

NIPPON FLOORSHIELD SF EPOXY MORTAR Solvent-free Epoxy Mortar

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NIPPON FLOORSHIELD SF EPOXY MORTAR is a 3-component shrinkage free 100% solid underlayment that provides impact resistance in heavy duty usages and permanent anti-osmosis system that out performs all the temporary cementitious epoxy moisture barrier (TMB). It is an ideal system in heavy duty high impact production and warehouse floors especially in lowest basement car parks such as Basement 6~7 where the hydrostatic pressure is greatest where conventional cementitious epoxy moisture barrier fails.

Product Features:

- Solvent free thus no solvent smell
- Impact resistance
- 100% Solid thus zero shrinkage
- Reduces moisture to < 2% wt /wt as early as 15 hours for over-coating.
- Excellent adhesion for overlayment
- Independent of air-drift or environment moisture

| Paint Type | Product Type | Finishing | Recommended Substrate | Pack Size |
|--------------|--------------|-----------|-----------------------|---|
| Solvent free | Interior | - | Floor Concrete | Part A: 1.18 kg Part B: 0.64 kg Part C: 18.2 kg |

Composition

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|---------|------------------------|
| Pigment | : Filler & silica sand |
| Binder | : Epoxy & amine |
| Thinner | : - |

Technical Data

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|-------------------------|---|
| Solid Content | : 100% |
| Density | : 1.90 kg/L |
| Shelf-life | : 24 months at 30C (tightly sealed and properly stored) |
| Mixing Ratio | : 1.18 : 0.64 : 18.2 (by weight) |
| Pot-life (30°C) | : 25 minutes |
| Application temperature | : 15-35°C |
| Consumption | : 8.50 kg/m ² @ 4mm mortar thickness <i>This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of coating applied onto a perfectly smooth surface without wastage. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry of the article being coated, the skill of applicator, method of application etc. when estimating quantities required for a particular job.</i> |
| No of coats | : 1 |
| Recoat Time | : 15-18 hours |
| Walk on Time | : 12 hours |
| Cleaning Solvent | : Nippon SA-65 Thinner |
| Adhesion Strength | : Concrete cohesive failure at > 1.5N/mm ² (ASTM D4541) |
| Shore D Hardness | : > 70 ((ASTM D2240) |
| Compressive Strength | : > 40 MPa (ASTM C579) |
| Flexural Strength | : >20 N/mm ² (ASTM D638) |

Application Method

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|---------------------|---|
| Surface Preparation | : NIPPON FLOORSHIELD SF EPOXY MORTAR is to be applied on primed concrete. Also, all traces of contaminants such as oils, fats, greases, paint residues, chemicals, algae and laitance should be removed. |
| Application | : NIPPON FLOORSHIELD SF EPOXY MORTAR is supplied in proportionate quantities in 3-component containers. The entire contents of the Component A are mixed and poured into a |

clean mixing barrel. Then empty Component B into the mixing barrel and mixed for 30 seconds with helical spinner and drill. Use a 300 -500 rpm slow-speed drill, with a spiral mixing blade or Jiffy mixer. Move the mixing blade in circles around the inside edge of the pail from bottom to top. The inclusion of air in the stirring process must be avoided. Transfer the mix into a screed mixer and charge in Component C and mix until homogeneous for 2 minutes. The mixture is poured into a screed box on the still tacky **NIPPON FLOORSHIELD SF EPOXY PRIMER** and pulled to distribute the semi-dry mix evenly. Pass over a power float to compact the screed to 4mm thickness. It is advisable the use low speed and light weight power float such as 35~50 rpm and about 55kg weight. Leave to cure for at least 15 hours prior to sealing the surface with **NIPPON FLOORSHIELD SF EPOXY OP TEXTURE FINISH**.

Cleaning

Clean up equipment with thinner immediately after use.

Safety Precautions

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose off any paint waste in accordance with the appropriate Environment Quality Regulations.

Note

* Theoretical Coverage is based on a mathematical formula

$$\left[\frac{\text{Volume Solid \%} \times 10}{\text{Dry Film Thickness}} \right] = \text{m}^2/\text{lit}/\text{coat}$$

and does not consider LOSS FACTORS.

Variables like porosity of substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect the loss factor and can vary from 30% - 50% or even more.

The above information is given to the best of our knowledge based on laboratory tests and practical experience.

However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself.

We reserve the right to alter the given without prior notice.