

# Technical advice: Plastering onto Laths

Lime plasters were frequently plastered onto lath backgrounds in the past, and this is still carried out today when making repairs or in some new-build situations.

Plastering on laths generally requires more skill and is slower than any other type of plastering, but if done correctly can give a very durable and high quality finish.

## 1. Types of Laths

Wooden lath: Wooden laths should be stored dry and should not be green when fixed. Riven (split) laths are stronger and more flexible than sawn. Wooden laths must be staggered rather than fixed with their ends in straight lines.

Metal Lath: Various types of metal laths are available, also known as EML (Expanded Metal Lath). You must use a lath designed for mineral renders, not gypsum plasters – consult the manufacturer. Be aware that they have a top and bottom and must be fixed the right way up. Rib lath is stiffer and generally superior to other types, though all are more difficult to plaster onto than wooden lath.

Plastic: Proprietary systems are also available and are suitable only for strongly setting plasters and renders, such as Lathrend

Reed Board: Can be used as a natural alternative to metal lath.

## 2. Preparation of the Laths

Ensure laths are correctly fixed according to the manufacturer's instructions. Old wooden laths should be thoroughly cleaned, with all loose mortar and dust brushed off. Damp wooden laths the day before application and again a few hours before hand.

## 3. Fixing the laths

Metal and plastic laths should be fitted in accordance with the manufactures instructions, do not use more than one type of metal when fixing the lath e.g stainless metal laths should be fixed with stainless metal screws and washers. Wooden lath should be fixed with an around a 7-9mm gap between them and 3mm gap between ends. Joints are usually staggered every 12<sup>th</sup> lath.

## 4. Product Selection

*Please note, for high vibration situations (e.g. single joist ceilings) additional fibre reinforcement will need to be added to pre-mixed plasters before use. Trials are strongly recommended before any product is chosen.*

Wooden Lath: **Lime Green: Ultra** is suitable for most situations, particularly externally. Alternatively, **Lime Green Non-Hydraulic Lime Plasters** may be used. These have a significantly slower set. On ceilings **Lime Green Non-Hydraulic Lime Plasters** can be gauged

with pure Plaster of Paris. Gauging with Plaster of Paris is traditional in some areas of the country and makes the job significantly easier and quicker, though reduces the breathability, water resistance and flexibility of the plaster somewhat.

Metal Lath: Generally, as above. Metal lath has sharp edges, and therefore is far harder to plaster onto successfully with non-hydraulic lime plasters. Gauging with Plaster of Paris will almost certainly be necessary if using **Lime Green Non-Hydraulic Plasters**.

Plastic Lath: A hard setting render will be required, such as undercoat **Lime Green Forte**.

Reed Board: As for Wooden lath (see above)

## 5. Plastering

Good quality work on laths generally requires 3 coats. Due to the huge variations in lath sizing and design, *trials must always be undertaken to ensure the compatibility of plaster with the lath system.*

Plaster or render should always be mixed to a stiff, plastic consistency. It should not be so wet that it runs or drips off the trowel

### First Coat

On wooden laths the plaster should be applied in a diagonal direction to the laths ensuring the plaster pushes through the gaps in the lath fully, so a “nib” forms on the other side. The front of the lath is covered by approx. 8mm. Other work likely to cause vibrations must not be carried out until the first coat has set. This coat must be well scratched once the plaster has set, but while it is still green with a diamond pattern 45° to the laths. For curing / setting times, see relevant datasheets.

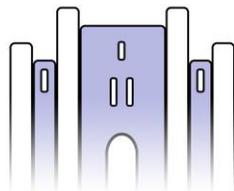
### Second Coat

A floating coat, which will add approx. 10 to 12mm in thickness to the first. Scratch while green with a devil or nail float.

### Final Coat

A thin skim of fine lime plaster will give the desired texture and smoothness, often no more than 3mm thick. Adequate time between coats must be left, normally around 1 week. Recommended products are **Non-hydraulic “Fine Stuff”** or **Lime Green Solo**.

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