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YSP Podcast Transcript: Episode 289. Evacuation Diagrams and Emergency Management Plans

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Intro: Welcome to Your Strata Property, the podcast for property owners looking for reliable, accurate and bite-sized information from an experienced and authoritative source.

Amanda Farmer: Hello and welcome. I'm your podcast host, Amanda Farmer, and my guest this week is Michael Barnes. Michael is an Associate at Credwell Fire and Risk. He has over 15 years' experience as a multi-site building compliance manager for a Fortune 500 company and 10 years' experience as a manager of fire safe for one of Sydney's biggest area health services. In this chat, we talk about emergency management plans for our residential strata buildings, including evacuation diagrams and how Michael and the team at Credwell are helping buildings right around the country to reduce their risk and potentially save millions of dollars. I'll take you over now to my chat with Michael Barnes. Michael Barnes, welcome to the show.

Michael Barnes: Hi, thanks for the chance to talk today.

Amanda Farmer: Pleasure to have you here with us, Michael. I know you are a font of knowledge on a very important subject, or probably a few subjects, for our strata managers. I'm going to start by asking you to tell us a little about Credwell. What is it that you do? Who do you serve in our strata space?

Michael Barnes: Credwell's a multi-disciplinary team of Building Code of Australia, environmentally sustainable design, disabled access, risk, and fire safety measures consultants. So, we're founded in 2015 and we're currently at 20 employees. Last week, we actually opened a new office in Newcastle. We provide services to all areas of the building lifecycle, but by far, our biggest area is providing advice to owners, corporations and strata managers on all building-related matters.

Amanda Farmer: Yes, sounds like a broad list there. So, we're talking about fire safety.

Michael Barnes: Access for people with a disability, energy efficiency, general building code compliance.

Amanda Farmer: In already established buildings?

Michael Barnes: In established buildings and even in brand new buildings that haven't even come out of the ground yet. So, we start with builders and developers in that very early stage, all the way through to taking over for owners, corporations, and assisting in getting all their maintenance right, dealing with their fire orders, any building-related problems that they may have.

Amanda Farmer: Sounds like a broad skillset. What I particularly wanted to talk about today is emergency management plans. That's something that has been coming up for owners that I'm working with. I'm often asked Amanda, "Do we need one? If we want one, what should be in it?" Also I'm going to ask you about evacuation diagrams, which are becoming more popular, particularly as we think about short-term letting and the requirements that are on owners who are using their apartments for short-term letting. First, why Michael, is it so important that our buildings understand and manage safety risks, our residential buildings in particular?

Michael Barnes: To us, it's very important for owners to understand and manage their risks so they can actually plan for the future and identify issues that are in their building, maybe coming in their building, so they can plan for that future progressively, address those issues, reduce their risks. It gives them a chance they can maybe end up with reduced insurance premiums. I can provide you with a couple of examples of projects that I've just recently have been working on. We had one owners corporation come to us in a building built in the 1960s and they said they want to rip all out all their ceilings and put new fire-rated ceilings in because they didn't actually think that they were fire rated. So, we assisted the owners in that building and actually did an inspection of their ceilings and told them that their existing ceilings that are from the 1960s are fire-rated and they only just needed a few very minor repairs, so that saved them hundreds of thousands of dollars. They've been able to spend that money that they put aside for new ceilings to actually do other upgrades in their building, fixing balustrades so there's less of a chance of people falling.

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Amanda Farmer: Nice one, that's a hands-on building that comes to you and says, "We think we need new ceilings." How often does that happen?

Michael Barnes: That was one of the most unique ones I've done. Typically in an owners corporation where they'll get a fire order, the order will say, "Tell us that the ceilings are fire rated or fix them," and it was just very ... in that building and I've done it in several buildings over my 30 odd years, where we've been able to look at the ceiling and compare it to original test reports and go, "By the way guys, yes, your ceiling is fire rated." And if it's not fire rated or we can't confirm it, provide them an alternative strategy rather than ripping out the entire ceiling, to repairing cracks, fixing all the flaking paint and painting it with a fire retardant paint, which will provide the same outcome as ripping the ceilings out and it's a lot less of a cost to the owners.

Amanda Farmer:

I'm wondering if safety issues and risk management may not be front of mind for our residential building and that's really where a lot of our focus is here on the podcast, residential buildings. Some owners may think they're not in a commercial building, they don't have employees, businesses operating, people coming and going, so they don't need to worry about workplace health and safety, about these risks that may be within the common property. What do you say about that difference between residential, commercial?

Michael Barnes: In residential, a lot of the owners corporations we find, we think, you're exactly right. They don't need an emergency management plan and evacuation diagrams because they don't have any employees. And strictly speaking, the owners corporation, if they've got their fire maintenance contractors, and their contract cleaners, and their contract gardeners, and people like that, doing work in the building, they are technically employees and they really should cater for emergencies and they have a duty of care to those people to provide a safe place of work. So, old carpeted stairs and you've got the cleaners walking up and down the stairs and the carpet's loose and they might slip, or your visitors to the building who may have a vision impairment and there's no contrasting nosings on the stairs, things like that. They're risks that a lot of owners will often forget about and just think, "Oh, we don't really have anybody, so we don't need an evacuation plan, an emergency procedures manual, everything's fine."

Amanda Farmer: Until something happens.

Michael Barnes: Until something, unfortunately, happens, yes. And having the last 10 years of my life has been spent in the commercial world, managing compliance for one of Australia's biggest companies. A lot of the lessons that we've learned from that we can apply to the strata and residential type markets for ... We had the same thing, sites where nobody actually visits, except for the maintenance contractors. So, they originally thought, "Oh, we don't have to do anything." It turns out when you think about it, they are contractors. We do have a duty of care to them and putting safe work procedures in place, emergency management plans. These places can be in the middle of nowhere, what to actually do if they do have an emergency.

Amanda Farmer: Let's talk about emergency management plans, Michael, what are they? What might they contain for our residential buildings?

Michael Barnes: The emergency management plan is twofold. Everybody thinks of the evacuation diagrams as one thing and a plan of what to do as another. It's actually one whole document, so you have your emergency management plan, which incorporates your evacuation diagrams and your emergency management plan is pretty much a simple set of instructions or guidelines for the owners to follow in the event that they have an emergency. Apart from picking up the phone and dial 000, what do we do if a tree falls down? It also provides a course of action for them to mitigate damage in the event of an emergency.

It could be as simple as a water pipe bursts. Who do they contact to actually get that fixed in a hurry? Or where do they go and turn the water off? Something as simple as that and the evacuation diagrams form another part of it, where everybody comes into their building, 10-storey high building, gets in the lift up to their unit, and they know the set of stairs are there. They know the fire extinguisher's there. How do they use them? That's incorporated into the management plan.

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I don't know how many buildings I've been into lately where we've asked the owners, "Have you ever walked down the stairs? They went, "No, never get down there." So, they end up walking down the stairs and go, "Oh, this is where it comes out, oh. And then how do I get to the road from here?" So, having all that information documented for them. That's the emergency management plan and incorporates the diagrams.

Amanda Farmer: Okay. Now we're going to dig deeper into some of that. First of all, I want to thank you for raising the issue of burst water pipes and water leaks, because that is something I'm going to say, older buildings, but I suppose it happens in newer buildings too, that is quite common. The impact can be devastating, especially if somebody is not home and the building manager, or the neighbours can't get into turn off a tap, or to work out what's going on in the apartment and the damage to the apartment below, next door, the common property, it can be months and a very large insurance claim.

Michael Barnes: Yes, that can be huge. In my previous role, we had one building, we were a tenant in the building and a piece of hydrant pipe burst. It took 2 hours for the fire brigade to work out where to turn the water off. It did \$8 million worth of damage throughout the whole building.

Amanda Farmer: Oh my goodness. All because there wasn't a map, a plan, here's where the water-

Michael Barnes: [crosstalk 00:10:15] there, so somebody knew, "Oh, this is where I turned the water off in an emergency."

Amanda Farmer: Yes. So, so important. So, we're not just talking about catastrophic fire events, something that you might think, "Oh, may happen, but pretty unlikely. We're in a small building. We all know where to go. We know what to do." Think about these events, water leaks, burst pipes. Do you know where to go to turn off the mains to the building?

Michael Barnes: Yes. Where do you go to turn off the mains, turn off the gas? Where can you turn off the power in an emergency? So, we've all evacuated in emergency. Where do we actually go? You'll find most residential buildings, everybody doesn't know where to go and having that place documented, this is where everybody's going to meet, so you can actually conduct a head count and realise that some people aren't there, somebody may know where they are. Having those plans and procedures and talking about them in every strata meeting as just an agenda item is a really good thing.

Amanda Farmer: And knowing who in the building may need additional support, who suffers from a disability and may need a hand getting downstairs, who is elderly and may need a hand. I imagine all of that goes in your plan as well?

Michael Barnes: Yes. All of that gets incorporated into the plan. It relies on that person to actually speak up and say, "Yes, look, I am going to need a bit of help to get out in an emergency," but for those people to do that, and that be documented, I've just finished a building and the evacuation diagrams of the emergency management plan am will go up today. The diagrams are on every single floor. The emergency management plan is in the fire panel for the fire brigade and it actually has personal evacuation plans for all these people that are in the building that do need assistance. So, the fire brigade can very quickly look at it and go, "Great, these are people that we may have to rescue because they can't get out themselves."

Amanda Farmer: Now I have to say, Michael, I have seen more commentary on the way in which our buildings deal with emergencies and the need for emergency management plans, I've seen more of that over the last couple of years. The question mark I have is, are buildings thinking about this because of COVID, because of the pandemic? Because we've got more people at home than ever before, we want to be able to check on our neighbors. We're suddenly thinking about these overarching plans. Have you seen that shift in the space since the pandemic?

Michael Barnes: A little bit since the pandemic, but what we're finding is in newer buildings and even buildings that are subject to fire safety orders, one of the items that will appear as part of a performance solution or a fire engineer design, or as part of the fire order, is to actually have an emergency management plan in place. That is one of the critical things in for fire engineering in getting people out of the building, because that's one of the most important parts of a performance solution. So, you might have a

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performance solution because it's too far to walk to the exit and one of those things is have a better smoke detection system and an emergency management plan, so these people know that when the fire alarm goes off, yes, they have to evacuate as quick as they can and that's happening a lot.

Amanda Farmer: Okay. So, these are requirements coming through our authorities, whether it's our state legislation, our local council planning, approval conditions now requiring buildings to have these plans in place?

Michael Barnes: In terms of fire orders, it is becoming very common for councils as part of their fire orders to write in, "You must have an emergency management plan and evacuation diagrams." When it comes to the newer buildings with performance solutions or fire-engineered designs, the fire engineers are writing it in. It's quite often one of the things that gets overlooked till the very, very last minute, particularly in residential buildings. In other types of buildings, childcare centres, it's front of mind from day one, before you get your development application, you must have an emergency management plan in place. So, as I said, with residential, it's just in fire engineering reports a lot and it is a good risk management thing for the owners, so they are aware of things that may happen. As I said before, knowing where to turn the water off, knowing where to turn the gas off, where the electric switch room is. Knowing that they need to maintain all their things as well.

Amanda Farmer: So, we do have the annual fire safety statement that has to be submitted to the council each year. You're saying that's really not enough. That deals with your fire devices, but there's so much more to the story.

Michael Barnes: Yes, there is so much more to the story. One of the things that we are finding a lot now with the changes in the legislation for accredited practitioners in fire safety, to endorse your measures now, is these people, some of the fire protection companies, they've been maintaining the systems in your buildings for years. All of a sudden now, you have this absolutely huge list of all these defects that you need to fix before they're going to sign off on the fire safety measures in your building on the annual fire safety statement.

Amanda Farmer: You must have just sat in on my own strata committee meeting because that's exactly what's just happened to our building. You just nailed it, yes.

Michael Barnes: I have assisted in my time at Credwell, I don't know how many strata plans actually looking at those reports and going, "Yes, look that item there. That's normal part of life. Yes, the exit sign's failed its test. You really need to fix that. That item there, that's a defect from the original installation. Your building's only few years old, negotiate with the developer and get it fixed at no cost to the owners." Looking at other defects and going, "Well, that's not even a defect at all. They've actually looked at your system against wrong Australian standard and the wrong standard of performance. So you don't need to do anything."

Amanda Farmer: Wow.

Michael Barnes: Often a couple of the buildings, well over \$100,000 dollars I've saved the owners by doing that.

Amanda Farmer: So, you mentioned there Michael, with the higher qualification requirement, accredited practitioner fire safety, these people who are coming out and checking your fire safety measures in your building are now picking up more defects than ever before, is that because their requirements have become more stringent or they're suddenly opening their eyes and realising they've got it wrong for all these years? What's going on there?

Michael Barnes: It's a little bit twofold. It's actually, the only change is now a person is personally accredited, like an accredited certified, they hold a personal accreditation. Previously, it was the company. So now, people are realising that if I don't notice these items and I get subject to review by the accrediting body, I could lose my accreditation then I'm out of a job, and that is happening.

Amanda Farmer: So, they're being perhaps more diligent and in some circumstances too diligent, a little over the top, and then someone like you comes in and says not necessary?

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Michael Barnes: Yes. So, we've had that in a couple of buildings where they've said, "Oh, you need to do all this work." We've actually gone in and gone, "No. When the building was built, here's the original approvals. Here's the original test document for the fire doors. No, you don't need to rip all your fire doors out and replace them because there's nothing wrong with what's there." Or they've said, "Oh, you need to do all this work to your hydrant pump." Well, no, because it wasn't a requirement when the system was installed.

Amanda Farmer: There you go. The value of a second opinion.

Michael Barnes: Yes, it's a second opinion. I'm here to look after the strata's interests and provide them the best solution possible.

Amanda Farmer: Yes. Well, I've taken us on a bit of a tangent there talking about fire. I do want to come back to evacuation diagrams because we have a new fire safety standard in New South Wales for apartments that are being used for the purpose of short-term letting. Those owners are being told that they must have an evacuation diagram. So you may be a lot more of these or consulting on a lot more of these since that started. Can you tell us a bit about that requirement? Is that a requirement just for the lot? Is it for the building as a whole? How are you working with owners dealing with those?

Michael Barnes: So, we haven't been approached yet by an individual owner to prepare an evacuation emergency procedures manual, or just an evacuation diagram for one unit. It comes back to the owners corporation in a whole, realising that this is a risk that they have in their building. They have people that are coming to stay in the building. And well, they don't know where the exits are. They don't know what the fire alarm sounds like. They don't know what to do in an emergency. If they evacuate out of the building, where do they need to go?

So, that's a risk for the owners corporation as a whole, that they need to look at. And then preparing that emergency procedures manual, having the evacuation diagrams, if a person uses one of their apartment as an Airbnb, or for other short-term rent, to actually provide a document in the unit for the person, that's a sample of the evacuation diagram, like you have in a hotel on the back of the door that's just stuck to the door and a simple one or two page thing of, "This is what you need to do in an emergency. You need to evacuate, you need to go here. This is the emergency number. This is the building manager's contact." All of those things that you can put in so they know what to do if there is an emergency and that's the owner's duty of care to that person, the unit owner and the owners corporation.

Amanda Farmer: Now, I had cause to go digging around a little further on this topic, Michael and I came across some references to Australian standards. There is an Australian standard when it comes to evacuation diagrams, query whether that apply to our residential apartment buildings. Is that something that you're across? If not, I don't mean to put you on the spot.

Michael Barnes: No, no, you're right. So, the Australian standard for emergency procedures in building structures and workplaces, there's AS 3745 and it provides you, I'll say a menu, on how to prepare your evacuation diagrams, what things you need to consider in your emergency management plan. So, for people like us to follow that and prepare your emergency management plan in accordance with that, make sure your evacuation diagrams are actually correct. The office building, I actually work in, we walk out and we can actually tell our fact diagram's prepared by the building owner. They're not actually strictly in accordance with the Australian standard. There is some very minimum requirements that you need to have and then there's additional requirements that you can include on them as well.

That governs the size of the diagrams as well. The orientation we'll often find, even in residential buildings, I was in one the other day, the evacuation diagrams that if you're standing there looking at the evacuation diagram, it says the door to get out is behind you when it's actually to the left-hand side of you because they're not done correctly from day one.

Amanda Farmer: So, if you are going to do it, get it right. Definitely, anyone who asks me about these plans, I say, "Go and talk to the experts. That's not a legal question. That's a question for someone who is expert in drawing these plan."

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Michael Barnes: Yes. As an owner, if you wanted to prepare them yourself, potentially you could, but it's quite a cost to buy the Australian standard for the first place and you doing it yourself, you're absorbing the risk. Whereas if you are getting an expert in the field to actually do it, you're removing your risk. There's another risk management thing for the owners.

Amanda Farmer: How do you, Michael, get buy-in from owners? You may attend committee meetings, yourself, going through reports, making recommendations and owners saying, "Oh, you know what? Well, strictly, legally, we don't have to, we don't really want to spend the money on this." I mean, how do you ... Michael's laughing here, I can see him on my screen. How do you get them on board?

Michael Barnes: It can be very hard. One of the analogies that I use and it tends to work quite a lot, is point out to the owner, they go out and buy a new car. They actually know that things are going to wear out in it. Things need to maintain so they can keep working and they do need to spend that money. A building is exactly the same thing. You need to maintain it, you need to test things. You need to repair things over time. Nothing will last forever. The other part is saying, "If you're investing in it," if you think of your car and you get out there and you polish the paint work and keep it all nice and shiny, it stops the rust. If you're out there and you're maintaining your buildings and repairing your carpet, repairing things as they start to wear out, things will last that little bit longer.

Eventually, in terms of fire safety measures, everything will wear out eventually, same as your car. Sooner or later, you're going to have to replace the engine in your car. Sooner or later, you will have to replace, if you have a hydrogen system with a hydro-pump, you may have to replace that pump, but maintaining it all the time and making sure that maintenance is done, very important thing. That's another way of the owners reducing their risks.

Amanda Farmer: And do you see this kind of planning for maintenance quite separate from what a building might be doing with their capital works fund planning? Where does your plan sit with a capital works fund plan?

Michael Barnes: Their capital works for upgrading and future upgrading and repairs and things, that's one thing. But knowing for the owners to plan when are they going to have to do these larger, really expensive maintenance things? So to be able to know that in 5 years' time, I'm going to have to do a pressure test of my hydrant system and overhaul every single valve and knowing when that's going to happen, so they can have a cost and actually budget for it.

Amanda Farmer: Wow.

Michael Barnes: Rather than finding out that in two years' time, you've got this huge bill to actually overhaul your hydrant system.

Amanda Farmer: I didn't even know this was a thing, Michael. So this is really important.

Michael Barnes: Yes. It's a little bit off track but in terms of your essential services maintenance, everybody knows you have to test things every 6 months and then test them every year. But when you get into larger systems like hydrant systems and sprinkler systems, there's 5 yearly services, 25 years, 30-year services. If you've got a fire water tank, you need to clean it every year. There's a 10 year service. That's a lot of things that owners don't realise and cleaning a large fire water tank can be \$10,000.

Amanda Farmer: Wow.

Michael Barnes: They need to be able to budget for that well in advance and that doesn't include the water cost to ... because you've got to drain the tank and then refill it. So, knowing all of that, and that's another part we've done ... and for owners understanding their risks of getting these things maintained properly, we've worked with some owners in the building in St. Ives. They just rang us up out the blue and said, "Oh, somebody told us you can help us, tell us if we're maintaining everything properly," in their building. It turned out that they weren't maintaining about 80% of the things in it. They actually didn't even realise that they

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were there.

Amanda Farmer: I was just about to ask you that actually, how often do you come across buildings who just have no idea? I mean, ideally, it should be the builder-developer, with a maintenance plan passing that on when the owners corporation is established. You start with that plan, you continue with it. But how many buildings are just completely in the dark about the need to do these things?

Michael Barnes: Probably 30%, 40% of buildings, particularly the smaller buildings. They just don't realise, or they've got their fire safety schedule that came when the building was built and the fire safety schedule was never right from day one and there's actually things missing off it that they actually need to maintain. Then, because they're not maintaining, they didn't know they had to maintain them. They don't maintain them and then when it comes around to it, somebody notices and you could have an owner who knows a little bit more about fire safety or has lived in a building before, or has been upset by one of the other residents. They just say, "Well, do you know you have to do all of this?" And make a complaint.

I have one building at the moment where one of the owners has made an anonymous complaint to the fire brigade about things in their building. We're helping the owners at the moment work through and get everything fixed and up and running. They said, "Oh, we just walk in and out every day. We didn't even realise this stuff was here."

Amanda Farmer: Yes. Well, important to be on the front foot, that's for sure. You don't want to wait for either the complaint where you have to deal with these issues in a timeframe you might not be comfortable with, or the disaster, the emergency, the tragedy, even.

Michael Barnes: The disaster, the fire order, particularly with older buildings. Some councils are very proactive on fire safety orders and development patrol orders and some councils are very relaxed, but for owners of an older building to get someone like ourselves to come in and look at the building and go, "If you were to get a fire order, these are the items that you are going to need to deal with." So they have a plan. The building where I just explained before about the fire rated ceiling, they've actually now gone down that path. They've gone, "Oh, maybe we do have other issues that we didn't know about." So we've provided them a report on all the issues and the non-compliances with today's building code. And they're working to address those as things wore out. They're going to replace all the carpets in the stairs, because they've worn out.

So, as they're going to do that, they're going to put the contrasting non-slip nosings in at the same time, so they close that off. The front doors are falling apart, they're going to replace them. So when they replace them, they'll make them swing the right way. They'll put the handles on at the right height. And they're just addressing those minor things as they go. That's reducing their risks throughout the life of their building.

Amanda Farmer: All sounds like excellent advice. Thank you, Michael. We are out of time and we are going to wrap up, but before we do, let me know if there's anything you absolutely want our listeners to hear and let us know where to go to find out more about Credwell.

Michael Barnes: Yes. Well look, we're always here to help. There's no problem with owners ringing up and asking a question. They can go to our website, credwell.com.au. There's a specific section there on how we help strata managers and how we help building owners. Angela from our office has sent you a link where they can download our brochure on how we are able to assist them and we are more than happy to help.

Amanda Farmer: Yes. I will include links in the show notes to Credwell's website and that's C-R-E-D-W-E-L-L and also Credwell's services for strata managers guide, direct link there for you in our show notes under this episode. Well, thank you very much, Michael, for sharing your extensive expertise. I know we've only scratched the surface, but there's a lot there for our listeners to take away and thank you for the good work you're doing for buildings in our space.

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Michael Barnes: And thank you and thanks for the opportunity for this. This is something new for me and I've quite enjoyed this. I'm more than happy to [crosstalk 00:30:28].

Amanda Farmer: I am so glad. I try to be gentle, I'm glad you've enjoyed it. I'm sure we'll have you back sometime soon.

Michael Barnes: Okay, thank you, thanks.

Outro: Thank you for listening to Your Strata Property, the podcast which consistently delivers to property owners, reliable and accurate information about their strata property. You can access all the information below this episode via the show notes at www.yourstrataproperty.com.au. You can also ask questions in the comments section, which Amanda will answer in her upcoming episodes. How can Amanda help you today?