

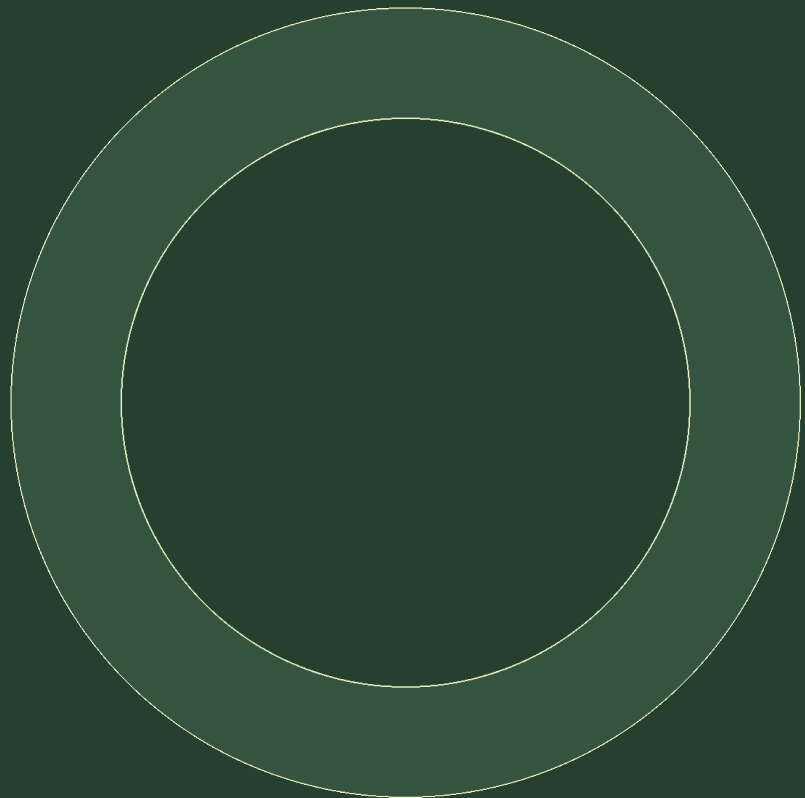
A FREE GUIDE FROM ENERGY EFFICIENT HOMES

Get More From Your Home Building Budget

How a quantity surveyor thinks about budget, waste and value

Episode 2 of our House 2.0 series

Featuring Daniel Whitehouse, Quantity Surveyor at Energy Efficient Homes



ENERGY EFFICIENT HOMES

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Where should you spend your money to optimise return? A quantity surveyor can tell you... *if you bring them in early enough.*

Most people building a new home have never heard of a quantity surveyor, let alone thought about hiring one before the design is finished. That could be a missed opportunity.

A quantity surveyor helps the homeowner answer the question: “**Where does my money actually make a difference?**”

At Energy Efficient Homes, we work differently to most. Rather than pricing a design once it is finished, our quantity surveyor gets involved from the earliest sketches, shaping decisions around cost effectiveness before a client falls in love with a home they can't afford to build.

These show notes cover Episode 2 of our House 2.0 series. We talk with our quantity surveyor at Energy Efficient Homes, Daniel Whitehouse, who explains what you should take into consideration when designing your dream home - especially if you are looking for the greatest return.

WATCH THE FULL INTERVIEW

Where Should You Spend Your Money When Building a House?

House 2.0, Episode 2 · Featuring Daniel Whitehouse, Quantity Surveyor at Energy Efficient Homes

youtu.be/EzIf0wIPHxE

Daniel works alongside the design team at Energy Efficient Homes from the earliest stages of a build, rather than being brought in once the plans are finished. The points in this guide are drawn directly from his firsthand experience helping clients explore their budget and how it can improve the home they will live in.

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MEET YOUR QUANTITY SURVEYOR

The person who should be in the room from Day 1

Most homeowners never meet their quantity surveyor - and never learn how much money that costs them.

What a quantity surveyor actually does

A quantity surveyor reads a set of building plans and turns them into a list of every material needed to make those plans real and the cost attached to each one. That covers everything from metres of stormwater pipe to steel reinforcing, timber framing, and much more.

Traditionally, that role sits at the conclusion of the design process, working with the builder and subcontractors once the plans are already locked in. By that point, there is very little room left to change how efficiently or how wisely the budget is spent.

1 in 10

houses' worth of material is roughly what ends up wasted, industry-wide, for every 10 houses built

6 metres

one length timber is commonly sold in; framing that doesn't divide evenly into this creates offcuts

Bring the quantity surveyor in early, and the numbers change

At Energy Efficient Homes, the quantity surveyor sits alongside the designer from the start.

Early collaboration means a design can be tweaked to work with standard material lengths before anything is built, catching waste that a disconnected, end-of-process quantity surveyor would have no way to prevent.

WHY IT HAPPENS

New Zealand building rarely works in standard, repeatable modules. Almost everything is treated as a one-off, custom item, which is part of why so much usable material ends up wasted.

DESIGN FOR EFFICIENCY

Shape is the biggest lever you have

Before a single fixture or finish is chosen, the footprint of a house has already decided a large part of what it will cost and how it will perform.

Surface area versus volume

A large, simple volume has less surface area relative to its size than a small or complicated one.

Add wings, angles, and jutting corners to a house, and you increase the amount of exterior surface compared with the space inside.

More exterior surface means more area for heat to escape through, more junctions where insulation and airtightness details can fail, and more materials and labour to build in the first place.

Square

the single most efficient shape, though rarely practical

2 : 1

the rectangle ratio used as a realistic, buildable target instead

WHERE SHAPE MEETS PERFORMANCE

Adding wings, angles and jutting corners doesn't just add cost. It also adds surface area and more complex junctions, which makes the house harder to keep properly airtight. A simpler shape is not just cheaper to build, it is easier to build well.

Two houses: same price, very different outcomes

Picture two homes that cost the same to build.

One has an elaborate, many-angled shape. It looks striking from the street, but its budget has gone entirely into how it looks, leaving nothing for insulation, airtightness or ventilation.

The other has a simpler footprint, and that saved cost goes straight into performance.

Years down the track, one of those homes costs far less to live in than the other. The people in that home have benefited from how that money was spent, too - not just the neighbours admiring it from across the street.

MAKING THE BUDGET WORK

Budget first, then design

A realistic budget, shared honestly and early, is the single biggest factor in whether a design and build process goes smoothly.

Start with the numbers

Many people underestimate how expensive building a house has become. Getting numbers on the table early, before any design work starts, shapes everything that follows.

DON'T SPEND MONEY YOU DON'T HAVE TO

"If you've got a million dollar budget, but you're going to be satisfied with a \$750,000 house to meet your requirements, we're perfectly happy building you a \$750,000 house... We don't want to make houses more expensive than they need to be."

Pricing in a loop, not at the end

Designing first and pricing later tends to end one way:

A beautiful set of plans that comes back over budget, followed by an unpleasant process of stripping features back out - typically the performance features nobody can see.

A better approach works in a loop:

An initial concept is priced, checked against the client's budget, refined, and priced again, in short cycles, so trade-offs get made deliberately instead of under pressure. This is done in tandem with the design progress, so no time is wasted.

APPROACH	WHAT HAPPENS
Design first, price later	Performance features may get cut once the bill lands
Price in a loop	Concept, cost check, and refinement repeat until budget and design agree
Value engineering done well	Client sees real options and real costs, and chooses with full information
Value engineering done poorly	Cheapest option is the only one presented, without the client's input

IT'S CHEAPER THAN IT LOOKS

A high performance home can cost more upfront, but the increase to a mortgage tends to be offset almost entirely by the weekly saving on power bills - before comfort and health benefits are even counted. Spent in the right place, that extra money pays you back in your pocket and health.

SPENDING IT WISELY

Looks good and performs well

Every dollar in a build budget can go toward how a house looks from the street, or how it performs for the people living inside it – not necessarily both.

The trade-off

A striking facade, an elaborate roofline, or a dramatic entryway all cost a lot of money, and none of it makes a home warmer, drier, or cheaper to run.

Most people spend around five minutes a day pulling into and out of their own driveway, looking at the facade. They spend the majority of their time, including every night asleep, inside the house. Money spent on how the house performs for its occupants tends to matter far more than money spent on how it looks to the neighbours.

A well-built envelope, strong insulation, airtightness, and mechanical ventilation with heat recovery won't impress the neighbours, but they are what determine whether a family is comfortable and healthy, and what their power bill looks like every winter.

WHERE ENERGY EFFICIENT HOMES SITS

A practical middle ground, not a compromise

Certified Passive House delivers excellent performance, but reaching that certified standard adds real cost - and relatively few New Zealand homes are built to it.

What certified Passive House actually means

Passive House is a verified product: a thermal model, construction monitoring, and a pass or fail certificate at the end. Passive House Premium adds a further requirement on top, a solar array or other on-site renewable generation that offsets the home's heating demand entirely, so the house draws effectively no net energy from the grid.

The Energy Efficient Home approach

The Energy Efficient Home approach is built on the same underlying principles as Passive House: better insulation, better doors and windows, a deliberate level of airtightness, mechanical ventilation with heat recovery, and reduced thermal bridging. Rather than chasing full certification, it applies those principles to the point of maximum return on money spent.

A HIGHWAY FOR HEAT

Thermal bridging happens wherever a piece of framing, like a stud or a steel beam, runs straight from the inside to the outside of a wall, letting heat escape far faster than it would through insulation. It can be reduced significantly, though never fully eliminated.

Why the middle ground matters

A standard home's building code is principally concerned with structure, durability, and keeping rain out. It is not designed to manage the moisture a household produces, or to guarantee comfort.

Because the energy efficient approach is more attainable than full Passive House certification, it can help far more households. The goal is a home that performs and that a family can actually afford to build, not the highest possible score on a certificate few people will ever see.

EPISODE REFERENCE

Key terms from this episode

A quick reference for the terms cited in the conversation.

Quantity surveyor: The person who turns building plans into a costed list of every material needed to build them.

Value engineering: Laying out real options with their real costs and long-term consequences so a client can choose with full information.

Thermal bridging: A 'highway for heat,' where heat escapes faster than it would through insulation alone.

Surface area to volume ratio: The relationship between a shape's external surface and its internal volume; simple, compact shapes have a lower ratio, and lose less heat, than complex ones of the same floor area.

Certified Passive House: A verified building standard, confirmed with a thermal model and construction monitoring, resulting in a pass or fail certificate.

Passive House Premium: Certified Passive House plus an on-site renewable energy source, typically solar, that offsets the home's heating demand entirely.

ENERGY EFFICIENT HOMES

Why build energy-efficient and how we can help

A home should keep a family comfortable, healthy, and protected from rising running costs - without a budget that spirals out of control along the way.

A partner from day 1

Bringing a quantity surveyor in early means every design choice gets weighed against its real cost, before you fall in love with something you can't afford.

Spend where it counts

Money spent on performance, not just appearance, is what lowers bills and improves comfort for years.

A shape that earns its keep

A well proportioned footprint delivers better performance without a premium price tag.

A future-proofed investment

Built ahead of upcoming building code changes and mandatory home energy ratings.

TALK TO OUR TEAM

Thinking about your next build?

Let's talk about your section, your budget, and where your money will do the most good.

[SCHEDULE A CALL](#)

HEAR IT FROM DANIEL

Watch or share the full interview

Real numbers, real trade offs, explained in plain terms.

[WATCH THE INTERVIEW](#)