

# FACTSHEET REPOINTING

## Anonymised reprint of 2005-2012 forum discussions

Calling all masons, artisans, or those with repointing experience.

Following a discussion elsewhere on repointing, and my bemoaning the fact that we lack a good fact-sheet on this popular subject, Barry has kindly put together a document as a starting point.

I would be most grateful if people could look through it, and then make constructive suggestions for amendments, additions, tips, etc that will ensure that the fact-sheet is as accurate, and applicable to the widest scope of implementation, as possible.

When all comments have been logged, I'll attempt to incorporate them into a full fact-sheet on this much-sought-after subject.

### Pointing stone walls.

These are of course only my views based on very limited experience (didn't do much pointing as a mechanical engineer) but I've attempted to write down the basic reasons, methods and materials that are used for pointing old stone walls. Naturally other people will have their own preferences and ideas but at least it puts down a basis to work from, comment on etc. I am sure there will be bits that require adding but at least it gives you a starting point.

### Understanding.

I understand that lime and cement are at opposite ends of the spectrum as regards to water ingress or porosity. Cement at the one end is impervious to water whereas lime, at the other end, allows water to pass through to some extent and therefore allows the stone to breathe. Water is absorbed into the stonework from the ground as well as from the elements. (rain, etc.) With a lime-based joint, the water can escape through the joint whereas with a cement-based joint, the water can only escape through the actual stone.

This 'breathing' of the joint causes the joint to erode over the years and re-pointing the joint will then be required.

### **There are basically 2 types of lime**

1. Non-hydraulic lime (*aérienne*), which sets over a period of time on contact with air.
2. Hydraulic lime, which sets on contact with water.

Available lime (free lime) in the product is important for workability, self-healing properties and elasticity. It will also contribute to final strength. Free lime will allow some tolerance for initial structural movements. Natural hydraulic lime mortars will therefore offer adequate strength with enough plasticity to accept slight load shifts.

Natural hydraulic lime (NHL) is the most common type sold in the DIY shops.

They are given an NHL number and have a corresponding level of free lime.

NHL 5 has a free lime quantity of 3%

NHL 3,5 has a free lime quantity of 9%

NHL 2 has a free lime quantity of 15%

When non-hydraulic lime is mixed with water, lime putty is formed. If you have to make any, always add the lime to the water slowly. Never add water to the lime as this can cause the water to boil.

Using a mixture of cement, lime and sand is called 'gauging'. White cement (ciment blanc) is the type used.

The reason why cement is added probably stems back to when cement was introduced. Because the non-hydraulic limes took several days or more to set, cement was added to obtain a faster 'set' and in effect achieve the characteristics of the hydraulic lime available today.

However, it must be borne in mind that the mixture should be slightly softer and more porous than the stone so that any problems that may occur such as cracks will only affect the joints themselves which can be re-made, and not the actual stone work.

I live in an area where the golden stone is 'soft' and consequently only use lime and sand.

If the house was made of say granite, very hard and relatively water resistant, then perhaps some cement could be added as it would not affect the wall's capabilities to breathe.

I believe a gauged mixture of 1 cement, 3 lime and 12 sand (1:3:12) would be a reasonable mix in this case.

### **Products.**

Lafarge make a number of limes such as Crualys, Chaux Blanche, Tradifarge, Frescalys and Parex.

Crualys NHL 2, is a Hydraulic lime. It is especially intended for use on old buildings for mortar, jointing and rendering.

Chaux Blanche NHL 3.5, is also a hydraulic lime used for jointing.

Tradifarge NHL 5, another hydraulic lime, is used for making mortar for block work.

Frescalys is an aerienne type lime and is used for lime washes (or whitewash as I used to call it.)

Parex type Monexal and Monorex are a cement, lime, flint and sand mixture used for rendering mortars.

I understand that a ratio of 1 lime to 3 sand is about the correct mix for jointing. Too much lime will cause the lime to be washed out and stain the stone work, possibly causing frost damage.

Too much sand and the mixture will not set correctly.

Personally, I use the Crualys and have found good results with a mixture nearer to a 1:4 sand mix.

### **Preparation.**

Wear good gloves whilst cleaning out the old mortar.

Raking out the old mortar is a real dusty job and it helps if you spray the area with water first using a garden sprayer.

Allow this to soak in and then rake out the loose mortar to at least a depth of twice the joint width.

If the mortar is really old and crumbly, keep raking it out until you reach a reasonably firm surface. I use an 8" flat blade screwdriver and have been in to full depth in several places.

Clean out any loose remains etc and then spray again so that the stone is damp.

If the holes are large, then start to find small stones that will fit into the crevices and place them in a handy position.

Mix or 'knock up' as builders say, a bucketful of dry mortar in the correct ratio. Ensure the two parts are really mixed together.

Add water and mix until a pliable mixture is obtained. The more you mix it, the better the consistency and the easier it is to apply.

Spray the joints and wall again and then apply the mortar.

Using a hawk board and a pointing spatula, push the mix firmly into the joints.

For the larger holes, apply some mortar, then push a stone in and then apply more mortar.

Fill the joint until it is slightly under flush by about 5mm. It doesn't need to be struck at an angle as it is not intended to shed water like a cement joint.

Leave this for about 20 minutes and then go over it with the spatula to achieve a good finish.

After about 3 hours (your own experience will dictate this amount of time) brush the joints to clear any smears off the stone work and to improve the contact between the edges of the stones and the mortar. Brushing too soon will put brush marks in the mortar and brushing too late will prove to be hard work.

Hope this is of some use.

My total lack of experience means I cannot offer much in the way of facts in the sheet. However, it might help to give you the questions I have after reading the sheet.

The *Chaux Blanc* has instructions for different Sand/Chaux Blanc mixtures (for different applications) on the sack. All measurements are number of buckets of sand per sack of Chaux Blanc. I have a few sacks around, but instructions are in French so it probably would not help the fact sheet much.

Does Chaux Blanc contain any cement. It seems to set in a reasonable timescale, etc.

I'm a complete amateur and have loads of problems getting

cement/chaux/anything to stick to walls (e.g. when plastering them). I've done the water spraying, etc. but still have problems. I was once told in the UK to add washing-up liquid. Don't know if this helps or not (or if there are other tricks or if failing to stick means too dry/wet).

*Chaux blanc* does not contain cement it is just lime. Tradifarge do do a cement/lime mix that we have used successfully internally and externally. Though in the colder weather it takes a little longer to go off and slows down your work.

Pointing is a long job and you need to brush your joints before they set with a soft hand brush to take away an excess material.

**ALSO** when dealing with Lime based products – wear gloves, face masks and goggles – cement and lime can cause burns and lime if ingested will make you proper poorly.

If you have trouble using trowels, then do what our friend did and point your walls with your hands, wearing marigold gloves for protection – you get an excellent finish (after brushing down – can get into small crevices and don't lose so much mix on the floor.

Hope this helps

I posted this before in relation to pointing interior walls – hope it is of some assistance

1. Sprayed the walls lightly with water to keep the dust down.
2. With wire brushes scraped out all loose and excess debris and general dirt, cobwebs you name it. This was quite hard work – you need to buy good wire brushes because the cheap ones wear out. Better to have too many than too few – nothing more frustrating than not being able to continue because you have no equipment. We wore gloves, dust masks, and goggles although the goggles tended to steam up.
3. I went to the local Bricomarche and got sand which was basically builders sand (and the only one they had) and lime (chaux blanc). This was mixed approx 3:1, Sand:Lime. I bought a wheel barrow (about €30) and used this for mixing – I would recommend this because you can move it round and it is not at ground level. The mixing is a bit of a knack but you tend to get a feel for what is the right consistency ie not too thick not too runny. Used a combination of a shovel and a large trowel to mix. Then put a shovel of this onto a hawk and slap it into the gaps with trowel. (a hawk is flat board with a handle underneath – you can make them yourself from old wood). When it comes to the trowel I would recommend you purchase what is called a “langue du chat” ie a cats tongue which is a long, light, narrow trowel with a rounded end readily available in the Bricomarche. When you are throwing it onto the wall my advice is not to be sparing – what falls on the ground you can gather up and put back into the mix
4. When the mix has started to dry out after a couple of hours start to brush back with your wire brush to expose the stones. Again you will get a feel for what is the right amount of pressure to apply without undoing all your work. Again most of what you brush off can be put back in the mix.

Thanks for these contributions. Please keep your pointing tips, instructions, and advice coming.

My recommended mix would be three parts soft sand one part sharp sand one part cement also if you like you can add a colouriser. use fairly dry as so as not to stain the stone. also add a very little fairy liquid and you will find your mix more pliable. I have pointed many many yards of crazy paving in my time and find this method the best. Peter.

Hi all, a bit late to your articles but here we are. If you have an older property, you must add lime to the mix. Older properties were built using lime only. They are still standing now! Reason? The lime used to let the building move slightly yet still retain its strength. If you use only sand and cement, the building will not be able to move so easily, thus cracks will appear. In the late 80's and early 90's the building trade used mixes that were too strong and therefore the bricks or blocks broke instead of the mortar joints. Hope this is not teaching any of you to suck eggs!

There's a British government factsheet available at

<http://www.mineralsuk.com/britmin/mpfhydrauliclimes.pdf>

I came across it when trying to find out more about NHL 3.5z. The addition of the letter z confused me. Point P in Prayssac only had the z version available this morning so I thought I'd check it out. Seems that the z denotes the addition of pozzolanic material for greater strength.

i had a great deal of difficulty getting the mortar to stick, i thought afterwards that the cement i used had no plasticiser in it as walcrete would have in uk, so unless anyone knows if you can buy a plasticiser i will take a can of febmix with me on my next trip, washing up liquid has a detrimental effect on the mortar's strength and was always frowned upon when i was building (20 years ago) hope this helps.

I have found using a rotary hammer drill with a "burnt out" masonry drill – (we all have one of these which the tungsten tips are missing in our boxes don't we)? ideal for removing old chaux / mud etc from the gaps between stones in a wall. GOGGLES ARE ESSENTIAL FOR THIS as bits of old chaux fly out at high speeds.

As regards to rendering – I use the "chuck it at it" method – using my hands (heavy duty gloves) to direct the chaux where it's needed. Yes this is messy, but the chaux goes deep in the joints.

The next morning I brush away the excess chaux using a wire brush. If the chaux is getting hard I will use a rotary wire brush (GOGGLES ESSENTIAL).

Tip. If you clean the area below the wall and/or place a sheet there to catch the

brushed off excess chaux – this excess chaux can be used again to fill in the odd hole etc, by re-hydrating it with water!

My mix is 10 parts sharp / river sand, 3 parts chaux and 1 part white cement – the latter hastens the drying process.

Sorry I forgot to say that before I start rendering I water the wall and joints (old chaux and mud) using my large garden sprayer.

For raking out the joints, use a small length of copper tubing ( 2 foot) with a slight bend on one end (for an handle) and flatten the other end about an inch or so from the end. After the a while, the end will “round off” and you have the perfect joint tool.

A bit late on this one .. I was speaking to a Welsh stone mason on my last trip over to France and was talking about pointing. He closely described Marks method, pushing it in with a large pair of the thickest rubber gloves you can find, but it was the mixture that he said was important.

He said you should use a mixture that when you put it together to form a ball in your hands, it should only just stay together. This way he reckoned the mix would not stain any of the stone-work. I think he said that he wetted it after with a sprayer.

He also said that he did not believe in lime mixes, he used 3:1 sand cement ...? His argument being that they only used lime in the old days because that is all they had to hand ...? I tend not to agree with this, but I thought his idea of using a dry'ish mix was interesting – I have yet to try it out ...

hi

ok have been trying all of the above methods for 4 days now and none have worked for me .....

so i have thrown away my float and bought a gauging trowel , i now use cement au calcair mixed 3.5- 1 . mix it in the mixer so it drops off the back clean i.e. not to runny and not to dry . soak the walls with a garden sprayer and when i think it's wet enough I wet it again .

then just load the hawk up from a spot board and lay on a scratch coat starting from the top left hand side ( i am right handed ) push it well into the joints and leave it alone .....

next day scrape down to the stone and feather it in a lay mans method but it works for me

I am currently working for a french builder and after taking all the old joint out with a hammer and chisel and a small kango for the harder stuff (usually sand and cement patch ins) we then jet wash the wall, getting as much of the dirt and crap out of the wall as possible is very important. It is possible with a large water sprayer (i use one) but you have to really wash it down well and again before you start pointing. The guage we use is 6 buckets of sand to one bag of lime and we add water proofer (hydrofuge de masse pour enduits et mortiers). I think the hydrofuge is very good.I have pointed in our house with and without and have found that it retards the lime mortar ( stops it drying out to quick) hence you do not get the little cracks in the mortar especially in the larger joints. I use a hawk and a gauging trowel(english) and a small french pointing trowel. I also wear gloves and slap it in with my hands when necessary (dont be shy). have plenty of small stones at hand and hammer them into any large joints before pointing them as it will help

stop the mortar sagging. As for consistency, get it so it will stay on your trowel when you pick it up, not too runny not too dry in the middle. If you are slow its no prob you can just add water to the mix and bring it back. Fill the joint right up, dont worry about keeping the stone clean, slap it in and on. The finish is with a wire brush and i always wait to the next day. The brushes differ in hardness and it pays to have soft hard and medium at hand. Now you will see why it pays to get plenty on the wall as you can take the joint back as much as you want therefore revealing as much stone as you like. Start with the brush gently, feel your way into the mortar. To soon and you will pull it out, leave it too long and it will go off to hard! keep an eye on it, i normally find next day works best, but if its very hot brushing the same day may be necessary. Hope this helps

That's excellent! A really good guide. If the French masons are doing it that way then it sounds good to me.

How much sand is in a bucket? Presumably the bag of lime is the 35kg weight? And approx how much hydrofuge do you add?

Knowing the measures will help us to get the mix just right.

Hi,

The bucket is a standard size french builders bucket (not the larger size you sometimes see) i think they hold about 10 litres of water. The lime is 35kg. I think the brand we use is called saint astier, it might be regional i am not sure. It comes in a blue sack or a green. The blue is very white and the green more of a dull white, not so bright. The hydrofuge is 70ml to 35kg, i normally aim towards 100ml just because its easier.

ps. Just level the sand in the bucket off flat with the top.

Thanks ... just what was needed for the calculations.

I work with a French artisan who is a specialist in the use of Chaux (lime) and we have just finished pointing the outside of a converted barn.

We used St Astier lime which is indeed regional – based at St. Astier I suppose. I live in Haute-Vienne, but work in Dordogne, and (by sheer coincidence) passed next to the plant on the way to Bordeaux last week.

We used a St. Astier lime called "Tere chaux". which is slightly hydraulic (NHL2). As the name implies (from Terre i.e. earth), this is intended to be used over supports such as Torchis (earth and straw). Anyway, my boss says it's good for surfaces that may be subjected to some movement (it's a fairly soft lime). I guess that's why he chose it for pointing the old barn. Other types of lime could, I'm sure, be used with

success. Have a look at the St.Astier website (<http://www.c-e-s-a.fr/>).

We also used a liquid waterproofer (impermeabilisant) which comes in sachets (add 1 per mix). You'd probably find it easily enough from the likes of Point P. Tell them it's for an "enduit" or "crepi".

The sand we used was, I suspect, just whatever they had at the local builders merchant at the time. Be sure to get as much as you need to finish the job, as their next batch might be a different colour. Another thing we did, possibly not essential, was to add 2 buckets of 'sable argileuse' (sand with a lot of clay in it) to every mix. It may not be easy to get hold of.

The resulting mix was wonderfully sticky and pleasant to use. I forget the exact dosage of sand/lime, but this info is printed on the bags of lime anyway, so you can't go far wrong.

The old mortar was removed with pneumatic chisels (small and light) and a large industrial compressor (hired). It may not be cheap but you will get the job done much faster and save a lot of hassle, unless you are doing a very small area. I find the electric hammer chisels are very tiring to use and, on a previous job, seen even Makita chisels ruined after several weeks of daily use.

The stones were then cleaned using a pressure washer. This also helps clean out the joints and moistens the wall in preparation for the mortar.

To apply the mortar, I flicked it on using a small diamond shaped trowel, as I found this helped to get the stuff well into the joints. You can apply it 'normally' though by pressing it on with a trowel. Don't be sparing, just try to leave the bulk of the bigger stones showing through. It's OK to cover up completely most of the stones, but not under a super thick layer!

Don't bother trying to re-use the mortar that falls. It may be dirty, you waste time, and anyway there will inevitably much more waste later on when you brush the dryish mortar off. It may seem that a lot of mortar falls to the floor but, with practice, the vast majority will have stuck to the wall.

Once the mortar has dried a bit you can start to brush the excess off. You may be able to do this on the same day or you may have to wait until the day after. It will depend – I expect – on the weather, how damp the wall, and how thick the coat is. I used 2 grades of scrubbing brushes. One hard (steel bristles) one softer (brass bristles). Brush vertically or diagonally to remove the mortar and reveal the stones. Once found, brush the mortar off the stone. The emphasis is brushing the stones, not the mortar, but in practice a bit of both is required. Finish with a softer brush, the type you normally use with a dustpan for sweeping up.

As an aside, the Chaux aerienne that you buy in sacks for decorative finishes has already been 'slaked' with water and will not generate lots of dangerous heat when used. You can so I'm told, still buy Chaux Vive which then has to be extinguished in water, then filtered, etc. It may be an interesting experiment but probably isn't worth the trouble.

We also use lime called "Chaux Aimos" which comes in buckets and has the consistency of Creme Fraiche. It's very pure, very white and makes a very economical limewash paint when mixed with water. It can also be used as the basis for other interior decorative finishes and easily coloured with pigments.

People may instinctively reach for sacks of cement when renovating, but your old barn was probably built without any cement!

Tremendously useful! You write with an air of genuine experience that will give confidence to anyone reading. Thanks for that.

I have also used a pneumatic chisel for cleaning out joints and can vouch for its efficiency.

Hello

We need to repoint the sides of a stone wall after having knocked an opening through it. We plan to use chaux hydraulique and sand but would like to know if there is any special technique to mixing it up – or is it just like making cement in the mixer?

Cheers

Hi

If you look back over the previous posts above I think there are several references to mixing, which I think you can do manually or in a mixer, according to your preference. Don't take my word for it though!

Hi – I have searched the forum and the internet in general but not found anywhere where it says how to mix it in a mixer. I had heard that you can't add water to the chaux – it must be other way around – but maybe that's for a non-hydraulique grade? Can I assume then that you mix the chaux and sand together and then add water until it is of the right consistency. How long will this take – I've heard it can take up to 30 minutes to mix – is this right?

Cheers

Hi ,

I'm not an expert at mixing Chaux, but when I use a mixer, I firstly put water in to clean it, then add some sand, then some cement. I would assume that you just substitute the cement for the chaux i.e. not actually putting it straight into the water. I would suggest measuring in buckets though to get the mix

consistent ..

Regards,

I would do sand and lime first then water. You want quite a dry mix with lime mortar – and it needs more knocking up than concrete would. You can easily overwater it.

I dont use a mixer, just mix by hand. I do say 3 sand 1lime, 3sand, 1 lime, and so on until I have the quantity right, just helps the mixing donw like that then add a little water.

Of course if you use putty rather than dry lime you might not need any water – but the mixing will be harder.

Hi, first time poster – so be gentle with me! I've just returned from France having employed a local artisan to reconstruct, in stone work, a collapsed wall / window and repoint the front and rear of the building. I admit to knowing little about traditional building techniques and am somewhat in the hands of this builder ( who came recommended by a number of local people ). He has used a combination of sand plus 'Calcia Technocem 32,5 Ciment Gris multi-usages' and 'Calcia Baticem 12,5 Ciment a Maconner' to rebuild the collapsed wall, and repoint the stone work ( which I believe is granite ). Having read on this forum, and others, the importance of using lime mixes on old buildings, I am beginning to wonder whether this chap has used the right materials! Nowhere on any of the Calcia bags does it clearly state Lime ( or Chaux ), and I've been unable to find any definitive information online. I am worrying unnecessarily? I would very much welcome the advice of anyone who has used these Calcia products.

Welcome to TF, try this site it should give you all you need to know

<http://www.ciments-calcia.fr/fr/index.asp>

Hi, thanks for your prompt reply. I've had a look at the link you kindly posted, but with my limited French I am still not very clear!

There is an english language version, just click on the flag at the bottom of the page

Thanks,, not sure how I missed that link the first! I've now had a look at the English version of the site but can't find the info I require. Hopefully someone else out there will be able to offer me the benefit of their experience re: the use of these Calcia products and if they might damage granite stone buildings.

Quick question?

Has anybody had any sandblasting done in France? I have a s\*\*t-load of pointing to do both interior and exterior of a barn and a friend in the UK had his whole Devon barn sandblasted to take the existing pointing and dirt back to the required depth for re-pointing.

This had the ancillary benefit of bringing the stonework up perfectly and as if that was not enough the Sandblasting chap blasted all the beams back to save those mind numbing days of cleaning and sanding beams.

I would be interested to know if anybody could give me the low down if you can rent sand blaster folks (or just the equipment) in France (I am near Luchon in the Pyrenees) and the cost?

Cheers for all the great info on mixes n stuff

What about a jet wash? For the outside anyway, friend of mine had internal beams sand blasted and got little bit of sand coming out of the timber 6 years later still

I have hired the equipment to sand-blast on several occasions. Essentially it consists of a large diesel compressor, a hopper for the sand, (different grades are required for different materials) and the nozzle with ceramic jets. Also supplied are the helmet with air feed, tear of strips for the visor. I would think these are available in any hire-outlet, and they will advise and sell you the necessary sand/grit. You need to look for "sableuse" in the catalogues online

Hi. Thanks to you all for the above. I'm just about to undertake re mortaring and re-rendering to a stone property in South Dordogne (Bellevue) This is a rendered building but years of wear mean that on the lower walls mortar is also washed out to a depth of some 6+ centimeters. I'm steeling myself for some hard cleaning and mortaring followed by re-rendering, but reading up on the subject suggests that the French pro would use a mortar pump to mortar and a crepi sprayer to render. It sounds easier and quicker. Has anyone any experience of hiring & using these? Any comments very gratefully received. Thanks.

Nice one, makes me feel like I have been doing it half right, I have been using the ready mixed stuff from Big Mat (available in loads of colours), I take your point about the sagging and cracking in larger joints. I have been using a fairly coarse nylon brush. The hardest part for me has been with getting the timing right with the brushing out.

I have just bought an old place just like everybody else on here. And my house has been already rendered by what seems to me cement mix as in UK, cracks everywhere, but that is to be expected, with such an old building, the barn has a largish crack about seven feet up to the roof, I was told that you must use lime mix to render the whole barn. While I agree with the French long used method I am not convinced that using lime and sand is going to be any good. It's all very well to let the building breathe and move, but as I am told lime doesn't set for years there seems to be a catch 22 situation here.

There has been some rendering on the side of the hanger, and that's the throw method I think. Bloody awful finish.

I still don't see why I can't use the sand and cement method as we use here. Much stronger and you get a brilliant finish.

If you have ever owned or been in a thatch cottage over here you will have no doubt noticed how damp they always smell, and that's due to the lime on the out and inside. Why not just inject silicone into the base and have done with it.?

The reason you have cracks everywhere should explain why you don't want to use cement render in an old building.

I would suggest that the reason cottages smell musty is that they have an earth floor, rather than the lime finish on the walls.

You can put a membrane under the floor, but I very much doubt you can successfully inject a silicon dampcourse into stone walls.

I would suggest reading up on lime finishes (chaux, CAEB etc) at various websites before going with cement.

What's the best way to bring "a bit of life" back to the stones in the wall. Would a brick acid cleaner be okay or a definite no no?

Depends on the stone – maybe jet-wash, sand-blast (careful with both), or simply brushing (good stiff yard broom is good initially), followed by more detailed brushing where needed. I'm thinking internal here, but this would help externally as well. Then if it needs pointing, point it! I would only use brick acid if there was something on the wall I couldn't get off easily, but I would try a test area first.

Let us have more details about what you are doing & maybe we can help more.

Not sure what the stone is but I have yet to find a drill bit that touches it. It's internal in a smallish room that already has been floor tiled. I discovered the wall behind a newer block wall and thought it would be nice exposed. The stones are a lightish brown colour and definitely needs repointing.

I don't know your region, but if it's that hard I suspect it is granite. I have the same problem, though the decent Bosch masonry bits (blue colour) on a standard drill work well or Dewalt etc on an SDS. What is it exactly that is stuck to the wall that you don't like? (paint, plaster ..)

Our place had been stripped back to the stone i.e. plaster removed – it left the plaster remnants, and the very soft mortar which was crumbly & almost like a brownish mud – at least very easy to clean for pointing. We use a chipping/welding hammer & some old large 6" nails with the ends flattened off with a grinder (use both ends of the nail depending on joint size). Clean back a good inch or more on wide joints. The old plaster and muck on the stone came off easily with a jet washer, though we had to be careful as it would chip the stone as well in places (granite is hard but sometimes brittle). In other places we've just brushed and scrubbed it.

31st March 2008

□

We are in the northern Cher and yes it could well be granite. The joints are, as you say, like a brown mud. I have an excellent tool for raking out which is actually used by auto window fitters for peeling back the rubbers on windscreens. I wasn't sure how far to take the pointing back in as it just keeps on coming being so soft, you reckon about an inch is enough? It's only old plaster on the stones but I just wondered about something to brighten them, as it were

I have an old stone wall frontage on the house in varying sizes from fist size to football size, in about three different stone types. Basically from what I can gather anything that was handy from the ground about three hundred or more years ago.

It looks fantastic from a distance but when you get up close you can see that most of the pointing has been washed out to a depth of up to 3 or 5 centimetres. I will be using a lime mortar but I don't want the mortar to be too obvious. I have bought a pointing gun (35 quid from local UK tool shop) this is just like a big silicon gun with a refillable tube. It has two different nozzle sizes and will be able to get right into the deep bits albeit with a bit of wrist ache.

Here is the only concern in my plan, I don't really want to see too much of the mortar as the stones are stunning in their own right, will it be a problem in terms of water ingress if I point to say within a centimetre of the face of the stone.? Most of the joints are a less than centimetre, The walls are 950 thick at the base and 800 at the top 4 .2 meters high.

□ I was in Leroy Merlin's the other week and they had ready mixed chaux pointing in tins.

A) Did I read this right and it is actually what I thought and

B) If so is it any good?

I have been cracking on with the interior of my 4 floor Maison de Maitre in Aude (11) and I'm now moving onto the roof and terrace.

I plan to strip the plaster off the terrace, reveal the stone and point this up.

What material / mix should I use for external pointing and where could I source it (I presume it would have to be waterproof)?

Also if anybody knows a good pointer upper in the area please let me know.

Hi, i have completed lots of pointing on old barns (in the uk) over the years and one of the best tools i have found is something similar to this –

<http://www.screwfix.com/prods/71494/Hand-Tools/Plastering-Tools/Edge-Jointing-Tools/Forge-Steel-Small-Tool-Leaf>

I had some made up, in stainless steel, as the ones from screwfix were a bit flimsy. They are ideal for "pushing" the mortar into the joints, especially if they are narrow. For larger joints, a small pointing trowel is best, if you can get one that is old and worn, the better. When they are new the edges are too sharp and makes things a bit more difficult.

Lime or cement? A lime mortar is best (IMHO) as explained above but i have, in the past used a lime mortar and added a very small amount of cement to it. This helps make a better "putty" type mix. Not sure about the lime in france but the lime powder i have used here is too "pure" (if thats the right word) so adding a bit of cement really helps.

Just had a quick look online and found this site –

<http://www.mikewye.co.uk/mikepointng.htm>

Theres a rough guide for pointing with lime mortar here.

One last point, make sure you protect your eye and hands, if it gets in your eyes (can easily happen) then you will "know about it"! Wear gloves and a barrier cream if possible, especially if you don't have "builder" hands.6

In france stone walls do not have close jointing so your tool would be of limited use. Pointing trowels are called 'langue de chat" cat's tongue trowels and can be obtained in all suitable sizes.

My views on the stupidity of pre-mixed lime putty mortars is not shared by many lime putty mortarers on this board.

Hi All. I haven't read the response to the question about pointing, however I can tell you about re-pointing stone walls. First thing, to get the answer from the horses

mouth so to speak, contact the Lime mortar association in the UK. What they don't know you don't need to know. I have re-pointed an entire stone barn & to keep it simple you need NHL3.5 St Astier (R Melin & Point P) Chaud Blanc is the same I guess it conforms to the same standards. I used St Astier. For me the colour was better (cream rather than white) So the advice I would give is.

The mix is 1 x St Astier to 2 of sand in the mixer.

Only mix what you can use.

Mix on the dry side the same as bricklaying.

When in the mixer it will behave like a wave breaking, at that point stop mixer for 5 mins & restart for 5 mins, it's then ready.

We found a full mixer gave us about 3 m<sup>2</sup>, so prepare 4 m<sup>2</sup>.

Remove the mud & rubbish between the stone to a depth of 25/50mm

Brush out the dust & spray water with a garden pressure spray ( ie spray for insecticides on the roses) Don't soak it as it the liquid mud will show through – just moist.

Apply the cement, we had a hawk & wearing gloves simply pushed the cement into the joint.

After we ran out we would return to the wall & simply rub the area to push the cement into the gaps & remove the loose sand.

Depending on the outside temperature return every hour & see how dry it is. We used a wire brush (must be copper BricoDepot red handle ) to brush the cement.

You know when it is ready because it will crumble away without leaving any smears. Do not let it get too dry, you will regret it. Clean with a stiff brush/broom & the finish I think is stunning. To see our end results visit our site

– [barnconversionfrance.com](http://barnconversionfrance.com)

Good luck.

Such a shame that there was not time to point the west gable end.

Oh and the satellite dish could have been placed less obtrusively. 8)

<http://barnconversionfrance.com/New%20Pics/GetAttachment-11.jpg>

Such a shame that there was not time to point the west gable end.

Think that's 'cos it's made of blockwork,

<http://www.barnconversionfrance.com/New%20Pics/GetAttachment.jpg>

Hi All I have pointed my barn over the last 3 years & I tell you the best & fastest method of pointing is to don a thick plastic/rubber glove & simply push the cement off the hawk into the joint. By the time you have done 1m<sup>2</sup> I would have done 2/3m<sup>2</sup>! Use the outside of your hand and apply the cement until the joint is full, with your fingers remove the surplus.

Look at the finish I got from exactly doing that.

[barnconversionfrance.com](http://barnconversionfrance.com) If you want closes ups I can supply If you give me your email address.

Good lluck

Hi Ian yep! your right the barn when I bought it was within 3/5 years off falling down. The gable wall had beaten me to it so it had been blocked, shame but there you have it. The reason for the satellite position is that the barn is the boundary & as your not apparently allowed to go/impinge on another's boundary that was my only choice. If I had my way I wouldn't have fitted one as I don't watch TV?

If you have a stone & mud/lime mortar wall I wouldn't water proof it, it's should be allowed to breath not be water proof. Go to the Lime mortar association UK site & give them a call, what they don't know you don't need to know. I found them helpful & easy going. Good luck Alan

Look at my quotes regarding pointing tick the newest first at the top I'm sorry but I am new to the site. Good Luck

Hi rimm. I have re-pointed 400m2, I have several easy way to sort this out. The definitive answer to all the questions can be found at the Lime Mortar Association in the UK.

The Lime mortar is made by several companies, I used St Astier NHL 3.5 We prefer the colour end of. The mix was 2 sand 1 Lime. Mix, rest for 5 mins & restart for 5 mins. The consistency should be mousse ish?. Application for me was fast & simple I like you used a hawk rubber gloves & I simply used the outside of my hand & slid it from the hawk into the joint job done. I found using a pointing spatula was long winded and gave no advantage? Look at our web site [barnconversionfrance.com](http://barnconversionfrance.com) Any help give ma a hit.

The other consideration is that cement not only stops the ingress of water but it stops the building breathing.

We have an old stone built manoire, parts of which were erected in the 13th century. The west facing wall was completely rendered with sand/cement some 60 years ago. Many of the joists/beams entering that wall had failed due to damp.

Whereas, all the woodwork supported by the non-rendered walls are still in good order.

In the summer we did 3 months of work on the ruin and we experimented with some mixes. The house is old and mixed stone and some French cob (Torche' I think it is spelt)

All the torche that we have taken down and reclianed from the inside of the wasll we removed had's been saved and rendered down in the mixer then sieved. The mix we found tye best to use is three sand one lime and one sieved torche. When it goes of it looks like it has been there forever and is the right colour. My wife has taken on the chief pointers job and uses the good gloves and hand method and a bloody good job she is making of it as well.

We will be rendering the inside walls with lime render and will be using the recycled torche in that mix as well.

I also have one torche wall standing and I am mixing up some lime render but with two shots of torche dust in it to make sure it looks as authentic as possible.

hi i used nhl 3.5 with quarry sand. dampen walls first. wire brush off excess when ready.if too dry difficult to brush off excess if too wet and wall will stain  
<https://i276.photobucket.com/albums/kk16/oldfrenchhouse/Picture031.jpg>

As the work continues on the place we have perfected the technique and our mix is proving to look the part. It seems to get tougher as the months go by. My wife now uses the compressor I bought with an air gun attachment and, wearing goggles and a dust mask, blows out any deep holes and then with a varying sizes of dowel crams the new mix in. She tends to put plenty of pointing on and then brushes the excess away with a soft brush until she is happy with the result. If we think that there is too much "staining we will sand blast the stone to bring it back however the stuff put on last year cleaned itself within a few frosts. I tried the pointing gun inside but you only get to use about a quarter of a tube before it gums up due to the compression, no matter how wet the mix. I will be e baying that out.

That mix again if you have an old property that seems to be held together with mud is 3 sharp sand, 1 lime (gris), and one sieved torchis/mud that you have taken from the wall.

I've just spent the best part of 3 weeks repointing our place in Finistere with lime mortar and I have to say that it is a very satisfying experience.

I bought the lime premixed from the uk as I wasn't confident enough to buy the ingredients in France but if I did it again I'd buy it in France and do it myself. I found out how to do the pointing by watching videos on Youtube – its amazing what there is available on there! It has everything.

I can't believe that no-one has mentioned the Point Master gun? <http://www.pointmaster.co.uk/> It has saved me hours and gets the lime deep into the joints very quickly and only rarely got gummed up. An absolutely brilliant tool and beats the other silicone gun type as it doesnt do your wrists in having to squeeze the trigger all the time. The mix needs to be fairly wet for it to work properly but I didn't have any problems with it drying. There are a few cracks in it now but I think this is normal?

To clear out the old mortar, I used a jet washer which saved a lot of time but was messy! You must use gloves and goggles.

What I did was splodge the mortar loosely into the joints using the gun and my hands until it was just flush with the stones and then leave it for a few hours (good chance to get to the beach for a break!). After a few hours, go back to it and beat it into the joints with a milk churn brush and my fingers where necessary. If the weather is hot, you must ensure that you keep it moist as you don't want it to dry too quickly. I then left it overnight and first thing in the morning I'd give it another bashing with the brush to push it further into the joints. If cracks appear after a day or so, you need to give this special attention and push the mortar into the joint with your fingers before it gets too hard.

It looks very new at the moment compared to the rest of the building but when its weathered it'll look great.

Hope that all makes sense?

Hi

Just read the whole thread, from start to finish, to see what's been contributed, and I thought I'd throw in a few facts.

Firstly, Chaux Blanche isn't strictly speaking Chaux (CaO). It's a cement rich in Lime. The rest of it is a mix of Oxides of Silicium and Aluminium, commonly found

in clay. NHL3,5 is the softest "Chaux Hydraulique" found in stock in most builders yards. This stuff is seriously hard when set, and it's doubtful whether it allows a building to move or breath. NHL2 is where it's at, and this contains a mix of Aerienne lime to soften it It's what the heritage people use for their historic renovations. Chaux Blanche contains white cement, and is therefore opaque when dry. The resulting joints in one's stone walls will appear flat in colour, and very pale. The use of colour additives to make up for this is just absurd. The colour of the joints is supposed to be natural, a mix of local sand, maybe some clay, and Chaux Aerienne, which is almost translucent when dry.

OK, so for longevity, a lime pointing done with Chaux Blanche will last for years. It's still a material of convenience, rather than an ideal.

The techniques for applying the various mixes given so far depend so much on the type of stone being pointed. As has been said, it's essential that the mix is weaker than stone. In most cases this isn't an issue except for limestone regions. Here though the stone still varies from the softness of blackboard chalk (it's cut using a hand saw) to seriously hard where it borders areas of flint stone. ANYBODY WHO JETS WASHES A STONE WALL IS A MORON. This is why houses fall down. A leaky roof allows water into the walls, the mud that was used in the construction goes soft, the stone moves, then bulges, then collapses. There is no way to estimate the damage done to the core strength of a wall. It is idiotic to do this. The joints do not need scraping out to remove all loose material. This is holding the house up. A patio can be laid on sand, so stones can be set in dirt. You are aiming to achieve a joint where your pointing mix adheres well. It needs to be approx. an inch to an inch and a half deep. The stone must be moistened so that the mix doesn't shrink on contact and lose it's adhesion. For the same reason it needs to be dust free. A compressor and airline pistol does the job perfectly, although the dust cloud can be off-putting. No one has mentioned the grade of sand. It should be quarried sand, as coarse as can be found, 0/5 is good, but not always easy to find. 0/2 is useless, 0/3 is poor, 0/4 is fine. the oblique signifies a range of particles from 0 to 4mm for example, in 0/4. 04 is a monograde, also useless. The gaps between the particles needs to be filled with a bonding agent, so the bigger the gaps, the more Chaux you'll need to give the correct consistency. It's also why rendering with 0/0 sand (sablon), needs less Chaux than with a coarse sand.

The Lafarge guide give the mix ratio at 10 buckets of sand to a sack of Chaux Blanche. This is clearly NOT 2:1, although I have no idea how many buckets of dust there are in a 25kg sack. The French use Multibat for everything, as can be seen by the dosages given on the back of the packet, and all it's applications. It may be Grey, but it's virtually identical to Chaux Blanche, so the person who saw it being used for pointing Granite shouldn't be unduly alarmed. It is 80% Chaux, 20% cement.

Applying the muck with rubber gloves is an excellent way of doing it. You can feel the joints being filled, and there's almost no wastage. Covering the whole stone lightly allows the mix to be brushed back as it starts to dry. Otherwise a half-covered stone can end up with a white halo where the mortar has dried around it's edge. This technique doesn't work too well with granite, but then I've seen acid being used to clean this kind of stone. Haven't tried this myself...

Bon courage a tous!

Thanks for the info and as you suggested the air gun is proving to be a very useful tool in preparing for pointing or any stonework.

Interesting about the various limes (or what I had thought were limes) I will have a look at the NHL2 before doing any more.

Is it suitable for the mixed stone of Brittany which where I am is a mixture of slate, sand stone, granite, quartz, and just ordinary stone looking stuff (sorry to be a bit vague but not a geologist) and lots of it looks like it has come from previous

buildings.

You sound like you know what you are talking about but didn't mention any "facts" or pros and cons, about the using of sieved torchis (mud) in the mix which I have been using not only for pointing but also external and internal rendering. Do you think it aids the "breathe" of the wall,? but one thing is for sure, it looks great.

On internal rendering (where not seen ie on the gables in the attic space) we are using the sharp sand (0/5 0/4) and the mix 3 sand one chaux and one sieved mud dust.

When we get to rendering where it will be seen and touched we have been advised to reduce to 0/2 sand and then go four sand 1 chaux and one sieved dust. I would be very interested in your response as we have only done little bits of pointing and rendering up to now but as the new roof is now on we will be getting stuck in inside and also have the outside walls to point in summer.

Could you shed more light on the above bit please?

<http://www.stastier.co.uk/nhl><http://www.frenchentree.com/wp-content/uploads/assets/nhl35.htm>

[http://www.lafarge.co.uk/Cement\\_HandS/H&S%20-%20Hydrated%20Lime.pdf](http://www.lafarge.co.uk/Cement_HandS/H&S%20-%20Hydrated%20Lime.pdf)

<http://www.stastier.co.uk/nhl/info/rawmat.htm>

I must say I do admire the patience and tenacity many of you have shown. I don't think I would have the stamina to repoint some of the large old barns which many of you have done.....

Teapot, you've done well. These are excellent sources of information, and well worth a read. I must confess to never having read them myself, previously. I was trained by the Compagnons de France, at a time when I was catching the gist, rather than the precise details of what they were telling me, so it's interesting to see these articles.

The thing that stands out is that St.Astier is a very highly regarded, and for me, a local product. It's been a couple of years since I moved away from the white-out mix of Chaux Blanche Hydraulique NHL3,5. This is horrible stuff, and quite an odd liant to use, being neither natural (the implication being that it breaths, nor sympathetic in the way it conceals the natural colour of the aggregate/sand being used. The St.Astier natural hydraulic lime is worth trying, just to see the difference. Their website touches on the importance of purity below:

*Limestone and argillaceous limestone that contains silica will also contain sulphates, alumina, iron, magnesium, manganese, potassium and other compounds. Burning the limestone at temperatures above 800oC will combine the above components with the calcium carbonate forming calcium silicates, aluminates and ferrites. The ideal result would be to obtain a product containing the required value of combined silica with the lowest possible presence of potentially damaging other components such as tricalcium aluminate (C3A) and soluble sulphates.*

*Tricalcium aluminate starts occurring when materials are burned at 900oC and increases at 1,000oC and over. The highest values are found in ordinary cement (sometimes over 10%). Obviously the lower the amount of alumina and sulphates contained in the raw material, the better the final product quality. St. Astier deposits are exceptionally low in alumina and in sulphates, the resulting products are therefore virtually free of these components. Ordinary cement mortars and mortars made with lime where cement has been added are sure to contain high quantity of tricalcium aluminate which in contact with sulphates and water*

*can produce sulphate attack starting with efflorescence and progressing to damaging joints, bricks and stone. The BS 5628 warns about this but does not indicate that a simple solution could be the use of a pure NHL mortar. High presence of gypsum is also to be avoided. Its sulphate content can be disastrous.*

I think it fair to say that I have overstated the levels of additives used in “ordinary” Chaux Blanche Hydraulic, as it appears to be strictly controlled by the Normes Francaises. However, St.Astier don’t seem too impressed with these guidelines, and I have read that even small amounts of cement in a Lime mix can radically alter it’s characteristics. My gut feeling is that these Lime/Cement cocktails are far too hard, and have seriously impaired breathability. Being in a Limestone region, this is a serious issue, so it is best to look for NHL2, or make your own. If you’ve got time on your side, why use it at all, just stick to Aerienne with a dash of Hydraulic on external aspects battered by the prevailing winds.

Regards,

Thanks,

I did my training at the lime centre in the new forest and the owner Bob was a strong advocate of St Astier over others. From the BS certs to the Norms in France I did not believe that cement was added as that would form a gauge mix which is neither natural or strong in use.

It is interesting (well to me) that La Farge UK admit adding gypsum to their cement.

For me, I stick with the pure and good mixed grades of sand. When the weather improves I have a church to re-point in East London.

Andy you didn’t mention anything about me putting the sieved torchis dust in the mix. have you got any opinions or do’s and dont’s about it?

We have saved all of the torchis (french cobb) from one wall that needed replacing and we save all the mud from when we have had to make new openings in the meter thick walls. We just sieve it through a garden sieve and use the dust in the mix. All of the pebbles get chucked back in as fill when rebuilding the stone walls of building new ones.

The colour when dry is absolutely perfect and blends perfectly with whats there and around.

A useful source of information:

<http://www.buildingconservation.com/articles/cement/cement.htm>

And specifically:

<http://www.buildingconservation.com/articles/pointing/pointing.htm>

I found the first link alarming. What if our cheap Hydraulic Lime has low-level traces of cement etc to aid setting times? According to this, the characteristics of the resulting mortars will be seriously altered. I think we knew that already. Specifically though, what do we do with MultiBat (lafarge). This is 80% Hydraulic Lime, 20% Cement, I believe. The Smeaton project found that all mixes with less than 25% cement failed.

Have I misunderstood this?

I enjoyed reading the second of Teapot's two links, because it is SO relevant to the everyday practices here.

Bentley asks the effects of re-using old cob in a fresh mix. Although I don't know the answer, it doesn't sound right to me. I've only demolished cob walls before, and the dirt was dusty, and full of ancient vegetable matter i.e straw, several hundred years old. This has no place in a mortar mix at all. I'd start from scratch, using fresh straw or chanvre (better still, and widely available in sacks), local earth and Lime putty. I've seen this done where the shrinkage has been extreme, so with the slow setting time, I'd avoid doing this anywhere with heating. I'd say that the old stuff would be best used on the garden. I'm using my own logic on this, so if anyone has a difference of opinion, I'd be interested to hear it.

Andy.

No your on the money Andy, it is very important to understand that they are talking mostly about Non hydraulic lime with additions, remember that sets by absorbing Co2 and we tend to use the dry bagged Hydraulic lime which sets with water.

There is stacks of good info to back up the training and i for one am always learning.

[http://www.ihbc.org.uk/context\\_archive/54/overviewlimes\\_dir/overviewlimes\\_s3.htm](http://www.ihbc.org.uk/context_archive/54/overviewlimes_dir/overviewlimes_s3.htm)

We only use the "sieved dust" from the torchis walls (and we sieve all the stuff that comes out of the walls where we make new openings) All the other stuff like pebbles, straw, sunflower seeds corn ears animal bones and walnuts?, goes back in as in-fill when rebuilding the thick old stone walls.

The stuff we have done so far looks good and feels very solid, and as I said it is 3 sharp sand one lime(chaux) one sieved dust. WE are pointing and rendering with the same mix. Here is a photo of the wall I rendered that goes into next doors garden, And the wall that Mrs Bentley built that has yet to be pointed.

I am not at home at the moment so cant tell you the name and number of the chaux I am using but I will try some NHL2 and see what happens

Then we have the wall that Mrs B built. The stones are in place with 3 rough sand one lime and half a multibat. They will be pointed with the same mix as the rendered walls which is 3 sharp sand one lime one sieved torchis.

---

Nice Job! Well done

Your stone looks to be hard granite and flint mainly so you can probably get away with multibat as they dont move much compared with our local Tuffau limestone.

If you use multibat on limestone its too hard and just pulls away when the limestone expands/contracts or settles and

makes a weaker wall than the clay/mud that it is replacing, hence what guillaumebatiment was saying about NHL2

Mrs B is indeed "well chuffed" with her new found stone walling skills. She also completed the opposite one to match and now has a 5 meter X 4 meter one to do at the front of the house.

I am putting together photos, video footage and narrative of the entire project so far and posting on Expo soon. Some is granite, some flint, some sandstone, some slate and some unidentified. The chaux sand and torchis mix works really well especially when joining old to new or vice

Hello has anyone used a crepinette like

- <http://www.shopix.fr/crepinette-pneumatique,p299.html>

for lime mortar pointing?

I would be interested in any successes or failures!!

Thanks in advance.

No good for pointing, that is for applying crepi or enduit.

Hi

We are repointing the inside of our cottage soo. We have about 80m2 to point. We will be using sand/lime mix 4:1 but i'm not sure how much lime and sand to buy. We are raking out to about 2cm and intend to point level with the stone surface. Anybody got any ideas how much sand and lime we will need?

Thanks

To give you a rough idea I've just finished about 90 square meters externally and used about 180 kilos of sand and 60 of chaux (3:1). Is there a reason you're using 4:1?

May I suggest that you study the St Astier information as no where do they use such a weak mix.

<http://www.stastier.co.uk/nhl><http://www.frenchentree.com/wp-content/uploads/assets/nhl35.htm>

We used 4:1 when rebuilding a wall and it worked out fine. I'm happy to go for 3:1 though if others have found that suitable for repointing. Thanks both for the replies.

Make sure you use the finer sand (0.2) for the re pointing as opposed to the coarser 0.4 that is used when making the stone walls and repairing the same.

3-1 seems to be the norm although we use 3 sand 1 lime and 1 sieved torchis/mud. Goes on like cream and is the right colour when dry.

Good

I'm surprised that you advocate 02 Sand for your pointing mix. This is of course a monograde. If you were going to use a fine sand, it would be 0/2, which comprises a grain size of zero up to 2mm.

Personally, I use 0/4 because I like the texture it gives, and variety of grain size and colour. I find that the finer sand gives a very flat colour, similar to a readymix pointing product.

As Teapot will verify, the quantity of Lime needed for a mix is entirely related to the grain size. The finer the grain, the less lime is needed. In the event of earth being used in a mix, this has the effect of needing much less lime, as it is infinitely fine, in the case of clay soil, for example..

Aye aye Andy, A fair point you make however we have found that with the sieved mud in the mix and the finer sand it gives a better pointed finish, particularly inside. The only thing with the interior pointing is that the weather and frost wont naturally clean the stone so because the bits of revealed stone we have chosen to leave we want to be looking good we are going to experiment with a small fine sand blaster and see if it "brings it up"

I will post the results either way.

I've been using 4 to 1 with 0/2 as suggested by local materials yard. It goes on well and looks good. 3 measures 0/2, 1 measure red 0/2, 1 measure chaux gives a nice ton pierre colour. More red makes it a bit too pink for my taste. 0/4 looks good as well though.

Amazed at the range of ratios in use in this discussion! I think I must have ended up at the sources Alan used and found 2 sand 1 NHL 3.5 gives a better result than 3:1.

Somewhere I came across a history that said the WW1 killed of most of the artisans and that as cement took over thereafter the skills got lost. Someone came up with the 3:1 ratio and it just stuck. But there has been a lot of research on compositions of old mortars and it was found that mixes varied from 1:1 – 3:1 with various explanations as to why each were used consistently in particular situations. But for the most part 2:1 was the commonly found ratio for general use. It is certainly (2:1) a lot more stable and less dusty later

than 3:1. Chemically the lime bonds to the sand and it was suggested that 2:1 gave the strongest most stable end result. Also 2:1 seems to stick a lot easier than 3:1.

Sorry I did not hang on to URL's but the info is all out there.

To increase insulation you can also point with Hemp (Chanvre) mortar.

4 buckets sand  
2 buckets NHL 3.5  
water

When well mixed add

2 buckets hemp (Chanvre)  
add more water as needed

On exterior walls do not use within 1 metre of the ground.

Note also that this is physically weaker than straight mortar so should not be used in areas where structural strength is needed.

You should also point to a depth of 4 to 6cm to get the greatest benefit.

St Astier sell pre-mixed but these are targeted at casting wall fillings and flooring.

Chaux blanc does not contain cement it is just lime. Tradifarge do do a ciment/lime mix that we have used succesfully internally and externally. Though in the colder weather it takes a little longer to go off and slows down your work.

Lime and cement both are made from lime it is the method that is different in its production. The use of lime went out a bit in the UK when plastisizer was bought in (never use washing up liquids) ( they cause the mixture to weaken).

There has been some recent thoughts on the mixing of lime and cement, that the mixing of the two is not so good.

I have now read all the posts,all the links,studied the manufacturers websites and am still undecided what lime to use.

It seems to be between Saint Astier NHL 2 and NHL 3.5.

I live in the Creuse (23),have a 150 year old granite house,and want to point some outside walls of the house and point and render inside as well.

I would like to achieve a light,sand coloured finish.I like contoured render over the walls,not a perfectly flat surface.

I will be re-building a wall in the future.

Will one of the above suit all my needs?

As your walls are granite (v hard) then 3.5 will be fine you could go as far as.....(no I don't want to confuse you any more) 😊

It is the sand that provides the colour but a strong lime 2:1 would obviously be lighter in colour than 3:1