



### **Lath & Plaster**

Riven/Split laths have been used for many years to receive plaster to give a homogenous and continuous finish to walls and ceilings. More recently, in the last 100 years or so, sawn laths were also used for the same purpose although they are rarely seen in high quality ceiling work as they are considered significantly inferior to the Riven or Split versions. Chestnut or Oak riven laths are available from Stoneware Studios and are considered the highest quality available and are suitable for old ceiling repairs and new lath and plaster work. They are strong, flexible and twisted with an uneven thickness and texture; all which makes them an ideal material to receive plaster.

Soaking wood laths in water or lime-water before fixing will assist slow drying-out of the plaster and will give a stronger key. It also, most importantly, will help to reduce the risk of the laths from splitting when nailed.

Laths should be set out approximately 8-10mm apart to allow for the plaster to pass between them, thus forming a nib behind the lath to anchor the plaster in place. A variety of nails can be used from the traditional hand-made shank to modern psvtd slab nails.

Laths should be counter lathed if timber grounds are 75mm or wider. Care should be taken to make sure there is always space behind the lath for nibs to form. Laths should not be but-jointed. A small space should be left at the end of each lath to allow for any potential expansion. Joints should be staggered every ten to twelve laths to avoid long runs of joints.

Almost all lathed ceilings in the past were executed with high calcium lime putty plasters. Today, these are still the recommended material, or a weak NHL2, in certain circumstances may be appropriate.

Probably the most critical ingredient in the mortar mix is hair or fibre which should be added to the mortar at a ratio of no less than 5kgs per cubic metre of mortar. Natural animal hair needs to be teased and worked into the plaster to avoid it clumping.

#### Disclaimer

Although we have taken great care to ensure that this information and advice is correct, we respectfully suggest that you take further advice to take into account site specific conditions. Therefore, we cannot accept any responsibility for any loss or damage in carrying out work using these guidelines.

Modern building fibres are not in keeping with best conservation practice but, in certain circumstances, they can be a suitable substitute for hair. Un-haired plasters are not suitable for lath and plaster work as the nibs are likely to detach from the main body of the plaster and overall de-bonding from the laths can occur.

**Mixes for Traditional Plaster on Laths:**

<b>INTERNAL PLASTER ONTO RIVEN OAK or CHESTNUT LATH Partitions and Ceilings</b>						
<b>COAT</b>	<b>MIX (SAND : Lime)</b>	<b>Lime</b>	<b>Hair or Fibre ADDED</b>	<b>SAND TYPE</b>	<b>APPROX. COAT THICKNESS</b>	<b>COMMENTS</b>
1 <sup>st</sup> Coat SCRATCH (Pricking up Coat)	2.5 : 1	NHL2 or Lime Putty	YES	WASHED, SHARP and well graded 5mm down	10-12mm	MAN MADE FIBRES or ANIMAL HAIR added for extra tensile strength and reduced shrinkage. This coat should be layed on diagonally to the laths and partially squeezed through laths to form nibs behind. This coat is scratched to a heavy diamond pattern.
2 <sup>nd</sup> Coat FLOAT	3 : 1	NHL2 or Lime Putty	YES	WASHED, SHARP and well graded 3mm down	8-10mm	MAN MADE FIBRES or ANIMAL HAIR added for extra tensile strength and reduced shrinkage. This coat is lightly scratched with a devil float.
FINISH COAT	PRE MIXED " SETTING STUFF"	Mature Lime putty binder	No	Silica Sand combination	3MM	A combination of SILICA SAND & AGED LIME PUTTY 20L (37kg) BUCKETS mixed through roller pan mixer and provided ready to use. Finish with scouring float and steel trowel to achieve SMOOTH FINISH.

Disclaimer

Although we have taken great care to ensure that this information and advice is correct, we respectfully suggest that you take further advice to take into account site specific conditions. Therefore, we cannot accept any responsibility for any loss or damage in carrying out work using these guidelines.