

# AVCRETE- ESD-LMC

PRE-BLENDED, CEMENTITIOUS CONDUCTIVE FLOORING SCREED MORTAR.



## Heavy Duty Industrial Floor Resurfacer.

Avcrete-ESD-LMC designed specifically for use as Conductive Flooring. It is a single component pre-blended dry mortar comprising of Cement, Graded high strength aggregates and performance polymers. Needs only water addition.

AVCRETE-ESD- LMC is applied in 12 to 40mm thickness onto new or existing base concrete surface to provide Anti-Static Floor.

### APPLICATION AREAS:

- Aerospace detonator handling
- Weapons and ammunition
- Blasting agents used in automobile airbag manufacturing
- DOD, Military & Military ordinance areas
- Engineering labs
- Electronics manufacturing & testing facility
- Data centers
- Energetic devices

AVCRETE –ESD-LMC is conductive floor with high impact and wear resistant properties ideal for Conductive overlay over new floor and dual applications of floor refurbishment and conductive system. Finished surface is similar to power troweled concrete surface. It can be laid in proper levels even if the base is uneven.

AVCRETE –ESD-LMC is indigenously developed Conductive floor screed mortar tested for Electrical Resistance at CPRI under Ministry of Power for compliance under BS 2050-1978, Clause A.4.1. It is superior alternative to Epoxy/PU or PVC tile system due to higher usable life with low maintenance. It has high flexural strength making it suitable for thin section applications.

### ADVANTAGES:

- Usable life of floor is much higher than conventionally available conductive floors. Does not need over-coating, easily repairable.
- Designed for Indian conditions with working environment.
- Usable for Internal and external working conditions.
- Large areas can be installed in single day.
- Easy to install, requires minimum tools and machines. Any flooring contractor can be guided to install the floor.
- It requires only 48 hours for curing and hardening. The floor is ready to accept full traffic after 48 hours.
- It can be used as final finished surface or can be overcoated.

Technical Data	
Surface Resistance as per BS 2050-1978	< 50000 Ohms
Compressive Strength	
2 days	30 N/mm <sup>2</sup>
7 days	45 N/mm <sup>2</sup>
28 days	75 N/mm <sup>2</sup>
Flexural Strength	
2 days	4 N/mm <sup>2</sup>
28 days	9 N/mm <sup>2</sup>
Adhesion Strength	
2 days	1.5 to 2 N/mm <sup>2</sup>
28 days	3 to 3.5 N/mm <sup>2</sup>
Density	2350 Kgs/m <sup>3</sup>

### STORAGE

AVCRETE –ESD-LMC is supplied in 25 and 50 kgs HDPE bags with LDPE lining. It should be stored in unopened bags in clean dry conditions. Storage temperatures should in the range of 5°C to 40°C.

All technical information is the result of independent testing and is provided in good faith. No warranty is implied as application and site conditions are beyond our control.

## **SURFACE PREPARATION:**

Proper surface preparation is key to the performance of product. The surface should be free of oil, grease, paint, curing compound and other contaminants. Finished base concrete surface or damaged surface should be closely hacked or preferably roughened with mechanical scabblers to form a rough, sound surface. All the loose materials to be removed and cleaned with high pressure water jetting followed by wet vacuum cleaning to remove all standing water. This gives clean SSD (saturated surface dry) substrate.

Any loose concrete in patches to be cut open in square or rectangular shape and patched with AVCRETE –ESD-LMC before total overlay.

Any errors of floor joint system in base floor should be corrected, including sealing of fine cracks with low viscosity epoxy and wider cracks with slurry of Cement and AVCRETE BONDING ADDITIVE.

## **PRIMING:**

Mixing AVCRETE BONDING ADDITIVE in cement slurry at a dosage of 8 to 10% of cement content. Applying by brush or spreading over SSD surface. Ensure there is no standing primer slurry over base surface.

If the primer dries before application of overlay, the surface should be given second coat of primer.

## **MIXING INSTRUCTIONS:**

- AVCRETE –ESD-LMC should be mixed in forced action pan or drum mixer. For smaller batches drill machine operated paddle mixer with maximum rpm of 900 to be used.

**Always add powder in water.** Take 5 of water in an empty container and gradually add AVCRETE –ESD-LMC powder and stir. Empty entire 50 kgs in the container and add upto ½ lit of water to get mix of desired consistency. Mix will have slump equivalent to concrete slump range of 60 to 80.

## **INSTALLATION GUIDE:**

- Use guides/ side forms of height to match desired FFL (finished floor level)
- Priming cleaned SSD (saturated surface dry) surface with AVCRETE BONDING ADDITIVE.
- Install earthing components in consultation with AVCON.
- Poruing the mixed AVCRETE-ESD-LMC onto tacky primed surface.
- Floating with power trowel to achieve desired finish.
- Applying curing compound immediately after finishing operations are complete. DO NOT APPLY curing compound if epoxy topping is desired. Wet curing for maximum 2 days.

## **YEILD:**

AVCRETE –ESD-LMC is supplied in 25kgs and 50 kgs bag. 50 kg yields 0.022 cum of volume or 2.35 kgs per m2 per 1 mm thickness. Example- 10mm thick floor will require 23.50 kgs per m2.

## **HEALTH AND SAFETY:**

Full health and safety information can be supplied on request. The unmixed powder is irritant as is any cement product and skin contact should be avoided.

## **For Further Information:**

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