

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. Ultra-fast drying enables two coat applications to take place on the same day and facilitates year round usage. **MONODEX SMOOTH** resists the growth of mould and fungi and is ideal both for new construction and refurbishment projects.

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 cross-linking micropolymer resin system forms a durable coating with excellent adhesion.
- Fast drying to permit 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.
- 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, waterproof coating based on an advanced micropolymer resin binder which cross-links to give outstanding durability over a service life up to **15 years**. The elastomeric nature facilitates substrate movement and bridging of hairline cracks. **MONODEX SMOOTH** can be reinforced to accommodate higher levels of substrate movement. It protects reinforced concrete structures from carbonation and allows substrate moisture to escape without blistering or weakening of adhesion. **MONODEX SMOOTH** is available in a range of attractive colours, and an active biocide inhibits mould and lichen growth.

TECHNICAL DATA (TYPICAL)

Basis:	Styrene acrylic copolymer.
Solids Content:	63.9% (wt) 59.0% (vol)
Specific Gravity:	1.42
VOC Content:	<0.07% by mass.
Min. Application Temperature:	3°C

Curing/Drying Time (approx):
1 hour (ideal conditions), through dry 2-24 hours

Elongation At Break: BS 903 Part A2
Unreinforced 279% at 240µm DFT
Reinforced (GFM 225) 27% at 1100µm DFT

Static Crack Bridging: EN 1062-7
A2 > 0.25mm at -10°C

Adhesion to Concrete: EN 1542:1999 (pull off test)
>2.5 MPa at typical DFT

Water Vapour Transmission: BS EN ISO 7783-2
V = 46g/m²/day µ H₂O = 2400

Equivalent Air Layer Thickness: S_D = 0.48m
Class I <5m equivalent air layer thickness

Accelerated Weathering: EN 1062-11:
No blistering, cracking or flaking after 20,000hrs QUV-B weathering.

Permeability to Carbon Dioxide: EN 1062-6
D CO₂ = 2.94 x 10⁻⁷ (cm²/s)
µ CO₂ = 507,000

Equivalent Air Layer Thickness:
R=121m at 239µm DFT
An effective barrier to CO₂ is R ≥50m

Equivalent Concrete Thickness: S_c = 300mm



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EN1504-2: Surface Protection Systems - Coating Protection Against Ingress (PIC)	
Adhesive Bond:	Pass ≥ 2.5 MPa
Water Vapour Permeability:	Class I <5m
Permeability to CO ₂ :	121m equivalent air layer 300mm equivalent concrete
Capillary Absorption:	Class III <0.1 kg.m ⁻² .h ^{-0.5}
Artificial Weathering:	20,000 hours
Dangerous Substances:	Complies with 5.4

APPLICATION DATA

Application Guide available on request.

PREPARATION

Areas to be treated must be free from 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. Our Technical Department will advise on treating other 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 on smooth substrates; always finish off in one direction. Most types are suitable operating at 2500-3000psi tip sizes 17-23 thou.

PRIMING

Ensure substrate moisture content is less than 20% wood moisture equivalent. Apply **BOND-PRIME** to prepared surfaces at a rate of up to 5m²/litre by brush, roller or airless spray. Ensure complete coverage. Rough or porous surfaces will increase consumption. For further information, please refer to relevant data sheet and priming guide.

COATING

Apply **MONODEX SMOOTH** by brush, roller or airless spray at the coverage rates below. Allow to dry for 1-4 hours in ideal conditions until touch dry before applying a second coat. To assist application and to act as a guide to coverage rates, each coat may be applied 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 are for smooth, non-absorbent surfaces. Make allowances for uneven or absorbent surfaces.

REINFORCEMENT CRACKS AND JOINTS

MONODEX SMOOTH will accommodate hairline cracks, but larger static cracks require filling with **MONOLEVEL FC**. Fill live cracks, construction joints and joints between dissimilar materials with a suitable exterior grade flexible filler and reinforce the membrane with **FLEXCRETE FLEX-TAPE** embedded in **MONODEX SMOOTH** centrally over the crack or joint. Allow to dry, and if necessary lightly sand to remove any prominent edges before overcoating the whole area with two coats of material. Overall reinforcement incorporating **CEMPROTEC GFM** random weave glass fibre matting may be used over larger areas. Further information is available through our Technical Department.

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.



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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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