

MONODEX METALLIC



Translucent Metallic, Water-based Anti-Carbonation Coating

USES

MONODEX METALLIC is a translucent elastomeric, water-based anti-carbonation coating with high diffusion resistance to carbon dioxide, offering complete protection from the effects of carbonation. It provides an effective barrier to water penetration and the ingress of airborne chlorides, whilst also allowing the release of moisture from the substrate. **MONODEX METALLIC** is designed for application over a complementary pigmented **MONODEX** base coat system to produce a metallic satin effect finish on external façades and other structures. It is equally suited for internal use, providing a unique designer look to decorative elements in high profile constructions.

ADVANTAGES

- Outstanding protection against the effects of carbonation, chloride ions and aggressive chemicals.
- Rapid drying, allowing two coats to be applied in a single day.
- Low hazard, low VOC (Volatile Organic Compounds) and virtually odourless.
- Water-based product with no flash point, equipment easily cleaned with water.
- Cures to form a translucent metallic satin finish which sheds dirt throughout its life.
- Active encapsulated in-film biocide inhibits the growth of mould, mildew and lichens.
- Water-repellent finish, yet allows damp substrates to breathe and dry out without blistering.
- Permanently elastomeric and UV resistant.

PRODUCT DESCRIPTION

MONODEX METALLIC is a single component, waterborne, translucent coating that offers an excellent defence against carbon dioxide ingress and the effects of weathering, significantly prolonging the maintenance free life of buildings and structures. Applied over a complementary pigmented **MONODEX** base coat system, it forms a translucent reflective metallic satin finish to create a feature appearance. It prevents water ingress, yet allows damp substrates to breathe and dry out, and is both dirt and UV resistant. Protection from the growth of mould and fungi is assured with the use of advanced encapsulated biocide technology to help maintain its appearance.

TECHNICAL DATA (TYPICAL)

Basis:	Water based acrylic copolymer.
Solids Content:	33-35% (wt) 38.0% (vol)
Specific Gravity:	1.04 -1.10
VOC Content:	<0.29% by mass.
Min. Application Temperature:	3°C

Curing/Drying Time (approx. depending upon temp.):

Touch dry in 1 hour at 20°C.
Dry to overcoat in 1-2 hours normally.
Product is through cured in 2-12 hours

Elongation At Break (150µm DFT) BS903 Part A2:

Elongation 164%

Tensile Strength 4.03MPa

Water Vapour Transmission (V): BS EN ISO 7783-2

V =50g/m²/day

Equivalent Air Layer Thickness: S_D = 0.42m

Liquid Water Transmission Rate :BS1062-3:

W=0.02kg/(m².h^{0.5})

Permeability to Carbon Dioxide: EN 1062-6

D_{CO2} = 2.76 x 10⁻⁷ cm²/s

Equivalent air layer thickness, R, = 83m at 150µm DFT

An effective barrier to CO₂ is R >50m

Equivalent Concrete Thickness: S_c = 210mm

Accelerated Weathering:

EN 1062-11: No blistering, cracking or flaking after 2500hrs QUV-B weathering.



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EN1504-2: Surface Protection Systems
Moisture Control (MCC)

Adhesive Bond:	Pass ≥ 3.0MPa
Water Vapour Permeability:	Class I <5m
Capillary Absorption:	Class III <0.1 kg.m ⁻² .h ^{-0.5}
Artificial Weathering:	2500 hours

APPLICATION DATA

Application Guide available on request.

PREPARATION

The complementary pigmented **MONODEX** base coat system must be applied in compliance with the requirements set out in the separate Technical Data Sheet and Application Guide. Allow to cure, typically 24 hours, prior to proceeding with the application of **MONODEX METALLIC**. Prior to work continuing, ensure the surfaces are clean, dry and free from all unsound material, i.e. dust, oil, or grease. In coastal locations, any airborne salt deposits should be washed off.

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 tip sizes 13-23 thou. Further details available on request.

COATING

MONODEX METALLIC must be thoroughly stirred with a slow speed drill and paddle for a minimum of 2 minutes to produce an even mix, free of streaks. Care must be taken to ensure excess air is not introduced into the coating during the mixing operation. Apply **MONODEX METALLIC** over the clean, dry surface of the complementary pigmented **MONODEX** base coat system by brush, roller or airless spray at the coverage rate given below. Take care not to entrap air into the coating. Allow to become touch dry, typically 1-2 hours, before applying a second coat as above. Do not apply if rain is imminent.

COAT	COVERAGE RATE			
	l/m ²	m ² /l	WFT (µm)	DFT (µm)
1ST	0.20	5.0	200	Nominal 150
2ND	0.20	5.0	200	
OVERALL	0.40	2.5		

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

CLEANING

All tools should be cleaned with water immediately after use.

SHELF LIFE

Shelf life is 24 months for unopened containers stored in frost free conditions away from heat.

PACKAGING

Pack Size: 15 litre plastic containers.

SAFETY DATA

Safety Data Sheet available on request.



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