

# Case Study

Passive House



# Waikuku Beach, Canterbury, New Zealand

# **Project Overview**

Paul Finch and his family have designed and built a Passive House at their Waikuku Beach section about 30 kilometres north of Christchurch. Passive House is a fabric-first approach to achieving healthy and comfortable buildings. A clearly defined standard and a quality management system that produces buildings that deliver on all aspects of occupant well-being while consuming very little energy. With Passive House design there is no longer a need to burn fossil fuels to power the spaces where we live, work and play!

Designers:	Chris Cawley (constructdrafting.co.nz) Elrond Burrell (via-architecture.net) – Passive House design Jonathan Holmes (via-architecture.net) – Passive House consultancy Jason Quinn (sustainableengineering.co.nz) – Passive House certifying
Client:	Paul Finch
Project Address:	Waikuku Beach, Canterbury, New Zealand

# saveBOARD Products Specified:

Exposed Internal Lining | Paperfaced Internal Linings





# Why the Client chose saveBOARD

"We wanted to keep a bach feel having replaced a 35 square metre seaside bach with a 150 square metre certified Passive House. saveBOARD was simply the best, and most environmentally friendly internal lining for our walls and ceilings to meet Passive House design principles.

"Ultimately everyone who's seen the finished work loves it ... especially the 'white noise' feature boards."

#### save the Environment

"As vegans we tend to have a lot of Tetra Pak plantbased milk containers around. Knowing about Tetra Pak's collaboration with saveBOARD was motivating and the environmental credentials appeal to our way of living."



#### Performance & Functionality

"I was happy to get my engineer to run the amendment process to swap out plasterboard for saveBOARD which the local council (Waimakariri) were fully supportive of.

"I didn't want dull flat walls and ceilings and much prefer the tactility saveBOARD brings."

#### Added Value

"Insurers should also get on board given the ability of saveBOARD to outperform plasterboard particularly in relation to retention of strength and stiffness."

#### save Time and Money

"Equally with wanting to retain a bach feel, I had no interest in taping, stopping or filling joints / screw heads which also means I can remove boards at any time to access cables and pipe runs."

#### **Circular Economy Solution**

"We diverted around 1.2 tonnes of waste using saveBOARD as the board offcuts and other construction plastic waste – such as insulation wraps, strapping, plastic wrap – can be returned to saveBOARD for further use.

"Taking part in a circular journey is also about making sure that waste is considered a commodity and ensuring it stays clean prior to transporting to saveBOARD. We love the circular economy focus of saveBOARD."





# About saveBOARD

saveBOARD is focused on building a circular economy by turning composite packaging waste back into products. We have two plants; one in Hamilton New Zealand and one in Western Sydney, Australia.

The core of the product is made from 100 % recycled shredded and compressed composite packaging and soft plastics, giving the user a sustainable and high performance product. saveBOARD products can be specified with timber or steel framing.

Finished with either a recycled facing paper (Paperfaced), fibreglass face (betterBRACE) or transparent top surface (Exposed, Ceiling Tiles, Multiuse). All products have a recycled paper facing on the bottom surface. saveBOARD products are alternatives to plywood, OSB or plasterboard.



### Declare

Declare is a database of non-toxic, sustainably sourced building products that meet the stringent requirements of the International Living Future Institute's Living Building Challenge.

Considered the most advanced sustainability certification in the built environment, Declare is like a nutritional label for building products, offering specifiers, contractors and building users insight into the ingredients used in the manufacture of building products. Click on the following link to see the saveBOARD current Declare label <a href="https://declare.living-future.org/products/saveboard">https://declare.living-future.org/products/saveboard</a>

# **Embodied Energy**

Calculated Cradle to Gate, saveBOARD product has 0.11kg CO2/kg material. This is 90% less than traditional cement board, 75% less than plasterboard, 50% than plywood.

