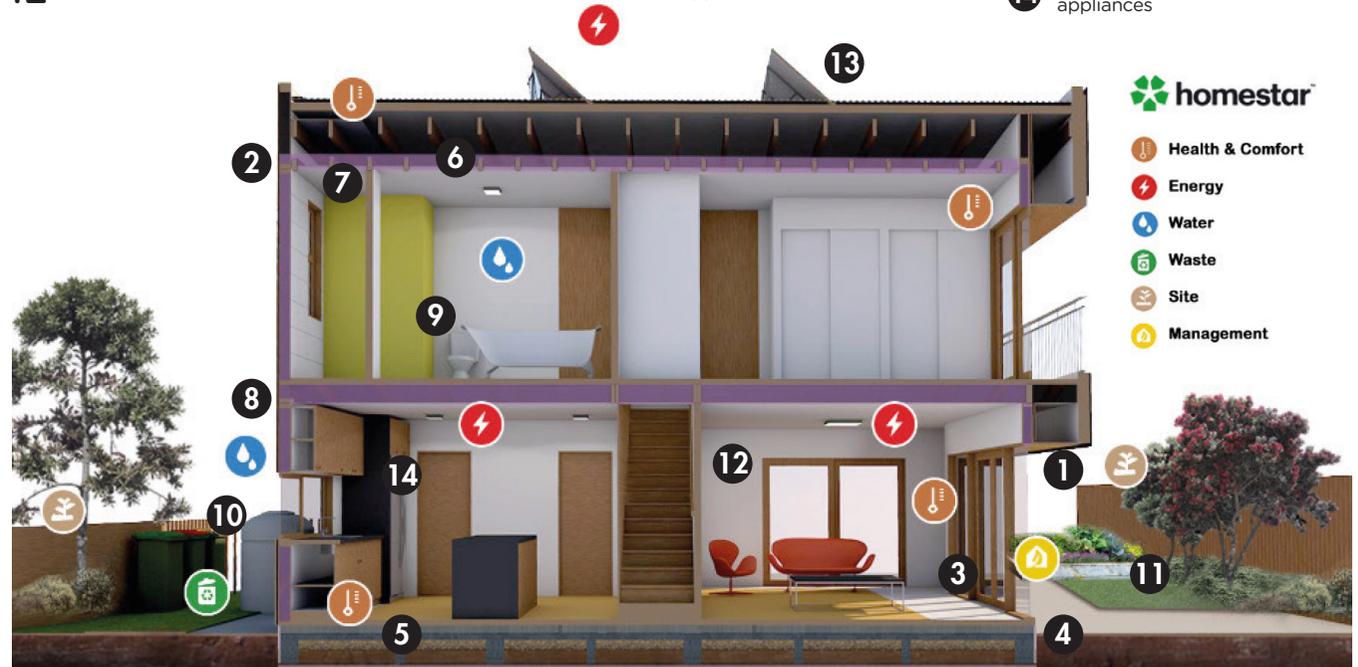


A guide to creating your own Energy Efficient Build 7 Home

PLAN YOUR ENERGY EFFICIENT HOME

1. Plan early. Think about site location and the home's orientation to the sun. Be size efficient, build just what you need.
2. Find an architectural designer who is experienced in designing for health, comfort, resilience, and energy efficiency. A good architect or designer will save you thousands in running costs of the home.
3. At Build 7 we have excellent relationships with some of Canterbury's best Eco-designers
4. Invest in the thermal envelope first including airtightness, fully insulated slab, uninterrupted insulation in the walls and ceilings, and high performance windows
5. Be sustainable in your choice of building materials. Think of the generations of people who will live in the home after you are gone and what will happen to the home in 100 to 200 years.

- 1 Design orientated for correct solar gain shading optimised to prevent overheating
- 2 High performance thermal envelope insulation continuous without thermal bridges
- 3 Windows high spec and recessed in wall low E double glazing with thermal spacer
- 4 Foundations fully edge insulated with no thermal bridging and insulated floor
- 5 Efficient heating, e.g. underfloor solar powered
- 6 Ventilation – balance energy recovery system
- 7 Airtight construction to avoid heat loss and provide a vapour control layer preventing mold
- 8 Moisture removed at source, bathroom/kitchen
- 9 Water efficient fittings and appliances
- 10 Rainwater harvesting for irrigation/use in home
- 11 Food producing plants and native landscaping
- 12 Materials environmentally certified/natural
- 13 Renewable energy, e.g. solar
- 14 Energy efficient fittings and appliances



ECO-DESIGN ADVISOR SERVICE

The Council's Eco-Design Advisor provides free, independent, expert advice about home design and renovation. Book your free consultation at: www.ccc.govt.nz/eco-design-advice

LIFEMARK

Is a guide for designing homes to be liveable and safe for people of all ages and abilities. lifemark.co.nz

HOMESTAR

Is an independent measure of the performance of your home using a 10 star system. It evaluates health, energy, water, waste and the materials used. The more stars your home has, the lower its running costs and environmental impact. 10 Stars means world-leading design and performance.

See how your home scores. homestar.org.nz

WELL DESIGNED

Beauty: Aesthetically beautiful just as much as it is functional

Functional spaces: Efficient use of space, good flow and plenty of storage

Lifetime design: Accessible and safe

Solar design: Sun facing windows sized for natural light and summer shade

Innovative: New, clever designs and building methods

GREEN

Water: Efficient fittings, appliances and rain harvesting

Waste: Avoids construction waste and home composting

Materials: Uses certified eco-friendly products

Health: Ventilation and moisture control

Ecological: Supports nature and food growing

ENERGY EFFICIENT

Insulated: High performance thermal envelope

Efficient: Low cost heating, appliances and lights

Air-tight: No cold drafts or heat loss

Renewable: Solar energy systems and heat recovery

RESILIENT

Durable: Low maintenance materials and repairable systems

Weather tight: Cladding repels water and responds to climate

Earthquake: Damage prevention, quicker repair, Quakestar rating

Natural hazards: Flood, wind and fire smart, a future proof design