

Data sheet C643

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PML Epoxy Screed MD - Low Odour

Introduction

PML Epoxy Screed MD - Low Odour is a factory mixed, pre-packed, medium duty flooring, applied at a nominal 5 - 6mm thickness.

PML Epoxy Screed MD - Low Odour is especially suitable for applications in food processing areas where freedom from taint during application is essential.

PML Epoxy Screed MD - Low Odour is available in a standard range of attractive colours, but is not primarily a decorative floor finish.

It is essential that good house-keeping practices are maintained at all times to maximise the performance of **APML Resin Flooring Systems**.

Typical Applications

Heavy duty thin screed flooring for:-

Food processing areas
Pharmaceutical Industry
Bakeries
Dairies, etc

Method of Use Storage

All materials must be stored prior to use under cover, preferably in a dry heated store. Materials stored at low temperatures (below 10°C) become more viscous and thus difficult to mix and apply. Do not store below 5°C.

If crystals are observed due to low temperature storage, contact **APML Technical Sales Department**.

Surface Preparation

Where rising damp is likely to be a problem, an efficient damp proof membrane should be installed beneath the concrete screed.

New Floors

New concrete floors should be **thoroughly dry** (moisture content not higher than 5% measured at a depth of 20mm with a Protimeter "Concretemaster") and fully aged before any work is commenced e.g. 28 days.

The surface must be free from laitance and non-polished. A wood float finish is ideal.

If it is necessary to remove laitance this should preferably be done by grit-blasting or grinding. Alternatively **PML Etch** may be applied in accordance with Data Sheet No. 608.

Very smooth and dense floors - i.e. those which have been power floated - may need to be grit-blasted or coarse ground in order to remove surface polish and provide the necessary open texture.

It is essential that any dust created during preparation is completely removed with an industrial vacuum cleaner.

Proprietary floor sealers of the silicate or silicofluoride type **must not be used** prior to application of **PML Epoxy Screed MD - Low Odour**.

Old Floors

All traces of oil, grease or other contaminants must be removed.

The following alternative methods may be used, in order of preference:-

- Grit-blasting, mechanical grinding or planing.
- High pressure hot water cleaning using heavy duty detergent followed by **thorough** rinsing with clean water.
- Mechanical scrubbing with a heavy duty detergent or proprietary floor cleaner followed by **thorough** rinsing with clean water.

After cleaning by methods (b) and (c) above, apply **PML Etch** in accordance with Data Sheet No. 608.

After finally washing down, the floor must be allowed to dry **thoroughly** before applying **PML Epoxy Screed MD - Low Odour**. The use of hot air blowers will be beneficial.

Caution: where silicate or silicofluoride sealers or any type of surface coating have been used it is essential that these are first removed by method (a) above before applying **PML Epoxy Screed MD - Low Odour**.

Certain types of coating may be difficult to remove by grinding and in such cases the **APML Technical Sales Department** should be consulted for advice.

Ambient Temperature

The ambient temperature should be at least 15°C during application and curing. If necessary heating should be applied sufficiently in advance of the time of application to ensure that the temperature of the floor and surrounding air is at least this level before commencing work.

Priming

Use **PML Screed Primer - Low Odour** (Data Sheet No. C611). Mix together one container of resin base with one container of hardener. Use a palette knife or flat piece of wood stir thoroughly until completely mixed. Apply, preferably, with a lambswool or long pile synthetic fibre roller.

Spread uniformly, but thinly, over the prepared surface. Do not apply excess primer as this will cause difficulties during the application of the screed.

As soon as the **PML Screed Primer - Low Odour** has been applied, spread on **PML Epoxy Screed MD - Low Odour** prepared as described below.

Mixing

The use of a mechanical mixer, e.g. "Cretéangle" is strongly recommended.

PML Epoxy Screed MD - Low Odour is supplied in two parts:

- Base Component, consisting of a factory mixed blend of epoxy resin, pigments, fillers and aggregates.
- Liquid Hardener Component.

Empty the Base Component from one pack into the mixing container and start the mixer. Whilst the drum is rotating add the contents of the tin of Hardener. Continue mixing until the Hardener is thoroughly dispersed throughout the mix and a uniform consistency has been achieved. Normally a mixing time of two minutes is sufficient.

Note: Do not overmix as heat will be developed, leading to excessive air entrapment and a reduction in the workable life of the mix.

Application of PML Epoxy Screed MD - Low Odour

Apply the mixed **PML Epoxy Screed MD - Low Odour** to the primed surface and spread out with a trowel or rake to produce an even coverage. Never apply to primer which has cured.

Fully consolidate and then finish with a steel trowel to a smooth, even textured and closed surface. Occasional wiping of the trowel face with a rag soaked in cellulose thinners, acetone, toluene or similar solvents assists easy application.

A sealer coat may be required in certain situations and for applications where chemical or liquid spillages may occur. Advice should be sought from the **APML Technical Sales Department**.

Cleaning

All tools and mixing vessels should be cleaned immediately after use with **PML Resin Cleaner** (Data Sheet No. 610) acetone or similar solvents.

Technical Specification

General data for guidance purposes only
(Approximate figures)

Packing	18 kg pre-weighed packs
Density of mixed floor	2.00 kg/litre
Volume of pack	9 litres
Coverage per pack	Approximately 1.7-1.9m ² at 5mm thickness
Pot life	45-60 minutes at 20°C
Cure time at 15°C	Approximately 18-24 hours to accept foot traffic, 2-4 days to accept vehicular traffic or chemical exposure
Shelf life	12 months minimum
Storage Conditions	Sealed containers under cover Minimum temperature 10°C Maximum temperature 50°C

Physical Properties (Approximate figures)

Compressive Strength to BS 6319 Pt 2	54 N/mm ²
Flexural Strength to BS 6319 Pt 3	28.5 N/mm ²
Tensile strength	10 N/mm ²

Thermal Properties (Approximate figures)

Maximum service temperature	60°C Continuous 90°C Spasmodic
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Chemical Resistance

PML Epoxy Screed MD - Low Odour is resistant to the effects of a wide range of chemicals however it is important that advice is sought from the **APML Technical Sales Department** before the product is specified.

Health and Safety

This product contains substances that are classified as hazardous according to the Chemicals (Hazard Information and Packaging for supply) Regulations 1994 (as amended). The product is labelled in accordance with these regulations and further information regarding health hazards, handling, storage etc. is detailed in the Material Safety Data Sheet(s). In addition to considering the advice given by APML, all users must conform to the Control of Substances Hazardous to Health Regulations, 1994 (as amended).

All coverages and thicknesses quoted are nominal and will be affected by substrate profile and porosity.

The information in this Data Sheet, given in good faith, is based on results gained from experience and tests. Since application and use are beyond our control, no condition or warranty is given covering the results from the use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept any responsibility for any loss or damage, howsoever caused arising from the said use.