

# HPH309

## **Ben Adam-Smith**

This is House Planning Help - episode 309. Hi there, I'm Ben Adam-Smith. And this is the podcast for you if you're interested in self-build or retrofit. I'm exploring what houses we should be building in the 21st century and trying to break down the major roadblocks that may get in our way. Coming up, two architects from top architecture practice Architype, that's Polly Upton and Kirk Rushby. They share their self build story. Lots in this one: a tight hold on the purse strings, in fact just making something a reality, that's a large part of this story, taking steps towards making things happen. Obviously, it helps that they are architects. Great design, problem solving in here, a lot of interesting stuff in this episode.

## **Ben Adam-Smith**

But first, I've decided to kick off a new part-time feature. So this is all about when low energy or sustainable - whatever we're going to call it - building breaks into the mainstream. It must be in a significant or entertaining way. Those are the two criteria to add. Today.

[Clip of Tinie Tempah's Pass Out song]

## **Ben Adam-Smith**

You weren't expecting that, were you? That's rapper Tinie Tempah, a big hit in 2010. Why on earth would I play you a clip of that? Well, it's actually something that happened the other day. I was just switching off whatever programme we were watching on the TV in the evening, and happened to flick through Channel 4's Extraordinary Extensions. And guess who was presenting? Yes, it was Tinie Tempah. And what caught my eye, I suppose more, was actually the guest on there. It was Richard Dudzicki, who we've had on the podcast before. If you delve back to House Planning Help episode 235 you will find him as our guest. So I'd just flicked on to this. This is pretty much the point where I came in.

[Clip from Extraordinary Extensions]

## **Tinie Tempah**

Here, Richard and Eva are using lime render, because they're trying to achieve an airtight house, this allows all the moisture to escape. If they use regular plaster, they'd be left with interstitial condensation. You don't want that.

## **Ben Adam-Smith**

Now, I've watched my fair share of property programmes over the years and I don't think I've ever heard any presenter reference interstitial condensation. It just, it goes deep at that point and you try and avoid it. So respect to Tinie. But listen to how they wrapped up the whole of this episode.

[Clip from Extraordinary Extensions]

**Tinie Tempah**

I'm really impressed by what Richard and Eva have achieved. We all need to be thinking about energy consumption. And I'm feeling so inspired right now. So you know what, my next project is going to be a Passivhaus. It's the future.

**Ben Adam-Smith**

This is it. It gets under the skin, doesn't it? And Tinie, when you've built that Passivhaus, I want you to report back to House Planning Help HQ and have a debrief here. That would be good.

**Ben Adam-Smith**

Let's get to our featured interview today. It's a case study. And it's a standout house in its location. Of course two architects, I think it really does help. It's a tight budget and I suppose that's what's interesting, here is how that money is being spent. You can still get results with a smallish budget. I started my chat with Polly Upton and Kirk Rushby by asking them to tell me a little bit about themselves.

**Kirk Rushby**

Polly and I are both architects. We have both been working for a practice, you probably know quite well, called Architype. We've both been there quite a while now. I think I've been there on and off for 12, 13 years or something.

**Polly Upton**

I think it might be a little bit longer than that.

**Kirk Rushby**

Maybe even longer.

**Polly Upton**

Both been there through our part ones, part twos.

**Kirk Rushby**

Yeah.

**Ben Adam-Smith**

And is it every architect's dream to build a house, do you think?

**Kirk Rushby**

I think most probably want to. But it's quite an opportunity to get to do, isn't it?

**Ben Adam-Smith**

I always think it's a good sign though, as well. And it's nice to have almost a little group of Architype members who've gone on to build their own house. So let's hear about your story today. And, yeah, when did that start? When did it get realistic?

**Kirk Rushby**

Well, we... How did we even do it? So...

**Polly Upton**

We were living in a very cold Victorian house in Hereford and thought we're preaching about Passivhaus at work and working on it with lots of our projects. And wouldn't it be nice to live in a Passivhaus one day? And then, yes, just started looking for a site.

**Kirk Rushby**

I think for us it was a bit opportunistic. A few opportunities aligned for us. I think we were at a point where we were saving money anyway, because we'd bought a house that we literally could afford on quite small wages at the time. And we just had a wage increase and we stayed in that house. We'd looked at other things. At the time we were looking at whether we'd buy another house. We looked at other properties. Nothing met our standards really. We looked at other houses and we just couldn't bear to buy anything. So we were just saving money for a larger deposit on something else. And we looked at sites as well. And we went to an auction, saw a couple of sites go, we thought we'd just go and see how they are. And they went for extortionate amounts that we just couldn't even think of affording at the time. This was on for less than them, but closer to what we could probably afford. But we still probably weren't anywhere near it. And so we had our eye on it, we'd come and looked at it. But it then went through a process of being sold to someone else. And then that fell through. And then in between that time, we had managed to save a bit more money. And then we just got quite close to being able to afford it. And we essentially, we just told them, we were cash buyers, and we put in a relatively low offer and got it because it wasn't really a perfect site for us. It wasn't. And I think if you look for perfection, that's when you're competing with everyone else. And when we came here, it was just sort of like, there's a lot of opportunity. But there's constraints and problems. And you could see why it was cheaper than other sites potentially. But again, that probably is what made it affordable for us.

**Polly Upton**

And it had been on the market for quite a long time. And the house next door was for sale, same people.

**Ben Adam-Smith**

I think biding your time as well, while actively looking is a really positive approach. This site though I find interesting. It has one key constraint but maybe you could list that and some of the others that you saw.

**Polly Upton**

Well, the obvious one is the access.

**Kirk Rushby**

Yeah.

**Polly Upton**

Under quite a low tunnel under the railway, which obviously makes getting materials in quite difficult. It didn't have any services on to the site itself, services all round. So that's something that I think puts quite a lot of people off. Yeah, it's down a track. That's very pot-hole. So again, people normally like to have cars that the suspension is not knackered all the time and noise from the train line. I think people might worry about that.

**Kirk Rushby**

Yeah, and the train line probably. But just knowing that we, as a starting point, we were going to build a Passivhaus. It's just something that didn't put us off. I think years ago, I'd been to see one in Ledbury and there was a main road right by the house and just thinking I can't hear anything. So this site, potentially, I thought would put other people off but not us because we knew that would potentially not be an issue really.

**Ben Adam-Smith**

Well, that is going to be a test today. We will put our best microphone ears on and listen for any trains going by and see how we do.

**Polly Upton**

Let's hope we get a freight train!

**Ben Adam-Smith**

The auction process is interesting. Was that an active area where you were looking, thinking that there are often opportunities that come through? There's normally something that you've got to try and address with an auction lot. Was that why started looking there or you were just looking everywhere anyway?

**Kirk Rushby**

We were looking everywhere. Really, at that point, when we were looking, we knew we couldn't afford anything. But I think we were looking because we thought maybe in five years or something, and you kind of need to suss things out anyway. There's a lot of time, I think, in just knowing where good sites are, where bad sites are, different places, you can buy sites.

**Polly Upton**

Yeah, we'd also looked at ones that had full planning on them already that we didn't really like the designs of them and didn't really work very well with Passivhaus. And then we looked at ones that just didn't have any planning on so it was much more of a risk. But this one had outline permission for a rectangle. So again that was good for us because we're architects, obviously, we can design our own house and not have to pay lots of fees to do that. But for other people that might put them off.

**Kirk Rushby**

So it got rid of the risk of the principle of planning permission but we weren't constrained by design, which was perfect, really.

**Ben Adam-Smith**

So take us through some of the design process. And also bearing in mind, you've mentioned a couple of times money, how did you address that?

**Kirk Rushby**

Basically, being really tight. That's essentially... [Kirk laughs]

**Ben Adam-Smith**

Well you've effectively said that you can't build a house to begin with. I love that, the fact that you said this is not even realistic. And you're still looking and trying to make it happen. And here we are.

**Kirk Rushby**

Yeah, we had actually looked at another site. And we actually costed it up. And it didn't stack up to us. It was an inner city site. We are lucky because we have access to some cost information being architects and there's a little bit of experience there. So there's general figures that we can work to. But then we just got more and more detailed with it. We started with a general kind of 'this is how much we think we can do it for', based on a rough square metre figure. And then we drilled down into actually what we're going to build out of and got each thing priced up.

**Polly Upton**

And designed a house of one size and then gradually kept making it smaller.

**Kirk Rushby**

There was loads of refinement. I think we designed a 160 square metre house. And then we realised that we probably couldn't afford that. And then we realised that maybe we didn't even need it. So we shaved about 30 square metres off and didn't really feel like we lost anything.

**Polly Upton**

It just gradually got a little bit smaller, a little bit smaller until we thought if it gets any smaller then it's going to be difficult to make the space planning work, particularly downstairs where the bedrooms are.

**Ben Adam-Smith**

And do you see eye-to-eye all the time?

**Kirk Rushby**

No. I've spoken to other people about this. Most of the people we work with their partners aren't architects. The issue they have is convincing their partner of certain choices. So they're the person that's maybe trying to push something a bit different. We don't have that problem. The different problem we have is quite strong, two strong opinions.

**Polly Upton**

No

**Polly Upton**

Yeah. And somehow we've got to meet in the middle ish.

**Kirk Rushby**

Yeah, and I suppose we've both had a similar sort of work experience having worked at Architype for quite a while. So there's a lot of practical choices that made a lot of sense to both of us, that were just made quite quickly, because it was just the way we do it. There's just things that are sensible. It's little details that, I think, that's where you really start... discussion, healthy discussion about what wall finishes, it's that stuff that becomes really important.

**Polly Upton**

But the fundamentals of bedrooms on the ground floor, living in the middle, that was easy.

**Kirk Rushby**

I remember there were early discussions, there were ideas about what the important things are, like the view was something both, we just both went, that's quite clearly important. And so there was a few key decisions that we agreed on quite quickly.

**Ben Adam-Smith**

You've talked about the bedrooms downstairs, big advantages of being cool. You've also got a double height space. So maybe you could just explain the upper floor as well or the half floor?

**Kirk Rushby**

Well the top floor, we use it as an office. Essentially what we've done is created the form of a two storey house but with a half storey on top of it. And that was because of the view because we wanted to get high, get a good view. But at the same time, we knew we're constrained by form because they were adjacent buildings that were of a certain size, so you're limited size. So essentially, that was driven by trying to get high, get a good view, but at the same time, not make the building too tall.

**Polly Upton**

Well, and it uses the space within the thermal envelope rather than having a cold loft space, which lots of houses do have.

**Ben Adam-Smith**

You talk about getting up high. There are obviously restrictions there. So how did you go? You had outline planning, what was that process like getting it all the way through?

**Kirk Rushby**

Yeah, not too bad. What we had was an outline on a plan, they'd had the principle of a three, four bed house approved. And it was just drawing up the elevations and the plans in more detail. And orientating it. And we did have a bit of discussion with the planner about the cladding and the form of it. But it wasn't a hugely difficult discussion, was it?

**Polly Upton**

No, no. It was just backing up why we'd made those decisions. I guess the biggest one was the corrugated metal cladding for the roof and the walls, and making a justification as to why that was a good idea. And either side of us is red tiled roof, and red brick, and then the rest of them up the lane are slate and render and brick again. So it made sense to fit within that colour palette between those two houses. And in terms of the material, we had to convince the planner about the detailing and just provide some precedents to show it wasn't going to look like a big agricultural, clunky shed and it was going to be quite refined. So yeah, once we've done that, then they were quite happy.

**Ben Adam-Smith**

How are you going to build this then?

**Kirk Rushby**

So we knew timber frame. And also just because we knew we had these site constraints, and we thought, let's not add complexity, let's do some things that we know. And that's something we did know.

**Polly Upton**

We knew that we couldn't do a panelised timber frame system because we couldn't get it under the railway line. So we knew we had to stick build it.

**Ben Adam-Smith**

When you say 'get them in' what does that mean? Can you just use a lorry to come through? I know you've obviously got dimensions of this little tunnel to go through. But how restrictive is it?

**Kirk Rushby**

Well, that's the other thing. So one of the big things was the foundation. So we didn't want to pour concrete. We had to design to allow for the possibility that the delivery couldn't get through, and that we might have to manhandle a few things through. So one of the early choices when we met Andrew, the structural engineer, was trying to go for a non concrete foundation and what was really good was he was open-minded to it almost instantly.

**Polly Upton**

Well and Nick Grant.

**Kirk Rushby**

And Nick Grant had been pushing the idea for a while.

**Polly Upton**

Had been winding us up for ages. And Andrew, I think.

**Kirk Rushby**

Yeah, he'd been pushing the idea of something like that for a while. So essentially, we've got a compacted gravel foundation. And that just means that if we get stuck, we always knew that there's an area on the other side of the tunnel that a lorry could just dump something and Matt could basically

'dumper truck it' through, and you've got nothing going off, you've got no risks of the concrete going off, you've not got time constraints, you can just deal with that.

### **Polly Upton**

When we started building, obviously, we didn't really know, the people around us that well. We didn't know who would be kind and let us drop stuff off in various places and things like that. And I think as the build progressed, we became more and more comfortable with what we could and couldn't do asking favours from people and things like that. So eventually, actually, the big aggregate wagons that came, the farmer allowed us to come through the farm and down this way, but only at a certain time of year and if the weather wasn't too bad. So we could do slightly more than we thought we might be able to, but it was still a bit restricted.

### **Ben Adam-Smith**

But again that's quite interesting, isn't it, that some people might have looked at that constraint and then given up and you have followed it through to actually discover at certain times of year, you've maybe more access than you first thought. Interesting.

### **Kirk Rushby**

The scary thing about it, when we started, was that it felt relatively simple, because we got it to a point where like, masonry would probably come in large pallets, be very difficult to get through. We knew that if they dumped all the I-beams, they are relatively light, you can lift them, and just walk them through, or just put them on Matt's van, you know.

### **Ben Adam-Smith**

Now that we're talking about builders, this is in some scenarios, I would say never do, but tell us about your builder.

### **Polly Upton**

So the builder was my brother. We still get on very well!

### **Ben Adam-Smith**

There we go. And this can work but I would say equally, you've got to be careful. So how did you know he was right for the job, and that this was the way to go?

### **Polly Upton**

Because he works very, very hard. He thinks very hard before he does things, about what he's going to do and plans very well and is very cheeky with certain suppliers. And he knows the building industry quite well, because he's been in it since he left school. So we knew that he wasn't going to mess around and would work hard. And then because his home was actually quite long way away he lived with us during the week. So we'd get back from work or he'd get back. And we'd have really intense discussions about what we're going to do the next day, the next week, the next month.

**Kirk Rushby**

Matt's got a general 'can do' attitude which in this situation is really useful, because you talk through the logical way of doing it. And quite often the solution you come up with is not what a typical contractor would come up with.

**Ben Adam-Smith**

Am I right in thinking that he hadn't built a house before but he had all the skills?

**Polly Upton**

Yeah, not an entire house. He'd done a really big extension/refurb on his house. Before that, he'd been mostly building fences, big, big fencing projects, really, really big ones. But still he, yeah, he'd never built a whole house, let alone a Passivhaus.

**Ben Adam-Smith**

The thing is though it's carpentry skills, really, isn't it when you get down to timber. And I've heard this a number of times: get a good carpenter, maybe they haven't built a house but if they can keep something plumb and get it all...

**Polly Upton**

Yeah but it's all the groundworks and things as well, getting all the drainage and all the site levels, and I think that's where we really benefited from his previous experience, was that he'd done all of that, which, you know, other people would have got a groundworks contractor in to do all that. And then got your main contractor in to do the bit above the ground.

**Ben Adam-Smith**

Was it easy enough to negotiate with him about what his pay should be? And all these sorts of things?

**Kirk Rushby**

He basically just told us a day rate and we said, yeah, that's fine.

**Polly Upton**

Yeah. We were pretty naive!

**Kirk Rushby**

It sounds weirdly simple.

**Ben Adam-Smith**

I don't believe you one second. You know what a good day rate is.

**Polly Upton**

You don't want to rip off your brother.

**Ben Adam-Smith**

Well that's it. I was going to say, did he do it as a favour, and he built it all for free for you?

**Polly Upton**

Well, we had a lot of other help from my dad who did a lot of work for us.

**Ben Adam-Smith**

Good old dads.

**Polly Upton**

To get him out of the house, I think really! But no, he said, I think his rate was a little bit cheaper than he charges other people. But again, it depends who is working for.

**Ben Adam-Smith**

How long did this all take? And were there any key challenges during the build?

**Polly Upton**

Just over a year for us to get in.

**Kirk Rushby**

I think it was about 15 months.

**Polly Upton**

A year and a quarter.

**Kirk Rushby**

Challenges. Services. Matt got really far on batteries and an extension cable.

**Polly Upton**

Well, we started January 2020. We didn't get electricity on site until January 2021. So he built everything with batteries, a very kind neighbour's extension cable from their garage, water, just a bit of...

**Kirk Rushby**

A bucket.

**Polly Upton**

We didn't need much... a bucket from their hose.

**Kirk Rushby**

But that was another benefit of all the dry construction. There was hardly any need for water.

**Polly Upton**

It was only the plastering really that needed it.

**Ben Adam-Smith**

What about assistance? You mentioned your dad. Is that as far as it goes? Or was there anyone else labouring?

**Polly Upton**

Yep, Matt's mate Morley came for a few weeks. He got another friend into help when they put the windows in, when they had the window delivery but that's about it.

**Kirk Rushby**

We paid him a day rate. And then we paid the farmer a day rate because he had a telehandler to get the windows in. And essentially we got the windows dropped at the post office just over the road. And each one was then brought through, if they were small enough, in Matt's van.

**Ben Adam-Smith**

I just like the idea of dropping it off at the post office. That's great. There'll be a telehandler coming through!

**Polly Upton**

They were really good. They took the whole of the timber delivery. And actually the local builders' merchants just across the main road Pontrilas Merchants. They took some quite big deliveries for us as well, didn't they, because they've got small vans that will come through the tunnel.

**Kirk Rushby**

So a lot of small favours actually from quite a lot of people.

**Ben Adam-Smith**

As this time goes on, you've talked about your evening discussions over little details and questions that he might have, but what else are you doing during the construction process, thinking of the final finishes and so forth?

**Kirk Rushby**

We'd done a lot of construction details, but a lot of it would be liaising with Matt about literally what we're going to build the next day or the next week. And you know, you have 2d details, but he needs to understand exactly how it's going together. So there would be a lot discussion about that, and we would be talking through that, ordering materials, too.

**Polly Upton**

Yeah we did all the ordering of everything, basically. Matt did a little bit, but most of it was us.

**Ben Adam-Smith**

Would you call yourself project managers as well as all the, you know, architecture that you've done?

**Polly Upton**

I think we'd have to.

**Kirk Rushby**

In this case, yeah, I suppose so. We sort of managed it between us and Matt.

**Polly Upton**

I think what was also quite fortunate was that I was on maternity leave. Well, we did shared parental leave. So I was on maternity leave. Kirk then took over and did shared leave until mid August last year. So for nearly eight months we were...

**Kirk Rushby**

There was a bit of time.

**Polly Upton**

There was a bit of time. Yeah.

**Kirk Rushby**

It was squeezing in orders.

**Polly Upton**

But it meant we could come and see the site in the daytime when he was here. Squeeze the orders in.

**Kirk Rushby**

Yeah, squeezing in orders between nap times and feeding,

**Polly Upton**

Nearly rolling off the cot whilst you're speaking to building control. That stuff! Yeah.

**Ben Adam-Smith**

Well, that is the lovely thing. When you think of this house you're making it a proper home now and your son's just going to take it all for granted.

**Polly Upton**

Yeah.

**Kirk Rushby**

Shared parental leave, it can be a little bit maddening, actually, a little bit of isolating so it's actually a nice side thing to do that keeps your mind occupied in a different way, in between feeding and...

**Polly Upton**

Bottoms!

**Ben Adam-Smith**

Anything else we should know about during the construction and the finishing, towards the end of the process.

**Polly Upton**

If you're going to install rigid ductwork for your MVHR, do it before you put your external sheathing boards up.

**Kirk Rushby**

When you put your joists in, you have to cut them up and then couple them back together. But that didn't end up being a massive...

**Polly Upton**

No, it was actually fine. But we were just, oh, how are we going to get those big lengths in. I think we'd had the Warmcel put in by that point. So we couldn't just make a hole in the sheathing board and slide it through.

**Ben Adam-Smith**

Did it feel any different doing something for yourself versus for a client?

**Kirk Rushby**

Yeah. Yeah, massively. Whether it's better or worse, I don't know. Just loads of choices, isn't there. Choices, choices, choices. It's just everything. And then you get to a certain point and you think, oh we're doing really well and then actually once you get inside, your choices just accelerate, they don't decelerate, they actually get more, because you're dealing with smaller bits. And like the wall finish, we spent ages trying to work out what wall finish we're doing.

**Polly Upton**

And that wasn't just because we couldn't decide what we wanted to do. At the time, because of COVID, there were quite big supply chain issues. So are we going to have it lovely lime plastered? But we haven't really got the reveal depth inside for that now. Should we just do standard plaster and plasterboard? Oh there's no plaster board, we can't get hold of that for months, shall we do something else instead? So yeah, it wasn't just that we couldn't decide.

**Ben Adam-Smith**

And what have you thought of Passivhaus? You obviously do a lot of it at work. But what has it been like to live in as a home?

**Polly Upton**

Amazing.

**Kirk Rushby**

Well, we've had the summer where some of the days were getting up to 31C and we've been pretty comfortable. The top floor got probably up to around 25C ish at the worst, but really compared to other people we were really comfortable.

**Polly Upton**

Yeah. And I think as probably with any new house or house that you move into, it takes a bit of adjusting to and learning how to use it. So when it first started to get warm, we hadn't actually put the brise soleil on the south facing ground floor window and door yet so it started getting a bit warm and we thought it's not too bad. And then we put a tarp up over them, and that then actually really helped with reducing the overheating. So that was good. And then you learn that at about one o'clock, you need to close the shutters on the big west door.

**Ben Adam-Smith**

Well tell us about these because this is something that fascinates me. And I love the manual nature of it, the simplicity of these. And that effectively it has allowed you to have some nice big windows here with the view.

**Kirk Rushby**

The view is a big thing but it's west. So the trouble with that is it's very difficult to deal with the overheating, the controlling of gains from the south is really straightforward, it's just an overhang that's an appropriate size, or just some brise soleil on the west, it's a bit harder. And really just shutters made sense, because they just allowed you that view when you want it and then probably for about four or five hours a day you just to close them in the summer.

**Polly Upton**

So they're just the same material as the cladding, corrugated metal in a metal frame on a runner. Well, there's two of them. One rolls in from each side and just covers over the three and a half metre by two point one ish opening. So in terms of overheating, it's a significant area to try and control.

**Ben Adam-Smith**

It's quite interesting as well to see you've got two big fixed glazing... Is this the south side?

**Kirk Rushby**

Yeah.

**Ben Adam-Smith**

On the south side. So tell us about the decision. Is it because of the size of the windows that you've gone that way, that it would have been clumsy to do anything with?

**Kirk Rushby**

We didn't want to break up any of the windows. We wanted a window arrangement where each window was just the opening. And so we sized each one for what we thought was appropriate. And then when we sized these ones, they were quite big. So it's quite difficult with an opener. So we went for a strategy where we would just say, okay, east and west, they all open anyway, so you can get cross vents, so don't need to open them.

**Polly Upton**

The combination between daylighting but also not having too many windows. And so we went for two big ones on this elevation instead of three small ones, because then you've got fewer thermal bridges, less complication, it's just a little bit simpler. And the same with all the other windows, they're quite carefully placed to get either views or light or a bit of cross ventilation.

**Kirk Rushby**

Yeah.

**Polly Upton**

But I think there's no unnecessary window, probably, in the whole house.

**Kirk Rushby**

No, maybe these ones could have been smaller, but I remember playing about with them in PHPP and reducing them didn't really do a lot. And we quite liked the fact that you get a really good view of the trees. These two sides, you almost feel like you're in a tree house. Just being able to see the canopies is quite nice.

**Ben Adam-Smith**

Some of that as well is the upside-down living, isn't it? There's no doubt about it. If the site's right, I think it's a great way to live. Is there anything you have learnt through this or anything you'd do differently?

**Polly Upton**

If we start with the thing I've learned is how hard it is to get service connections, and how it might be nice actually to buy a serviced plot. But actually, if you're willing to be quite patient and dogged, and you can get it done, it's just...

**Ben Adam-Smith**

So why was that? What was slowing things down? Or just the whole process of it?

**Polly Upton**

It just took ages. We started trying to get the ball rolling the summer before we started building. And we didn't get the last telephone line in until we'd already moved in so it took a long, long time. And it's just because of the various different departments and all the hoops that you have to jump through. And if you're not used to doing it, you don't know the process. You've always got to kind of spend more time asking people and then we had a few issues with where the existing services are around the house in terms of connecting into those and people letting us connect into various points or not. Yeah.

**Kirk Rushby**

It was two things: one is that utilities companies don't really have the same sense of urgency that you do. And two, in a lot of cases you have to have agreements with third parties, which can get quite complicated.

**Polly Upton**

And just some of the things aren't very joined up in terms of some of the service providers. They could be a bit smoother. But we got there in the end. Yeah. So that's the main thing we've learned.

**Ben Adam-Smith**

And the 'do differently', did you come up with anything?

**Kirk Rushby**

There's a couple of finish things. Again, everything we did, we did because we were trying to think of a straightforward and simple way to do it... and not cost too much money. In the bathroom we've gone for this, we've actually used like a roofing finish, which kind of works really well. It's like a wet room. But it doesn't look that great, because it's a roofing...

**Polly Upton**

Basically a GRP roof in the shower.

**Kirk Rushby**

But it works really well.

**Polly Upton**

Oh, yeah, it's waterproof.

**Ben Adam-Smith**

I'm assuming if it irks you enough, you could change that later down the line?

**Kirk Rushby**

Yeah, yeah. Yeah.

**Polly Upton**

But at the moment it's fine.

**Kirk Rushby**

Yeah, I think generally, things are working out really well. I mean, there's a couple of things... With the floorboards, particularly with a Passivhaus, getting the MVHR on, the humidity really kind of stabilises. And with the programme, we really needed to get the floorboards in and we needed to do the plastering. So we plastered, the humidity was up a little bit, put the floorboards in. We did leave them in to acclimatise them a bit and dry the plaster out. But then once we got the MVHR on, realised that the humidity probably dropped even more. So they've had a little bit of shrinkage. It's not too bad.

**Polly Upton**

It was summer going into winter when the house was plastered and the floorboards went in at the same time. And then there was obviously no heating all the way through until spring. So things have taken a while to dry out and humidity levels to even out a bit.

**Kirk Rushby**

A lot of things we would do differently might be programme things that you might want to go more straightforward, but the reality of it is that you get delays with certain things, and you can never have completely 100% control of it all.

**Polly Upton**

And you need to try and fill the time with things you can do.

**Kirk Rushby**

And crack on. I was quite glad overall, actually, that we got it done in 15 months, because we just kept things moving. I think that's quite important.

**Ben Adam-Smith**

Now, this seems to me a good experience which, as architects, makes me wonder is this a house for some time? Or are you going to get tempted off somewhere else and do it all again?

**Polly Upton**

It's tempting.

**Kirk Rushby**

We can never say...

**Ben Adam-Smith**

You're not going to commit on this one, are you!

**Kirk Rushby**

We would never say never. Yeah, yeah.

**Polly Upton**

Personally, I really enjoyed the experience.

**Kirk Rushby**

Yeah.

**Polly Upton**

I just enjoyed the process of getting things built. So I think we'll be here for a while. We've got no plans to go out and find another site at the moment.

**Ben Adam-Smith**

It's just interesting. Yeah, just interesting. Well, I think it's really inspiring story. And I love the fact that you've got the house even though you couldn't afford it. So well done.

**Polly Upton**

Thank you.

**Kirk Rushby**

Yeah, thanks.

**Ben Adam-Smith**

Head online to take a look at the show notes that accompany this episode, [houseplanninghelp.com/309](http://houseplanninghelp.com/309). There's a summary of the conversation, including the main lessons learned. I do wish I'd pushed them a bit more on their design phase and how they were revising their designs making things smaller and smaller to marry up with the budget, because as a client I don't think it's quite so easy. Often, the time that you're getting a number on the project is when you go out to tender, and then quite a lot of work has been done by that stage. If you're one of our Hub members, though, Polly and Kirk go into even more detail, so you can hear them, explain the project and show you some of the different design elements that we've touched on today. But yeah, a bit more detail there. If you've got a comment or you'd like to ask a question, you can either do that within the show notes or on social media. We've got the links for you. We'll link to Architype, all of that at [houseplanninghelp.com/309](http://houseplanninghelp.com/309).

**Ben Adam-Smith**

Let's conclude today with a Hub update. This is our membership community, designed for you if you plan to go about building a high performance home using really good materials and just doing as much as you can to make yourself comfortable and be thinking about the environment as well. One of the core elements of The Hub is our in-depth video case studies where you can watch through entire builds, get your head around, what is it that I'm going to have to do. We always like focusing on the decision-making process. So this is our Kinver story. It's a retrofit project to Passivhaus standard, a mid terraced Victorian property, very interesting, been completely eye-opening to me. So far, we've seen the building be stripped back to its bare bones. And now at the rear of the property, they've adjusted the levels and they're ready for the concrete pour for the new foundations for the extension. And inside, another key part of what they're doing is opening up the spaces because some of the rooms were a bit pokey before so now they're introducing some steels and we see that steelwork, very interesting video, this current chapter in fact. So delve into our in-depth video case studies in The Hub. If you're serious about building a home, no matter where you are in the journey, we've got people looking for land, people with properties that they're looking to retrofit, people some of the way through, people at the end of the process who just want to stick around. They're all in The Hub. Come and join us with our courses, live training calls, private members only forum and get input from me on your project. I'm more than happy to do what I can. All of this help for you in The Hub - [houseplanninghelp.com/join](http://houseplanninghelp.com/join) to find out more.

**Ben Adam-Smith**

That's it for today. Thank you so much for being there. The House Planning Help podcast is produced by Regen Media - content that matters.