



Wine Industry Protection Systems

The guide to a good drop from the ground up

EpiMax 222

EpiMax 225

EpiMax 330

EpiMax 333AR

EpiMax 333WB

EpiMax 465

EpiMax 777UHD

EpiMax 999WB



EpiMax



What needs to be considered in the selection of a Wine Industry Floor Protection System?

- **Inherently food safe**

All floor and wall protection systems must be inherently food safe and chemically inert. They must not support microbial activity or taint food stuffs.

- **Contamination prevention - seamless continuity**

Cleaning and sanitising eliminates contamination. For this to be effective, floors should be seamless, mechanically strong, and chemically and microbially inert. Over time, kitchen floors and walls can become eroded, cracked, decomposed and unhygienic. These surfaces are more difficult to clean or sanitize, and may no longer be safe. New standards specify the finish requirements, so care should be exercised in selecting protection systems.

- **Safety under foot but still easy to clean**

Standards specify the slip factors for various environments. But are they easy to clean? New systems are available that offer both.

- **Design life - budget compliance**

The first important question to ask when selecting a food and beverage protection 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, food, bacteria 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.

- **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.

- **Chemical and mechanical performance**

The chemical and mechanical performance requirements including impact and abrasion resistance must be addressed. Any protection system applied to concrete must exhibit excellent adhesion and have a bond strength that exceeds the tensile strength of concrete.

- **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 concrete protection 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).





Creating the perfect wine is technically challenging with very pleasing rewards. To do this, wineries must take care to construct the perfect environment. Whether in barrel rooms, bottle storage areas, pressing, fermenting, filling or other production areas, a contaminant-free setting contributes to a high-quality product. These areas are also often prone to spills and staining.

Protection systems must offer:

- High resistance to acids and chemicals
- Customizable level of skid resistance
- Excellent stain resistance
- Outstanding chemical resistance
- Superior acid resistance
- Food safe
- Low to zero VOC and low odour options
- Formaldehyde-free formulations
- Zero outgassing when cured
- Meet local, state and national regulations
- Durability, high level of cleanability for easy sanitation

EpiMax is your source for the latest proven developments in sustainable 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.

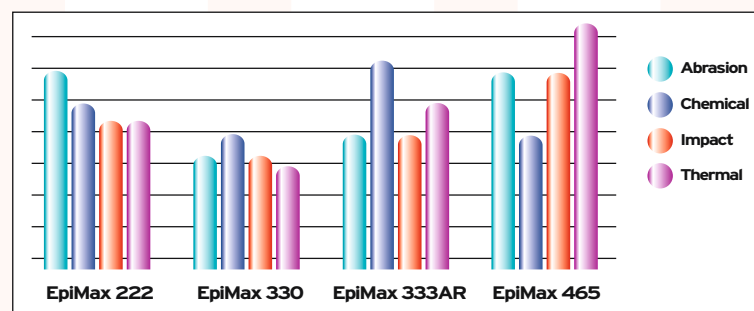
EpiMax has built its reputation on a construction engineering foundation. Our experience has been forged on an impressive variety of civil, environmental, industrial, mining, defence and general services construction. This success has been proven through partnerships with forward-thinking architects, consultants, engineers, application contractors, project managers and materials testing agencies. We believe in teamwork, respect and integrity.

Our primary focus is

- Floor Protection Systems
- Commercial Kitchen Floor Protection Systems
- Industrial Concrete Protection Systems
- Green Star Protection Systems
- Water and Wastewater Processing Protection Systems
- Foundation Protection Systems
- Extreme CAT (Corrosion, Abrasion and Thermal) Protection Systems

EpiMax: Expertise Applied, Answers Delivered

System Performance Chart



EpiMax Heavy Duty Food Grade Flooring Range

Applications

Specific Application Areas:

- **Non-skid toppings for production and bottling areas**
- **Acid resistant and high temperature resistant flooring**
- **Food safe coatings and toppings**
- **Coving systems for floor and wall - floor junctions**
- **Renewal of badly eroded concrete**
- **Polished concrete, clear sealed or coloured epoxy finishes to tasting rooms**

Typical Application Areas:

- **Bottling lines**
- **Warehouses**
- **Receiving and processing areas**
- **Plant rooms**
- **Internal and external tank farms**
- **Packaging areas**
- **Barrel rooms**
- **Walkways and corridors**
- **Cool rooms**



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 harsh chemicals and cleaners
- Certified traction levels available
- Anti-microbial formulation
- Tough and abrasion-resistant; excellent for heavy traffic
- Ideal for wet areas, ramps etc



EpiMax 225

A two-pack solventless epoxy binder system that can be used for a variety of applications in concrete construction, repair and maintenance.

- Multi-purpose use - aggregate extendible
- Excellent adhesion to wet or dry surfaces
- High mechanical strength
- Resistant to a wide range of industrial chemicals
- Potable water approved



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 harsh chemicals and cleaners
- Non-tainting to food stuffs during application
- Anti-microbial formulation
- Variable slip resistance available



EpiMax 333AR

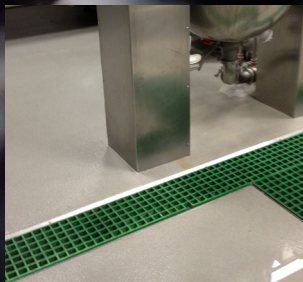
A two-pack high solids novolac coating system demonstrating outstanding chemical resistance and adhesion.

- Roller or airless spray application to 300 microns in two coats
- Self priming
- Highly resistant to splashes and spills of harsh chemicals
- Also selected for higher temperature applications
- Variable slip resistance available
- Potable water approved

EpiMax 333WB

A fast 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
- Fast return to service
- Hazmat free chemistry
- Long lasting durability
- Good adhesion to damp concrete
- Can be applied in non slip finish





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 temperature and thermal shock resistance
- Good chemical resistance



EpiMax 777UHD

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



EpiMax 999WB

The maintenance free solution for general warehouse floor protection which demonstrates excellent adhesion and general durability.

- Fast installation
- Mechanically durable, high surface integrity and non-dusting
- Chemically resistant to handling equipment oils and fluids
- Environmentally sustainable - maintenance free
- Slip resistant version available



Washing, sanitisation and sterilisation

Washing is simply the process of removing organic and inorganic contaminants to a level of insignificance using, ultimately, clean water alone.

Sanitisation and sterilisation are not equivalent.

Sterilisation is the process of eradicating all living microorganisms by using specialised technology and methodologies, such as autoclaving. Autoclaving involves exposing items to high-pressure, saturated steam at 120°C for 15 to 20 minutes—certainly not a practical option production facilities.

Sanitisation is a limited form of sterilisation; it is the process of eradicating living microorganisms down to an acceptable level and which has no adverse effects on winemaking.

Why is the design, construction and maintenance of wine making facilities so important?

Trust is everything in food and beverages. Everything should be "trustworthy," in terms of where it came from - and everyone involved in the supply chain should be accountable for their actions. From both logical and regulatory perspectives, sanitary conditions are essential during commercial kitchen processing. That pertains not only to equipment but also to the surroundings. Concrete is a remarkable material, but it has significant limitations in a sanitary environment. It has minimal chemical resistance and is porous. That makes it an ideal haven for contamination, bacteria and odour generation. Further, chemical washdown of equipment can be quite destructive to concrete. High performing seamless systems protect the concrete foundation and provide a sanitary barrier to contamination. Floors need to be maintained in a sound condition so that they can be kept clean. Integral coving is required. All surfaces in areas where food and beverages are handled must be capable of being effectively cleaned, disinfected and maintained in sound condition. All wet area flooring must allow for adequate drainage and no ponding. All flooring must meet the appropriate slip resistance standard.

All floor protection systems should be certified by the manufacturer as being to Food Grade Standard.

AS 4674:2013

Design, construction and fit-out of food premises

This standard specifies the selection and installation of food-safe floors. It controls flooring material composition, chemical resistance, installation and ease of cleaning.

The range of EpiMax Commercial Kitchen Flooring Systems complies with AS 4674:2004

AS/NZS 4586:2013

Slip resistance classification of new pedestrian surface materials

This Standard provides means of classifying flooring systems 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 flooring 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 Commercial Kitchen Flooring Systems has been tested to AS/NZS 4586:2013.

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

This Handbook provides guidelines for the selection of slip-resistant flooring surfaces classified in accordance with AS/NZS 4586. It recommends the minimum floor surface classifications for a variety of facilities.



Environmentally sustainable



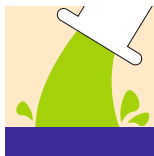
Resistance to abrasion and impact



Durable



High adhesion



Resistance to chemicals



Anti microbial



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