

Huntsbury homeowners enjoy warmer healthier home

Huntsbury homeowners David and Helen are already noticing the benefits of having their house upgraded during their earthquake repairs.

Huntsbury homeowners David and Helen had their walls, ceilings and floors insulated, a new heat transfer system and range hood and some double glazing as part of Beacon Pathway's Build Back Smarter project while their home was repaired.

Build Back Smarter is a 10 home project which aims to show that performance upgrades (to make homes warmer, healthier and cheaper to run) **can** and **should** be included with earthquake repairs to Canterbury homes.



Helen and David's four-bedroom hillside home was damaged during the February earthquakes with the movement of the outside concrete block walls and cosmetic damage inside.

Their Hawkins project manager suggested including their home in Beacon Pathway's Build Back Smarter project and it is the first house in the trial to be completed.

"We have really noticed a difference in the warmth of our home and it's also a lot cooler on those really hot days we've been having," said Helen.

The couple, who are former English as second language teachers, used to heat their dining room/main living area with a woodburner and spend as much time as possible in this area. The rest of the house, particularly upstairs, would remain cold, even on sunny days.

"I used to put on a down jacket to go into the lounge to play my piano. Our home is now so much more comfortable and we've even noticed health benefits such as fewer sinus issues. We are very appreciative of the work that has been done and how it will impact on our lives."

David and Helen's home was upgraded late last year at the same time as earthquake repairs were carried out, with Beacon Pathway's Bill King as project manager. Although they had to move out, David and Helen were pleased with how easy the process was and that the additional upgrades did not delay their repairs.

"We are very grateful that the work was completed so early and we hope the other people in the trial enjoy their warmer more comfortable homes."

Earthquake damage to Huntsbury 2

David and Helen's home (called Huntsbury 2 in the project) is a large 1960's concrete block and stucco house with a first floor extension built in the 1970s and a basement garage.

Huntsbury 2 had some typical earthquake repairs which gave Build Back Smarter the opportunity to include extensive insulation. Internal ceiling linings needed to be extensively replaced, allowing current ceiling insulation to be topped up. The stucco veneer and some wall linings were due to be replaced – this is an ideal time to install wall insulation. As often happens, cracking of interior linings turned out to be so extensive that most linings were removed, and most external walls, upstairs and downstairs, were able to be insulated.

While David and Helen were out of the house and repairs were underway, Build Back Smarter also made some extra changes to make sure the home was warmer (double glazing, draught stopping and heat transfer), drier (better ventilation and a vapour barrier) and more energy efficient (hot water pipe lagging).

The upgrades

A house assessment established a plan for upgrades which was finalised in discussion with Helen and David. The final upgrades included:

- Topping up ceiling insulation, and installing underfloor and wall insulation, to above Code minimums
- Installing an underfloor vapour barrier
- Double glazing south facing windows in the upstairs bedrooms
- Draught stopping doors
- Lagging hot water pipes
- Installing a range hood vented outside
- Installing a heat transfer kit and thermostat from the living area to the upstairs bedrooms



Build Back Smarter

Through Build Back Smarter, Beacon Pathway wants to find out whether performance improvements during earthquake repairs without slowing down the rebuild process. The project is funded by the Energy Efficiency and Conservation Authority, Fletcher Building, Christchurch City Council, Christchurch Agency for Energy and the Ministry for Science and Innovation.

The extensive repair and rebuilding required in Christchurch presents an opportunity to include upgrades which will improve home performance – Beacon Pathway calls this building back smarter. Typically, performance upgrades might include high levels of ceiling, floor and wall insulation, clean heating, solar or heat pump hot water, and rain tanks.

Having a home which performs well results in:

- a healthier, warmer home with lower health costs and fewer days off work or school
- lower power and heating bills
- better resilience and ability to meet future challenges
- reduced demand on centralised electricity and water networks

For more information:

- Beacon website www.beaconpathway.co.nz/existing-homes/article/what-is-the-build-back-smarter-project
- Watch the Huntsbury 2 case study Youtube video <https://www.youtube.com/watch?v=KW9M3cfEryE>