

PENTENS E-300

High Performance Free Flow Epoxy Grout

Product Data Sheet

Description

PENTENS E-300 is a three-component mortar consisting of modified epoxy resin mixed with epoxy resin (A-Comp.), hardener (B-Comp.) and specially graded aggregate (C-Comp.).

PENTENS E-300 is a high performance free flow epoxy grout, for large gaps up to 300mm or for grouting at high ambient temperatures up to 60°C .

Uses

PENTENS E-300 is suitable for levelling and repairing standard to highly absorbent concrete and cement screed surface prior to the application of epoxy. PENTENS E-300 is particularly suitable for the preparation of epoxy mortar.

- Heavy crane
- High ambient temperature
- High mechanical wear
- Traffic zones
- Loading / Unloading quays
- Suspended floors
- Storage and logistic areas
- Car park
- Factory floor
- Institutional areas
- High speed turbines and centrifuges
- Grouting under rotating equipment

Advantages

- Excellent wear and impact-resistant properties.
- Impervious to liquids and excellent resistance against chemicals.
- Easy application.
- High strength.
- High compressive strength.
- Varying degree of anti-skid finishing available.
- Resistance against repetitive dynamic loads.
- Superb adhesive strength.
- Low viscosity.
- Good penetration.
- High mechanical strength.
- Short waiting times.
- Non-shrink.
- Environmentally friendly.

Technical & Physical Data

Form	Liquid
Density (Part A & B) (CNS 6986, CNS 6988)	1.08kg / litre
Flexural Strength (ASTM C 580) (7 days)	>32N/mm ²
Tensile Strength (ASTM C307) (7 days)	>20N/mm ²
Elongation at Break (%) (ASTM D638)	9
Compressive Strength (ASTM C 579 : 93) (7 days)	80N/mm ²
Pot Life (30°C)	30 mins
Shelf Life	1 year when unopened and undamaged
Storage Condition	Store in a dry, cool place
Packaging	E-300 A 6kg /pail E-300 B 3kg /pail E-300 C 25kg /pail

Chemical Resistant

Citric Acid 10%	Excellent
Tartaric Acid 10%	Excellent
Acetic Acid 5%	Good
Fuel / Petrol	Excellent
Sugar Solution	Excellent
Hydrochloric Acid 25%	Excellent
Lactic Acid 10%	Very Good
Phosphoric Acid 50%	Very Good
Sodium Hydroxide 50%	Excellent

Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Apply only to clean and sound substrates which should be well dampened but free of surface water and leakages.

Instruction for Use

Surface Preparation

All surfaces must be clean, free from grease, oil, laitance, dirt and contaminants which might affect adhesion.

Underplate

All pressure relief holes should be provided to allow venting of any isolated high spots.

The gap between the perimeter formwork and the plate edge should not exceed 75mm on the pouring side and 25mm on the opposite side. It is advisable and practically to have no gaps at the flank sides.

Formwork

The formwork should be constructed to be leak-proof as PENTENS E-300 is a free-flow grout. Use foam rubber strip or mastic sealant beneath the constructed formwork and between joints. For free flow grout, it is essential to provide a hydrostatic head of grout.

Mixing

PENTENS E-300 A/B must be mixed until homogeneous prior to application, using an electrical or pneumatic power stirrer at approximately 300-400 rpm. (mixing time is minimum 3-4 minutes but depending on the circumstances, it may take longer until a homogeneous mix is achieved.)

Application

Mix Pentens E-008 epoxy primer: A-Comp. and B-Comp. until a homogeneous substance is achieved. Apply with brush and roller.

Mix Pentens E-300: A and B Component until a homogenous substance is achieved, then add C-Comp. slowly while mixing continuously using a mechanical mixer.

Distribute the mortar screed onto the wet primer. The mixed grout should be poured steadily from only one side to eliminate the entrapment of air.

For more details, please refer to PENTENS Technical Department.

Curing

- Foot traffic after 6 hours
- Full mechanical and chemical resistance is achieved after 7 days

Cleaning

Tools and equipment can be easily cleaned with thinner 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, rinse immediately 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.