



Need more living space?

Who doesn't? Basement conversions are like architectural soufflés – technically challenging, but they can be well worth the fuss, adding lots of space to your home in one go and, in some cases, lots more value too. Here's what you need to know before you start going underground **Web** Luke Tibbitt



opposite page
The end of this basement by Found Associates (020 7734 8400; foundassociates.com) has a glass box to fill an otherwise-dark space with plenty of light
left and below
This project by Edgley Design (020 7033 9522; edgleydesign.co.uk) is for a self-contained granny flat under the garden. A concrete shell was inserted below ground, with a glass cube dropped from the garden down into the space to bring in light and fresh air



Steve Ashford

Digging out a basement might be a messy and expensive process, and annoying for your neighbours, but it is one of the best ways to create lots more living space, short of moving (which can prove more expensive anyway, once you count stamp duty and other costs). But how do you make this underground space light, bright and watertight?

Design

Forget dark, damp, and cramped. Technology has moved on in terms of how basements are built, waterproofed, and lit – and what they lack in external views, they make up for with a sense of calm, being quieter than rooms above ground.

High ceilings are the most important thing, says Angus Shepherd from Powell Tuck Associates (020 8749 7700; powelltuck.co.uk), who has worked on numerous basements. He advises a minimum height of 2.7m for his clients, and London Basement Company (020 8847 9449; londonbasement.co.uk) does →

similar – 2.4m. 'If you have this measurement, it takes away the feeling of being in a basement, even without natural light,' says Shepherd.

If you're using your basement for living space (as opposed to a gym or a cinema), light wells at the front or back, or around the perimeter, will bring in daylight. Voids between floors also work well, creating double-height space and connecting it with the ground floor, and if you're building under the garden, you could put roof lights in the landscaping. Ventilation is also important in basements, so having some glazing that opens will allow for this naturally.

Also make sure your basement flows seamlessly from the ground floor, otherwise it will quickly feel redundant. Stairs that continue on from, or near to, your home's existing stairs make it feel logical to continue down into the basement.

Construction

Build times vary, depending on the size, depth and complexity, of course. It takes London Basement Company between 12 and 30 weeks to build a plumbed and wired shell measuring 65–85sqm, says its marketing manager Maggie Smith, and non-structural and non-decorative building work can be done in the rest of the house at the same time. She also says people can usually live in the house during excavation. Though be warned – basement builds are noisy and dusty.

A structural engineer will work out the best way to build your basement, so it's important to include one from the start. 'It doesn't work so well when the design

is fixed, and we get appointed to make it stand up,' says structural engineer Stuart Tappin (020 7713 8608; standengineers.eu). 'Every project is unique and requires a different solution.'

Homes near waterways or railway lines, for example, might be too shaky to withstand a big dig beneath them.

'It's really important to take time to understand the structure, and then do a site survey for the ground. And the sooner this is done, the better,' says Tappin.

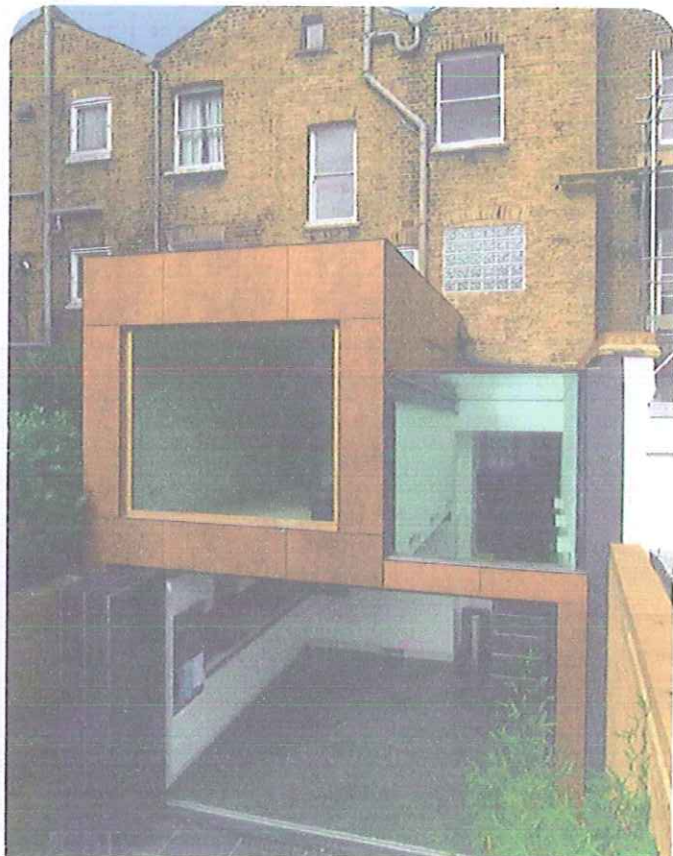
Access is also important, and you may have to outline how this will be managed in your planning application. Builders need to get in and out to excavate (which might involve temporarily knocking down part of your home, such as a bay window at the front, to gain sufficient access). You also need room outside for a skip to hold the spoil.

And properly waterproofing your basement is imperative, with the most common way being a cavity drain membrane system. This is a lining between the concrete shell and the internal wall, which acts as a barrier, catching any water that might get through and draining it away.

Money matters

It's no surprise basements are pricey, given their specialist nature. Maggie Smith says London Basement Company's average is about £300 per sqft (£3,229 per sqm) for a plumbed and wired basement, to a level ready for decoration and finishes, or about £200,000 for a family room, utility room and bathroom. Still, it could

*below
Crawford
Partnership
(020 8444 2070;
crawford
partnership.
co.uk) lowered
the ground and
garden in this
house by one
metre to make
room for a
double-height
extension*





be cheaper than paying stamp duty and other moving costs, and in some premium areas – particularly the most expensive parts of London – you could make the money back on the value it adds.

'I've not seen anyone lose money on one yet,' says estate agent Bob Crowley from Bective Leslie Marsh in London's Notting Hill. 'But it's not just about having the extra square metres. If you dig down deeper, you can create something that's got more wow about it, and that's what people want.'

But what about those on a smaller budget? Maggie Smith suggests getting a specialist to construct the shell, and a builder to do second fix and fit-out. 'You can do the fit-out cheaply, but it's important that the structural work is done by a specialist. You should always see at least two of their jobs and speak to their clients.'

Planning and party walls

Most basements require planning permission (some might come under Permitted Development Rights, which allows you to make small additions without permission, but you should always check with your local authority). Some boroughs, particularly in London, →

above and right
Architect Robert Dye (020 7267 9388; robertdye.com) focused on space and height aspects to provide further living space that is constantly in use



'We spend most of our time down here cooking and having meals'

Gyms and playrooms are common in basements, but how do you make one your main living space? That was the challenge facing Joy and Daniel Marovitz, who live in this house with their two young children. It came with a kitchen and dining room in a dark and poky basement, but having lived in New York, they were used to open-plan lofts, so they asked architect Robert Dye (020 7267 9388; robertdye.com) to create something similar.

Rather than move living space above ground and extend into an already-small garden, Dye added extra space underground, enlarging the basement by about 37sqm. He then topped it with a double-height triangular light well at the back, which extends out from the ground floor, creating a six-metre-high atrium inside. Its windows face north, for an even light, and it is topped with

roof lights to bring in extra. Downstairs, shiny materials (polished concrete floor, glossy kitchen cabinets) and white walls help maximise this light.

To get permission in a conservation area, Joy and Daniel hired a planning consultant. They also had to do party-wall surveys on three sides (because the house behind them is less than three metres from the excavation), which cost £18,000. It then took three and a half weeks to dig the space, and about three months to complete the basic shell.

The result is a great example of how height and light can transform a dark space into a liveable one. 'It's definitely a successful result,' says Daniel. 'We spend most of our time down here cooking and having meals, and it never feels like you are in a basement.'



Julian Gornish-Tredwell, James, Type

require extra information with applications, such as reports on the structural engineering, or the impact on groundwater, or the likely disruption from lorries. Others have banned basements altogether beneath listed properties.

You'll also need to give your neighbours a party-wall notice if their building is within three metres of yours, and you are excavating lower than their foundations, or if they are within six metres, and the line between the bottom of your foundations and their foundations is 45°. You have to do this at least one month before work starts, and they have 14 days to consent. If they don't, you will need to appoint (and pay for) a party wall surveyor who checks both sides of the fence before and after, and you will need to remedy any damage caused by the work. GD

Contacts

Basement Information Centre

(01276 33155; basements.org.uk)

The British Structural Waterproofing Association

(020 8866 8339; thebswa.plus.com)

Delta Membrane waterproofing

(01992 523 811; deltamembranes.com)

Faculty of Party Wall Surveyors

(01424 883 300; fpws.org.uk)

Government Online Planning Portal

(planningportal.gov.uk)

Newton Membrane waterproofing

(020 7237 1217; newton-membranes.co.uk)

right and below
A seven-metre-deep hole under the house was required to accommodate this basement build. Architect David Long (020 8533 5555; dlaltd.com) achieved maximum light by cutting a huge void out of the existing kitchen



'It's a semi-detached house; the neighbours were very patient'

The owners of this house, who have three children, originally approached a specialist basement company, which designed light wells at the front and back, but they worried the middle would be dark, so they asked architect David Long (020 8533 5555; dlaltd.com) if he could bring in more light.

His ambitious design cuts a huge void out of the kitchen on the ground floor, to bring masses of light down into the playroom below, so the two spaces feel like one. It also means the adults can easily keep an eye on what the kids are up to downstairs.

'The most important thing was that it didn't feel like it had been hidden away,' says David. 'The basement now feels like it's the

ground floor, so you lose this idea that it's the imposter.'

Of course, this made it more challenging and expensive to build. 'We effectively removed the ground floor and dug down four metres, so there was a seven-metre-deep hole beneath the house,' he says.

It was held up by a huge steel structure during the build, with the shell taking six months to complete (and costing about £250,000), and the fit-out taking another six months. Thankfully, the neighbours were amenable.

'It's a semi-detached house, so they were very patient. The advantage is that the site is large, so we could put the site cabin off the road. We weren't making a mess in the street.'



Owne Parrot (oliverparrot.com)