

ISSUE 22

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NZ METAL ROOFING MANUFACTURERS INC.



Below is a brief introduction to the 2009 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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for Dimond.

Troy Smith: Marketing Manager for
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material please contact any
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SCOPE

CONTENT ISSUE 22



PAGE 2: Davor Mikulcic designs
the Dulieu's new home with style and
pride.



PAGE 9: Stuart Hayman and
Stuart Thomson look at the problems
that can be caused by unwashed
areas.



PAGE 13: Graham Hepburn
discovers a unique balance between
high tech and tradition at Piha



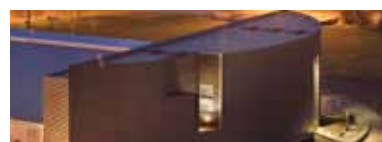
Page 17: Metal roofing has come
a long way – not only is it made more
efficiently but the process is cleaner
with waste minimised at every turn.



PAGE 19: Roofing Industries
solved the problems of incompatible
materials on this historic



PAGE 24 Wayne Bishop creating,
designing and building an entire
lifestyle environment in what was to
become Western Rise.



PAGE 27: Brian Riley - Arthouse
Architecture Ltd. Nelson designs
stage one of the Trafalgar Centre,



PAGE 33: PLC Developments Ltd
Christchurch create a new lifestyle
village in harmony with the
environment



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Scope is the official publication of
The NZ Metal Roofing Manufacturers Inc.
Executive Officer: Peter Atkinson
Private Bag 92 066, Auckland.
DDI Ph: 09 367 0934,
Ph: 09 367 0913
Managing Editors: Christine Wilkinson,
Warren Oliver, Troy Smith, Dave Hall,
Tim Rutt.
Published by ICG Limited.
57 Glendhu Road, Glenfield, Auckland.
Telephone: 09 444 2424.
e-mail: conceptart@xtra.co.nz



IN PURSUIT OF DESIGN EXCELLENCE

Having published several projects
designed by Davor Mikulcic from
studio MWA Ltd. in Wellington,
two primary factors seemed to
be consistent. The first was the
excellence in design and the second
was that his clients were not just
happy with the results but they had
established a lasting friendship with
Davor.

To better understand the chemistry
behind this we asked Davor to
elaborate on his personal approach
from concept to completion. How
does the creative process work for
him and his clients?

The Dulieu Home provides an
insight to this process.

The clients, Dianne and Barry
Dulieu having just purchased
their site, were advised by the
previous owner to discuss the
potential of the site with Davor
as he had been commissioned
to do some site analysis and
preliminary sketches which may
prove beneficial. The first meeting
was in the new Lendrums studio
that was designed by Davor and
illustrates his skills in architectural



and colour composition. The first
of many projects that have won
recognition with a NZIA Awards. The
Dulieu's later confided that they had
been impressed by this creative and
unusual office space.

The Dulieu's were no new comers to
the design and build process having
worked together over the past 30
years building and marketing a few
houses every year. They had in fact
designed all the previous houses for
clients but had never designed one
for themselves. Now they wanted
their own home, one that would
last them through their retirement
years. Something unique. Something
Special.

Managing Director, Bob Lendrums
from Lendrums, attended the first
meeting and having listened to
the client brief his comment to the
Dulieu's was short and honest. "If
you want something that is special,
unique and with flair you have come
to the right person but you have to
be prepared for the journey. it will
be challenging but enjoyable and
in the end you will have something
very special you can be proud of."

And so the journey began.

Davor is quick to point out that
although familiar with the site it was
crucial to begin at the beginning.
A site visit, the first of many as
it was important to spend time
walking and talking to get the
Dulieu's impressions of the site and
which aspects of the property they
enjoyed and to get to know one
another. The site is magnificent. The
approach is from above and as you
look down on the clearing in the
bush (of approximately 60 metres)
you get a feeling reminiscent of a
Greek theatre. There are nature
water features, streams, waterfalls
and 100 meters from the building
platform is the Akatarawa River.

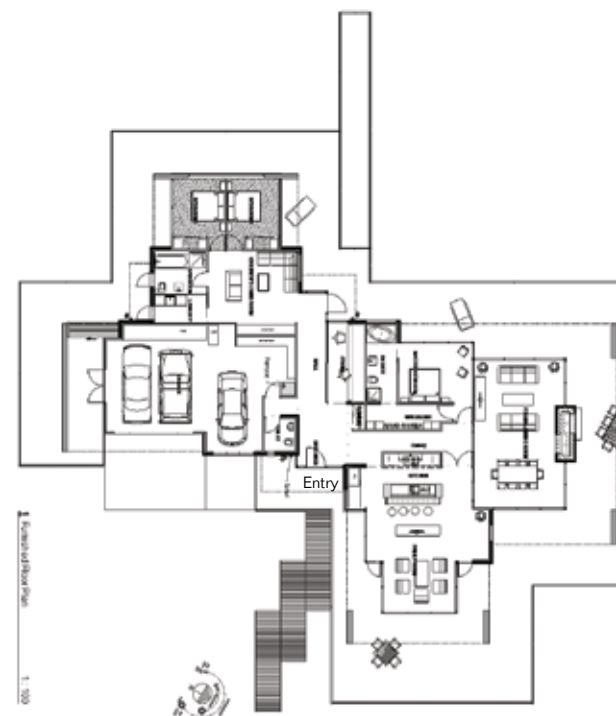


The room specification was simple including an entry hall (if possible with gallery for many interesting family photos and art work), a studio with two work stations, a big open plan kitchen and family living as one big room with easy access to decks and terraces. A separate formal living and dining room, with an open fire, that could be opened to the rest of the house when required. The master bedroom was to be generous with a walk-in wardrobe and ensuite including a bath and shower. (Dianne specifically wanted the old established trees to become the "focal point" from the master bedroom. This was achieved in the final design.) A separate third living space with an additional two double bedrooms with wardrobes, separate bathroom and outdoor access.

Further requirements included a separate laundry utility / storage room with easy access out to clothes line, a triple garage with workshop (possibility to work in and out under cover) and generous storage space,

As with all clients the basics were established and at this point Davor outlines clearly what his expectations are to enable him to deliver their dream home. The first point is total honesty and openness. "I have to dream their dream", says Davor. "To do this I have to know them well, I have to understand their way of life, I have to know them as friends with open hearts. Only in this way can I do my best for them. And that is what we all, as architects, have to strive to achieve....something above our clients expectations."

For both Davor and Jonathan Wilson, design is more than a business, it is a passion. "The budget (large or small) does not reflect the success of the project. You can recognize a project that is driven only by money," says Davor. "The defining factor is the degree of personal involvement and understanding between the design team and the client. This is the separator between good design and excellent design."



This natural wilderness is surrounded by hills, native bush and water. In the clearing you have a sense of isolation and connection only with nature; the sounds of the Akatarawa River and the abundant bird life whose song dominates the site. Over the next weeks and months many visits to the site were made during good and bad weather, at night and throughout the day. Clearly the site would dictate many of the final design attributes and in approaching the design Davor explores every detail and mood of the site.

The client brief was relatively simple with nothing particularly unusual. A contemporary residence, on single level with a simple indoor / outdoor flow. The home should take advantage of every aspect of the very unique site. Easy maintenance inside and out with the maximum usage of passive solar energy and good building orientation, under floor heating – heat pumps were installed to heat the under floor water system) double glazing with maximum thermal insulations for floors, walls and ceilings.





Throughout the design process Davor acknowledges that his clients have to be prepared to discuss details and to understand that there is a reason for his design approach as he will never willingly compromise his professional opinion of the best design solution. "Naturally, if during discussion, there are some aspects of design that are to radical we find an alternative solution. Generally when there is a point at issue site visits are arranged to show the client similar finished concepts. At this stage drawings and photos do not suffice. It is important to touch, feel and see the results. This builds confidence and trust and helps to broaden the horizons. Discussion between different clients and site visits is always beneficial and often leads to a refined brief and detail," says Davor.

An example on the Dulieu residence was related to the exterior cladding. In the first instance there was a desire to use natural schist, which proved very expensive. Having visited other projects and seeing first hand the visual effect achieved with a combination of schist and the vertical metal cladding a decision could be made with confidence. This is now a feature of the residence.

"At the outset I asked Dianne and Barry for their permission to explore many different options from the bizarre to the conservative. They were open to this approach and this latitude and freedom to explore is vital to the creative process of design."

So from a blank canvas the first ideas are formed. Davor recognizes his background varies from most New Zealand and Australian architects and as a result his approach may be different. He is, in his words, "From



the old school" and relies on a camera to capture the site moods and a sketch pad that is constantly with him. In developing the concept studio MWA takes advantage of every design facility from coloured pencils to scale models, to ArchiCAD computer models and renderings. "Anything that will help bring the design and client closer and help push boundaries a little further. In the preliminary stages many design options are explored and discussed. Some are developed and some discarded but it is only through continued exploration of the differences between concepts that the final design concept emerges. On this project the initial stages of design concept took about 3 months to develop to a point where we were all satisfied," says Davor.

In some instances clients do not understand why small details of colour, texture, materials, appliances, fittings, furnishings, etc are discussed early in the design process. This becomes clearer as the project evolves. It was fortunate that Barry Dulieu was in fact a very, very accomplished builder. A man Davor describes as having "golden hands", a perfectionist whose attention to detail was a work of art. As a commissioned lecturer in Architecture in Brisbane, Davor tries to impress on students the importance of this detail and it's

execution. "This is what architecture is ... the combined result of small details that build the complete composition. It is a balance and achieving the right balance is what separates one designer from another."

Many aspects of the design had to be considered and these included factors which are influenced by; the clients' brief, site, surroundings, context and a variety of compliance criteria. The site is within the 100-year flood zone and required design solutions to ensure it would not be an issue in the future. Two large water tanks, a septic tank with influent field and the inclusion of gas for hot water were mandatory. Some of these elements represent a design challenge and must be incorporated as an integral part of the design, not added on. Something that is often overlooked.

Barry built and project managed the house part time, with help from his son. (Rhys Dulieu is owner and director of Rhys Construction from upper Hutt – www.rhysconstruction.co.nz)

Often when clients decide to manage a project it is a recipe for disaster but in this case there was no doubt they had the skills and experience to complete a high end residential project.

The building that others describe as a "Butterfly" is first seen from above (fifth elevation) making the roof a prominent aspect of the design that forms two connecting "L" shapes. These forms allow shelter in all weather and take full advantage of the sun and assist with natural ventilation throughout the building via strategically placed opening windows. Part of the sustainable strategy and one of the goals of the design was the use of passive solar energy, natural ventilation, rain water collection and the use of natural materials. In essence to be sensitive to the site and enhance the natural aspects of the surroundings.

The building platform is on one level to allow residence, now and in the future, to enjoy easy access to the home with no compromise.

Again being able to visit a previous project, the Blundell's residence, was a great example.

Polished concrete floors with under floor heating was one of the imperatives from the start. With good building orientation, this project maximized the use of passive solar energy with highly compressed polystyrene thermal insulation under the concrete slab.



To achieve large open plan areas, with more than 70 % of the buildings elevations in glass, an elegant steel cantilever structure was chosen as the main form. The structural steel was incorporated into the thickness of roofing structure or walls giving the entire composition a light appearance

To achieve these big open spaces without any additional support between, a simple yet elegant support was designed at the end of the cantilevered eaves that turns down the roof to touch the ground. This creates a very simple, clean line form that frames the view from the interior. This cantilevered section provides bracing to the virtually glass structure, with eaves that extend 3-4 meters providing shade in the summer.

The "trough section" metal profile of the Dimondek 400, was an excellent cladding choice as it helps to maintain simple clean lines in both sloping and vertical planes. Sharp lines emphasize the simplicity of straight lines. Roof and wall claddings are without any penetrations avoiding potential problems and give an aesthetically pleasing appearance. Schist was strategically used on corners in L shaped forms and with the intention of creating a dramatic

appearance to the exceptionally well-executed masonry. From the start the intention was to use some of exterior materials (like schist) and incorporate them as interior details providing continuity and a connection between the inside and out. Mr. Glen Bosworth, from Bosworth Stone Ltd. in Upper Hutt, and his team worked nearly 6 months to achieve an incredible, unique finish – definitely one of "key" features in new Dulieu Residence.

The interior design initiated some lively debate as Davor had deliberately chosen Marine plywood (Brownwood) for much of the interior joinery. The Dulieu's concern was that the plywood could devalue the project.

Again, it helped to be able to show them finished examples (on Davor's own Lower Hutt home) that illustrated the goal... to create timeless design that would be functional and yet pleasing. This resolved the issue and the concerns the Delieus had.

Studio MWA Ltd. pride themselves on original design, choice of structure and materials that are not influenced by fashion trends... design that will endure without dating.



As on previous projects Hadrian Noble from Noble Kitchens in Upper Hutt manufactured and installed the joinery for the kitchen, bathroom, laundry and walk-in wardrobe. His attention to details and his input to "fine tune" the design was much appreciated by the MWA team and client. Davor and colleague Michael Maddern's goal is to create uncluttered work spaces with clean lines that are functional yet aesthetically pleasing. The kitchen is a focal point in family area of Dulieu residence. The central free standing island is the main entertaining "hub" and is finished in a combination of stainless steel, plywood, glass and Seratone. At 4.5 m in length this is fantastic work space that is particularly useful when entertaining.

The majority of interior walls and ceilings are gib lined and plastered with level 5 finishes and painted in white to emphasis other material combinations; the polish concrete, cedar sliding doors, dark brown-black plywood cabinetry, dark slate grey aluminium joinery with gray tinted double glazing and schist to name a few.

All connections between walls and ceilings are a simple square finish with no skirting between the floor and walls giving the impression of

lightness and floating that further simplifies the interior. Beautifully crafted cedar timber sliding doors, in combination with glass, form a real feature in the interior.

In the bathrooms, ensuite and toilet wall finishes are in a two colour composition of Seratone that contrasts with the polished concrete floor, white ceiling and dark plywood cabinetry.

Throughout the house halogen lighting is used in blocks of usually 2,3 or 4 lamps. This gives a bright, dramatic appearance and in the evening transform the house. Exterior halogen lamps, strategically located, provide soft lighting to the covered exterior decking and make a transition between the very bright interior light and pitch-black exterior.

In the final analysis of any home design the ultimate judgement will be from the client. In this case Dianne and Barry Dulieu have aptly called their new home "Paratiho" which is the Maori for paradise. "We are living in Paradise", says Barry, "everything is in harmony with the preservation of natural beauty."

This is what Studio MWA strive to achieve ...the moment when the synergy between client and designer produces a result they are both proud of.



Studio MWA

Studio MWA now works in collaboration with the new, Brisbane based office of Davor Mikulcic Architect. With today's technology we can synchronise our working environments via video conferencing that brings the skills of our Wellington offices into the Australian market.

The range of projects is a spread between commercial and residential. Our primary focus is on high end residential and we currently have a few very exciting projects on with several other on hold due to recession constrains.

Our new clients predominantly are the result of recommendations, or they are people who have seen our work through publications, Industry Awards or from visiting completed Projects through friends and acquaintances.

The core team consists of Practice Manager Jonathan Wilson, Davor Mikulcic (Architect) and Micheal Maddren (interior design and ArchiCAD specialist).

Micheal Lectures at Wellington Weltec in interior design and ArchiCAD systems and Davor Mikulcic also lectures in the Queensland University of Technology (QUT) -faculty of Build Environment.

Davor was on the jury for the 2009 Royal Australian Institute of Architects (now AIA) for Queensland and Brisbane and this year was invited onto the jury for the international architectural student's competition, Denver, Colorado

Client: Dianne and Barry Dulieu
Author of Project:
Davor Mikulcic Dipl. Eng. Arch.
(Sarajevo) ANZIA, RAIA

Project Team:
Michael Maddern- Interior designer
David Thomson – arch. Technician -
Cad operator
Daniel Casas – architectural
graduate
Davor Mikulcic – architect
Studio MWA Ltd - NZIA Practice
Wellington
Telephone: +64-4-8018141
Facsimile: +64-4-8018142
Skype: studiomwa
www.studiomwa.blogspot.com
www.studiomwa.co.nz

Land Surveyor: LENDRUMS
Wellington
Telephone: (04) 527 9028
www.lendrums.co.nz

Structural Engineer: ABUILD
Mr. Michael Ives
Johnsonville
Telephone: (04) 478 3929
www.abuild.co.nz

Stone work : Mr. Glen Bosworth
Bosworth Stone Ltd. Upper Hutt
Mob: 021 27-74099

Roof & wall metal cladding:
T.W. Clark Roofing 202 Ltd
Lower Hutt
Metal profile: Dimond – 0.55 mm
Dimondek 400.
www.dimond.co.nz

Engineer: Whakatiki Engineering
Ltd. (structural steel)
Upper Hutt
Telephone: 04 528 8982

Windows: Mr. Paul Cunningham
Westview Aluminium Ltd
Upper Hutt
Telephone: (04) 526 4400

Kitchen: Mr. Hadrian Noble
Noble Kitchens
Upper Hutt
Telephone: (4) 528 3965