ROCKBOND SCP LTD

ROCK BOND

**FORMULATORS, MANUFACTURERS AND CONSULTANTS OF
SPECIAL CONCRETE PRODUCTS**
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ROCKBOND POLYPROPYLENE FIBRE 6mm

DESCRIPTION:

ROCKBOND POLYPROPYLENE FIBRES 6mm (RB PPF6) are strong, inert, monofilament polymer fibres specially designed to improve the plastic and hardened properties of cementitious materials. Mortars, renders and concretes are more workable and cohesive when plastic, and flowing materials harden to produce products with greater flexural and tensile strengths. The fibres are also used to reduce or eliminate problems associated with drying out, shrinkage and cracking. The fibres are supplied in 1kg water dispersible paper packs, and have an indefinite shelf life.

SPECIAL PROPERTIES:

  * 1g of ROCKBOND POLYPROPYLENE FIBRE 6mm produces 30,000 individual fibres!
  * Quickly and easily mixed with cement and dispersed without bundling throughout the mix.
  * RB PPF6 modified mixes are plasticized and cohesive, have a low bleed and a low air content.
  * The enhanced workability, stability and pumpability of RB PPF6 mixes facilitate application.
  * The fibres are non absorbent, chemically resistant and will not degrade with time.
  * Fibres develop a strong adhesive and mechanical bond to cement.
  * Minimises shrinkage, reduces or eliminates both plastic and long term shrinkage.
  * Reduces or eliminates cracking to produce impermeable and durable products.
  * Cured materials are strong in flexion and tension.
  * Produces surfaces that are quickly finished, strong and resistant to impact and abrasion.
  * High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.

USES:

  + For use in mortars, renders and plasters to aid placing, working and finishing.
  + To reduce plastic settlement and shrinkage in mass concrete and concrete floors.
  + To produce low rebound, sprayed concrete mixes that are cohesive and high build.
  + To increase the flexural and tensile strength of site batched and precast mortars and concrete.
  + To eliminate cracking and crazing in cementitious screeds, thin toppings and coatings.
  + In roads and car parks which are exposed to frequent and heavy vehicular movement.
  + For precast concrete units, manhole rings and covers, frames, posts, kerbs, tiles and slabs.

MIXING INSTRUCTIONS:

ROCKBOND POLYPROPYLENE FIBRE 6mm can be pre-mixed with the cement or dispersed in the mix water. The dosage rate is normally 0.2% by weight of cement contained in the mix: 0.2kg of ROCKBOND POLYPROPYLENE FIBRE 6mm per 100kg of cement. Calculate and weigh out the amount of fibre required, and add the fibre to the mix water. Add the remaining ingredients of the mix, and mix until homogeneous.

ROCKBOND POLYPROPYLENE FIBRES 6mm are supplied in ready to use, water dispersible bags for addition to ready mixed and site batched concrete. The dosage rate is normally 0.2% by weight of cement contained in the mix. For 6m³ of ready mixed concrete containing 300kg cement/m³ concrete, 4 x 1kg bags of fibre will be required. Add the bags containing the fibre to the mix water, let the bag of fibre disperse. Add the remaining ingredients of the mix, and mix until homogeneous.

APPLICATION PROCEDURE:

For the application of renders, mortars or concrete to be placed on cementitious or brick surfaces, careful and proper preparation of the substrate is essential if a successful material is to remain in place. Abrade the surface where necessary to produce a sound substrate with a good mechanical key. All traces of contamination must be removed.

On weak, friable or porous substrates, use ROCKBOND PRIMER LATEX (RB PL) to penetrate, consolidate, strengthen and seal the surface. With a brush or a soft broom, brush the latex completely and evenly over the surface. Work the latex well into the substrate. Pay particular attention to the edges of the repair, and brush the liquid at least 25mm beyond the repair area. Brush out any puddles, and let the latex dry out, usually 15 to 30 minutes depending on conditions.

To prime the substrate and to enhance the bond, apply a second coat of the latex to the first coat. Normally, 1 litre of the ROCKBOND PRIMER LATEX will treat 5m² of concrete surface with a two coat application.

HEALTH, SAFETY AND STORAGE:

ROCKBOND POLYPROPYLENE FIBRES 6mm are safe to use. Store in a cool, dry, dark place.

TECHNICAL DATA:

Tests have shown that ROCKBOND POLYPROPYLENE FIBRES 6mm added at the recommended dosage rate improves the performance of concrete:

PLASTIC STATE PROPERTIES		HARDENED STATE PROPERTIES	
Workability:	1% improvement	Compressive strength:	No change
Bleed:	Up to 55% reduction	Surface hardness:	Up to 3% increase
Plastic settlement:	Up to 42% reduction	Abrasion resistance:	Up to 11% increase
Plastic shrinkage		Impact resistance:	Up to 67% increase
cracking:	Up to 95% reduction	Surface impermeability:	Up to 19% increase
		Freeze/thaw resistance:	Up to 80% increase

FURTHER INFORMATION:

Should you require further information on this product, or details of other ROCKBOND SPECIAL CONCRETE PRODUCTS, then please do contact our Technical Department:

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IMPORTANT NOTE:

ROCKBOND SCP LTD provides the above information in good faith and without warranty. The data represents typical values which can be updated at any time, and this information supersedes previous issues. No liability can be accepted for any damage or loss arising from the use of ROCKBOND SCP LTD literature or its products, because the company has no continuous control on how the products are mixed, placed or cured.

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