



SILKON
ADDITIVES INDIA PVT LTD

Silplast RS

Silplast RS is a rapid hardening cement based, water plugging mortar. It is used for the rapid temporary patching and plugging of concrete segments, concrete and brick tunnel linings, sewage systems, below ground access chambers, pipes, basements, foundations and mines.

Silplast RS is supplied as a ready to use blend of dry powders which requires only the addition of clean water at site to produce a highly consistent, rapid setting mortar which is easy to apply in many difficult conditions. The material is based on a blend of cements, graded aggregates, special fillers and chemical additives which control the rate of set and minimise the risk of thermal cracking.

Usages and Advantage

- Emergency water - stopping capability
- Single component - only the addition of clean water is required.
- Excellent bond to the substrate
- Low exotherm minimises thermal cracking
- Pre-packed formulation to overcome variation in site batching
- Contains no chloride admixtures.

Silplast RS can be applied to horizontal, vertical or overhead surface at a wide range of thickness. Generally, the volume of mixed material used in a single application is restricted to that which can be applied by trowel or gloved hand. Thicker sections can be built up in layers. If any doubt arises about the nature of the substrate, consult the Silkon's Technical team.

Technical support

Silkon offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Silkon offers technical support service to specifiers, end users and contractors, as well as on-site technical assistance in locations all over the country.

Properties

Initial set time : Approx. 1 - 2 mins. at 30°C
Note : Set times will be extended when mixed or applied at lower temperatures.

Compressive strength : 25N/mm²@ 28 days @ 30°C

Thermal Reactions : High heat output (exotherm) leads to undesirably high shrinkage and consequent thermal cracking. The curves below show the low heat output of Silplast RS which minimises the risk of shrinkage and thermal cracking.

Application Methodology

Preparation

Areas to be patched should be cut back to a depth of 15mm and given a good mechanical key. Feather edges must not be allowed. Surface should be brushed clean to remove loose material, dust and laitance. Grease, slime or mould growth should be removed by steam cleaning or high pressure water jetting. A proprietary degreasing agent should be used for removal of light oil or grease contamination. To seal leaks, crack openings must be chased out to approximately 20mm. The chase should always be undercut to avoid leaving a V-section. All loose material and debris should be removed.

Mixing

Silplast RS should be added to clean water in the following proportions :

One part clean water : 3 parts Silplast RS (measured by volume).

Mix to a stiff consistency in a suitable container using a trowel or gloved hand. Due to the rapid set characteristics of the product, only prepare a quantity of mortar which can be placed within the prescribed set time.

Application

Trowel apply or hand-knead the mixed mortar in place, ensuring maximum contact with the substrate before the material sets. If being used to plug running water, Silplast RS be used and held in place until the initial set is reached.

Cleaning

Silplast RS should be removed from tools, equipment and mixers with clean water prior to the initial set. Cured material can only be removed mechanically.

Limitations

Silplast RS should not be used when the temperature is below 10°C and falling



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Packing

Silplast RS : 5 kg water resistant HDPE Bags

Shelf life

Silplast RS has a shelf life of 6 months if kept in a dry store in the original, unopened pouch/bag.

Health & Safety

Silplast RS contains cement powders which, when mixed or become damp, release alkalis which can be harmful to the skin. During use, avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment. The use of barrier creams provide additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - do not induce vomiting.

Fire

Silplast RS is non-flammable.