



20 Hydrocoat Water Base Epoxy Coating (Grey)

DESCRIPTION

20 Hydrocoat is a grey two-part water-based epoxy primer sealer for concrete, masonry, fibrocement and other cementitious surfaces.

20 Hydrocoat may be mixed in equal parts by either weight or volume.

RECOMMENDED APPLICATIONS

As a primer sealer for concrete, masonry, bricks fibrocement and other cementitious surfaces.

As a water retaining curing aid (membrane) for concrete suitable for further finishing with decorative or industrial coatings.

As a one coat "moisture suppressant" over green concrete slabs.

As a water-impermeable coating to protect against dampness and seepage.

As a binder and reinforcer for dusty and eroded concrete surfaces.

As an adhesive tiecoat between old and new cementitious compounds.

TECHNICAL DATA

Resin Base:

Appearance: Grey liquid
Chemical base: Epoxy resin
Solids: 67%
Viscosity: 100,000cps
Specific gravity: 1.50

Hardener:

Appearance: White liquid
Chemical base: Polyamine adduct
Solids: 59%
Viscosity: 10,000cps
Specific gravity: 1.46
Mixing ratio: Equal parts, weight or volume
Pot Life: 1-2 hours
Surface appearance: Matt
Touch dry: 6 hours
Hard cure: overnight 20°C
Complete cure: 28 days, 20°C
Minimum curing temperature: 8°C
Permeance: $0.37 \times 10^{-8} \text{gPa.s.m}^2$
ASTM E96094: Sect 12 (Water Method)
Potability: Conforms to AS/NZS4020-1999

20 Hydrocoat will not perform as specified, if applied over paint, dust, or old adhesive.

Add the hardener to the base and thoroughly stir it in by means of a hand-held mechanical mixer for a minimum of two minutes. It is advisable to allow the mixed composition to mature 5-15 mins before application. Where it is intended to use part units; the resin and hardener base should be thoroughly stirred separately before removing smaller quantities. 20 Hydrocoat grey may be applied by

RECOMMENDED COVERAGE:

Dependent on surface porosity and expected service conditions. Recommended total coverage: $4\text{m}^2/100\text{u}$ dry film/L (if used undiluted).

PERFORMANCE DATA

- **May be applied to dry or moist surfaces.**
- Good adhesion to all common building substrates.
- Tolerant of poorly prepared surfaces.
- Resistant to oil, petrol, common soils, stains and detergent cleaners.
- Suitable for indoor and outdoor applications.
- Compatible with cementitious compounds.
- long term contact with strong acids, alkalis, or aggressive solvents;
- over untreated steel;
- application in areas which are actively leaking during use, or where active leakage is likely to occur within the first 72 hours of use;
- **Do not use at ambient/slab temperatures below 10°C**

APPLICATION

Where it is intended to use 20 Hydrocoat as a water retaining aid to assist the curing of concrete under optimum conditions; it may be applied to new concrete as soon as the latter has hardened. Otherwise the general recommendations for the preparation of concrete surfaces for overcoating should be adhered to.

20 Hydrocoat is usually reasonably tolerant with regard to surface preparation. Nevertheless to maximise adhesion it is important that application is to sound, clean concrete. Laitence should be removed by acid etching or sweep blasting. Acid etched concrete should be neutralised with dilute ammonia and then thoroughly rinsed with water to remove all water soluble salts which impair adhesion of the coating. Old concrete should be thoroughly cleaned with detergent cleaners. Severe contamination with oil and grease should be removed by steam cleaning. If penetration of the pores has occurred, mechanical cutting back to clean concrete may be required.

continued

brush, roller, air assisted or airless spray.

20 Hydrocoat grey may be applied as supplied to produce a wear resistant matt coating. However addition of 10% water will assist spraying and penetration. For cement modifications still larger amounts of water may be added.

If using spray application; the product must be rolled after applying to ensure complete even coverage.

Application should be completed before expiry of working life which is indicated by a marked increase in viscosity.

Apply one coat for dust sealing or priming, two coats for waterproofing, two to three coats for wear and soil resistant industrial flooring.

USE AS A "GREEN SLAB" MOISTURE SUPPRESSANT

- The slab to be coated must be clean and sound ie not rain damaged, powdering etc. (If this is the case; mechanical means of rectification, prior to 20 Hydrocoat application will be required). Any curing membrane must be removed.
- Tested RH of the "green" slab should be less than or equal to 85% and dropping ie moisture content not due to hydrostatic pressure; in which case a two coat (minimum) system will be required.
- Apply a single coat of Polymer 20 Hydrocoat at the rate of 3.0 - 3.5m²/L and allow to dry and cure, prior to laying of topcoverings. (See notes on "Post Applied Top Coverings"). Note that a single coat of Polymer 20 Hydrocoat will reduce the RH above the slab by greatly reducing transmission of water vapour, but will not completely stop moisture transmission. The slab moisture will still need to hydrate and or escape elsewhere.

Over coating may proceed when the touch-dry stage is reached.

Cured at room temperature, 20 Hydrocoat will be ready to accept foot traffic next day. For heavy traffic, as for instance fork lifts trucks, it is advisable to wait a few days.

IMPORTANT NOTES

Cracks and Floor joints will not be sealed by 20 Hydrocoat. These will need to be filled with a suitable proprietary filler (epoxy, or 2 part modified urethane) prior to application.

20 Hydrocoat grey has been formulated to show optimum curing and application characteristics in the temperature range from 15-25°C. At lower temperature that rate of cure will slow down considerably and at higher temperatures the working life of the mixed composition may become too short for manual application. As with all water-based coatings it is inadvisable to use any 20 Hydrocoat product under conditions of very low temperatures and high humidities.

POST APPLIED TOP COVERINGS:

20 Hydrocoat is designed as a non-moisture permeable coating. This must be considered when laying top coverings over 20 Hydrocoat; as water based adhesives will have considerably extended open times even with porous coverings such as carpet. If laying impermeable coverings such as vinyl sheet; either a layer of screed (3-5mm minimum thickness), contact adhesive, or reactive adhesive (eg Polymer 8000) will need to be used. When laying a screed over 20 Hydrocoat, check with the screed supplier, as to any preparation required to achieve acceptable adhesion.

CORRECT APPLICATION RATES:

In order to achieve the required waterproofing effectiveness; 20 Hydrocoat must be applied at the correct coverage rates. On a sound smooth surface; a final dry film thickness of 200-250µ(microns) is considered sufficient. This equates to a coverage rate of mixed product of between 1.6 to 2.0m²/litre total, for a two coat application. Typically; the first coat will have a lower coverage rate than second or subsequent coats, due to absorption, and the roughness of the surface.

Typical application rates would be:

1st coat 3.0m²/litre (approx 140µ dry)

2nd coat 5.0m²/litre (approx 85µ dry)

CLEAN UP

Clean up of brushes, roller sleeves and spraying equipment is by means of soapy water, before they dry.

PACKAGING

20 litre unit (10Lt base in 10Lt can, 10Lt hardener in 10Lt can).

GENERAL PRECAUTIONS

- Do not allow condensation to form on film of 20 Hydrocoat while drying/curing.
- Adequate ventilation is required to remove moisture vapour from film, and to allow odour (epoxy) to dissipate.
- Do not use mixed product beyond its pot life of approx two hours after mixing.
- If using solvent based adhesive, or other solvent based products over 20 Hydrocoat; allow at least 72 hours to cure prior.

HAZARD & FIRST AID

Refer to Material Safety Data Sheet.

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