More Passive Houses in paradise

German native is helping to build better buildings in New Zealand

New Zealand offers many natural attractions and a largely pleasant climate. It is therefore surprising that the existing building stock is in a rather abysmal state, with cold and damp buildings. New Zealand consequently has one of the highest incidences of asthma, also in children. Time to change this, Thomas van Raamsdonk thinks. The North German native lives in New Zealand with his family. He was involved in the construction of the first Passive House building in New Zealand and he notices a growing interest in extremely energy efficient buildings. In this interview with the Passive House Institute, Thomas van Raamsdonk talked to us about this and much more.

What is it like to live in New Zealand? How did you get there?

Out of love! I met my wife, who is from New Zealand, when I used to live in Japan. After many years abroad, there was not much to lure me back to Germany, so I was happy to move to New Zealand with her. I feel at home here; it is true that life here is much more relaxed than in Germany.
Based on your experiences, what are New Zealanders like?

New Zealanders are generally more relaxed. Which politician would otherwise have turned up at a UN General Assembly with her baby, as the New Zealand Prime Minister Jacinda Ardern did in September 2018 in New York?

Family and leisure

When you get to know people here, the first question you’re asked is not "what do you do for a living?", instead they ask how your family is, about the beach you went to last weekend or where you went camping or hiking. Family and leisure play a large role here.

How did you start your career in New Zealand? What do you do now?

The building culture of this country interested me greatly right from the start, so it was clear to me that with the expertise and experience I had in this field I wanted to work for myself. As is always the case with self-employment, this involved ups and downs

Ups and downs

From my student days, I was in contact with Lothar Moll from Schwetzingen, whose company supplies eco-friendly construction products. When in 2006 he suggested that I should manage the new subsidiary in New Zealand, I did not have any second thoughts.

In 2010, we opened another subsidiary in Australia. We import and market these products; among other things, we offer indoor and outdoor sealing systems. We now have over 20 employees in New Zealand and Australia, and we are continuing to expand.

Left: conventional new build in a picturesque setting; © pro clima Neuseeland. Right: Increasing numbers of building owners in New Zealand prefer to construct an energy efficient and comfortable building, like this Passive House building in Greytown. © eHaus.
Your first impression regarding buildings in New Zealand?
Cold, damp and mouldy!

It is surprising to hear that the buildings are in such a bad state. Why is that, with such a pleasant climate?
The climate in New Zealand is extremely varied, from a sub-tropical climate in the north to extremely cold winters in the south, which is close to the Antarctic. For me, it was all the more surprising to see that all throughout the country, the buildings were constructed in an identical manner, and only minimally adapted to the cold or to humidity.

Barely adapted
Standards have now been stipulated in the building regulations for the individual regions. However, if these standards are met but poor products are used, then the outcome will not be much better than before. The New Zealanders know how to build houses, there’s no doubt about that. However, many in the construction industry must first be shown how to construct warm, dry and energy efficient buildings in which comfortable and healthy living and working is possible.

Not warm and not dry
And that's not all. First, one must explain to the people why warm, dry and energy efficient houses are necessary. Due to the low population density, proximity to the sea and remoteness from other countries, the air quality in New Zealand is excellent. Despite this, we have one of the highest incidences of asthma in the world. Cold, non-airtight and damp houses certainly are playing a role here. Apart from that, a significant section of the population cannot afford to heat their homes during the cold season continuously.

Incidences of asthma
Wood stoves, electric heaters and gas heaters are standard here and these consume a large amount of energy in non-airtight and damp houses. For example, my own electricity bill increases manifold in the winter.

At the conferences organised by the Passive House Institute and also in

The first Passive House building in New Zealand was erected in 2012 in Auckland in the northern part of the country. Thomas van Raamsdonk was involved: "We mastered this challenge as a team!" © PHINZ

Another very attractive Passive House building, this time in Christchurch, to the south of the island. © Sarah Gibbon
It is clear that energy efficient construction is generating more and more interest in New Zealand. The first Passive House building was built seven years ago. What is the current situation?

To date, there are over 20 certified Passive House buildings in New Zealand. Many more projects are underway or in the planning stage. There is even a social housing project in Dunedin, which is great progress because the government has now also become active.

Passive House for social affairs

However, overall progress has been too slow. Unfortunately, most people believe that energy efficient construction is too expensive. People here often do not think in the long term and look for the cheapest quick solution.

Pioneering project in New Zealand

Jason Quinn is the first and so far the only Passive House building certifier in New Zealand. On his [website](#), he provides case studies of all the certified Passive House buildings in the country.

You were involved in the construction of the first Passive House building in New Zealand. How did it feel to participate?

This project was the result of a coincidence. Philip Ivanier and I got to know each other through a friend. Philip was from Canada and was very interested in building a healthy and energy efficient house for himself and his family. I then told him about Passive House buildings and one thing led to another and Philip was the first person to build a certified Passive House building in the whole of Oceania.

High mountain

I can definitively say that this was the highest mountain that I’ve ever climbed. Originally the house was not planned as a Passive House building and the client did not want to deviate from his preferred design at all. At the time, I took a huge risk when I promised to realise the building as a Passive House building.

All’s well…

There were many moments of panic, and many days (and nights!) when even I stopped believing in the successful implementation of the first certified Passive House building in Oceania. Nevertheless, we mastered this challenge as a team and we are proud of it. As they say, all's well that ends well!

Passive House Movement

This project was the start of the Passive House movement in New Zealand, in particular with the initiation of the Passive House Institute New Zealand (PHINZ). I am eternally grateful to Philip Ivanier for that fact that he took the plunge into the cold water with us and I am still glad that we climbed the previously mentioned mountain as a team.

You studied timber construction at the University of Applied Sciences in Rosenheim, Germany, and you completed an apprenticeship as a carpenter prior to this. How do these skills benefit you today?
I work with architects, craftsmen, planners and engineers on a daily basis. The combination of an apprenticeship and academic study allows me to put myself in their shoes and understand all aspects. That is extremely helpful.

**What exactly does PHINZ do, and who is behind it?** PHINZ is also very active on social media.

The Passive House Institute New Zealand (PHINZ) is a foundation which has made it its main priority to teach New Zealanders how Passive House buildings are planned and constructed. A group of positive-thinking, crazy volunteers is behind this. They invest their non-existent time and thus also resources in this, with the objective of constructing healthy houses according to the Passive House Standard for all New Zealanders and retrofitting existing buildings accordingly.

The new training centre in Auckland is a much-used for energy efficient construction. © pro clima HUB

You have recently opened a large training centre in Auckland. What has the response been like? Modern building systems for healthy, energy efficient and long-lasting buildings are displayed in our pro clima HUB. The HUB is made available to all participants in the construction industry (architects, craftsmen, planners, engineers) as a further training facility so that they can learn how new buildings can be constructed and also how existing buildings can be modernised.

**Training centre for all**

This training centre is the first of its kind in New Zealand and we are very grateful that we were able to realise this flagship initiative with the support of many partners. We ourselves from pro clima also offer courses on the topic of "healthy living". We also rent out the centre to companies which conduct their own training courses, hold their annual meetings or thematically relevant conferences and exhibitions.

**Overwhelming response**

Nevertheless, we are still in the process of establishing ourselves and still have much to accomplish. We have new ideas every day and have also received many enquiries from the industry, which goes to show how very well-received the training centre is and how diverse the utilisation options are. We are incredibly pleased about the overwhelming response from the construction industry.

(End)

*Interview by Katrin Krämer*

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