

PROCRETE

MULTI-PURPOSE BONDING AND WATERPROOFING ADMIXTURE

PRODUCT DESCRIPTION

OPTIMIX PROCRETE is a premium milky white co-polymer emulsion of high-grade Styrene Butadiene rubber, engineered to significantly enhance the waterproofing, bonding, durability, and flexibility of cementitious mixes and products. Its advanced formulation provides exceptional strength and water resistance, making it an ideal choice for applications requiring robust protection.



OPTIMIX PROCRETE serves as a versatile admixture to improve the physical properties of cement and mortar mixes, including primers, bond coats, mortars, screeds, renders, and concretes, ensuring long-lasting performance in wet, dry or variable conditions.

TYPICAL USAGE

- Enhanced Spatterdash is tougher even after just a few days
- Bond Coat delivers high strength, excellent waterproofing plus corrosion protection for steel.
- Admixture for cementitious mortars ensuring durability and moisture protection.
- Ideal with ***Optimix F12*** for Spatterdash, Render and screed performance offering superior strength and waterproofing properties.

FEATURES AND BENEFITS

- Excellent Adhesion Characteristic
- Reduced Shrinkage And Cracking
- Can Improve Compressive Strength
- Enhanced Water Resistance
- Improved Flexural Strength
- Good Workability
- Improved Tensile Strength
- Can Be Used In Contact With Water



TECHNICAL DATA

Product Characteristics	*OPTIMIX PROCRETE*
Co-polymer type	Styrene Butadiene Rubber
Supplied State	Aqueous Solution
Colour	White
Specific Gravity (20°C)	1.02
Solids Content	~ 40%
Toxicity	Non-toxic
Packaging	20 or 200 kg
Shelf Life (5 - 40°C)	12 months in a sealed container



Prescribed Mix Proportions[2]						
	Bond-coat[1]	**Render / Screed**	**Repair Mortar**	**Spatter-Dash[1]**	**Adhesive Mortar**	**High Strength Floor Screed**
Cement[3]	1.5 L	50 kg	50 kg	40 L	50 kg	50 kg
Sand[4]	--	125 kg	125 kg	80 L	125 kg	125 kg
10mm Agg.[5]	--	--	--	--	--	100 kg
PROCRETE	1.0 L	9 L	9 L	10 L	9 L	9 L
Water	--	9 L	9 L	15 L	9.0 - 9.5 L	7 L
Mix Weight	~3.2 kg	193 kg	193 kg	~205 kg	193 - 193.5 kg	291kg

Yield And Coverage						
	Bond-coat*	**Render / Screed**	**Repair Mortar**	**Spatter-Dash***	**Adhesive Mortar**	**High Strength Floor Screed**
Mix Density (kg/m^3)	~ 1,850	~ 2,000	~ 2,000	~ 1,800	~ 2,000	~ 2,250
Prescribed Mix Yield	~ $7m^2$ @0.25mm thick	~ $9.5m^2$ @10mm thick	~ $9.5m^2$ @10mm thick	~ 2.0 to 3.5kg/m^2	~ $9.5m^2$ @10mm thick	~ $13m^2$ @10mm thick
Coverage per Litre of ***PROCRETE***	~ $7m^2$ @0.25mm thick	~ $1.0m^2$ @10mm thick	~ $1.0m^2$ @10mm thick	~ $6m^2$ to $10m^2$	~ $1.0m^2$ @10mm thick	~ $0.7m^2$ @10mm thick

Notes:

1. *Proportions measured by volume, weights are estimated.*
2. *The ideal mixing proportions and resulting performance are highly dependent on the quality of cement, sand grading, aggregate properties, moisture content, and site/environmental conditions. Site trials are recommended.*
3. *Most good quality Portland cements complying with BS EN 197-1 are suitable; 52.5 & 42.5 are recommended.*
4. *Most good quality manufactured sand (M-sand), ground, or clean river sands are acceptable. All-in, silt/clay-rich, contaminated, or marine sands should not be used.*
5. *Most good quality clean, sound, hard 10 mm aggregates are suitable. High-strength angular crushed granite is preferred.*

Test results are based on laboratory conditions; actual site results may vary. Yield and coverage are approximate and do not allow for wastage, substrate variations, or application losses.



Performance						
	Bond coat	**Render / Screed**	**Repair Mortar**	**Spatter Dash**	**Adhesive Mortar**	**High Strength Floor Screed**
Compressive (MPa)	--	≥ 40	≥ 40	--	≥ 40	≥ 45
Tensile (MPa)	--	≥ 4	≥ 4	--	≥ 4	≥ 4.5
Flexural (MPa)	--	≥ 8	≥ 8	--	≥ 8	≥ 9
Bond (MPa)	≥ 2	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1
ISAT @ 120min ($ml/m^2 \cdot s$)	< 0.01	< 0.01	< 0.01	--	< 0.01	--
DIN1048 (0.5MPa @ 3d)	0mm	0mm	0mm	--	0mm	--
Chloride Ion Penetration	nil	nil	nil	--	nil	--

Environmental Data	
Volatile Organic Compounds (VOC) for Multi-Purpose Construction Adhesives	< 70 g/L
Potential BEAM points	Product is manufactured within 800km of Hong Kong project sites

INSTALLATION GUIDE

(Refer to Method Statement for more details)

SUBSTRATE PREPARATION

Substrate including metals must be clean, free from unsound material, oil, grease and other contaminants. Concrete substrates should be damp and free from pooled water.

MIXING

According to the proportion table, measure or weigh ***OPTIMIX PROCRETE*** and water in a correct ratio into a container followed by the solid part: cements, sand, etc.

Mechanically mix the materials with a suitable forced action mixer such as:

- Bond Coat or Spatterdash - a slow speed drill fitted with a suitable spiral paddle
- Mortars or screeds – a pan mixer
  Mix for 3-5 minutes or until a homogeneous mixture is achieved. The mixture is ready to use.

APPLICATION

Bond Coat

Apply bond coat on the substrate using stiff brushes or rollers. Wait until the bond coat becomes tacky before applying subsequent construction. If the bond coat dries out then it should be re-applied.

Render/Screed

Renders and screeds modified with ***OPTIMIX PROCRETE*** will exhibit improved bonding performance and may not require a bond coat, however, ***OPTIMIX PROCRETE*** bond coat is recommended for best results especially when using a dry-mix screed workability.

Repair Mortar

Saw cut the area to be repaired to a depth of 10mm to avoid feather edging. Apply ***OPTIMIX PROCRETE*** Bond Coat slurry by brush onto the repair area taking care to completely encase any exposed reinforcement. Apply the Repair Mortar while the bond coat is still tacky.



Spatterdash

Flick, spread or spray the spatterdash slurry evenly onto the substrate aiming for >80% coverage. Allow 2-7 days for hardening before applying subsequent renders.

Adhesive Mortar

Spread and comb the adhesive horizontally on the substrate using a notched trowel. If required repeat this on the back of the tile. Place and press the tiles firmly onto the adhesive bed while the adhesive is still wet. If the adhesive dries out, remove it and re-apply.

For other applications, please consult our technical representatives for advice.

FINISHING AND CURING

The mixture incorporating ***OPTIMIX PROCRETE*** do not usually require any special finishing or curing, however in exceptionally dry, hot or windy conditions normal curing systems such as membranes, water spray and wet hessian can be used.

CLEANING

The mixture incorporating ***OPTIMIX PROCRETE*** can be expected to bond very strongly to most construction materials so any excess should be removed with a wet cloth as soon as practicable.

LIMITATIONS

OPTIMIX PROCRETE has high performance and is extremely versatile as an admixture for site batched mortars, however such mixes are liable to variations in materials, measurement and mixing on site. For ultimate results contact Optimix and select a specialized pre-packed mortar, render, screed or adhesive from our extensive range.

HEALTH AND SAFETY

OPTIMIX PROCRETE is non-toxic and non-flammable but can cause irritations to persons with sensitive skin. Wear suitable protective gloves and goggles while handling the product. Working areas should be adequately ventilated. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice.

STORAGE

Store in closed containers, in a dry place and protect from direct sunlight. Do not store at a storage temperature below 5°C. Failure to comply with the recommended storage conditions may result in premature deterioration of the product.

ALTERNATIVE PRODUCTS

- ***EVA*** Emulsion
- ***SF80*** Primer
- ***PE*** Polymer Emulsion
- ***Bondpro Powder***



Important Note: The information contained herein is, the best of our knowledge, true and reliable and is supported by the present state of our knowledge. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives as the conditions of use and any labour involved are beyond our control.

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