

MasterProtect[®] 200

Flexible, decorative waterproof & protective coating for external Concrete & Masonry surfaces

DESCRIPTION

MasterProtect 200 is a single component, flexible, elastomeric coating based on acrylic co-polymers. The coating enables long term protection of concrete & masonry from aggressive atmospheric gases such as, carbon dioxide, sulphur dioxide and chloride ions & prevents water ingress. It is available in standard pastel colours. It can be made available in custom colours subject to prior agreement.

RECOMMENDED USES

MasterProtect 200 is recommended for external protection of concrete to prevent ingress of atmospheric corrosive gases, wind driven rain, and water borne chlorides.

Applications include protection of:

- RCC Frame structures with masonry infill
- Residential & Commercial Buildings
- Multi storey car parks & podiums
- Overhead water tanks.
- Industrial buildings and power plants.

MasterProtect 200 is not recommended for application in areas likely to be submerged in water and on floors subjected to traffic.

FEATURES AND BENEFITS

- **Resists water ingress and permeable to water vapour** – suitable for splashes and wind driven rain
- **Resists dirt pick up, and growth of fungus** – suitable for the tropics
- **Flexible** – capable to bridge cracks
- **Good resistance to CO₂ & SO₂ diffusion** – suitable for urban environments.
- **UV resistance** – suitable for external applications.
- **Robust** - Washable coating with excellent durability

PROPERTIES

Aspect	: Viscous Dispersion
Density	: 1.20 ±0.10gm/cc @ 25°C
Volume Solids	: 39%
Application temperature:	: 5°C to 50°C
DFT at 0.5 Kg/m ²	: 150µ
Touch dry	: 1 Hour at 25°C
Recoatable	: 4 Hours at 25°C

Full cure	: 7 Days
%Elongation, ASTM D 2370	: >200% @150µ
Pull off Bond Strength (ASTM D 7234)	: > 1 MPa or Concrete Failure
Water Vapour Transmission (ASTM E 96) @150 micron (gm/m ² /24hr)	: >70
Chloride ion penetrability (ASTM-C-1202-2007)	: Very Low
Tensile Strength (ASTM D 2370)	: 1 Mpa

APPLICATION

New masonry and concrete should be at least 14 days old before treatment and with moisture level in substrate below 7% by volume.

Surface preparation

Correct substrate preparation is critical for optimum performance. The surface to be treated must be thoroughly cleaned. Remove all traces of formwork, release agent, grease, efflorescence, laitance, algae or other contaminant that may prevent proper adhesion. Remove organic materials by scraping, brushing or high pressure water cleaning. Spores must be treated with a suitable fungicide sterilizing agent and carefully rinsed.

On non-decorated concrete surface containing blow holes and/or minor irregularities, and on some rough rendered or dashed surface, it is advantageous to use **MasterEmaco N303** to close the surface, thus preventing the possibility of pinholes occurring. Cracks wider than hairline should be patched using **MasterFlex 1500** or sealed using acrylic caulk before treatment.

Priming

Prime the surface using **Masterseal 399** or **MasterKure 181** as primer.

Allow the primer to dry for 2-3hr (at temp. >25°C) before applying **MasterProtect 200**. At lower temperatures, allow a longer time to dry.

Note: If **MASTERKURE 181** is used as the curing membrane, priming may not be required. Contact Master Builders Solutions for advice.

Mixing

MasterProtect 200 is ready for use. Stir (do not dilute) to obtain a uniform mixture before use.

MasterProtect[®] 200

Application

Apply **MasterProtect 200** in one coat using airless spray to achieve a wet film thickness of 370µ or in two coats each of 185µ WFT using roller or brush, with the second coat applied 2 – 4 hrs after the first and at right angle to it. The prepared substrate must be air-dry when the first coat is applied.

Where a textured finish is required use a medium nap roller to apply the product and over roll with a textured roller to give the desired finish in One direction only.

Only apply **MasterProtect 200** when the ambient temperature and substrate temperature are at least 5°C, and will not fall below 5°C within 24 hours. To avoid condensation which influences the adhesion negatively, surface temperature during application should be at least 3°C higher than the dew point.

Curing

MasterProtect 200 is self-curing.

Equipment

Airless sprayer, medium nap roller or brush

ESTIMATING DATA

The coverage rate is strongly influenced by the roughness and porosity of the substrate. Minimum recommended rate of application for **MasterProtect 200** is 0.25 Kg/m²/coat.

Each pack of 20kg is sufficient for an area of 40 m² to achieve the recommended final dry film thickness of 150µ.

PACKAGING

MasterProtect 200 is supplied in 20kg containers

SHELF LIFE

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above

PRECAUTIONS

It is highly recommended to use necessary PPE (Gloves, mask etc.) during installation of the product. In case of Incidents of direct inhalation, causing dizziness/giddiness, loss of consciousness, contact with eyes etc, seek immediate medical advice. The requirements may vary depending on the application areas. Please ensure to have proper ventilation while working in confined areas. Contact Master Builders Solutions representative in case you need further details or refer to the material safety datasheet of the product to know more.

MasterProtect200/02/0115

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