



**Manufacture and retailer
of Hot Lime Mortar and Lime Insulation**

Eden Lime Insulation Mixing Instructions

Health and Safety Info:

Always wear safety glasses whilst working with lime materials and products, if you do get any splashes in your eyes use eye wash, if this doesn't solve it go to A&E.

Preparation of the Wall:

The walls need to be clean of dust/debris, old plaster taken off back to the stone. If there are any holes they can be filled in with stones and lime mortar, then left to dry before the first layer of insulation plaster is applied. On the day of applying the insulating plaster the walls should be given a very good soaking down, once the drips have stopped, the first layer can then be applied. If the stone is porous, the walls should be soaked the previous day as well as doing just before start of work.

Mixing Procedure:

The 3 materials and the water should be measured out by volume with the aid of a bucket/s, as long as they are of the same size. It has been found to be preferable to use a forced action mixer, such as a baron, but belle mixers will work, but they tend to ball the materials rather than going through the mix, mixing in a belle mixer is a slow process. Be very careful with a belle mixer on splashback. If only making smaller quantities people can use an industrial whisk but make sure the materials are mixed in a strong rubber tub, it will melt a rhino/plastic bucket.

It is important to make sure the buckets are filled to the full level. Once the water has been added the quick lime will react and heat will be generated, work carefully. Give a thorough mix as it needs to slake all the way through, this will help prevent shrinkage later on as well as not pinging off the wall.

Mixing Proportions:

- 2 x Perlite
- 1 x Coarse hemp
- 3/4 Quick lime
- Pozzolan if required @5% of the volume of quick lime, generally only used in cold damp conditions
- Water as required



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Applying the Plaster Backing Coats:

Depending on the stone and how rough/smooth the stone is, a wet mix can be harled on initially to obtain a better key for the next coat. If so make the harling coat quite wet, then throw it onto the wall so at least 90% of the wall is covered, then leave it for a few days before applying the first 25mm layer.

The plaster can be applied whilst still hot, most people use a steel float but it can be done using a harling trowel. The main priority is to use a bit of force so it gets good compaction.

The length of hemp determines how thick the plaster can be applied, it has been known to apply 30mm in one coat, but generally people tend to put the layers on in 25 mm layers.

The first layer can be left quite rough, but go over it with a float, and scratch with a piece of wood. Generally the plaster is left for 1 week or longer depending on drying conditions, a little heat can be on in the room, but not too much.

Once the first layer is dry (turned white) the second layer can be applied, before applying the second layer the first coat should be wetted down before the second coat is applied.

If applying the insulated skim coat, leave the second coat as an open pore texture so it is a good key for top coat. If using a standard lime skim coat, the second coat will need to be left a bit smoother.

The skim coat can be applied once the backing coats are fairly dry but not fully dried out, otherwise this is when you can get shrinkage in the skim coat.

The Insulated Skim Coat:

The skim coat is normally done around 1 week after the backing coats have been finished, this could be the case in the summer, but expect it to be longer in the winter colder months.

Mixing Proportions:

- 1 x Nosterfield sand
- 1 x Perlite
- 1 x Fine hemp
- 0.7 x Quick lime
- Water as required

It is advantageous to make the skim coat one day then put it on the following day when it is cold, it will just need knocking back up again and a little water adding.



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Give the materials a good mix as before, damp the wall down before applying the skim coat. The skim coat is put on at approx 7mm thick with a float trowel, some customers prefer a steel float finish, whilst others have a sponge finish.

Paint:

Remember to use a breathable paint like limewash or Keim paint.