

Ceiling/Wall Repair Method Statement

Where appropriate for repair:

REPAIR: With repair, cut the edges of any existing plaster to halfway of the nearest joist; angle the cut on the old plaster at 45 degrees so the new material is applied over the bevel holding the edge of the original plaster in place. Ensure that all laths are securely fixed, re-nail where necessary.

LATHS: Provide either oak or chestnut riven laths. The textured surface and exposed grain provides a better key. Thoroughly wet laths. To remove the absorption from the laths spray with "Westox RAP primer or similar" thoroughly wetting the laths top and bottom, also soak the exposed edges of the plaster around the repair with the primer to "kill" the suction.

a. Fix the lath at every fixing point (joist) using stainless steel fixings, such as nails, cup and screw, screw and washer or stainless steel brad nails. Make sure there is a 6mm – 10mm (3/8") gap between each lath to ensure the lime mix can squeeze through and hook onto the back of the laths.

b. **PREPARATION OF MATERIALS** Roughly mix the sand and lime together at the ratio of 3 parts sand to 1 part lime and 1 part of teased hair. (all parts are by volume and the same part measurement should be used for each component) Mix by placing 1 portion of lime into a mixer with water and the fibers followed by three portions of sand, tip out after turning over 6 or 7 times. Form a pile of the material until enough mortar has been mixed that is required for the render and float coats. Cover the pile with a plastic sheet and leave for a minimum of 14 days before using if the lime has not been previously aged. (All measuring should be with gauging boxes, not shovels)

c. **MORTAR.** Take 3 portions of the mixed material (e.g. 3 x 20 litres) this measure will consist of 60 litres of sand and 20 litres of lime (Lime mixes with the sand without increasing the bulk).

d. **LIME SET COAT** The basic components of a lime set coat is a reverse of the scratch and float coats, ie, 3 parts sand 1 part lime mortar (Coarse stuff) to 3 parts lime to 1 part sand, set coat (Fine stuff) adjustment might be required depending on the sand and 5 parts lime to 2 parts sand is often the required mix after good clean pit sand is passed through a 300 micron sieve. Mix the lime plaster in a clean mixing vessel using clean water, mix to a usable consistency and apply a scratch coat directly over the laths at a 45 degree angle to the laths so the plaster passes through the wire and laths curling over to form a key on the back of the laths, apply so approximately 5 to 8mm of the plaster is left on the underside of the laths, allow for initial set and scratch thoroughly ready for the following float coat. After the material has cured for several days mix fresh mortar and fill the area to be repaired or form screeds around the perimeter of the ceiling at the required finished level, if plastering a large area form box screeds to the perimeter screeds, fill between the screeds and rule and devil float to a flat keyed surface ready for the following set coat. If a lime set is preferred allow three or 4 days before applying the lime set over the float coat (depending on the drying conditions)

e. **SET COAT** In a suitable mixing vessel, place 3 portions of lime to 1 portion of sand, and mix to a usable consistency. Apply the mix to the float coat in an even coat at the approximate thickness of 3 to 4mm. After the initial application, lay the material flat and scour the surface with water and a wooden float to compact the material and prevent crazing. (If crazing occurs, increase the portion of sand to 1½ or 2 parts). When the material is well compacted, apply a 'laying in' coat tightly over the surface to fill any voids and finish with a steel trowel and water to a smooth even surface and leave ready for painting.