

CONDITION 10:

Prior to any re-rendering of the front elevation taking place, a specification for the external render to be used shall be submitted to and agreed in writing by the Local Planning Authority. The specification shall define:

- *The mortar mix,*
- *The number of coats and finish, including colour,*
- *Backing and edging materials,*
- *The relationship to existing finishes and openings.*

The works shall be carried out in accordance with the approved details.

Lime Rendering Specification:

General:

1. Before rendering the backing surface (existing brickwork) should be thoroughly wetted to control suction. If uneven suction is likely, then a splatter coat is to be applied.
2. Where work is to be undertaken externally, it should never be carried out in frosty conditions or where the temperature is likely to fall below 5 degree centigrade during the execution of the work or until the material has cured.
3. Protection should remain in place for as long as necessary. Ensure that the rate of drying is consistent and that strong draughts are excluded from the working area.
4. Undercoats should be left until 'green', protected by ventilated covers to ensure that the initial shrinkage is over before the next coat is applied. Tests for adhesion and strength must be made before a second coat is applied and the surface lightly sprayed to control suction immediately before application of subsequent coats.
5. At the corners, no beading should be used, the mortar can be worked on either side of the corner, pressing up and out from the corner to form a smooth corner.
6. No additional backing or edging materials are required.
7. The render shall be taken up to the corners, where the side elevations have not had the render removed. The cut of the existing render shall be 'V' to ensure the new front elevation render can be blended into this and held, even with anticipated shrinkage.
8. All existing openings have timber frame details/ architraves around them. The render should be taken up to these details and these should be used as stop beads for the render.

Materials:

1. All materials used shall comply with relevant British Standards in so far as these are applicable. Any proprietary materials shall be used strictly in accordance with manufacturers' recommendations. The recommendations for use and application contained in BS EN 13914-1:2016 'External Rendering' shall apply in so far as they are relevant. Materials shall be stored under dry clean conditions; bagged materials shall be kept sealed until required.
2. Lime: Shall comply with BS EN 459-1. To be Calbux 90 quicklime. This should be hot-mixed with the sand and water, in the correct ratio.
3. Sand: Shall comply with BS EN 13139:2002 for rendering mixes. Sands shall be clean and sharp, and those containing substantial quantities of loam or clay shall not be used. The sand should be a locally sourced sand, which is well graded.
4. Reinforcement: To be ox, cow, goat or horse hair (with lanolin content, not processed), clean and strong. The hair should be well separated before being mixed with the mortar. Hair should never be added to partially slaked lime or it will be broken or burnt. On mixing with coarse stuff, the contractor is to ensure that the hair is evenly distributed within the mass and is not allowed to tangle into lumps. Hair to be cut to approximately 50mm in length.
5. Water: Water is to be clean, obtained from main supply and free from salts. It should be stored in clean containers where necessary.

Mixes:

1. FIRST COAT: 3 Locally sourced sharp sand (Well graded 5mm size down) : 1 Calbux 90 quicklime with 3Kg of Hair per m3.
2. FINISHING COAT: 3 Locally sourced sharp sand (Well graded 2mm size down): 1 Calbux 90 quicklime.
3. A pre-mixed render, made using hot-mixing maybe used, if it meets the specification above.

Methodology:

1. FIRST COAT: When working on masonry surfaces the first coat of mortar should be applied by throwing or with a laying-on trowel on to a dampened but not wet background (ideally 10 - 15mm thick). The render coat should not be straightened. Tighten the entire surface in with a cross grained wood float. Key surface with a comb. Control the rate of drying out by misting the surface with clean water until all shrinkage has stopped and the mortar has hardened sufficiently to receive the second coat. Do not over-wet the surface.
2. FINISHING COAT: Apply with a laying-on trowel to a thickness of around 10mm. Tighten in with a cross grained wooden float, dampening as necessary as the set takes up. Form final finish by trowelling the surface with a wood float to provide a slightly

open and textured surface. A dead true surface is generally not required and some slight undulation to follow the contours of the wall behind is to be preferred.

3. Finishing coats should not be overworked. A slightly open texture is generally to be preferred.

Lime Wash Finish:

1. Lime wash is to be to the natural colour, no pigment is required.
2. Lime wash should ideally be made directly from the lime putty rather than from a supplier, to ensure a workable consistency.
3. MIXING:
 - 3.1. Allow to create lime wash in batches.
 - 3.2. Add around 3 trowel fulls of lime putty into a bucket with a few inches of water. The materials should be mixed well until a smooth paste. Water is then to be slowly added until the lime wash is at the consistency of single cream. The mix should then be sieved to ensure that any grit or larger lumps are taken out of the lime wash.
4. APPLICATION:
 - 4.1. Generally lime wash should be added fairly thinly with several applications.
 - 4.2. Ideally the freshly coated surface should have its first coat of lime wash just when the top coat is 'green' to provide good adhesion between the lime wash and the plaster.
 - 4.3. Allow to spray the area where lime wash is to be applied to ensure good adhesion. Do small areas at a time, to ensure they don't dry out before getting to the area.
 - 4.4. The lime wash should be worked into any cracks, but care should be taken not to build up the lime wash too quickly else it will craze as it dries.
 - 4.5. A minimum of 3 coats of lime wash should be applied. Each coat should be allowed to dry out before the next coat is applied. Before applying each coat the area should be sprayed.