TEST STANDARDS
Density, [g/cc]	1.75±0.05	ASTM D 1475
Finish	Glossy	
Compressive strength @7days, [N/mm ²]	> 70	ASTM C 579
Flexural strength @7days, [N/mm ²]	> 30	ASTM C 580
Pot life [mins @ 30°C]	60	ASTM D 2471
Initial cure, [hours]	24	-
Full cure, [days]	7	-
Abrasion resistance, [mg]	<50	ASTM D 4060
Application temperature, [°C]	5 to 35	-
Chemical resistance	Resistant	ASTM D 543

All values given are subject to 5-10% tolerance



Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.