

MONODEX SMOOTH

Water-based Elastomeric Decorative Coating

USES

MONODEX SMOOTH is a high performance water based, elastomeric, high build, decorative coating which provides protection against carbonation and water ingress, yet allows damp substrates to breathe without blistering. It's ultra-fast drying enables two coat applications to take place on the same day and facilitates year round usage, even in uncertain weather conditions. The product is available in a range of attractive colours and prevents the growth of mould and fungi, making it an ideal maintenance coating for internal and external use.

ADVANTAGES

- High diffusion resistance to carbon dioxide, offering complete protection from the effects of carbonation.
- Active encapsulated in-film biocide inhibits the growth of mould, mildew and lichens.
- Advanced micropolymer resin binder and cross-linking system cures to form a durable coating with excellent adhesion to most building substrates.
- Fast drying to rival solvent based systems, enabling two coat applications on the same day and facilitating year round use.
- Low hazard, water based product with no flash point. Equipment easily cleaned with water.
- Low water vapour diffusion resistance allows damp substrates to breathe and dry out without blistering, whilst still providing a tough, impenetrable barrier to further water ingress.
- High colour pigment concentration obliterates strong underlying colours to produce an attractive matt finish.
- Easily reinforced locally over cracks and joints, or overall to effectively seal crazed surfaces.

PRODUCT DESCRIPTION

MONODEX SMOOTH is a single component, high build, decorative and protective coating based on an advanced micropolymer resin binder which cross links to give excellent adhesion to most building substrates. The cured membrane is elastomeric, enabling it to facilitate movement in the substrate and to bridge hairline cracks, giving outstanding durability over a service life up to **15 years**. Where necessary, **MONODEX SMOOTH** can be reinforced either locally or overall to accommodate higher levels of substrate movement. It protects reinforced concrete structures from carbonation and water ingress, whilst allowing the free passage of entrapped moisture from the substrate without blistering the coating or weakening it's adhesion. **MONODEX SMOOTH** is available in a range of attractive shades which give high obliteration of strong underlying colours. An active biocide inhibits the growth of mould and lichens, making it the ideal maintenance coating for both internal and external use.

TECHNICAL DATA (TYPICAL)

Basis:	Modified styrene acrylate copolymer.	Adhesion to Concrete:	EN1542:1999 (pull off test) >2.5 MPa at typical DFT
Solids Content:	63.9% by weight 59.0% by volume	Water Vapour Transmission:	BS EN ISO 7783-2:1999 V = 46g/m ² /day μ H ₂ O = 2400
Specific Gravity:	1.42	Equivalent Air Layer Thickness:	S _D = 0.48m Class I <5m equivalent air layer thickness
VOC Content:	<0.07% by mass.	Accelerated Weathering:	EN 1062-11: No blistering, cracking or flaking after 6000hrs QUV-B weathering.
Colours:	Please consult our Technical Department for colour range.	Permeability to Carbon Dioxide:	EN 1062-6 D CO ₂ = 2.94 x 10 ⁻⁷ (cm ² /s) μ CO ₂ = 507,000
Min. Application Temperature:	3°C	Equivalent Air Layer Thickness:	R=121m at 239μm DFT An effective barrier to CO ₂ is R ≥50m
Curing/Drying Time (approx):	1 hour under ideal conditions. Through dry in 2 to 24 hours, depending on conditions.	Equivalent Concrete Thickness:	Sc = 300mm
Elongation At Break:	BS903 Part A2 Unreinforced 279% at 240μm DFT Reinforced (GFM225)27% at 1100μm DFT		
Fire Properties:	In compliance with BS476 Part 6 & Part 7.		

APPLICATION DATA

Application Guide available on request.

PREPARATION

The areas to be treated must be free from all unsound material, i.e. dust, oil, grease, corrosion by-products & organic growth. Surface laitance & any soft, sandy or flaking material should be removed by mechanical means back to a sound surface, suitable for treatment. Use techniques capable of achieving the required degree of preparation, such as wet grit or water blasting techniques or equivalent approved methods. All Flexcrete Concrete Repair Mortars must be allowed to cure for a minimum of 72 hours. Concrete & cementitious screeds or renders must be a minimum of 10 days old & preferably 28 days. Please contact our Technical Department for further advice on treating alternative substrates.

EQUIPMENT

Brushes: Wide, soft nylon or bristle paint brushes.
Rollers: Use a heavy nap (¾" or 1") synthetic cover.
Spray: Airless spray can be used with care on smooth substrates only; always finish off in one direction. Most types are suitable operating at 2500-3000psi tip sizes 17-23 thou. Further details are available on request.

PRIMING

Ensure the moisture content of the substrate is less than 20% wood moisture equivalent. Apply one coat of **FLEXCRETE BOND-PRIME** to the whole of the prepared surfaces to be treated at a spread rate of up to 5m²/litre by brush, roller or airless spray. Ensure complete coverage, free from pinholes or misses. Rough, porous or uneven surfaces will considerably reduce coverage. For further information, please refer to relevant data sheet.

COATING

Apply **MONODEX SMOOTH** over the primed, dry surface, by brush, roller or airless spray at the nominal coverage rates given below. Allow to dry for a minimum of 1-4 hours in ideal conditions until it is touch dry before applying a second coat as above. To assist application and to act as a guide to coverage rates during application, apply each coat in a contrasting colour.

COAT	COVERAGE RATE			
	l/m ²	m ² /l	WFT (µm)	DFT (µm)
1ST	0.2	5.0	200	Nominal 240
2ND	0.2	5.0	200	
OVERALL	0.4	2.5		

Coverage rates quoted are for smooth, non-absorbent surfaces. Allowances should be made for uneven or absorbent surfaces.

REINFORCEMENT CRACKS AND JOINTS

MONODEX SMOOTH will accommodate hairline cracks, but larger static cracks require filling beforehand with **MONOLEVEL FC**. Live cracks, construction joints and joints between dissimilar materials must be filled using a suitable exterior grade flexible filler and the membrane reinforced with **FLEXCRETE FLEX-TAPE** to provide strategic strengthening. Apply an embedment coat of **MONODEX SMOOTH** centrally over the crack or joint to embed the reinforcement whilst the coating is still wet. Allow to dry, and if necessary lightly sand to remove any prominent edges before overcoating the whole area with two coats of material, using the coverage rates and techniques described above. Overall reinforcement incorporating **CEMPROTEC GFM** random weave glass fibre matting is also available. Please contact our Technical Department for further information.

CLEANING

All tools should be cleaned with water immediately after use.

SHELF LIFE

Shelf life is 2 years for unopened containers stored in dry, frost free conditions away from heat.

PACKAGING

Pack Size: 15 litres

SAFETY DATA

Safety Data Sheet available on request.

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.



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