

MONODEX ULTRA

Water-based Flexible Decorative Coating



USES

MONODEX ULTRA is a technically advanced, minimal VOC, water-based decorative coating which protects against carbonation and water ingress without entrapping moisture. It is fast drying for year round use externally with excellent fire performance characteristics for internal use. **MONODEX ULTRA** prevents water ingress and resists the growth of mould and fungi, making it the ideal low cost coating for new build and maintenance projects.

ADVANTAGES

- Advanced copolymer formulation with excellent adhesion and resistance to weathering.
- Arrests carbonation in reinforced concrete structures through high diffusion resistance to carbon dioxide.
- Vapour permeable nature allows damp substrates to breathe and dry out without blistering of the coating.
- Durable barrier to rainwater ingress with Inherent flexibility to resist substrate hairline cracking.
- Active encapsulated in-film biocide inhibits the growth of mould, mildew and lichens.
- Two coats can be applied during one working day, with year round application possible.
- Environmentally friendly, minimal VOC, low hazard, water based product with no flash point.
- Produces a matt finish and is available in a range of attractive colours.

PRODUCT DESCRIPTION

MONODEX ULTRA is a one component, decorative coating which offers an economic solution for the protection of buildings and other structures with a service life up to **10 years**. To inhibit the growth of mould and lichen, it contains an active biocide which is retained in-film. Elastomeric properties permit substrate movement and bridging of hairline cracks. Adhesion is excellent to mineral substrates and other commonly encountered building materials. **MONODEX ULTRA** is cost effective for internal use and for the external decorative protection of facades, soffits and the elevations of structures in temperate and tropical climates.

TECHNICAL DATA

| | |
|-------------------------------|---------------------------|
| Basis: | Styrene acrylic copolymer |
| Solids Content: | 41.2% (wt), 32.5% (vol) |
| Specific Gravity: | 1.2 |
| VOC Content: | <0.06% by mass |
| Min. Application Temperature: | 3°C |

Curing/Drying Time (approx):

Touch dry within 1 hour in hot conditions (>30°C), touch dry in 1½ hrs at 20°C, 4 -12 hours at lower temperatures (<10°C).

Dry to overcoat in 1-4 hrs in ideal conditions. Product is through-cured in 2-24 hrs, temperature dependent.

Elongation At Break: BS903 Pt A2

125% at 130µm DFT

Adhesion to Concrete: EN1542:1999 (pull off test)

>3.0 MPa at typical DFT

Water Vapour Transmission: BS EN ISO 7783-2

V = 20g/m²/day µ H₂O 7800

Equivalent Air Layer Thickness: S_D = 1.03m Class I

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 = 9.77 x 10⁻⁸ (cm²/s)

µ CO₂ = 1,530,000

Equivalent Air Layer Thickness:

R = 201m at 132µm DFT

An effective barrier to CO₂ is R ≥50m

Equivalent Concrete Thickness: S_c = 500mm



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EN1504-2: Surface Protection Systems
 - Coating Protection Against Ingress (PIC)

| | |
|-----------------------------------|--|
| Adhesive Bond: | Pass ≥ 3.0 MPa |
| Water Vapour Permeability: | Class I <5m |
| Permeability to CO ₂ : | 201m equivalent air layer 500mm 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 |
| Reaction to Fire: | Euroclass B-s1, d0 |

COMPLIANCE

CE marked in accordance with BS EN 1504 Part 2. Compliant with LU Standard 1-085 'Fire Safety Performance of Materials'.

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 11-19 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 ULTRA** 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 | |
| 2ND | 0.2 | 5.0 | 200 | |
| OVERALL | 0.4 | 2.5 | | Nominal 130 |

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

REINFORCEMENT CRACKS AND JOINTS

MONODEX ULTRA 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 ULTRA** 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 litre Plastic Bucket.

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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