

Building warmer and healthier

Richard Loader

Having completed his first high performance certified Passive home project earlier this year and a second under way, Wayne Dyet is a passionate convert to the benefits of warmer, healthier and more comfortable homes through Passive design.

Based in Dunedin and operating as WD Homes, Wayne has been in the construction industry for sixteen years, having previously trained and worked as an aircraft engineer through the Royal New Zealand Airforce.

Focused on a diverse spectrum of residential construction from high-end architectural homes to alterations and extensions, WD Homes specialises in challenging builds—whether on steep sections or complex architectural designs.

Last year a chance meeting with a client led to Wayne's first involvement in Passive house construction.

"Although I wasn't familiar with Passive home construction, I felt my skills as an aircraft engineer and work on high-end architectural homes would place me in good stead to build the home."

Located in St Clair the home was designed by award winning Dunedin practice Architype, a specialist in high performance Passive house and low energy residential design.

Learning about Passive home construction throughout the build, Wayne achieved a very positive air tightness report at the completion of the build - critical for successful completion of a Passive Home.

"I've been back to the St Clair property and the warmth and comfort of the house was lovely and even right throughout. The filtered humidity controlled air that is in the house is great for health



WD Homes specialises in challenging builds whether on steep sections or complex architectural designs.

and comfort—so they're pretty impressive."

Having established a strong relationship with Architype, Wayne was recommended for the next Passive project.

Located in St Leonard's, five minutes out of Dunedin on the way to Port Chalmers, the 220sqm home is built on a particularly steep site, requiring construction of two significant retaining walls to create a lawn area.

Extensive decking takes in brilliant views of Otago Harbour and out to the Port.

A certified passive design, the four-bedroom home includes a plant room housing the brains for home automation. It also includes an extra large laundry accommodating an internal clothesline.

"The way the heat recovery/ventilation system works you can hang your clothes out in the laundry at the start of the day and at the end of the day it's just like it has been a nice hot summers day out on the line."

A recently completed preliminary air tightness report shows the level to be twice as good as the requirement for certification.

Using about 90% less energy to heat and cool than a conventional home, the monthly power bills are considerably lower, but Wayne emphasises that it is just as much about the homes

comfort and health.

"In Dunedin in the middle of a cold winter passive homes really show their true colours with warmth and comfort.

"A nice benefit of Passive homes is that they are very quiet as a result of thicker insulation and triple glazed windows."

Working with Architype to find economical ways to achieve the high performance around New Zealand's construction methods and using readily available materials, Wayne is looking forward to his next Passive home project.



OPEN 7 DAYS FOR ALL YOUR BUILDING SUPPLIES

MITRE 10 TRADE

www.m10trade.co.nz | Phone 455 3341 | trade.admin@megadunedin.co.nz

PRO POWER
ELECTRICAL + HEATING

Professional and Personable Electrical Services

Proud to support the team at WD Homes www.propower.nz

architype
architects+designers

www.architype.co.nz