

Casting Blend

PRODUCT DATASHEET

Product Description

A benchtop casting blend formulated specifically for the restoration and repair of external Roman Cement mouldings and details.

Mix Ratio, Binder & Aggregate

1:1 – sand : binder. The binder is Prompt Natural Cement. The aggregate is a blended sand being predominantly flint with a maximum aggregate size of 5mm. This blend comes pre-fibred for better tensile performance of any cast element.

Product Compatibility

Suitable for use with latex, silicone, or polyurethane rubber mould types, and compatible with release agents such as liquid soap, petroleum jelly, or most commercial release sprays.

Suitable for external and internal use.

Coverage

After mixing, a 25kg bag will produce approximately 14-14.5 litres of mortar.

Colour and Texture

As this product is produced using Prompt Natural Cement the final colour achieved will depend on the rate of drying and overall curing of the render in-situ. The faster it dries the more of the rusty-ochre colour will come to the surface, the slower it dries the greyer or more light tan the render becomes; we would recommend keeping your curing consistent to achieve as even a finish as possible. This product also contains a small amount of natural pigment to try and offset this colour variability and pull it closer to the original roman cement colour.

In particular we would recommend the cast pieces are placed in a shaded damp environment; Kept slightly moist for **at least 7 days**, ideally misted with water or covered with damp cloth.

Tempo

Tempo is the retarder which will need to be used in conjunction with this product. Without adding Tempo the render will set in somewhere around 90-120 seconds. Gauging Tempo should be done using the cap of the bottle; a common dose would be 5 capfuls per 25Kg bag of render, we do not recommend more than 10 capfuls per bag of render. Tempo should be added to the mixing water and allowed to dissolve before use.

Preparation, Mixing and Application

Ensure the work area is properly prepared. Ensure surfaces of moulds are clean and free of dust and other debris.

Setting times will vary considerably depending on temperature and weather conditions therefore it is advised to always test a small amount first and adjust the Tempo retarder according to the application. Visit www.thenaturalplastercompany.co.uk for our detailed Casting Blend user guide.

Gauge clean water with the desired amount of tempo retarder for the application required. **Ensure that the tempo is added to the water and allowed to dissolved before it is added to the Casting Blend.**

Mix small amounts at a time. Best mixed using a paddle mixer or plasterer's whisk. **Mix for no more than 3 minutes and** use immediately. Once set has begun do not re-mix.

Casting Process

1. **First coat (face coat)**
 - a. Brush or pour a thin slurry into the mould to fill fine details.
 - b. Work out trapped air bubbles with a brush or by vibrating the mould gently.
2. **Backing layers:**
 - a. Fill the mould in layers, tamping down lightly.
 - b. For larger mouldings, embed reinforcement (additional fibre glass strand , stainless mesh, or hemp fibre) midway for strength.
3. **Level the back:**
 - a. Strike off flush with the top edge of the mould.
 - b. Key up the back for installation.

Tips & Best Practices

- Always **pre-test your mix** in a small mould to check setting time and finish.
- Work quickly – natural cement hardens faster than Portland cement.
- Keep moulds clean and conditioned to extend their life.
- Store finished mouldings in a dry, ventilated place before installation

Storage & Packaging

Store under cover and off the ground and keep bags dry at all times. Use within four months of the date of manufacture, as indicated by the first five digits of the date code. The first three numbers indicate the day of the year (e.g. 035 is the 35th day of the year; the 4th of Feb) and the next two numbers are the year.

This product is supplied in 25kg polythene lined paper bags, palletised for shipping and handling. The packaging is a mixed material and should be recycled accordingly.

Also available as tonne bags for 3 Tonne or higher order quantities.

Health and Safety

RISK PHRASES: R36 / R37 / R38 / R43

- Avoid contact with skin and eyes.
- Contact with wet mortar may cause irritation, dermatitis and/or burns.
- Contact between lime powder and body fluid (sweat, eye fluid etc.) may cause skin burns and respiratory irritation, dermatitis or burns.

SAFETY PHRASES: S2 / S24/25 / S26 / S37

- Avoid eye and skin contact by wearing suitable eye protection, protective clothing and gloves.
- Avoid breathing dust.
- Keep out of reach of children.
- On contact with skin and/or eyes, rinse immediately with clean water and seek medical attention.

Declaration

The Natural Plaster Companies renders and plasters are manufactured and tested to the requirements of BS EN 998-1: 2016. This product will contain no Portland Cement.

Datasheet version 1.0, issued October 2025. More modern versions of this document will supersede this datasheet, with no exclusions.