

Roofdex HB

High Build, Eco-Friendly, Cold Applied Liquid Roofing

Product Overview

Elastomeric, fluid applied, waterproof roof coating used with glass fibre reinforcement.

Description

ROOFDEX HB is a vapour permeable, minimal VOC styrene acrylic coating which is virtually odourless on application. It is inherently protected against biofilm attack and is resistant to water ponding, remaining flexible throughout its long service life. The high build, thixotropic nature allows for treatment of upstands and other roof details without slumping. ROOFDEX HB readily accepts the embedment of reinforcement producing a high tensile strength membrane.

Uses

Suitable for surface protection systems principles 2.2, 8.2 as defined in BS EN 1504-2.

Advantages

- Applied in a cold, fluid form free of any fire risk.
- Single pack with no mixing required.
- Forms a completely seamless, waterproof membrane.
- Environmentally friendly, ultra-low VOC
- No release of hazardous solvents or heavy odour.
- Elastomeric extreme temperature ranges without degrading, tolerates thermal and substrate movement.
- Solar reflective white reduces energy consumption, and heat build-up.
- Compatible with a wide range of new or existing flat or pitched roofs.
- Excellent adhesion to cementitious and bituminous
- Vapour permeable, allowing the release of substrate moisture.
- Exceptional resistance to accelerated weathering.

Compliance

- CE-Marked in accordance with BS EN 1504-2.
- Fire rated for flat roofing applications.

Application Instructions

Preparation

The areas to be treated must be free from all unsound material including dust, oil, grease, corrosion by-products and organic growth. Surface laitance and any soft, sandy or flaking material should be removed by mechanical means back to a sound surface. Use techniques capable of achieving the required degree of preparation. Please contact our Technical Department for advice on levelling and screeding materials.

Equipment

Brushes: Wide, soft nylon or bristle paint brushes.

Rollers: Use a medium pile roller.

Spray: Airless spray can be used with care on smooth substrates. Most types are suitable operating at 2500-3000psi with tip sizes 17-23 thou.

Substrate Priming

Ensure substrate is dry, maximum 20% on Protimeter WME scale.

Concrete, cementitious screeds, asphalt and bituminous roofing felts should be primed with BOND-PRIME at a rate of up to 5m²/litre.

Lightly abrade any plastics before applying BOND-PRIME.

Metal surfaces and flashings should be primed with a suitable proprietary metal primer.

Primer coats are applied by brush, roller or airless spray. Ensure complete coverage.

For further information, please refer to the Priming Guide.

Treating Cracks and Joints

MONODEX ICB should be used as a pre-treatment for filling cracks and for treating construction joints and joints between dissimilar materials.

MONOLEVEL FC may be used to fill larger static cracks in concrete or screeds.

When carrying the ROOFDEX HB system over expansion joints, first apply minimum 25mm wide masking tape centred over the joint.





Application

Apply the initial embedment coat of ROOFDEX HB by brush, roller or airless spray at the minimum coverage rate shown below. Immediately embed pre-cut lengths of CEMPROTEC GFM 225 reinforcement. Ensure complete wetting out of the glass fibre reinforcement using a medium pile roller pre-loaded with ROOFDEX HB. Overlap adjacent layers by a minimum of 25mm.

Allow to dry and apply a second finishing coat of ROOFDEX HB by brush, roller or airless spray at the minimum coverage rate shown below.

Coverage

Coats	Coverage Rate		
	l/m²	m²/l	WFT µm
1 st	1.25	0.8	1,250
2 nd	0.5	2.00	500
Overall	1.75	0.57	1,750

Cleaning and Storage

- Clean all tools with water immediately after use.
- Shelf-life is 2 years for unopened containers stored in dry, frost-free conditions away from heat.

Health and Safety

Safety Data Sheets are available on request.

Application Top Tips

- 1. Rough, porous or irregular substrates will reduce coverage.
- 2. For brush application use wide, soft nylon or bristle brushes.
- 3. For roller application use medium or heavy nap (34" or 1") synthetic or sheepskin cover.
- 4. An acceptable spray finish is achieved with a Graco Ultra Max II 490 electric airless spray pump using a 23 thou tip at 2700psi.
- 5. When using airless spray equipment, always finish off in one direction.
- 6. To assist application and to act as a guide to coverage rates during application, the base coat may be applied in a contrasting colour.
- 7. Regularly check the coating thickness during application using a wet film thickness gauge.
- 8. Clean brushes and rollers occasionally during use.
- 9. Regularly clean spray nozzles to avoid blockages.
- 10. Curing/drying time is temperature dependent. As a guide the coating will be touch dry in approximately 1-8 hours in hot conditions (>30°C), 2-12 hours at 20°C and 4-24 hours at lower temperatures (<10°C).
- 11. The product is through-cured in approximately 12 hours dependent on ambient temperature.
- 12. Spray equipment must be emptied and flushed at the end of the working day.
- 13. Cold Weather Working (See separate Guide)
- ≥3°C. providing this is 2°C. above dew point.
- Do not use any product that has been frozen.
- 14. Avoid prolonged storage at high temperatures (≥35°C.).

The information herein is correct to the best of our knowledge, but it does not necessarily refer to the particular requirements of the customer. If the customer has any particular requirements it should make them known in writing to Flexcrete Technologies Limited, and obtain further advice accordingly.





Technical Data

Property	Standard	Typical Result	
Basis	-	Styrene Acrylic Copolymer	
Colours	-	Solar Reflective White: other standard colours available	
Adhesive Bond	EN 1542	≥ 3.0 MPa	
Water Vapour Transmission	EN ISO 7783	$V = 11.5 \text{ g/m}^2/24\text{h}$	
Equivalent Air Layer Thickness		$(S_D) = 1.79m$	
Flexibility (Mandrel Test)	ASTM D-522 Method A	1.5mm crack	
Liquid Water Permeability	EN 1062-3	$w = 0.02 kg.m^{-2}.h^{-0.5}$	
Service Temperature	-	-20°C. to +80°C	
Curing / Drying Times Per Coat	-	4-24 hours	
Tensile Elongation	BS 903 Part A2	5%	
Tensile Strength	BS 903 Part A2	16.6 MPa	
Accelerated Weathering	EN 1062-11	No change after 20,000 hours	
Solids Content		60% (weight) 49% (volume)	
Specific Gravity		1.35	
VOC Content		< 0.07% by mass	
Minimum Application Temperature		3°C	
External Fire Exposure Roof Test	BS 476: Part 3:2004	Ext. F.AA: 1 hour - no penetration or spread of flame	









