

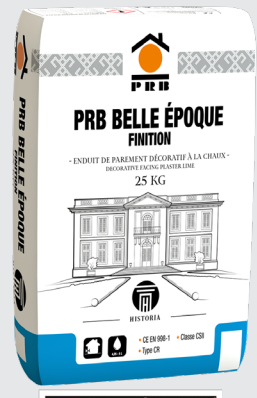
# PRB BELLE ÉPOQUE FINITION GM/GF

DECORATIVE, FINE OR MEDIUM GRAIN LIME TOP COAT RENDER & MORTAR

## Benefits of the PRB BELLE ÉPOQUE FINITION GM/GF



- +** Decorative, pre-coloured and highly breathable top coat finish for a traditional and heritage lime render system in two or three layers for exterior or interior walls
- +** Finishes: Scraped, floated, wood float, trowel smoothed, sponge aged, roughcast, stonework effects
- +** Particularly suitable for repointing work



## KEY PRODUCT INFORMATION

- 25 kg paper bag.
- 0.98 t euro pallet, i.e. 42no 25 kg bags.
- 1.6 t 1m x 1m four way pallet, i.e. 64no 25 kg bags.

## CONSUMPTION

Consumption rates provided are for a float finish and will vary according to the substrate conditions (type, flatness, roughness). Consumption will vary for other finishes.

**10 mm thick** – 1.45m<sup>2</sup> per 25 kg bag – approx. 17 kg per m<sup>2</sup>

**15 mm thick** – 1.0m<sup>2</sup> per 25 kg bag – approx. 25 kg per m<sup>2</sup>

**20 mm thick** – 0.72m<sup>2</sup> per 25 kg bag – approx. 34 kg per m<sup>2</sup>

The minimum thickness applied will vary depending upon application finish and weather rating zone but must be applied at the specified thickness to guarantee the weatherproofing function.

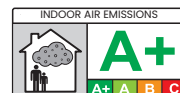
For pointing / re-pointing a 20mm deep x 10mm wide joint, approx. coverage is 9 m<sup>2</sup> of brick slips, however the consumption will vary depending on the thickness and depth of the pointing to be carried out. For guidance contact the PRB Technical Department.

**COLOUR:** 100 PRB colours and Sun + colours.

**STORAGE:** 18 months



EN 998-1 Type  
Class. CR-CSII-Wc2



## USAGE GUIDE

### WHERE TO USE?

- Decorative render for exterior or interior walls on all types of housing, office or industrial buildings.
- Pointing of masonry and mortared stonework, brickwork, tiling etc.
- As a bedding mortar.

### SUITABLE SUBSTRATES:

- ✓ **PRB BELLE ÉPOQUE SOUS ENDUIT** base-coat.
- ✓ Traditional cement renders and scratch coat renders.
- ✓ New masonry.
- ✓ Pise, Adobe, rammed earth, Cob, Wicket, etc.
- ✓ Old masonry constructed with weak or lime mortar.
- ✓ For refurbishment applications, contact the PRB Technical Department.

### PROHIBITED SUBSTRATES

- ✗ All Gypsum-based substrates (Plaster).
- ✗ Directly on exterior masonry walls (cellular concrete, breeze blocks, bricks...) that are not covered with a weatherproofing render e.g. **PRB BELLE ÉPOQUE SOUS ENDUIT**.
- ✗ Paints, thin coat renders.
- ✗ Directly on wood.
- ✗ Horizontal, below DPC and basement surfaces, sloping surfaces (except arches and undersides of lintels).

### APPLICATION CONDITIONS

- Between 5°C and 35°C.
- Do not apply on substrates that are frozen or thawing, hot or exposed to full sunlight, soaked or exposed to driving rain and strong winds.
- Avoid applying dark shades at temperatures < 8°C and in very damp conditions (increased risk of efflorescences or carbonation).
- Take extra precautions when applying in hot weather and strong winds in order to avoid premature drying out which can be detrimental to the appearance, strength or aesthetics of the render.

NB: Floated finishes generate shade differences and micro-cracking caused by early surface drying (surface should be protected against this – Refer to GENERAL ADVICE) that can be detrimental to the appearance or aesthetics.

### COLOUR

- Because this is a naturally pigmented product whenever possible, obtain colour samples prior to specifying and apply a sample panel for approval. Ensure you follow the mixing guidelines and water content for the product to avoid a shade difference.
- The quantity of material required for a given area (e.g. when applying to the same elevation) should be of the same batch number or if not, the different batches of material must be thoroughly mixed to avoid shade variations.
- Avoid applying the render to the same elevation at different times or applying half of the elevation one day and the other half another day as shade variations can occur.
- There is no benefit in using the **PRB ACCELERATEUR FLASH** in lime renders.

### GENERAL ADVICE

It is advisable to dampen the surface after initial curing of the topcoat finish, using a garden sprayer or mist spray from a hose to prevent early surface hardening which can lead to surface micro cracking. Until the render is dry and hardened, it is recommended to cover with hessian or mortar fleece to protect from drying winds, frost, strong sun and driving rain.

Caution must be given when dealing with darker colours because these are more vulnerable to marks showing on the finish generally caused by over working the finish, adding too much water to the surface when sponging or trowelling, or using dirty trowels or sponges, or finishing during unsuitable weather conditions (e.g. wet or damp climatic conditions, direct sunlight, drying winds) and not taking suitable precautions against these conditions, therefore good application procedures and techniques are paramount to avoid these effects occurring.

#### Colour consistency

The evenness and consistency of the colours will be affected by the climatic conditions in which they are applied (temperature, humidity, wind, sunlight). Shading may occur if the application conditions are not identical. Similarly, surface shadowing can be created in the finish by scaffolding platforms and scaffold poles when the sun is shining, due to the difference in drying between the area exposed to the sun and the area in the shade. This phenomenon is more noticeable with darker shades.

To avoid this natural phenomenon, we recommend that scaffolding be covered with a tarpaulin or netting to reduce the amount of solar energy absorbed and to ensure uniform setting and drying conditions.

## COMPOSITION

- CL 90 air-slaked limes (calcic lime or fat lime) hydraulic lime NHL 3.5.
- Rolled and calibrated quarried quartz alluvial sands.
- Natural mineral pigments, specific additives.

## PRODUCT CHARACTERISTICS

### POWDER:

Max. grading:

- **PRB BELLE ÉPOQUE Finition GM:** 3.15mm
- **PRB BELLE ÉPOQUE Finition GF:** 2mm

### MIXED PRODUCT:

- Water retention: 86 to 94 %
- pH (alkaline): 12.5 ± 0.5

### RENDER PERFORMANCE WHEN HARD:

- Density: 1.4 to 1.8 t/m<sup>3</sup>
- Modulus of elasticity: 3500 to 7500 MPa
- Bending strength: 1 to 1.5 MPa

### RENDER PERFORMANCE AS PER EN 998-1 FINISHING

#### RENDER MORTAR USING CATEGORY CSII CR lime:

- Compression strength (BELLE ÉPOQUE Finition GM): CS II (1.5 to 5 N/mm<sup>2</sup>)
- Permeability to water vapour:  $\mu \leq 15$
- Thermal conductivity ( $\lambda$  10, dry): 0.76 W/m<sup>2</sup>K (tabulated value)
- Adherence/Rupt:  $\geq 0.2$  N/mm<sup>2</sup> A or B or C
- Water absorption (B.E. Finition) Wc2: < 0.20 kg/m<sup>2</sup>.min0.5
- Fire behaviour: A1 (non-combustible)

## MIXING, APPLICATION & CURING OVERVIEW



Mixing rate: 4.25 – 5.0 L clean water / 25kg bag.

- Mixing time: 3 to 7 mins
- Batch life time: 60 min. max.
- Curing time: 4 to 6 hrs
- Time between applications: 7 days
- Max. thickness per layer: 20 mm

**N.B.:** These values are estimates based upon standard laboratory or site testing. The preparation conditions, conditions of use, substrate type, site conditions etc. can significantly alter these values.

## POINTING / REPOINTING

**PRB BELLE ÉPOQUE SOUS ENDUIT** is also suitable for pointing of masonry and as a bedding mortar. You can also modify the appearance of **PRB BELLE ÉPOQUE SOUS ENDUIT** by adding materials such as: crushed bricks, crushed glass, shells or aggregates of different colours and textures. However, these additional aggregates or materials should not exceed 5% per 25 kg bag.

SCAN THE QR CODE BELOW  
TO FIND THE MATERIAL  
QUANTITY NEEDED



## Material calculations on the go.

Calculate the exact materials you need to get the job done. Wherever you are.

### 1. SUBSTRATE PREPARATION

- Substrates must be clean, sound, free of dust, stable and free from anything that may interfere with the adhesion of the material being applied, with voids and holes re-filled using the same material beforehand.
- Prepare the substrate using **PRB PRIMCHAUX PE** primer or wet but do not saturate the substrates ½ hour before application to leave a dampened surface before applying the render.
- During hot weather and/or dry or strong winds, to prevent the risk of early render dehydration, the substrate must be sprayed to saturation the day before application and wet again if necessary prior to application, to leave a dampened surface before applying the render.
- For full application guidance for a specific substrate, request a specification from PRB.

### 2. MORTAR PREPARATION

#### Mortar spraying pumps – Cement mixers



Mix **PRB BELLE ÉPOQUE FINITION** with 4.25 to 5.0 L clean water / 25 kg bag for 5 mins.

- The water dosage and mixing time must be as constant as possible to guarantee correct render consistency.

NB: Always check before commencing by producing a sample panel for approval.

### 3. SPRAY EQUIPMENT SETTINGS

#### Render pump

- Water pressure setting: 12 to 14 bars
- Mortar operating pressure:
- 16 to 24 bars
- Lance output flow rate: 14 to 18 L/min
- Spray nozzles (min. Ø): 12 mm

#### Spray pots

- Air pressure: 6 to 8 bars

#### Manual

- The application can be carried out by applying trowels of mortar with a highly elastic consistency and slightly overlapping one another.

### 4. RENDER BEAD ADHESION

- Adhere the render beads on dabs of **PRB BELLE ÉPOQUE FINITION** at maximum 300mm centres & level and line to suit or use the **PRB RENDER BEAD ADHESIVE**, if permitted (check on conservation and heritage projects).

### 5. APPLICATION AND FINISH

- **PRB BELLE ÉPOQUE FINITION** render also provides the possibility of altering the appearance through the addition of materials such as: crushed brick, crushed glass, seashells, different colours and different types of regional aggregate.
- However, these aggregates or materials must not exceed 5% per 25kg bag.
- **PRB BELLE ÉPOQUE FINITION** as a top coat render can be finished in a range of different types of finishes.

Apply the **PRB BELLE ÉPOQUE FINITION** in a one or two pass / coat operation to the required 10, 15 or 20 mm thickness or to a maximum thickness of 30mm. Beyond this thickness contact PRB. When exceeding 10 mm thick, as part of the application as a minimum, embed 500 x 300 mm diagonal stress patches using **PRB ORANGE MESH** or **PRB AVE MESH** across the corner of the openings to provide crack resistance. In addition, full or partial mesh may also be required.

#### SCRAPED FINISH

For a scraped finish apply an additional 2 – 3mm as this will be removed by the scraping process to give a finished thickness of 12, 15 or 20 mm. Rule and level the surface using a serrated Darby, straight edge or spatula, then smooth the surface and allow to harden for between 5 and 16 hours depending upon the temperature. Sometimes a longer period may be necessary depending on weather and background conditions. When sufficiently set, using an I bar, scrape the surface to remove high points and begin opening the surface of the render, then using a scraping float, scrape the surface in small circular motions, removing no more than 3 mm from the surface to remove any slight imperfections and to bring the total render application to the desired scraped finish, specified thickness and to leave an unblemished finish. After scraping, remove any surplus residue from the surface by brushing with a clean, soft bristle brush. Always stand back and examine the whole surface for blemishes and unevenness. Errors must be corrected at this stage as rectification later is unlikely to be achieved. Each elevation must be scraped at the same stage, as early scraping e.g. same day, will result in a slightly darker shade and later scraping e.g. next day, in a lighter shade.

### 5. APPLICATION AND FINISH (continued)

#### SPRAYED TEXTURED/ROUGHCAST FINISH:

Apply a minimum ruled and level 10, 13 or 18 mm base coat. Ensure the render is sufficiently dry but still in a green condition – 1 – 2 hours, then spray the textured coat to the desired effect from light Tyrolean to a Heavy Roughcast appearance to create a single monolithic coat. During the spraying process allow time between each build-up of the textured layer for the render to “semi-set” to avoid creating a slump effect in the finish. This building up process will also enable the creation of a heavy roughcast appearance.

#### FLOATED SMOOTH FINISHES:

**Trowel, Sponge or Bagged Finish** – Please note: The surface appearance of hand finished floated finishes, if overworked can create a surface slurry which can cause surface micro cracking and inconsistencies in the appearance, shade, and finish. Dark shades accentuate these appearances. This is not detrimental to the render finish.

Hand floated finishes will also tend to leave a variable surface appearance and generate shade differences which is part of the appeal of these types of finishes.

- A trowel finish is achieved by skimming the level and ruled surface with a wooden or plastic float to produce a smooth dense surface to the desired effect.
- A sponge finish is achieved by skimming the level and ruled surface with a sponge float to produce a slightly sanded surface to the desired effect.

- A bagged finish is achieved by rubbing a ball of damp hessian over the surface which produces patterns depending on the style of rubbing.
- Care must be taken not to let water run down the wall spoiling the finish by washing the colour out of the render.

#### ASHLAR DETAILING

When ashlar detailing is required allow additional render thickness to accommodate the depth of ashlar cut and carry out the process when the render is in its semi-cured state. It is recommended that a minimum depth from the substrate to the back of the ashlar cut should be no less than 12, 15 or 20 mm subject to application requirements.

**NOTE:** Ensure the mesh is deep enough not to be exposed during the ashlar cutting process.

To avoid surface cracks appearing, particularly when a smooth finish is being created, it is important to keep the render damp after the initial finishing by lightly mist spraying the surface with water using a garden sprayer of similar to control drying and prevent early surface hydration which can lead to surface micro cracking – do not overspray the surface causing runs – if this happens then apply a dry cloth over, to soak up the excess water. During hot sunny weather, this process may need to be carried out after application, at the end of the working day and the following day too. Until dry and hardened cover with hessian or mortar fleece to protect from drying winds, frost, strong sun and driving rain.

### HEALTH & SAFETY

- Contains lime.
- May produce an allergic reaction. Harmful if inhaled, irritating to eyes and skin. Wear suitable protective clothing, gloves and eye/face protection.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical help. After contact with skin, wash immediately with plenty of soap and water.
- Keep out of the reach of children.
- For further information, please read the Material Safety Data Sheet for this product.