



Low VOC Performance Flooring Systems

Green Certified Protection for the future

EpiMax 222

EpiMax 330

EpiMax 330 Express

EpiMax 333WB Express

EpiMax 333WB-SR

EpiMax 444

EpiMax 465

EpiMax 777HD



EpiMax



What needs to be considered in the selection of a Low VOC Flooring System?

- **Sustainability - whole of life**

Sustainability is related to the quality of life in a community - whether the economic, social and environmental systems that make up the community are providing a healthy, productive, meaningful life for all community residents, present and future.

With regard to flooring systems, sustainability should consider the "whole product life cycle". This includes production, application, service life and disposal.

Volatile Organic Content (VOC) is an important measure of a flooring system's environmental impact. Our products meet or exceed the requirements of IEQ.13.1, Green Star Office Interiors, Indoor Environment Quality. We are a member of the Green Building Council of Australia.

Yet a low VOC level is not all that is required to make a coating sustainable. The arithmetic of the application and the durability is very important. If the system lasts longer, it's even better.

Underperforming systems will always have greater environmental impact due to re-installation costs (surface preparation grinding energy, disposal and then the impact of the re-application itself).

- **Design life - budget compliance**

The first important question to ask when selecting a new flooring system is - What is the required design life - 2, 5, 10 or 20 years? And, is frequent or regular maintenance feasible?

It is virtually impossible to keep any concrete structure from cracking. Without proper protection, these cracks become the routes through which moisture, salt, acid rain and other chemicals can begin the degradation process on concrete remarkably quickly.

The specification must meet the agreed design life and the intended maintenance-free period.

- **Inherent chemical resistance requirement**

Concrete is a widely used engineering material. However whilst strong in certain mechanical aspects, unprotected concrete is extremely susceptible to a wide variety of chemical attack.

The specification for any flooring system must address the chemical resistance requirements.

EpiMax offers a range of protection systems that cater to project requirements.

- **Mechanical performance**

The specification for any flooring system must address the mechanical performance requirements including impact and abrasion resistance.

Any protection system applied to concrete must exhibit excellent adhesion and have a bond strength that exceeds the tensile strength of concrete.

- **Practical application characteristics**

The particular needs of the structure including the practical aspects of access and application are important considerations in any project.

EpiMax supplies protection systems that can be applied by spray or roller in thicknesses of 150 - 3000 microns per pass. Trowel applied systems can achieve 75 mm thickness.

Our systems are self priming.





Significant research in coatings technology has resulted in the development of high performance low and very low VOC coatings for industrial and commercial applications. This development work has been accelerated by the growing awareness of the impact of climate change on our community.

Launched in 2002, the **Green Building Council of Australia** is a national, not-for-profit organisation that is committed to developing a sustainable property industry for Australia by encouraging the adoption of green building practices. It is uniquely supported by both industry and governments across the country. The GBCBA's mission is to develop a sustainable property industry for Australia and drive the adoption of green building practices through market-based solutions. This is accomplished by encouraging and recognising the specification of finishes that minimise both the contribution and the level of VOC within the building envelope.

EpiMax is your source for the latest proven developments in performance protection systems. *This is all we do.* Our systems build on break-through technologies (extreme chemically resistant third generation epoxy novolac chemistry, high performance water based chemistry, new polyaspartic chemistry).

At EpiMax we pride ourselves in the chemical technology of the systems we offer, the knowledge value involved in their use and our overall responsiveness.

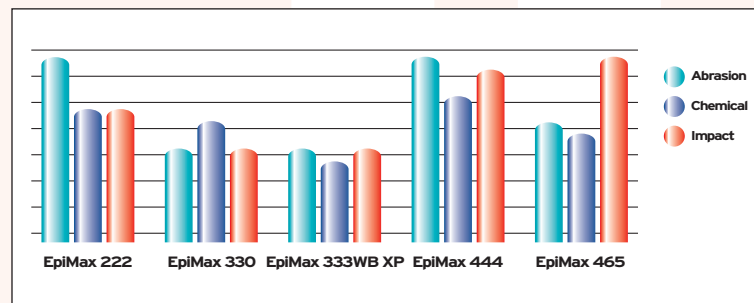
EpiMax has built its reputation on a construction engineering foundation. Our experience has been forged on an impressive variety of civil, environmental, industrial, mining, defence and general services construction.

This success has been proven through partnerships with forward-thinking architects, consultants, engineers, application contractors, project managers and materials testing agencies. We believe in teamwork, respect and integrity.

Our primary focus is

- Floor Protection Systems
- Industrial flooring systems
- Green Certified Protection Systems
- Water and Wastewater Processing Protection Systems
- Foundation Protection Systems
- Extreme CAT (Corrosion, Abrasion and Thermal) Protection Systems

System Performance Chart



EpiMax Heavy Duty Low VOC Flooring Range

Applications

Typical industries include:

- Food and beverage production
- Mining and resources
- Aircraft servicing and maintenance
- Commercial kitchens
- Chemical processing
- Cement plants
- Distribution centres
- Apartment and hotel construction
- Hospitality
- Local government
- Parking garages
- Commercial kitchens
- Correctional facilities
- Paper manufacturing
- Power generation
- Commercial laundries
- Port and terminal operations
- Water treatment and supply
- Waste water facilities
- Healthcare and retirement
- Transfer stations
- Medical and research laboratories



EpiMax 222

Exceptional two-pack solventless epoxy flooring system demonstrating excellent adhesion and general durability.

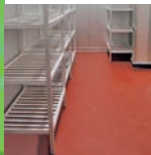
- Trowel application to 5+ mm
- Resistant to a wide range of industrial chemicals
- Certified traction levels available
- Anti-microbial formulation
- Tough and abrasion-resistant; excellent for heavy traffic
- Ideal for wet areas, ramps etc



EpiMax 330

New two-pack solventless high build epoxy flooring system demonstrating excellent adhesion and general durability.

- Roller or airless spray application to 500 microns
- Resistant to a wide range of industrial chemicals
- Non-tainting to food stuffs during application
- Anti-microbial formulation
- Variable slip resistance available
- Wide range of colours



EpiMax 330 Express

A rapid hardening two-pack solventless high build epoxy flooring system demonstrating excellent adhesion and general durability.

- Roller or airless spray application to 500 microns
- Rapid return to service
- Resistant to a wide range of industrial chemicals
- Non-tainting to food stuffs during application
- Anti-microbial formulation
- Variable slip resistance available



EpiMax 333WB Express

A rapid hardening two-pack water based epoxy flooring system that provides excellent protection to all forms of concrete. This system can be used to prepare easy-clean floor and wall surfaces for a wide range of applications.

- Roller or airless spray application to 350 microns
- Rapid return to service
- Hazmat free chemistry
- Long lasting durability
- Good adhesion to damp concrete
- Non slip version available





EM 333WB-SR

This system has been proven as an aviation industry concrete floor protection system for commercial and military hangers and support facilities.

- Excellent adhesion
- Hazmat free/non flammable
- Excellent abrasion resistance
- Meets AS 4586 Slip Resistance standard
- Meets GBCA Low VOC standard
- Meets BCA CRF Fire standard
- Skydrol resistant



EpiMax 444

The proven solution for tough industrial applications where end users want to eliminate floor maintenance problems and expense. This system provides a bright, durable, impervious and chemically resistant floor surface which is both hygienic and easy to clean.

- Professional application at between 2 - 4 mm
- Fast application - minimal downtime
- Attractive finish
- Chemically resistant
- High mechanical strength
- Hygienic - provides a dense, impervious, seamless floor surface
- Easily cleanable



EpiMax 465

Industrial floor protection for areas with the highest mechanical demand. This system offers excellent thermal shock resistance and resistance to abrasion, mechanical stress and mid range chemical action. Installation is fast and placement is easy.

- Typically applied at between 4 - 5 mm
- Fast application - minimal downtime
- Extreme mechanical performance
- Excellent thermal shock resistance
- Good chemical resistance
- Easy to clean and sterilise
- Non-tainting, non-dusting



EpiMax 777HD

A high performance, gloss, two-pack solventless polyurethane coating that provides a durable gloss finish to coated and uncoated concrete.

- Thin film chemistry - 150 microns
- Hazmat free chemistry
- Fast hardening
- Non yellowing, UV stabilised - external applications
- Excellent scuff resistance
- Re-coatable

Standards Compliance

AS/NZS 4586:2004

Slip resistance classification of new pedestrian surface materials.

This Standard provides a means of classifying pedestrian surface materials according to their frictional characteristics when determined in accordance with the test methods included. These test methods enable characteristics of surface materials to be determined in either wet or dry conditions.

The test methods in this Standard shall be used for the classification of pedestrian surface materials for use in either the wet or the dry condition.

The inclining ramp test methods are suitable for measuring the slip resistance of gratings, heavily profiled surfaces and resilient surfaces within the test laboratory environment.

In the field, the most commonly accepted and specified method of measuring slip resistance is by use of the TRL Pendulum Tester incorporating a rubber slider.

The range of EpiMax Low VOC Performance Flooring Systems have been tested to AS/NZS 4586:2004.

HB 197 An introductory guide to the slip resistance of pedestrian surface materials.

This Handbook provides guidelines for the selection of slip-resistant pedestrian surfaces classified in accordance with AS/NZS 4586. It recommends the minimum floor surface classifications for a variety of locations, and includes a commentary on the test methods set out in AS/NZS 4586, as well as information on the consideration of ramped surfaces. Published in conjunction with the CSIRO.

AS/ISO 9239.1 2003

Reaction to Fire Tests for Floorings. Critical Radiant Flux Energy.

To meet the Building Code of Australia, floor materials and floor coverings meet certain minimum Critical Radiant Flux (CRF) energies, and for non sprinklered buildings, a maximum smoke development rate.

The test method for these tests involves heating the horizontal test sample along its length with a radiant panel and then igniting it at the hot end. The sample is allowed to burn until the flame goes out (extinction). The heat energy measured at the point of extinction is the Critical Heat Flux (CHF), also called the Critical Radiant Flux (CRF) in the Building Code of Australia.

Smoke is measured over the duration of the test. The total amount of light extinction (measured as a percentage) due to the smoke obscuring a light beam in the flue is multiplied by the time of the test to give the result (in percent minutes).

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Environmentally sustainable



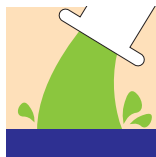
Resistance to abrasion and impact



Durable



High adhesion



Resistance to chemicals



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