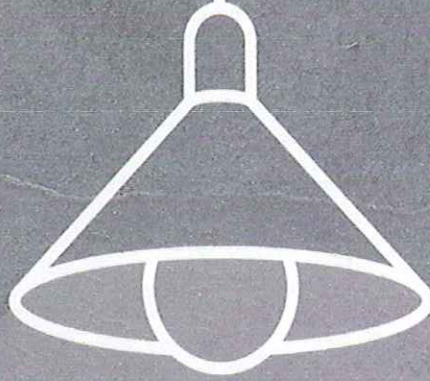


AN EXCERPT FROM THE NEW BOOK WRITTEN BY ARCHITECT AND T.V. HOME  
SHOW PERSONALITY, GEORGE CLARKE (published 30.09.2010)  
FEATURING LONDON BASEMENT



George Clarke's

# HOME BIBLE

# Creating new basements

If you are anything like me, and you've increased your sense of space by decluttering, knocking down walls, reconfiguring spaces to make open-plan areas work, done your loft conversion and your side-return extension – or even a rear extension – and had a go at converting your garage or cellar into a utility room or a little extra space, then you probably think you've reached the maximum that can be done to refurbish your existing home.

Well, there is one more thing you can do, and it may actually be easier than you think. I know because I've not only helped design these types of spaces, but I also created one in my own home. You can construct a full new basement underneath your house. Your first thought to this suggestion may be: *How the hell am I going to do that!* However, although the prospect sounds daunting, the reality of the project is definitely far less so!

New basement technology has moved on so much over the last 15–20 years and some pretty amazing things are now possible. When I started in practice it was common to see new basements being formed on sites where no existing buildings stood, but it is now possible for you to create a full new basement right underneath your old existing house. It's unbelievable!

## Constructing your new space

The construction processes vary depending on the type of property that you live in, but the general principles of creating a new basement under an existing building go something like this:

- 1 The basement company constructs a hoarding at the front of your house, which allows them to start digging through your front garden.
- 2 Once they have dug down to the basement level, they then start to make their way underneath your house, by forming a one-meter-wide tunnel right down the middle of your home. They go down the middle because all of your structural foundations run along the edge of the house. For the time being, they have to stay away from them.
- 3 They then have a skip located on the road outside your house and a conveyor belt that goes from the underground space up through your front garden – over the top of the street footpath and into



**above** A clever way to maximize light in a new basement conversion.

the skip on the road. As the guys dig out the mud, they throw it on to the conveyor belt and it goes from the subterranean space and into the skip. The skip is unloaded regularly by a lorry with a grabber.

- 4 They then tunnel off to the corners of the house and begin to underpin the house with huge, deep, new concrete foundations. They gradually and very slowly do this in sections to provide the much-needed structural support to your foundations before they can remove the surrounding soil.
- 5 They underpin, remove a bit of soil, then put up some Acrow props to provide some temporary support for your flooring above.
- 6 Once all of the perimeter walls and foundations are completely underpinned, the remainder of all the soil under your house is removed.
- 7 Steel beams and steel columns then span beneath your existing ground floor to keep it in place.
- 8 Light wells are formed at the front and the back of the property, to allow in as much natural light and ventilation as possible. These can either be sunken external courtyards or glass skylights inserted at ground level.
- 9 Next, the waterproof tanking system is put up against all of the concrete walls.
- 10 Insulated concrete slabs, under-floor heating pipes and screeds are installed.
- 11 All the drainage and plumbing is installed.
- 12 The walls are timber-battened, dry-lined and plaster-boarded before being given their final finish.

I am completely astounded by the simplicity of this process. Not only is all of this work done quickly and efficiently, but you don't have to move out for a single day! All of the work happens underground, while you remain living in the rest of your house. Being able to create this newly formed space from something that didn't even exist before completely blows me away. In fact, I was so blown away by the possibilities, that I decided to get in touch with the London Basement Company, to do one for me.

## Basement worries

The main thing that concerns people about new basements is that they may damage neighbouring properties or affect the ground water table. Neither of these is true. What's more, with a good, reputable company running the project, any structural movement will be absolutely minimised.

Unless you live near an underground stream, the water table won't be affected, either. The biggest thing that you and your neighbours have to worry about is the disruption and the noise. But even that hasn't been as bad as I thought it would be!

**below** This is how they do it! A conveyor belt takes the newly extracted soil to a skip waiting on the road outside.



## My new basement

When I'd refurbished my house from top to bottom, and added as much space as I possibly could, I decided to begin the design drawings for a full new basement under my house. I had to ask myself some very serious questions before moving forward, because I had to make sure that it made financial sense. From a family and lifestyle point of view, a basement made perfect sense. I didn't want to move house and even though we were comfortable in the space we had, having additional room was great for when parents and other family members came to stay. I also knew my kids weren't getting any smaller and that they would, in the long run, love some more space. But did it stack up financially? Some serious number-crunching was in order, and I asked myself the following questions:

- How much would a basement, with a footprint that was the same size as my house actually cost?
- Once the basement was completed to a high specification, what sort of increased value would it add to my home?
- Was there a danger that adding so much space and increasing the value of my home substantially would break through the ceiling of house prices that people would be willing to pay in my local area?
- How long would the build realistically take and what level of disruption would it actually cause for my family?
- Overall, was it actually worth it? With the extra capital I would need to spend, combined with the level of disruption, would I be better off just moving and buying a bigger house elsewhere?

With a little research, all of these questions could be quickly answered. The London Basement Company gave me a ballpark price based on some quick sketches. Yes, the price was only an estimate at this stage, but these guys have bags of experience so it was a pretty good guess. I was already aware of the property prices in my area, but I still put a call in to an estate-agent friend to find out if I was over-investing in the property. Even with all of my financial cards on the table, he said that there was no chance of my property going through the financial ceiling for our area. So doing the work as a financial investment made sense.

I then had to look at whether it would be easier and more cost-effective to move. Looking at bigger properties in my local area and some larger houses beyond, I realised I would have to commit a substantial amount of capital money in order to climb the property ladder while staying in the same area. Add to that the cost of selling my house, agents' fees and VAT, as well as stamp duty, legal fees, removal costs and potential refurbishment of a new home, and creating a basement looked like the best proposition by far!

In a matter of two days, the decision was made. It was new basement time!

At the time that this book goes to print the basement won't be fully completed. We were granted planning permission in the early winter of 2009 – relatively straightforward considering I live in a conservation area with very tight restrictions.

At the time of writing, most of the house has been underpinned and the majority of the underground space has been formed. The next stage is for all the waterproofing to be done, the slabs to go in, and the space to be made wind- and watertight. We can then begin fitting the internal walls and dealing with the finishes. I can honestly say that every time I go down the ladder to those newly formed underground spaces, I am absolutely amazed.

Due to new legislation that's been brought in to protect green garden spaces, this underground garden structure has to be built at an even lower level than the main basement, so that there can be a 1 metre clear zone on which the garden's top soil and grass can be re-established above the office's basement box.

The total floor area for this new basement is 1100 square feet! To put that into perspective, the area of the original two-storey house was only about 1600 square feet! You couldn't maximise a very ordinary, two-storey, Edwardian semi-detached house any more than this. I've used every single square inch of available space and more – and have managed to do all of this with a huge number of planning constraints that are the result of living in a conservation area.

What originally started as a simple, Edwardian two-storey house has become a four-storey home flooded with light from top to bottom.

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