Bowden Mansion Contract, Restoration of Victorian Encaustic & Geometric tiled floor. Grade 2 listed.

Large side by side Victorian Mansion house late 1800's.



Bowden Mansion House.

This was a difficult contract; I first looked at this project some 3 years before we finally went on-site in February 2007 the contract finished on March 30<sup>th</sup> for Our Co anyway. This as I said was a difficult contract because the client was from another culture and had already upset the Conservation Officer so much that a mediator had to be employed to allow the job to continue so nearly everything passed between the mediator to the client & vice versa.

Most of the building contractors were employed as separate Co's so there wasn't a proper hierarchy which meant that the Conservation Officer had a rough time of it.

From our point of view the contract was a shambles with materials strewn over the very expensive Victorian Encaustic & Geometric floor.

Eventually we arranged matters so that our areas were kept clear, another reason this contract is memorable was because I had to work through a rehabilitation program as I had suffered a work related heart attack caused by an injury, That coupled with frankly a hostile client and a work-force that had never worked on a listed building (grade 2) before meant that this project will be remembered for ever.



Materials stacked over Stair-side damaged section of Victorian encaustic & geometric tiles.

After we organised clearance of the floor areas including having to dissuade people from mixing sand & cement directly on the tiles! We were able to finally start our own work!

Eventually the floors in both sides of the Mansion had been cleared for us to take a measure of exactly how many tiles were loose / missing or damaged since our initial survey of 3 years before. Some more preventable damage had occurred as you would expect having a workforce on-site with zero knowledge of listed building etiquette, just the provision of adequate floor covering which are relatively cheap against the cost of new geometric tiles and our fee would have cut some of the costs.

For this contract to work out so that the client ( who wanted to rip the floor up but couldn't as it is in a listed building) would co-operate with the Conservation Officer we had to cajole the C.O. into agreeing to lift the hallway tiles on one side to allow those tiles to be used to restore one hallway (the least damaged ) the hallway that had been lifted then had a geometric floor fitted in new Victorian reproduction tiles made by Craven Dunnill of Jackfield, however the client would not pay for an encaustic border. We also managed to get a grant organised as well!

The original tiles were made by Godwin and were six and half inches format or 164.5 mm and by rights the C.O. (Conservation Officer) could have insisted that the replacement tiles be made to that size. I spent a fair amount of time persuading the C.O. that the difference in half an inch 12.5 mm was not enough to engage in a battle of wits with the client.

We agreed to put the new section down with a bridge design between the original tiling and the new tiles by Craven Dunnill which are on the more usual six inch format. Craven had also provided a good deal of the tiles cut to the various shapes needed although many of the tiles had to be cut with diamond wet-cut machines on-site.

Below is a picture with a patch of damaged tiles.



Patch of missing tiles and cracked screed.

To remove the broken & damaged tiles and lift the large sections of tiles we employed 4 Exakt saws fitted with fine diamond blade's approx 1mm thick the machines are fitted with vacuum hoses as the dust from cutting into lime screed is very fine, masks are also worn.

The Exakt saws are used to cut around and isolate the intact geometric and encaustic tiles as these will be used to restore the least damaged hall-way floor.

Exakt saws are used as the blade cuts a few mm into the under-lying screed and so prevents any transference of impact and vibration whilst the recovery process goes on.



Part of the main floor after being cleared prior to restoration.

Fein super-cut machines are also used with a variety of attachment's to tease the tiles out of the floor.

We also use the Fein super cut to grind areas of the under-lying lime screed down to a level which will accept a layer of flexible adhesive and a replacement tile.

In the past we have been asked by either Architects or a few Academics about restoring the floor tiles using the original methods! That is fine if a wall is being restored and a lime based plaster was used originally. However this is usually not possible while restoring an original Victorian tiled floor because the floor would have been put down in stages, usually the first stage screed was made up of a very rough mortar that had more or less everything on the site at the time mixed in with it! we have found wood shavings , horse manure, nails , pipe dottle (used pipe tobacco) broken clay pipes, bits of the tiles, off-cuts of lead (usually from the stained glass people) bits of brick /stone any of the days rubbish it has all been found mixed into the first rough screed.

A finer screed is laid over this and whilst still green (un-cured) slurry is put over in small sections which the tiles are beaten into both from above with felt covered or plain wood sections and the tiles are also squared up by knocking from the side. Generally they are laid on a 45 degree angle as that allows a long straight edge to be used as a guide.

We once had a nice chap from the York Institute who arrived on one contract and took a number of core samples away to analyse the lime based screed with a view to making up a formula for our Co to use? When he returned with pages of how we were to make up the screed based on his calculations I told him we had already done it. We had mixed up a much purer version than our long dead colleagues had ever used. The original Tilers definitely did not use a formula.

If we actually went to the trouble of carrying out the work as it was done originally we would also have to work in very bad light (hence the large number of out of sequence & upside down tiles) with poor tools it is a tribute to the hard work & craft of these skilled people that the floors look as good as they do. Plus it is pointless to re-enact bygone times just for the sake of it, in the case of patches of tiles it would be sheer folly to try and beat in tiles into patches of new lime screed introduced into an old lime screed floor, the old screed would leach all of the moisture from the new patch and would cause the tiles to blow or sink within days.

We could lay large areas but not patches, that's why we use a flexible based adhesive so that the patched areas stay where they are and look as good as ever.

Some of the patches were so damaged we had to take the screed out to the underlying wood battened floor. To counteract movement a screed was laid that had glass fibres throughout the mix, once cured a latex leveller is poured to the correct height to accept a tile & adhesive bed.



Patch taken back to the wooden battens. Sharp edges are from the Exakt saw!

This particular section was also shored up underneath to prevent a further drop in the floor, a section of joist was replaced with a metal section.

This type of full removal is thankfully not the norm; usually only parts of the screed are removed and made good before going on to replace the tiles.

P7.

The following pictures show the floor patch above as a dip in the floor prior to be lifted, the length of wood shows how much the floor had dropped.



Dip in floor as demonstrated by the length of wood.



Dip from other direction.

Pictures below show the Victorian encaustic & geometric tiled floor before it is cleaned ,first picture also shows part of the porch floor with removed tiles scars, the tiles had been removed before our Co arrived it appears they were post  $2^{nd}$ 

world war tiles judging from the remnants.



Bowden Mansion floor prior to full restoration showing porch top of picture.



Porch 2 showing tile scars. P9.

Porch 2 had already had it's non-descript tiles removed = plain red, Porch 1 tiles were again post –war and were red 6 inch x 3 inch tiles laid in a herringbone fashion.



Red 6x3 tiles in Porch 1 Bowden.



Both porches were tiled with red 6x6 Craven Dunnill tiles with a plain black border. P10. We had agreed between the C.O. & the client that a plain red tile with a black band from Craven Dunnill Jackfield with an Encaustic panel made by the same

Co would be used at both porch entrances.



The Encaustic panel above is a fine feature of the porch floor, panel made by Craven Dunnill tile of Jackfield.

Both porches have the same layout so only one picture is used to illustrate both entrances to the mansion.

We had petitioned for more encaustics to be used as I felt that the porch floors would have been quite elaborate given the features elsewhere! Again the client objected hence only one panel.

The client at one point had asked for all the tiles to be lifted so he could lay a slate or marble floor!!!!!!!!!

P11.

After almost a month on site with 3 of our team the floors are now at the cleaning stage, we had laid boards over the finished sections as soon as possible bearing in mind that apart from ourselves and the Conservation Officer nobody else on-site including the client gave a damn about the beautiful Victorian encaustic & geometric tiled floors. If the floors didn't receive immediate protection it was likely they would abused by all & sundry.

Usually on a listed building project we tend to be working with like-minded people which means that care is taken for the handiwork of others and a certain amount of appreciation given to other craftspeople. On this project we were greeted daily with moans from builders who thought it would be ok to drop heavy gear/materials on new-laid tiles or restored sections.



Bowden Mansion Victorian encaustic & geometric tiled floor prior to cleaning.

Above picture shows the floor after all the patches have been lifted & restored a few hours of cleaning now takes place starting with a mild alkaline cleaner, then a polish stripper followed by a PH neutral cleaner, plus use of a paint scraper for anything that resists the above.
P12.

On a floor as old as a late Victorian encaustic & geometric tiled floor it is likely that the tiles will have had at the beginning a generous coating on a regular basis of linseed oil & turpentine oil (not the white spirit used today) this mixture causes the tiles to become sticky and attracts dirt, in the following decades the tiled floor will have had every type of sealer in vogue at the time liberally applied over the previous remnants which by the time our Co became involved these coating had made the tiling discoloured.

As you can see below the intense deep cleaning provided by our Co brought out the vivid colours once more.



Bowden Mansion Victorian encaustic & geometric tiled floor restored.

Picture above shows the Victorian tiles restored after a month of hard work lifting tiles from the other hallway, which had more extensive damage than the one above. This hallway did have unusual thresholds = tiled in green marble!

P13.

As the green marble thresholds were original they had to be retained, they were damaged and had sunk at angles. We lifted the pieces out glued them together and when they were sturdy enough they were re-fixed into the thresholds.

Below pictures of the new sections tiled with Victorian reproduction square edged tiles by Craven Dunnill tiles of Jackfield. Thankfully commonsense prevailed and the tiles did not have to be made in the six & half inch format of the original Godwin tiles. Apart from the lack of an encaustic tile border (client would not pay out) these tiles by Craven are a very good match to the original Victorian tiles. The hallway was very damaged and had large areas of just mortar in-fill, the recovered tiles were used to restore the original tiling and our Co rescreeded this hallway to accept the new tiles.



Bowden Mansion Victorian reproduction tiles by Craven Dunnill of Jackfield.

The above hallway had to have the old tiles lifted plus areas of mortar and in-fill areas of a red terrazzo!

P14.

Below pictures showing the continuation of this floor around the corner.



Continuation of new Victorian reproduction geometric tiled floor.

Given the problems we had from the start on this contract = hostile client, people disrupting our work on a daily basis it is an achievement to have produced such a good end result the main hall-way floor and other sections fully restored and the new sections laid that fully complement the original tiles!

The client didn't want the sealing to be carried out as per our schedule = 2-3 days later and in the end our Co never returned to seal this project.

We did cover the floor up with a protective layer before we left the site. Thankfully we do not have too many contracts with hostile clients, it will continue however as often people buy a Public Listed Building and have zero idea of what that entails, in the more serious offences it can mean that a person can be heavily fined or in the last resort jailed as it is now a criminal offence to willingly do damage to Listed Buildings such as remove features because they are not wanted or liked or don't fit a persons idea of colour or décor!

The Conservation Officer often bears the brunt of both a recalcitrant client and a belligerent work force it is a very difficult job to do properly and we need more Conservation officers not less!