

High Build Structural Repair Mortar

PRODUCT DESCRIPTION

Supplied as a single component, fibre reinforced, high build cement based repair mortar.

Requires the addition of clean water at site.

INTENDED USES

Specifically designed for structural concrete repairs and general concrete remediation as well as reinstatement works on runways, bridges, decks and floors.

Intercrete 4801 exhibits a combination of physical and chemical compatibility with concrete and consistent high strength development.

This product can be used for repairs up to 80mm (3.15 inches) deep in a single layer as supplied making it ideal for rendering and re-profiling of vertical, overhead and horizontal surfaces.

PRACTICAL INFORMATION FOR INTERCRETE 4801

Colour	Grey			
Gloss Level	Matt			
Volume Solids	100% (based on wet film thickness applied being equal to dry film thickness)			
Typical Thickness	5mm - 80mm (0.20 - 3.15 inches) dry			
Theoretical Coverage	Typically 1.31m ² at 10mm (0.39 inches) dry film thickness per 25kg supplied			
Practical Coverage	Allow appropriate loss factors			
Density	2100 kg/m ³ (131.097 lb/ft ³)			
Method of Application	Float, Hand Moulding, Trowel			
Drying Time	Overcoating interval with self			
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
20°C (68°F)	5 hours	7 hours	5 hours	7 days ¹
¹ If the maximum overcoating interval is exceeded the surface must be thoroughly cleaned and saturated prior to overcoating.				

REGULATORY DATA

Flash Point (Typical)	Not applicable		
VOC	0 g/lit	Calculated	
See Product Characteristics section for further details			

Protective Coatings

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SURFACE PREPARATION

Concrete Substrates

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 inch) behind the bars and 50mm (2 inches) beyond the point at which corrosion is visible.

The perimeter of the repair area should be stepped to a depth of 10mm (0.4 inches) using a saw, disc or power chisel. Feather edges must be avoided. Smooth surfaces should be roughened.

All surfaces requiring repair should be clean and free from curing compounds, release agents, trowelling compounds, surface hardeners, efflorescence, grease, oil, dirt, old coatings and loose or disintegrating concrete.

Any steel reinforcement present will require appropriate treatment using Intercrete 4871; consult that product datasheet for further information.

Thoroughly soak the substrate with clean water until fully saturated. Remove excess water prior to application of Intercrete 4801.

The compressive strength of the concrete substrate should be a minimum of 20MPa.

APPLICATION

Mixing	Intercrete 4801 is supplied as a single component powder. Pour 2.3 - 2.7 litres of clean water into a mixing vessel then add one 25kg bag of Intercrete 4801. Mix using a slow speed drill and paddle with a maximum speed of 750rpm. Mix for 2-3 minutes to an even consistency. Do not use a concrete mixer
Mix Ratio	For part mixing, use 7-8 parts Intercrete 4801:1 part clean water by volume
Working Pot Life	20°C (68°F) 40°C (104°F) 60 minutes 30 minutes
Intercrete 4801 Application	
Float - recommended	
Hand Moulding - recommended	
Trowel - recommended	
Thinner	DO NOT THIN
Cleaner	Clean Water
Work Stoppages	Use immediately after mixing and discard once the working pot life has exceeded.
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

Always consult the Intercrete 4801 Application Guidelines prior to use.

This datasheet provides general guidance on the use of Intercrete 4801. Specific project requirements will be dependent upon the substrate condition, service end use and environmental conditions. Always consult International Protective Coatings to confirm that Intercrete 4801 is suitable for the intended end use.

The detailed project specification provided by International Protective Coatings must be followed at all times.

This product will not cure adequately below 5°C (41°F). For maximum performance, curing temperatures should be between 10°C (50°F) and 35°C (95°F).

It is important that the surface of Intercrete 4801 is protected from strong sunlight and drying winds. To aid curing, Intercrete 4870 curing membrane should be applied directly over Intercrete 4801. Alternatively, polythene sheeting can be used.

Mechanical Characteristics (typical values)

Compressive Strength (BS4551 @ 20°C (68°F))

1 day 33.0MPa

7 days 44.5MPa

28 days 56.5MPa

Flexural Strength (BS4551 @ 20°C (68°F, 90% R.H))

7 days 7.4MPa

28 days 8.6MPa

Note: VOC values are typical and are provided for guidance purpose only. These may be subject to variation depending on factors such as differences in colour and normal manufacturing tolerances.

SYSTEMS COMPATIBILITY

Depending upon the condition of the substrate and any exposed steel reinforcement, additional surface preparation products from the Intercrete range may be required prior to the application of Intercrete 4801. Consult International Protective Coatings for further details.

The following topcoats are recommended for Intercrete 4801:

Intercrete 4801

Intercrete 4850

Intercrete 4870

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ADDITIONAL INFORMATION

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following documents available at www.international-pc.com:

- Definitions & Abbreviations
- Surface Preparation
- Intercrete 4801 Application Guidelines

Individual copies of these information sections are available upon request.

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 Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

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.

PACK SIZE

25kg packs
For availability of other pack sizes, contact International Protective Coatings.

SHIPPING WEIGHT (TYPICAL)

STORAGE

Shelf Life 12 months minimum at 25°C (77°F).

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.

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