Monodex ICB

Intermediate Crack Bridging Coating & Filler

Product Overview

Elastomeric primer and crack-bridging compound with enhanced polymeric properties.

Description

MONODEX ICB is a single component, water-based, thixotropic compound with dual purpose as a substrate primer and elastomeric crack bridging medium for concrete, render and other masonry substrates. It is designed for use on surfaces which exhibit cracking or which have a high risk of cracks forming. It is also effective in masking existing crazing in painted surfaces prior to protection and decoration with one of the specialist membranes from the wider **MONODEX** range.

Uses

Pre-treatment for the range of high performance anti-carbonation and masonry coating systems from Flexcrete.

Advantages

- Fills cracks, pores, cavities and blowholes.
- Designed to bridge cracks and joints up to 1mm.
- Versatile, trowel or roller application.
- Diluted with water when used as a primer and for spray application.
- Can be extended with sand for use as a as a mortar.
- High solids content, non-shrinking in deeper section.
- Low odour, cures rapidly without solvent release.
- Active encapsulated in-film biocide inhibits the growth of mould, mildew and lichens.
- Self-priming material, can be applied over existing paint finishes.
- Excellent crack-bridging properties down to -20ºC.
- High diffusion resistance to carbon dioxide enhances anti-carbonation performance.
- Vapour permeable to allow damp substrates to breathe and dry out without blistering.

Compliance

- CE-Marked in accordance with BS EN 1504-2.

Application Instructions

Preparation

The areas to be treated must be free from all unsound material, i.e. dust, oil, grease, corrosion by-products and organic growth. Mechanically remove surface laitance and any soft, sandy or flaking material. Use techniques to achieve the required degree of preparation, such as wet grit or water blasting techniques or equivalent approved methods. Flexcrete Concrete Repair Mortars must be allowed to cure for a minimum of 24 hours. Leave concrete and cementitious screeds or renders for a minimum of 10 days, preferably 28 days.

Equipment

Brushes: Wide, soft nylon or bristle paint brushes.

Trowel or Float: Steel.

Rollers: Medium Pile synthetic cover.

Spray: Airless spray at 2500-3000psi (finish off in one direction).

Substrate Priming

MONODEX ICB is self-priming. Ensure substrate moisture content is less than 20% wood moisture equivalent prior to application.

To seal highly absorbent surfaces, dilute 2 parts with 1 part clean water by weight and apply at a coverage rate of 5m²/l by brush or roller. Application. Ensure complete coverage. Rough or porous surfaces will increase consumption.

Reinforcing Cracks and Joints

MONODEX ICB will accommodate cracks and joints typically up to a width of 1mm. Fill live cracks, construction joints and joints between dissimilar materials to leave a flush finish with the substrate. Allow to dry and lightly sand to remove any prominent edges.

Fill larger static cracks or voids with **MONODEX ICB** bulked out with sand to a mortar consistency. Use up to 20% by weight of a 0.1-0.3mm clean kiln dried sand and apply by trowel to achieve the desired finish. Allow to harden but not fully cure before sanding to remove any prominent edges.

➢ Note - Extending with sand will affect physical properties.

Coating Application

When used as an intermediate crack-bridging coat, apply by brush, roller or airless spray at the coverage rates below ensuring that a uniform film is achieved and that all blow holes and surface defects have been filled.

To reduce surface texture for roller application, dilute up to 5% with clean water. Dilute up to 10% with water for airless spray application.

Allow to dry for 1-4 hours in ideal conditions until touch dry before applying a second coat.

Coverage Rates

Coat	Coverage Rate			
	l/m²	m²/l	WFT (µm)	DFT (µm)
Per Layer	0.5 - 1.0	2.0 - 1.0	500 - 1,000	Nominal 330 - 660

Coverage rates are for smooth, non-absorbent surfaces. Make allowances for uneven or absorbent surfaces.

Cleaning and Storage

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

Packaging

- **MONODEX ICB** is supplied in 15 litre containers.

Health and Safety

- Safety Data Sheets are available on request.

Technical Data

Property	Standard	EN 1504-2 Requirement	Typical Result
Basis		-	Styrene acrylic copolymer
Adhesive Bond to Concrete	EN 1542	≥ 0.8 MPa Crack bridging or flexible systems	> 0.8 MPa at typical DFT
Water Vapour Transmission	EN ISO 7783	Class I (Permeable) S_D< 5m	S_D= 0.33m (Class 1)
Liquid Water Transmission Rate (Capillary Absorption)	EN 1062-3	Class III (Low) w< 0. 1kg.m^{-2}.h$^{-0.5}$	w = 0.021kg.m^{-2}.h$^{-0.5}$ @ 600µm DFT
Accelerated Weathering	EN 1062-11	-	No blistering, cracking or flaking after 5,000 hours QUV-B weathering
Permeability to CO_2	EN 1062-6	S_D ≥ 50m (R)	S_D = 417m at 600mm DFT
Equivalent Concrete Thickness		-	S_C = 1245mm
Static Crack Bridging	EN1062-7	Class A3 >500µm	1mm at 20ºC.
Elongation at Break	BS 903 Part A2	-	300% at 600µm DFT
Tensile Strength	BS 903 Part A2	-	0.55 MPa
Solids Content		-	74% (weight) 66% (volume)
Specific Gravity		-	1.34
VOC		-	<0.29% by mass
Curing / Drying Time (approx.)		-	Touch Dry (ideal conditions): 1-3 hours Through Dry: 2-24 hours
Minimum Application Temperature		-	3ºC.
Reaction to Fire	BS EN 13501-1	-	Class F

The properties given above are obtained from laboratory tests: results obtained from on-site testing may vary according to site conditions.

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