



Below is a brief introduction to the 2006 executive of The NZ Metal Roofing Manufacturers Inc. It is intended that Scope be representative of the industry and therefore material of interest is welcomed from all sectors of the building industry be it design, research, manufacture or construction.



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SCOPE

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With a career spanning thirty years, specialising in commercial buildings, Alan Palmer's design flare, experience and empathy with the ever changing commercial development is positively huge. His attention to detail and the use of a variety of materials, in combination with metal claddings, caters for individual identity, functionality and variety of the occupant's business. The accent, for Alan Palmer, in this market sector is designing for sustainability. In the following article he shares his insight on the dynamics of commercial design with a variety of examples from his extensive portfolio.



Whilst considering the

content of this article I became aware of the differences in the dynamics of the design and construction phases of the building process

between commercial and industrial projects and some other types of building.

A residential or institutional type project tends to be fairly static in its design dynamics. The design solution is a response to a specific brief provided by the client, who usually has definite ideas of what they want or don't want, and to the particular features and constraints of the building site, aside from compliance issues, which are common to most building types.



In the commercial field numerous parties can be involved, each operating with a different agenda in relation to the project. Any one of, or all of, these parties may, and often will, have an influence in the decision making process in the design and construction of a commercial building.

One of the aspects of designing buildings of this nature, being buildings for business, reflects the evolution of that business so the building requirements vary. This is also true of other building types but I believe is more so in the commercial field. As businesses grow, take over other smaller companies, retrench or refocus their activities in different areas, so their building needs change. More or less space may be required, company identities morph over time as takeovers and mergers occur.

As more companies lease rather than own the buildings they occupy, the building ownership may also change. Add to this the fact that many buildings are often commissioned by developers, whose objectives in the process are often at variance with those of the investor or the end user or occupier, and a extremely dynamic process exists which can make life interesting for the architect.

Having specialized in this type of building over a period of some thirty years and having witnessed and been involved in the evolution of many buildings to the specific requirements of new occupants or owners. It has been evident that aside from the obvious aspects of architectural design, which are usually to achieve attractive, efficient and cost effective buildings, which are safe and user friendly for the occupants, another important and usually unstated design criteria is flexibility. Flexibility to accommodate evolving needs.

In commercial building terms:

Designing with site area capable of accommodating future growth, either in floor area, staff numbers or both.

Emerald Foods main entry to their office complex combines aluminium panels, stone and Zincalume® which is effective and cost efficient.

Designing to enable aggregation of initially separate tenancy units into larger units to enable floor area to be increased or to subdivide larger areas into smaller tenancy units incorporating self contained office and amenities facilities.

Designing to provide the ability to subdivide initially single ownership multi-tenanted developments into unit titled separate ownership units enabling part of a larger development to be sold or refinanced.

Designing with the potential to accommodate changes of use.

In other words designing for sustainability.

TYPICAL PALLETTE OF MATERIALS:

Building materials used in most of the buildings featured have been selected with the criteria of attractiveness, durability, quality and cost effectiveness. Large roof areas utilize roll-formed lightweight Zincalume[®] steel roofing and external wall areas similar rollformed Colorsteel® metal cladding

Roofing generally is 0.55 mm deep profile trapezoidal section over double sided foil insulation on galvanised wire netting on cold rolled galvanised steel purlins. Translucent rooflight strips are matching in profile to the roofing material.

Wall cladding is 0.40 mm medium profile trapezoidal section Colorsteel[®] on cold rolled galvanised steel girts. Gable and eaves cladding is 0.40 mm corrugated profile Zincalume® steel on timber framing. The horizontal break between wall and gable areas is intended to reduce the mass of the gable end of the building which is usually facing the street and to mitigate the "shed" look which would otherwise be apparent.

Office façades are clad predominantly with prefinished composite aluminium panels fixed









Zincalume® products have been put to a variety of creative uses from entry shelter and security to privacy for courtyard areas.



over fire retardant breather type building wrap on timber framing. Panels joints are sealed with Silicon sealant.

Small areas of selected stone veneer are utilised at some entries to provide a feature material in relatively small quantities to achieve maximum cost effectiveness and yet achieve a high quality appearance with low maintenance. Other feature materials used in detail areas include curved corrugated profile Zincalume[®] canopy roofs on roll-formed, zinc spray finished, steel pipe frames; corrugated profile perforated Zincalume® screen fence infill panels on galvanised steel pipe frames and shiplap profile clear finished Rimu boarding to entry canopy soffits.

EMERALD FOODS LTD.

Emerald Foods is a typical example of the evolution of a project. Initially designed as a front site, spec. development commissioned by Synergy Properties Ltd. A general purpose spec. building of 2,547 sq.m was designed to achieve approximately 57% of the ultimate site development potential with emphasis on quality in both design and construction. This created the potential for either securing a sale or lease of the initial unit to a company looking to provide for future growth or enabling a second unit to be built on the remaining undeveloped site. The building was bought on completion by a family trust and leased to Chateau Ice Cream Ltd. who had secured the licence to manufacture Movenpick ice cream in New Zealand in addition to their own Chateau product range. The initial shell building was then fitted out to accommodate the new production facility, a warehouse area for storage of packaging materials etc. and the addition of a 977 sq.m freezer store with an environmental load out facility. The planning, design and construction of the fit out and freezer extension was completed within 6 months. Subsequently Chateau Ice Cream Ltd. was sold and the company is now Emerald Foods Ltd. Recently the freezer area has been almost doubled to 1,884 sq.m.to service increased export production.



STIHL NZ LTD.

The commission for the design and construction of new headquarters for Stihl NZ Ltd. came by way of the exposure and recommendations generated by other previous high profile projects such as Yamaha and Movenpick and is one of the most recently completed projects. Designed in conjunction with the German based chief design engineer responsible for overseeing all company projects worldwide, the building is the most highly spec'd project undertaken to date and has received very favourable comment from management, staff and visitors. The building accommodates showroom, administrative offices, training room and acoustically insulated workshop, meeting rooms, staff amenities and high stud warehouse incorporating the latest



computer operated spare parts carousels for high efficiency picking and distribution of parts orders. The site area will allow for future expansion of the warehouse area, which is fully insulated. The building is designed to cater for all potential means of transportation of products, both inward and outward, incorporating a ramped truck dock with scissor lift and dock leveller bays, as well as side loading and end loading level entry doors.



TURNCO ENGINEERING LTD.

The brief for the project encompassed the design of a total site development concept, maximising the development potential of the 6,836 sq.m site. Buildings were to incorporating a new factory, administrative offices and staff amenities for Turnco Engineering Ltd. totalling 1,750 sq.m in area, as well as a future warehouse for steel storage and a second separate tenancy unit initially for lease and for company expansion in the longer term. The initial office and amenities facilities have been designed to allow for the addition of a future first floor to accommodate expansion of the offices and amenities. To service the proposed future site development, 75 carpark spaces will ultimately be provided.

The nature of the work undertaken by Turnco Engineering Ltd. necessitated heavy duty, high capacity material handling equipment covering the entire area of the factory floor. The scope of work included design and installation of two gantry cranes running the full length of the factory area. The main gantry hall houses a 15 tonne capacity crane and the lean-to roofed side hall is served by a 5 tonne crane.

The main gantry hall component of the building, housing the 15 tonne gantry crane was purchased by the owners, dismantled and transported from Huntly to the Takanini site. The portal frame columns which were originally 7.0 metres long, were lengthened by 3.0 metres to increase the maximum hook height of the crane to 8.0 metres. Each column sits on a 2.5 metre x 1.5 metre x .5 metre reinforced concrete foundation pad and is stiffened by concrete encasement to a height of 3.0 metres above floor level.

The greatest challenge in the project was to design sliding doors which would allow the main gantry crane to travel out beyond the front end wall of the building to allow for loading and unloading of equipment in the front yard area. This was achieved without a top guide track by cantilevering the top support for each door panel from the adjacent door and wall panels. The resulting doorway provides an 8.00 metre x 8.00 metre clear opening. The steel RHS section door frames were fabricated by Turnco Engineering Ltd. and are clad with powder coat finished corrugated profile Zincalume® steel.





VIDAK.

This project began as a general purpose investment building comprised of 315 sq.m Offices, 101 sq.m Staff Amenities and 1,980 sq.m Factory- Warehouse. The brief called for the building to present an attractive, high quality facade to the street which would appeal to a prospective tenant company and would reflect and express their character and focus.

Vidak Davies Ltd. a company highly focused on innovation and quality entered into a lease agreement during the early stages of construction. In addition to the administrative facilities offered in the building, Vidak required a dedicated showroom area and an additional area to accommodate future office expansion. This was accomplished by creating a mezzanine floor within the factory - warehouse with the area below forming the showroom adjacent to the reception. This provides visitors direct access to the showroom from the reception. The original open office area was



subdivided to provide a meeting room and several individual executive offices. The mezzanine floor was constructed using Speedfloor, a floor system which consists of a reinforced concrete slab, poured insitu, over temporary plywood form



work panels supported on removable steel bars. A suspended ceiling system was installed to the perimeter of the showroom, the central area being left open, exposing the Speedfloor system as a feature. The staff cafe opens onto a courtyard which is screened from the carpark with perforated metal panels fixed to tapered, galvanised mild steel angle posts. Externally colours are predominantly neutral, in tones of grey, expressing the inherent nature of the materials used and while internally, strong feature colours are used against a white background to create a stimulating working and display environment.

on a corner site of 4,012 sg.m. was designed in consultation with the leasing agent to achieve a mix of individual floor areas as well as maximising the road frontage exposure for each unit. Unit 1, fronting Cryers Road is 1,024 sq.m. in area, units 2,3 and 4 fronting Echelon Place are 480 sq.m : 219 sq.m and 279 sq.m in area respectively. This allowed the units to be marketed to suit varying tenant requirements and created the potential for some of the tenants to take up a larger or smaller or even an additional unit in the future if circumstances allowed. This project incorporated the use of a new reverse profile ribbed Colorsteel[®] wall cladding, which has received favourable feedback.

Architect: Alan Palmer Auckland *Telephone: 522 4324* Mobile: 0274 769 673 *E-mail: alan.d.palmer@xtra.co.nz*

Feature materials : Painted rolled steel portal frames. (Interior). Corrugate Zincalume® steel gable and eaves cladding. Colorsteel[®] metal wall cladding. Zincalume[®] steel canopy roofing. Painted, zinc sprayed rolled steel canopy frames. Powdercoat finished galvanised steel roller shutter doors. Composite aluminium panels to Office facade. Galvanised steel courtyard screen fences.



In the mountain beech forest surrounding Arthur's Pass, on a 3,000 hectare nature reserve and high country Merino sheep station, is Wilderness Lodge. Here there is a strong emphasis on conservation to ensure the survival of rare and endangered flora and fauna. Guests have a rare opportunity to explore and experience the unsurpassed beauty of this natural paradise. Owners Dr Gerry McSweeney and Anne Saunders were keen to expand the well established lodge (built in 1996) by adding four luxury units. Their vision, the inspiration of architect Gary Hopkinson and the craftsmanship of builder Chris Yeats resulted in Chris winning the title "2005 Registered Master Builder of the year -Commercial." A well deserved result which was achieved despite environmental and weather constraints for all concerned.

The project brief required four new guest units to be located on a hillside, overlooking a glade in the beech forest, with magnificent views of the Southern Alps beyond. Each unit was to have unimpeded views but was also required to offer privacy to guests. To minimise the impact and protect the integrity of the existing forest landscape the units were "stacked" with the lower unit being excavated into the hillside reducing the overall height.







Top left: Colorsteel[®] and matching joinery details provide an unobtrusive frame in this natural environment.

Top right: The simple form reminiscent of the bush hut reveals little of the interior luxury to be discovered.





Above: Clever design provides guests with private, panoramic views from every area of these luxurious units. From the lounae to the shower, bath and bed.



architect, has a special affinity with New Zealand's West Coast and this is confirmed by the judges comment, "This building blends into the landscape so effortlessly, it could almost have grown from the ground it

sits on." In addition the judges credit the skills of builder Chris Yeats, "The builder has exhibited extreme attention to detail, innovation and organisation in testing circumstances. Despite the building process the surrounding landscape is untouched. This faultless property is a truly magnificent piece of construction."

A result, Gary Hopkinson attributes to, "A close working relationship between client, contractor and architect."

The exterior design was kept relatively austere using simple forms created with horizontal and vertical colorsteel®. The intent being to emulate the "feel" of the iconic New Zealand bush hut. A limited pallet of muted green in contrast to natural oiled timber echoes the beech forest surrounds.

The units are divided by a stairway which enhances the "outdoor" ambience and offers entry shelter, separation and privacy to quests.

Whilst the exterior may reflect the raw character of the New Zealand West Coast the interior introduces guests to a world of sumptuous creature comforts. A cosy refuge in this mountainous retreat.

Each unit has uninterrupted views of the mountain divide from the bed (elevated on a plinth), the lounge and bathroom facilities. From the double glazing, the gas fired heating and high spec fittings this project offers absolute comfort and luxury to guests.



Chris Yeats began work with excavation of the site while panels were being pre-cast in Greymouth. The weather was unreliable with several heavy snowfalls slowing progress and making access from Greymouth difficult. The building site was in the hillside, with a tanked retaining wall forming the rear wall of the building. The concrete wall panels were sized by the design engineer to the constraints of a 30-tonne crane, and its positioning on site, then built in Greymouth and transported to the site via Arthur's Pass where they were lifted into place. This was particularly difficult, with no drive-on access to the site, requiring all materials, including the pre-cast panels, to be craned in from an access point above the site.

The extensive Colorsteel® Endura roof and cladding was supplied and fixed by Stratco. "We took great pride in our involvement with this project," says Mark Moore of Stratco. "The cladding and flashing system was innovative and involved but the result superb."

Due to rain and snow the wall framing, while kiln dried, needed considerable heating to dry once the building was closed in. Despite the weather the buildings were completed in the contract period of four months.



Clients: Dr Gerry McSweeney and Anne Saunders. Wilderness Lodge

Architect: Gary Hopkinson Hopkinson Team Architecture, Greymouth. Telephone: 03 768 4141 Fax: 03 768 5922 E-mail: hopkinson@teamarchitecture.co.nz

Building: Contractor and winner of the 2005 Registered Master Builder of the year - Commercial. Chris Yeats Chris Yeats Builders Ltd. Grevmouth. Telephone: 762 6040 Fax: 762 6090 Email: chris@cybl.co.nz

Engineer: John Mackenzie of ELMAC Consulting. Telephone: 03 351 3223

Manufacturer cladding & roofing: Stratco (NZSI) Ltd. Roofing & Cladding Contractor: Stratco (NZSI) Ltd. 55 Hands Road, Christchurch. Telephone: (03) 338 9063 Mobile: 021495533 *E-mail: mark.moore@stratco.co.nz* Profile: Corrugate. Color: Colorsteel® Endura Rivergum.

Phographer: Stewart Nimmo.















Entries can use any of the extensive range Gerard Roofing profiles in a variety of colours and textures

THE GERARD **DESIGN AWARDS** REWARD DESIGNERS, **BUILDERS AND** HOME OWNERS

In 2001 Gerard Roofs implemented their awards program. Five years later the program continues to grow with entries coming from every sector from North and South Islands of New Zealand, Australia and Pacific Islands." The success of the program is, in part, due to the equal recognition of the three primary participants," says Grant Williams, Business Development Manager for Gerard Roofs." Whilst we never under estimate design skills we see the synergy between designer, owner and builder as an integral part of attaining excellence. A big plus, there's no cost to enter and everyone involved wins the same travel pack as first prize."

The program is divided into several categories giving opportunity to both new home design (under \$250,000 and over \$250,000) renovation and commercial. The only prerequisite is that the building must have used one of the Gerard roofing products. The product and colour range is extensive and allows considerable scope for creative flare from traditional tile to shakes and shingles. All options can be viewed on the Gerard website at www.Gerardroofs.co.nz which provides home owners and designers with specific product information. (details on page 21)

From all the entries received finalists are chosen and the supreme winner is judged from these. Judging is impartial and done by a range of industry experts.

Who wins?

There are 3 categories which gives different types of building projects a fair chance of winning. Each rewards different participants.

New Homes enter for the Supreme Winner Award. The Designer, Builder and Owners each receive the travel prize.

Refurbishment and renovation. The home owner is awarded the travel prize.

Commercial. The architect is awarded the travel prize.

What is the prize?

The prize for the home voted The Supreme Winner is three travel packs each to the value of \$2000.00.

For refurbishment the owner receives the travel pack of \$2000.00

In commercial the architect receives the travel pack of \$2000.00. To make the prize option as flexible as possible Gerard contribute this towards any travel destination of your choice within a 12 month period of winning the award.

Who can enter?

Anyone involved in the design, planning, building or ownership of the home or building can enter. As part of the entry condition Gerard Roofs retains the right to take and publish photographs of the completed building which requires the written consent of the owner.

The value of being seen.

The Gerard Design Award program was established to achieve two primary objectives:

1. As a marketing tool to illustrate that a Gerard Roof choice was appropriate to a very wide range of design from an aesthetic and functional perspective.

2. To give recognition to those architects, designers and home owners who chose to use these products.

Where ever possible Gerard Roofs promotes excellence in design and those who contribute towards the end result. It is difficult to quantify the value of being seen, the alternative is being invisible. Our recognition of excellence is designed to promote those who are proud of their product and is not limited to those who are winners of awards but to all of the outstanding projects entered.

How to enter.

To enter you need only supply reasonable photographs, which best illustrate the design and home features, and a brief design summary. Gerard have a specific entry form, which simplifies the details required, and that is available from all distributors, from their website (www.Gerardroofs.co.nz), by emailing info@gerardroofs.co.nz or calling 0800 104 868.













SUSTAINABILITY WITH STYLE

Tom Evison, of Technical Press, reports on Susie Lees Nelson home, designed by architect Helen Richards and the increasing trend toward sustainable design.

Further evidence that stylish sustainability in affordable residential housing has become mainstream in New Zealand is presented by the latest home designed by acclaimed Nelson architect Helen Richards. Situated in Mapua, west of Nelson, the new two-storey passive solar house sits well with its rural surroundings. Incorporating many features to enhance the health of occupants and environmental performance, the building is designed for year-round comfort and warmth - almost entirely from solar energy.

Richards oriented this 3-bedroom home 30 degrees west of true north which, she says, is very efficient. Following principles of best solar performance, floors are concrete, extensive windows are north-facing and there is double glazing throughout. Cooling and ventilation are also passive through judicious use of windows and blinds.

The design incorporates rainwater collection, solar hot water and major use of sustainably-sourced materials including native timbers. Says Richards: "We've taken the level of comfort very seriously with this house. It also has environmentally very smart performance and will save a lot of money on energy costs for heating"

Despite frosts in winter, space heating will seldom be necessary and annual savings could amount to \$500. Provision is included for a solid fuel burner to be added if desired.

Further features of sustainable design include management of noise, minimal use of materials

Landscaped two-storey Mapua home packed with sustainability features.

Passive light, heat and ventilation bring convenience and cost savings.

containing chemical toxins, and absence of mould due to continuous warmth and good ventilation. Maximum use is made of natural lighting to give the home a powerful "feel-good" factor. Coloured concrete flooring is insulated and provides passive heat storage. The low maintenance surface is sealed with a low toxicity hard floor oil form BioPaints. Toilets use minimal water reducing waste in the dry climate and grey water is recycled to feed trees in the landscaped area surrounding the house.

British-qualified Helen Richards attracted national attention for the first sustainable house she designed and built in New Zealand a single storey combined home and office in Nelson. That building and the new two-storey home both offer a strong element of surprise while being contemporary, durable and minimizing greenhouse gas emissions.

Data loggers are installed to provide statistics as evidence of high performance year-round. Richards' company, Powered Living Ltd, actively promotes the architectural design concept of her sustainable homes.

Client: Susie Lees

Architect: Helen Richards Powered Living Ltd. Nelson, New Zealand. Telephone: 03 548 1680 Mobile: 021 436 314

Contractors: Kevin Mayes. Telephone: 021 139 1706 Daniel Whitten. Telephone: 03 543 2676

Roofing and Cladding: Contour, Nelson. Telephone: 03 546 4260 Profile: 5 Rib Colorcote® and Zincalume® Corrugate.

THE HAZARDS OF ATTACHMENTS TO METAL ROOFS

Metal roofing has been used extensively in New Zealand for over a hundred years. In certain locations (even some exposed situations i.e. close to the galvanised steel roofs has exceeded one hundred years, through appropriate maintenance and by minimising any damage to A metal roof will remain corrosion the roof caused by various sorts of interference.

Like most things exposed to the harsh outdoor environment in New Zealand, metal roofs are affected by how they are maintained. Regular cleaning and painting when required will increase the roof life. Equally, lack of cleaning or care can reduce its service life. Some coast) the life of attachments quite commonly used on or with roofs can significantly shorten the life of the roof if not installed correctly, if made of incompatible materials or if they create a permanently wet area.

> free and resistant to perforation for a long time provided it is washed freely by the rain and can dry, has no areas in which corrosioncausing deposits can build up, is not in continuous contact with incompatible metals and has regular routine maintenance carried out.

> The sort of things that can reduce the life of the roof are continuing presence of leaves and dust or dirt (particularly when wet), damage or additions allowing ponding (permanently wet areas), installation of vents, chimneys, gutters, down pipes running on to a roof, gutter protection systems or any other devices which leave incompatible materials in permanent contact with (or running off onto) the metal roof.

The Zincalume® coated steel currently used in the majority of metal based roofs has greatly superior durability compared with the old galvanised steel. However it does have the disadvantage that the adverse situations listed above can have an even greater and more rapid negative effect on its

life than on the life of galvanised steel. Note that steel guttering, with either metal coating, can also suffer from these hazards, particularly from build-up of damp materials and from ponding.

The correct care and maintenance of a metal roof or gutter guite simply involves avoiding damage caused by:-





Ponding - allow no dents or areas where water can rest permanentl. Provide correct sloping of flashings etc., ensuring the product has the required fall for all water to drain.

Build up of atmospheric dust and dirt - washing by rainfall with the ability to dry out (and being prepared to wash unwashed areas with a hose and soft brush).

Incompatible materials - either in wet contact with the roof or water running off such materials onto the roofing.

Attachments installed to the roof with incorrect fasteners.

Gutter debris - clearing out gutters and avoiding build-up of leaves etc

Typical examples of things which are likely to cause damage are:-



■ Water from copper spouting running off onto Zincalume® based roofing, or splashing up onto the unwashed underside of the bottom of the roof:



Penetrations (skylights etc), chimneys or flashings not angled so as to prevent ponding and dirt buildup.

■ Walking or loads from e.g. airconditioning units causing denting and ponding;



Solar water heaters, gutter

the roof with incompatible

protection systems, satellite dishes

etc fastened onto the top surface of

fasteners, causing incompatible run-

off, creating permanently wet areas,

build-up, or preventing rain-washing;

creating dirt traps for corrosive

■ Tie wires or braces for pipes,

aerials or flues made of incompatible materials and/or attached with incompatible fasteners.

> There are of course many examples of all these things that have not caused problems and also quite a few where damage has occurred, sometimes requiring roof replacement at significant cost. Damage can sometimes take many years to show, so even in cases where no obvious damage has so far occurred, if one of the above poor practices has occurred the life of the roof and or guttering system is still likely to be impaired and future problems may yet arise.

> The manufacturers of unpainted and prepainted steel or aluminium roofs offer good warranties but this does depend on the roofing not being damaged by such hazards as those listed above. Failures of roofing or

Indicates possible damage due to water runoff from incompatible materials. Indicates areas of potential



guttering caused in this way will not be covered by the manufacturer's warranties, and so any such fixtures, devices or systems must be specified, detailed and maintained so that they do not impact on the durability of the roof or invalidate the warranty.

Note that the illustrations included here are schematic, not necessarily to scale, and show what NOT to do. Refer to the NZMRM's NZ Metal Roof and Wall Cladding Code of Practice for detailed methods for CORRECT specification and installation of roof penetrations, flashings and attachments, including which materials are compatible / incompatible with each other.



The COP is available from the: NZ Metal Roofing Manufacturers Inc. Private Bag 92 066 AUCKLAND.







BUILDING A GOOD WORKING RELATIONSHIP

Grant Richards was the main contractor/builder of the Red Beach Playcentre and during the process of building, he and architectural designer Michael Manning established a good working relationship.

At the time Grant and his wife Amanda where planning to build in Weiti Views on the Hibiscus Coast and they invited Michael to design a home for their site. The result was supurb making the most of the limited space the site offered. It achieves its objectives of providing a work base for Richard's business without intruding on the comfort and aesthetics of the family home and activities

Weiti Views is a new subdivision and the Richards site was one of the most elevated with a panoramic urban outlook and distant sea views.

The shape of the house was influenced by the desire to catch the views, which are easterly, and provide a sheltered northerly outdoor area for entertaining and to provide a safe play area for the Richards young family.

The Richards wanted a home that was both practical, constructed of traditional materials, but with an aesthetic difference.

A combination of cedar weatherboards and plaster claddings, with cedar shingles to the gables, topped off with a corrugated colorsteel® roof was

A private, safe and sunny north facing spot to enjoy the view opens from the dinning room and family room. Above: A visable safe area for the kids complete with swings, trampoline and even a camp out.

chosen. The shape of the house, its roof lines and choice of materials gave it the point of difference that the Richards where looking for along with a commanding presence on the crest of the subdivision. Being single level with good indoor outdoor flow the home is very user friendly for its young family. The family room opens directly to the children's outdoor play area allowing good visual contact from the kitchen, dinning room and master bedroom.

Grant has an enviable "builders garage" made to order with a 3.0m stud and doors for clearance should the work 4WD have anything strapped to the top of it. Ample space for two more cars, materials and tools... it also features the pool table which is currently used for "tradesman bonding" on Friday after work.

Client: Grant and Amanda Richards.

Architectural Designer Michael Manning. Manning Architectural Design. Red Beach, Whangaparaoa. Telephone: 09 426 2255 Mobile: 027 280 8689

Main Contractor: Grant Richards. GDR Builders. Telephone: 09 426 2617 Mobile: 027 496 9730

Roofing Manufacturer: NZ Steel and Tube. Auckland. Telephone: 09 274 4056 Roofing Profile: Custom Orb

Roofing Contractor: Scott Riach. Rodney Roofing. Telephone: 09 424 2393



Two contrasting homes with two things in common.

Both were designed by architect Gary Hopkinson, of Hopkinson Team Architecture Greymouth, and both were winners in the NZIA Resene Local awards for architecture.

The Brickell-Pollock retreat is located at Bethells Beach and the Wild home on a small farm lot at Takaka. These homes illustrate innovative design, a sensitivity to their environments and the results that can be achieved with the creative use of a variety of materials including Colorsteel[®]. Both homes will be featured in future editions of

Team Architecture also designed Wilderness lodge which was the winner of the 2005 Registered Master Builder of the year -Commercial. (Featured on pages 9 -12)

Scope.



The Brickell-Pollock retreat



Wild home at Takaka



Gerard Roofs website: Designed to make design easier.

As a result of the 2004 Building Act Local Authorities now demand even more extensive information making CAD drawings increasingly complex and time consuming. Gerard Roofs have taken the initiative to meet these standards by providing working drawings, which meet E2/AS1 requirements, that can be directly placed into plans and specifications.

The drawings for all aspects of roofing can be downloaded from the Gerard website without the need to search for, and use data on, a CD. The accent is on ease of use and convenience.

To satisfy industry standards the technical information is available in four different formats; DWG for AutoCAD MOD for ArchiCAD DXF for CAD PDF for those who want high quality reproduction of details without the need for a CAD program.

The interface provides 99% of all roofing situations which are required for specification of all Gerard roofing products. Following the steps ensures you select a roof "fit for purpose." Choose your degree of pitch, type of roof structure, then select a profile from the range available based on the settings and design situation. The program instantly finds and previews the detail on screen without the need to scroll through countless lists of drawings.

These drawings compliment the master spec specifications which are also available for downloading.

Anyone can register on the site free of charge and access all of the information required. Log onto the Gerard website at: http://www.gerardroofs.co.nz and follow the "partner Login" link.

Hot on the heels of Gerard Roofs' on line CAD library, the company has launched a new website tool



featuring a user friendly "Roof Chooser" application which allows home owners and designers to preview potential roofing combinations. Users can select the house style which resembles their home, customise the cladding type and colour and then preview the effect of Gerard Roofs' eight most popular tile, shake and shingle roofing options, altering both colour and texture. Users can preview the roof, print the finished result or e-mail it.

An additional re-roofing section is now under construction (shown right) which will provide owners and designers with a guide to options available to suit their existing home design style. As with the new home style guide roofing profiles and colour options are inter-changeable.

Once the roof style has been established with the home owner the designer, builder or specifier can go on line to Gerard Roofs'

"Partner" section of the website and quickly and easily download all the technical details. These can be copied and pasted onto plans simplifying the work required in detailing the roof structure.

Figure 05 Valleys



For further information about the website you can contact Grant Williams, Business Development Manager, Gerard Roofs on 027 578 9043 or e-mail him at grant.williams@gerardroofs.co.nz.

For further information on Metal Roofing or Cladding or details of any of the articles which appear in this publication please contact any of the members listed below.

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