

EPONITE EP / T / FC / VFC

THIXOTROPIC EPOXY ADHESIVE

DESCRIPTION

EPONITE EP is a thixotropic, solvent free structural epoxy adhesive ideal for bonding a wide range of building materials to one another including concrete, brick, metal, stone, and wood. EPONITE EP has a high level of mechanical integrity and exhibits excellent bonding characteristics even under damp (but not wet) conditions. Eponite EP-T is a specially thickened version for use where reduced slump and higher build are required or in warmer weather conditions to retain build in vertical applications. FC (Fast Cure) and VFC (Very Fast Cure) are available on request for faster setting times.

USES

EPONITE EP is a versatile, epoxy paste adhesive being particularly suitable for all general-purpose bonding operations and thin section concrete repairs. It is also used in conjunction with Hydroband HP1 and HP2 to form a watertight but flexible joint.

ADVANTAGES

- Colour coded components to ensure correct mixing.
- Excellent adhesion to most building materials.
- Bonds to damp substrates
- Low Odour
- Thixotropic nature facilitates application in both vertical and overhead locations.
- Very good chemical properties and cohesive strength

Property	Value
Colour	Light Grey
Specific Gravity	1.5g/20°C
Pot Life	50 minutes @ 20°C
Compressive Strength @20°C	40 MPa – 1 Days 75 MPa – 7 Days
Tensile Strength	18 MPa
Moisture Resistance	<0.4% increase at 28 days (BS 6319:Part 8)
Lap Shear Strength to grit Blasted steel	14 MPa
Shrinkage on Curing	Negligible
Hold Up	>15mm when using the EP-T version
Application Temperature Range	3-30°C (Please note that at reduced temperatures below 10°C there will be increased setting time).
Touch Dry @ 20°C	EP 4-6 hours, EP-T FC 3-4 hours
Hard Dry @ 20°C	EP 10-12 hours, EP-T FC 5-7 hours
Elastic Modulus Comp	6,300N/mm ²
Slant Shear Strength to Concrete at 24 Hours	45° Smooth Plane – 20MPa (Concrete Failure) 30° Smooth Plane – 13.7MPa (Concrete Failure)

PROCEDURE

Surface Preparation: Concrete substrates should be sound, clean, and free from dust, dirt, grease, oils, laitance, and other contaminants. A roughened or profiled surface will ensure optimum adhesion. Mild steel and other metallic substrates shall be degreased, power wire brushed, or grit blasted and vacuumed free from dust.

Mixing: The base and curing agent components should be thoroughly mixed together using a slow speed drill with paddle attachment, until a uniform grey mixture has been produced.

Application: The application of EPONITE EP is best achieved using spatula, trowel, serrated trowel, or stiff-bristled brush depending on the area to be treated. EPONITE EP should be applied to each of the two substrates to be bonded. The two substrates are then pushed together to achieve the required bond. This application does not apply when using it with HYDROBAND HP. When using it as an adhesive for HYDROBAND HP, refer to the HYDROBAND HP technical data sheet under the application section.

Equipment Cleaning: Clean all equipment immediately after use, with solvent cleaner.

Curing: EPONITE EP will be hard dry following 10-12 hours of curing at 20°C. At higher temperatures, this period will be reduced and at lower temperatures this period will be increased. Allow 7 days for optimum mechanical properties and full chemical resistance.

PACKAGING & COVERAGE

Pack Size: 5kg, 10kg, 20kg

Yield: 3 litres per 5kg pack, 6 litres per 10kg pack, 12 litres per 20kg pack.

Coverage: A 5kg pack will cover 1.5m² at 2mm thickness, a 20kg pack will cover 6m² at 2mm thickness.

STORAGE & SHELF LIFE

Store in dry frost free conditions, out of direct sunlight. Protect from frost. EPONITE EP has a minimum shelf life of 12 months when stored in original, unopened containers, in accordance with the manufacturer's recommendations.

LIMITATIONS

EPONITE EP should not be applied at temperatures below 3°C. Do not apply to uncured concrete substrates.

HEALTH & SAFETY

Avoid contact of material with skin and eyes. Wear appropriate gloves, overalls, and eye protection during use. Wash off skin with soap and water. Any eye contamination must be rapidly irrigated with copious amounts of clean water and immediate medical attention sought.