

# METHOD STATEMENT; RENDER AND WATERPROOFING TO VAULT AREA

Tom white

WHITE PERIOD RESTORATION LTD 68 Rosaline road, Fulham SW6 7qt

13<sup>th</sup> November 2018 RE; 41 Arlington Road NW1 7ES





## VAULT AREA RENDER AND WATERPROOFING



On the lower ground floor, at the front of the property, we have found that an underground vault was present but covered up by a sheet of cementitious render reinforced with eml steel. There was also blown cementitious render, which came off purely by tapping carefully each area with a club hammer.

There is an arched entry to the vault with some of the surrounding brickwork in need of repair.

Within the vault area we have found bare loose earth however we have not been able to explore as to whether there is any floor layers beneath this. To reinstate these areas, we will need to repair brickwork, repair or install subfloor layers and install suitable ventilation or drainage. It does not seem to be of extreme damp except for a leaking water meter, which is situated directly above.

It was suggested to use a delta membrane dimple membrane to protect the interior from moisture but this will need a chamber dug into the vault area housing a pump, to pump out any excess build up of moisture. This could also entail battening out to install plasterboard or excess layers of plaster inside, reducing the size of the room and potentially the height. This would also run the risk of trapping the water on the brick faces, which would further increase moisture damage to the brickwork. Instead we would like to reinstate the breathability of the area, as existed originally, by using lime plaster while also installing some extra ventilation possibly utilising the door to the front courtyard. We should end up with a self sufficient ventilated area without the need for pumps, while also benefitting from installing lime plaster that follows the contours of the original walls, rather than covering up the original walls and losing space.

We have enlisted a consultant to specify our products and suitability remotely whose details are as follows and is happy to answer any questions..

Tom Perkins, Eco lime ltd, Southwood Farm, Terrington, York YO60 6PZ

01653 648566 tom@ecolime.co.uk

Our process will be as follows for the walls:

1. Gently remove any cementitious pointing or remains on our current brickwork by a scutch hammer between the joints, a stiff brush along the faces of the brickwork then a gentle hammer and bolster at 45 degree angle to any areas of stubborn remains.
2. Will make good brickwork and rebuild following the arch form work using tudor reds <http://southernreclaimbrickmerchants.co.uk/reclaimed-bricks/imperial-bricks/tudor-reds.htm>. Using a hot lime mortar with a pozzolan, we will bed the bricks in place using chalkhill <https://ecolime.co.uk/shop/lime-mortars/ready-mixed-lime-mortar/ready-mixed-hot-lime-mortar/>
3. We will install either plastic or stainless steel reinforcing sheet material to all walls and ceilings
4. We will apply 2 coats of light weight insulating lime plaster sub-coat to all walls and ceilings as per installation instructions <https://ecolime.co.uk/shop/lime-render/unity-light-weight-insulating-plaster-12-23-kg-bag/> .
5. We will finish with one coat of lime fine finish plaster <https://ecolime.co.uk/shop/lime-render/fine-finish-plaster-2-1-mix-25kg/>

Our process for the floor layer will be:

1. Take up the non-original concrete slab in the boiler area, close to vault by the courtyard door and remove down to earth level, it is preferable to have a full limecrete screed in the

boiler room area plus the vault area so that we have full continuity of lime over the floor and walls, to improve our hydro system

2. We will remove the concrete by a small hand held kango, starting from the threshold between the boiler room and the newly exposed vault, working towards the outside perimeter of the slab so it is released from compression and the perimeter sections of the slab will break away easily without causing damage to the surrounding brickwork
3. We will clean off all the loose area within the vault area and clean down to a clean base and level off. We will then fit a 150mm layer of foam glass gravel <https://ecolime.co.uk/shop/flooring/lime-crete/geocell-foam-glass-1m3/> and compact down with a compactor to provide a structural base. On top of that we will fit a 100mm limecrete screed.

Once our bases are done on both floors and walls we will finish with a silicate paint primer and paint.

We would aim to ventilate this area as a necessity by installing a vent into the courtyard door both sides that is adjustable <https://www.doorfurnituredirect.co.uk/brushed-stainless-steel-adjustable-vent-210x152mm.html> 210mmx152mm stainless steel.