Method Statement

Lath and Plaster

The materials used are sawn oak laths, pre-batched lime putty and coarse washed sand ratio 1:2.5 containing a 2mm granulation down to fines, with hair or glass fibre entrained into the mix, for the two backing coats and the top coat will consist of pre-batched lime putty and fine washed sand with a granulation of maximum 1mm, down to fines in a ratio 1:1, containing no hair. Stainless steel fixings for the laths.

After the old lath and plaster has been removed from the joists, check all timbers are free from rot, insect activity and are generally sound. Use a brush to get rid of any residual materials and dust, then de-nail all timbers, disposing of the old nails in an appropriate manner. Now wet the laths, this helps to cut out the problem of warped laths when the wet plaster is applied. 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 gap between each lath to ensure the lime mix can squeeze through and hook onto the back of the laths. Fix every lath the same way until you come to fix the eighth lath, move this one over one joist, to create a staggered joint , this will help prevent long, continuous cracks from developing. Once the whole ceiling or wall is lathed it should be dampened about 10minutes prior to the application of the first coat, this gives time for any excess of water to run off and gives you time to knock up the lime mix. There shouldn’t be any droplets of water on the laths, as this will cause the plaster to slide across the laths rather than stick to them. When getting the first backing coat ready, be very aware of how much water you add to get it to a workable consistency, the mix already contains a lot of water so just a couple of cupfuls should be plenty. Add too much and even though it will squeeze through the laths it won’t take the weight of the plaster on the face of the lath, and this will drop. Excess water and thickness, will lead to excessive shrinkage and could lead to failure of the scratch coat.

Once the scratch coat has been applied, leave to prick up for a couple of hours and then scratch diagonally across the laths both ways to make a diamond pattern, making sure not to go through the scratch coat with the scratcher.

Despite what different people say, small diamonds are best, just because there is plenty of key for the next coat to bond with. This first coat should be no thicker than 8mm off the face of the lath. Once applied, leave this coat to dry until green hard, not quite totally hard, but hard enough to take the pressure of the next coat being applied ,without pushing the first coat through the lath. This could be 5-10days in summer with good air movement and 15-20 days in winter.

Once the scratch coat has dried sufficiently, dampen down with a mist spray until there is a colour change to the scratch coat, but not enough for droplets to form, you can still bring the scratch coat back, even at this stage, so be careful. The application of the second coat, the floating coat, follows the same procedure as the first coat, keeping the thickness to no more than 8-9mm, otherwise it will be too much to screed and most of the second coat will end on the floor. Again, once applied, leave for an hour before devil floating. The drying time for this coat should be less than that of the first coat.

Now the floating coat is ready for the top coat, once it has been dampened, as before. The top coat will probably need a cup of water per bucket, just to make it creamy. Whisk the mix for a few minutes, using a drill. When ready apply the top coat in two applications, wet on wet, leaving upto 20mins between applications. This gives the ceiling time to pull some moisture out of the first coat, but leaving it damp enough to bond with the second application, but the suction on the second application should be just right to work the plaster. If you put the second straight on top of the first application it could be hours before you will be able to get a decent finish. If the ceiling pulls in a little too hard, use a wet, cross grain float to scour the ceiling. If the timings right you can flatten with a steel trowel and, as the ceiling pulls in, get a finish with a steel trowel as well