Engineer Plus Power Latex-502

ACRYLIC 100% BONDING AGENT FOR REPAIR & WATER PROOFING

Description

Engineer Plus Power Latex-502 is based on acrylic 100% bounding agent supplied as a ready to use bonding agent in liquid consistency. It is reduces shrinkage, prevents cracking, prevents dust pick up and improves abrasion resistance.

Engineer Plus Power Latex-502 is bonds strongly to old & new concrete and to plasters and used for repair of spalled concrete.

Areas of Application

- Repair structural concrete, fixing or re-fixing of slip bricks, tiles, stones & marble bedding, waterproofing and as a bond coat

Rate of Uses

Theoretical consumption without allowance for loss.

Rate of Uses						
	Litre / m^2			m^2 / gallon(1 Litre)	m^2 / gallon(5 Litre)	m^2 / pail (20 Litre)
	Standard	At Least	At Most			
1 Coat	0.23	0.20	0.25	4	21	86
Total 1 Coat	**0.23**	**0.20**	**0.25**	**4**	**21**	**86**

Method of Application

- **Surface Preparation**
  - Clean the surface with wire brush or scrubber to remove hidden dirt, loose particles, laitance & dust. Degrease the surface by using suitable solvents.
  - Repair the concrete spalled portion by saw, cutting the extreme edges of the repair location to a depth of at least 10 mm to avoid featheredging & to provide strong substrate.
  - Clean the concrete surface to remove any contamination where breaking is not possible. Roughen the surface by light scrabbling or grit blasting.
  - Expose corroded rebar in the repairing area fully. Remove all loose scales & corrosion deposits and immediately clean the surface.
- **Priming**
  - For priming of steel surface, apply one coat of Engineer Plus Power Latex-502 to all exposed reinforcement area &allow it to dry before second coat application.
  - For priming of concrete substrate, the surface should be thoroughly saturated with potable water. Remove any excess of water prior to application ratio. Slowly mix cement with binder to obtain a smooth consistency. Continue mixing the slurry during application to prevent settlement.

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For bond coat application

- Apply Engineer Plus Power Latex-502 to prepare substrate by brush at rate 4-5 m2 per ltr.
- After applied wait until Engineer Plus Power Latex-502 form tacky, then applied other cementitious application.

- **Mixing**
  - A forced action mixer is essential (PAN Mixer) & recommended to ensure that Engineer Plus Power Latex-502 mortar is thoroughly mixed. Use a suitable sized drum with heavy-duty electrical drill machine fitted with spiral paddle mixer at slow speed of 400-500 rpm.
  - Hand mixing is permissible only for 25 kg or less quantity.
  - Charge the mixer with required quantity of clean & dry sand, cement & mix for 1-2 minutes, then add Engineer Plus Power Latex-502 as per the doses recommended. Mix for 2-3 minutes to avoid air entrapment. Keep on slowly adding water until the required consistency is achieved. Do not add extra water.

- **Applications**
  - Wide range of mix designs are recommended for different application using Engineer Plus Power Latex-502

1)Bonding agent for rendering/ Bonding between old and new concrete

Mixing Ratio

Engineer Plus Power Latex-502 with water = 1:1 by volume (or by weight)

All Method Working (Except spray) to coating primer (Bonding coat)

Engineer Plus Power Latex-502 with water (Ratio 1:1)

With cement on surface by brush.

Coating with mortar on bonding with wet on wet.

Usage: Coating bonding in area 1m^2. thickness 1 mm. Then Engineer Plus Power Latex-502 1liter with have area 4.76 m^2

2) Floor screeds/renders

Ratio

Engineer Plus Power Latex-502	0.8 (ltr.)
(Water)	3.2 (ltr.)
(Cement) OPC#1	5.6 (kg.)
Sand (Size) $\leq$ 3.0 mm.	14.1 (kg.)

Ex. (Cement) OPC#1 50kg. Sand (Size) < 3.0 mm. 125kg. Water 30 litre. Engineer Plus Power Latex-502 7 litre.Note that this depends on the amount of cement used in each species.

Usage: Coating for waterproofing concrete surfaces in one square meter area at a thickness of 10 mm

Application: The mixture was coating repair, concrete finishing, and wet thickness of about 10 mm to10 mm over the coating to coating layers. On the skin with moisture at all times.

- **Precautions & Limitations**
  - Do not add extra water or more than recommended dosage.
  - Recommended dosage to be followed to achieve desired results.

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Technical Information

Properties	Standard/Test Method	Results
Appearance	-	White Milky Flow able Liquid
Specific gravity	-	1.01+/- 0.02
pH	-	7 to 9
Compressive strength	BS6319 part2:1983	35 N/mm^2
Tensile strength	ASTM C–190-85	3.3 N/mm^2
Flexural strength	-	11+/- 2 N/mm^2
Bond strength	-	30 N/mm^2
Chemical resistance	-	Resists mild acids, alkalies, sulphates.
Resistance to water pressure	-	Up-to 2 bar
Bond Strength by Slant Shear by bond coat	ASTM C-882	Control Sample Result
-14 days		3.22 4.78 MPa
-28 days		4.43 6.02 MPa
Bond Strength by Slant Shear by mix Concrete	ASTM C-882	Control Sample Result
-14 days		2.73 4.63 MPa
-28 days		3.25 5.73 MPa

Storage

- Shelf life is 12 months from the date of manufacturing.
- Store in a cool & dry place in unopened condition (Prevent from direct sunlight).

Health & Safety Precautions

- Cementitious mortars & slurries modified with Engineer Plus Power Latex-502when mixed or when become damp, may release alkali which can be harmful to skin & eye.
- Wear suitable protective clothing, gloves, eye protection and respiratory protective equipment during application.
- In case of contact with skin, with eyes, rinse with plenty of clean water and then cleanse with soap water.

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Packing

Mktd. By : ALOK WATERPROOFING CO.
Mfg. By : INDORE COLOUR ORGANICS LTD.
Manufacturer of World Waterproofing Chemical & Paints :
Regd. Off.: 61 Jawahar Marg, Indore-452009, Toll Free no. 1800 891 2230
Email: info@engineerplus.in, Engineerplusindia@gmail.com
Customer Care No. : +91 93295 77550, 92291 31999
For more information about our product & Services log on to
www.eningeerplus.in / alokwaterproofing.com / icoindia.co.in

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