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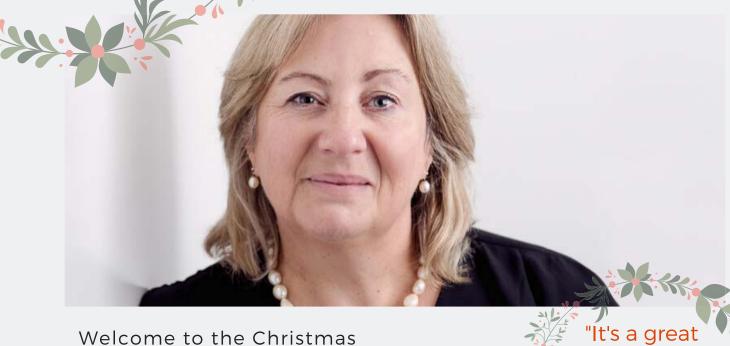


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# WELCOME FROM FIONA GAVRIEL

AS WE HEAD INTO THE FESTIVE SEASON, WE FIND OUT WHAT PRENDOS IS DOING TO CONTINUE DELIVERING FOR ITS CLIENTS



Welcome to the Christmas 2019 edition of Property Informed.

2019 has brought with it some market and economic challenges, and the New Zealand property industry certainly hasn't been immune – experiencing its share of ups and downs, particularly throughout the winter months.

However, along with the weather, the market seems to be warming up again, so it's a great time to move forward and prepare for a strong 2020 year.

For Prendos, this means continuing to offer new, relevant services that match the requirements of the market. It's about making sure we're flexible enough to continually evolve, so we're able to move into the areas where our clients need us to be.

One of these is Passive House certified design - something our architectural design team, Respond Architects, are right behind. Kiwis are becoming more aware of the health and cost benefits of high performance housing, and Respond are helping to create low energy buildings that are warmer, drier, healthier and more efficient. You can read more about this on page 14. In this issue we also focus on the legal side of property and construction. On page 4 Prendos Board Chair Sean Marshall and Senior

Property Lawyer Michelle Hill delve into

the often murky waters of Lease Reinstatement and what's required from both tenants and landlords. Then, on page 10 we look at how to get your construction contract right for your next big project.

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On a final note, we're really excited to have recently launched our new Prendos website. Our previous site had served us well, but we hope the new one is fresher and easier to navigate, as well as more clearly identifying just how we can help you.

If you feel we could add value to your next property venture, or you'd just like to find out more, make sure you get in touch with us. Thanks, and have a wonderful festive season wherever you are.

**Fiona Gavriel** 



Michelle Hill, Partner

KensingtonSwan\*

# TENANT'S COST OR LANDLORD'S PROFIT?

A guide to navigating the often murky waters of commercial lease reinstatement.

When a commercial property lease comes to an end, the tenant is typically expected to reinstate the premises to an acceptable condition. But should landlords be able to profit from this opportunity, and what is legally required of tenants? We spoke to Property Law expert Michelle Hill and Prendos Building Consultant Sean Marshall about how to best manage lease reinstatement.

Most commercial leases contain specific maintenance and reinstatement obligations which the tenant must fulfil before lease end. Maintenance can include painting, decorating and keeping the premises in good order, while reinstatement includes removing anything installed since the lease began (such as partitions) and repairing any resulting damage.

Michelle Hill, Partner at national law firm Kensington Swan, is a specialist in the area of commercial leasing and says the complexities of lease reinstatement can often lead to uncertainty on both sides.

"Lease reinstatement is seldom clear cut. Confusion arises not only from a lack of clarity around required standards, but from lease misinterpretation. There can be a number of different provisions in the lease documentation that are relevant, and there's a plethora of case law and legislation that set the legal framework for determining both parties' obligations. These three aspects (contract, case law and legislation) may apply regardless of whether the lease is a formal document or written on the back of a napkin!"

As a starting point, she says, a tenant's requirements are dictated by the specific wording of the lease itself.

"Depending on the bargaining position of the parties, some tenants are able to negotiate no reinstatement obligations as part of their lease terms at the outset, but this is not the standard scenario. Typically, the tenant is required to return the premises to the landlord in the same condition they received it at the commencement of the lease, except as to 'reasonable wear and tear'."

Michelle sees many cases where a landlord asks a tenant to do more than they are legally required. They will do a final check on the building, come back with a 'wishlist' of what they would like done and use that as the starting point.

"They often have in mind what needs to happen to make the property suitable for the next tenant, rather than what's legally required. In some cases, the dollar figure between what landlords want and what tenants are legally required to pay can be vastly different. That's where we get involved."

Building Consultant Sean Marshall agrees that lease reinstatement is not the time for landlords to profit.

"If Prendos worked with a landlord who was using the end of a lease as an opportunity to profit, we'd tell them they were working with the wrong company. Picking an overinflated 'make good' figure out of the air is inviting a costly and time-consuming legal dispute, which is exactly what you want to avoid as a landlord."

So what's the best way to manage the reinstatement process? Michelle and Sean give us their top 10 tips for managing things through the entire lease lifecycle.

#### #1. Get the legal framework right upfront

As a landlord, it's important to get the lease conditions right from the outset, says Sean.

"Be really clear around your expectations: what do you want your tenant to do at lease end and how prescriptive do you want to be about it? A vague lease can be more beneficial to the tenant and open up more opportunity for misinterpretation."

You can also decide whether the lease is backward or forward looking. Most leases require reinstatement of the building to the condition it was in at the start of the lease, however a 'forward-looking' lease requires the premises to be brought up to a standard for a new tenant. You can also opt to include a pre-determined mechanism for resolving leasing disputes – something that's popular with larger institutional landlords.

#### #2. Seek legal advice when signing up

Avoiding involving a lawyer in order to save money will most likely lead to more cost, time and stress in the long run. Even when you've only signed a two-page document, you could be unwittingly bound by a whole lot more.

"Engaging a specialist property lawyer is about value, not cost," Sean says, "whether it's monetary or peace of mind."

#### **#3. Get a premises condition report**

Lack of evidence plays a big role in lease disputes. When either party fails to get a condition report at the outset of the lease, it can be difficult to determine the tenant's obligations to 'make good' at the end – particularly when there's been a change of hands during the tenancy.

#### **#4. Rent Reviews**

A rent review clause allows landlords to change the contractually agreed rent to allow for inflation and market changes. It's important that tenants understand the frequency of the reviews and the amount of increase so they can ensure the lease remains affordable.

Where alterations are being carried out to the premises that may enhance the market rent, the tenant may want to consider negotiating into their lease at the outset that this is disregarded when it comes to market rent reviews.

#### **#5. Maintain good records**

Both parties should keep a record of the premises' condition at the start of the lease and any changes that take place during the term – including alterations, remediation or maintenance work. As a landlord buying a property with a commercial lease already in place, your due diligence should include getting evidence of the building's condition at the start of the lease.

#### #6. Tenancy changes: do your homework

If a tenancy is changing hands, the incoming tenant needs to have a clear picture of the liabilities they're taking on.

"If an existing lease is being assigned, you're stepping into the shoes of the previous tenant," explains Michelle. "So, if they've completed fitout or damaged anything, you'll likely be taking on their liability of fixing or reinstating it. This is different to a sublease situation – where the initial tenant remains liable under the head lease, and the subtenant is only liable for anything relating to their sublease period."

Equally, as a landlord, you must take care when consenting to an assignment of lease. By doing so, you're generally acknowledging there are no outstanding breaches – so if there are any unresolved tenant maintenance obligations, you may find you've lost your right to insist on them.

#### **#7.** Be clear on responsibilities and timings

"If a landlord is entitled to complete work, for example painting the building, they may need to claim 'outgoing' costs with the tenant while the lease is still alive," Michelle says. "Once the lease comes to an end, their right to claim costs can be less certain. The wording in the lease is key."

When the tenant is obligated to do something as part of the lease contract, they're usually required to complete this before lease end. If they don't, they may be in breach and have to either pay for the landlord to complete the works, or request to 'hold over' the lease to complete the works themselves – in which case they'll likely have to pay rent during this period.

There is also a difference between obligations a tenant is automatically required to perform, and those that are only triggered if a landlord requests them. If it's the latter, the landlord may have to request this before the lease ends.

#### **#8. Plan your exit strategy**

Both parties should allow plenty of time to think about what's required at lease end and what their strategy will be. They'll also need input from the right people.

An experienced building surveyor can accurately report on the condition of the building, while a commercial leasing law expert can help you understand your rights and options.

#### **#9.** Always go back to the lease

If both parties are acting reasonably and fairly, the landlord's reinstatement claim and the tenant's own assessment shouldn't be far apart and any negotiation should be straightforward. However, there can sometimes be a large discrepancy, in which case Sean says the starting point is always the wording of the individual lease.

"The lease may say the tenant's repainting obligation is not absolute but rather subject to fair wear and tear from reasonable use. Agreeing the price per metre of paint is a different matter to whether it needs to be painted in the first place!"

#### **#10. Arbitration**

If the parties can't reach an agreement, leases often require that the dispute be referred to the arbitration process. However, Michelle says parties often end up settling before things get to that point.

"When one party sees the other is serious and prepared to take things to arbitration, it can spur them to put forward a more reasonable offer. At the end of the day, both landlords and tenants want a smooth lease reinstatement process, so it pays to manage things carefully and sensibly."

#### FREQUENTLY ASKED QUESTIONS

#### Can a landlord enter a tenanted property to complete works a tenant should have done?

Only if they have an express or implied right to do so. Usually they can access the premises to carry out works they're entitled to do as a landlord. If the tenant has failed to complete works they were required to do, this is a contract breach but does not typically give the landlord the right to access and complete the works themselves.

#### If the landlord intends to demolish a building after lease end, is the tenant still obliged to 'make good'?

The starting point is always the contractual agreement. Regardless of future plans the landlord is entitled to what was agreed at the start of the lease. However, if the tenant can prove the landlord definitely won't suffer any loss through their not complying with the requirements, there may be an argument that the tenant isn't required to perform the full extent of their obligations.

#### Is a tenant entitled to ask for invoices to prove costs incurred by a landlord?

Yes absolutely, because they're assessing the accuracy of the landlord's damages claim. It's a matter of arriving at a 'fair and reasonable cost' to reinstate the building to the required specifications.

# AVOIDING COSTLY CONCRETE REINFORCEMENT ISSUES.

With the recent focus on deficiencies in reinforced concrete structures, we look at a few of the common defects found in concrete design and construction - and how to avoid them.

As a multi-disciplinary property and construction consultancy, Prendos has the advantage of housing many different specialists all under one roof, says Prendos Building Consultant, Sean Marshall.

"This has been particularly valuable when it comes to helping our clients identify and resolve deficiencies in concrete buildings. We essentially have a joint structural engineering and building surveying team who work together to look at design deficiencies or check the quality of the construction."

When carrying out Initial Seismic Assessments (ISAs), Structural Engineer Andrew Crowley says Prendos goes further than most – starting by checking the building has been constructed in accordance with the drawings lodged at council.

"We take specialised concrete scanners, such as Ferro Scanners or Ground Penetrating Radar (GPR), to the building to 'look inside' the concrete. We're primarily trying to identify steel reinforcement within it. The GPR tools we use can detect all sorts of things up to a depth of 200mm – ferrous and non-ferrous metals, as well as wood, plastic, pipes and cables. However, there are instances where the GPR is unable to determine the type of object detected."

Using scanners, design drawings and physical inspection techniques, Prendos picks up issues ranging from lack of concrete cover to no reinforcement at all.

"Concrete is not good in tension situations, so if there's no rebar it simply won't work in slabs or beams. If it's the walls of the building that are lacking reinforcement, you may not notice until there's a quake."

#### A prime example of what can go wrong

Prendos has recently been working on a building constructed using precast concrete panels. Midway through construction, design and build flaws were identified and Prendos was brought in to investigate.

"The building contained a multitude of failures," says Sean, "from gaps between the precast concrete panels, to visibly unaligned and damaged panels. The majority of faults were due to very poor quality control during construction. However our building surveyors worked closely with our structural engineers on the report, as some of the issues were more of a structural design nature."

"Using scanners, design drawings and physical inspection techniques, Prendos picks up issues ranging from lack of concrete cover, to no reinforcement at all."

The investigation revealed something called 'plastic shrinkage cracking', where concrete shrinkage had led to significant cracks.

"Because concrete is a 'wet' material, there's a great deal of water loss as it dries – leading to a decrease in volume, or shrinking," Andrew says. "If concrete dries too quickly, or one part dries faster than another, it can cause cracking. Good concrete design will include reinforcement to prevent this, but if there's not enough, or it's not spaced correctly, it won't work. You can have enough reinforcement for strength purposes, but still not enough to prevent shrinkage cracking."



Another issue in the building was a lack of concrete cover - or the amount of concrete covering the rebars something our scanners were able to show.

"Concrete is alkaline, which protects the steel reinforcement against corrosion. The amount of cover you need depends on the building's exposure to the elements – for example a marine environment needs much higher cover. Over time, the surface of the concrete will become more acidic, losing its protective power. This can take decades depending on the building's location. Much of Auckland is close to the sea, so any exposed concrete is likely to be exposed to salt spray - which means you need to be extra careful with your concrete cover depth."

#### "The quality of your building will go up markedly if you engage a supervising engineer to visit the site regularly, oversee and sign things off."

Spacing around reinforcement bars was also a big issue in the building inspected, which came down to a combination of poor construction and poor design. Without sufficient spacing, concrete can't flow around the reinforcement, so the bond between concrete and steel is limited - as is the protective cover.

"Our investigations showed the contractors had laid the reinforcement directly onto the permanent formwork or onto expanded polystyrene insulation. The building also showed areas of dense grouping of steel rebars. When designing concrete structures you need to allow space around the reinforcement and, if you do 'bundle' your rebars, your design should specifically allow for this."

Waterproofing, or lack of it, can also play a big part in concrete issues. If too much water is allowed to penetrate a concrete slab, says Andrew, it will lead to corrosion of the encased reinforcement and cause structural problems. "There have been a few instances where I've been called in as a structural engineer to look at a crack in a building, and found it has more to do with waterproofing than the structure itself.

Especially near the sea, the marine aerosol can degrade the concrete and therefore the reinforcing steel. When steel corrodes it can expand many times its original width, and the expansive force is such that the surrounding concrete will be blown apart. Typically this presents as cracking, but in extreme cases your concrete will actually fall off and leave the reinforcement exposed."

#### How to avoid issues

Prendos has seen a lot of poor concrete design and construction techniques over the years. Sean says many of their clients end up coming to them because they've had a bad experience and don't want it to happen again.

"They've seen first hand what can go wrong, and the second time round they realise they need to pay a bit more at the front end to have it done right. If you're constructing a new building, our advice is to get a structural engineer involved in the design and include ongoing site observation and supervision as part of your build. The quality of your building will go up markedly if you engage a supervising engineer to visit the site regularly, oversee and sign things off.

"Prendos is totally focused on quality and adding value. In almost 100% of our projects we're retained all the way through to project sign off. That's why clients come to us - to be assured of a quality build.

"We absolutely agree with Benjamin Franklin's quote, 'the bitterness of poor quality remains long after the sweetness of low price is forgotten'. In addition to the remediation cost, it's the heartache and stress that comes from being left with a poorly designed or constructed building. You can pay for the engineers now, or pay the lawyers later."

# HAS AUCKLAND'S DOWNTURN PASSED?



For most of 2019 we have seen subdued sales and prices in our largest city: a 'buyers' market'. But, could recent renewed activity and a spike in prices herald the start of the next upswing? Valuations expert Gordon Edginton gives us his predictions. There's no question the Auckland property market has been in the doldrums for the past nearly three years. 2019 sales volumes were down another 10% at under 2,000 sales per month, and days to sell sat at a very lengthy 46. Prices had also started to slide, with an average fall of 2.7% across the region, a median price in Auckland of \$850,000 (REINZ) and a Corelogic average value of \$1m. However, Gordon says the last three months have seen a strengthening in sales and prices.

"Sales volumes are up to 2,335 for November, which is an increase of at least 15% from earlier this year. Days to sell have also dropped to 35, which is a big improvement and better auction clearance rates are evident. The REINZ median price jumped to \$885,000 in November, a rise of 4.1% and a new record for the region. Equally, the Corelogic average value is up to \$1,038,500 - a rise of 3.85%." Civen our previously high prices and the affordability constraints, this relatively quick price turnaround is unexpected. Equally, Gordon says, there are good reasons why prices have not fallen more.

"There are stimulatory factors in play that have helped underpin the market. Population growth continues as net migration sits at near record levels. Interest rates are at record lows and likely to fall further, and long term low interest rates are firmly cemented in place. We also have a sound Auckland economy that will continue to grow, with large infrastructure projects underway, a major housing and construction boom, unemployment at very low levels and rising household income.

"On top of this, the threat of Capital Gains Tax is gone and initiatives such as KiwiBuild have failed to build enough houses to match past population growth. All of this is encouraging market activity and price growth." The stagnation that prevailed over the last two years comes down largely to the effects of Government regulations and Reserve Bank LVR rules, which Gordon says can't be understated.

"A raft of new legislation recently came into play, including taxation rules (the five year bright-line test and ring fencing tax losses), banning foreign buyers (except Australians and Singaporeans), and amendments to the Residential Tenancies Act – including insulation requirements and the drive toward healthier, safer homes. A significant array of further possible amendments have been floated – all of which are tenant focused and will deter some existing or would be landlords."

The coming months will also see housing insurance become more of an issue, as risk based pricing is fully bedded in.

"Those with homes in high seismic risk areas or in locations at risk of rising sea levels and coastal erosion will find insurance harder to obtain or very expensive. Self insurance will be inevitable, but this won't sit well with banks if there is a loan involved. People need to be wary of multi-unit blocks, apartments and coastal assets."

All in all, Gordon says, the signs tentatively point to the property slump coming to an end, and an upturn, for now, seems to be underway.

"I predict a steady Auckland market, but I'm sceptical as to whether the recent price lift will last. Policy changes and regulatory settings will act as a major headwind. Coupled with already high prices and affordability constraints, property values are not likely to take off any time soon. However a collapse in prices is equally unlikely as constrained supply, high population growth and a low interest rate environment continue to support demand."

**First home buyers vs investors** While investors had eased back in the slump, they are now emerging as a

"Conditions look favourable for investors for two reasons. Firstly, the

dominant buyer group once again.

#### "Self insurance will be inevitable, but this won't sit well with banks... People need to be wary of multi-unit blocks, apartments and coastal assets."

very low interest rates support borrowing and equally offer a paltry return on money in the bank. Secondly, bank returns are far outstripped by property investment both from rentals and now in terms of capital gain, which is still essentially tax free.

"However, an interesting development is that first home buyers have also become more active, with those purchasing their first home now making up 27% of the Auckland market by sales numbers. So, at a time of high prices, unaffordability issues, tight bank lending and LVR restrictions requiring first home buyers to have a 20% deposit, their share of the market is growing, The increased construction of smaller homes and units on smaller sites is also providing a more affordable entry level house for first timers. These cheaper areas and more affordable homes look best placed in the current market."

Another relatively new property class that's popping up in greenfield subdivisions and older suburbs is multi-unit housing, which now makes up the largest proportion of house types being built – compared to the stand alone home of the past. It seems, Gordon says, that housing types are finally starting to match demand.

"Smaller homes/sites and multi-unit projects are helping fill a gap in the market that had occurred as a result of developers building larger, more expensive homes to maximise the value of their section. Building

#### The overall outlook

- First home buyers active. Affordable markets best placed.
- Rents should continue to rise.
- Lending market restricted. Bank capital requirements are a focus, LVR rule changes possible and lower interest rates likely.
- Insurance an emerging risk. Pricing increasing on some assets and no cover offered on the most risky properties.
- Beware of leasehold. Changes in ground rent can destroy your equity. This type of asset is poorly understood and not favoured as an investment.

consents are booming in Auckland as a response, but much of this work was planned or in the pipeline some time ago, so we will start to see fewer new projects brought to market. Talk of the Reserve Bank's plans to lower minimum deposit requirements to 15% will also boost demand but not necessarily supply. However, the Reserve Bank is unlikely to reduce the LVR limits any time soon, given the signs of a market upturn.

"New Zealand wide, the property market has been ticking along nicely. Nationwide values are up 8.3% out of Auckland and some places like Dunedin have seen prices skyrocket. Capital growth across the provincial centres has been strong as buyers seek cheaper housing."



# GETTING YOUR ONSTRUCTION CONTRACT RIGHT

In the early stages of a commercial construction project, one of the first things to sort out is the contract. We asked Prendos Quantity Surveyor Linda Lodetti about the best approach to take to ensure you're legally covered.

Traditionally, New Zealanders have tended to take a 'she'll be right' attitude to construction projects. As a small country where everyone knows one another, projects were often based on nothing more than a friendly handshake. But, with historical construction industry practices recently contributing to the liquidation of some main contractors and sub-contractors, the industry has become aware of the importance of getting legal contracts right.

"Construction is a unique practice where, contrary to traditional legal aspects of sale and purchase conditions, the client is expected to pay for incomplete work as it progresses – before it's been fully certified and signed off," explains Linda. "We wouldn't buy a car that way! We would only pay for it once it's been designed, manufactured, built and delivered in full working order. Now add the complex



environment of construction. All parties intend to deliver on the signed deal, but there are so many factors that can impact on final delivery – all of which occur over very lengthy periods of time.

"It's a bit like a marriage. We all have good intentions but there are inevitably issues that will arise and if you're not properly covered legally, it can get messy. That's why it's so important to put the right contract in place during the 'honeymoon period', with a clear mind and careful consideration of the typical aspects that can go wrong – such as severe weather, consent issues, poor design, late delivery of materials or defective work."

So how do you go about selecting the right contract? There are number of standard contracts to choose from when entering a construction project. Linda says

#### New Zealand has the following suites of standard contracts:

- NZS3910: A build only contract with the design responsibility held by the third party consultants appointed by the client.
- NZS3915: Similar to 3910, however no one is appointed to act as engineer to the contract. The client administers the contract directly.
- NZS3916: Design and build contract where the contractor takes full responsibility for all design.
- NZS3917: Intended for use when contracts are signed for providing maintenance or services on a fixed term basis.
- NZIA SCC: New Zealand Institute of Architects contract – for use between client and contractor, where the Architect is engaged to administer the contract.

selecting the right one is sometimes about understanding where the risk is attributed.

"Of New Zealand's suites of standard contracts, NZS3910 is by far the most commonly used. It's applied across a wide variety of building and civil engineering construction projects, and strikes a fairly neutral balance between the interests of client and builder. It introduces a third party 'Engineer' (architect, quantity surveyor or other clientappointed professional) who acts as project manager and oversees all aspects of the contract."

However, there is a widespread opinion that NZS3910 is outdated and doesn't fit the requirements of modern construction projects. It was most recently reviewed in 2013, prompted by concerns from the construction industry about the frequent addition of extensive 'special conditions'. However while the update has reduced this practice, encouraging a tick box approach to cover key items of the contract, Linda says it hasn't eradicated it. "Ideally, the best approach is to select the most appropriate contract with due consideration of the options and with minimal changes or bespoke clauses – all overseen by a legal expert."

"Clients still take NZ3910 and add onerous bespoke clauses in order to amend the contract to fit. Not only can this result in huge legal fees for new terms and conditions, it has the potential to undermine the original intent of the contract – leading to different interpretations of the changes and becoming a minefield in legal disputes. I certainly agree with the opinion that NZ3910 needs an overhaul. But, while it may not be perfect, the safest option is to stick with the original intent of the standard contract."

Linda does recognise that there are many circumstances where clauses do need to be added, in which case she recommends seeking advice from an expert.

"If your project is particularly complicated, you'll need an added layer of legal advice. Any proposed changes to a standard contract should be discussed with experts such as legal representatives or solicitors who specialise in construction contracts. Architects, building surveyors and contractors aren't legally trained, so while they'll do their best, you may end up in a situation where the intent of all parties is not aligned.

"Ideally, the best approach for a happy 'marriage' is to select the most appropriate contract with due consideration of the options and with minimal changes or bespoke clauses – all overseen by a legal expert. This will hopefully see you avoiding any disputes or, failing that, ensure the relationship ends with a smooth divorce!"



# THE ART OF PROFESSIONAL PROJECT MANAGEMENT

Prendos Project Manager Mark Abrey explains what makes a good project manager, and the benefits of engaging one in your next property or construction project.

Mark joined the Prendos Central North Island team in July 2019 as a Project Manager and Building Surveyor. Originally from the small town of Port Elizabeth on South Africa's southern coast, he completed a degree in Construction Management at Nelson Mandela University – going on to achieve a Masters Cum Laude and become registered as a Professional Construction Project Manager.

While he certainly sees the importance of professional qualifications and knowledge in the project management arena, Mark says there is so much more to being a talented project manager – particularly within the built environment.

"In construction project management it's so important to have a well-rounded skillset – including onsite experience and the right technical abilities. Project managers sometimes tend to overlook this, which makes it hard to oversee projects in such a hands-on and fast paced industry. My plan when starting my career was to do my time onsite, gain technical knowledge and develop a wellrounded combination of skills which would ultimately make me a better project manager."

For Mark, this meant joining a small real estate firm after graduation, managing all aspects of the construction processes for middle to high income residential developments and large-scale retirement villages, from both a contractor's and developer's perspective.

"My title was project manager, but my role was much more diverse! I was the quantity surveyor, construction manager and site manager. I was responsible for company PR, the website and Facebook pages, health and safety and legislative compliance. I was involved in the acquisition of new projects, as well as conducting feasibility and viability studies to ensure they met the organisation's objectives. It certainly threw me in at the deep end, but at the same time gave me crucial onsite experience and a solid technical grounding in all aspects of the industry."

One thing he sees as the mark of a successful project manager – apart from the obvious qualities like sound organisational skills, attention to detail, time and quality management – is high emotional intelligence, or EQ.

## "Every project has multiple personalities involved. It is (a Project Manager's) responsibility to bring all of these together to achieve a common goal."

"Having an innate understanding of people is really what project management is all about when it comes to managing stakeholders and human resources. In any business environment, ethics and integrity are highly valued, but I believe good interpersonal skills are one of the most important things you can have. Conflict resolution is also key – every project has multiple personalities involved and it is your responsibility to bring all of these together to achieve a common goal." As a professional project manager, Mark is passionate about the advancement of the profession and the development of those new to the industry. This sees him dedicating his time to mentoring younger project managers – something he says has traditionally been lacking in the industry.

"Sharing knowledge among industry professionals is essential to the development and advancement of the profession. Unfortunately, some old school construction professionals tended to keep their skills close to their chests. I am lucky enough to have a fantastic mentor – a Senior Professor who is a widely published health and safety researcher. He has influenced my professional and personal development, which is why I feel so strongly about developing others entering the profession."

Mark not only works with project management graduates, but has maintained an academic relationship with Nelson Mandela University through lecturing, conducting postgraduate research supervision and co-publishing research papers in various areas of the construction industry. This not only allows him to give back to and develop the profession, but helps him stay abreast of the latest industry advancements.

"Maintaining a connection with the academic world is important if you want to keep up with current innovations. The construction industry is continuously growing and developing at a rapid pace with the introduction of Industry 4.0 - it's important to stay on top of it if you want to implement new strategies and technologies to successfully manage construction projects. South Africa was limited in many ways when it came to the application of new technology, tools and systems, so I'm enjoying exploring what's on offer in New Zealand. Prendos has an active drone service, for example, which is helping with monitoring project progress and providing clients a visual view of where things are at."

#### Adding value

So what can a professional project manager add to a property or construction project? Mark says that if you get the right person on board at the right point, they'll ultimately make sure your project objectives are met on time, within budget and to a high standard.

"On any construction or property venture, a professional project manager can add value from conception to completion. The best time to seek our services is during the initial project stages – so we can develop a clear project brief and identify project deliverables.

## "The best time to seek our services is during the initial project stages – so we can develop a clear project brief and identify project deliverables."

"From there, we can add value in every area, from identifying and procuring suitably qualified consultants and contractors, to developing formal communication strategies that successfully manage the flow of project information. Most importantly, we will help manage and reduce risk, identify opportunities and keep the relevant parties on track and working towards the same vision. This is where that well-rounded skillset is so important. The right combination of construction and project management methodologies, along with technical abilities and people skills, can make all the difference."





## THE SCIENCE BEHIND

# WARMER, DRIER, HEALTHIER HOMES

Are Passive House certified homes set to be the next big thing in New Zealand? We talk to Respond Architects' Joe Lyth about why they're right behind the Passive House movement.

"Passive House is a rigorous, internationally recognised standard for energy efficient buildings," explains Joe. "Using quality products, careful planning and attention to detail, you design and build a property that has a high performance envelope – both extremely airtight and insulated as the local climate requires. It's warm, quiet, and best of all your power bills will be tiny. A certified Passive House uses no more than 15kW per square metre, per year to heat – that's around 80% less energy than a typical family home in Auckland."

So why aren't more New Zealanders building Passive House certified homes? As Joe says, it's a standard that's relatively new in this country. "The first Passive House was built in Germany back in 1990, while New Zealand's first was built in 2012 – so we're just starting to catch up here. Our Building Code standards around insulation, airtightness, ventilation, heat loss and energy efficiency are currently quite poor, with no mandatory airtightness requirements at all."

The fact is that Kiwis are used to living in cold, damp, draughty houses. One Danish builder observed that New Zealanders 'don't find it strange to wear coats and outdoor clothing when indoors'! The consequences of this, however, are serious. Studies show that the average New Zealand home is 16 degrees inside during winter, with the average bedroom temperature reaching just 13 degrees between midnight and 9am\*. This is far lower than the World Health Organisation standard of 18 degrees (or 20 degrees if babies or elderly live in the house)\*. Cold homes are typically damp homes, which can lead to mould as well as a raft of illnesses. In fact, one in six New Zealanders are sick with respiratory illnesses, which costs \$6.16 billion a year in public and private costs\*.

Thankfully, the thinking is changing. Passive House benefits are becoming more widely known, and more certified Passive Houses are being built around the country. Banks are starting to recognise it too, with ANZ one of the first to offer lower mortgage rates if you build a certified Passive House. As a result, more builders and designers are getting the required registration to create these buildings – including Respond Architects, who Joe says is right behind the Passive House movement.

"We're currently working with Öko Konstrukt, specialists in the construction of high quality certified Passive Houses, to design Passive Houses in the new Weiti Bay development, north of Auckland. Co-owner Murray Durbin worked on the first Passive House in New Zealand, going on to build his own Certified Passive House Plus, which carried a 10 Homestar built rating. Murray also imports and distributes European products and systems to help others meet this standard through his business 'Enveloped'. We're excited to be working on the development with him, and hope to see the relationship continue."

#### Achieving Passive House certification

Airtightness is a key feature of a Passive House building, but it doesn't mean you can't open any windows. It's about managing the amount of air leaking through the building fabric.

"The idea of 'allowing a building to breathe' isn't actually a good thing," says Joe. "Air carries heat and moisture with it into the building fabric, which can lead to mould and other issues. You need to stop air from entering the construction, while letting out any moisture that has come in. The interior air quality is kept fresh and clean through balanced heat recovery mechanical air ventilation systems, while excellent insulation, high performance window glazing and quality joinery ensure heat doesn't escape."

Passive House buildings also reduce thermal bridging as much as possible. As Joe explains, every material has a heat transmission value: with steel transferring more heat than timber, timber more than insulation. A thermal bridge is where a material with a higher heat transmission capacity bridges the thermal envelope of a house.

"Apart from heat loss, it can lead to condensation and even mould. Passive House design eliminates as many of these heat loss points as possible. It's also about using the right products - high quality insulation for example, installed properly so there are no spaces through which heat can escape."

Achieving Passive House certification requires rigorous on-site testing throughout the build process. 'Blower door testing' is used, where all windows and doors are closed and a fan is put on the front door to pressurise and depressurise the house. The amount of air loss/gain is measured and if it doesn't meet the required levels, the



design or materials need to be adjusted until it's just right. Heat loss is then balanced by taking into account heat generated within the house – from body heat, cooking appliances, hot water systems and sunlight.

"You look at what direction the house is facing and how much sun gets into each area throughout the day, through all seasons. You can even account for things like house plants – how much oxygen they give off and how much moisture they require. All of this information is plugged into a scientifically calculated spreadsheet called PHPP (Passive House Planning Package) and it tells you what capacity heating system you need to keep the home at 20 degrees Celsius, and whether you'll need additional shading or active cooling during the hotter months. The formula is location specific, so in hotter climates it's about how to cool the home to keep it at a pleasant temperature."

"When you're listening to your kids coughing in a cold, damp house every winter despite high heating bills, you realise there's nothing more important than improving their quality of life."

#### A Passive House of his own

One key issue Respond hopes to address is cost. New Zealand is one of the most expensive countries in the world in which to build, and the cost of construction in the main centres rose more than 30 per cent over the past 10 years<sup>\*\*</sup>. So, how are people expected to afford a premium on top of this to build to Passive Certification?

Joe says there's no easy solution, but it's something he's currently trying to resolve as he designs a Passive House certified home for his family. He hopes to find a route through which Passive House certified homes can be produced within tighter budgets, using simple, functional interiors which can then be upgraded by the inhabitants over time, as their bank accounts allow.

"When you're listening to your kids coughing in a cold. damp house every winter despite high heating bills, you realise there's nothing more important than improving their quality of life. A warm, healthy home is the important bit, the rest can come later!

"Our goal is to show that designing a Passive House certified home isn't as restrictive as you might think. While costs are currently higher than standard construction, you'll save in power bills over the long run. Plus, the more Passive Houses that are built, the more the prices will come down and the more attainable having a warm, healthy home will become for New Zealanders."

\*Jason Quinn, Passive House for New Zealand, 2019

\*\*Chris Hutching, Is it really more expensive to build new in New Zealand?, Stuff.co.nz article August 2019

# TAKING A HOLISTICVIEW OF BUIL DINGS

Prendos Building Surveyor Jan Connell describes her job as something like a 'building doctor'. Armed with a broad knowledge of all aspects of a building's health, her aim is to offer clients the best, most cost-effective solution to ensure their property performs over the long term.

"Put very simply, a Building Surveyor's job is to go in and see whether a building is sick and what medicine is required," says Jan. "But more than this, we work to understand what our clients need from their property and make sure their building delivers on it. We offer independent, expert advice and technical expertise across all aspects of the property, looking at its entire lifespan. So rather than thinking short term, we put the right things in place up front to protect their investment over time."

A building surveyor is typically brought in to assess a certain aspect or issue in a building and advise on the best

way forward. Sometimes this means involving other disciplines - something made easy for Jan thanks to Prendos' multi-disciplinary capability.

"As a building surveyor I'm often appointed to look at some failure in the building: water ingress or failure of cladding for example. I can assess the issue, engage whoever is needed to do the job, get all the costs together and give the client the full picture of what fixing the problem might look like. The great thing about Prendos is that we have most required disciplines in-house, so I have access to a huge amount of knowledge and experience."

While most people only look at the material touch ups required in a building, a surveyor takes into account everything from whether the property meets current fire or seismic regulations, to issues around structure or design. This 'big picture' view allows them to give clients a realistic view of costs (both short and long term) and help them make informed decisions: essential when looking at purchase a new building or deciding what to do with an existing one.

"We have a client who owns a portfolio of properties – one of which she rents out. When her tenants complained that the building was leaking, she came to us to get an understanding of her options. I advised her that the building's roof was failing as a result of poor design, and presented her with two initial options: repair and keep the building, or sell it and use the money to maintain the other buildings in her portfolio." Armed with the right information, Jan's client decided to keep the building, as the rent was so valuable to her. However, this led to two further choices: to repair or replace the roof.

"We could either set up a programme to repair the roof, taking into account that this costly repair may need to happen every few years, or get one of our designers to design a whole new roof, which would have a lifespan of 25 years with no repair or maintenance costs over that time. So, while the latter option was more expensive up front, we were able to show her how it would save her a great deal of money in the long run."

Building surveyors also work in dispute resolution, insurance or legal cases. Jan was recently involved in a claim by a client against a product that had failed, where the original builder had also acted as project manager.

"The client wanted an impartial, expert view on whether the builder was being upfront about why the product had failed: was it due to poor quality or was there an issue with how it was installed? I looked at the literature provided by the manufacturer and checked whether the team appointed to do the work had followed these installation instructions. As it turned out, the product had been incorrectly installed, so the builder's team were at fault rather than the manufacturer."

The fact that a building surveyor can provide impartial knowledge and advice is essential. Sometimes, Jan says, this may mean offering advice on other issues outside their original scope.

"When I'm brought in to look at just one aspect of a building, I believe it's my professional duty to alert the client if I see something else that's an issue. As building surveyors we're qualified to look at every aspect of a building's health, and we're committed to making sure our clients get the best advice over a property's entire lifespan."



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"IT'S ABOUT MAKING SURE WE'RE FLEXIBLE ENOUGH **TO CONTINUALLY** EVOLVE - TO MOVE INTO AREAS WHERE OUR CLIENTS NEED US TO BE."

> Fiona Gavriel Prendos CEO