

## Substrate Conditioning Mortar, High Bonding Rapid Hardening

# CHICHIBU EPOTEX

Chichibu EPOTEX is a special polymer cement composed of water-based resin and special ultra-quick hardening cement. Combination of two different bonding materials, with their reciprocal action, demonstrates extremely high bonding efficiency and quick hardening property. With the features of water-based epoxy resin, it enables work execution at non-primer basis, providing excellent bonding efficiency and with the features of special ultra-quick hardening cement, it can achieve earlier hardening and lowering of surface moisture rate in a short time.

EPOTEX mortar, with function of resin, hardener and special cement composing it, forms moisture proof barrier by absorbing, to some extent, moisture inside substrate. As the result, it can temporarily prevent moisture out of substrate from penetrating upto surface.

When executing work for resin group finish coating to cement group substrate or for floor cover finishing, the foregoing features are extremely effective for eliminating inferior bonding to substrate or preventing blistering due to moisture. Therefore, this product is the most suitable material as substrate conditioner for substrate containing much moisture and difficult to dehumidify, and/or for floor repair work subject to time wise restriction.

### <Features>

- (1) It is a quick-hardening type to achieve hardening in approx. 2 hours.(20°C)
- (2) As the surface water content rate is lowered in a short time, it enables sooner transfer to the work steps for resin group coating floor materials or coating waterproof materials.
- (3) With the effect of ultra-quick hardening cement, it has excellent strength manifestation property.
- (4) It demonstrates smaller shrinkage compared to conventional polymer cement mortar, hence causing less cracks.
- (5) Being excellent in solvent proof, it has no danger of being invaded by solvent group polymer.
- (6) Being of combination use type as primer, it provides excellent bonding strength if coated at non-primer basis.
- (7) Because the cement powder part and mixture liquid is supplied in the standard combination set, its mixing is easy and provides stable quality.

### <Type of EPOTEX>

Type	Applicable Portion	Coating method	Coating thickness
ET-0	Vertical surface	Striking coat	1 mm or so( twice coat)
ET-1	Flat face	Striking coat	1 mm or so( twice coat)
ET-3	Flat face	Thin coating	0.5-3 mm( single or twice coat)

### <Packing of EPOTEX>

Mixture	Powder Part	15 kg	Vinyl bag
	Principal material	3 kg	Vinyl bag
	Hardener	3 kg	Vinyl bag
Total( set)		21 kg	Pail can

※Cement powder available in 2 blending types of room temperature use ( over 15°C) and low temperature use (5-20°C).



### <Standard Coverage of EPOTEX>

Coat thickness(mm)	Coverage	
	Kg/m <sup>2</sup>	m <sup>2</sup> /set
0.5	0.9	23.3
1	1.8	11.6
3	5.4	3.8

### <Main Application of EPOTEX>

- (1) As substrate conditioner for floor coating material or lining material of epoxy resin group.
- (2) As substrate conditioner for floor coating material or waterproof coating material of urethane resin group.
- (3) As substrate conditioner for floor covering such as P tile or long size sheet.
- (4) As repair material for concrete surface exposed to rain.

### <Summary of EPOTEX Work Execution>

- (1) Put mixture (principal material and hardener) into the mixing container and stir them with a hand mixer for 30sec. Then, put in the powder gradually and stir with the hand mixer for 2 min. Use a hand mixer of high speed rotation.
- (2) Apply the mixed EPOTEX to rub onto the substrate surface, then coat to the subscribed thickness.

### <Special Application of EPOTEX>

In case of scab or other troubles on the finishing material due to rising of moisture from the substrate, use of EPOTEX may help to solve the trouble, as EPOTEX forms the initial moisture proof barrier effective for those troubles.

But as EPOTEX is not applicable to all conditions, please consult with our staffs.

Mortar mixed of Epoxy Emulsion and Ultra-quick hardening Cement

# CHICHIBU EPOTEX

## <Properties of EPOTEX> ( for room temperature: 20°C test)

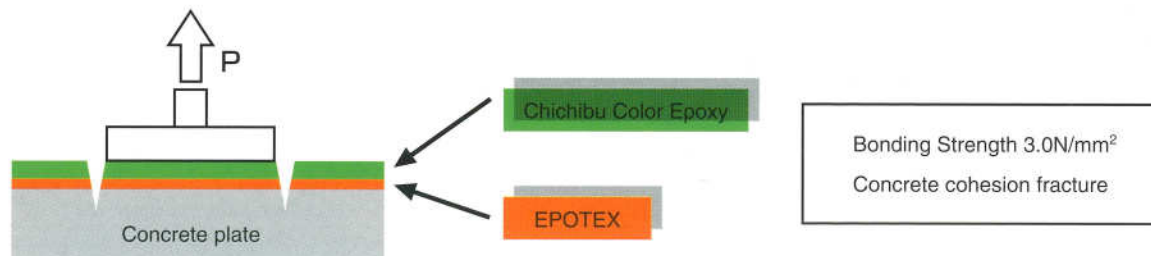
Measured Item		ET-0	ET-1	ET-3	Test Standard
Pot life		30~40min.	30~40min.	30~40min.	
Compressive Strength ( N/mm <sup>2</sup> )	3hours	11.4	7.1	6.7	
	24hours	16.5	15.6	17.0	
	7days	28.2	24.0	25.0	
Bending Strength ( N/mm <sup>2</sup> )	3hours	2.4	2.4	2.3	
	24hours	3.9	4.2	3.5	
	7days	7.1	6.9	5.8	

## <Bonding Test Data of EPOTEX ET-1 to Various Substrates>

Type of Substrate	Bonding Strength ( N/mm <sup>2</sup> )	State of Fracture	Substrate Treatment
Concrete	3.2	Substrate concrete cohesion, EPOTEX cohesion	Wire brush
Wetting Concrete	3.0	Substrate concrete cohesion, EPOTEX cohesion	Wire brush
Epoxy Resin	2.7	EPOTEX/ epoxy resin boundary face, substrate cohesion	Wire brush
Clinker Tile	2.1	EPOTEX cohesion, EPOTEX/ substrate boundary face	Disc grinder

## <Bonding Strength of EPOTEX to Epoxy resin>

Testing Condition: Coated EPOTEX ET-1 in 1mm thick to concrete plate, after 5 hours, coated Chichibu Color Epoxy SL-100 (dash spread method in 2mm thick) and conducted bonding strength test at the material age of 14 days.



## <Caution upon Work Execution>

- (1) Avoid execution of work under strong wind or at temperature below 5°C. Apply curing for 24 hours after work execution to avoid exposure to water.
- (2) Substrate treatment  
Completely remove frail portion, efflorescence, laitance and if stained with oil, remove by scraping. Wipe out lifting water if any. As cracks on the substrate cause irregularity or cracking, fill those portions with cement mortar before work execution.

## <Caution upon Storage>

Avoid storage in places exposed to water or places with high humidity, and also do not place EPOTEX directly on the ground.

## <Caution on Handling>

It's base material of this product being cement, this product tends to raise fine dust and has high alkalinity. Because its direct eye contact or skin contact may cause blind or inflammation, when handling, use safety glasses, dust protection mask, rubber gloves, etc. In case of eye contact, flush eyes adequately with clean water and consult a physician. If the material spills out of the container, apply treatment after scattering sand. After handling, do not forget adequate hand washing and gargling. If swallowed by mistake, vomit it and well rinse inside the mouth, then consult a physician. Store it at a place out of easy reach of children. Dispose the container as waste after the content is exhausted.

Distributor:



**CHICHIBU CONCRETE INDUSTRY CO., LTD**

Head Office: 28-23, Honngo 1-chome, Bunkyo-ku, Tokyo 113-0033

TEL (03) 3816-5951

Factory : 1-1, Tsukimicho 2-chome, Kumagaya-shi, Saitama 360-0825 TEL (0485) 21-2161