



Arina Polymer

شرکت آرینا پلیمر

تولید کننده انواع اپوکسی های ساختمانی

## Arina-patch SRM 145

Structural repair mortar based on cementitious materials

### Introduction:

**Arina-patch SRM 145** is a single component fiber reinforced repair mortar use for structural repair of concrete elements such as beams, columns, piles and walls. When mixed with water, gives a high build and high strength repair mortar, reinforced with poly propylene fibers. It possess excellent bond characteristics to steel reinforcement and to concrete.

### Where to use:

**Arina-patch SRM 145** is specially formulated to produce a shrinkage compensating mortar for spray and trowel applications in thicknesses up to 30 mm in each layer. It has low permeability and is extremely durable.

**Arina-patch SRM 145** contains no metallic aggregate and is chloride free, it 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 loadings.
- Repairing reinforced or pre-stressed beams and columns.
- Protection of concrete subject to attack from water containing chlorides and sulphates etc.
- Repairing industrial areas, especially those expose to mineral oils, lubricants.
- 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 to +85 °C
Full cure	After 28 days (at 25 °C)
Working Time / Pot life	60 min. (25 °C)

### Advantages:

- Shrinkage compensation, reduces the risk of cracking due to shrinkage and ensures full contact with host concrete and load transfer in structural repair jobs.
- No primer required, allows rapid application at reduced cost.
- Can be spray applied, rapid application of large quantities.
- 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.

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 must be full saturated with no standing water before applying **Arina-patch SRM 145**.

### Mixing:

**Arina-patch SRM 145** is formulated to give an easily mixed material. For full bag mixing, a portable electric mixer, or a hand held electric drill with a suitable paddle can be used. For mixing large quantities, a force action mixer is recommended. Over mixing should be avoided.

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 lamp free mortar.



Arina Polymer

شرکت آرینا پلیمر

تولید کننده انواع اپوکسی های ساختمانی

**Application method:**

*Arina-patch SRM 145* can be sprayed or trowel applied. Suitable spraying vessel for wet spray is required to minimize re-bound. When applying by hand, *Arina-patch SRM 145* must be forced tightly onto the substrate to ensure firm contact with the pre-wetted substrate. Levelling and initial finishing should be carried using a wooden or plastic float. Final finishing should be carried out using a steel float. 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/ m<sup>2</sup> for 1 mm layer thickness.

**Limitations:**

Do not apply *Arina-patch SRM 145* at a thickness of more than 30 mm in each layer. Age of concrete must be 21~28 days, depending upon curing and drying conditions.

**Cleaning:**

Application tools and equipment should be washed with water after completion of each job or before 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 SRM 145* 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.