

August 2017 – Floors and walls!

The floor slab: This was the big job for August/September: To excavate the inside of the steading building and get our sub-floor laid. Ric was on site a week ahead of us and dug the floors out to around 520mm below finished floor level, to allow for the depth of the floor. We arrived - to what looked like swimming-pool-sized voids all the way through the building and with the courtyard just about completely full of spoil. Not a good look.

Anyway we hit the ground running. The next step was to square-up the excavations, digging out by hand the bits the digger could not reach, a quick job thanks to Ric's thoroughness. Then the big task, lining the whole lot with 200mm of compacted hardcore.



Cue our 186 tonnes of hardcore. We used it to make ramps into the building that the dumper

could get down & up safely. Then over three solid days, the dumper dropped hardcore at whatever point we were working. We levelled the

hardcore by hand, then compacted it with a large petrol-engined Wacker. The hardcore was not good to work with – a high percentage of large stones seemed to 'float' to the tops of the dumped loads and had to be picked out and thrown into the unfilled space – but it was rock solid once compacted. We know, because we temporarily removed the drain pipes inside the building and had to re-dig

channels in one area that we had compacted – a lot of work with a pickaxe. We made sure we dug the others out before compacting.

The end-result was quite a transformation. Having spent years climbing around inside the building, we could walk over the whole area with only foundation blockwork to get over. We used rather more than 100 tonnes, we still have plenty left over!



Next the 50mm of protective blinding. We used 20 tonnes of 'quarry dust', a coarse sandy material that, unlike building sand, also compacts down. This was quick, we used a home-made levelling rake to get to a flat, smooth surface, then finished it with the Wacker.

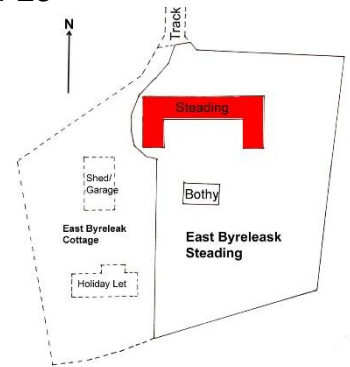
My youngest brother Geoff, another professional builder, joined us for a week's 'holiday' and things went into overdrive.

We used our 4 big rolls of polythene membrane, held together by rolls of very sticky PVC tape, to cover the entire floor right into all the doorways window foundations



– an oversized craft activity that became especially challenging during and after rain.

Jill & Andy Walker



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The last job before getting the cement truck in was setting up the reinforcing mesh. This stood on supports 70mm above the membrane, with the sheets of mesh overlapped and wired together with ties.

That was the prep completed, so we called in the cement trucks.

We used a company that has volumetric mixers. They bring all the materials on site in a big truck and mix it as it is poured. One advantage for us was that, fully extended, the machine can pour concrete 6 metres from the back of the truck. So although we worked over four mornings and laid 33 cubic metres of concrete,



the work was not particularly heavy. Geoff did the skilled work, tamping the concrete and checking the height with his laser level. After the truck had gone, he used his concrete float over the



course of the day to smooth out the surface. The end-result was pretty amazing – smooth, level concrete laid over 230 square metres with less than 10mm variation in height. Most of it was 150mm below finished floor height because we need to put insulation panels on top, then under-floor heating pipes, then 4 cm of screed and a final decorative covering – once we have a roof on. The garage floor is as-is, with no other finishing required.

Building walls: With the floor slab out of the way, we started rebuilding our walls. These must be constructed as an inside course of concrete blocks, with granite rubble-build on the outside. Geoff worked on the larger runs of blocks – the two gable-ends. Ric worked on the many openings in the existing walls where doors are being turned into windows or where we opened up new windows. They laid the first metre of blocks using cement mortar, tied in to



the existing granite walls either side and with expanded metal mesh to tie in later to the exterior course of granite. This blockwork will be tanked from the inside. They used lime mortar in the courses above one metre, to improve the breathability of the wall. In a remarkably short time, they had all the blockwork in place up to lintel height. A huge

and exciting step forwards! We look like we have walls at last, with openings for windows, in place of the jagged mess we had before!

