

DECKSHIELD EP (also Deckshield EPSF)

A solvent free, 2 pack, resin primer/DPM for new concrete or screed prior to the application of the Deckshield System.

Deckshield EP may also be combined with Deckshield EPSF filler pack to provide a 3 pack, scratch coat primer.

Uses

Deckshield EP is used in the Deckshield System as a damp proof membrane and is used as an alternative primer to Deckshield SF on concrete up to 98% RH.

As a scratch coat primer, in conjunction with EPSF filler, to reduce profile of rough surfaces.

Benefits

- ✓ Applied up to 98% RH.
- ✓ Outstanding adhesion
- ✓ Solvent free.
- ✓ Impervious to water
- ✓ Fast track installation

Surface Preparation

Laitence and contamination to be removed by totally enclosed shot blasting, power grinding or scarification. All residues must be removed to provide a clean dry dust free open textured surface.

Mechanical preparation is needed to remove laitence and contamination. Several methods are available depending on the profile and depth of removal required.

1. **Shot blasting:** Enclosed vacuum blasting can give a range of profiles from light to heavy, suitable for application of toppings from coatings to trowelled screeds. Generally, the thicker the topping, the greater the profile required.

Scarification: A wide range of equipment is now available capable of producing a range of profiles. Vacuum extraction is also available.

3. **Grinding:** Generally gives a very fine texture, suitable for sealers or coatings. On dense surfaces e.g. power floated concrete, an adequate profile may not be achieved.

4. **Hot Compress Air:** Can be useful for contaminated surfaces.

5. **Acid Etching:** Not recommended.

6. **Wire Brushing:** Not recommended.

7. **For edge work and upstands detailing:** hand held equipment is recommended.

Notes:

- Prior to the application of thin film coatings, care must be taken to ensure that the profile is uniform to prevent a patchy appearance.
- Whatever method of preparation is used all dust/debris must be removed by thorough vacuuming.
- Preparation of edges is important, especially vertical surfaces of a coving is to be formed.

Mixing

Pour total Hardener B into Base A container and drain thoroughly. Ensure that the materials are thoroughly mixed using a slow speed industrial hand drill and helical spinner.

For use as Deckshield EPSF, Filler C component is added to the premixed A+B components in stages, while still stirring, to ensure even distribution.

Do not mix by hand.

Pack components are pre-weighed for optimum performance. Never split or proportion packs.

Application

Immediately after mixing, spread the Deckshield EP using a squeegee and/or medium pile roller, ensuring it is worked into all surface irregularities.

For porous floors, where a second coat is required, allow the first coat to cure and apply the second coat as above.

Coverage

Deckshield EP
0.2 - 0.3 kg/m² dependant on substrate porosity, surface texture, method of application and temperature of substrate. Ensure that the Deckshield EP is free from pinholes, otherwise a second coat will be required.

Deckshield EPSF
0.7 - 1.5 kg/m² dependent upon surface profile.

Physical Properties

	10 °C	20 °C
Pot life	55 mins	35 mins
Tack free	16 hrs	10 hrs
Maximum overcoating time	7 days	7 days

Consideration must be given to the accelerating effects of heat from sunlight.

Density Deckshield EP	1.12
Density Deckshield EPSF	1.40

General Specification

Deckshield EP epoxy resin primer to be supplied by **Flowcrete Car Park Structures Ltd.**, Sandbach, Cheshire.

Installation by an applicator trained and approved by Flowcrete Group plc.

Additional Toppings

Deckshield Elastomeric Membrane should be applied after Deckshield EP/EPSPF is cured to a tack free state. If maximum overcoating time is exceeded, refer to Reactivating primer data sheet

Temperature

Deckshield EP/EPSPF should not be applied at material temperatures below 5 °C. Temperatures should not fall below 0°C during the first 24 hrs after application.

Tool Cleaning

Use Flowsolve cleaner before the product hardens.

Packaging

Deckshield EP is available in 10 kgs composite packs, consisting of Base A and Hardener B.

Deckshield EPSPF filler (pack C) is available in 5 kg packs proportioned to suit the 10 kg Deckshield EP pack size. This should be ordered separately to the standard (EP) primer system.

Storage & Shelf Life

Stored unopened, in dry conditions at 10 - 25 °C, shelf life will be 12 months minimum.

Substrate condition

Surfaces to be primed must be:-
Dry to a moisture content below 99% RH as per BS 8203: 1987.

- Clean, free from oil or other contamination.
- Sound, & of adequate strength for the proposed end use.
- Profile appropriate for the topping to be applied.
- Free of laitence.

Old Concrete must be checked for contamination. Review the processes & materials used in the area previously eg. fats, sugars, cutting oils, etc. Contamination can result in changes to concrete colour and surface texture.

A quick and useful test is to play a small flame gun over a local area and note the effects eg. smoking, vapours, liquid migration to surface, colour change etc.. Oil contamination will result in oil quickly migrating to the surface as liquid droplets and, dependant on oil & temperature, vaporising.

Oil contamination can be removed using the HCA (Hot Compressed Air) method, followed by Flowprime HCA to the warm floor.

Where floors have been subjected to contamination, a thorough evaluation should be undertaken before application of any resin based finish.

Where any doubt exists on contamination within the concrete, it is recommended that core samples are taken of the top 50 mm of concrete to allow a proper evaluation.

Health & Safety

Some of the components of this product may be hazardous during mixing and application. Please consult the relevant Health & Safety Data Sheets, available from Flowcrete on request and sent with each delivery

Further information

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

Flowcrete have a wealth of technical and practical experience built up over many years in our pursuit of excellence in flooring and concrete technology. Clients are welcome to call our Technical Desk, or visit our Technology Centre in Sandbach.

Important Note

Flowcrete's products are guaranteed against defective materials and manufacture & are sold subject to its standard Terms & Conditions of Sale, copies of which may be obtained on request. Whilst Flowcrete endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, it cannot - because it has no direct or continuous control over where or how its products are applied - accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it. This product is not covered by the BBA certificate for the Deckshield System.

Deckshield EP 04.12.01 MP