SCOPE

NZ METAL ROOFING MANUFACTURERS INC.

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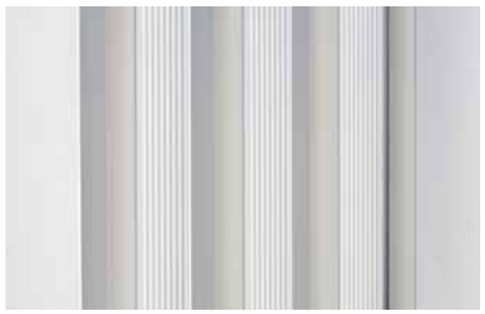
Below is a brief introduction to the 2020 executive of The Metal Roofing Manufacturers Inc. It is intended that Scope be representative of the Metal Roofing and Cladding Industry in both commercial and residential sectors. Your submission of material you consider is of interest is welcomed be it design, research, manufacture or construction.

PROJECTS

ARTICLES

FAT PARROT ARCHITECTURE TAKES EDUCATION HIGHER

The Ministry of Education realised it will either need to purchase new land for bigger schools in the central city area or significantly increase the capacity of existing schools.



At the end of 2017, Statistics New Zealand estimated the population of Auckland to be 1.66 million. It is projected to grow to over 2.3 million people by 2043.

Population growth in Auckland not only puts pressure on the housing market, infrastructure such schools also need to adapt.

As the city grows and matures there will inevitably be a demand for more high-rise apartment buildings. In turn the existing schools will need to be able to cope with the predicted increase in student numbers.

During the early 2000s the Ministry of Education realised it will either need to purchase new land for bigger schools in the central city area or significantly increase the capacity of existing schools.

The potential cost and time of finding, purchasing, and developing new schools make it an unattractive proposition. The Ministry decided to pursue redevelopment of existing schools. One of the first on the list was Newmarket Primary School.

The school is situated on the fringe of the Newmarket business district and borders a busy thoroughfare. Unusual topography for a school divided the ground into two distinct areas. The existing classrooms and administrative block were located on a higher level; the sport fields, additional car parking area, and old school hall were on a lower level. The two levels are separated by approximately 10m high bluestone terraced walls. Access between the levels was via steps running down one side of the stone terraces, under a grove of large protected Pohutukawa trees along the road frontage.

The school approached Fat Parrot Architecture in 2011 to prepare a submission for redevelopment. The redevelopment had to include a new administration area, library, staff room, toilets, offices, twelve classrooms, and a new school hall.

Keeping the need for intensification in mind, Fat Parrot Architecture developed the concept of a 4-storey building, with the ground floor accessed from the lower field area and the top floor from the upper level.

Fat Parrot's Graeme Fanselow says, we realised to be cost effective, the external envelope and structure of the building had to be simple, leading to a rectangular form and commercial construction methodology being adopted.

The initial concepts incorporated staging options. The new hall at ground level would open onto the playing field, the new administration area set on the top floor with direct access via a bridge to the upper area, and traditional cellular classrooms between. These facilities would have been serviced by external circulation areas and a large lift for people with disabilities.

Wendy Kofoed, Newmarket Primary School principal, says, "we knew we needed a small footprint. We also knew it was going to a long narrow building. The only way to achieve all that and increase capacity, was to go up."

The company, in partnership with the school, refined the design to incorporate modern learning and teaching principles by opening the interior to create shared leaning spaces. The school proposed constructing the new building in its entirety, rather than the staged approach discussed earlier.

The Ministry of Education introduced a new classroom delivery program in 2013, which reinforced the single stage approach. The Ministry also emphasised the need for shared learning spaces.

Graeme says, "The new guidelines changed the rationale of some of the earlier layout decisions. The interior was redesigned to incorporate the efficiencies and more innovative layouts this enabled."

Wendy says, "our philosophy at Newmarket had always been to create a building that is for the students as much as for the staff. We wanted a building that everybody could feel belonged to them. We shared our contextual knowledge with

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“Our philosophy at Newmarket had always been to create a building that is for the students as much as for the staff.”

The design team opted for substantially open plan learning areas for maximum flexibility.

the design team. That contextual knowledge gives us a better understanding of the way spaces may be used. We needed the spaces to be adaptable. Sometimes students have ideas about changing the way rooms are used. They want more solitary nooks for reading or more shared spaces. This design gives us that fluidity.”

Graeme Fanselow says the external circulation added a lot of complexity to the external envelope. “It was going to be expensive to construct, posed some safety issues with small children and, unless it was large enough for group activity (which the budget wasn’t going to allow), effectively was not going to be used for large periods of the day.”

The team decided to move the horizontal circulation space inside, effectively making it a part of the learning areas. External stairs at each end and a central elevator provided for vertical circulation.

Nature threw another curve ball. Geotechnical investigations showed the building would sit over a tongue of lava that tapered the length of the building. “Since the brief was to future-proof the building by designing it to allow adding another two floors in future, we determined the lava could not be relied upon to support the structure,” says Graeme.

Contractors had to drill through the lava to the bedrock below, sometimes as deep as 18m below the surface. These holes were then filled with reinforced concrete to act as posts for the foundations.

The unknown nature of the fill behind the 150-year old bluestone terraces made foundation design for the bridge challenging. According to legend, fractured rock retrieved from building the nearby motorway was used for fill. Removing the bluestone terraces was not option, since it been a part of the school’s identity since it first opened in 1875. The same method of drilling through to the bedrock below was used to secure the bridge foundations.

Air pollution also proved to be an obstacle, due to the proximity of the motorway overpass and traffic associated with the nearby Newmarket business district. Air testing early in the design process showed the outdoor air quality in the area was not of a high enough standard to allow simple natural ventilation of the teaching areas.

Fat Parrot decided to provide a filtered air supply to the building, using existing trees as a first defence. Graeme says, “…the idea being, that the natural vegetation in that area would provide a degree of natural filtration and cooling of the air.” Using trees in this way should also help to reduce the maintenance schedule of the intake filters.

Winter heating is provided through the mechanical air supply.

Maintenance
“We realised that long-term external maintenance was going to present greater difficulties than would normally be the case…To minimise construction cost and time, and to simplify maintenance, we determined that the building envelope should be simple and made from as many pre-finished materials as possible.”

Framing and Cladding
Rondo steel stud was used for all internal and external framing.

Pre-finished long-run metal was chosen for the large mono-pitch roof area with horizontal and vertical metal cladding in combination with pre-finished fibre cement sheet and aluminium joinery on the upper levels, and predominantly pre-cast concrete at ground level for robustness.

The external finishes used were manufactured by Steel & Tube Roofing. The cladding was a combination of COLORSTEEL® Horizontal corrugate Custom Orb Maxx® in Pioneer red and STC900 vertical COLORSTEEL® Maxx® in Titania. Steel & Tube Roofing ST900 in green is matched to the steel gutters

Safety Mesh
The external stairs are pre-cast concrete landings and treads on an exposed galvanised steel frame. The stairs are covered in using a galvanised mesh external screen — which the school has since decorated using corrugated steel geckos.

“We decided to put galvanised steel geckos on the mesh, to enhance the look of the stairs from a distance, but also to make it visually interesting for the internal users,” says Wendy Kofoed. This is aligned with the recycled stainless steel gecko artworks along the front of the building.

Interior
The design team opted for substantially open plan learning areas for maximum flexibility, with smaller associated spaces to the perimeters connected by sliding glass doors for specialist learning, small groups, or quiet study.

The exposed concrete floor, steel frame, and services on cable trays allows the students to see how the building is constructed and how the services work. Wendy says, “with the raw concrete and rough-hewn planking we wanted to create that rawness you’d have seen in buildings 150 years ago. We also included lots of artwork and drawings depicting the history of the school.”

Clear finished timber wall and ceiling linings are used in selected smaller spaces to add warmth.

The upper level has a standard suspended ceiling beneath the roof structure, which has been designed to facilitate its removal should the additional floors be added in the future.

The breakout spaces use the image of a tree house and the cabbage tree theme is carried through in the design.

The Maori called Newmarket “Te Tı Tutahi”, which translates to the cabbage tree standing alone or the cabbage tree of singular importance, referring to a tree which stood on the corner of Mortimer Pass and Broadway (according to other references at the corner of Clovernook Road and Broadway) until 1908. Wendy says, “we wanted to keep that reference, it is part of our history.”

The principal’s excitement is evident when she talks about the new buildings. “Focusing on the learning experiences of the students, Newmarket School’s vertical teaching block includes a diverse range of learning environments. These include instructional, collaborative, reflective, technical, and smaller group areas that empower students to engage with their learning and passions.”

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Newmarket School's vertical teaching block includes a diverse range of learning environments

"It works really well," she says. "Everything has a multipurpose function. The adaptability of the design allows us watch how students use spaces and change accordingly."

"The students love the new buildings and want another one, but we will focus on upgrading the existing buildings."

Fat Parrot
We are an NZIA practice based in Albany (Auckland) and Havelock North. With a multi-talented team, we have extensive experience in education, commercial, community, residential and interior design projects. We can offer full consultancy services from assistance in developing a design brief, through to the various stages of design, tendering, and construction to bring the project to fruition. We have a hardworking, resourceful in-house team, as well as a network of other consultants and engineers to deliver your project.

Our education work includes early childhood centres, primary and secondary school developments, varying in size from the simplest of projects to whole school development plans. We also have extensive experience with upgrades and new buildings for education facilities catering for children with special needs.

Our residential projects include design of new residences and multi-unit developments, private townhouses, apartment developments, retirement villages and social housing.

With expertise in various forms of building upgrades, we can add value to your commercial and/or heritage/ earthquake strengthening projects and have completed weathertightness upgrades for commercial and larger residential projects.

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Roofing Manufacturer:
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Profile: COLORSTEEL® Maxx® ST900
Colour: Green
Cladding Manufacturer:
Steel & Tube Roofing
Profile: Horizontal Corrugate Custom Orb COLORSTEEL®Maxx®
Colour: Pioneer red
Steel & Tube Roofing
Profile: Vertical STC900
COLORSTEEL® Maxx®
Colour: Titania
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Total Roofing Ltd
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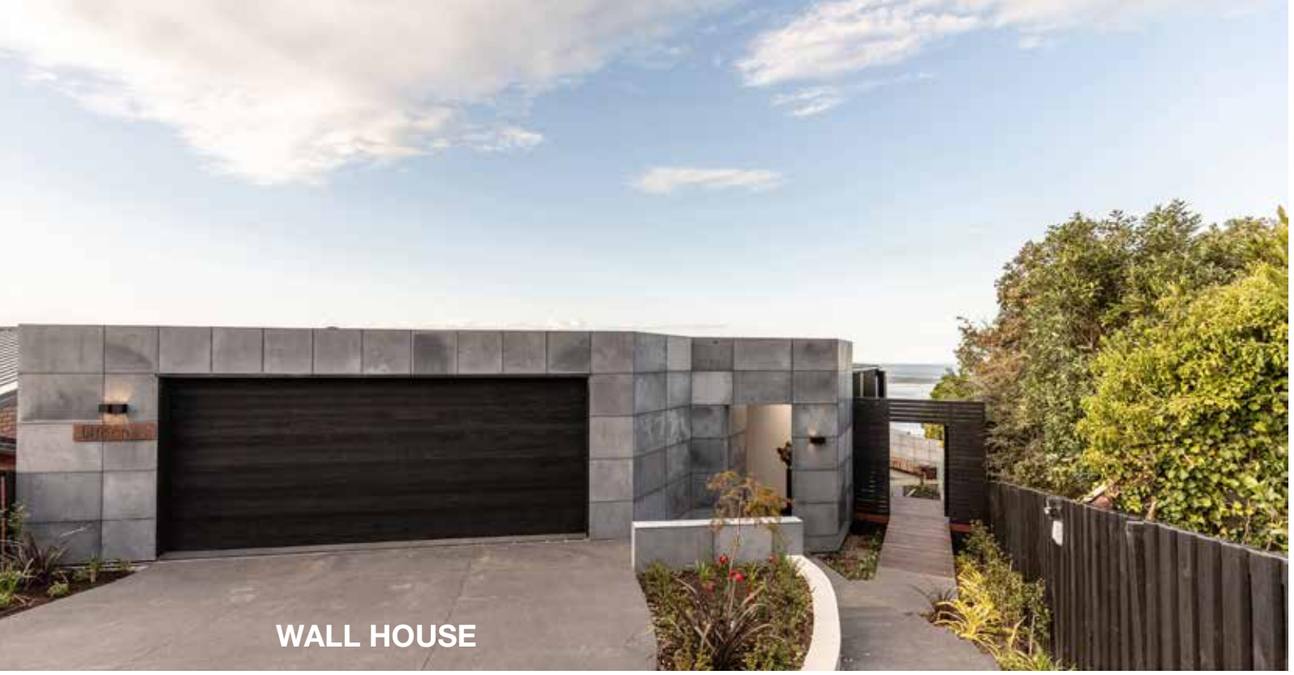
Main Contractor:
Form Building and Developments
Telephone: 09 579 5079
www.formnz.co.nz
Project Managers, Design & Documentation: Coffey
Project Managers, Construction: Greenstone Group
Structural Engineers: Brown & Thomson



WALL HOUSE

The home sits on top of Mt Pleasant in Christchurch with views to a natural landscape of mountain and the waters of the estuary. With the environment front of mind, the owners were mindful of the impact of building and vice versa in this setting. It was critical that the form of the building was drawn to the key features of the elevated site and its wider environmental effects.

As the main image shows, the wall along the front of the property, offering a solid street frontage, gives the home protection; from that position the visitor stands with curiosity and wonder about what lies within.

The “wall house” has a northern façade which splits open to capture maximum sun contact and spectacular views while outdoor living areas are sheltered from the prevailing winds. As the design process began with MC Architecture Studio Ltd, the owners communicated a number of key points. -

- Their value for privacy
- To go far beyond a standard box
- Need to have an open and uninterrupted connection with the views and the sun
- Separate living areas for different activities and times of day
- Agreeable blend of home with land/site
- To be energy efficient
- Kitchen at the heart of the home
- A striking point of entry but still private

A key factor in the internal layout for MC Architecture Studio was to create two separate living quarters – an upper storey in the eastern wing opens itself up to the surrounding environment and its beauty, overlooking the bay through the natural vegetation of the mountain. But for a more private sense of living you descend to the lower living area which is a space of privacy and enclosed comfort.

The owners wish for curiosity and privacy from the outside is matched by interiors focussed on comfort, environment and a sense of security.

A unique feature of the home is the journey created from the street to the home’s interior and the expansive views beyond. The street facing wall seems to cloak and protect the home and the view beyond. But on closer inspection, the wall separates with a small split which leads to a point of entry into the transitional space between the exterior and interior of the home. This is a tightly confined space, narrowly surrounded by tall, white concrete walls, the direction of sight drawn to a black steel door, standing alone at the end of the path with an inviting gesture of natural life extended from a soft, organically moulded timber door.

Once through the point of entry to a tiled doorway, the confining white walls are gone and the home presents its outstanding view of the bay and the surrounding natural landscape. The home now offers its previously kept secrets with the court yard providing both protection to the owners and a celebration of the home’s astonishing views.

The owners wish for curiosity and privacy from the outside is matched by interiors focussed on comfort, environment and a sense of security. Two separate wings – one facing the north-east corner and the other leaning to the north-west provide two different living areas, creating the owner’s brief for places to suit different activities and times of the day.

Two living areas

It was crucial in the client’s brief to have two separate living areas for different types of living (entertaining, intimate, relaxed) and also that they catered for different times of the day and weather. Downstairs is shaded and cooler using the balcony as a form of shelter from the sun in contrast to the upstairs living which is wide open to views and the external environment and is directly attached to the kitchen as the heart of the home. Designed by Ingrid Geldof Design, the kitchen has followed the owner’s brief for this area to become a crucial player in the

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In accordance with the client's brief there are a number of features in this home with more than double the level of insulation required by the NZBC.

plan, being at the entry to the home and a central element in the first-floor plan with direct connection of the lounge, dining and outdoor balcony areas.

The bedrooms are orientated to the north, not only for maximum sun entry but to take advantage of the views over the estuary – specially the master bedroom on the first floor. The internal layout of the master bedroom has the unique feature of an ensuite with a window in the shower which looks out over the water and creates a direct connection to it.

Energy efficiency
In accordance with the client's brief there are a number of features in this home with more than double the level of insulation required by the NZBC found in the roof and walls. There is underfloor heating throughout the house and the natural thermal mass of the concrete block wall helps to control temperature of the internal environment.

Roofing
The True Oak MagnaFlow profile, chosen for its cost effectiveness, and it was evident from early discussions that when used to clad a wall it would be seen from the side without the tray profile look.

It was also favoured for the shadowing effect it created, which emphasised the vertical lines that form a corrugate profile.

MC Architecture Studio began the design process for this home with an understanding of the surrounding environments and their impact on the building and vice versa. The Wall House has been formed to address and exist alongside its exterior world. A fragmented northern façade splits open for maximum sun contact while protecting a sheltered outdoor living a rea from the prevailing winds.

MC Architecture Studio
Originating from Rome, Principal Max Capocaccia moved to New Zealand in 2007 and in 2009 established MC Architecture Studio. He is committed to developing local and international networks to cross-pollinate ideas and maintain his connection and currency with best practise and new conceptual thinking.

An energy efficient Summer home, designed by Max, was the first New Zealand project to win a category at the World Architecture News Awards in London. Black Door House, completed in 2015, won the Modern Method of Construction category.

The True Oak MagnaFlow profile, chosen for its cost effectiveness, was also favoured for the shadowing effect it created, which emphasised the vertical lines that form a corrugate profile.

The Studio's work, questioning the boundary between art and architecture, strives to provide engaging and innovative living spaces with the highest sustainability standard. Design solutions are tailored on client needs and site's characteristics. Hence the final product will be unique and strongly related to the context and wider environment. On a specific-project basis, the studio, maintaining the leadership of the whole process, works in a network with local and international practices to achieve the best operational efficiency and local knowledge worldwide to accommodate the needs of a big scale project or specific requirements.

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Main Contractor: Parsons Construction
Roofing and Cladding Manufacturer: Roofing Industries Ltd
Profile and Colour: True Oak MagnaFlow Corrugate 0.40BMT and 0.55BMT – Ebony
Roofing Installer: Weathermaster Roofing Canterbury

HARRISON LANE: HOUSE AND STABLE

With a passion for all things equestrian, this Auckland family decided to setup their own base in Clevedon. The owner of this well crafted home combines the very best of country living with stables that would be the envy of every horse owner nationwide.

To fulfil a dream, the owner engaged Harrison Lane who have both the knowledge and expertise to bring together the aesthetic qualities of country living with a state-of-the-art stable and adjoining arena. Laura Daly, of Harrison Lane, has considerable experience in both and has brought all the disciplines together to meet the client brief and create an enchanting rural environment.

The Owner has happy memories of days at Massey University residing in the “shearer’s quarters” and the brief was to create a similar atmosphere in what is described as an apartment style dwelling. The result was somewhat larger than what most consider an apartment to be. The combined house, stable and garage is 680 square meters, has four

bedrooms, 5 bathrooms, living/dining area and 4 stables.

The decision to combine the stable with the house was inspired by Laura and is reminiscent of large country homes in the UK that incorporate a wing for the stables.

From first impressions the house fits comfortably into the country landscape with dark stained ply and batten exterior cladding with its Flaxpod corrugate roof. The entry is welcoming and practical with a covered drive in entry.

Directly to the rear of the house is the equestrian arena which has been specifically designed to allow panoramic views of all activities from the main living area and adjoining deck.

The 0.55 Endura Maxx roofing was chosen for its longevity as the property is close to the sea. The roof is made up of 4 simple gables one of which bisects the building to form the upper story and entertainment hub of the house. The pearl aluminium joinery, from MD Aluminium completes the farm style aesthetics and offers a practical solution that compliments the interior creating an uninterrupted and seamless flow from the interior spaces to the exterior.

Directly to the rear of the house is the equestrian arena which has been specifically designed to allow panoramic views of all activities from the main living area and adjoining deck. Here is where the skills of Harrison Lane are evident, as Laura is able to bring her expertise to practical use in the design and construction of the arena. The stable has direct access onto the arena which is practical, safe and convenient. Laura says, “it’s great to have the stables and arena connected even if it’s just a line of sight for safety.”

The stables, that are virtually “part of the house” leave nothing out and are specifically designed to ensure the safety, comfort and well being of the owner’s 4 horses. The stable is designed to be well ventilated, safe, and a comfortable environment, and boasts a tack room that is finished with a polished concrete floor and natural stained plywood joinery that is in keeping with the house.

The stable is custom built and specifically designed storage for bridles, saddles and riding gear. Each stable opens onto a common grooming area with washdown facilities for both horses and riders. The stable is accessed by both internal and external stairs with the external stairs, from the deck above, providing additional covered storage.

The house has 4 self contained bedrooms with their own bathrooms/ensuites. One of the bedrooms on the lower level can accommodate 6 with 4 bunk

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The clever use of battens running longitudinally along the entire ceiling length of the open plan kitchen, living and dinning area, visually lead you to the balcony overlooking the arena.

This is a house that has considered every possible amenity to accommodate the owner, riders and horses

beds and one double. Two bedrooms are situated on the lower level and two on the upper level. All are well appointed with high end bathroom fittings, double glazed, Low E Soundstop laminate glass and marble tiles and all are of generous proportions giving a feeling of space that reflects the country lifestyle. The bedrooms on the lower level open directly onto the covered patio with the arena beyond.

The spacious entry has a polished concrete floor with white washed walls that gives a sense of lightness to the area with the floating stairway leading up to the central hub of the home.
The landing services both the main living area and the master bedroom. The timber floors on the upper level provide natural warmth to the predominantly white living area which features a single span pitched roof. The clever use of battens running longitudinally along the entire ceiling length of the open plan kitchen, living and dinning area, visually lead you to the balcony overlooking the arena. This accentuates the sense of space and light in what is already a very impressive space.

The kitchen has been custom made and the beautiful natural timber cupboards and a 3.2m island bench provide a further acknowledgement to the brief. Clean, sleek lines place this elegant kitchen and home firmly in the present.

The end of the living/dining area is completely glazed with the roof extending over the exterior deck to provide shelter from both sun and rain. A generous 2.2m tall, 9m wide double siding door opens directly to the deck with self-standing glass balustrades that allow uninterrupted views of the arena, students and farmland beyond.

This is a house that has considered every possible amenity to accommodate the owner, riders and horses but the details do not stop there. “The house is built to a very self-sustaining specification,” says Scott Munro, construction director for Harrison Lane. “The home has eco-friendly high R rated insulation, underfloor heating, the concrete flooring and patio areas provide a huge heat sink, the extended eaves are designed to capture winter sun and block summer excess, the windows and doors are all double glazed with Low E Soundstop laminate glass and the building is powered by 20 solar panels that charge two Tesla storage batteries. In addition to this the water is captured from the massive roof area and the sewage and waste water is captured and circulated to provide pasture and garden nutrients.”

Architectural designers Harrison Lane
The Master Builders Gold award and Lifestyle Awards are testimony to the skills offered by Harrison Lane. The company, lead by Laura Daly and Scott Munro, specialises in the development of rural lifestyle properties. Laura has a background in the equestrian community and is able to apply her skills to directly tailor making each property to the needs of clients.

Scott Munro provides a wealth of experience in the building industry and leads the construction team at Harrison Lane. Scott is also from a rural background and has a passion for building off road facilities for their clients to enjoy.

Harrison Lane are registered Master Builders and pride themselves on being able to offer clients a complete design and build package. Each home is specifically custom designed to each clients requirements making good use of natural materials, energy efficiencies and meeting a balance between aesthetics, function and budget.

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Roofing profile: 0.55 COLORSTEEL® Maxx® Corrugate
Colour: Flaxpod
Roofing Installer:
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NGA KERERU IN MARAETOTARA: A STRAWBALE HOUSE

Family and friends and other locals who were on their own journey in straw bale building, joined together for the traditional wall raising

Nga Kereru in Maraetotara, Havelock North was purchased in April 2016 by Andrew Tuck and Alessandra Menegon with a dream to develop a rural sustainable lifestyle. The couple were living an international life in Australia and Europe and wanted to settle back in NZ and create a more sustainable building and lifestyle.

The name Nga Kereru is aspirational and reflects the native forest regeneration planting programme started in 2017, with 2500 local native trees and shrubs which attract and support many native birds, planted so far at Nga Kereru. Nga Kereru is within the cape to city native bird corridor in the Maraetotara river valley. The Kereru is New Zealand's native wood pigeon.

As the concept developed to build a strawbale house with passive solar elements, the hunt was on for Alessandra and Andrew to find an architect and builder. After much deliberation and a few lucky connections, Alex Grieg from GreenHaus Architects and local builder Pat Mawson from Straw Home Hawkes Bay (www.strawhome.co.nz) joined the project team.

Pat Mawson is the current president of the New Zealand Earth Building Association. With over 10 years experience in straw and earth building. Greenhaus Architects has a philosophy that is based on the ecological building and design principles of the Building Biology and Ecology Institute and has been involved in several strawbale houses in NZ. Much of the initial design was done remotely with Alex in NZ and Peru, Andrew in England and Pat in NZ so with the help of Archicad 3d visualisations, Pat, Andrew and Alex were able to develop the design for Nga Kereru.

The site developed with services and connections being installed, taking advantage of the natural spring on site. By October 2018, Alessandra had moved to join Andrew in NZ and building consent was approved. Earthworks started for the caravan site, container site and the building platform and it felt momentous to finally being starting the build after so much dreaming and preparation.

The couple's detailed forward focus and experience in project planning saw them making early decisions on appliances and other fixtures and this saved time and costs as they were able to be 100% clear on the layout for the plumbing of the slab, electrical design and so on. Using ex demolition kitchen and pantry carcasses aligned with the sustainable building culture of the project.

The design team chose Kliplok® as a concealed clip fixed roof that offered visually clean lines and low long term maintenance. Made in Colorsteel®, Kliplok® Flaxpod® is safe to harvest rainwater. The extra long flashings were supplied by local supplier Stratco. The roof faces south to allow for maximum passive solar gain through the north facing windows. Solar panels will be incorporated at a later date in a ground or roof mounted installation.

Having the roof on meant protection from rain and so the straw bales for the walls were able to be delivered and stored under cover inside the house. Organising and confirming the supply of straw bales was nerve wracking as the quality of the growing season could impact heavily on the availability of straw bales and therefore the build process. Fortunately it was a bumper season in 2018-2019 and supply was found for 320 bales of barley straw from Matapiro Station, an hour's drive away.

Pat's experience in straw bale house building came to the fore with the creation and installation of moisture meters - a simple way of setting up a base line for conductivity inside the finished walls.

The moisture meters allow early warning of any issues and help give the consenting authority confidence. They would normally read around 8 - 12%. Moisture content of the straw would need to be well above 20% for a sustained period to support fungus and rot. The moisture monitors will be re-checked in the years ahead to monitor any significant changes inside the plastered walls. The response to finding raised moisture levels would be to identify the source of the moisture and ascertain how complex the fix may be.

As the strawbales walls are the outside walls and the internal framed walls, by design, hold all plumbing fixtures etc, it is not very different from a conventional building in terms of identifying and resolving any issues with moisture. Ideally, strawbale houses are not sealed with Latex paint or cement render and this keeps the building open and makes it easy for moisture to escape. In Pat's experience, even a flood resulting in 40% moisture levels in clay plastered straw walls dried out naturally, without need for intervention, returning to acceptable levels within a fortnight.

Family and friends and other locals who were on their own journey in straw bale building, joined together for the traditional wall raising where the straw bales are cut, laid and compressed into the house wall. In about 4 working hours they had completed raising the exterior walls – definitely a case of many hands making light work.

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The strawbale walls were built using timber frame “bucks” with strawbale infill topped with a perimeter plywood/timber box beam. The height of the beam is set so that the bales will be a tight fit and well compressed. The first 4 bales were fitted, hydraulically compressed using jacks and then stropped in place. This created space for the 5th bale to be inserted into the wall in a tight friction fit and the strops were then released.

The external 450mm thick strawbale walls were plastered with a 35-40mm base coat of clay plaster on both sides. The final lime plaster finish on the exterior is more durable and resistant to erosion and rain. The internal clay plaster finish is easier to work with than the exterior lime finish and has reported health benefits in terms of humidity control, is negatively charged and releases no toxins. In addition to the natural beauty, the plaster system is a great insulator for heat/sound, it is airtight but allows vapour to move in/out of the walls and last but not least it also adds to the thermal mass of the house. Repairs to the interior clay plaster and exterior lime plaster finishes are simple and Pat leaves his owners with a manual so they can affect any repairs that may be needed.

As the plastering work started, Pat’s skills as a practitioner for clay and lime plaster systems in NZ were invaluable. Sourcing the clay from a local properties and hydrated lime from a local quarry maintained the connection with the land and minimised the embodied energy of these materials. Mixing mud for the plastering process is very labour intensive but was aided by the use of a plaster mixer/pump.

The house build has also established a canvas for art work. The first art installation was the creation by Alessandra and her friend Vicki Campbell of a beautiful stylised cabbage tree cob relief on the western wall that greets all visitors to Nga Kereru.

As the exterior clay plaster on the straw bale walls continued to dry, Thermadura shipped in all of the passivhaus certified timber exterior joinery, high performance glass and hardware from Germany and assembled it in their Mosgiel factory in New Zealand, before delivering it to the house site. Nga Kereru was built to the passivhaus principles of comfort all year round, energy efficiency and quality assurance and so the European profile, tilt and turn solid wood, high spec (U and R value) glazed doors and windows were critical for the house design to work.

The design brief tested the limits and the sliding door units are the tallest ever built by Thermadura, and the overhead windows are top instead of bottom hung to provide for maximum opening with the ceiling raked at 25 degrees. The team at Thermadura supported Nga Kereru every step of the way with good advice, clear boundaries on what was and wasn’t possible and then delivering on quality. The large slider frames were manhandled into place rather than hoisted to prevent damage to the frames, and Vitali from Thermadura then glazed and these units on-site.

Whilst the exterior of the house was being plastered, Terralana wool ceiling insulation was being installed in the ceiling to provide an R8 insulation rating. Being an organic material, Terralana helps store moisture from inside the house until it can evaporate off at a later stage.

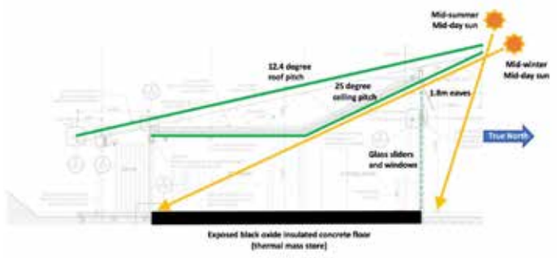
The ply ceilings have industrial style exposed nail heads, which means a lot of time and care was taken in marking and then neatly nailing them off. The design of the west of the house incorporated a diaphragm ceiling with a huge number of nails, for example to put up just 1/3rd of the garage ceiling more than a thousand nails were used - there were some harsh words from time to time for the engineers who specified the nailing pattern.

The addition of wing walls to the front of the house and closing it in with the exterior cladding transformed the look of the house.

The wing walls are a mix of form and function; they break up the front of the house, providing some degree of privacy (or a least the feel of separation) and they help manage unwanted solar gain on the north facing glazing from the morning sun (east) and most importantly evening sun (west) in the summer months without significantly effecting views or reducing desirable solar gain in the winter months.

With great teamwork from the builders Pat and the RM strawbale team of Nils and Everett and the other trades, Bob and Geoff on electrical and Kenny (NZ master plumber of the year 2019) by July 2019, Andrew and Alessandra were able to move from their on-site caravan into the self-contained B&B flat within the main house - just 10 months from first breaking ground! Work progressed on completing the remainder of the house and they were able to move into the full house in October 2019. The oiled plywood soffits were finally added (the soffits were left to last to prevent marking from over spray from plastering the walls) and the cabbage tree artwork on the western wall of the house, inspired by another of Pat’s strawbale home builds, looks fantastic with its lime plaster finish coat.

The passive solar design developed with Alex from GreenHaus Architects has worked well in practice. The Northern soffits were designed with a 25 degree angle which is an extension of the interior ply ceiling as though it had swept through the walls and carried on out of the house. The 25 degree angle is the angle of the mid-winter sun at midday, so maximising the passive solar heat gain inside the house in the cooler months. The big, almost 2 metre, eaves on the North of the house allows for the angle of the summer sun, minimising passive solar heat gain inside the house in hot weather. In summer, cooling the thermal mass at night keeps the house cool during the day.



At the time of writing this article, the house build has just been completed including the kitchen with its beautifully recycled cabinetry and refurbished mismatching chairs, the sgrafitto moon-kereru artwork in the main bedroom and the sgrafito and linseed oil toe toe in the toilet.

Final finishing work on the exterior is being completed, with the front decks now built and landscaping around the house and restoration of the driveway underway.

The view from the main entry pathway of the rear deck and pizza oven is inviting, and this entertaining area was put to hard work with various celebrations during the course of the project, and creates a relaxing place to enjoy a quiet evening’s relaxation with friends.

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www.greenhausarchitects.co.nz
Roofing Manufacturer:
Steel & Tube Roofing
Telephone: 09 274 4056
www.steelandtube.co.nz/
Roofing Profile: Kliplok® in COLORSTEEL® Flaxpod®
Roofing Installer: Pat Mawson, Andrew Tuck

WALKER ARCHITECTURE: INTELLIGENT BY DESIGN

When Ngai Tahu approached Walker Architecture in Christchurch to design a new building for PGG Wrightson (one of their key tenants,) it represented both a remarkable opportunity and challenge for both architects and structural engineers.

PGG Wrightson Seed in Christchurch were in a temporary building in Hornby, after their previous building collapsed during the 6.2 magnitude earthquake on 22 February 2011. The earthquake was centred 6.7 kilometres south-east of the Christchurch city centre causing severe damage, especially in the central city and eastern suburbs.

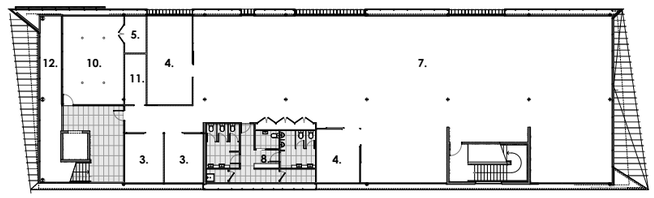
Christchurch inhabitants were still reeling from the effect of the 7.1 magnitude earthquake on 4 September 2010, and buildings and infrastructure were already under pressure. The eastern suburbs were affected by significant liquefaction, producing approximately 400,000 tonnes of silt. This project was therefore an ideal opportunity to design a venue specifically purpose built to the needs of the occupant and local environment.

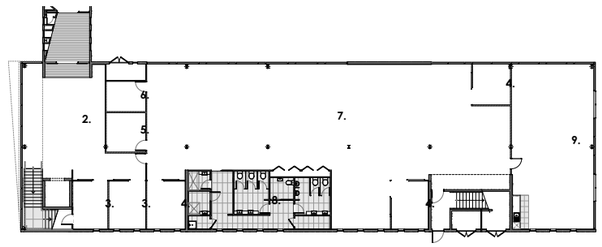
Walker Architects worked closely with PGG Wrightson Seeds and Ngai Tahu, site-owner, to create a tailor-made building on the south east corner of the Springs Road / Gerald street intersection in Lincoln. It is adjacent to the university and forms part of the AgResearch Centre campus.

The nature and shape of the site and the building platform dictated a building that had to be a long rectangle, two stories high. The architectural response provided a strong linear form parallel to the street (Springs road) boundary. The building envelope is deliberately exposed, simple and continuous, making the roof a seamless feature of the overall building. There are no penetrations from either the plant or venting on the roof with all the plumbing and ducting concealed in the soffits.

The contrasting external treatment of the two vertically stacked volumes reduces the visual weight of the building. The black upper storey seems in suspension over the light filled transparency of the base level. This sense of contrast is further accentuated by the smooth glazing in contrast to the textural quality provided by the standing seam cladding above.

On approach, the subtle complexities of the upper level unfold. The metal ribs of the exterior walls continue to the roof line accentuating a sense of the exterior architecture wrapping around the internal spaces. These fluid lines are virtually uninterrupted by roof penetrations and guide the eye up, over and down. With both ends fully glazed the unique facetted detailing leads the eye into the upper level of the building emphasizing its tubular form.





The roofing and finishing presented some interesting challenges to achieve the finish the design demanded. Collaboration with the roofers, builders and designers found a solution using Colorcote

Walker Architecture strive for exceptional outcomes and architecture of the highest standard

The metal ribs of the exterior walls continue to the roof line accentuating a sense of the exterior architecture wrapping around the internal spaces.

Zinacore and Prefa Aluminium in the same Tarc Tray Single Lock Standing profile.

The design teams choice of completely contrasting colours, materials, and textures from the ground to the first floor provides further separation. Natural, smooth, sealed concrete panels and full height glazing to the ground floor complement the first-floor walls and roof in Colorcote Lancewood with the standing seam providing texture.

Material
The main walls and roof are all clad with TARC TRAY Single Lock Standing Seam in Colorcote Zinacore, Lancewood.

Because the Zinacore cladding was too difficult to facet in multiple directions, the feature walls on the first floor were clad in TARC TRAY Single Lock Standing Seam in Prefa P10 Black Aluminium. The soffits are also clad in Tarc Clad Flat Lock in Colorcote Zinacore, Lancewood and the rainscreen panels behind the fins are made from 2 mm aluminium Pe2 panels with a powder coat finish.

Walker Architecture
A multi-award-winning practice, bringing decades of collective experience to the table. Even if you haven't worked with Walker Architecture yet, no doubt you'll recognise their many buildings around Christchurch, not to mention the iconic homes dotting the suburbs (and beyond).

Architecture can be intimidating for those not in the industry. Walker Architecture is different as there is no confusing industry jargon and no pedestal. Its all about making the process relaxing and enjoyable. When you visit, you'll find yourself in a warm and welcoming place.

Getting the highest standard of design out of any budget is a relished challenge and a promise. Designing to the budget is a discipline they are proud of without encouraging unachievable aspirations for clients

Passionate about the people who work for them and with them. A close-knit team led by Jason Walker, a life-long Architectural Designer who has designed dozens of homes and commercial buildings, including Christchurch's new Press Building and the HSBC Tower.

Above all Walker Architecture strive for exceptional outcomes and architecture of the highest standard – while taking time to have fun along the way

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Roofing /Cladding Installer:
Architectural Roofing Company
Cladding and roofing Profile:
TARC TRAY Single Lock Standing Seam in Colorcote®
Zinacore
Colour: Lancewood.
Feature Wall: TARC TRAY Single Lock Standing Seam in Prefa P10
Colour: Black Aluminium.
Builder/Main Contractor:
Hanham Philp Contractors
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http://www.hanhamphilp.co.nz

GUTTER AND DOWNPIPE DESIGN

We often hear about internal gutters flooding. This is not because they are inherently unsafe, it is because, using the Acceptable Solution, they are designed to fail!

On 1st November the updated Code of Practice section on Roof Drainage was released. This was the most challenging section we have tackled in the current V3 revisions
Normally we try and parallel the Acceptable Solutions closely, and focus on offering solutions for situations not covered by the Acceptable Solution. The reason for this is that were we to disagree, if someone followed the COP and it disagreed from the Acceptable solution, we could lead them into a dispute with the TA that they may not win. So, where we can live with it, we sometimes concur with an Acceptable Solution even where we believe it is overly conservative.

But Roof Drainage is different, in this section we are far more conservative than the Acceptable Solutions. Try as we did, we simply could not justify publishing gutter and downpipe recommendations in compliance with E1/AS1, as we believe them to be dangerously unconservative.

Why we differ from E1/AS1

So why are we different? Our major points of difference are:

■ **Average return interval**. The Building Code says that buildings must have less than a 2% probability of flooding. That requires using rainfall intensity with a return period of 50 years. Yet the charts in E1/AS1 are for a 10-year return period.

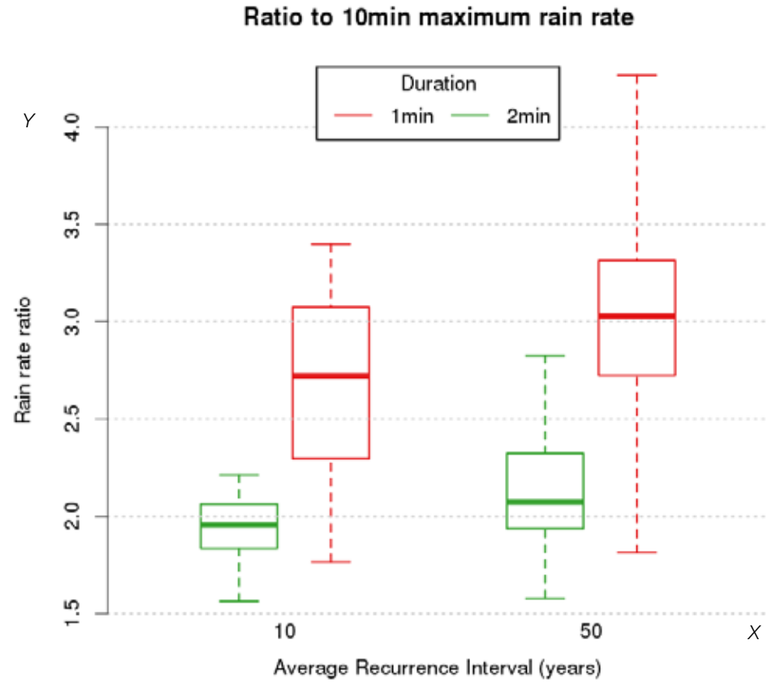
The COP uses the 50-year ARI figures; depending on location that is a difference of close to 40%.

5.6.3A COMPARISON OF 10-YEAR AND 50-YEAR RAINFALL INTENSITIES

■ **Short term Rainfall Intensity**. E1/AS1 uses the maximum intensity over a ten-minute period. That may be fine for ground drains where flash downpours take longer to reach the drainage channel, but is inadequate for roofs, where flooding can occur in less than 1 minute.

Graph 5.6.3.1A shows the difference between 1-minute and 2-minute intensities, compared with the 10-minute intensity used in E1/AS1. The horizontal line shows the median, the box represents the upper and lower quartiles, and the dotted line the complete range. It shows that a 1-minute intensity can be as much as 4.3 times the intensity over a ten-minute period.

5.6.3.1A COMPARISON OF 10-MINUTE PUBLISHED INTENSITY WITH 1-MINUTE AND 2-MINUTE INTENSITIES



The COP calculator uses 10-minute intensities, because that is what is readily available, and applies a short-term intensity multiplier to convert them to a shorter-term intensity. For instance, for Residential Internal it defaults to a multiplier of 3.1, designers can opt to increase this if the risk of a 50-year flood cannot be tolerated, but it cannot be reduced. Industrial Internal defaults to 2.2, as on most commercial sized jobs the travel time of rainfall will be closer to 2 minutes. External gutters have various factors depending on the assessed consequence of occasional overflowing.

All the above variables are interactive, you can make the changes on-line and see what effect they have on allowable catchment areas.

The above two inconsistencies alone account for much of our divergence, but there are others. So, this time we followed our own path, and with the help of expert advice from Opus, have published our own solutions. These are consistent with the Standard AS/NZS 3500 but employ worksheets to simplify the calculations contained in that complex document.

If all you want is a design that merely complies with the requirements for a consent, use E1/AS1, but if you desire a design that won't flood, consult the COP.

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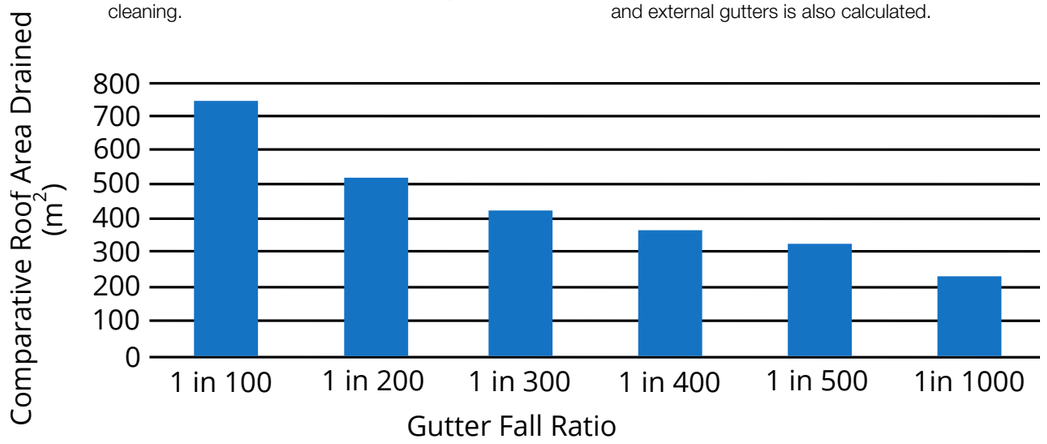
The heart of the COP section on Roof Drainage is the capacity calculator.

The COP offers More Options

The COP recommendations also offer more options in design criteria than E1/AS1.

■ **Gutter Fall** The COP calculates capacity of internal gutters with different degrees of fall, this has a big effect on capacity. E1/AS1 has no minimum fall for internal gutters, E2/AS1 minimum fall must be 1:100 (10 mm per metre), which is often unachievable. The COP has a minimum fall of 1:500, but allows designers to calculate the extra capacity they can achieve by increasing the fall. The COP recommends a 1:200 fall (5 mm in 1 mm), as it will improve drainage and self-cleaning.



■ **Freeboard.** Again E1/AS1 and E2/AS1 disagree. E1/AS1 has no requirement for freeboard on gutters, in accordance with E2/AS1 the COP has minimum 20 mm freeboard for internal gutters. Valleys have a minimum 15 mm freeboard, 20 mm for gutters at less than 8°.

■ **External gutters**. It gives options for external gutters with and without overflow.

■ **Internal Gutters.** It calculates the effect of the wetted area on water flow. The less wetted area the freer the flow, the optimal ratio is width = 2x height.

■ **Valleys.** It gives maximum catchment for common valleys at pitches other than the minimum pitches given in E1/AS1. The capacity of custom-sized valleys can also be calculated.

■ **Downpipes**. The downpipe capacities are variable according to the rainfall intensity of a location, and options are given for downpipes with and without overflow.

■ **Rainfall.** The COP gives the ability to calculate capacity in areas where rainfall intensity is less than 100 mm/hr. This particularly affects much of the South Island. The effects of 90° bends in internal and external gutters is also calculated.

Interactive Worksheet
The heart of the COP section on Roof Drainage is the capacity calculator.

We still have some tables in the COP, but accurate design is most easily achievable using the interactive worksheets, which calculates roof area drainage capacity of a specific system.

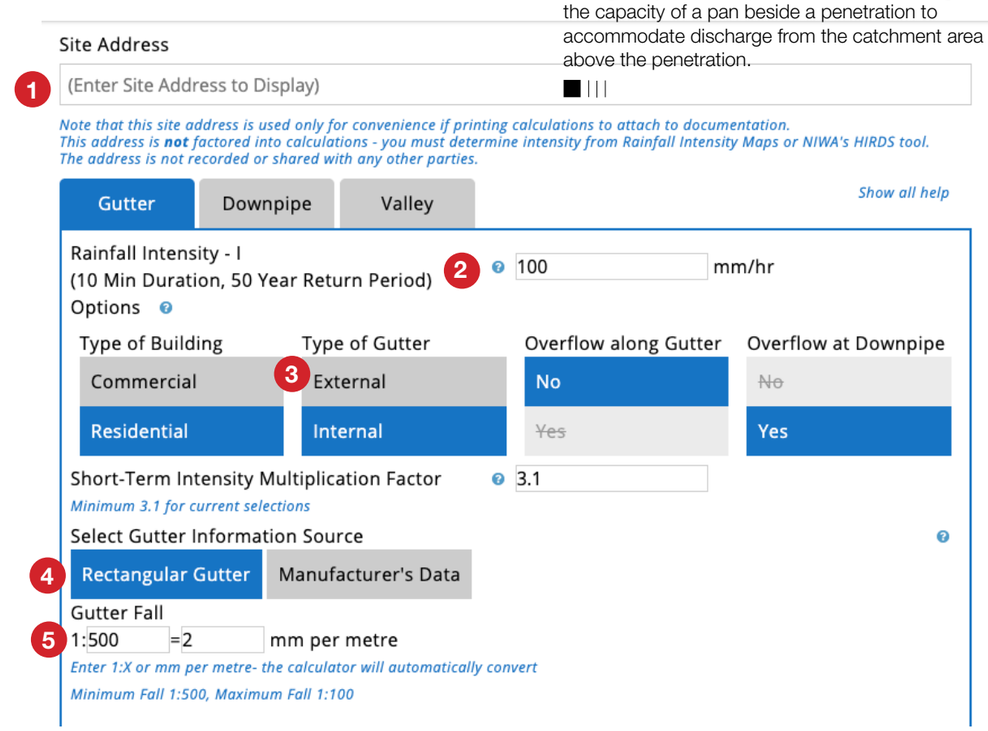
Worksheets can be printed or electronically attached to a consent application.

The following inputs are required:

1. Enter site address, and select gutter from the tabs
2. Enter 50-year 10-minute rainfall Intensity. This can be taken off maps provided, but is more accurately given on HIRDS website. Do not use the E2/AS1 maps, they are outdated and are only for 10-year return period. https://hirds.niwa.co.nz/
3. Enter type of gutter. This effects pre-set minimum factors such as short term intensity.
4. Enter gutter shape. This can be dimensions of a folded rectangular gutter or manufacturers data (cross-section area and wetted surface) for proprietary spouting.
5. Enter gutter fall. This defaults to 1:500 (2 mm/m) and can be increased up to 1:100 (10 mm/m).
   The maximum catchment for the design is then given. If the design catchment exceeds this, gutter design, slope, or catchment area can be altered to find a working combination. Similar inputs in downpipe and (if required) valley calculations can be entered, for which the rainfall intensity input on the gutter sheet is retained.
6. The site details are retained when the Downpipe and Valley tabs are subsequently selected.

The worksheets can then be printed or electronically attached to a consent application.

Future Development
For the next update we will be extending this worksheet to provide maximum length of run for a given profile and pitch, and for calculating the capacity of a pan beside a penetration to accommodate discharge from the catchment area above the penetration.



NZ STEEL LAUNCHES INAUGURAL COLORSTEEL® AWARD 2019

New Zealand Steel has designed the COLORSTEEL® awards to elevate pride & professionalism in the roofing and construction industry. The COLORSTEEL® Awards will recognise the industry's best roofers, as well as highlight innovative design across the country.

The judging criteria.

This year's judging panel was carefully chosen based on outstanding experience in the roofing and construction industry. Using their wealth of knowledge, the judges chose winners based on a fair evaluation across all criteria.

These criteria vary from category to category. Overall, the judges were looking for:

- Creative design and innovative use of COLORSTEEL® products
- Complexity of project(s)
- Environmental considerations
- Excellent workmanship
- Outstanding health and safety practices
- Remarkable leadership.

Hosted by New Zealand Steel,the Awards consist of three categories: Building of the Year, Roofer of the Year, and Young Roofer of the Year.

Category criteria:

COLORSTEEL® Building of the Year
In this category, the judges look for creative design and innovative use of COLORSTEEL® products. They consider the function and form of the building design, as well as the impact the building has on the surrounding environment.

COLORSTEEL® Roofer of the Year
In this category, the judges look at the roofer's workmanship, health & safety practices, customer service and communication, ability to solve problems, and leadership skills. As well as the complexity of the roofers past projects and how the individual has impacted on the industry.

COLORSTEEL® Young Roofer of the Year
Similarly, to the 'COLORSTEEL® Roofer of the Year' award, judges look for excellent workmanship, tenacious problem solving, the willingness to go the extra mile, great customer communication, leadership and an impeccable safety record.

The 2019 judges were:

New Zealand Steel Chief Executive, Gretta Stephens; Roofing Association New Zealand Chief Executive Officer, Graham Moor; Roofing Expert, Rod Newbold; The Block NZ Site Foreman, renowned media personality and builder, Peter Wolfkamp; and Director of Crosson Architects, Ken Crosson.

The winners in each category were named at the COLORSTEEL® Awards on 8th Novemeber 2019, celebrating roofing excellence across all categories

Wainui Construction
Building of the Year
Congratulations to Wainui Construction, our 2019 COLORSTEEL® Building of the Year winner. This innovative commercial development by Wainui Construction was a worthy winner.
Wainui Construction's Two Sheds in Raglan takes home a $25,000 prize.

Matthew McDougall
Roofer of the Year
The 2019 COLORSTEEL® Roofer of the Year Award went to Matthew McDougall from The Roofing Company Canterbury. Matthew's attention to detail, passion for the craft and ability to execute a difficult project meant he took home this prestigious award. Congratulations. Matthew was the winner of the COLORSTEEL® Roofer of the Year for his work on the Dagg residence and won a $25,000 travel voucher.

Vaughan Cook
Young Roofer of the Year
Vaughan Cook, the 2019 COLORSTEEL® Young Roofer of the Year winner. Vaughan has set the standard for future contestants. Congratulations on your great achievement. Vaughan, of Cowperthwaite Roofing Limited, based in Auckland takes home $10,000 cash.

New Zealand Steel's Chief Executive, Gretta Stephens, is thrilled to have gathered industry experts and enthusiastic up-and-comers to celebrate success and excellence.

"Congratulations to our winners and all of our finalists. It was fantastic to bring everyone together and facilitate conversation between industries and individuals in different stages of their careers."

"We hope these Awards can grow and offer roofers the opportunity to really celebrate their work. We want to see the roofing industry recognised for the innovative designs we see from across the country."

For each category, entrants may nominate themselves or be nominated by their employer. Entrants are invited to enter as many categories as they are eligible for.

For more information on the Awards and how to enter please visit: https://www.colorsteel.co.nz/awards/

BUILDING THE SAME AGAIN – BUT DIFFERENT

The location chosen was heavily based on the view which provides 360-degree views that stretch over valleys, a range of rocky mountains and across to the McArthur Ridge vineyard with its changing seasonal colours.

A few years back, Ian and Linda Gare built a home they loved, but hankered to build again - making some subtle changes but using the same basic layout. Their new home in Golden Road, 10km from Alexandra in Central Otago, has incorporated features they spent a lot of time thinking about and revising before locking in an architect to draw up the plans to include these new ideas.

The four-bed home sits on an elevated site on a 26-acre block owned by Ian's parents, on which they grow winter feeding crops – namely Lucerne. The location chosen was heavily based on the view which provides 360-degree views that stretch over valleys, a range of rocky mountains and across to the McArthur Ridge vineyard with its changing seasonal colours.

A large part of the design was based on encouraging passive heating during winter so there is a large proportion of glass on the north face of the house with large eaves stretching out over the four bedrooms. This draws the sun deep into the home over winter with none coming in throughout what are normally very warm summers.

Ian says their aim with the new plan was to open up the view and create outdoor areas in harmony with this theme. Location on a lifestyle block has allowed the Gares to have freedom in the design with the space and privacy to achieve this. Ian primarily designed the house himself but worked in collaboration with Nathan Shearing from Fat Hippo Design Group in Invercargill.

A major change is that the second lounge and garage are now incorporated into the main house whereas before they had been separated from the house. The entrance to the home also merits a change from before with Corten steel wrapped around the fascia of the flat roof that comes out from the front door and another opposing wall has Corten steel in an attractive grid pattern.

Linda and Ian have introduced far more colour to the interiors this time round: there are various American white oak features and the flooring consists of vinyl planking over concrete so not quite so harsh in texture for the main living areas. While they were restricted on the exterior to choose colours in harmony with the environment, inside the home wider use of colours such as Resene's Tuna and St Kilda have been an exciting exercise for Linda in particular.

▶

Location on a lifestyle block has allowed the Gares to have freedom in the design with the space.

The Fat Hippo Design Group
Established over ten years ago, partners Martin Gvardijancic and Nathan Shearing first met in South Africa but are now based in Invercargill, Kerikeri and Queenstown providing professional, cost effective solutions for clients' design requirements.
Nathan grew up in Southland and trained in engineering and architecture before moving to Auckland to indulge his passions of design and sailing. This expanded to working in Asia, followed by a four- year trip around the world, mainly based out of Ireland. Nathan returned to New Zealand in 2001 and worked in a multi-discipline office before establishing The Fat Hippo Design Group with Martin who studied architecture in Slovenia and operated there for a time before discovering the distinctive styles of Central Otago while living in Queenstown. Martin is now based with his family in Kerikeri

As Operations Manager for Placemakers in Alexandra and Cromwell, Ian has been in a key position to explore the different ideas, plans and concepts coming through the trade with many different products and finishes to choose from. This time the Gares sought inspiration over a wider field and the roofing on the new home is a case in point.

Dimond's Black Zinacore DP955 was the profile chosen for both the walls and roof of the new home. Ian hadn't seen this profile used as a wall cladding before but since they were looking for something different to Corrugate or Veedek, they are loving the tray-type look without the associated cost.

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Main Contractor:
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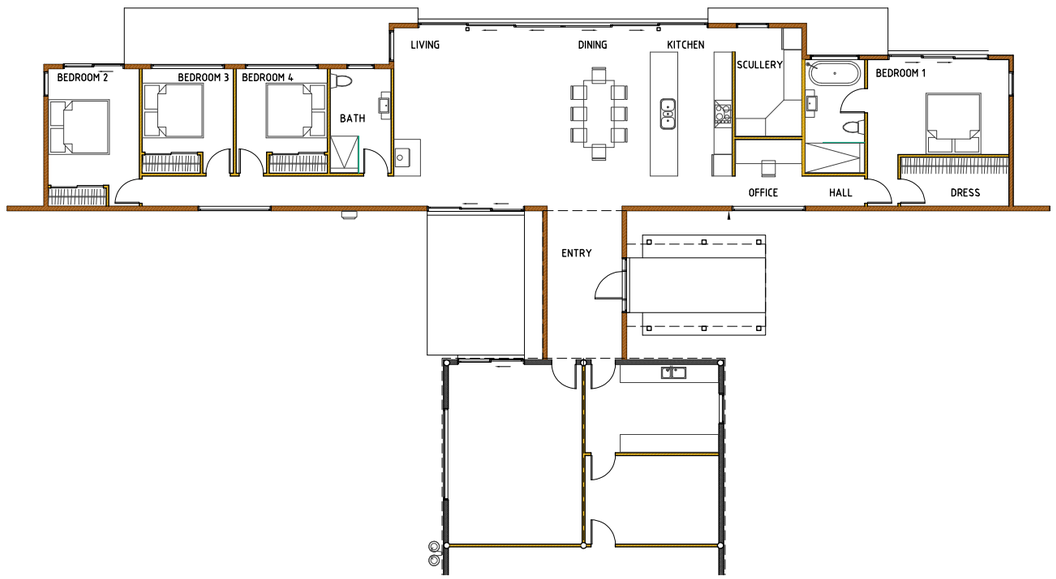
shirley.howden@codc.govt.nz
www.aworldofdifference.co.nz
Roofing/Cladding Manufacturer:
Dimond Roofing
Telephone: 0800 346 663
www.dimond.co.nz
Profile and Colour: Black Zinacore DP955



Steve Haines: PCC

COMMUNITY PROJECT ROOFING INDUSTRIES AND PCC

PCC and Roofing Industries considered this small communities efforts exceptional

It is well known that New Zealanders give generously to worthy causes, although they often don't talk about the near $3 billion a year they give to trusts, foundations and charities. Then there are the smaller, locally-promoted fund-raising efforts in communities around the country. When the need arises, Kiwis rally to support local causes - a great example of this generosity took place in the Taranaki settlement of Tarata, 18km inland from Inglewood.

A rural community of just 70 families, the residents of Tarata have demonstrated on many occasions their willingness to raise money for local causes – the latest being the need to re-roof the hall which had been leaking for over 20 years.

The hall was built in 1904; the tender accepted was for 159 pounds and ten shillings, later revised to 172 pounds. The timber was milled locally (red pine with matai flooring, totara piles and heart rimu in the roof structure. The hall opened in 1905 but since then extensions have been added in 1980, 1983 and 1986.

The hall is at the heart of the community and is the chosen venue for pot luck dinners, family celebrations, winter exercise groups, women's institute meetings and flower shows. However ever since the early 1980s the hall has suffered from leaks related to an extension performed by locals.

Two years ago, a dedicated committee swung into action, their efforts so impressing NZMRM members, Pacific Coilcoaters and Roofing Industries, that an approach for assistance could not be ignored.

With $25k in the kitty, which included a grant of $4,000 from New Plymouth District Council's rural hall fund, the target for the likely cost of the re-roof of $60k still seemed a way off. Following a car rally this year, some discussions took place around how to achieve the re-roof and committee member Shelly Worthington contacted some rollformers. At some point the request filtered down to Steve Haines at PCC and then to Paul Ross at Roofing Industries who were "completely impressed" by the way this small, rural community had worked so hard to raise the dollars needed.

While continuously being approached to donate product from a variety of sources, both PCC and Roofing Industries judged the efforts of this small community to be exceptional. To this end, PCC donated coil and Roofing Industries Central Ltd rollformed the New Denim Blue Zinacore .55 BMT True Oak Corrugate product for the roof, colour matched to the material used on the church roof.

▶

Bryan Hocken the "unofficial" mayor of the local community

The ladies from the "Hall Committee" with Paul Ross, Roofing Industries, giving a thumbs up for a restoration job well done

The entire Tarata community attended an evening to celebrate the new roof

Farnsworth Roofing, the chosen roofing contractor for the reroof, also stepped up and discounted their contribution.

Seventy families live in Tarata, and over time and with persistence they have actively raised funds to restore and reroof the local church - completed in 2015 - before turning their efforts to raise money for the badly leaking hall. Events have ranged from an adventure race and a horse trek to selling ice blocks to 800 car enthusiasts during an American classic car event in February 2019. Perhaps their hardest endeavour was picking and selling over 2.6 tonnes of feijoas – picking every two days for six weeks. The committee even managed to sell off some old roofing iron.

Hospitality Tarata style

As only a rural community could demonstrate, the entire Tarata community attended an evening to celebrate the new roof with official ceremonies and tables laded with homemade food from all members of the community for the MRM member companies involved in the re-roof along with installers Farnsworth Roofing (Darin Voight and his staff). Local sheep farmer and agri-engineer Bryan Hocken, along with the North Taranaki District Mayor, Phillip Holdom and local National MP, Barbara Kuriger along with Steve Haines and Paul Ross made speeches, Steve speaking in particular of the emotional phone call received from Shelly at news of the material to be donated.

In addition to the"main event" members of the team were extended excellent hospitality and accommodation at the Croft owned by Paul and Julie Dravitzki. A beautifully restored,100 year plus, homestead set in picturesque ,well maintained, gardens. The Dravitzkis proved to be excellent hosts providing a generous country style breakfast...a highly recommended destination for anyone wanting to get-away for a relaxing, peaceful break.

Local landmark

The Tarata Tunnel was a feature during this year's American Classic Car rally when ice blocks were sold to 800 enthusiasts during the fund raising for the hall. The Tarata (Otaraoa Road) tunnel was dug in 1904, the same year as the hall was built, its purpose being for people to get to the valley from Waitara/North. It is about 30 metres long.

Another tunnel, the Graylings stock tunnel is near the top of the Tarata Saddle and this section of road was known as the ZigZag in the old days.

Mr WG Grayling owned both sides of the sharp ridge near the top of the saddle and to get his cows back to the day paddocks he dug the stock tunnel through the ridge. He brought the cows back through the tunnel for milking.

A walk is being planned by the Endless Step Club in February 2020 to mark their 20th anniversary. Older members plus some newer ones will be walking eleven traffic tunnels and eight stock tunnels throughout Taranaki and walking between each one, a journey expected to take three weeks.

Also happening in 2020 is the Tarata Valley Trek – two nights, 1.5 days of trekking – walking, horse riding or mountain biking - with all food provided and a live band on the Saturday night. For more information go to:

www.facebook.com/events/461184861103814

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