

User Guide

Casting Mouldings in Silicone Moulds with Running Render Casting Blend

Introduction

Running Render Casting blend is a rapid setting mix of Natural Cement, coarse aggregates and pigments reinforced with fibrous strands used for the casting and re-producing of decorative cast elements for use in the restoration of historic facades.

The Natural Plaster Company Casting Blend is incredibly fast setting with an open working time of between 90 seconds and 5 minutes. The temperature and weather conditions also play a considerable role in the setting and work time of this product. This setting time can be extended and adjusted with the use of **Tempo retarder** (sold separately).

We have manufactured the Casting Blend without any retarder in the product itself to give the most flexibility within the material, in terms of its application, uses and seasonal temperature variations. In our extensive experience of using this Casting Blend the majority of smaller jobs can be undertaken without use of retarder, however for larger cast elements like decorative window heads enough working time must be allowed to complete the pour without the material flash setting in the middle of the work; this is achievable with the addition of Tempo retarder and adjusting it to suit the requirement.

Materials & Equipment

The following is a short list of materials and equipment we would recommend for your project.

- Running Render Casting Blend
- Potable Water
- Rubber moulds: latex, silicone, or polyurethane rubber
- Release agent: liquid soap, petroleum jelly, or commercial release spray
- Mixing tools: bucket, mixing paddle or trowel
- Brushes for mould coating
- Measuring scales or buckets
- Protective gear: gloves, mask, safety glasses

Preparing the Rubber Mould

Inspect the mould for dirt, damage, or old residue. Clean thoroughly. Support the mould (if flexible) with a rigid "mother mould" or box to prevent deformation. For Silicone moulds a spray of diluted washing up liquid works well for reducing air bubbles.

Mixing Running Render Casting blend

Running Render sets faster than modern cements, so work in small batches. Mixing notes are given below:

1. Slowly add water while mixing. Aim for a creamy, pourable paste.
2. Avoid over-watering (causes weakness and shrinkage).

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.

Setting & Demoulding

- Initial set: Running Render sets quickly (20-30 minutes depending on temperature with a dose of Tempo).
- Curing time in mould: Leave for at least an hour in the mould. The longer the stronger.
- Demould carefully: Peel rubber mould away slowly to avoid damaging details.

Curing & Finishing

For consistency in finish, we would provide the following guidance.

- Place cast pieces in a shaded, damp environment for curing.
 - Keep slightly moist for at least 7 days (mist with water or cover with damp cloth).
- Avoid direct sun or wind, which may cause cracking.
- After curing, trim edges, sand lightly, or patch imperfections if needed.
- Optional: Apply limewash, mineral paint.

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.

Safety Notes

- Always wear gloves, goggles, and a dust mask when handling Running Render.
- Wash skin immediately after contact.
- Store materials in a dry place, sealed against moisture.

☒ This method is widely used for restoration of heritage facades, cornices, and ornamental mouldings, since Running Render is Natural Cement based and has good flexibility and compatibility with historic materials. For further advice, please contact The Natural Plaster Company technical support team.