



### Description

Tŷ-Mawr Fat Lime Hemp Plasters are made from a high calcium lime (also known as a fat/air/putty or non hydraulic lime) blended with the hemp fibres. The Tŷ-Mawr product is entirely made from British materials. It requires exposure to Carbon Dioxide in the presence of moisture to harden, however, it can be applied in thicker coats than conventional lime plasters. It has good flexural strength and is breathable, which makes it suitable for use in the restoration of old 'solid wall' construction buildings as well as ecological new builds, it also provides additional insulation, is easier to use and is ideal for patching and improving air tightness. It should not be used in damp situations e.g. basements or on wet substrates. Good practice should be taken to ensure that the building structure is 'breathing' e.g. removal of external cement renders/plastic paints etc.

Time needs to be given for previously wet walls to dry out if cementitious renders have been removed.

### Please note

The application of lime plaster is more involved than using conventional plaster. It is highly recommended to use a plasterer experienced in the use of lime plasters or at the very least some practical experience is essential e.g. by attending a lime course, as it is not possible to cover every point in detail here. However, should you experience difficulties in applying our products after following the advice given, please contact our Product Support Team at [tymawr@lime.org.uk](mailto:tymawr@lime.org.uk).

### Preparing the mix

- The plaster needs to be 'knocked-up' - a process of chopping, beating and turning which will release some water. Water should be added cautiously to make a workable mix.
- A bell mixer is the ideal way to 'knock-up' the lime hemp plaster. It should be left turning for long enough to achieve a suitable consistency (20-30 minutes). Smaller quantities can be 'knocked-up' with a whisk and bucket if no mixer is available. If preparing the fine hemp & superfine 50/50 mix (by volume), empty 1 bag of each in to the mixer and "knock-up" until desired workability and finish is required.



Assessing the workability of the lime hemp plaster and deciding whether or not to add water



### Preparing the surface

- Hemp plaster should not be applied to walls that have a problem with damp. This can dramatically extend the setting times, especially during winter months. If in doubt refer to manufacturer for guidance
- Sometimes there is no need for extensive pre-wetting of backgrounds (but please assess first) before applying lime hemp plasters as they hold more water than standard lime plasters – just a mist down should suffice. The suction created by differences in background moisture will help. Onto high absorption backgrounds these will definitely need pre-wetting.
- If CeWood wood wool boards or wood-fibre boards are being used as the background, they do not require damping down. N.B. Do not put scrim or mesh directly onto the boards.





## Lime Hemp Plaster Selection

| Building Material                                         | Site Type                   | Suggest Base Coat/<br>Levelling Coat | Suggest Build Up            | Suggested Top Coat - please<br>note the top coat should not be strong-<br>er than the base coat | Suggest<br>Build Up |
|-----------------------------------------------------------|-----------------------------|--------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------|---------------------|
| Cob, Rammed Earth,<br>Strawbale                           | Internal                    | Lime Hemp Plaster (medium)           | 1 x 15mm                    | Lime Hemp Plaster (fine) or<br>Superfine 50:50 mix                                              | 1 x 6mm**           |
| Lath, Reed Mat, Reed<br>Board                             | Internal                    | Lime Hemp Plaster (medium)           | 1 x 15mm                    | Lime Hemp Plaster (fine) or<br>Superfine 50:50 mix                                              | 1 x 6mm**           |
| CeWood Wood Wool<br>Boards                                | Internal                    | Lime Hemp Plaster (fine)             | 1 x 6mm                     | Lime Hemp Plaster (fine)                                                                        | 1 x 6mm**           |
|                                                           | Ceilings<br>Heavy<br>Stress | Lime Hemp Plaster (fine)<br>(meshed) | 1 x 6mm                     | Lime Hemp Plaster (fine)                                                                        | 1 x 6mm**           |
|                                                           | Light Stress                | Lime Hemp Plaster (fine)             |                             |                                                                                                 |                     |
| Woodfibre Board                                           | Internal                    | Lime Hemp Plaster (fine)             | 1 x 6mm                     | Lime Hemp Plaster (fine)                                                                        | 1 x 6mm**           |
| Soft Stone, Brick                                         | Internal                    | Lime Hemp Plaster (medium)           | 1 x 15mm-25mm <sup>00</sup> | Lime Hemp Plaster (fine)                                                                        | 1 x 6mm**           |
| Hard Stone, Hard<br>Engineering Brick,<br>Concrete Blocks | Internal                    | Lime Hemp Plaster (medium)           | 1 x 15mm-25mm               | Lime Hemp Plaster (fine)                                                                        | 1 x 6mm**           |
| Insulation Blocks*                                        | Internal                    | Lime Hemp Plaster (medium)           | 1 x 10mm-15mm               | Lime Hemp Plaster (fine)                                                                        | 1 x 6mm**           |

• May require more coats due to waviness of bales.

<sup>00</sup> Depending on suction Could be greater on well keyed high suction backgrounds.

\*\* For a smoother finish, a Lime Top Coat Plaster can be applied in 1 x 3mm coat.

\* Insulation blocks have very high suction, be careful to control the suction. N.B. Drying times will be extended with thickness.

## Application of lime hemp plaster

- Lime hemp plaster is suitable for base coats, dubbing-out and textured top coats.
- Unlike standard lime plasters, lime hemp plasters can be applied in single coats 15-25mm thick (thickness will depend on the substrate and application, see above, remember, the thicker the coat, the slower the drying).
- A dry premix is now available for more extreme conditions e.g. if the substrate is damp, during the winter months, please seek advice and see notes below.
- Lay on and trowel up with a steel trowel.
- Wet the surface of the plaster before working it over with trowels or floats, by splashing with water. Over-wetting should be avoided.
- Feather edge and soft brush the base coat to give a key then apply a top coat of fine lime hemp plaster at 6mm
- For a smoother finish Top Coat (internal) Plaster can be gauged into Lime Hemp Plaster (fine) in any proportion from 1 to 100 % by volume. Blending these together also helps when plastering ceilings as it creates a "stickier" mix."
- It is advisable that test panels are made to ensure the desired finish is achieved prior to the works commencing.
- Following good practise, this should be applied before the base coat is completely hard "
- 10cm wide jute scrim should be trowelled into the basecoat Lime Hemp Plaster at corners or at wall/ceilings junctions. This will help counteract shrinkage in these areas.
- After 3-4 weeks, it is possible to finish the plaster with a limewash or breathable paint if required.



## Application on ceilings

- For ceilings (heavy stress), onto 25mm CeWood wood wool boards, it is best to apply two 6mm coats of fine grade lime hemp plaster, followed by an optional 3mm top coat plaster to achieve a smooth, flat finish if required. Joints between the boards and other areas of potential stress, such as the transition to the walls or across the corners of window openings, should be reinforced with jute scrim embedded within the first coat of Hemp Lime.
- For ceilings (light stress) onto 25mm CeWood wood wool boards, apply 6mm coat of the fine grade lime hemp plaster, followed by a 6mm coat of fine grade lime hemp plaster or 3mm Finish Plaster.



### Lime Hemp Plaster Selection

- Lime hemp plasters hold more moisture than sand/glass lime plasters and therefore do not require as much tending.
- It can take anything from a week, a month or more to completely dry depending upon the substrate, thickness of application, wetness of material and the environmental conditions.
- Monitor new work - as much care needs to be provided to encourage drying with lime hemp as to protecting against rapid drying.
- To encourage drying - good ventilation is vital and possibly the gentle use of dehumidifiers, blowers and/or gentle heat (please consult manufacturer before using). Care should be taken in winter months as drying is slower.
- To slow drying down - gentle spraying may be required

### Please note

Failure to provide adequate ventilation can lead to temporary mould growth whilst carbonation is taking place. Immediate action should be taken to remedy this situation. Call 01874 611350.

### Storage

- Store airtight, dry and frost-free.
- Premixed lime hemp plaster will become hard over time and require more 'knocking-up', therefore, use as soon as possible after purchase.
- Use within 4 weeks of purchase.

### After care

Your finished plaster will care for your building for years to come as well as helping to control the humidity of the internal environment. It will give a beautiful finish that no 'conventional' plaster can replicate. We highly recommend that if you paint it, that you should finish it with a 'breathable' and preferably a natural paint, your choice will depend on the level of durability, required vapour control and the desired aesthetic.

### Approximate Coverage Rates

#### 20kg Bags

1m<sup>2</sup> at 15mm  
1.6m<sup>2</sup> at 9mm  
2.5m<sup>2</sup> at 6mm

#### 1 Tonne Bags

50m<sup>2</sup> at 15mm  
80m<sup>2</sup> at 9mm  
125m<sup>2</sup> at 6mm

For further information about the whole subject and illustrated diagrams of lime plastering and pointing techniques, see *The Lime Handbook* now available to order on [www.lime.org.uk](http://www.lime.org.uk)

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### Please note

Please refer to specific manufacturer's instructions for detailed notes on plastering and rendering with lime hemp plaster onto different substrates.

### Health and Safety Information



#### Warning

**Skin Irritation 2 H315** - Causes skin irritation  
**STOT SE 3 H335** - May cause respiratory problems



#### Danger

**Eye Damage 1 H318** - Causes serious eye damage

#### Precautionary Statements

**P102** Keep out of reach of children

**P280** Wear protective gloves, eye protection/face mask.

**P305 + P351 + P310** If in eyes rinse cautiously with water for several minutes and immediately get medical assistance.

**P352 + P352** If on skin, wash affected area part immediately with plenty of soap and water.