

# HPH326

## **Ben Adam-Smith** 00:00

This is House Planning Help episode 326. Hello, 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.

## **Ben Adam-Smith** 00:18

For the next couple of episodes we're focusing on upskilling. And in this session, Simon Bell, one of the directors of HLM is going to be my guest, sharing why he decided to become a Passivhaus consultant during his self-build project.

## **Ben Adam-Smith** 00:32

We've actually featured an HLM project on the podcast before - that's when we were chatting to John Fenwick - lovely self-build project. But this is also, it's funny how you get these coincidences, where I met architect, Ross Barrett, who is also Simon's architect. Clearly, they work together so there's a relationship there. But I thought, if you had a couple of minutes to pause the podcast, I don't normally suggest doing this because I want you to stay with me and not forgetting, you probably go into a YouTube spiral. But there's a really nice video that we made all about John and Jeanette's home, up in the Highlands, and not really necessarily what you might anticipate from a Passivhaus project. That form in itself is quite different, but lovely, contemporary home. So we'll put a link in today's show notes so you can go and check that out: [houseplanninghelp.com/326](http://houseplanninghelp.com/326).

## **Ben Adam-Smith** 01:28

Now, one of my friends is a doctor, and I remember him telling me once that he tries to read about eight hours of medical journals and what have you each week just to stay current in his practice. Incredible. That's almost a whole day's work, isn't it? In any profession, if you're not learning, you're probably moving backwards. So where could you upskill? Simon Bell trained as a landscape architect, he now manages a team at HLM. But really off the back of this, some upskilling he did during his own house build project where he saw an opportunity. So that's where we're going to pick up things today. I started though by asking Simon when he'd first thought about building a house.

## **Simon Bell** 02:10

Yeah, I mean, we've always wanted to do a self build project for many years, there were some opportunities in the past, which didn't quite happen. And then the price of land got very expensive through the boom so we'd almost put it out of our minds. And then through the recession, some opportunities presented themselves with, you know, good site opportunities. So yeah, we decided to go for it. And I think at that point, we'd had some involvement with Ross on the two projects that he was involved with in our Glasgow studio. So first at the Scottish Housing Expo, many years back now, probably 2010, maybe even before that.

**Simon Bell** 02:49

And then off the back of that he designed Tigh na Croit near Ullapool in the Highlands, which has since won a Passivhaus Trust award for that project. So we knew we wanted Ross as our architect, he's a good friend of ours, and Passivhaus was certainly high on the agenda for our build as well. I wouldn't say it was the primary force. And you'll have seen that from the design that it's not, you know, from a Passivhaus point of view, it presented some challenges with the design. And that was what was working through. But I think what Ross has shown is that Passivhauses, while they might be at their most efficient as a simple box, they don't have to be a simple box. And yes, you have to work harder to make the standard apply, but it is possible to create buildings with architectural merit and beauty as well.

**Ben Adam-Smith** 03:37

Yeah, that one that I'm not going to try and pronounce the name of, that was an L shape, wasn't it?

**Simon Bell** 03:43

It was yeah, yeah. And I think that was off the back of the site having planning permission for that form. And then they discovered Passivhaus, and wanted to apply that and I know Ross did talk to them about form factor at the time. But they were very committed to that form and that was a challenge for us as a team to make that work. And yeah, Ross achieved that with the team.

**Ben Adam-Smith** 04:05

I'm not sure that we've mentioned this yet, but you're in Northern Ireland, aren't you?

**Simon Bell** 04:09

I am, yeah. So I'm in Belfast based in Belfast, although my work with the company has taken me all over the country and indeed the world. But yeah, so Belfast, for me is where I was born and bred. I studied in London, but moved back to Northern Ireland in 2000. So I guess the Passivhaus scene here is still fairly young. It's very domestic building focused, although I think there's been a significant move into more complex buildings over the last couple of years, not least with Southwest College, which opened last year, and a number of projects coming through over the next few years, which I think will really move the Passivhaus agenda on in Northern Ireland.

**Ben Adam-Smith** 04:52

So we're going to talk a little bit about upskilling, and maybe it's actually worth going back way before you even had an idea of building a house. So how have your skills developed over time?

**Simon Bell** 05:05

Yeah, so I'm the type of person who likes to understand things. Even if I'm paying someone else to do it, I kind of like to understand what's going on just to be able to ask the right questions or challenge or whatever. And I always like to be learning new things. So I guess in my career, that's been natural career progression. But then in things like international working, going to a new place, learning a new climate, a new set of rules, a new culture and applying that to design.

**Simon Bell** 05:34

So I guess when it came to Passivhaus, initially, I wasn't necessarily focused on learning all about it. And initially, that came out of perhaps necessity of just a lack of capacity in the Passivhaus community, particularly here in Northern Ireland. Maybe not necessarily the number of people but the people with experience, and I was looking for experience to help guide us through.

**Simon Bell 06:00**

And I guess there is one person who was a bit of an inspiration in all of that: Tomas O'Leary from MosArt, very well known in the Passivhaus circles - certainly here in Ireland and Northern Ireland, but internationally as well. And his background was very similar to mine as a landscape architect. So I thought, well, if someone has done it in the past and been able to build a business and a reputation out of it, then I could certainly do it for my own dwelling. And that's kind of what gave me the confidence to crack on and do the course.

**Simon Bell 06:00**

The more I kind of got into it I began reading and learning just to be an informed client at that stage. And we had some initial work with a Passivhaus consultant who was extremely busy. And at the same time, Southwest College who are Passivhaus training providers, had advertised their course, there was also funding available for it as well. So normally, that's, as you will know, quite an expensive course. Well worth it nonetheless, but expensive. Paying it for a client's point of view, with the funding, it becomes much more attractive. And I asked a few people about whether I would get through it and pass and be able to take on the role.

**Simon Bell 07:11**

The course, as you will know, is intense, challenging, but I actually really enjoyed it, because it's very factual, it's science based, and that kind of appeals to my nature. I like to understand how things work and for the results to be proven. And that's what the course showed me that Passivhaus wasn't the kind of something that you could do a few things and get there, you had to be really methodical, and work your way through the process and the design and pay really good attention to detail, and then carry that through on site. So that really appealed to me. And yeah, then I did the course and met some more great people and learned a lot of things in that fairly intense, sort of 10 days.

**Ben Adam-Smith 07:53**

Now, I'm always intrigued by how much I learn and then forget. So do you think there's something in just in time learning. So doing this before your project?

**Simon Bell 08:02**

Definitely. And I think it's something that we focus on with our own Passivhaus team, as we're putting them through the training, trying to get them onto a project straight away. For me, yeah, we were going through the final stages of design on this house at the same time as I was doing the course. So you know, we were able to test and play and experiment as part of that process.

**Simon Bell 08:24**

For me, this has been a bit of an experiment as well. It has allowed me to play it round in PHPP, probably much longer than is healthy! But just to test things, play with things, really understand what

changes make, the sort of luxury that you wouldn't get on a project where you're trying to be commercial and work within your fee. So certainly a lot more time spent on this house, about getting the theory and then going straight home and putting that into practice is hugely beneficial. It gives you confidence when you see things working as they should, but also it throws up a lot of things that you maybe hadn't really fully appreciated as you went through the theoretical piece.

**Ben Adam-Smith 09:05**

As you look at yourself then, this is the beginning of your self build project. You know what you've done in the past both the landscaping and this managing and being a director. So what do you decide to do for your own project? What role are you?

**Simon Bell 09:23**

This was a difficult one, because I would have loved to have been the self-builder actually doing the work. I think I realised fairly early on that that was going to be unrealistic, I would have had a family waiting five years for a house. So at that point, we decided we wanted to be an informed client to work really closely with everyone on the team, so with the architect, and the contractors and everyone else to deliver what we want, but bring our vision but also make sure that each of those people were bringing their particular skill set and input to the project.

**Simon Bell 09:55**

So yeah, that's where we set out. I think as it developed, we became more hands on. I took on quite a lot of site role in the end, because we were building through Covid, so unfortunately, Ross couldn't be on site as often as he would have liked. So I became his eyes and ears on site. And I also became, I suppose, an educational resource. So talking to everybody who came onto the site about Passivhaus, about the important things that they needed to be looking out for on site, and avoiding doing. And just trying to educate them as well about some things that they felt were probably insignificant, were actually really quite important for the overall performance of the house when it was finished. So those were the roles that we took on. And of course, quality control, was a big part of that throughout.

**Ben Adam-Smith 10:45**

Let's get a bit of context then, can you tell us about the site and how you ended up with the design that you did end up with?

**Simon Bell 10:51**

We're really lucky, it's an absolutely stunning site near a little village called Broughshane. It's pretty much in the centre of Northern Ireland, just near Ballymena would be the closest town. We're up in the hills, are about 160 metres above sea level. So just on the edge of the Glens of Antrim, fantastic views to the east and west, and also panoramic views to the south. And that was always going to be a challenge in balancing that with solar gain, shading and window ratios.

**Simon Bell 11:20**

So we gave Ross originally a brief which was around how we wanted to live in the house, the adjacencies that we wanted. And we picked a lot of kind of images of things that we liked. I think originally, it was steering towards a long house type arrangement, which would have worked really well

from a Passivhaus point of view, and form factor point of view. But then I think it developed over time, just as Ross was going through the design iterations with the adjacencies we were looking at and how we wanted to use the spaces. It just wasn't singing. So I think Ross felt he'd got it to be about 90%. And then he presented this other idea where the walls weren't parallel, it widened out as it got to the centre of the building, and then narrowed down at the ends. And, you know, we looked at that and I think as soon as we saw it, we knew that was the design that we wanted to move forward with. So again, the value of an architect bringing a different vision, a different solution to the table.

**Simon Bell 12:18**

And so we ran with that. It exploits the views. If you look at it from a purely Passivhaus point of view, you would certainly argue that we've got too much east and west glazing, and that's something that we've, we've had to address through shading and making sure that the actual extent of that was quite narrow, why the building tapers down at each end. And then similarly to the size, just making sure that we take the opportunity of those views to the south but without opening ourselves up to significant overheating. So it tends to be framed views of the landscape rather than a huge expanse of panoramic glass.

**Simon Bell 12:55**

So that's what Ross did. And then the materiality was around something that really sat in the landscape. Typically, in this part of the world, we build white rendered bungalows, that seems to be the norm. The art form mimics a more agricultural barn, with timber at the upper level and cement fiberboard panel at the ground floor. And the form of it as well with the long sloping roofline is also reflective of some of the, albeit more modern, agricultural buildings you would see in the landscape here. And I think because of our height as well, Ross was conscious of making sure that it blended in. So those materials just helped the building to recede into the landscape rather than stand out on the hillside.

**Ben Adam-Smith 13:41**

And how were you going to build this? What was the discussion around this?

**Simon Bell 13:45**

Yeah, so I think once we veered away from self building, we knew it would be a main contractor, brought on board to manage the process, work with all of the various trades to deliver the building. Again, just my role at work, didn't necessarily allow me to be on site every day. So even managing trades would have been quite challenging as well. As it turned out with Covid, I did have the luxury of being able to be on site every day, living nearby. But yeah, we decided to go with the main contractor route.

**Simon Bell 14:17**

It was tendered to a group of contractors at the time. We'd pre-selected those contractors on their ability to deliver the project. Now that didn't necessarily mean they had direct Passivhaus experience because again, that was quite limited here. When we met them before the tender process, we focused on their attitude, their attention to detail in their other builds, and asked them just where they had gone

above and beyond. So all of the contractors on the shortlist had gone above and beyond normal building regs on some of their previous builds.

**Ben Adam-Smith** 14:52

You've already mentioned quality control. So what did that mean to you as this work went by?

**Simon Bell** 14:59

In fairness, I got more involved than maybe I would have liked to. Perhaps due to the pandemic, our contractor was also, you know, experiencing challenges not only in our build, but on other builds. So what that allowed me to do was be on site every morning, every evening, so I could meet whoever was on site during the morning and talk through what they were doing, and highlight anything that I thought they needed to be aware of, or be careful around. And also, I could check in at the end of the day and see where things were and if there were any issues, we could pick them up quickly and get them rectified.

**Simon Bell** 15:35

But in this part of the world, airtight membranes aren't a common, certainly to the Passivhaus level, it's not a common practice. So just ensuring that everybody knew what that was, and appreciated the importance of it, and setting up that no blame culture as well, so that if anything was damaged, for whatever reason that we could be informed, and we could rectify it, rather than something getting covered up and becoming a larger problem later on.

**Simon Bell** 16:02

It was about communication, really, with everyone and make sure everyone understood the importance of all of those aspects. But then also making sure that we were doing the required testing as we went along. So we ended up I think we'd asked for two air tests on the project but the contractor proposed to do three, just to give him the confidence along the way that we got it right before we started covering up. And I think we were taking lots of photographs as well, throughout the build, feeding that back to Ross. We had a very good and detailed set of drawings to start with, which helps, but part of my role was making sure that the guys actually had the drawings on site, because that wasn't always the case! And making sure they knew what they were doing.

**Ben Adam-Smith** 16:47

So this is a long distance relationship with Ross. And it does seem as if architecture these days, you can have minimum involvement. But did he ever come to site?

**Simon Bell** 16:58

Yeah, he was on site near the start of the project, probably at foundation stage, not really before it got going. And then with lockdown and travel difficulties, it was pretty much finished before we got back out of that phase again. So not really. And I know it's completely unlike Ross because he loves to be on site and seeing how things go. And I know that's how he has worked in the past and how he had intended to work on this project, but the benefits of technology and allowing us to send stuff through or even do video calls on site, whatever we were able to work around that.

**Ben Adam-Smith 17:34**

How were things in terms of treading on the contractors toes when you're doing your quality control setup at the beginning and end of the day?

**Simon Bell 17:44**

I don't think there were too many issues there. I mean, to be fair, the contractor was willing to learn. They came into the project wanting to understand and learn and deliver to the best of their ability. So I think they were quite open to discussion about issues when they did arise. And again, there weren't many. There were a couple, but we had an open discussion, explained what the situation was. And I think they were quite appreciative actually, have another pair of eyes because at least where the issues did occur, they were picked up quickly and could be rectified at minimal cost really, rather than having something that you only discover a month later and have significant rectification to do. So I think they were quite appreciative of it throughout the process.

**Ben Adam-Smith 18:29**

Yeah, it's a massive help, isn't it, if they come with that mentality. What else is important then in this upskilling conversation?

**Simon Bell 18:37**

I think once you start working on a project and delivering it on site, there's loads of other things come to the fore around, you know, particularly around detailing, that attention to detail.

**Simon Bell 18:49**

There are things like heating systems, for example. So how do you best heat a Passivhaus without spending either a fortune on stuff or unnecessary technology, or stuff that you just don't need and getting that optimum solution?

**Simon Bell 19:05**

I certainly feel more comfortable now, having done it here. I might do things differently if I was doing it again, but I don't think the course can provide you with that information you have to learn on the job almost. Of course, you've got your certifier in the background for a backup but again, even on some of these aspects, you've got to learn on the job.

**Simon Bell 19:26**

But you know, that's my I suppose approach to learning is to learn by doing things. I'm probably not the person to absorb all of the theory and then remember it all word for word and go and apply it. I tend to need to learn by doing things. And I suppose taking on that role as a client and quality control and Passivhaus consultant, you have to be quite robust at times about what you're expecting and where if something's not up to standard, you've got to deal with that. It's, you can't let it slide, you've got to get in there and deal with it. And sometimes that can be a difficult discussion which none of us like but best to have it, get it over and done with and move on. And I think it's that ability to move on. So have a difficult discussion and then crack on and nothing held over, you've resolved it and move on kind of thing.

**Ben Adam-Smith 20:20**

What about just thinking of clients now? You were the client on this, you did some extra things, but just looking at other people, I doubt you have that many self build projects going through the practice. But to be a good client, someone who's coming in with very little information to begin with, as I think a lot of people do. And sadly, I often think, Oh, you've missed some opportunities here. So how would you recommend, someone that doesn't want to go really in depth, but just learn a little bit about what's going on? What they need to get a grasp of? Because you did say that at the beginning, I was wondering whether to stop you when you were saying you're reading about different areas? What were you reading?

**Simon Bell 21:02**

Yeah, so I mean, I was it was reading the, I think the Passivhaus Trust rule of thumb for Passivhaus design. I think that was one of the ones I've read. I've read stuff on the internet at times, I watched some of Tomas's early YouTube videos.

**Simon Bell 21:17**

Yeah, it's difficult for clients, I think, because Passivhaus can be quite scary when presented with lots of the information. But I think some of that guidance from the Passivhaus Trust has made it available to people at different levels, so you can pick the level that you need.

**Simon Bell 21:33**

But I think for clients that the main thing is that they can trust their consultants, they've got to give their consultants a degree of freedom to come up with the solution. Of course, the consultants need to be able to competently and confidently advise and guide and, in many cases, persuade the client that the solution is correct. But I think if a client can understand the standard and how it works, and the guarantee of performance, and we always are careful about using the word guarantee, but I think with Passivhaus, that's what you get isn't it? It's a guarantee of performance. And if they can see and understand that and then put the trust into consultants, that's a key thing. And perhaps not get too involved in some aspects and more involved in focusing on how they're going to use the building and communicating that, but not necessarily getting too hung up on the actual technical solutions.

**Ben Adam-Smith 22:34**

We've talked about hiring different people, and you've given some good tips about their mindset, making sure they're into it. What if we're engaged with someone that we just get a feeling this isn't going well? So how do we either rein it back or decide whether it's time to put a stop to this?

**Simon Bell 22:55**

Yeah, I think that's, that's difficult to a degree. We maybe had that at one point, and probably the reason why I went in to do the course and become the Passivhaus designer and take on that role in the project. You've got to remind yourself that you're paying the money. This is your dwelling that you're going to be living in. And if at any point you feel either a relationship's not right, or you're not getting the advice that you feel you need to answer your questions. And I think you've got to, you've got to raise that initially, and hopefully the suggestion can be rectified. But if it can't, you've got to bite the bullet and make the change that's required to ultimately give you what you want. And that's difficult, and that depends on contracts and all of those kinds of things. So, you know, I guess having a degree of

contractual relationship with all parties is important. And certainly, I would advise that for clients. We did that both with our consultants, and the contractor. We made sure we had a clear form of contract, so we knew what we were expecting. They knew what we were expecting.

**Ben Adam-Smith** 24:05

What kind of contract are we talking about here?

**Simon Bell** 24:08

For the building contract that was JCT intermediate. We went with intermediate because we felt the basic form was just a little bit light in places. For the consultants, it was around their professional institutes appointments. So with Ross, it was a RIBA appointment.

**Ben Adam-Smith** 24:26

Let's just get back to the project and wrap up here. So what was the biggest challenge of your whole project?

**Simon Bell** 24:36

The biggest concern I think throughout was the airtightness. No one had, certainly the contractors hadn't, delivered it to Passivhaus levels before. We were dealing with different trades at different times, so it was making sure that everybody knew what they were doing and we didn't kind of introduce a problem that would come back to bite us later on. So I think that was the biggest concern throughout.

**Simon Bell** 25:00

The biggest challenge probably that we had was the pandemic itself and the impact on materials, on getting people to site, just at the impact on the program. I think in the end, we probably lost about six months, not necessarily all in one go, just to things being delayed, not being able to get the right people that we'd chosen to do things, not the right time. So that all kind of impacted. I think that was the biggest issue. It left the structure open for longer than we would have liked it to be open, which again, had knock-on implications. I mean, there was one day we came up and some of the external insulation had been ripped off by a particularly stormy night. So that was the biggest challenge.

**Simon Bell** 25:46

I think in terms of relationships and the team's ability to do the job, we didn't experience very many challenges other than, you know, what we might normally expect. But certainly the challenge was the pandemic and getting through that, and also the potential risk to programme and cost that that brought in.

**Ben Adam-Smith** 26:07

Yeah, cost is something we haven't mentioned. So if we're not familiar with how we look after costs, what might you suggest to a budding self-builder, someone coming in at the bottom?

**Simon Bell** 26:22

I think it's really important that you have an accurate idea of what something's going to cost before you go to site. And we see it on the TV on the programmes. You know, at the start, everybody tells us what

the budget is going to be for their dream home, and then they tell you the size of it, and then you think those two things don't really add up. So I think to have a really detailed cost plan at the start, because inevitably, there will be challenges, you're going to have to deal with something unexpected. And then you've either got to work within your budget, or you've got to find extra cash. And I think if you've got that detailed cost plan, you can begin to make choices about where your priorities lie. And what's most important.

**Simon Bell** 27:05

So yeah, I think for us, we went to a Quantity Surveyor and got them to do a cost plan. And in fact, the original design, we did a bit of value engineering as we like to call it, before it went to tender. And even when it came back from tender, it was a bit more expensive than we would have hoped. With that cost plan, then we were able to go through it and say, well, actually, that's not important right now, we can take that out and do that later. But actually the Passivhaus element getting the fabric right, you know, things like the windows, there was no discussion about changing those. That we knew some of the other things like finishing we can deal with over time, but that cost plan gave us the tool to make those informed decisions.

**Ben Adam-Smith** 27:48

How long have you been in the house now?

**Simon Bell** 27:51

We've been in just over two years now.

**Ben Adam-Smith** 27:54

And how have things been for you?

**Simon Bell** 27:56

Yeah, I mean, it's been performing really well. It's comfortable, it's quiet. The air quality is really good all the time. We're undertaking monitoring along the way to prove to ourselves that all of the investment has been worth it. There are some things that yeah, we're beginning to think, well, we might have done that differently if we were to do it again.

**Simon Bell** 28:17

Last year, we had an energy usage of 36 kilowatt hours per meter squared over the year. So that's quite encouraging, given that we've been working from home for a lot of that time as well. So you know, we certainly see when we're not working from home, we're not running two machines, or whatever, that the energy just drops off quite dramatically when we go into the office.

**Simon Bell** 28:39

So yeah, it's performing really well, loving it. No real significant defects during those two years, either. We paid a lot of attention to resolving defects as we went along and getting them closed out fairly quickly. Yeah, we've had nothing significant since so yeah, really happy with it.

**Ben Adam-Smith** 28:58

Well thank you so much for today. I think I've just got one last question, which is, is there a key message from a conversation around upskilling?

**Simon Bell 29:09**

For me, it would be to have confidence that anyone can upskill to Passivhaus. So whether you're a tradesperson, whether you're a client, whether you're a designer, or a contractor, none of it's rocket science. It might appear like that sometimes when people talk about it, but none of it's rocket science. Most of it is good design, or good practice, or attention to detail. Passivhaus then brings that together to optimise the outputs, but certainly don't be frightened of it.

**Simon Bell 29:40**

Embrace upskilling. I think it's always good for all of us to learn new things, either by theory or through learning, by practice. And really important that we do review when we deliver something that we then go back and review, look, you know, what could we have done better? What do we need to do to upskill for the next project? And I think it's a continuous process. We're always learning, we always need to learn, and that should be the mindset rather than trying to, you know, maintain a status quo where we always do things the way we've always done them. Let's challenge ourselves to always improve and do better.

**Ben Adam-Smith 30:19**

Simon, thank you so much for your time today.

**Simon Bell 30:22**

Thank you, Ben.

**Ben Adam-Smith 30:24**

Head online to take a look at the show notes that accompany this session: [houseplanninghelp.com/326](http://houseplanninghelp.com/326). You can review the key points in our summary, there are some photos of construction and of Simon's finished house. If you've got a comment, or you'd like to ask a question, either do that within the show notes or on social media. We'll give you links to Simon on Twitter to the HLM website if you want to look at that further. [Houseplanninghelp.com/326](http://Houseplanninghelp.com/326).

**Ben Adam-Smith 30:54**

Big thank you to Bez who has added an iStore review: "Brilliantly presented diverse mix of super helpful podcasts. I love the entire story episode of Ben and Kay's build the most. Can't recommend it enough if you want to start researching your own self-build project." That's lovely. Thank you so much Bez, and I do love those episodes as well. We did quite a few on my own project. I was worried for a time it was getting annoying, but pleased to hear you say that! And if anyone else has joined the podcast since I've finished that, which is highly likely because it's years ago now, you can go to [houseplanninghelp.com/235](http://houseplanninghelp.com/235), and that contains all of the links to the podcast that we did about my own house build.

**Ben Adam-Smith 31:38**

My call to action today is to ask you to check out The Hub. This is our online community for self builders, retrofitters, people who are looking for a low energy healthy, comfortable home. Low embodied carbon, all of that sort of thing. You can dive into the video content here, we've got courses, you can chat with me during our office hour. You can be around like-minded individuals in the forum. And we also have live training sessions. Tabitha Binding is our latest one that we've added in. She shares lessons from her own retrofit. It was a house bought in the summer on a lovely sunny day and this is what you don't want. You plunge into winter and discover not only is it very uncomfortable, but also there's a flood risk. So you can find out how she addressed that in The Hub. She also shared some links to monitoring equipment that she used afterwards just to see how the house was shaping up. So all of that in our membership community: The Hub. Find out more at [houseplanninghelp.com/join](https://houseplanninghelp.com/join).

**Ben Adam-Smith 32:38**

Next time we continue the upskilling conversation with Es Tresidder: How do you upskill in DIY?

**Ben Adam-Smith 32:46**

Thank you so much for listening. The House Planning Help podcast is produced by Regen Media: content that matters.