

Barrier Seal WPM

DESCRIPTION

Barrier Seal WPM is a two part waterborne epoxy coating system designed to act as a membrane/barrier coating primarily over cementitious substrates.

FEATURES AND BENEFITS

- Environmentally friendly.
- Water clean up.
- Convenient equal part mixing.
- Non flammable.
- Negligible odour and toxicity.
- Excellent adhesion to brick, masonry, concrete, compressed fibreboard, stone and timber.
- Approved for use with Potable Water – Conforms to AS4020 (1999).
- Can be used as fairing compound when mixed with cement.

RECOMMENDED SUBSTRATES

- In-situ concrete.
- Water tanks.
- Hydrostatic resistant primer for waterproofing membranes and epoxy coatings.
- Brick, block and stone work.
- Fibre cement and AAC systems.
- Pre cast and tilt up panels.

PERFORMANCE PROPERTIES

Appearance	Uniform paste
Colour	Grey
Finish	Semi Gloss
Mixing Ratio	1:1 by volume
Volume Solids	40%
Weight Solids	53%
Pot Life	2 hours @ 25°C
Specific Gravity	Approx 1.25 @ 25°C
Viscosity	Approx 15000cps
Re-coat time	4 hours @ 25°C 50%RH
Full Cure	7 days @ 25°C 50%RH
WVT	11.3 g/m ² /24hr

PACKAGING

Barrier Seal WPM is available in 20 litre kits.

COVERAGE RATES

- Membrane/ Barrier ⇒ 3 m²/litre/coat
- Primer/Surfacers ⇒ 5 m²/litre/coat

SURFACE PREPARATION

- All surfaces to be treated must be structurally sound and all previous coatings, adhesives, efflorescence or laitance should be removed by chipping, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or other suitable means.
- All surfaces must be cleaned free from dirt, grease, oil or other surface contaminants.
- Holes, non-structural cracks and other surface deformities should be repaired using a Polycrete or Polyepoxy repair mortar in accordance with the technical data sheets.
- Very porous or 'boney' concrete may require three coats. The first coat acting as a primer, penetrating into the pores of the concrete.
- Ensure recoat times are adhered to between applications (refer to precautions). A minimum of four hours is required between coats, preferably overnight if temperature is below 20°C.

MIXING

1. Mixing should be by means of a mechanical forced action mixer with a high shear stirrer.
2. First, premix each individual component to form a homogeneous paste.

3. Second, join the two components by equal volume, mixing thoroughly for a minimum of five minutes until a homogeneous blended paste is obtained.
4. Avoid trapping air during mixing; it may cause later pin holing in the coating. Only mix as much as may be used within the pot life of the product.

NOTE:- When using as a primer or when adding cement, thin Part A with 20% water and mix well.

PLACING

1. *Barrier Seal WPM* is a minimum two-coat system. The coverage rate as specified must be achieved to ensure transmission barrier and low permeability is obtained. (Water features it is recommended to use 3 coats).
 2. Applying with a brush or roller, ensure to work the material into the substrate surface to fill voids and eliminate pin holing. Successive coats should be applied at right angles to the previous coat.
 3. It is recommended that as application progresses, the coating depth be tested at random points with a wet film gauge/comb.
 4. Extreme care is necessary, and if required, protection should be provided to ensure *Barrier Seal WPM* is not damaged in any way between or after final coating.
- *Barrier Seal WPM* cure rates will be dramatically reduced if relative humidity is above 85%.
 - *Barrier Seal WPM* is **not** trafficable and must be covered with floor toppings, coatings or conventional coverings prior to foot or vehicle traffic introduction.
 - In enclosed areas, such as water tanks or reservoirs, ventilation should be provided during curing cycle to enable adequate evaporation of the coating.
 - Allow to cure for a minimum of 24 hours at 25°C/50% R.H. before applying adhesives, mortars, decorative coatings or other surface treatments.
 - *Barrier Seal WPM* will tend to yellow when exposed to UV light.
 - Discard any material that has exceeded the pot life or working time of the product.
 - Do not apply over any substrates that have been previously treated or coated with curing compounds, PVA concrete bonding agents or acrylic coatings. These areas must be mechanically cleaned by grinding or shot blasting to produce a contamination free surface.

COLD SUBSTRATES AND COOL CLIMATE CONDITIONS

CLEAN UP

Wash all equipment in water or water/detergent immediately on completion of application and mixing.

Barrier Seal WPM will cure under water; hence ensure dirty equipment is not left soaking in water.

PRECAUTIONS

- Some individuals may experience a skin reaction to *Barrier Seal WPM*. Those individuals should wear personal protection equipment. Refer to our Material Safety Data Sheet for more information.

- *Barrier Seal WPM* cure rates will be dramatically reduced if substrate surface or ambient temperature is below +10°C.
- If *Barrier Seal WPM* is applied in cold or cooler climatic conditions, substrate temperatures can produce amine blush, resulting in an oily residue and/or areas of uncured tacky discolouration (usually off white or yellow).
- If amine blush or any other form of surface contamination or discolouration appears on the coating, *Barrier Seal WPM* should be allowed to cure and then be washed with clean fresh water, Methylated Spirits or Xylene depending on the severity of the amine blush.

- Ensure thorough removal of contamination prior to the application of any further coating.
- Failure to perform this procedure will result in delamination between coatings.
- Follow the mixing instructions exactly. Mixing slightly longer (eg: an extra one minute) after homogeneous paste is obtained is better than under mixing.
- Allowing the product to stand for approximately five minutes after mixing will assist in accelerating the drying reaction.
- Never apply thin coats as the rapid moisture loss will arrest or slow the drying reaction.
- Thin coats can result in amine blush presence on the surface producing uncured or tacky areas.
- If possible store the *Barrier Seal WPM* in a 20°C environment 24 hours prior to use.
- If possible warm the substrate surface area where *Barrier Seal WPM* is to be applied by air blower or use a blower after application.
- Always provide adequate ventilation during the curing cycle.

STORAGE

Store between 10°C and 30°C away from direct sunlight. Shelf life is 12 months in original unopened container. Partly used containers must be sealed tight when not in use.

HEALTH AND SAFETY

Barrier Seal WPM is non-flammable and is classified non-hazardous under work safe guidelines. However, all manufactured products should be handled with care and due diligence.

- If swallowed do NOT induce vomiting – give glass of water.
- If in eyes, hold eyes open, flush with water for at least 15 minutes.
- If skin contact occurs wash skin thoroughly do not use solvents.

- Some individuals may experience a skin reaction to *Barrier Seal WPM*. Those individuals should wear personal protection equipment.

For further information on above products, please refer to the relevant Material Safety Data Sheet.

Please Note:- The information given in this data sheet is based on our current knowledge of the product when properly stored, handled and applied. We cannot guarantee that the product will be suitable, effective or safe when used for any purpose other than its stated uses.

To the extent that it is lawful, we exclude warranties implied by law and limit our liability to the cost of replacing the product. We accept no responsibility for loss or injury caused by improper use, incompetent preparation, inexpert or negligent application, or ordinary wear and tear.

Service or advice given by our staff should not amount to responsibility for the project - since the owner, or their contractor (and not River Sands), is responsible for procedures relating to the application of the product.



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