

Data sheet C634

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PML SL30 Flow Applied Epoxy Floor

Introduction

PML SL30 Flow Applied Epoxy Floor combines the ease of application of flow applied flooring with the hard wearing characteristics of epoxy resin screeds. Applied at a thickness of 3mm, it provides an extremely tough, hard wearing surface with an attractive appearance. **PML SL30 Flow Applied Epoxy Floor** has both excellent chemical resistance and an excellent nuclear decontamination rating.

For even more arduous conditions, **PML SL60 6mm Flow Applied Epoxy Floor** (Data Sheet No. C650) or **PML Epoxy Screed - Low Odour** (Data Sheet No. C646) may be more suitable. **APML** should be consulted for advice on the most appropriate system.

PML SL30 Flow Applied Epoxy Floor 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

Industrial process plants, power stations, food processing areas, laboratories, pharmaceutical plants and the nuclear industry.

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 i.e. 28 days.

The surface must be free from laitance and non-polished. A wood float finish is ideal. Furthermore since the thickness of the applied **PML SL30** flooring is only 3mm it is essential that the surface is level.

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 SL30** flooring.

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 SL30** flooring. 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 SL30** flooring.

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

Surfaces to receive **PML SL30** should first be primed with **PML SL/SR Water Dispersible Epoxy Primer** (Data Sheet No. C746).

PML SL/SR Water Dispersible Epoxy Primer is supplied in a 3 kg pack containing separate Base and Hardener components.

Thoroughly mix the two components together until uniform in consistency. To this mixture add **slowly**, whilst stirring continuously, 1 - 1.5 kg (1 - 1.5 litres) of clean water.

Apply by brush or roller to the prepared floor. Use within 2 hours of mixing. The mix is sufficient to prime approx 18m².

The primer must be left for a sufficient time for both the water to evaporate, i.e. all 'whiteness' has gone and the material has become clear, and to achieve a degree of surface tack before applying **PML SL30**.

The time will vary with the ambient temperature, and will be approximately as follows:-

15°C	4 hours
20°C	3 hours
30°C	2 hours

Do not leave longer than 24 hours.

Application of PML SL30

PML SL30 is supplied as a three part pack consisting of Base (coloured), Hardener and Filler components.

Mix together in a suitable mixing vessel the contents of one Base container and one Hardener container, using a mixing paddle fitted to a slow speed heavy duty electric drill. When Base and Hardener are **thoroughly** mixed add contents of the bag of Filler **slowly**, stirring continuously until completely uniform in consistency. A mixing time of approximately 2 minutes after all the Filler has been added is normally sufficient.

Note: Do not mix at high speed or over-mix as heat will be developed leading to excessive air entrapment and a reduction in the workable time of the mix.

When laying **PML SL30**, spiked shoes should be worn by operators.

Pour mixed material on to the primed surface and spread out to a uniform 3mm thickness with an adjustable rake, notched trowel with 10mm deep serrations, or with a steel float.

Approximately 10 minutes after laying, roll with a plastic spiked roller to even out irregularities and remove any trapped air.

Roll twice more at approximately 15 minute intervals.

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	30 kg pre-weighed packs
Density of mixed material	1.94 kg/litre
Volume of pack	15.46 litres
Coverage per pack	Approximately 5m ² at 3mm thickness
Pot life	30 minutes at 15°C
Cure time at 15°C	Approximately 36 hours to accept foot traffic, 4 days to accept heavy traffic or chemical exposure
Shelf life	12 months minimum

Physical Properties (Approximate figures)

Compressive Strength to BS 6319 Pt 2	62.5 N/mm ²
Flexural Strength to BS 6319 Pt 3	25.4 N/mm ²

Thermal Properties (Approximate figures)

Coefficient of linear thermal expansion per °C	30 x 10 ⁻⁶
Maximum service temperature	60°C Continuous 90°C Spasmodic

Chemical Resistance

PML SL30 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.