

Polymer Modified Cementitious Coating

PRODUCT DESCRIPTION

A two component, fast drying, water based epoxy and polymer modified cementitious flooring for the protection of concrete substrates.

Intercrete 4851 exhibits both excellent flow characteristics and ease of application by pouring or pumping techniques to give a smooth surface finish.

INTENDED USES

Specifically designed for the structural waterproofing and protection of concrete floors where improved chemical and abrasion resistance is required.

Intercrete 4851 offers low permeability to water at 10 bar positive and negative pressure along with excellent resistance to carbon dioxide gas and chloride ion diffusion.

Intercrete 4851 is the ideal choice where rapid return to service is required and/or green concrete is the likely substrate.

PRACTICAL INFORMATION FOR INTERCRETE 4851

Colour	Grey			
Gloss Level	Matt			
Volume Solids	100% (based on wet film thickness applied being equal to dry film thickness)			
Typical Thickness	2000 microns (80 mils) dry			
Theoretical Coverage	Typically 8.1m ² at 2000 microns (80 mils) dry film thickness per 30kg composite pack			
Practical Coverage	Allow appropriate loss factors			
Density	1850 kg/m ³ (115.49 lb/ft ³)			
Method of Application	Float, Serrated Trowel, Skid Leveller			
Drying Time	Overcoating interval with self			
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
20°C (68°F)	1.5 hours	4 hours ¹	24 hours	Not applicable

¹ Applied at 2000 microns (80 mils) thickness to the substrate. This is the minimum walk-on time

REGULATORY DATA

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

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SURFACE PREPARATION

Concrete Substrates

All surfaces should be clean and free from laitance, curing compounds, release agents, efflorescence, grease, oil, dirt, old coatings and loose or disintegrating concrete. The preferred methods of surface preparation are wet grit or water blasting techniques.

Any defects such as blow holes, small and large voids etc. revealed by the surface preparation process must be treated using the appropriate Intercrete products. Consult the Intercrete 4851 Application Guidelines for further information.

All concrete floors and decks should be appropriately sealed using Intercrete 4850.

APPLICATION

Mixing

Intercrete 4851 is supplied in two parts; a liquid binder component (Part A) and a powder component (Part B). **MIX FULL UNITS ONLY.** Shake Part A thoroughly and pour into a suitable mixing container, then slowly add Part B whilst stirring with a mechanical agitator. Mix for 5 minutes with regular scraping of the container sides to prevent lumps from forming. Once the unit has been mixed it should be pumped or poured onto the substrate and used within the working pot life specified.

Working Pot Life

20°C (68°F)
30 minutes

Intercrete 4851 Application

Typical application method of Intercrete 4851 is skid levelling followed by de-aeration using spiked roller. For detailed areas such as joints to adjacent intact flooring a serrated trowel should be used.

Thinner

DO NOT THIN

Cleaner

Clean Water

Work Stoppages

Do not allow material to remain in pumps and associated hoses. Thoroughly flush all equipment with clean water.

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 4851 Application Guidelines prior to use.

This datasheet provides general guidance on the use of Intercrete 4851. Specific project requirements will be dependent upon the substrate type, substrate condition, service end use and environmental conditions. Always consult International Protective Coatings to confirm that Intercrete 4851 is suitable for the intended end use.

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

Intercrete 4851 must be protected from freezing at all times during storage and transport. The recommended storage temperature is between 4°C (39°F) and 25°C (77°F).

Surface temperature must always be a minimum of 3°C (5°F) above dew point.

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).

All construction, expansion joints and live cracks in the existing floor must be continued through into the new coating and filled with an appropriate sealant. Intercrete 4840 embedded with Intercrete 4872 tape can be used to accommodate any anticipated movement over cracks and around joints. Consult International Protective Coatings for further details.

Care should be taken to avoid air entrapment during application.

In cold, humid conditions, condensation may form on the surface of Intercrete 4851 resulting in a darker finish and an increase in cure time.

It is important that the surface of Intercrete 4851 is protected from strong sunlight and drying winds. To aid curing, Intercrete 4870 curing membrane should be applied directly over Intercrete 4851.

For an improved anti-slip and abrasive resistant surface, immediately broadcast a suitable grit or sand into the wet surface of Intercrete 4851. An approximate coverage rate is 5kg/m². Consult International Protective Coatings for further details.

Mechanical Characteristics

(typical values)

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

4 hours 8.0MPa

1 day 18.0MPa

7 days 33.5MPa

28 days 55.0MPa

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 4851. Consult International Protective Coatings for further details.

All concrete floors should be appropriately sealed using Intercrete 4850 prior to the application of Intercrete 4851.

The following topcoat is recommended for Intercrete 4851:

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 4851 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

30kg composite packs
For availability of other pack sizes, contact International Protective Coatings.

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
30 kg	7.79 kg	22.85 kg

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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