

ARMOLITE 1000

Light Weight Cement Based Screed

Description:

ARMOLITE 1000 is a pre-blended, cementitious, underlayment lightweight screed mortar for weight reduction and thermal insulation on floors and roofs. When used for floor application, it provides a monolithic topping. ARMOLITE 1000 can be used for several applications including, leveling rough floors, for applying drainage falls in wet area floors, casting decorative profiles, etc. but not designed for high wear and impact resistance. When used on roofs it can be laid to falls and is generally topped with membranes or waterproof coatings.

Uses:

ARMOLITE 1000 is designed to be used on both internal and external foot trafficked floors areas, in domestic and residential areas, as a replacement to the conventional sand and cement screeds due to structural load restrictions. Some applications include:

- Leveling old or new concrete floors.
- To create rain fall slope on roof as an integral part for waterproofing systems.
- Leveling and smoothing concrete floors prior to laying decorative floor coverings, carpets, floor tiles, PVC flooring, and parquet floors.
- Correction of loads of screed.
- Can be used to produce light weight decorative profiles for evaluations.
- Can be applied on variety of substrate.
- Light underlayment for dry and wet areas such as verandahs, balconies, laundries, toilets, bathrooms and shower recess areas.

Advantages:

- Less than half the weight of normal screed. This makes it ideal for areas where weight restrictions apply.
- Achieves acceptable strength for roofs and normal duty floors

- Applicable in thicknesses from 20 mm to 200 mm.
- Single component, ease of application.
- Trowelable, accepts subsequent finishes: coatings, membrane, tiling etc.
- It has the ability to reduce noise and heat transmission.
- It is an environment friendly product.

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. Curing agent should be totally removed. Ensure that concrete floors fully cured for at least 14 days. Movement joints in main structure should be respected through the applied screed. The substrate should be divided into bays using wood or steel guides. The top of the guide should be fixed to the required level.

The application of ARMOLITE 1000 requires a saturated surface dry condition (SSD), achieved by applying clean water to the surface. In case of high porosity surfaces, apply a rich coat of ARMOPRIME AC to the substrate prior to application of the screed. The primer can be applied in a spread rate of 6-8 square meter/litre depending on substrate porosity.

Mixing:

ARMOLITE 1000 is a pre-blended screed that only requires the addition of water. Each 25 Kg of ARMOLITE 1000 powder requires 5.75 lit of water. Pour the water into a suitable container and then add the powder content from the bag. Mix using a low speed drill fitted with a suitable paddle. Mix for minimum 3 minutes. For best results use a wide mouth shallow container. Always allow the mix to stand for 4 minutes and then re-stir before using.

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Application:

Empty out the mixed ARMOLITE 1000 screed onto the substrate. Spread the mixture evenly using a flat steel or wooden float. The amount of mix should be sufficient to cover the area of application to avoid multiple casting. Ensure that the thickness of the screed is not less than 30 mm. Level the surface or adjust the falls in the screed using an appropriate steel or timber straight edge.

ARMOLITE 1000 can be trafficked on after three days. Floor coverings or water proofing membranes can be applied after 7 days of casting.

ARMOLITE 1000 is a cementitious base product. Normal practice of curing is required. After the application, avoid rapid evaporation of water and cover the screed with plastic sheet fixed over wet Hessian for 3 days or apply a proper curing compound.

Standards:

- ASTM C158-02, ASTM C109

TECHNICAL PROPERTIES	
Appearance	Cement Grey Mortar
Density (Air Dried)	1000 kg/lit
Moisture Content	>5% (dry)
Setting Time	Approx. 12 – 48 hours.
Open to foot traffic	24 hours
To receive water proofing recoat interval	3 days
To receive tiling	7 days
Compressive Strength (ASTM C109)	9.0 N/mm ²
Thermal conductivity (k) (oven dried) (ASTM C158-02)	0.08 – 0.09 W/m°C

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

Coverage:

ARMOLITE 1000 achieves approx. coverage of 1 square meters @ 30 mm thickness per Bag.

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

Packaging:

ARMOLITE 1000 is available in 25 Kg high quality recyclable bags.

Storage:

ARMOLITE 1000 to be stored in original packing in dry conditions away from direct sunlight and high humidity levels.

Shelf Life:

ARMOLITE 1000 can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

Remarks:

- During summer season, working area should be covered to prevent direct sun effects.
- Do not use in area of water immersion, like inside swimming pools, or fountains.
- Do not add sand or cement on the ARMOLITE 1000. Any additions may affect the performance and density of the product.
- Do not use where negative hydrostatic pressure is evident (i.e. rising damp) as it will affect the bond of ARMOLITE 1000 to the substrates.
- For other uses or the use of ARMOLITE 1000 over substrates/situations not mentioned in this technical brief, contact MATEX Technical Department.
- For weak surfaces, it is recommended to apply one coat of cement slurry as a bonding layer before applying ARMOLITE 1000 screed.

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.

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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 ARMOLITE 1000 Material Safety Data Sheet.

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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.



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