

Concrete Primer

FORMERLY FLEXCRETE POLYMER ADMIXTURE 850

PRODUCT DESCRIPTION

A single component, water-based (VOC free), advanced copolymer dispersion which, when used as an admixture for sand and cement mixes, produces a high strength waterproof patching mortar, screed or render. It can also be mixed with cement to produce a slurry for sealing porous and absorbent substrates.

INTENDED USES

For polymer modification of sand and cement mortars to provide enhanced mechanical characteristics; when mixed with cement, can be used as a primer and a bonding agent for polymer mortars, renders and screeds. Can also be diluted with water to produce a primer for roof and deck applications in the clean water industry. WRAS Approved for use in contact with potable water.

PRACTICAL INFORMATION FOR INTERCRETE 4810

Volume Solids	57%			
Density	1.00kg/l (8.33lb/gal)			
Practical Coverage	see Page 3 Product Characteristics			
Method of Application	Not applicable			
Shelf Life	6 months at 20°C (68°F).			
Pack Size	5 litre and 25 litre units			
Drying Time	Overcoating interval with self			
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
20°C (68°F) ¹	1	1	1	1

¹ Not applicable

COMPLIANCE AND CERTIFICATION

When used as part of an approved scheme, this material has the following certification:

- WRAS approved for use in contact with water



Protective Coatings

Concrete Primer

SURFACE PREPARATION

Concrete

Mechanically remove all damaged concrete back to sound, intact material. It is recommended that any steel reinforcement present be exposed to at least 25mm (1.0 inch) behind the bars and 50mm (2.0 inches) beyond the point at which corrosion is visible. On cutting back, feather edges must be avoided. The perimeter of the repair area should be stepped to a depth of 10mm by means of saw, disc cutting or preferably using a power chisel.

The areas to be treated must be free from all unsound material, dust, oil, grease, corrosion by-products and organic growth. Smooth surfaces should be roughened, all loose material and surface laitance removed using wet grit blasting techniques, but for smaller areas needle gunning or bush hammering is effective. The strength of the concrete sub-base should be a minimum of 20MPa. The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without any standing water.

APPLICATION

Mixing

Mortars and screeds made with Intercrete 4810 should be mechanically mixed using a forced action pan mixer, or in a clean drum, using a drill and paddle. A normal concrete mixer is NOT suitable.

Shake Intercrete 4810 before use and pour the required quantity into the mixing container together with an equal volume of water. Slowly add the required amounts of sand, cement and, if necessary, coarse aggregate, as determined from the mix design guide on page 3 and mix until homogeneous. Continue to mix and add the minimum of extra water required to give the desired workability, to enable correct working and compaction. A water:cement ratio of less than 0.4 is advised.

Normal mixing time depends on the type of mixer used; 2-3 minutes is average. Mix so as to entrain as little air as possible and use without delay.

Work Stoppages / Clean Up

Clean all equipment immediately after use with clean water.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

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PRODUCT CHARACTERISTICS

Priming

Where necessary, two coats of Intercrete 4810 should be applied to the prepared steel, by brush, as described in the individual Data Sheet. Where the substrate exhibits high porosity or is absorbent, the pre-dampened surface should be primed with a thin slurry consisting of 1 part Intercrete 4810, 1 part water and 2 parts ordinary Portland cement mixed to give a thin emulsion consistency (coverage 10-15m²/litre of Intercrete 4810). Allow to become dull before continuing with the application and remove any excess material lying in rough, broken or irregular surfaces. If the material is allowed to dry, then it must be mechanically removed before re-application as above. Under no circumstances should fresh slurry be applied to hardened slurry.

Priming of Roof and Deck Areas in Clean Water Applications: In drinking water applications, dilute Intercrete 4810 1:1 with clean water and apply at 5 – 7m² by brush or roller and allow to become clear.

Placing

Mortars or screeds should be applied so as to remove entrapped air, in layers not exceeding 50mm (2.0 inches) thickness. If necessary, support with shuttering to allow for compaction if working to reveals, etc. For repairs which require multi-layer application, it is important to ensure that previous layers are well keyed and hardened but not fully cured (ideally 24 hours, dependent upon temperature) prior to the application of subsequent layers. Final profiling should be carried out with a wooden float or steel trowel.

Curing

Normal concreting procedures should be strictly adhered to. It is important that the surface of the mortar is protected from strong sunlight and drying winds with Intercrete 4870, polythene sheeting, damp hessian or similar (see separate Data Sheet for full details).

Recommended Mix Designs

The following are suggested trial mix ratios by weight based on saturated, surface dry aggregates with 5% water in the sand and 1% water in the single sized aggregates. Trial mixes should be carried out to determine optimum consistency and physical properties for an application. Please consult our Technical Department for alternative mix designs.

NOTES: Consult BS 8204: Part 3 'Code of practice for polymer modified cementitious wearing surfaces' for further information. Mix proportions are based on 50kg of cement. Maximum water additions give a maximum water:cement ratio of 0.40.

Thickness (mm)	Sand (kg)	Aggregate		Intercrete 4810	Max. Extra Water (litres)	Approx. Yield (litres)
		Sand (mm)	Weight (kg)			
Light Duty Screed						
8-15	200	--	--	12	4	120
Medium/Heavy Duty Screed						
10-15	100	3	100	12	8	115
15-30	112.5	6	87.5	10	8.5	120
Render Mortar						
5-50	150	--	--	6	15	105
Patching Mortar						
5-50	150	--	--	8	15	105
Heavy Duty Mortar						
10-100	75	6	75	6	11.5	95

APPLICATION TIPS

- Consult BS 8204: Part 3 'Code of practice for polymer modified cementitious wearing surfaces' for further information.
- Always use sharp sand. All sand and aggregate must be cleaned and washed. Add the minimum amount of water to give the desired workability, to enable correct working and compaction. Maximum dilution 1:4 (Intercrete 4810:water).
- DO NOT wet out or prime between layers.
- When finishing, trowel from the centre out towards the perimeter, working into the edges of the repair.
- Cold Weather Working (See separate Guide): ≥3°C (37°F) on a rising thermometer, ≥5°C (41°F) on a falling thermometer.
- Do not use any product which has been frozen.
- Hot Weather Working (See separate Guide): Store material in cool conditions to maximise working life. Shade applied material from strong sunlight. Spray-apply a second coat of Intercrete 4870. If possible, avoid extreme temperatures by working at night.

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SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

Important Note

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local representative that this data sheet is current prior to using the product.

This Technical Data Sheet is available on our website at www.international-marine.com or www.international-pc.com, and should be the same as this document. Should there be any discrepancies between this document and the version of the Technical Data Sheet that appears on the website, then the version on the website will take precedence.

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