



Your transcript

**The Residential Efficiency Scorecard
for Existing Homes, with Melanie Lupis,
Sustainability Certified [Part 1 of 2 Episodes]**

PODCAST EPISODE #262



Undercover
Architect

Hello ...

I'M AMELIA LEE,
THE ARCHITECT
BEHIND
UNDERCOVER ARCHITECT



New home or renovation on the cards?

Chances are you're worried about what it will cost, if you can afford it, and how you'll avoid a budget blowout.

You're also probably nervous about how much time it will take, and how it's going to fit into your already busy life (#serialjuggler!).

And obviously you don't want to stuff it up, and end up with a home you wish you did differently. Who needs those regrets, hey?

I'm Amelia Lee, and I'm a wife, a mum and an award-winning architect with over 27 years industry experience in over 250 homes (including 3 renovations of our own homes).

I'm here to share the detail and insights on how to create a home that feels great, and that you feel great in. From understanding the cost of renovating and building, to insider know-how and step-by-step advice, Undercover Architect will help you get it right, simply and with confidence.

Whoever you're working with, and whatever your dreams, your location or your budget, consider Undercover Architect your secret ally.

Here's to helping you create the perfect home for you and your family ...

- Amelia, UA x

EPISODE #262



Hello! This is Episode 262, and in it, I'm speaking with Melanie Lupis, from Sustainability Certified.

Melanie is a NatHERS Accredited Assessor, Passive House Certified Consultant and Residential Scorecard Accredited Assessor. She owns her own business, Sustainability Certified, and is passionate about helping homeowners and designers achieve more sustainable, energy efficient and thermally comfortable outcomes in their designs and finished homes.

In this episode, Melanie talks with us about the Residential Efficiency Scorecard Assessment process - or Scorecard, and her work as an Residential Scorecard accredited assessor.

What is Scorecard? Scorecard is a national energy efficiency rating program for existing homes, the first of its kind in Australia. Scorecard rates your home's energy efficiency and comfort.

Getting a Scorecard rating from a government-accredited assessor will help you make the best choices by providing targeted information to ensure that any money you spend on upgrades will lead to a cheaper to run, more comfortable home.

The rating is like an Energy Star rating like you would see on a dishwasher or washing machine, and the more stars, the cheaper the home is to run. The Scorecard assessment reviews the building shell, including glazing, insulation, building materials, air leakage and then also examines your appliances, heating and cooling systems, hot water heating, any pool equipment and solar panels.

If you're wanting to improve your existing home either before you renovate, or as part of your renovation, and you're keen to access more information about what to focus on specifically, this episode will be super helpful for you.

Now, let's dive in!

Before we jump into my conversation with Melanie, let me tell you a bit more about her.

Melanie Lupis is an environmental enthusiast, nature lover and mum. She works as a

Home Energy Efficiency and Sustainability Consultant and heads up her own company Sustainability Certified Pty Ltd. Her mission statement is to “demystify the challenges of sustainable building and make it accessible and desirable to mainstream homeowners and designers.”

Melanie has a Bachelor of Science (Hons) majoring in environmental studies. As I mentioned in the intro, she is a NatHERS Accredited Assessor, Passive House Certified Consultant and Residential Scorecard Accredited Assessor. She is trained in BERS Pro, FirstRate5 and Hero Software packages. She balances her field work with office based advice and modelling for residential architects and designers.

Her unique perspective on home energy efficiency and thermal comfort derives from the combination of Melanie’s science background; her first-hand experience in assessing current [and outdated!] building stock; and her design-work off the plan for future builds.

Melanie has a wealth of knowledge to share about the work she does to help homeowners in both their existing homes, and those planning renovations and new builds.

PLEASE NOTE:

The following interview has been transcribed through AI, and will not be 100% accurate. This is particularly relevant when there is a lot of industry terminology in the conversation that the AI bots can’t translate or understand precisely.

Timestamping is included so you can refer to (and listen to) the original podcast episode recording to check any discrepancies. The timestamping starts at the point of my conversation with our guest (not from the beginning of the episode itself).

Head to www.undercoverarchitect.com/262 for the podcast episode, or Episode 262 wherever you listen to Undercover Architect’s podcast (Spotify, iTunes, Google Play, Stitcher etc)

Amelia Lee 00:00

Well, Mel, I am super excited to have you here I said, before I jumped on that I’ve just been really looking forward to being able to introduce you to the Undercover Architect

community, share with them more about what you do and how you help. Because I know that you're the role that you play in a project team, and in the process of getting a renovation or new build done, can be so critical to ensuring that a homeowner is optimising what is possible for them that they're really getting the most out of their design, out of their construction, and really creating that fantastic end product that is a fantastic home to live in.

Amelia Lee 00:33

But before we dive into talking all about that, can I just ask you to tell us a little bit about yourself, and how you actually came to be doing the work that you're doing? Because I know you I mean, you've got lots of different feathers in your cap!

Melanie Lupis 00:44

Yes, I do. Thank you very much for having me on. Yes, so I studied environmental science at uni. And then I worked at Bankstown Council. And I got to work on a project called choose for climate protection, which was in those days as the late 90s. People hadn't really heard of what a greenhouse gas emission was. So it was a really interesting time, because I had to educate on that. So we've come a long way, when you think about that.

Melanie Lupis 01:15

So then I've got four children, that sort of ate into my time.

Amelia Lee 01:20

That's one way to put it!

Melanie Lupis 01:24

I went to work for family business and construction industry for eight years. And then my girls were looking to study environmental science at you know, finishing up their HSC. And I was looking at the courses, and thinking "Oh, how did I stray so far from what I love". And so I decided to retrain, but sort of combine the two things of energy efficiency that I worked in with Bankstown Council and the construction industry. So I went through my search for and home energy efficiency and sustainability. And yeah, that was just sort of started that and became a NatHERS assessor. And then, as you probably know, I also did my passive house course. And my residential scorecard course.

Amelia Lee 02:08

Yeah, that's the thing, when I looked at, and you know, your bio, and the intro of all of the different certifications and training that you do have, you've got this great wealth of knowledge and experience that can be a huge asset to teams that you're working with.

And I love that you've become so sort of, almost multidisciplinary in the way of sort of thinking about energy efficiency, and the way it applies to homes and, obviously, really passionate about what you're doing. So, yeah, it's really awesome.

Amelia Lee 02:34

And I love that love that, you know, seeing your daughter's kind of, and them exploring their interests triggered that, you know, a lot of people think, Oh, it's too late for me, but I know we've got lots of, you know, HOME Method members who, because of what they've learned about sustainable design, they're actually looking at career changes, and looking at becoming certified as energy performance assessors and, and energy efficiency assessors, and even you know, getting trained in building design and those kinds of things. So it's never too late. And it's awesome that you've been able to do this.

Amelia Lee 03:02

So now you've mentioned that you're a Residential Scorecard accredited assessor. So can you tell us a bit more about what that means? And about the residential scorecard scheme and what it means to be accredited as an assessor?

Melanie Lupis 03:15

Yes. So fantastic. I'm so excited that we finally got residential scorecard. Prior to this, there really wasn't any software tools that allow us to have sort of a quantifiable look at the the energy use of an existing home. So if you're building a new home, and as you know, you've got natters, you've got Passivhaus, even BASIX that you can use to optimise your design.

Melanie Lupis 03:44

But existing homes are just they're such a huge piece of the pie in terms of trying to improve energy efficiency. And as an assessor, like I'm constantly asked by existing homeowners, what can I do? And sure I can give them advice. But prior to the software tool being developed, it wasn't quantifiable.

Melanie Lupis 04:04

So luckily, the Victorian Government came up with residential scorecard efficiency scorecard. And it's an online software tool where and a whole network of accredited assessors.

Melanie Lupis 04:19

So somebody can come out to your existing home doesn't matter if you've got plans or not, because we'll come in measure up and look at a lot of the different things in the

house that construction, the insulation, the type of windows, and we also look at all the appliances. So I kind of like to explain it as like NatHERS and whole of home put together but simplified NatHERS and for existing homes.

Melanie Lupis 04:46

So it's yeah, it's a fantastic program and the assessors are growing nationally. It's been now endorsed by all of the state governments and further developed so fantastic. Hopefully, moving forward, no matter where you are in Australia, what climates zone, you'll be able to have an assessor come out to your house.

Amelia Lee 05:08

Yeah, this really excites me, because I know in speaking with a lot of homeowners who are planning a renovation, oftentimes, the first thing that they wanting to do is to improve the performance of their existing home because they're sick of living in a place that's cold during winter, you know, hot during summer, requires a lot of artificial heating and cooling or it's incredibly drafty, or those types of things so that they can actually tap into something that is data driven, that gives them some data feedback. And that can be done by an accredited assessor so that you know that it's reliable information is really, really exciting.

Amelia Lee 05:39

So now in terms of that, that actual assessment process, and the way that it goes, I am really curious if you can sort of take us through the detail of sort of arriving at a at a person's house and the kinds of things that you'll look at and the process that you go through to do that assessment. Because it's quite involved, isn't it?

Melanie Lupis 05:59

Yes, it is. And because you're entering somebody's private space, you have to be aware of that. The added advantage of entering an existing home to do an assessment is that you've got the feedback from the homeowner. So they can say to me, look, this room is freezing, I can't sit in here in winter, or this room is boiling. So you can use that knowledge as you're walking around.

Melanie Lupis 06:22

So the first thing we do, we arrived, we have a bit of a chat about the process, and then get up into the ceiling space. To have a look at the if they've got insulation, sometimes they do, sometimes they don't looking for gaps in insulation, getting under the floor, if there is an under floor to look for what insulation they've got their walls are a bit trickier. So sometimes we have to take a guesstimate based on the age and less the

homeowners have got some knowledge in that space.

Melanie Lupis 06:53

We go around, have a look at all the appliances and I take photos of all the labels on the appliances, so that I can check the star ratings of each of those appliances. And measure up rooms. So we've got room sizes, window sizes, we're looking at the window coverings, both inside and outside, because obviously, that's heat loss with your window coverings or heat gain if you haven't got any shading, particularly on East / West.

Melanie Lupis 07:22

And so then as I'm going around, I've got an iPad, and the tool is an online tool. So all the data has been entered. In as we're going around, we're looking for air leakage spots, so and we've calculate that out even in centimetres squared. So it's quite in depth, we're looking at the lighting, particularly if it's halogen vs LED and air leakage in that respect.

Melanie Lupis 07:51

And then so by the time I finished entering all the data going around the house, I've got, I can produce a preview certificate from the online tool. And that gives us straightaway an indication whilst I'm on site, to be able to have a chat with the homeowner and be honest, sort of explain through what the recommendations are because the online tool is very smart in the background, it's calculating what are your top three recommendations.

Melanie Lupis 08:20

So it produces those recommendations in terms of, so you get star rating, which is to do with the cost to run the house. So that's sort of similar to the star rating that you would get on like a dishwasher or washing machine, that's sort of saying that this house reaches this ministers ear will cost this much to run essentially.

Melanie Lupis 08:41

It also gets a thermal comfort rating, so hot weather comfort rating, and a cold weather comfort rating. And that's more to do with the building shell. So we're sort of looking at what can we do to improve there. So it might be window coverings, more insulation in the ceiling, that sort of stuff. And then in terms of the appliances, we're looking at hot water as well so and we calculate out the litre usage of the showers. So there'll be some recommendations to do with each of the appliances if you're you've got an old air conditioner, it's not very efficient, it might the recommendation might be to upgrade that.

Melanie Lupis 09:22

Now, it doesn't mean that you necessarily have to race out and go and buy an air conditioner tomorrow. The idea is that once you've got the knowledge that when your hot water heater goes for instance, and you know your family's going to kill you ... The maximum you've got is about three days and a hot water heater before everyone's gonna come at you. So if you've done the research prior to and we often obviously recommend heat pump. If you've got an electric storage it's a really big difference in the energy use if you go to heat pump. So if you've done that research before you know about what rebates are available, you know about the cost, you've been able to put aside a little bit of money so that when it goes, the plumber doesn't come out and say, I'm just going to replace it like for like, and then there's a lost opportunity for another 10 years.

Melanie Lupis 10:09

So the reports really handy because you've got all this information, and you don't have to act on it straightaway, you can make your own decisions about what you want to do. Depending on the assessor, they can also run some variations if you want them to. So if they say, 'Well, what would my star rating be if I increase the insulation in the ceiling?' So I can run a variation on the assessment to see the impact of that. And that way we can sort of prioritise what things that you want to do first, what things are more expensive than others? And you kind of get it in the pipeline, I guess. Yeah, that's a long answer.

Amelia Lee 10:51

No, no, that was fantastic. And I think it's what I what I love about it is it is translating what is available in new home construction into an existing home environment. And it's giving people that opportunity to figure out what their priorities are going to be.

Amelia Lee 11:07

So, you know, so that, that once you've then collected all that information, and potentially, you know, sat with a homeowner who said, I look, okay, can you just quickly run ... What would happen if we did have proper insulation bats in the ceiling? Or if we changed all of this lighting to LED or if we, you know, improve the air tightness and those kinds of things ... How, what, what, what then gets produced when you go back to the office, and you you then get back in touch with the client after you've done that scorecard assessment on site?

Melanie Lupis 11:41

Yeah. So when we go back to the office, because it's government based, it's there's a lot of checks and balances, I guess, we have to upload the photos that we've taken from site as evidence, because they're trying to make sure, obviously, that there's sort of no

loopholes here, I guess. And then we normally would run checks to make sure that we got the star ratings right on all the appliances. So sometimes there's a bit of research in that. And then I would run variations, and I send it as a report back to the customer. They also get the final certificate of the scorecard, delivered to them. And then if they've got any questions, they're welcome to give me a call.

Melanie Lupis 12:25

One of the things that I find is a bit tricky for people is like, you might find a situation where the it's coming up as insulation needs to be replaced as highest priority, because it's going to have the best bang for your buck. But I can see that they've got halogen lights, right. So the difficulty is if you go to put the the insulation up there, the halogens are going to be the way, you're going to have huge gaps. And as I know, I've heard you speak about before and you know, just a 5% gap in insulation is a 50% drop in, in its effectiveness.

Melanie Lupis 12:59

So if you've got an R4 but they're wonderful, but it's back to R2 straightaway. And then often when I get up in the ceiling spaces, it's a lot more than just 5%. It's quite large. And so I might prioritise it in that way and say, Well look, do your halogens first change those to led to make sure you get a IC4 rated, LED. And then you can just have a beautiful blanket of continuous insulation above the ceiling.

Melanie Lupis 13:28

So I guess in that way, it's good to have that assessor feedback. And it's not just okay, this is the best thing for you coming from a computer because you've got a little bit of both: the knowledge of the assessor, and they're on site having a chat with you. And yeah, as well as the database information coming out of the scorecard.

Amelia Lee 13:51

I think that's really great. And I think the fact that the feedback can be tailored and nuanced as well for your personal inspection of that home and seeing, you know what the big ticket items might be I, The Australia Institute of Architects had a session on yesterday for members where Michael Ambrose from the CSIRO was on talking about the upcoming changes to the National Construction Code and, you know, the changes that have come into place. And he was talking about how they've been collecting the data from the NatHERS assessments since 2016. So they've now got about a million new homes in you know, in terms of seeing the star rating.

Amelia Lee 14:28

And so I really liked that the Scorecard assessment data is also having to go through some kind of, you know, processing tool externally to the individual assessor because I can imagine that, then that data is being collected to see what is the existing housing stock, you know, really like in Australia, how is it really performing. And what then does government, does legislation, does the industry need to target in terms of us making a dent on improving this and changing so that we can actually deal with the challenges in environment and those kinds of things.

Amelia Lee 15:00

So I, you know, I love that there's sort of this individual approach for the homeowner to tackle it in their own home. But then obviously, the industry has wrapped their head around, well, holistically, we need to understand how do we dramatically, you know, we've got so much existing building stock, how do we actually improve it? What opportunities are there because those things then kind of feed into when they do look at rebate schemes, and they look at opportunities for funding and that kind of stuff that that, you know.

Amelia Lee 15:28

And Michael was talking about how they, you know, in the process of looking at the changes to the National Construction Code, when they were preparing for them, they pulled out the data from, I think it ended up being just under 300 ... no, it was like 290,000 homes that had been built in that 2020 to 2021 period. And they ran them through the new modelling to see how, how difficult it would have been or how hard it was going to impact them to be then be able to see how they were going to transition us into the changes for the National Construction Code. So you know, that data becomes really, really important. So yeah, I actually really love that you having to do that, because, you know, I can imagine it's arduous, though, you know, helpful in that big picture sort of idea.

Melanie Lupis 16:12

Yes, absolutely.

Amelia Lee 16:15

And so you're then setting those recommendations, you mentioned that you're tailoring kind of increasing that, you know, whether it's insulation, which can be just an easy kind of low hanging fruit, particularly in old homes, where you stick your head up in the ceiling, and it's literally like the bats have been moved around. Because somebody's come to change a light fitting, and they've never bothered putting anything back. So

and getting that sort of improved, that can make a really big, you know, performance difference.

Amelia Lee 16:41

You know, what, how do you sort of support homeowners who want to sort of understand cost? And, you know, what might be cost prohibitive? Versus what might be easy for them? How do you sort of navigate that in your role as the scorecard assessor providing this information to clients?

Melanie Lupis 16:59

Yeah, so it is a bit tricky. There are situations I did an assessment recently. And the house actually had one entire room that was connected to all of the living areas that was a glass ceiling.

Amelia Lee 17:12

Oh, wow.

Melanie Lupis 17:14

And it was a really tricky one. You can't put insulation in a glass ceiling. Not easily anyway. It was also cathedral ceilings, exposed beams, no insulation in the ceiling whatsoever, or walls, or floor. So it becomes, so because of those high ceilings, it's very tricky to then add insulation in those ceilings is mean a lot of houses, easily accessible. But in installation, wonderful. You've got solution right there, right? This one was really tricky. So I ran a lot of variations on it, just to see because he wanted to know like, this is going to cost me a fortune to I like my expose beams. Is it going to cost me a lot of money? If I want to try and insulate that.

Melanie Lupis 18:03

So yeah, we did, I ran a lot of variations to see. And he had an old electric storage hot water heater, his appliances were not, you know, they were quite old, his heating and cooling appliances. So he just wanted to know, like, he sort of said, Should I just put more PV on? because that also is part of the scorecard.

Melanie Lupis 18:24

So we talked through it, I gave him a whole bunch of variations, we ran through, you know, each of those variations to see which one was going to be most effective for him. So for him, the appliances were probably number one ticket first, right? And then if he ever decides he doesn't like the exposed beams, then maybe there's an opportunity there. Or if the roof ever has to come off, there might be an opportunity. So there's not always

an easy solution in our existing housing stock.

Melanie Lupis 18:56

We did talk about zoning off that glass roof room, which he hadn't really realised was really what was impacting upon the rest of the house. Because you can't you're just living somewhere you don't really know how it all feeds in together. But it's probably a little easier as an energy assessor. You walk in you go wow, okay. There's a problem. So yeah, it's great working through all these difficulties, and then you could go ... I was in a house on Monday and easy solutions, you know, very identifiable straightaway and affordable.

Amelia Lee 19:36

Do you find that people are thinking I have to have all double glazed windows or I have to figure out how I'm going to get underfloor insulation in or get insulation into my walls. Like do you find that people are sort of overestimating how dramatic changes might need to be to make an impact or, you know, how are you sort of seeing people navigate it?

Melanie Lupis 19:53

Yeah, I think the double glazing thing comes up a lot. And obviously that's very, very expensive to retrofit if you're not doing a major renovation, so you're not sort of, you're only trying to retrofit for energy efficiency, that one is often off the cards really. But you can get, in fact, there's some data from Sustainability Victoria, that shows you if you do really heavy curtains with pelmets, it's the same impact as having double glazing. But you have to remember to close them at night-time. This is the thing, we've all got beautiful windows we love looking at and it gets dark, and we forget that actually, they need they're naked, we need to cover them up so that heat doesn't keep going out in the middle of winter. But by the same token, opening up in the in the daytime to let the sun shine in when you can.

Amelia Lee 20:47

So yeah. And you mentioned too heat pump, hot water units as well. So do you find when you're suggesting that to people that they're concerned, or they're, they don't really understand what a heat pump hot water unit is? Or, you know, how is that sort of conversation being received, when you have that with clients that you're discussing this with?

Melanie Lupis 21:07

I know, I don't, usually, the people who call you up to get an assessment are very well aware of sort of what's out there. And they want the assessment to sort of confirm what

the priorities will be. I don't think even in mainstream, like I was speaking to a fellow from Australian hot water recently. And he was saying they're doing like 10 a week heat pumps they're just getting and he's just like the local rep. So I think there's rebates out there that it's, it makes sense. And it's such a dramatic drop in your energy use, I don't think people really quite comprehend. And when they get scorecard assessment, they do. The percentage of your energy that's going to heating some water. So I mean, yes, of course, we love having beautiful hot showers, but heat pump can do just the same thing.

Amelia Lee 22:01

Yes, but do it more efficiently.

Melanie Lupis 22:03

Yes. So anytime you're looking at the efficiency on the heat pumps, you know, between four and six times the energy output, compared to a regular electric storage where you're losing, so one kilowatt in and you're back down at maybe 87%. out because you're losing that to the storage.

Amelia Lee 22:29

And you mentioned that the PV or solar says, you know, solar panels are included in the scorecard. So how does the scorecard sort of look at that, that information in regards to somebody having, you know, for example, we've got an old solar hot water unit on our roof. How does it sort of assess that kind of stuff when it's looking at it, and also proposing potential, you know, improvements in the scorecard as well.

Melanie Lupis 22:51

Yeah, so it does take into account solar hot water, but also the PV. In terms of PV, you get like a star rating, that will show as your star rating without the PV. And then potentially, if you've got enough PV and not, and reasonably performing house, you can get up to eight stars anyway. And if you're, if you're doing well, with your PV, you can get up to 10, where you're pushing back out into the grid, because you're not using very much. But it does divide it up so that you know how much your PV is contributing to your star rating. So you can see, yeah, there's still some things I can fix. Because PV is fantastic. But the greenest kilowatt is the one that you don't use. So even if you've got

Amelia Lee 23:44

I love that Mel "the greenest kilowatt is the one that you don't use" ... that is that is a printable that one.

Melanie Lupis 23:50

So if you can push out, if you can make plenty that's wonderful, but don't hoard it to yourself, push it out there, save more at home, push it out there, use it, somebody else's house who doesn't necessarily have the ability to reduce these.

Amelia Lee 24:05

Oh I love that. And you finding, you know, in the housing stock that you're looking at, is there a pretty common kind of star rating? Or are you still seeing a big range? Because it's a different sort of housing stock sort of age groups and different site conditions and those kinds of things?

Melanie Lupis 24:21

So the average star rating is three across scorecard. And I think I mentioned it was, you know, originated in Victoria. So they've done a lot of assessments down there in the past 5000 assessments, and that sort of average is coming from that. So it's not comparable with NatHERS exactly, the stars are not the same. The hot and cold weather rating compares more with the NatHERS star ratings.

Melanie Lupis 24:51

But yes, I know, you know, from other research that the average housing stock if you want to speak in NatHERS terms is between one and three stars, the existing housing stock, which, you know. I think we were talking about the fact that by 2050, we'll still have 7 million homes in Australia that haven't been subjected to the energy efficiency requirements under the NCC. So, you know, there's a lot of work to do on the existing housing stock. So it's fabulous that this tool allows us to make a real start on that.

Amelia Lee 25:26

Fantastic. So now, I'm wondering if we can talk about in your role as an energy efficiency assessor and potentially doing modelling on people's homes, when they're doing projects?

Amelia Lee 25:39

Are you seeing clients worried about the upcoming changes and the shift to seven stars and the National Construction Code? You know, what suggestions do you have for homeowners that might be a bit concerned about how their projects going to achieve it?

Melanie Lupis 25:50

No, I guess everybody sort of thinks that that's, you know, a year away. But I like to try and remind people that this is like energy efficiency, this is a benefit to you, this is not,

okay, you might spend the money. And I know you hear this one touted about a lot, but it's worth coming back to is you get a Caesarstone benchtop, right, everybody just doesn't anyway, usually, they'll make the money for that. That's not going to give you a payback. Energy efficiency will.

Melanie Lupis 26:26

So you hear these arguments in the media saying, oh, we can't afford to go to 7 stars, and it saves you money, it's one of the only things in the whole building of your house is going to save you money, year on year for the entire age of that house. This Caesarstone benchtop, it's not going to save you money, and probably will be replaced, you know, within 20 years for a refurb I don't know. But energy efficiency is there for good.

Melanie Lupis 26:53

There's some really simple things, you know, north facing living areas, like the way I like when I'm modelling, in NatHERS, I, I'm a bit strange in this way, I kind of pitching myself in the house ...

Amelia Lee 27:08

That's not strange.

Melanie Lupis 27:09

I'm walking around. And to me, because I'm looking for warmth in the house or cool'th'. I'm looking for where would I go and see it in this house to warm up on a cold winter's day where I can get sunshine. Now, if you're looking at your house, and all you can see for a space to go and do that is a garage, or a kitchen or a toilet, those you're only north facing, you've got the design wrong.

Melanie Lupis 27:35

So go back to the drawing board, or flip it or do whatever you need to do. But we want our living areas so we can enjoy that space. I mean, I don't know about you, but I love having sunshine. Now I know that not everybody has that access to the sunshine, you might have, you know, a three story house next door to you that's blocked it. This happened to my parents.

Melanie Lupis 27:56

But there's other things that you can do. You can look at making sure that you've got good zoning in the house. So one of the common things that you see particular project homes is that you'll see a beautiful open plan living area, which is wonderful, I love open plan. But it's completely interlinked with the whole of the upstairs. So if you

put a heater on downstairs, that's that heats. I mean, that's just make sense, right? We know that heat rises, it's lost. So to even try and heat or cool that area you're having to the massive volume of the house.

Melanie Lupis 28:35

So try and think about your zoning that doesn't cost anything. And then you've got cross ventilation. So start thinking about your windows, obviously, window types do play into it. And yes, double glazing will come into, depending on your climate zone. But there's plenty of other things that you can do.

Melanie Lupis 28:55

One of the, this doesn't count into the seven stars, but it's certainly worth remembering. And that's roof design. So you can capture PV as well. So you can put your, your PV cells up there so that they're at a good angle to get good PV and that you've got space to put the PV up there. I don't know is that helpful?

Amelia Lee 29:19

There's some great tips there. And I think this is the thing like it's not it's, um, you get, you know, you really do get 80% of the way there by designing with suitability for climate. So thinking about orientation, thinking about natural ventilation, thinking about how you maximise the value of the natural assets that you have, which feeds into a great feeling home anyway, and supports you easily achieving that seven star energy rating.

Amelia Lee 29:21

I think a lot of people and the the, you know, there's parts of the industry that are doing a very good job of putting out that it's going to be extra, you know, it's going to be more expensive because you're gonna have to upgrade insulation and windows and all of those types of things, but you know that I have seen houses in oil A lot of climates that are seven stars that just have the base standard insulation. And they still have, you know, very standard conventional construction methodology and materials. But they're well oriented. They're well designed for the climate. And they've thought about things like orientation and thermal mass and those kinds of things.

Amelia Lee 30:18

So I think when you do get into more sort of extreme climates, like how cold Canberra and, you know, you know, some of the Alpine regions can get, then yes, you do need to think obviously, about insulation and wall wraps and being very particular about those kinds of things. But for the large part, the core fundamentals of great design feed into this so significantly, and I think it's just what I get really excited about, you know, it's

always been a big goal of Undercover Architect that every house is designed for its specific site, so that we don't just get that plonk effect of, of houses being put on a site without any regard for how the sun moves.

Amelia Lee 30:54

So I get really excited by what opportunity this presents for homeowners to learn more about that and understand it, because there's so many cultures around the world where orientation and designing for orientation is just everybody knows about it. But in Australia, and in other parts of the world, it's just not part of our common understanding of how we design homes.

Melanie Lupis 31:13

The other thing is, don't feel like you have to do it alone. Like, there's not as assessors out, I know that traditionally, you would get an added assessor through an architect or building designer. But we're not that scary. You if you're building a home, and even if you're getting a project home, if you want to contact a NatHERS, so they will give you the advice. So even if you can't change a lot of things, they can give you the advice on Windows specs, on installation specs, so that you can build that into your designs, instead of just leaving it up to them to decide. I think sometimes you need to take that, you know, it's it's your house, I think that you need to get that information for yourself. So you're convinced instead of just being led by somebody else telling you, this is what you must do. Because there's a lot of solutions out there that are no cost that you know, you should explore in terms of trying to reach that seven stars.

Amelia Lee 32:11

I'm so glad you said that, Mel, because I'm such a big advocate for the energy efficiency assessor coming in during the design process. And it was really interesting in this presentation yesterday with Michael Ambrose and the Australian Institute of Architects that we're talking about the fact that the software was designed to be used during the design phase. That it is designed to be, to be able to provide design feedback that it was it was intended to be this kind of iterative, exploratory sort of thing that would enable people to to test that their design is actually doing the best that it can under the conditions that it's in.

Amelia Lee 32:45

And so the fact that that a lot of energy assessors are left to that point of the building approval, and they're externalised even, it's the builder that's kind of dealing with them. And it's this tick and flick process, and it's the deemed to satisfy, it just wastes the beautiful opportunity that their involvement can actually provide, and their expertise can

add in terms of seeing how you can hone all the things that you're already going to be spending money on to create a far better impact and outcome for your home. So and for the lifestyle that you're going to lead.

Amelia Lee 33:15

So yeah, and that's why I'm so excited because it's to get you on the podcast, because, you know, I hear more and more from homeowners that is difficult to find energy assessors who want to work collaboratively. Who want to, you know, there's there are energy assessors out there like every other part of the industry where people just want to kind of get their job done and step away and not have that collaborative relationship. And so to find you know, somebody like you and Sustainability Certified, your business, that you know, really does love and embrace this idea of how we can be involved and how can we help advise and how can we help inform and educate to me is really, really exciting.

And that's it for Part 1 of my conversation with Melanie.

I hope you enjoyed learning more about Scorecard, or the Residential Scorecard Assessments. I've got links in the resources in this area for you, if you're in Australia, to find an accredited assessor near you. Melanie also has detailed information on the Sustainability Certified website where you can see more about what's involved.

Be sure to tune in next time for Part 2 of my conversation with Melanie. We'll be talking more about NatHERS and Passive House assessments, and what she sees are the choices for homeowners trying to decide which method to pursue.

Plus we talk about 'as built verification' or how you can set up your construction process to help ensure you're getting what you're paying for in the sustainability measures and energy efficiency choices you're making during the design phase.

And, we'll talk about her entry into the Zero Carbon Challenge home competition that Design Matters ran, and her tips from what she learned from working so closely with building designer, Lachy McEwan from Harmonic Design.

As always, thank you for tuning in, and for letting me be your secret ally. Until next time, bye..

END OF TRANSCRIPT

RESOURCES

Sustainability Certified Website >>> <https://sustainabilitycertified.com.au/>

Residential Scorecard >>> <https://www.homescorecard.gov.au/>

Find an accredited assessor >>> <https://www.homescorecard.gov.au/find-a-scorecard-assessor>

Access the support and guidance you need to be confident and empowered when renovating and building your family home inside my flagship online program >>> <https://undercoverarchitect.com/courses/the-home-method/>

Learn more about how to get started with your home design with the Happy Home Design mini-course >>> <https://undercoverarchitect.com/courses/happy-home-design>

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"You have helped us move forward with clarity and confidence, and it's great hearing every tradie or supplier I talk to saying "Wow, you've really done your homework!" Yep, I listen to Amelia!" - Kate

"I have been binge reading your entire blog! Thanks for sharing your expertise and experience, it's a great resource." - Jane

"Searching through the website is like scanning great tomes of knowledge with pages of advice to point the right direction. Thoroughly recommend Amelia's advice as a preparatory step to getting the most from your home with the ideal journey to attaining it." - Andrew

"The information Amelia shares is literally life changing." - Lanc

"We've decided to defer our build so we can listen to all of these podcasts and be better informed. Thank you so much for all your knowledge and way of speaking that is so easy to listen to." - Kate

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