

ARMOSCREED T40

Cement Based Heavy Duty Floor Screed

Description:

ARMOSCREED T40 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 thicknesses. ARMOSCREED T40 is formulated to be applied in thickness from 10 mm to 40 mm. 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.

Applications:

ARMOSCREED T40 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 small thicknesses from 10 mm to 40 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 be 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.

Priming:

Concrete surface should be primed with cement slurry (mixing weight ratio of 3 cement: 1 MEGABOND SBR^{plus}: 1 water) at a rate of approx.4-6 m²/ liter, before applying ARMOSCREED T40 by using a brush, sprayer or roller.

ARMOSCREED T40 is applied as a fully bonded screed to avoid debonding and cracking of casted screed.

Mixing:

ARMOSCREED T40 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 6.0 to 6.50 liters of water, then add the 50kg bag of powder screed to the water under flow mixing and 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:

While primer is still wet, apply the mixture of ARMOSCREED T40 to the floor directly. The floor has to be prepared by guides, and the amount of mix should comply with the area of application to avoid multiple casting times.

Spread evenly the mixture to the desired thickness, compact and level it carefully as ARMOSCREED T40 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,

ARMOSCREED T40

and cure for two days with clean water. Flooring finishing material can be applied on top of ARMOSCREED T40 after 14 days from casting, depending on the thickness, the supports humidity and the weather conditions.

Standards:

- EN 13813
- ASTM C109, ASTM C580, ASTM C17)

TECHNICAL PROPERTIES	
Color	Cement Grey
Density	2.31 ± 0.03 kg/lit
Working time at 25°C	>45 minutes
Aggregate Size	Up to 3.35 mm
Open to foot traffic	24 hours
To receive further coats	14 days
To receive tiling	Min. 14 days
Compressive Strength (ASTM 109)	25 N/mm ²
Flexural Strength (ASTM C580)	6 N/mm ²
Tensile Strength	>2.5 N/mm ²
Shrinkage (ASTM C157)	0.01%

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

Coverage:

ARMOSCREED T40 achieves coverage of approx. 2.2 square meters @ 10 mm thickness per bag of 50 Kg.

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

Packaging:

ARMOSCREED T40 is available in 50 Kg high quality recyclable paper bags.

Storage:

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

Shelf Life:

ARMOSCREED T40 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.
- Protect the freshly applied ARMOSCREED T40 from direct sunlight and/or strong drying wind.
- ARMOSCREED T40 should be cured for minimum 2 days with clean water.
- Do not use where negative hydrostatic pressure is evident (i.e. rising damp).
- Floor covering with finishing products (such as PVC, Tiling, Parquet Floor, etc.) should be fixed after 21 days of casting to secure that no more shrinkage will occur.
- For large areas and/or external application, consult with structural engineer for approved expansion joint applications.
- 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 T40 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.
- If the casting of the screed is interrupted, make a straight cut at the end of the casted screed and

ARMOSCREED T40

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 vapour 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 T40 Material Safety Data Sheet.

MATEX Rev.06-0422

MATEX warrants that its products are free from material and manufacturing defects. Instructions on how to use the product should be strictly followed to ensure effectivity and safe use. MATEX shall not be liable either directly or indirectly for any damages to personal, equipment or products that may occur as a consequence of the failure of any products application because it has no direct or continuous control over where or how its products are applied. It is the user's responsibility to acquire always the updated version of datasheets.

