

Episode 251

Adopting a 'do less, but better' mentality - with Charlie Luxton

The show notes: www.houseplanninghelp.com/251

Charlie: How I ended up doing architecture – I've often thought back about this. I kind of wanted to be an architect or work in architecture from about the age of twelve, thirteen.

I think one of my earliest memories is with my brother building a treehouse when I lived in Australia, in Sydney. I remember doing that and I remember it being enormously satisfying.

Then I moved to England when I was about ten and we moved to a farm. And on that farm, we had haybales and haybales are the most wonderful tectonic building material that you can have as a kid. Because they're big, you can move them around if they're strawbales and you can make forms and rooms, tunnels and dens. So, we did that endlessly, all the time.

We then moved to making dens out of pallets, more treehouses – even with some friends we dug a den underneath the floor slab of a derelict industrial building on a housing estate in the next-door village.

So, it struck me recently that I've always been interested in making things on that sort of scale. I also did a lot of sculpture at school and university. So, making was always a part of it.

I think when I got to university and started my architecture training, I'd been travelling around the world, to India, and seeing how other people lived, and I think getting a wider understanding – though I'm not sure I really got it at the time – of how the world was rapidly changing. You think that there are these wild places but there aren't as many as you might imagine and I think that was a bit of a shock.

I was opened up to a lot of different people on those journeys and I think I questioned the way that we started doing things. Then as soon as I got to university, pretty much in my second year, I latched right on to sustainability. This is 1994/95 that I really got interested in it. I remember no-one taught it at school at all. It was quite a

fringe activity but I was really focused on it right from the very beginning of my architectural training.

Ben: There are quite a few things we could talk about because you have built your own home, a self-build, so we're definitely interested in that. There's the ecological side, that I think you're someone who really tries to make a difference, so I'm hoping to bring that out in this interview as well. Then there's the TV stuff too.

So, maybe we could start with that? Because you must have seen loads and loads of projects and we're always looking for useful information for self-builders. Do you see any themes emerging from that, from your visits from your encounters?

Charlie: The biggest lesson that I really try to instil in my practice with the guys that work with me is, do less better. And whenever I go and meet someone and I'm looking at their project with them while they're building, is to try and rein in the scale of what people try to do and to do it better. Because if you build well and you build sustainably, you will enjoy the space so much more. It will last better. It won't be an albatross around you.

You see so many builds that when they get to the final finishing stage, they're just sort of thrown together and you just know it's going to be a maintenance nightmare.

Actually, building a house takes an enormous amount of energy. The embodied energy is vast. I think we're only just starting to understand that. So, if you're going to do it, it's a real responsibility to do it well, so that it's going to last for a long time. So, sometimes in order to do that, it can't be as big as you might be able to build. You have to make it a bit smaller and just make it better. Because well-designed and well-built, a small house can be just as successful and provide as much usable space as a badly designed large house.

So, I think the main thing is, do less better.

Ben: Some people might say that you're almost driven by the plot because of economics. Do you think that's true or can you always have the size house that you want to?

Charlie: Clearly economics plays a role in it, but I think this idea of the market is a misnomer in many cases.

I've done ninety-five Building the Dreams, right? Plus, many other shows and self-build programmes. So, that's just that one show. Ninety-five people. And so many of the times you sit there before

they've started building with their plans and they're like, 'we've got to have four bedrooms because it needs four bedrooms. It's got to have resale value. It's got to have four bedrooms.' And I'm looking at these plans and there are two alright bedrooms, maybe an alright master bedroom, and then there are a couple that are just downright useless. And you're like, 'right, you've totally compromised this house.' And there are only two people who are going to live in it, for example.

This is often the way I've seen it. There are literally two people who will rattle around in this four bedroom house. And the thing is, when you're building your own house, you're going to have it for twenty years, statistically. If you're just moving, it's every seven. But if you self-build, that's about twenty years. You're building in what somebody else wants for the next twenty years. It's insanity. Actually, less bedrooms, better space. Do less bedrooms, do it better. Do the circulation space right.

I believe firmly that if the architecture is right and the build quality is right, the sale price will reflect that. Because actually, if you're selling a house, somebody else will want a similar thing to what you've wanted. You're not so unique. In most cases, somebody else will want it.

Ben: How do they start down that track, just so I can see if I can understand it? Because you draw up your brief of the things that you need, you would like. So, four bedrooms. Is it just that Fred down the road has got four bedrooms and that's how we sell houses, four bedrooms?

Charlie: Yes, I think it is. I think it's the market. The market says four bedrooms is worth more than three bedrooms. So, therefore the plot can take four bedrooms, therefore we have to get four bedrooms.

I think people always push themselves. They always go, 'we can afford to build a hundred-and-sixty square metre house but we're going to try to build a hundred-and-eighty because it will be cheaper.' And guess what? It isn't. And guess what? The prices that you see in the magazines aren't accurate and they don't reflect the reality for most people building. So, often they end up biting off more than they chew and they end up compromising what they deliver.

So, again it comes back to actually, if you can afford to build a hundred-and-eighty square metres at two-thousand pounds a square metre, I would say build a hundred-and-sixty square metres

at two-thousand-one-hundred-and-fifty or whatever the maths is. But just do less and do it better. And if it's delivered right, I am convinced it will have the same value as a four bed house. If it's really well-designed.

Ben: When you meet people do you feel they've done enough research?

Charlie: I think people do a lot of research. I nearly always meet people who haven't been prepared to spend enough money on good design. And I think that is at the heart of where a lot of people make mistakes.

Now, that's rich coming from me, isn't it? Do you know what I mean?

Ben: But I sort of know what you mean, having been through the process, that we feel that we invested in a good design. But for a lot of people, it's just a number on their spreadsheet. How do you justify your architect, your designer, and how much you allot to them?

Charlie: So, going back to your first question about research, I think a lot of people have done a lot of abstract research around buying things. Because we are enormously good consumers, right? We are A-grade consumers trained from the very first moments of consciousness. We're looking at adverts, looking in magazines, 'I want that game, I want that Lego thing, I want whatever.' So, we're brilliant at buying stuff.

So, normally the research that people do when they're trying to build a house is, 'what stuff am I going to get? What stuff am I going to buy?' Rather than, 'what kind of house do I really want to live in? How do I want it to feel? How many modern houses have I been to see?' And most of them have been to almost none, actually been and visited a new house built by somebody else that might be a very sustainable house or a new take on a traditional house or whatever it might be.

Ben: This is so valuable, isn't it? And I'm always bashing on about this, that you can go to houses you don't like sometimes. Because you can get stuck. I think many people's first self-build can actually be with all the baggage that they've got from the past, and then the second time around you think 'whoa,' when you do see them do it a second time, it's often very, very different.

Charlie: I think one of the things that I have learnt about self-build over the years is you're only ever really ready to do your first self-build after you've finished your first self-build.

Ben: It's crazy, isn't it? That you go into this – I mean, it's a lot of fun, but building a house when you're starting from zero. And that's why I personally feel you should invest in a design professional because of that.

Charlie: Yes. And I think if people did more research about the varied outcomes of people working with really good design specialists or without them, they would find it much easier to justify the expenditure of a design professional. And I think they would see that the outcomes are noticeably better, in my experience.

Ben: Do people take advice well when you've offered it?

Charlie: Mainly. We've got hundreds of different clients and with some of them I have sat down and said to them, 'I really don't know why you're paying me if you're not going to listen to what I've got to say.' And sometimes you get to that point. Nearly always people do listen.

Somebody said to me the other day, 'you guys don't have a monopoly on good ideas,' and they're absolutely right. Designers, architects don't have a monopoly on good ideas. What they do almost invariably have a monopoly on is design process. How you take an idea, how you draw it, how you test it, and crucially how you tear it up, learn from it and start again. Because most people who are not trained as designers in these areas or in any kind of design will get an idea and they'll just keep evolving it. They'll never tear it up and go, 'actually, that didn't work. I've got to start again.'

So, most people, I think once they get involved with us or with a good architect, a good designer, realise there's a strong process there, they're good. And then they value what's being told to them.

The issue – and I'm totally aware of this – there are a lot of bad designers out there. There are a lot of bad architects out there. There are a lot of people who are just going through the motions and wheeling out the same old stuff without looking at context, without looking at specifics of brief, about the specifics of even site – where are the views? Where's the sun? There are a lot of designers and architects that frankly are bad.

So, again it comes back to your point of research. You need to choose a professional, you need to find out what the varying options cost, you need to go and see their buildings that they've built, you need to kick the tyres. What do they feel like? Because you can walk into a house and get a sense of what your home is going to feel like at the end of the process if you've been to two of

their other houses and they have a certain feel. Because they tend to be similar. And if they're a bit crappy, the chances are yours is going to be a bit crappy. If they're good, the chances are it's going to be good.

I think the research you've got to do is find a really good partner to work with to deliver this. And it might not just be the guy in the Yellow Pages down the road, or the woman in the Yellow Pages down the road. It's about finding people that are good.

And unfortunately, it costs. I know that, for example, in our practice, our hourly charge rates are very similar to other practices from small to big practices – lower than bigger practices but relative to a one-man-band, let's say. But we'll just do more hours. And that's how we get quality. It's just about time and that costs. But if the person you're paying is designing your building and dictating every single element that goes into that building and how they come together, surely it's some of the most important money you're going to spend.

Therein endeth the adverts for architectural design.

Ben: Don't worry about that.

Charlie: No, I mean, it always sounds hard coming from somebody who makes their living out of designing for people. But whoever you go to, I think it really is one of the most important moves.

Ben: Anything else from the TV shows? When you go back at the end, do people always enjoy the process?

Charlie: No, I think invariably most people don't. I think they do in hindsight – I think there's this thing that when you finish a self-build, it normally takes you about six months to fall back in love with it. I was scarred by building my own house. I'm not going to lie. I was doing TV, running a business, building this house as the principle contractor and finishing it, and it's a technically quite challenging house and it drove me close to the edge.

Ben: You've done a nice link across there. Let's talk about this. When did you start thinking about this build? Because you were in a lovely thatched cottage, weren't you?

Charlie: Yes, and we still have that thatched cottage. We moved here twelve years ago. I have to say, I didn't really have an idea then that we'd build a new house here, but I knew that there was an outbuilding that we could convert. So, we bought a thatched cottage and a little outbuilding and just under an acre of ground.

You know, very nice, but the cottage sits on a common so you can't extend it.

Ben: What does that mean, a common?

Charlie: It means that the land is owned by the people and it's controlled normally by the parish council, although the Commons Commission and various other people have oversight over all of that. So, it is common land.

Ben: Do you have a garden?

Charlie: I have a tiny bit of land around the cottage that is walled in, but other than that – I can walk on it, I can sit on it, and we've always eaten out and my kids have spent their childhood on the common. But anyone else can come and spend theirs – but I can't build on it and making any changes to that landholding is incredibly archaic, expensive and time consuming. So, almost a no-go.

So, I knew that the cottage couldn't get extended. I converted this small barn. We lived in the cottage and had the office in the barn. And we realised that we needed a bigger house and I didn't want to move. I love where we live, I love this part of the world. It's been a joy to be here.

I put my thinking cap on and went to planning to knock down the outbuilding and dig down a bit and build a new house. And then we would always keep the cottage was the idea for the office. I just love it. I don't want to get rid of it. That was one of my very early really sustainable refurbishments. And so, it's very precious to us.

I went to planning and they said four pages of, 'no, you can't build this.' So, I took that apart with my planning consultant and we ticked them off one by one. And eventually, it was supported by the planning officer and we got it straight through.

We did that by losing the building. We had to disappear the barn, had to lose a building to get a building. So, when you look out now, it's almost impossible to see the house. It sort of disappears into the landscape very much.

Ben: What did the dialogue look like? Were you finding out what they would say yes to?

Charlie: I'd love to say it was that consensual. But no, unfortunately often planning is a bit more dysfunctional than that now. No, the dialogue was, 'okay, these are your problems,' so then we just ticked them off.

Ben: Give us a few examples.

Charlie: Okay. Contaminated land – they were worried about contamination, they were worried about spread, they were worried about the separation of the building from the other building over time. They were worried about the visual appearance of it because it was a very simple design I'd put in. I basically put in something really simple so that they would shoot it to pieces and I knew where they were, what their issues were, and then I could design accordingly.

It took three iterations to get to planning. I then redesigned it twice after that because I'm a terrible client. Anyway, that's another story.

Ben: But how has it been being the client, or actually playing a few roles in this?

Charlie: I think loaded would be the answer. It's even more loaded because of what I do. That's an internal pressure I put on myself. I wanted to do something good, better than good, and so it became quite loaded. But I think hard is the answer.

And it took ages to get to this. Originally it was two storeys. I got two planning permissions like that. And then eventually I was washing the car up by the road and I had six conversations with neighbours, which I've always loved about this area, and I suddenly thought, 'wait a second. If I have my veg garden and I live down by the stream away from the road, I won't have those conversations.' So, suddenly I thought if I put my veg garden on the roof, I can have a conversation with people as they walk past seeing me doing my veg garden badly and that will be nice. Otherwise, this little bit of community in the village is lessened. I didn't want that. So, then I changed it to a bungalow, effectively. A single storey dwelling at that point.

Ben: What did you want from it as a family?

Charlie: A very sustainable home. I wanted it to be very low energy. We're not Passiv certified but all the elements are Passiv.

Ben: Did you model it in PHPP?

Charlie: I didn't actually, I'll be honest with you. The only thing that would let it down are the roof lights. I didn't model it in PHPP. I got to the point of being about to model it in PHPP. I was actually more interested in overheating, because you can always put on a heater. It's very hard to stop something getting too hot. So, we got to the point of wanting to know if I should put external active louvers over the windows and I was about to get PHPP at that point. My

PHPP guy looked at it and said, 'you're going to be very close to Passivhaus and to be honest with you, overheating is going to be a problem. So, just put on the louvres and save the money for the Passivhaus certificate.' Because I wasn't going to get it certified.

In hindsight, we should have used PHPP. We used to use a couple of energy modelling software in the practice and they were just not good enough at overheating. So, we're trying to refocus back on to PHPP.

Ben: It's fascinating. I saw the video – we'll link this into the show notes – with the overheating, you explaining the shuttering that you've got. But when I saw that video, I suddenly said to myself, 'oh, why did we not put in any external shuttering?' Particularly from that point of view of the climate changing. We don't know what the future might have.

Because our house is modelled never to go over twenty-five degrees, which we're very pleased with. That's the best you can get, zero percent risk of that. And so far, one thing that I've noticed that's quite fun – and you might have a dig at me; I'm in my shorts at the moment – but when you get warmer temperatures in the summer, it feels alright in the house. Whereas if you've got twenty-two or something like that in the winter, that would be really hot. So, just the difference of living like that.

But tell me how you're using your shutters then.

Charlie: Well, I think a big problem with a lot of modern architecture is that it's just very hot. It's overheating. And I didn't want that. So, we wanted a lot of glazing for connection to the landscape. It's a one-sided building because it's dug into the hillside. So, we could have no windows on one side.

Ben: Hence the rooflights as well?

Charlie: Hence rooflights, hence overcompensating if you like on the non-earth-sheltered side.

When you do modelling of sun path, you realise that this is actually a very difficult country to do low energy architecture in because the sun has such a massive range, from the middle of winter being very low, to being very high in summer. And to actually shade that passively with overhangs is quite hard. They get very, very large. And if you have a lot of glass, in late September you can ...

Ben: There's your answer. Purists would say cut down on the amount of glass.

Charlie: Yes, of course they would. Absolutely. And you make choices, don't you?

Ben: But it's architecture too, isn't it?

Charlie: And I think actually, for us, architecture comes not before environment, but I don't think you can ignore architecture and just focus solely on the environment. Because if a building is really good architecturally and ninety-five percent as good as a full Passiv building, to me that's got real validity. And I think there are always choices to be made about why you're putting in a window for a view or for overheating or for heat loss.

So, it's a hugely complicated thing. And I'm not saying we've got it right and we always have to be refocusing our efforts. That's what is brilliant about Passivhaus. It gives you that standard, that gate, yes or no. Are you in or out? As soon as you're not doing it, it's a bit more vague and you can start to abuse that or drift away from the purity.

But getting back to overheating, in order to passively stop overheating with louvres or with Brise-soleil, they get massive, right? So, in this climate, it seems to me that a very good option is to actively to do it, to have a moveable louvre system. So, in all winter, the louvres are completely open, we've got lovely views of whatever, and any sun that's coming down, we get loads of it. And also, when you really need the heat in winter, you can get quite a chunk of it actually from that. Our heating season is probably late November through to late February. Other than that, we don't need any. And that's then done by wood pellet. But we don't need any other.

Ben: Why did you choose that?

Charlie: Because I already had it. I put it in ten years ago in the cottage because it was the only thing that I could put in really.

Ben: But that's not coming from the cottage?

Charlie: Yes.

Ben: Oh, it is?

Charlie: We've got a district heating main, a highly insulated main that connects the two buildings. So, the rainwater harvesting comes down and the wood pellet heating comes backwards and forwards. As well as having solar thermal.

So, with the solar gain issue, that actually to have an active control system with external louvering seemed to make a lot of sense. So, that was a big new thing for us to do. We've done it once on a building with one louvre because it was obviously going to overheat with the easterly sun. And here, we went for it.

I always use these opportunities to build my own houses to test stuff on myself before I do it on clients. Because the last thing I want is something not working for a client. I'd rather it didn't really work well for me because I can put it in context, deal with it, make phone calls and get it fixed.

Ben: That is a challenge though, isn't it? For people that work in construction just generally. How do you make sure that you're constantly progressing? Because not every architect gets the chance to build their own house.

Charlie: No, absolutely. I think that's why they have continued professional development staff. But it's one thing to sit in a lecture and be told stuff. It's quite another to reach into your own pocket, pay for something and live with the consequences. And I think it's a really useful process if anyone can do it and I would recommend that anyone who is in architecture to try and build their own houses to learn things. Or failing that, to do proper post-occupancy analysis. Which is a massive failure in the whole of architecture. Going back to your buildings when they're finished and actually working out how well they worked compared to the way they should have done.

You know, we try it. We're not perfect, far from it. But we try to learn as many lessons as we can. When I did the cottage, that was ten, eleven years ago when we started that, and I'd been designing low-energy refurbishments for quite a while. And invariably, we design all the stuff, we get to budget, cost-cutting – value engineering is a sanitised way of describing it – and a lot of this stuff would get cut out. So, when I did the cottage, I was like, 'no, I'm going to do this a hundred percent.'

So, we did wood fibre and lime internal insulation, we dug out the floors, put in two-hundred mill. of insulation under the floor, we insulated under the thatch, we put in rainwater harvesting, we put in no MDF, just all local European hardwoods, mainly Scottish elm that was cut down from the great estates in Scotland from diseased and old trees, so it was not even clear felling. So, we really put a lot of effort in. Then a wood pellet boiler and solar thermal on this building. So, a super amount of learning.

Ben: But on this one your hands have been tied a little bit with the build system, haven't they?

Charlie: With this one, yes, planning played into it. Because we needed to hide the building, it's effectively earth sheltered, dug into a hillside. So, immediately you're doing that, you're then using reinforced concrete because that's how you hold soil up basically, like it one way or the other.

Ben: That's quite a lot of soil, isn't it?

Charlie: Well, yes. Apparently it's three tonnes horizontal push or three tonnes per square metre onto the entire back of this wall, which was amazing to me when the structural engineer calculated it. So, there's an enormous amount of push onto the back wall. That meant that we had to have a fairly chunky floor slab. And then because we've got a green roof, a two-hundred mill. intensive wildflower roof, we had to have a concrete roof.

It's all GGBS – granulated ground blast-furnace slag – so, that reduces the amount of concrete that you need. It's all sixty percent. So, we've made a big chunk there of reducing the CO₂. Then the external walls are hundred-and-forty mill. concrete block on the inside with a timber I-beam and then fully blown actually with a high performing polystyrene bead because we were a bit limited on depth. So, I didn't use wood fibre in that situation. But normally I would. It was a slight get-out-of-jail card at that point because of the louvre heads as much as anything.

I think I'm going into a bit too much detail.

Ben: It's alright. We do like detail.

Externally then, how does the building look or how did you want it to look?

Charlie: Well, just to briefly go back a second, the issue around all of that concrete is obviously the embodied energy. So, you end up with a thermally massive building and a building that uses a lot of CO₂. I think there's no two ways about that.

The way that you can try and offset that or ameliorate that in some ways is we have a power flow to the concrete floor that's got the underfloor heating in it. That floor is the finish. So, we didn't have to buy a wood floor or a porcelain floor which is very energy intensive. Even a wooden floor, a lot of manufacturing, didn't have to do that – and sealants, glues, didn't have to do any of that. That floor is the floor. It is the structure, heating and floor finish in one. Done.

So, the concrete block is straight onto that with a lime plaster, on to the concrete block. Then we're using the concrete block a) to give a rigidity, a sturdiness to the walls; b) to give that thermal mass so we can iron out any temperature fluctuations with a thermally massive building. So, that's how you try and make what is on one level a problem, using so much concrete, into something of a strength. So, it's a bit of judo.

Externally, we used a lot of local stone. From my perspective, I like using local materials. Great architecture is about context in many ways, in many cases, I think. Obviously, international modernism slightly varies but I really like a modernism that is about place and people and culture. We used stone from a quarry about three-and-a-half miles away that was then brought in blocks to a stone yard.

Ben: Does it become more attractive at the point, when you think three miles away, that is brilliant – a proper sense of place?

Charlie: Yes, of course. And the inspiration for the building from day one has been the big, old, viaduct piers, that are straight in front of us that were taken out in '62 under the Beeching cuts – they are these wonderful Victorian pillars that almost look like Roman ruins. That's the inspiration for the architecture of the building.

So, using the local stone was really good because Hook Norton had a lot of stone quarrying, mainly for iron actually. They smelted it for iron. So, we used the stone which is called ironstone and we used COR-TEN because of a reference to the local steel industry, and the outside of the building is also inspired by railway bridges that you get around the M25. Which seems like a slightly weird inspiration, but there you go. I got carried away.

Ben: What other challenges have you had on this project?

Charlie: Management.

Ben: Yes. You said you were busy.

Charlie: Yes, management. I'm not a builder. I run an architecture practice, I do TV. I'm not a builder. I think we did a pretty good job, but there were times when I found the management side of it really important.

I did all the sourcing. I bought pretty much everything apart from a few bags of sand and a few bags of cement. I literally phoned up, ordered and bought everything. And that took an enormous amount of time.

We had an unfortunate issue around plastering where we had a mistake on plastering which was so painful. And actually, it was going fine until then. But just at that point when you're exhausted and running out of money – more importantly, running out of emotional strength – you hit problems and you have to try and get through that. And I found that incredibly hard, actually. Really hard. It was a very unfortunate situation that no-one could have seen but it was just very painful.

Ben: Again, we'll put that video into the show notes because you go into a lot more detail about that.

Charlie: Yes. Don't go down that rabbit hole.

It was very interesting. I learnt a couple of things when doing this build. There are a few sayings. One is like, 'today's overinvestment is tomorrow's bargain.' And I think when you're building, if you just take a very short-term view or an accountant's view – and I don't mean that to be as much of a pejorative statement – but an accountant's view of what you should invest, I think sometimes that's wrong. And mainly that's because at the moment, for the last twenty years, build costs have outstripped inflation quite significantly. So, if you build it today and it costs more and you go further than you want to, it's going to be cheaper than building it in ten, fifteen years' time.

So, actually if you do it right now, you won't go back and redo it. So, a) you save wasted materials of going back and redoing something; and b) you save the cost uplift that's likely to happen.

The second thing I learnt was in the search for perfection, the one thing you're bound to find is insanity. And I think trying to finish this house, you've got to let things go. You've got to be proportionate. And I think a lot of people really struggle with that. I think if you accept early on that it's never going to be perfect, as much as I'm not perfect, no-one I know is perfect, then I think you'll find it a much easier ride.

Ben: What advice do you give off the back of your project, speaking to a self-builder trying to tell them what it's like?

Charlie: I think planning, as in, really working out your cost plan before you get going.

Ben: How do you do that?

Charlie: With a QS. I went to a QS. And I think managed to persuade the QS – and I went to the QS very upfront, I work with him a lot so he

was open to it, I said, 'when you've done the QS work, I want the spreadsheet. Because I want to then populate that spreadsheet with my own figures.' And I took his spreadsheet, added to it and changed it. And that was a really useful guide to understand where I was going.

I so often see people who are kidding themselves about the real costs of these things. And I think it's necessity that they do that because if they knew the real costs, they would never do it. They'd never start. Equally, most people get away with it but some people you meet just get into the most awful situation where they're just stuck. And a half-finished house is next to worthless. It's a disaster. So, you really don't want to fall into that.

So, the planning in terms of cost plan is really important. Get your schedule really organised, really organised, and start tendering things way down the line or start those conversations around plumbing, plasterboard, der-der-der.

And I think go to specialists. They might be more expensive but it's so much less hassle. If you're going to get a suspended roof system in, go to a suspended roof company. Get a quote from them. Even if they're quite big, you'll be amazed. They're really cost-effective. And it might be that Bob or Sue or whatever is working at a hundred-and-sixty quid a day. Surely it looks cheaper to begin with, but I bet you it won't be by the end. The people who do one thing day in, day out, are often very quick and really good value when you look into it in hindsight. So, don't be afraid of using specialists.

Ben: Charlie, thank you very much for your time today. Really appreciate it.

Charlie: No worries. It's very enjoyable having a chat.