



ARDEX WPM 256

(HydrEpoxy 256 Bonding Bridge)

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Description:

ARDEX WPM256(HydrEpoxy 256) is a two component water based epoxy polyamide unpigmented new to old concrete bonding bridge and admixture for cement based materials.

- Non-flammable & negligible odour.
- Convenient equal part-mixing ratio.
- Surface tolerant.
- Water thinned and clean up.

Features/ Benefits:

A relatively high solids product specifically designed as a high strength bonding bridge for bonding new render or concrete to aged concrete substrates. Ardex WPM256(HydrEpoxy 256) is also used as an epoxy admixture for cementitious products used for concrete repair.

- Forms a structural bond between new and old concrete.
- Can be applied to damp surfaces.
- Is compatible with fresh cement or concrete products.
- Has excellent adhesion to most substrates including brick, masonry, concrete block, concrete, compressed fibreboard, stone and timber.-

Typical Applications:

- As a new to old concrete bonding bridge to substantially improve the bonding characteristics.
- As an admixture to cement to produce variable strength repair mortars and waterproofing grouting material.
- As a concrete curing membrane to contain the water and as an aid to the curing of and sealing of concrete.

Basic Application Instructions:

Surface Preparation:

All surfaces to be treated must be structurally sound, all previous coatings should be removed and the surface cleaned free from contaminants.

Installation

Mixing:

1. Each component should be individually mixed to form a homogenous component.
2. Thoroughly mix the two components in the ratio of 1:1 by volume, preferably using a power stirrer, until a homogeneous mix is obtained.
3. Only mix as much as may be used within the pot life of the product and avoid excessive aeration during mixing.

Application as a New to Old Concrete Bonding Bridge

Apply one coat by brush, roller or spray to a section of the area to be treated at a coverage rate of 7 square metres per litre.

Only apply the Bonding Bridge to an area to which the new render or concrete can be placed while the bonding bridge remains wet or tacky.

Immediately following application of the Ardex WPM256 (HydrEpoxy 256), place the new render or concrete and finish as required.

Repeat the process until the full area to be treated is complete.

Application as a Concrete Repair Mortar

After mixing the Ardex WPM256 (HydrEpoxy 256), mix with an equal volume of cement and add a fine particle grade river washed sand to achieve the desired working consistency (normally 2-3 times the volume of cement added).

During trowel finishing of the concrete repair mortar, use a wet trowel to avoid drag-up and to obtain a smooth finish.

Application as a Concrete Curing Membrane

Apply one coat by brush, roller or spray at a coverage rate of 3 square metres per litre.

Note that surfaces must be sanded in the event of application of coatings or adhesives after the film has cured.

Packaging/ Shelf life:

(10 L part A + 10 L part B) plastic pail

12 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

Clean up & Disposal:

1. Thinning is not recommended when using this product for the applications described.
2. Wash all equipment in water or water / detergent immediately on completion of work since Ardex WPM256 (HydrEpoxy 256) will cure underwater if equipment is left.
3. Clean up tools with water before the compound dries.

Safety Data:

- UN Number: N/A non flammable and non explosive.
- Inhalation: Non toxic, irritating or flammable vapour.
- Ardex WPM256 (HydrEpoxy 256) may cause a mild dermatitis skin reaction with some people after prolonged contact. It is recommended that protective gloves be used during application.

Product Limitation:

The product should be applied whilst the surface temperature is between 10-35°C. The product will cease to cure below 10°C, but will recommence curing when the temperature rises above 10°C. Curing time will also be adversely affected in situations where relative humidity is >85%.

Good ventilation should be provided during curing cycle.

Will yellow when exposed to ultra violet light for extended periods.

The cured coating will form a glazed chemically resistant surface finish which must be well sanded to produce a course surface profile prior to adhering any product to the cured film.

Mixing Ratio

To mix WPM256 Part A: Part B=1:1 (by Volume), and then using following cement/sand ratio for further applications.

Application	New/Old Interface	* Concrete Repair	Concrete Curing	Cement Coat
WPM 256	100	100	100	100
Water	0	50	0~10	0~25
Cement		100		100
Sand		0~300		
Coated	1	2	2	2
Coverage (After Mixing)				
M ² /L/ Coat	8	N/A	4.7	4
Coated Top 6mm		0.6	N/A	N/A
Pot life (25 ^o C)	1 hour	*	1 hour	1 hour
Set Time (25 ^o C)	Touch Dry Time : 4Hours Setting Time : 24Hours Curing Time : 7 Days			
* As waterproofing grout ,the mixing ratio of sand is 100.				

Technical Data:

Part A : Part B = 50 : 50 (By Volume)

All results are according to the installation requirements and testing methods by applying the consistency of WPM256 in different curing specimens.

Curing Condition : 25±3°C, RH 65±10%

Testing Item	Test Result	Methods
Bonding Strength 14 Days curing in air	> 17.75 kg/cm ²	CNS 4684 > 15 kg/cm ²
Water Absorption 14 Days curing in air 24 hours in water for test	< 0.17 %	CNS 3763 / 3764 < 0.2 %
Water Permeability 14 Days curing in air Water Pressure 1kg/cm ² , 1hr	< 0.37 %	CNS 3763 / 3764 < 0.4 %
Mandrel Bend 14 Days curing in air.	3" Pass	ASTM D522
Chemical Resistance KOH 10% HCL 10% CH ₃ COOH 10% NH ₄ OH MEK Xylene Tolune	CNS 3299 24 hrs covered spot test No Effect	

Part A : Part B: GC : Water = 50 : 50 : 100 : 10 (By Volume)

Sample	WPM256	1 : 3 Cement / sand
Mixing Ratio	10% of Cement	17%
Compression Strength(kg/cm ²) 14 Days curing in air.	214	200
Water Absorption (%)	2.42%	>4 %
Water Permeability, Water Pressure 1kg/cm ² for 1hr	1.18%	>5%
Abrasion test H22 wheel , 500g Load ,100 Cycles	0.01%	5.29%

We assume warranty for the perfect quality of our products.
Our handling recommendations are based on trials and practical experience; however, they can only be regarded as general advice without a quality warranty, as we have no influence on work site conditions and the execution of the work
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