Ground floor - flowing screed

After all the effort in laying the underfloor heating pipes, and making them look neat, it's time to cover them all up for good with screed...

First of all, why flowing screed ?

Traditionally, floors have been made up using a traditional sand & cement screed, usually barrowed in and laid at 65-75mm depth.

However, modern flowing screeds have many advantages:
- Flowing screed is very quick to pour. Our screeders left less than 2 hours after arriving, and in that time setup their equipment, setout the levels, waited half an hour for the screed truck, poured 90sqm of screed, and cleaned up all equipment.
- Flowing screed can be laid thinner than traditional sand & cement screeds, this is particularly beneficial when using UFH as there is less mass to heat up and therefore is a bit more responsive.
- Flowing screed completely envelopes UFH pipes, eliminating any voids around the pipes which would impede heat transmission (especially round the underneath of the pipes).
- Flowing screed produces a perfectly flat finished surface.
- Flowing screed does not require wheelbarrows to be driven backwards & forwards over UFH pipes, which is more likely to cause damage.

Downsides ? Well flowing screed is more expensive than traditional sand & cement screed. Prices vary according to depth and floor area, and distance from the screed plant. Our quotes varied from approx £18/19 per sqm, up to around £25 per sqm (excluding VAT - but as a selfbuilder you can either get the whole job zero-rated, or reclaim VAT on materials afterwards). But for me, the numerous benefits listed above made it the obvious choice.

There are several makes of flowing screed available. After reading up on the subject, it appears the 3 choices were: Lafarge Gyvlon, Cemex Supaflo, and Tarmac Truflo. We ended up choosing Cemex Supaflo - the reason being that unlike the other two, it does not produce a laitence layer that needs to be sanded/scrubbed off afterwards. With a baby on the way, and tight timescales, the last thing I needed was yet another job to add to the list.

Next task was to find a supplier. I looked on Cemex's approved contractor list, and also googled for suppliers. I approached a number of companies. One "nationwide" company said we were too far away (reading between the lines - our job was too small for them to be interested). One company tried to persuade me to go for traditional sand & cement screed instead. No thanks. Several other replied, with a range of prices.

One company that replied to me, was Selfbuild & Contract Floors (website: http://www.selfbuildfloors.co.uk/). As well as giving me the most competitive price, they were very helpful, taking time to give me plenty of advice by phone and email on the subject of flowing screeds, and also on the preparation process I was undertaking beforehand. Simon & Bevin who setup the company had previously worked for many years for Lafarge, progressing through a variety of roles including being technical sales reps, and also training other contractors on laying flowing screed. With that kind of knowledge behind them, and price & helpfulness, they were the obvious choice for the job. They could also supply all of the three main screed brands.

OK, fast forward to the day of screeding.

Bev and his two colleagues arrived around 9am, and straight away started setting out the pump & hoses. Bev placed depth gauges all round the floor area and set them all accurately from a laser level, to take into account any variation in floor height. As it was, the floor was pretty level, a maximum of 10-15mm variation in the concrete slab which in building terms is pretty much spot on.

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Once everything was setup, it was time for me to make the teas and all of us to wait for the Cemex lorry (which had to drive from Sheffield). It arrived at around 10am. A day or two before, Simon had asked me to work out the floor area to be screeded, and decide on a depth. From this he worked out what volume of screed to order. I think 5.4 cubic metres was ordered - just on the limit of what one readymix truck can deliver without it all slopping out the back (it's runny stuff, a lot more so than readymix cement/concrete!).

The truck was gingerly reversed down the drive avoiding the big tree at the bottom, and the driver positioned the chute into the screed pump.

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The pump was fired up, the screed was dropped into it, and out it came of the pipe.

Bev & his two colleagues started pouring at the furthest extremes of the house from where the hoses went through the door, and worked back.

Starting in the utility room:

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Then the kitchen & bolier room:

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On into the dining room:

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Time to change my workboots for wellies, and gaffer-tape up the split in the right-hand one!

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Into the living room:

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And finishing in the hallway:

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..and the volume of screed had been calculated perfectly - one empty Cemex truck.

Next task is to lightly ripple through the screed to make sure that it's fully flowed to an even depth and to a perfectly flat finish:

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Screed will be able to take light foot-traffic in approx 24 hours or so.

Time to clean up, and me to make them another cuppa:

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Total time on site, 2 hours; the actual pumping of screed into the house took about 30 mins.

It was evident throughout that Bev knew his stuff, as he was talking me through everything he was doing, and talked in depth about the various types of screed available.

He did mention that Lafarge are launching a new, low-laitence version of their screed, information on which isn't widely available yet - but it sounds promising if you're looking at doing something similar.

So all in all, very pleased. When appointing contractors on a job I always get a bit nervous, worrying if they'll do a good job or not. These guys turned out to be professional, friendly and well-priced - I highly recommend them.