

# ARMOSCREED

## Cement Based Heavy Duty Floor Screed

### Description:

ARMOSCREED is a cement based, single component pre bagged floor screed. It consists of hydraulic cement, graded aggregates, silica, fiber and special chemical additives to provide high compressive strength screed at controlled thickness. ARMOSCREED is formulated for application thickness of 40mm to 100mm. For unbonded system, a minimum of 50mm is required. Its main function is to level uneven floor especially when high thickness is needed prior to laying subsequent floor finishing like carpet, tiles, PVC sheet, epoxy coating, rubber sport sheet, etc.

### Uses:

ARMOSCREED is used at:

- Leveling old or new concrete floors.
- Leveling and smoothing concrete floors prior to laying on decorative floor coverings, carpets, floor tiles, PVC flooring, and parquet floors.
- Storage areas.
- Area with limited access.

### Advantages:

- High strength for pedestrian traffic and medium loads.
- Applicable in thicknesses from 40 mm to 100 mm.
- High bonding to substrate.
- Single component, ease of application.
- Trowelable, accepts subsequent finishes; coatings, membrane, tiling etc.
- Compatible with all cementitious substrate.

### Instructions for Use:

#### Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Concrete substrate should have been placed for at least 28 days. Contamination or excessive concrete laitance can be

removed by utilizing grinding, captive blasting and sand blasting. If the substrate is restricted to access, utilise preparation by handy mechanical tools. Any necessary repairs should be carried out using one of MATEX range of concrete repair products. Consult with Technical Department for recommendation.

If fully bonded screed is required, ARMOPRIME AC or SBR slurry should be applied to the concrete substrate as a bonding and priming layer. ARMOPRIME AC can be applied with a rate of 4 to 6 m<sup>2</sup>/lt. As an alternative, to prepare the slurry primer, mix 1 volume of MEGABOND SBR to 1 volume of clean water with 1 volume of fresh cement and mix until a smooth consistent slurry is prepared. Pour the mixed slurry into the concrete surface, and immediately apply ARMOSCREED mix in order to ensure good adhesion with the substrate.

For un-bonded screed, primer will not be required. Concrete substrates should be soaked with clean water prior to screed application. Free water on the surface should be allowed to disperse before laying. In case of floating screed design, place a suitable separating or dampproof membrane over the substrate before applying the screed mortar.

#### Mixing:

ARMOSCREED must be mixed mechanically with low speed drill mixer (200-300 rpm) fitted with suitable paddle. For large production use vessel mixer. For the preparation of mixture, pour into a container 4.5 to 5.0 liters of water, then add the 50kg bag of powder screed to the water and under slow mix for 3 minutes until a uniform, lump free consistency mix is achieved. No further water should be added to the mix. Do not add water to the mix once its start to set.

#### Application:

Apply the mixture of ARMOSCREED to the floor directly, once proper surface preparation is done. The floor has to be prepared by guides, and the amount of mix should

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comply with the area of application to avoid multiple casting times.

Spread the mixture evenly to the desired thickness, compact and level it carefully as ARMOSCREED is not a self-leveling product. Allow material to initially set before final touches with an aluminum float or a helicopter floating machine. After casting is completed, protect the floor from direct sunlight, high winds or rain, and cure as per normal curing practice for cementitious materials. Once ARMOSCREED is fully cured, overlayment can be applied. The application of flooring finishing material on top of ARMOSCREED can vary based on the thickness, humidity levels and weather conditions. For specific guidance, please consult MATEX Technical Department.

## Standards:

- BS EN 13813
- ASTM C109, ASTM C580

TECHNICAL PROPERTIES	
Color	Cement Grey
Density	2.10 ± 0.05 kg/lit
Open to foot traffic	24 hours
Compressive Strength (ASTM C109)	>35 N/mm <sup>2</sup>
Flexural Strength (ASTM C580)	>9 N/mm <sup>2</sup>
VOC	<1.0 g/L

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Coverage:

ARMOSCREED achieves coverage of approx. 2.00kg/square meter per 1mm thickness.

\*Coverage rate is an approximate value, and subject to actual site conditions.

## Packaging:

ARMOSCREED is available in 50 Kg high quality recyclable bags.

## Storage:

Store in original packing in dry conditions away from direct sunlight and high humidity levels.

## Shelf Life:

ARMOSCREED can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

## Cleaning:

Clean tools and equipment with water before material hardens. Hardened materials can only be removed mechanically.

## Remarks:

- During summer season or temperature higher than 40°C, working area should be covered to prevent the direct sun effects. Keep equipment cool and use cold water for mixing the product. In hot and dry weather, avoid applying the product when the temperature is at its highest.
- Protect the freshly applied ARMOSCREED from direct sunlight and/or strong drying wind. Avoid work under heavy windy condition where the product may dry fast and cracks may appear.
- Ceramic tiling can be applied on semi dry screed. Ask Matex for recommended Method of Application.
- In case of corridors, it is recommended to fix control joints (saw-cut) on each 15 linear meters and in each connection between corridor and room.
- For large areas and/or external application, consult with structural engineer for approved expansion joint applications.
- Do not use where negative hydrostatic pressure is evident (i.e. rising damp).
- Do not mix excessive quantity of water as it will extend the time of drying and will, when dries, create uneven surface with cracks,
- Do not add water to ARMOSCREED material once the mix starts to set.
- Do not wet the top of applied screed for the purpose of smoothing it with the trowel.
- Where it is necessary to for lay Electrical conducts or piping in the screed, the mortar on top of the conduct or pipe should not be less than 25mm thick, and should be reinforced with proper galvanized steel mesh.
- Around the parameter of the area and around columns it is recommended to make an expansion joint with minimum 10mm wide using a flexible material.

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- If the casting of the screed is interrupted, make a straight cut at the end of the casted screed and inserts 25cm steel dowels of 4 to 6 mm diameter at a 50cm spacing to ensure a perfect bonding and to avoid cracks at the construction site.

## Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapor or spray mist.

## FIRST AID:

Eyes:	In the event of accidental splashes, flush with warm water and seek medical advice.
Skin:	Wash skin thoroughly with soap and water
Inhalation:	Remove to fresh air, keep patient rested
Ingestion:	Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to ARMOSCREED Material Safety Data Sheet.

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