

# How a 1920's bungalow transitioned from draughty to toasty



## Home Owner:

Denise Culley

## Builder

Glenn Cameron  
General Construction Ltd

## Solutions

Knauf glasswool  
Jet Stream Max

## Date

September 2021

“My children and I have lived through 10 cold winters in our 1920's Californian bungalow. It was time to do something about it. Our home not only needed a significant renovation, we also wanted it to be warmer and healthier. Now we have it all!”

**Denise Culley** - Homeowner



## OVERVIEW

In 2010, Denise moved into her Mount Albert bungalow with 2 young children. The house was generally tidy and well maintained having had some minor modernisations in the 1990's. Those changes were the wrong way around though with the laundry on the sunniest corner of the house. Also, the house was cold, especially the bedrooms. It was time for a change.

Seeking advice from architectural friends, builders and Nick Hall of Enstall, Denise embarked on making her house really perform; not only in function by taking advantage of the north facing aspect, but also to improve energy efficiency and comfort by implementing simple improvements.

---

When combining existing old structures with new construction, a blend of insulation solutions is needed to maximise the performance of the whole house - not just the renovation.

## 1920's Bungalow

- ↓ Ceiling insulation <50mm
- ↓ No underfloor insulation
- ↓ Gaps between tongue and groove flooring
- ↓ No external wall insulation
- ↓ No acoustic insulation around bathrooms
- ↓ Poor performing windows
- ↓ Fragile plaster ceiling inlays

## Applications

- ✓ High performing ceiling insulation upgrade
- ✓ High performance underfloor insulation with windwash barrier
- ✓ External wall insulation
- ✓ Acoustic wall insulation to selected applications
- ✓ Carpentry repairs to wooden frame windows
- ✓ New double glaze windows to living areas

### Old meets new

A makeover of a well-built original home. Upgrades included; mix of new external wall; most internal walls; new ceiling lines; plumbing, electrical, flooring, kitchen and bathrooms.

### Modern insulation for a modernised home

#### Ceilings:

- ✓ R4.2 Knauf glasswool to new truss and skillion ceilings
- ✓ R4.1 Jet Stream Max to the fragile no-access plaster inlay ceilings, including closing the thermal envelope over the coldest rooms in the house

#### Underfloor:

- ✓ Windwash barrier Knauf glasswool R1.8. Reduces uncontrolled air infiltration between gaps while improving thermal performance higher than the building code.

#### External Walls:

- ✓ R2.6 Knauf insulation, above minimum code with ProClima Solitex drainage material reducing risk of water transfer through back of weatherboards.

### Builder's comment

"The Enstall team were easy to work with. They communicated well throughout the project, completing installation in stages. These guys know their stuff. Their teams follow good site safety. Looking forward to the next project with them".

**Glenn Cameron**

### The final word

"My home now feels complete, not only does it now look fantastic, modern kitchen and living, taking advantage of the sun, and I now know my family are going to be warmer during winter".

**Denise Culley**

