

# PML Epoxy Render - Low Odour

## Introduction

PML Epoxy Render - Low Odour possesses high strength characteristics, superb trowelling properties and can be applied without slump on vertical and overhead surfaces. It is especially suitable for applications in food processing areas where freedom from taint during application is essential.

PML Epoxy Render - Low Odour may be used for skirtings or vertical and overhead applications and for concrete repairs.

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

PML Epoxy Render - Low Odour consists of an epoxy resin, hardener and specially graded filler, supplied in pre-measured packs designed to give the maximum ease of mixing. It is easily applied and may be consolidated to provide a dense finish. It bonds tenaciously to prepared concrete surfaces and will cure without shrinkage in 12-18 hours, although full mechanical and chemical resistant properties will not be obtained for a further 2-3 days depending on the ambient temperature.

PML Epoxy Render - Low Odour should be used in conjunction with PML Epoxy Tack Coat (Data Sheet No. C607) as described.

It is essential that good house-keeping practices are maintained at all times to maximise the performance of PML Epoxy Render - Low Odour.

## Typical Applications

Food and drink processing areas, abattoirs, dairies, breweries, storage areas and pharmaceutical plants.

## 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 Concrete

New concrete surfaces 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 i.e. 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.

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

Proprietary concrete sealers of the silicate or silicofluoride type must not be used prior to application of PML Epoxy Render - Low Odour.

### Old Concrete

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 concrete must be allowed to dry thoroughly before applying PML Epoxy Render - 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 Render - 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 concrete and surrounding air is at least this level before commencing work.

## Priming

Use PML Epoxy Tack Coat (Data Sheet No. 607) which is supplied in a 2kg pack containing separate base and hardener components.

Thoroughly mix the two components together with a palette knife, flat piece of wood or preferably a slow speed drill fitted with a mixing paddle. Apply the mixed material with a stiff bristle brush. Spread uniformly over the prepared surface ensuring the substrate is well 'wetted'. Do not apply excess primer as this will cause difficulties during application of the render.

A 2 kg pack of PML Epoxy Tack Coat will cover 3.5 -7.4m<sup>2</sup> depending on porosity and/or profile of the surface.

The PML Epoxy Render - Low Odour must be applied while the PML Epoxy Tack Coat is still wet or tacky.

## Application of PML Epoxy Render - Low Odour

All prepared surfaces should be primed with PML Epoxy Tack Coat (Data Sheet No. C607).

Apply mixed PML Epoxy Tack Coat to prepared surfaces with a stiff bristle brush, working well into the surface to ensure complete wetting. Do not flood.

Note: Under no circumstances should the PML Tack Coat be allowed to cure before the render is applied.

PML Epoxy Render - Low Odour is supplied as a 3 component pack resin base, hardener and filler.

PML Epoxy Render - Low Odour should be mixed by means of a forced circulation mixer e.g. 'Cretangle' or similar. Free fall mixers of the type used to mix concrete are not recommended nor is mixing by hand.

Mix together the contents of one base and one hardener container. When thoroughly mixed, add the contents of one bag of filler and continue mixing until a uniform consistency has been achieved. A mixing time of approximately two minutes is usually sufficient.

Note: Do not over-mix as this will lead to excessive air entrapment and formation of heat which will cause application difficulties and a reduction in pot life of the mix.

Apply PML Epoxy Render - Low Odour, mixed as described above, when the PML Tack Coat is aggressively sticky (vital for overhead work), i.e. within 4-8 hours after application, depending on ambient temperature.

## 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	Supplied in 9 kg and 36 kg packs
Density of mixed Epoxy Render	2.05 kg/litre
Volume	9 kg pack - 4.4 litres 36 kg pack - 17.6 litres
Coverage	5mm render: 0.85m <sup>2</sup> / 9 kg pack 5mm render: 3.4m <sup>2</sup> / 36 kg pack
Pot life	45 minutes - 1 hour
Cure time (15°C)	12-18 hours initial set 3-4 days maximum mechanical and chemical resistance
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	50-55 N/mm <sup>2</sup>
Tensile strength to BS 12	10-11 N/mm <sup>2</sup>
Adhesion	Stronger than concrete provided surface is adequately prepared

## Thermal Properties (Approximate figures)

Co-efficient of linear expansion	25 x 10 <sup>-6</sup> cm/cm/°C
Maximum service temperature	60°C Continuous 90°C Spasmodic

## Chemical Resistance

PML Epoxy Render - 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.