

Arina-patch LRM 143

Latex modified repair mortar reinforced with PP fibers

Introduction:

Arina-patch LRM 143 is a single component latex modified, fiber reinforced repair mortar use for structural repair of concrete elements such as beams, columns, piles and walls. When mixed with water, produces a thixotropic and high strength repair mortar. It possess excellent bond characteristics to steel reinforcement and to concrete.

Where to use:

Arina-patch LRM 143 is specially formulated to produce a shrinkage compensating mortar for spray and trowel applications in thicknesses up to 40 mm in each layer. It has very low permeability and is extremely durable.

Arina-patch LRM 143 contains no metallic aggregate and is chloride free, and can be used in following applications:

- All types of structural repair which can be applied by trowel or wet spray.
- Repair of structural members subjected to repetitive loading.
- Repairing reinforced or pre-stressed beams or columns.
- Protection of concrete subject to attack from water containing chlorides and sulphates etc.
- Repairing industrial areas, especially those expose to mineral oils and lubricants.
- As a water permeability reducer mortar.
- Repairing concrete in marine environments.

Technical information:

Appearance	Grey powder
Mixing water	14% to 16% powder weight
Specific gravity	1.450 kg/l (mixed)
Service temperature	-35 °C to +65 °C
Full cure	After 28 days (at 25 °C)
Working Time / Pot life	60 min. (25 °C)

Advantages:

- Shrinkage compensated, reduces the risk of cracking due to shrinkage and ensures full contact with host concrete and load transfer in structural repair situations.
- No primer required, allows rapid application to reduced cost.
- Can be spray applied, rapid application of large quantities.
- Low rebound, when spray applied rebound is minimal, with subsequent saving in material cost.
- Extremely low permeability, gives excellent resistance to attacks from aggressive chemicals.
- It is not poisonous and can be used in potable water reservoirs.

Surface preparation:

The substrate must be sound and free of loose particles. Remove dust, laitance, oil, grease, curing compounds, waxes, disintegrated and other bond inhibiting materials from the surface. Surface can be prepared by blasting methods, grinding, or chipping.

The damaged areas of concrete to be removed should be clearly identified. The perimeter of the area should be saw cut to a depth of at least 10 mm and the edges cut as neatly as possible keeping the sides square. Featheredging is not permitted and a minimum thickness of 10 mm must be maintained over the whole repair area.

Substrate should be saturated surface dry (SSD) before applying **Arina-patch LRM 143**.



Arina Polymer

شرکت آرینا پلیمر

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Mixing:

Arina-patch LRM 143 is formulated to give an easily mixed material. For full bag mixing, a portable electric mixer, or a hand held electric drill fitted to the suitable paddle can be used. For mixing large quantities a force action mixer is recommended.

When mixing 25 Kg. bag, pour 3.5 to 4 liters (depending on required consistency) water in the mixing vessel and commence mixing. Add the powder to the water whilst mixing to achieve a uniform, workable and lump free mortar. Over mixing should be avoided.

Application method:

Arina-patch LRM 143 can be sprayed or trowel applied. Suitable spraying vessel for wet spray is required to minimize re-bound. When applying by hand, **Arina-patch LRM 143** must be forced tightly into the substrate to ensure firm contact with pre-wetted substrate.

Levelling and initial finishing should be carried using a wooden or plastic float. Final finishing should be carried out when the material has stiffened to the point where finger pressure lightly marks the surface, a final firm trowelling should be given using the steel float.

Curing:

Good curing practice is essential for 3 to 5 days. Even though the product is specially formulated to prevent shrinkage and cracking, water curing is specially recommended. Particular care is required in hot and windy conditions.

Material consumption:

Approximately 1.450 kg/ m² for 1 mm layer thickness.

Cleaning:

Application tools and equipment should be washed with water after completion of each job or at break time. Cured material can only be removed mechanically.

Storage / Shelf life:

Store out of direct sunlight on pallet and protect from compaction and rain fall. The shelf life for originally unopened package is 12 months from date of production.

Packaging:

Arina-patch LRM 143 is available in 25 Kg. bags.

Safety precautions:

Like all cement based materials, this product may cause irritation. Use personal safety devices such as gloves and goggles. If contacted with eyes or mucous membrane, wash immediately with water and seek medical attention.