

HighBond EB406

EPOXY BONDING AGENT AND ADHESIVE

HIGHBOND EB406 is a high performance, two -component, 100 % solids, moisture insensitive, high strength epoxy bonding agent or adhesive and binder for numerous applications. HIGHBOND EB406 bonding agent designed for multipurpose applications. This high modulus, medium viscosity resin is the perfect solution for bonding new, plastic concrete to existing concrete slabs and steel. for cementitious systems which enhances water and abrasion resistance and increase durability. HIGHBOND EB406 Epoxy resin Bonding Agent is ideal for use in internal and external renderings, flooring screeds and patch repairs. It can be used internally or externally where improvements in the physical properties building structures are required. mix ratio.

Features & Benefits

- Provides exceptional adhesion
- Ensures bonding of floor Easy to use mixing ratio
- Not regulated and non-corrosive
- Waterproof barrier and bonding agent
- Moisture insensitive for damp applications
- Good abrasion resistance and proven performance
- Good resistance to many chemicals ,frost ,salt and to mineral oil.
- Excellent adhesion to steel and concrete.
- Adheres well to brick, glass, asphalt, wood, expanded polystyrene etc
- Low VOC and Green building comply.

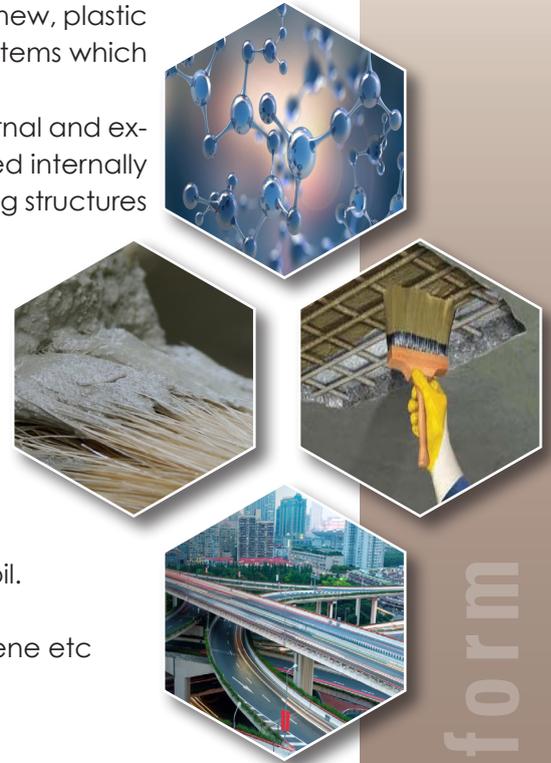
Field of Application

- Bonding of concrete, masonry, steel, fiber glass and wood
- Anchoring bolts, dowels or pins
- Seal cracks and sets ports prior to injection
- General adhesive for concrete and masonry
- For corrosion protection of steel
- To prime and waterproof steel reinforcement prior to patching or concrete pouring
- To promote adhesion of concrete, bedding mortars or toppings to non-cementitious substrate such as tile, plywood or steel.

PROPERTIES (ASTMC881 TYPES 1, II, IV AND V, GRADE 2, CLASS C)

Mixed Viscosity, cp		4,400
Gel Time , minutes	ASTMC881	35
Bond Strength , psi (MPa)	ASTM C882	14 Days 2,590 (17.8)
Water Absorption	ASTM D648	24 hours , Nil
Heat Deflection Temperature		
ASTM D 648		50° C
Linear Coefficient of Shrinkage		
ASTM D695		0.002
Mortar workability		1 Hour
Compressive strength	ASTM C 579	90 N/mm ²
Tensile strength	ASTM D638	54 N/mm ²
Shear bond strength	ASTM C 882	9 N/mm ²
Application temperature		5 to 50 ° C

Tolerance of 10 % apply



engineered to perform

SURFACE PREPARATION

All surfaces must be sound, clean, free from dust, grease, oil and loose materials. Any water content should be removed and fully dry from both surfaces to be adhered before application. Following surface preparation, the strength of the surface can be tested if quantitative results are required by project specification. When coating steel, all contamination should be removed and the steel surface prepared to perfect finish using clean, dry blasting media. For mortar preparation, Sands used in the mixes should be well graded, clean, sharp sands, and should conform to the appropriate standards.

Mixing

Mix EB406 Part A and Part B completely on a neutral pan using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 1 minute each. Combine Part A and Part B in the given ratio by volume, then mix thoroughly for 3 to 5 minutes. Do not aerate the material during mixing.

For the preparation of mortar, gradually add clean, dry silica sand to previously mixed component and mix thoroughly for 3 to 5 minutes. The mix ratio of aggregate to mixed epoxy is approximately 3 to 2 by volume, but can be modified on the desired consistency of the mortar.

APPLICATION

Bonding fresh concrete to hardened concrete: Apply by brush, roller, squeegee or spray to the prepared, existing concrete substrate. Place fresh concrete on to the applied EB406 while it is still tacky. The open time is typically 2 to 4 hours (25°C to 35°C). The open time reduces at warmer temperatures. If applied EB406 loses tackiness or exceeds open time, abrade the surface of the epoxy, wipe surface clean, re-apply EB406 and proceed.

Bonding hardened concrete to hardened concrete.: Apply by spatula, brush or trowel. Ensure the surfaces to be joined have uniform coatings of EB406. Join the surfaces and hold or clamp firmly until the epoxy gels. Ideally, a small amount of adhesive should exude from the joint. Surfaces must be mated while the adhesive is still tacky.

Anchoring bolts, dowels, pins: EB406 can be used neat or as a mortar to grout vertically aligned anchors (into a horizontal substrate). The anchor hole should be free of all debris before grouting.

Patching and repairs: Apply EB406 as a primer coat to the prepared concrete surface. The prepared EB406 mortar mix apply to the area by trowel or spatula in lifts before the primer becomes tack free.

Setting ports & Sealing cracks: Place a small amount of mixed EB406 on the back of the port and carefully place it centered over the crack. Be careful to not fill the hole of the injection port. Allow the places mortar sufficiently harden before injecting.

Pick-proof sealant: Apply a bead of EB406 to the joints and areas being sealed. Strike off the epoxy with a rounded spatula, or similarly rounded tool, to finish.

CLEANING

Clean all equipment with water immediately after use

PACKING: 5 Litre (Two Pack)

HEALTH & SAFETY INSTRUCTION

Non Hazardous. if ingested seek medical advice. is essentially non hazardous in normal use. For further information please refer to Health and Safety data sheets available on request.



ORGANIX
BUILDING SYSTEM



engineered to perform