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YSP Podcast Transcript: 367. Dr Nicole Johnston uncovers thousands of fire safety defects in our buildings

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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 to this week's podcast episode. I'm your host, Strata Lawyer, Amanda Farmer, and my guest this week is Dr. Nicole Johnston.

Nicole is the founder and director of Strata Knowledge, an independent research and consulting firm specializing in strata and community title, law and governance. As a socio-legal researcher, Nicole is focused on translating applied research into practice by collaborating with industry to ensure impactful and beneficial outcomes.

Nicole started her professional life as a commercial lawyer, but for the past 15 years, she has worked as an academic at Australian universities. Nicole has led a number of research projects on topics including building defects, strata insurance, strata law reform, fire safety, conflicts of interest and developer governance responsibilities. She is a regular presenter at industry conferences, consults with the government and has chaired numerous international forums. She's also been a past guest here on the podcast and on our Friday live sessions.

Nicole holds degrees in psychology, criminology, law, and has a PhD in strata and community title, law and governance. She's also an experienced body corporate committee member, having chaired a large scheme for 13 years. I'll take you right on over now to my chat with Dr Nicole Johnston.

Dr. Nicole Johnston, welcome to the show.

Nicole Johnston: Thank you so much once again for having me Amanda, I always love coming on to your podcast.

Amanda Farmer: We love having you. You have been here a few times now on the podcast, on our Friday LIVE. I generally like to chat to you, Dr Nicole, when you've got some new research out when you're up to some new adventures in strata land, and you certainly have been doing that lately. You've got a new business. It's called Strata Knowledge. Tell us about it.

Nicole Johnston: Yes, so last time I think I was with your listeners, I was in the university sector and stepped away about six months ago to start my own business, Strata Knowledge, as you said. And it was very much about undertaking research that can translate into practice. So that's really the core of my business. So my business is about research, consulting and training, but very much about research and undertaking research in strata and community titles.

And so that's what I've done. So I've stepped out and started to do a lot of great projects. I've been doing quite a bit of training and really branched out from the services that I was providing as an academic, which I'm really happy about and it's going really well. And I hope that I can provide more information to your listeners as the years go on.

Amanda Farmer: Absolutely, we hope so too. And we're going to come back around and talk about where our listeners can find out more about Strata Knowledge and connect with you. But just to clarify, your business will accept instructions engagements from private enterprises within our Strata sector to do research for them on any particular strata topic as long as it has something to do with strata. Is that right? You're interested?

Nicole Johnston: Absolutely, and also about buildings. I mean, you know, my research agenda has, I suppose, progressed over time from being very sort of socio-legal and talking about governance and management and the structure of schemes from the outset through now more to around building defects and issues around maintenance and repairs. And that's certainly where there's been a lot more interest over the last few years. So a lot more work has centred around that area.

And so, yeah, so I take instructions from different organizations, representative groups, individual businesses, anyone that thinks

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that my skills can be used to enhance their business practice or, you know, what they're doing as a representative body.

Amanda Farmer: Excellent. Now I did see on LinkedIn, I think it was Nicole, you were sharing some recently completed research that I would love for our listeners to hear about, particularly as it's timely. It deals with fire and fire protection systems in our strata buildings. And just a few weeks ago, I was talking about the devastating building fire that happened in Sydney's Surry Hills. Luckily nobody was injured or killed in that blaze, but an important topic to be talking about. So what is this research on fire systems that you've just finished?

Nicole Johnston: Yes, so this is an area that can be a little bit confusing and complex, but it's really important that we understand it. So this project is about passive fire protection systems. So to break it down, to make it really easy for everyone to understand, essentially in any building, there are two fire protection systems. They're what we call active and passive fire protection systems.

So the active systems are all those things that activate when a fire or there's smoke from a fire. So you know, it's your extinguishers, your alarms, you know, your sprinkler systems, all those sorts of things that activate as soon as a fire is detected, or should activate, I should say when a fire is activated. But that works holistically with another system called passive fire protection systems. And these are the areas that are less understood well, but we need to understand it both from a building owner perspective, a management perspective, and anyone that has anything to do with the built environment.

And so when we're talking about passive fire, we're talking about construction elements that are designed within the building to prevent or delay the spread of fire or smoke. So there are fire doors. That's sort of the easiest thing to think about. But it's also, you know, if you think about individual units or individual apartments, they are created as a compartment and there's special fire protection products that are built into the apartment to ensure that if a fire starts, for example, in your kitchen, where a lot of fires do start in apartments, then the time it takes for the fire to spread is slowed because of these construction elements built into the apartment. So when it reaches the wall that is an adjoining wall to the apartment next door, for example, the spread is slowed because the product that is used is fire rated. And so it may take, you know, 90 minutes, for example, to penetrate that wall.

And so it's all about enabling people to safely get out of their apartment when they know a fire is present. That's what these protection systems are all about. Another really important area are penetration seals. So of course in high-rise buildings or buildings of multiple stories, we've got a lot of conduits and pipes and cables running all through our buildings that provide services, electrical, hydraulic and so forth. Now these conduits and pipes are penetrating sometimes all different aspects of the walls and the ceilings and the floor of these apartments. And so these conduits and pipes that are running through must be sealed off properly and they might be sealed off with a particular sealant or a particular product. And they should be rigorously tested to ensure that no fire is moving through where those pipes have penetrated, for example, a slab or a wall.

And so again, that's really important to protect the people, the residents within a building and protect the building as the fire moves through. So again, these two systems, the active and the passive, have to work holistically to ensure that everyone is, can safely be removed from the building in the event of a fire. And so this project was about looking mainly about compliance, how we are in terms of construction defects and then of course, when we move into maintenance.

Amanda Farmer: So what were the findings from your research, Nicole?

Nicole Johnston: So this project was based in Victoria, but there are lessons that we can learn in all jurisdictions. I don't think that the findings are just relevant to Victoria. I think they're relevant to all jurisdictions in Australia. And so we looked at this in two different areas. One were in really relation to construction defects. So in new builds, where are there problems and defects in terms of these pacified protection systems.

And so we found that there were some real concerns, in Victoria in particular, in relation to construction defects around pacified protection systems. I'm gonna put New South Wales aside for a second because obviously there's a lot of movement moving forward in relation to dealing with defects in New South Wales. So a lot of the new builds, hopefully these are being picked up, these issues, and dealt with right from very early on prior to the completion of the building.

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But what we were seeing in Victoria and what we probably have in the older stock in New South Wales and the other jurisdictions are issues with the walls, so these fire-rated walls, a lot of penetrations that haven't been sealed correctly and a lot of problems around fire doors and other elements that make up this fire protection system.

What's really I think valuable for your audience both owners and managers is to understand that one of the big takeaway messages that came out of this research is really in relation to the essential services maintenance that is being undertaken on a yearly basis.

What we found from the Victorian study is that oftentimes the person that you're engaging to come in and do that annual inspection and report on any non-compliance issues often is really looking at those active fire protection systems. So they're looking at whether your extinguishers are compliant, whether your sprinklers are compliant and all those sorts of things. They're really focused on that. At times they also look at your fire doors and from one of the data collection points that we got we looked at 434 buildings. This is in Victoria, we found 44,000 defects. They were reported from that particular group of buildings.

Now, of course, that varies. You may have a very large building with thousands of defects, but on average, it's really, really high, the number of defects. And the number one issue was around fire door safety. Fire door safety and these penetrations that haven't been sealed correctly. So I think for owners and managers in particular, making sure that the people that you engage have the requisite skills and qualifications to also look at these particular fire protection systems, so the passive fire protection systems, they should be looking at your penetrations where they can observe them.

Sometimes it's difficult to observe these things, they're hidden behind walls for example, but we need to be able to ensure that people that you're engaging are looking at these issues, they must be looking at the fire doors in terms of compliance and then action needs to be taken on behalf of the building owner so the owners corporation needs to take action in relation to this.

One of the big concerns that we need to turn our minds to is the fact that oftentimes people will be penetrating our walls including these fire-rated walls not really understanding what they're doing. So for example the wall that sits between you and your neighbouring wall, you don't know where that actual fire rating wall system is and so you could be putting up a large television hammering it right into the wall and then you're damaging that fire rated wall potentially and so that is a real concern. So there's a real lack of knowledge in relation to how our buildings are actually built, what materials are in our buildings, how they need to be protected for example.

And another thing that I very rarely see is what's called a pacifier or a penetration's register. So this register that's kept by the owners corporation highlights where all these penetrations are throughout the life cycle of the building, Amanda. So when you get the telecommunications people coming in, drilling holes left, right and center through walls, they need to be careful and someone needs to have some oversight in relation to where those penetrations are being made and then how they're being sealed. That's what I really, that's the big takeaway from this research for everyone that's involved in strata and community tidal living.

Amanda Farmer: Hmm. I suppose for some buildings, it's easier said than done when it comes to identifying the passive fire safety system, newer buildings, as you said, in New South Wales, we now have some very strict requirements for new buildings as to designs, registering those designs, having certifiers tick off that the construction is happening in accordance with the design. And I'm already hearing that certifiers are finding it much easier to be able to do their job and to do it properly because these designs are a lot more detailed. So we can see over time newer buildings where this type of legislation is in place are going to find it much easier to have these plans of where their passive fire safety systems are.

But older buildings, I mean the building, I'm thinking of buildings that I'm working with 30 and 40 years old, there's just no way that they would have any idea what system was in place. And even if they wanted to be proactive and engage someone who has the right qualifications to come in and identify those systems, I suppose that's an option. It may or may not be possible to develop these plans retroactively. Have you seen buildings trying to do that? Or is that something that you would suggest buildings at least attempt?

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Nicole Johnston: Listen, I think it's a really hard one, Amanda because I think a lot of these buildings that are dealing with construction defects, even if they're older buildings and they've still got legacy issues from the past 20, 25 years, the issue is that attention in terms of defects and maintenance always turn to the things that are impacting habitability directly.

So when water is coming through your apartment and coming into your living, quarters, people will turn their attention to that mostly. They're the things that will get fixed always first and as we know it's really costly. When water gets into your building it is always costly. When membranes fail it is really costly to replace. So they are the areas in terms of defects and maintenance that most people turn their attention to and that's usually the first thing on the agenda when these buildings have to do any type of work in relation to this.

Fire safety systems seem to be a very different kettle of fish so they're very much about, because it's really based, it's about risk assessment right so unless there's a fire you know these systems can just lay dormant and even if they're defective, you can have a building that never has a fire and therefore these things never really get noticed. And of course, it is much more complicated because you often have to delve in behind walls, which is an extremely costly process. So when we see these sorts of defects being picked up during the life cycle of a building, it's often because of something else going on in the building. So it may be that.

A good example is in relation to combustible cladding. So when you're pulling off the combustible cladding off the building and people may be able to see a little bit more behind what's going on internally within these buildings, that's when sometimes there can be a notification about that there's a pacifier issue in terms of the walls, the virated walls, for example.

So it's often when other people are digging around or you've got an engineer or someone digging around about some other issue that's been raised pacifier defects are being alerted to. So the research that we did really showcase that there is really not an appetite for owners corporations to investigate some of these more complex defects, especially when it's not impacting their day-to-day livability within the building, right? So their attention is any tripping hazards and all those other areas that really impact upon direct safety or immediate risks to the lives of people in these buildings.

Of course, the concern is that in the event of a fire, this is where the danger can be and this is what we saw, you know, Grenfell is the perfect example of this, how easily a fire can move through. You know there were a lot of issues with the fire door closes in Grenfell so the doors were left open and so fires can really rage through that building very quickly. And so, there are things that we need to do. I mean, we certainly need to look at things that are observable. So we need to make sure that the fire doors, for example, are compliant. You know, that's an easy thing for people to do and it should be just part of the maintenance as a requirement in relation to the maintenance.

Certainly, there's, you know, if you're in your basement or down in the electrical room for example in the basement and you go in there, you shouldn't be able to see up through the floors. If you do, there's some problems around the penetration seals so you need to deal with those sorts of things. Anything that you can get someone in to observe these issues needs to be dealt with directly. But I know that it doesn't matter how many times we bang on to say that we want to work towards having a completely compliant building, we know that people and the cost involved in dealing with some of these rectification works is just cost prohibitive. And so it's more likely than not that owners corporations will turn a blind eye to complex defect rectification works that aren't impacting upon habitability directly, which is a really difficult thing.

I think also, Amanda, on that point that I think technologies are getting better so we'll be able to see probably through some walls to see what's actually going on behind some of these walls and what the actual risks are. You know there may be buildings that don't have fire-rated walls which is you know a giant concern so we need to make sure that people are perhaps talking to their fire engineers or getting some advice on how to safeguard their building to make sure that there are sprinklers if that's what they need and make sure all those other elements are working really well. So listen it's a really difficult thing but that's really the appetite of people that they will always deal with things that are impacting upon them and their apartment directly.

Amanda Farmer: Tell me who commissioned this research from you.

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Nicole Johnston: So this research was funded by the Victorian Building Authority and so for the first time ever they put a grant program together, this is now two years ago, in which they were calling for researchers to come forth with a project proposal and they had key areas or key themes that they were looking at and certainly the built environment defects and those sorts of things were core issues for them to look at. So I put this application is based on previous research that we had undertaken that looked at defects more broadly. And one of the issues that came up in that original research was that we weren't really getting to explore in any great detail issues around pacifier protection system defects. And people kept telling me after that first research project Amanda, there are big issues here. But of course, because they aren't often just observable, there wasn't a lot of data. And so I thought we needed to dig in a little bit deeper. So I put the proposal to the VBA and I was granted, I was one of the first to receive this grant, which was fantastic. And I would really implore other jurisdictions to engage in research in relation to these issues.

The more we know, the more were armed really to make effective changes in terms of policy and law reform and to protect the people within the Strata and community title community and protect these buildings better. Research is a really important vehicle to understand actually what's going on and so that effective change can be made and that's really what I'm all about Amanda and what my platform for my new business is about to try and able to undertake that sort of systematic inquiry, which is what research is about, to really understand and describe what's going on in our environment so that we can make effective change. I really am passionate about it and I believe that research is really an important factor in that.

Amanda Farmer: Now the full report on passive fire protection systems is available to everybody over on your website. That's strataknowledge.com. If you head over there and it's a very nice looking website, I have to say, you've got your research reports there and the report investigating passive fire protection defects in residential buildings is one of your more recent reports. And you've also done, I think just a two-page summary for those of us who are on the run perhaps I'll make sure we link to both the um I won't link to the actual report because I want to send them to your website I'll make sure we link to both your website and also that summary version of the report there perhaps something for managers to be sharing with their committee members

Nicole Johnston: Absolutely and that's what I want and that was one of the reasons I've done these, I've done these bite-size, much more digestible briefing notes on the research because some of the reports are very overwhelming to read, it's very dense research reports and I wanted to be able to have these sort of like take away little notes that people can just read very quickly in a couple of minutes and get the information that they need to implement in their business or to implement in their schemes and so I've done that in relation to a number of research projects that I've done and I will continue to do that because I think it's quite valuable.

Amanda Farmer: And what else have you got on the boil? What are you researching at the moment that we might get a little heads up on?

Nicole Johnston: Yes, so there are a couple of projects on the go, some partially funded, still looking for funding. It's always the issue with research to get the funding to be able to do these great projects. But one that I'm really passionate about and has been partially funded is really I want to explore building rectification processes. So we're still getting staying in this sort of defects and maintenance phase, which I think is really important because I think this is the area that we need to understand more about. We need to understand how committees and how owners corporations are making decisions to undertake maintenance or not to undertake maintenance, to delay maintenance and what relationship or what is the involvement of managers and other professionals. Who to go to Amanda to help navigate this world in terms of some of these more complex maintenance issues and also some of these latent defects that owners corporations unfortunately have to deal with by themselves?

What this came about was I kept seeing, and we've known from other jurisdictions, especially countries like New Zealand, where they have had a leaky building crisis there for a long time. And what's happened is when people go and replace the membrane, for example, because I think the membrane has failed, then in a few years they're having to replace it again because it may be that there was a design fault or some issue in terms of the product that was used in terms of replacing that membrane.

And so I start to question, who should be involved in assisting owners corporations deal with these more complex maintenance issues. So membranes are a perfect example. Do you just call the guy who's in the yellow pages that does waterproofing? Do you

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need to have a technical expert to oversee that work? How does the Tyler or some other, all these other types of trades work in collectively and who's overseeing that? What's the role of the manager, both from a strata management perspective or an onsite resident manager?

Oftentimes they don't have the requisite skills to really help navigate and they do play an important part, however, in the decision-making process in relation to these particular issues. So I really wanna dig down, Amanda, to find out what maintenance issues we're dealing with, how these decisions are decided, and what are the core factors that may prevent or delay people going ahead making these sorts of decisions, besides just the financial aspects. But how that actually comes into play is really important.

But we need to understand who do we go to? Who do we need to be in that? Who do we need to engage collectively to get this job done correctly? And of course, New South Wales is taking us a different pathway. They're being very proactive in terms of project intervene to really, I think, to ensure that we're not seeing these sort of replications of the same issues that we saw in New Zealand. But I think managers constantly tell me that they don't know really who to go to.

And so we need more information about, we need checklists, we need toolkits to know, well, what questions do we need to ask? What licensing requirements are there for these different types of trades? what check boxes do we need to tick off and so forth. So that project is very much exploring that and I really wanna have a toolkit at the end of it to be able to send out to managers and owners corporations to help them navigate through that complex process.

So that's one of my main ones on the go at the moment. The other project that I hope to get funding for is really about strata benchmarking. So what we haven't had is access to a lot of data. And we've been banging on about this for a long time, us researchers, about how hard it is to get data. But we're sort of at the time now where we can get a little bit more data than we have in the past, to be able to almost compare like schemes across the board. So this comes for me, the sort of, I suppose, starting aspect of it is around governance. So why are schemes that are very similar in terms of size, infrastructure and so forth, what are they doing in terms of governance and the decisions that they're making in terms of their scheme and how that impacts potentially on levies, their budget, all those different factors.

So we're at a time now where we can start to import information data to do a bit more of a cross comparative so that we can give advice then back to committees and back to owners corporations about how they potentially can do things perhaps a little bit better. That will maybe be a cost-saving exercise and that sort of thing. So that's another project that's on the go. Just need to get the funding for that Amanda.

Amanda Farmer: Yeah, well, I am regularly asked by clients, by neighbours in my communities that I'm involved in. What are the standard levies for a strata building like ours? And we don't have the answer to that. And you would think that should be some very clear, very stable data that could be collected and could be reported. And I know in New South Wales, we now have our strata hub and our mandatory annual reporting. And I hope, believe that data is being collected for purposes like this to be able to benchmark, but so, so important. And I think very useful for our buildings, for our committee members to know where they sit relative to other similar buildings in terms of their expenses, their 10-year plans, certainly their levies and their management and governance issues for something to strive for or something to be proud of if you find out that your building is doing really well.

Nicole Johnston: And I think it's going to be really important in terms of insurance, Amanda, because more and more strata underwriters are saying, we are going to look into how these schemes are governed. And so if you've got a well-governed scheme, you've got a committee that, works collectively well to make good decisions. You don't have any delayed maintenance or defect issues. You've got a good strata manager that's working well with the owners corporation, and they're looking at their risk factors, for example. The insurers are looking at that now and it will have an impact upon premium. So a well-governed building should have a lot of benefits coming its way, especially from an insurance perspective and the costs associated with the rise of premiums and so there's a number of factors that come into play here.

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Amanda Farmer: Yeah. And to the extent you can make that information public about your very well-functioning building, what a great marketing benefit to increase the value of everybody's investment. I would love to know that I'm buying into a well-run, well-managed, top of its game building.

So if there are any industry associations tuning in, large corporates, government entities who have, there is pricked up by these research ideas and avenues that Nicole is exploring. Please do get in touch. What's the best way for our listeners to get in touch, to connect with you, Nicole, be part of future research perhaps and certainly be reading what you are publishing?

Nicole Johnston: Absolutely and this is what I really want to do. I want to engage more with interested people both from industry and those that are sitting perhaps more on the periphery of the strata industry. It's really important that these projects are collaboratively created, that people feel that they have a voice in this research as well.

So you can go to my website, I have an inbox there, you can just put your name and your email and I'll send out information over the time about new research projects or research reports, some of the briefs that are coming out in relation to those projects. My email address, all the contact information is available on my website so you'll be able to get to me fairly easily, and I look forward to having conversations with people about these issues and other issues that are impacting upon their scheme, upon the sector and also those that are sitting in the periphery of the strata industry that need more information that will help ultimately residents within these buildings.

Amanda Farmer: The website is strataknowledge.com. We'll make sure there's, we'll make sure there is a link to that in our show notes for today.

Thank you so much for joining me once again, Dr Nicole Johnston, and for all of your good work that you do for us in the strata industry. We are looking forward to seeing what comes next.

Nicole Johnston: Thanks so much for having me Amanda.

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 yourstrataproperty.com.au.