

PENTENS E-500FLEX

Solvent-free, Flexible Low Viscosity Epoxy Resin

Product Data Sheet

Description

PENTENS E-500FLEX is a 100% solids, solvent-free, chemical resistant, elastomeric epoxy resin which combines the toughness, adhesion durability and flexibility of epoxy. Its flexibility is achieved without the use of plasticizers or other additives. PENTENS E-500FLEX is self-leveling and may be used with fiberglass reinforcement to enhance system properties or as a waterproofing coating.

Uses

- PENTENS E-500FLEX is recommended for use as a trafficable sealant and/or a flexible coating for application in industrial areas and warehouses where maximum protection against substrate cracking is required, as well as an aesthetic finish.
- PENTENS E-500FLEX can also be used independently or in conjunction with any PENTENS flooring system as a crack bridging and waterproofing membrane.
- PENTENS E-500FLEX can be applied as a high strength cushion sealant and/or coating between the bridge deck and the pier foundations.
- Due to its extraordinary properties such as: low viscosity, long pot life, flexible and high strength properties, PENTENS E-500FLEX is also ideal for use in application of concrete cracks injection repair coincide with leaks

Advantages

- Very good adhesion, high strength, high chemical resistance and self-leveling, can be highly filled with mineral aggregates.
- Tough, abrasion resistant.
- Long-term flexibility, can bridge cracks in concrete structures up to 1.5mm.

Technical & Physical Data

Color	Clear / pigmented
Density (mixture)	Approx. 1.10g/cm ³
Viscosity	Approx. 100 cps
Mixing Ratio	3:1
Pot Life	1 hour
Resistance to Foot Traffic	After 24 hours
Full Mechanical and Chemical Resistance	After 7 days
Hardness, Shore D	68-55
ASTM D 2240 (0-10 sec)	
Tensile Strength	> 8 N/mm ²
ASTM D 412	
Elongation at Break	> 70%
ASTM D 412	
Reverse Impact, in-lb to fail	160
Minimum Application Conditions	8~30°C substrate temperature, < 85% relative humidity, 3°C above dew point.
Storage (not mixed)	Can be stored in original sealed packs under cool and dry conditions for at least 12 months.
Packaging	A: 15 kg/pail B: 5 kg/pail

Instruction For Use

Surface Preparation

The substrate must be sound, dry, clean and free from all loose particles, dust, cement laitance, oil and other contaminants.

Mixing

PENTENS E-500FLEX consists of a base and a hardener component supplied in prebatched packs. Before application, the base and the hardener components are carefully premixed by means of a slow rotating electric drill with paddle. To complete the mixing, the resin is poured from one can to another and mixed again. Mineral aggregates are mixed with the binding resin by means of a forced action mixer. To ensure the correct mixing ratio and for ecological reasons packs should be emptied thoroughly.

Application

Application of PENTENS E-500FLEX is normally by means of rubber squeegees or rolling. Readings must be taken continuously during application with a wet mil gauge to verify material is being applied at the proper thickness. Allow to cure overnight at 23°C surface temperature.

Material cures slower at lower temperatures. Epoxy materials will appear to be cured and “dry to touch” prior to full chemical cross linking. Allow epoxy to cure 2-3 days prior to exposure to water or other chemicals for best performance.

Cleaning

Tools and equipment can be cleaned with toluene or xylene immediately after use.

Safety

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin cleanser followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.