



RESTORE PLASTER BINDER

1. DESCRIPTION

This is a modified Restore Plasterbinder product, formulated for incorporation into cement compounds. Use to wet sand and cement mixtures instead of water. It is used for waterproofing, damp-proofing, improving flexibility, adhesion, strength and durability of plaster.

Can be used to repair large, damaged cementations surfaces e.g., repair floor screeds and walls, areas where very thin films are required (feather-edging), repair or construction of fishponds and in plaster below damp-proof course D.P.C. (stops rising damp), in plaster, on flower boxes etc.

2. TECHNICAL DATA

| | |
|---|--|
| Product Code | RES 1120 |
| Colour | Clear |
| Shelf life | 12 Months |
| Packaging | 1L, 5L, 20L |
| Flashpoint | Non flammable |
| Viscosity | 15-16 sec./F4/25°C |
| Specific Weight | 1,01 – 1,10 |
| Solids per volume | 44 - 46% |
| Solids per mass | 45 – 47% |
| Practical Spreading rate (Depending on porosity) | 1M ² per 1L of mixed paste |
| Recommended finishing coats. | See application guide |
| DRYING TIME | |
| Touch dry Time | 2 Hours at 25°C |
| Recoating Time | 4 Hours at 25°C |
| APPLICATION | |
| Brush, Roller or Plaster Tool | See instructions below |
| Cleaning | Water |
| Mixing | Very important to stir mixed pasta continuously to prevent solidification. |

3. FEATURES

- It imparts the following properties to the mixture
- It makes the dry product water resistant.
- The cement becomes flexible.
- Allows you to patch damaged floors or walls at depths of 1mm and greater.
- Improves adhesion to whatever surface it is being applied to.
- Improves both the strength and long-term durability of cement and diminishes dusting.
- Improves resistance to certain chemicals.

4. SURFACE PREPARATION & APPLICATION

Surface Preparation

It is essential that all surfaces are free from crumbly or other unsound areas. Dusty patches, old paint and contaminants such as oil and grease must be removed prior to application of Restore Plaster Binder modified cements. Cement substrates should be dampened with water prior to application. Old walls and floors may require mechanical scarifying (chipping) prior to application while new smooth surfaces may require etching using hydrochloric acid. Always ensure thorough washing to remove all traces of acids. Water damaged/crumbly plaster should be removed back to brick or a sound and to DPC (damp proof course) level, and then repaired as per no. 8 below.

Applications of Restore Plaster Binder modified plaster mortars should be restricted to no more than 10mm per coat. Greater thickness may tend to sag or even fall off. Several coats may however be applied in fairly rapid succession. The time required between coats will vary according to conditions, but reaction time for the mortar is typically 15 to 30 minutes.



5. Primer (Bitumen surfaces, walls and floors)

Priming is required to obtain maximum adhesion of the subsequent renderings or coatings. The primer is prepared by mixing one part Portland cement with one part Restore Plaster Binder. The slurry is then brushed onto the required surface ensuring that all the brush strokes end in the same direction e.g., vertical.

Apply a second slurry coat at right angles to the first coat e.g., horizontal.

Allow half to one hour drying time between applications.

Allow 48 hours drying time before over coating.

6. General-purpose wall plasters and floor screeds.

| | |
|---------------------------|-----------------------------|
| Plaster Sand/River Sand: | 150 kg |
| Ordinary Portland cement: | 50 kg |
| Restore Plaster Binder: | 10 Litres |
| Water: | As required for consistency |

Surfaces must be prepared as described in surface preparation above, followed by priming as described in 1 above. The primer coats must be left to dry for at least 48 hours after application. Ensure the entire area is completely sealed after each application of the primer coat. Before application of the plaster mortar a track coat of **Restore Plaster Binder** (undiluted) should be applied to the primer and the plaster mortar applied as soon as the track coat has dried to clear. Mortars can be laid to any thickness, down to a featheredge if necessary. However, a sufficiently fine grade of sand should be used, and no ultra-fine clay-like materials must be present in the sand.

7. Concrete and heavy-duty flooring.

| | |
|---------------------------|-----------------------------|
| River sand: | 150 kg |
| Crushed Granite Stone: | 150 kg |
| Ordinary Portland Cement: | 100 kg |
| Restore Plaster Binder: | 20 litres |
| Water: | As required for consistency |

It is required that all existing floors be prepared as described above, followed by priming as described in above before laying the concrete or flooring.

8. Water and moisture resistant mortars. (Plaster)

Surfaces must be prepared as in surface preparation described above, followed by priming as described in 1 above. The primer coat must be left to dry for at least 48 hours after application. Ensure the entire area is completely sealed after each application of the primer coat. Before application of the plaster mortar a tack coat of **Restore Plaster Binder** (undiluted) should be applied, and the plaster mortar applied as soon as the tack coat has dried to clear.

Water resistant plaster mix

| | |
|---------------------------|------------------------------|
| Plaster Sand: | 150 kg |
| Ordinary Portland Cement: | 50 kg |
| Restore Plaster Binder: | 15 – 20 litres |
| Water: | As required for consistency. |

The amount of Restore Plaster Binder required in the mortar composition depends upon the degree of water resistance required and the conditions prevailing, where high hydrostatic pressures are anticipated, the level of Restore Plaster Binder could be increased to levels where no water is required in the composition of mortar.



9. SURFACE PREPARATION OF ROOFING OR WALKWAY SURFACES

- Surfaces must be clean, sound, dry and suitably primed.
- Remove grease and oil.
- Abrade painted surfaces to ensure adhesion
- Remove any chalky material and wire-brush concrete to free loose particles.
- All surface contamination should be removed before application can commence
- New concrete must be cured for at least 28 Days
- Roofs should be graded to falls away from expansion joints thereby minimising the volume of water which would of necessity flow over them. The largest volume of water would thus flow way from the joints by design.
- Old coatings must be stable if not remove completely

10. APPLICATION GUIDES

Mixing Ratio`s

| | Unit | Mixing Ratio | | | |
|------------------------|--------|--------------|------|------|------|
| Restore Plaster | | | | | |
| Binder | litres | 1,0 | 5,0 | 14,7 | 25,0 |
| Water | litres | 1,0 | 5,0 | 14,7 | 25,0 |
| Portland cement | kgs | 3,3 | 17,0 | 50,0 | 85,0 |
| Yield | litres | 3,2 | 16,0 | 47,0 | 80,0 |

Slurry Mixing

Mix the required amounts of **RESTORE PLASTER BINDER** and water first, then add the correct quantity of Portland cement slowly, while mixing, to avoid the formation of lumps

Mixing can either be achieved manually or mechanically with a slow speed mixer (set at 400-600 rpm). Mechanical mixing is recommended for quantities more than 5 litters. Mixing should continue until a uniform, lump-free consistency is obtained. The slurry should be mixed periodically during application to prevent settlement.

11. WATERPROOFING OF CONCRETE DAMS, OPEN DECK AND WALKWAYS WITHOUT PAVING OR TILING COVERAGE

Primer Coat

Saturate absorbent surfaces thoroughly with water. Apply an even coat of **RESTORE PLASTER BINDER MIXTURE Waterproofing Compound** at a rate of 1L/m² undiluted with a brush or roller and leave to dry for minimum 4 hours.

Waterproofing slurry

Pre-cut the **RESTORE PLASTER BINDER** Fabric into convenient sizes for application, then soak the **Restore reinforcing membrane** in clean water and hand dry. Apply an even coat of **RESTORE PLASTER BINDER MIXTURE Waterproofing Compound** at a rate of 1L/m² undiluted with a brush or roller. While the compound is wet, embed a **Restore reinforcing membrane** (non-woven polypropylene) and ensure that the membrane is completely saturated.

The minimum weight of the membrane alone shall be 100g/m². Product should be evident "striking through" the membrane and if this is not the case, too little product has been applied. Care should be taken that all bubbles and wrinkles are smoothed out. After allowing a minimum drying period of 8 hours, apply a second coat **Restore Plaster Binder Mixture** at the rate of 0.75L/m². Allow a minimum of 8 hours drying period. Apply a further final coat of **Restore Plaster Binder Mixture** at the rate of 0.75L/m². Allow at least 8 hours drying time. Side laps of 75mm and end laps of 100mm must be allowed. It will be noted that a total of 2.5L/m² of **Restore Plaster Binder Mixture** has now been applied. The total weight per m² shall therefore be 1.5kg. Note drying times are based on a temperature of 23 °C and a R.H. of 60% max. Technical assistance and applicator training are freely available to all approved users



MOVEMENT JOINTS FOR WATERPROOFING /TILE INSTALLATION

It should be noted that the lack of movement joints in a waterproofing tile or paving panel is a major cause of tile failure. They should be specified at the design stage to avoid placing them in heavy traffic areas and spoiling the visual effect of the tiles.

- Movement joints should be in both directions at maximum 5 metre centres for interior surface bed applications and maximum 3 metre centres for suspended or exterior applications.
- Movement joints should also be located around the perimeter of all floors, in all vertical corners, against obstructions fixed to the structural background and over all discontinuities in building materials, e.g., at interfaces of concrete and brickwork. In addition, movement joints should be located around any fixtures protruding through the tiled surface such as columns or stairs.
- The joints should be at least 5 – 10mm wide and extend through the tile/ paving and adhesive layers. All structural expansion joints in the background must be extended through the tiles/ paving to the surface. The full width of the structural joints must be extended through the tiles to the surface.
- Where practical, the bulk of the depth of the movement joint can be filled with an inexpensive compressible material, such as a Closed Cell Polythene Foam Cord.
- Seal the joint using a Good Quality Polyurethane Joint Sealant in accordance with the manufacturer's instructions. It is important that the joint sealant bonds only to the sides of the movement joint.

Tiling and Paving installation

- **Great care should be taken when installing paving or tiles not to damage the waterproofing membrane.**
- **When installing paving a slip sheet like a 250mikron PVC sheet should be used as a barrier between waterproofing and paving bricks**
- **Installation must be monitored at each stage by a Restore representative or the guarantee would be void and not applicable.**
- **All paving or tile should be laid in strict accordance with the S.A.B.S Code of Practice and the also the manufacturer or supplier of the paving or tiles.**

OTHER AREAS OF WATERPROOFING

Bonding/Bagging

RESTORE PLASTER BINDER and water are mixed in equal proportions by volume. Mix clean building sand with Portland cement in equal proportions by volume and then add sufficient diluted **RESTORE PLASTER BINDER** and continue mixing until a uniform, lump-free consistency is obtained.

Mix periodically during application to prevent settlement.

For waterproof bagging, saturate the brick substrate and, while it is still damp apply a coat of bonding/bagging slurry by means of a block brush.

For bonding, saturate the substrate and while it is still damp apply a coat of bonding/bagging slurry by means of a block brush.

Immediately apply a render of screed while the slurry is still wet.

Fishponds

Due to the sensitive nature of fish, it is important that the fishpond is adequately washed out after applying the **RESTORE PLASTER BINDER**.

Cement is highly alkaline and will have an initial effect on the PH of the water, so ensure that the water is conditioned before introducing your fish.



PRECAUTIONS

- It is essential to ensure total drying between coats.
- Application should be avoided in cold and moist weather conditions.
- Do Not apply the product at surface temperatures below 6°C (minimum of 2°C above dew point) and temperatures above 40°C
- Do Not apply if ambient temperature is less than 10°C or more than 40°C.
- Do Not apply if relative humidity temperature is less than 10°C or more than 85. °C
- Thinning down is not recommended (except as a primer), but in extreme cases a slight addition of water can be made.
- Not suitable for permanent immersion in water.
- New concrete should be allowed to age for 28 Days before over coating.
- Impa Restore membrane must be used.
- Do not apply if rain is imminent.
- Do not cover with stones or stone chippings.

CLEANING EQUIPMENT

Clean all equipment immediately after use with water.

Environmental Health & Safety Information

WARNING! IRRITANT! HARMFUL IF SWALLOWED. CONTAINS: PROPYLENE ORETHYLENE GLYCOL. MAY CAUSE EYE, NOSE AND THROAT IRRITATION. AVOID CONTACT WITH SKIN AND EYES AND AVOID BREATHING OF VAPORS AND SPRAY MIST. WEAR EYE PROTECTION AND PROTECTIVE CLOTHING. USE ONLY WITH ADEQUATE VENTILATION. To avoid breathing vapours and spray mist, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches or dizziness, increase fresh air. If properly used, a respirator (NIOSH approved for organic vapor with P series particulate pre-filter) may offer additional protection; obtain professional advice before using. A dust mask does not provide protection against vapors. Avoid contact with eyes and skin. Wash thoroughly after handling. Close container after each use. **FIRST AID:** If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If swallowed, get medical attention immediately.

CAUTION: KEEP OUT OF REACH OF CHILDREN AND ANIMALS - DO NOT TAKE INTERNALLY.

Refer to Material Safety Data Sheet for additional health and safety information.

IN CASE OF FIRE: Use foam, CO₂, dry chemical, or water fog.

SPILL – Absorb with inert material and dispose of as specified under **Thinning/Clean-up.**

† **WARNING!** If you scrape, sand or remove old paint, you may release lead dust.

DISCLAIMER

The technical information contained in this document are given in good faith and are meant to be used as a guideline by the specifier or user. Whilst we are confident about the quality of our products, we cannot accept any liability for the incorrect use or application of our products. Surface preparation forms an integral part of the scope of works and it is expected that the highest standards are maintained during surface preparation and application, to ensure that our products perform as intended. Always ensure to use the same product batch numbers, refrain from doing spot touch-ups and paint surfaces from corner to corner to prevent colour and sheen variance.

Please note that all our latest Product Data Sheets and Material Safety Data Sheets are available for viewing on our website at www.prepfit.co.za. All information listed is owned or used under licence of Prepfit and its related companies. © Prepfit (Pty) Ltd. All rights is reserved.