

CHEMILINKTM SS-123RF

Fast Setting Reinforced High Performance Mortar

Description

Chemilink™ SS-123RF is a grey powder mixture of special cements and additives designed for fast setting non-shrinkage, reinforced and high performance grout and repair mortar. It possesses longer working time and enhanced anti-cracking properties to SS-123.

SS-123RF is specially introduced to quickly repair and build high-performance horizontal pavement surface. For the pavement surface with big and deep pit/hole, should apply the smooth free-flowing slurry of powder and water directly to needed locations; For small and shallow section repair, the aggregates (5-~20mm) may add into the slurry to further increase the strengths.

Typical Uses

- Emergency repair such as for airfield pavements
- Fast repair or build various horizontal pavements with semi-self-leveling ability
- Repair damaged concrete (horizontal structures)
- Repair for big and/or deep areas
- Other general grouting purposes

Advantages

- High early strength with a longer working time (20~30 minutes): can be placed into service after 2~3 hours
- High final strength: suitable for high loading situations
- Pourable: easy to apply in confined areas with some selflevelling properties within the working time
- Environmentally friendly: non-toxic, and does not corrode reinforcement
- Shrinkage compensated and reinforced: enhanced cracking resistances

Typical Technical Data

i) Powder mixed with water, powder: water = 1 : 0.18~0.20

Compressive Strength at 2 hour: 15 ~ 20MPa Compressive Strength at 3 hours: 25 ~ 30MPa

Compressive Strength at 1 day: 40 ~ 50MPa Compressive Strength at 7 days: 50 ~ 60MPa Compressive Strength at 28 days: 55 ~ 65MPa

Setting Time: > 30 minutes

Notes: slurry of SS-123RF powder and water is highly recommended to repair big and/or deep areas due to its fast mixing and easy handling process with an optimized working time.

ii) Powder mixed with water and aggregates (5 - 20mm), powder: aggregates: water = 1:1:0.18 ~ 0.20 (for reference only; may have mixing difficulty if with aggregates in large volume mixture)

Compressive Strength at 2 hour: 20 ~ 25MPa Compressive Strength at 3 hours: 30 ~ 35MPa

Compressive Strength at 1 day: 50 ~ 60MPa Compressive Strength at 7 days: 60 ~ 70MPa Compressive Strength at 28 days: 65 ~ 75MPa

Setting Time: > 30 minutes

Surface Preparation

Correct substrate preparation is very critical for adhesion performance. All substrate surfaces should be sound, clean and free from laitance, oil, grease or any other contaminants.

For thin layer pavements, brush or roll Chemilink™ SS-232 (primer) evenly onto the substrate prior to applying the mortar mixture. Depending on the environment, the primer may take about 10 to 30 minutes to become touch dry.

Mixing

Mechanical mixing is recommended.

For small areas with different thicknesses, the detailed mixing procedures are similar to SS-123, i.e.

For thickness of 10mm ~ 30mm, mixing should be carried out by adding 25kg Chemilink™ SS-123RF into 4.5 ~ 5.0L water in the mixer (with the mixer running) and mixing for approximately 2.5 minutes, or until a smooth homogeneous slurry is produced. For thickness > 30mm, mixing should be carried out by adding 12.5kg Chemilink™ SS-123RF into 2.3 ~ 2.5L water, mixing for about 1 minute, then adding 12.5kg aggregates (5-20mm) mixing for another 1 ~ 2 minutes.

For big or larger areas, SS-123RF is mixed with water only. Sizable and capable mixers sitting on the mobile vehicles are highly recommended so that the homogenously slurry can directly be discharged or flood into the section to be repaired. Try to control the mixing time within 3-5 minutes and make sure the mixture is homogenous.

Application

The mixed mortar should be placed as soon as possible after mixing. Properly tamping or brooming to densify/compact the mortar mixture may be necessary at final surface levelling. The handling time after mixing till the well placed should not be more than 20~30 minutes.



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Curing

It is essential that all exposed areas are properly cured immediately with wet hessian, polythene sheet or curing compound after the surface is dry.

Package & Coverage

Package: 1t/bag, 0.5t/bag and 25kg/bag

Coverage: Approximately 2.1 tons for 1m² at thickness of 1m

Important Note

For applications on sizable areas, should select big packing for higher productivity and efficiency.

Cleaning

Tools and equipment should be cleaned with water before the mortar hardens.

Storage

Chemilink™ SS-123RF has a shelf life of approximately 4~6 months if stored in a cool, dry place in tightly sealed jumbo bags, where special attention should be paid to the package of 25kg/bag with weaker sealing.



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Website: www.chemilink.com