

THE HOUSE ON A HILL

A SUPERHOME BY GREEN ABODE

At Green Abode, our focus is simple: creating homes that are warm, healthy and energy efficient, without compromising on everyday liveability. We specialise in high-performance builds using structural insulated panels (SIPs), delivering homes that go well beyond minimum Building Code requirements.

One of our recent projects, "The House on a Hill" in Waikanae, shows what this looks like in practice – and why it proudly sits within the Superhome Movement.

This is a compact, thoughtfully designed family home: three bedrooms, two bathrooms and an internal-access garage. It's not a giant mansion; it's a realistic New Zealand home that performs exceptionally well. Architecturally designed, the house is carefully oriented and detailed to make the most of the Kapiti climate and coastal outlook.

The structure is built with Formance SIPs for both walls and roof. These panels combine structure and insulation into one solid layer, giving the house a very high level of thermal performance. In this build, the walls are R4.3 and the roof is R 7.2, significantly higher than a typical framed house. Underneath, an insulated MAXRaft foundation helps keep the floor warm and reduces heat loss through the edges of the concrete slab as well as into the ground below. The home is also fitted with triple-glazed windows, which further cut heat loss, reduce winter condensation and improve acoustic comfort.

The exterior envelope is both durable and attractive. The walls are clad in a combination of vertical Nu-Wall E200 aluminium cladding and horizontal Abodo shiplap timber cladding, all over a drained and vented cavity. Overhead, a Colorsteel Endura profiled metal roof completes the shell. Together with FPS building wrap products, and Proclima tapes, these layers form a robust, weathertight skin that protects the high-performance structure within.



Where this home really stands out as a Superhome is in its airtightness and controlled ventilation. A pre-lining blower door test measured the building at just 0.44 air changes per hour at 50 Pascals. In plain language, that means that under test conditions it would take more than two hours for the entire volume of air inside the home to be completely replaced through unintended gaps and cracks. Typical New Zealand houses are many times leakier than this, which is why they can feel cold and draughty even when the heater is running.

Of course, airtight doesn't mean "stuffy". The House on a Hill uses a mechanical ventilation system with heat recovery (MVHR) to continuously supply fresh, filtered air while transferring warmth from the outgoing stale air to the incoming fresh air. The result is a home that feels fresh and comfortable without the need to fling windows open on a southerly and watch all your heat disappear.

For the owners, the benefits are very tangible: low heating demand, stable indoor temperatures, reduced condensation and a quiet, calm interior. For us at Green Abode, the House on a Hill demonstrates what's possible when you treat a home as a complete system; structure, insulation, airtightness, cladding, glazing and ventilation all working together.

It's not just a beautiful house on a scenic site. It's a real-world example of what future-proof New Zealand housing can be: a genuine Superhome.



