



Description

Engineer Plus Power Latex is based on modified Styrene butadiene latex used for high performance applications in waterproofing and repairs. It is used for repairs of spalled concrete such as – floors, columns, beams, chhajjas, slabs & waterproofing of toilets & bathrooms & terraces. It bonds strongly to old & new concrete & plaster.

Typical Application

- As a bond coat - Plaster to plaster, concrete-to-concrete, plaster to concrete for plastering over brick masonry.
- Bonding coat & mortar for tiles & panels, under lays for special finishes such as top rendering coat for chemical resistant floors.
- As waterproofing – Waterproofing of small roof terraces, sunken portions of toilet & bathrooms, chajjas & lift pits, balconies & staircase.
- As crack repair - Repairs of plaster cracks more than 5 mm & in gaps developed between masonry and RCC members.
- As rebar coating – Coating for prevention of corrosion over rebars.
- For Cladding – Fixing or refixing of slip bricks, tiles, stones & marble bedding.
- Concrete repair mortars - Improves the durability of the mortars and it can be used for making polymer modified mortars for patching and concrete repair.
- Cement mortars - For filling holes, reconstructing damaged areas and finishing surfaces on buildings and precast elements in concrete .

Features

- Multipurpose – It is multipurpose & economical product, easy to use
- Cracking – It prevents cracking by improving flexural strength
- Hardness – Improves the hardness & prevents dust generation
- Shrinkage – Reduces drying & aging shrinkage cracks
- Bonding – Bonds strongly to concrete, masonry, stone work, plasters, steel & most of the building materials.
- Erosion & corrosion – Improves erosion resistance & prevents corrosion.
- Abrasion resistance – Improves abrasion resistance of cement mix.
- Waterproofing - Prevents leakage & dampness.
- Durability - Enhances strength of a repair mortar & provides durability.
- Rebound loss - Less material wastage- material does not fall back/ rebound, when used as bonding agent.
- Coverage - Excellent Coverage -70-80 sq.ft per kg/ in 2 coats, hence economical.

Method of Application

SURFACE PREPERATION

- 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 provides strong substrate.
- Clean the concrete surface to remove any contamination where breaking is not possible. Roughen the surface by light scabbling or grit blasting.
- Expose corroded rebars in the repairing are a fully. Remove all loose scales & corrosion deposits & immediately clean the surface.





Application Mixing

Sr. No.	AREAS OF APPLICATION	MIX (POWER LATEX : WATER : CEMENT)	METHOD OF APPLICATION
1	As bond coat	1 : 4 : 7	Apply a single coat of the mixed quantity of Engineer Plus Power Latex. When coat is tacky, apply the plaster or concrete according to the situation. Always add cement to the liquid (Engineer Plus Power Latex : water = 1 : 4).
2	As waterproof coating	1 : 4 : 7	Brush apply the 1st coat. Apply 2nd coat after 1st coat is dry approximately 4-6 hrs between two coats. Overlay the 2nd coat with screed/plaster for protection and finish.
3	Rebars coating	1 : 4 : 7	Rusted rebars must be thoroughly scraped, by mechanical means if required. Brush apply a single coat of prepared mix over the rebars. Apply concrete/mortar when the coat is tacky.
4	For 'salt petre'- free plaster Brick masonry	1 : 4 : 7	Brush apply the 1st coat on brick. Apply 2nd coat after 1st coat is dry. When 2nd coat is tacky, place plaster as per instruction in no. 5
5	Renders, Patching & Crack Repair Mortar	5 kg Engineer Plus Power Latex +15 ltr Water 50 kg Cement + 150 kg Sand	Mix 5 kg of Engineer Plus Power Latex with pre-measured water for 50 kg of cement. Use this mix to add to the recommended dry mortar mixes. Mortar mixes may be as rich as 1:3 (cement: sand) Keep water-cement ratio in Mortar as low as 0.4 but not more than 0.45. Clean the cracked area properly of all loose materials. Wet the crack completely using a bottle spray. Apply a single coat as a bond coat prior to the crack filling of the Engineer Plus Power Latex as per the mixing proportions mentioned earlier. Fill the crack with above prepared mortar. Compact it into the crack fully and trowel finish to level.
6	As waterproof plaster	50 kg OPC cement 150 kg Sand 1 kg Engineer Plus Power Latex	Mix 1 kg of Engineer Plus Power Latex with pre-measured water for 50 kg cement. Use this mix to add to the recommended dry plaster mixes. Plaster mixes may be as rich as 1:3 (cement : sand) Keep water-cement ratio in Plaster as low as 0.4 but not more than 0.45. For better application apply a bond coat with power latex as suggested earlier. 2nd and final layer of plaster must not be mixed with Engineer Plus Power Latex. Add Engineer Plus CAM-90 to the second coat plaster. Take care to scratch-key the 1st coat surface for effective bond with the 2nd coat.

Coverage

Preparing the Mixes for Bonding & waterproofing applications

- 1 kg of Power Latex will cover 70 - 80 sq. ft. area in 2 coats for a proportion mix 1 : 4 : 7 (Power Latex : Water : Cement).

For Patching and concrete repair

- Recommended mixing ratio: 5 kg Engineer Plus Power Latex-502 + upto 15 ltr Water 50 kg Cement + 150 kg Sand.

Technical Data Sheet

PROPERTIES	RESULTS
Appearance	Free flowing liquid
Colour	Milky white
Specific Gravity @30°C. gms / ml	1.02 ± 0.02
pH Value	7 – 9
Non Volatile matter, %	42 – 44
Bond strength, N/sq mm	5 +
Chemical resistance	Resists mild acids & alkalies
Freeze thaw resistance	Excellent

