

Understanding the building process



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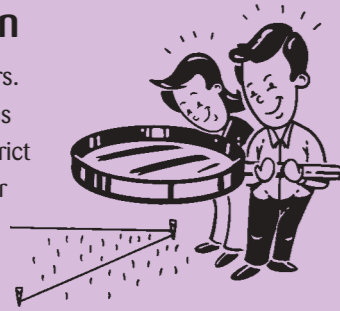
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Your step by step guide to building

This guide is designed to give you an overview of the building process. All the major steps involved are set out in brief form in the first part of the guide, with more in-depth information on the following pages.

Checking out the section

Building covenants. Zoning. Land contours. Soil stability. There's a vast array of issues relating to a section that may affect or restrict the type of home you can build. Do your homework thoroughly before you buy.



STEP 1

Choosing and briefing a designer

Registered architect or architectural designer? What do they charge? How do you brief them? Lifestyle choices. Consider environmental factors such as sun, light, climate. Is noise control an issue?



STEP 2

Materials selection

It's critically important to choose materials based on life cycle costings rather than just price. This can have a huge effect on maintenance costs and resale value.



STEP 3

Your wish list



STEP 5

Now's the time to make definitive decisions on internal fittings, fixtures, kitchen top, bathroom vanities, stove, taps, electrical fittings. You have to develop a full schedule of all materials in order to get an accurate quote.

Revising the design



It's rare for a designer to come back with exactly what you want first time. Usually, you will want to make some revisions.

STEP 4

Final plans

After lots of discussion and revisions, you're happy with the concept plans. Now it's time to prepare final plans and working drawings.

STEP 6

Reality check



The costings have all come in. You may need to review and revise your plans for budgetary reasons that become evident during the tendering process.

STEP 8

All systems go

The building contract is signed, the Building Consent is applied for and obtained, a construction timetable is established and you press the 'go' button.

STEP 9

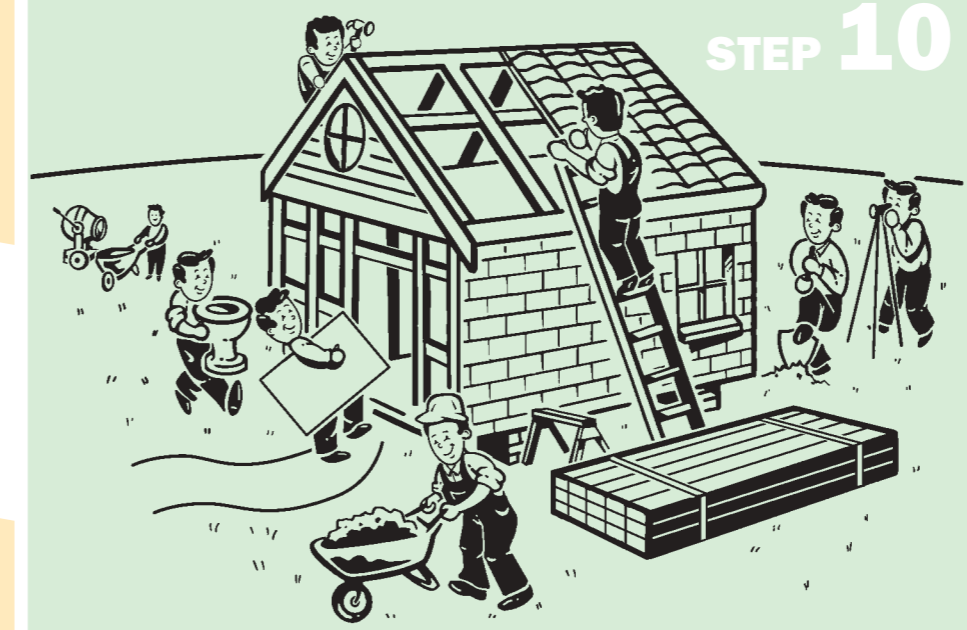
Choosing contractors & getting quotes

Should you or your designer get the job estimated by a quantity surveyor or do you simply obtain competitive quotes for the whole job from builders?



STEP 7

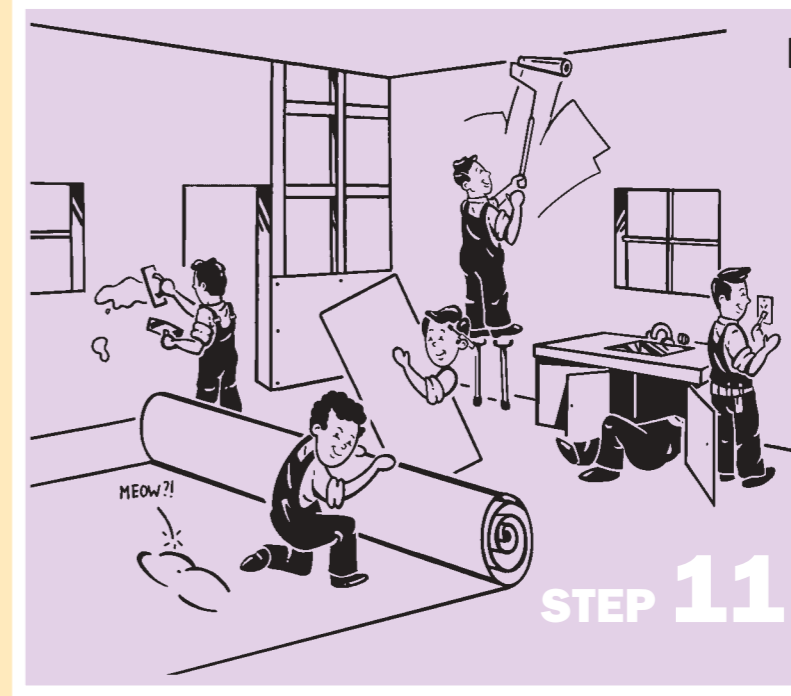
The building shell Once excavations and foundations are completed, things can happen pretty quickly. Most builders nowadays order the framing in pre-built sections and put them together on site. Next, the roof goes on, windows are fitted and the exterior cladding is fixed. Plumbing, electrical wiring, insulation and doors are installed. The building is now at "lock-up" stage.



STEP 10

Interior lining & fit-out

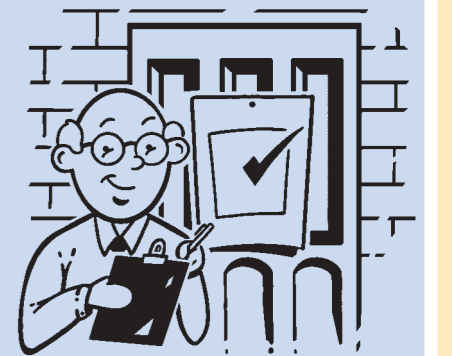
The interior is lined with GIB® plasterboard. The various different types of plasterboard (eg GIB Aqualine®, GIB Noiseline®) have different coloured face papers so you can tell that the right board has been used in the right area. Interior cabinetry such as vanities, kitchen, laundry etc are installed, followed by tiling in appropriate areas and painting. Final plumbing and electrical fit-out is completed and the home is now ready for floor coverings, window treatments etc.



STEP 11

Final checks

Your designer and/or project manager checks that everything has been done satisfactorily. If there are any defects the project manager arranges to have them fixed. On final completion of the project, the building inspector makes a final inspection and a "code compliance certificate" is issued.



STEP 12

Move in!



Which way to go?

The process of planning and building a new home, or carrying out major renovations, can be very daunting. With so many different things to think about, it's easy to become confused, especially when you're not familiar with the terminology.

We've put this guide together to shed some light on the process and help you understand the various steps along the way. Even if you plan to appoint a project manager or designer to oversee the whole project, it's still helpful to understand what's going on so you can discuss issues as they arise with some knowledge of how the process works.

While the major focus of this brochure is on building a new home, most of the steps also apply for renovations.

There are three common ways of going about building a new home. You need to decide at the outset which method is the best for you. This will depend on your needs and desires and your knowledge of the building process, your budget, and the amount of time you have available to oversee the project.

Group housing company

There are many highly reputable building companies that offer a variety of standard house designs at fixed contract prices. These companies often provide an all-up land and house package, and can help with finance.

With a group housing company, the house designs have been tried and tested over time, and you can generally visit a showhome or at least get to see photographs of homes that are similar to the one you decide on.

This makes it much easier for you to envisage what your new home will look like, and provides a degree of certainty as to quality, pricing and when the home will be completed.

Once you decide on the basic design, you can sometimes make minor adjustments to the plans to suit your needs.

Custom design

With this choice, you get to design your home from scratch, which gives a lot more scope to include special features and styling details.

Depending on your ideas and budget, you can have your home designed by a registered architect or an architectural designer, or simply have your design drawn up by an architectural draughtsperson.

Once you are happy with the design, the actual building process can be handled in three different ways:

1. Control the project yourself where you act as project supervisor from go to whoa, purchase your own materials, organise your own builder and sub-contractors. This is what is known as a "Labour Only Contract".
2. Employ a project manager to run the contract on your behalf. In some cases, this may be the person who designed your home.
3. Put the project out to tender to a builder who will give you a clear completion date and a total cost which covers everything including materials, sub-contractors, full site supervision and co-ordination.

Design & build companies

Another option is to deal directly with a builder who can arrange working drawings to your brief, or a design and build company that will give you a fixed price for designing and building your home to your brief.

Checking out the section



Make sure you find all the boundary pegs and that they correspond with what's shown on the survey plans. If there's any doubt, get a surveyor to confirm the boundaries.

Some sections will have all services (water, power, phone) right up to the boundary. Others won't. Check out proximity of services and the cost of getting them "on site".

Also be mindful of access. A long driveway or particularly difficult access can make a huge difference to the overall building cost.

Check for building covenants. It is not uncommon for developers to place covenants on sections which stipulate that they must be built on within a specified time, to a specific standard.

Make sure you get a LIM report (land information memorandum) from the council. It costs around \$300 and may take up to 10 days to come through, although urgent processing can be arranged in some cases.

What's a LIM?

A LIM provides important information about the property such as legal description, stormwater and drainage details, special land features including susceptibility to flooding or erosion, presence of hazardous contaminants, conservation or heritage protections and classifications, rates, government valuations, and consents, certificates, notices, requisitions or orders previously issued by the council that may affect the land or any buildings.

Will you need a resource consent?

In most cases, no. But to be sure, you should research the local district scheme available through the planning department at the council. This provides information on requirements for zoning, site building restrictions, landscaping, carparking, access, protected trees, neighbours' rights etc.

If you plan to deviate from these requirements, you will need to apply for resource consent.

Does the section require surveying?

If the site isn't flat and there are no surveyed plans available, you will need to get a surveyor to plot the land contours. If you are planning to build close to the boundary, the placement of foundations will need to be plotted by a registered surveyor and the height of the building in relation to the boundary will require confirmation.

Height to boundary regulations are designed to ensure that a building will not cast shadows or adversely affect the daylight available to neighbouring properties.

Do you require soil tests?

If the section is steep or complex in nature, or you anticipate a reasonable amount of excavation or retaining, you may need to engage a geotechnical engineer to test for soil stability, soakage etc.

The design brief

If you've decided to have your new home custom designed from scratch, you'll need a registered architect, an architectural designer or a draughtsperson.

Registered architects are members of the NZIA (New Zealand Institute of Architects) and you can obtain information on professional standards and expectations by contacting the institute.

Fees for a registered architect generally range between 10% to 15% of the construction value.

Architectural designers come under DINZ (Designers Institute of New Zealand). Their fees generally range from 5% to 15% of construction costs depending on their level of expertise and the scope of work you are engaging them to do.

Both registered architects and architectural designers will be able to design your home from the concept stage right through to providing finished drawings, and may offer to supervise the building project right through to completion.

There are also draughtspeople who do not design but simply draw the final plans and details for construction. Fees for this service generally range around 5% of construction costs, but once again, it depends on the complexity of the design and the quality of information provided.



In all cases, before deciding on a designer or architect, you should check out some examples of their work and seek testimonials from previous clients.

Be clear what you want

Establish a budget. You may wish to speak to a valuer and get some broad idea on what other properties in the area are worth. Most builders or designers should be able to give you an idea of the current rates for building costs. With this information, you can make some reasonable judgments on what you can spend and what the property will ultimately be worth.

You need to consider whether the project is purely a lifestyle choice or are you out to make a short term capital gain?

If you are clear on the style of design you are looking for, provide photographs or cut-outs from magazines to clearly convey your ideas. This is also useful if you are unclear as to what you're seeking but you know what catches your eye.

The designer needs to be able to get into your mind to understand your lifestyle and what's important to you. Talk to them about your lifestyle plans and how you can accommodate them most effectively. Do you have children? Are you planning to have children? Do you like entertaining and in what way? Do you have regular guests coming to stay?

Consider environmental factors. Do you or your family have any special health needs? Plan to take maximum advantage of sunlight, and minimise noise problems.

Establish the ground rules

Keep in mind that designers sell time, knowledge and experience in the same way as lawyers and accountants. This is why it is important to make sure that you have a clear idea of your needs, likes and dislikes. Make sure you both understand the scope of the work the designer is about to undertake, what's included and what's not. Most professional designers will have a "conditions of engagement" to protect both parties.

Concept design

Concept plans are the initial design sketches. They begin in a very crude form to establish the direction of the design and to identify the potential issues with planning.

For example, there are limits to how much land on a property can be occupied by a dwelling. Other issues include access for vehicles, turning circles, provision for courtyards, disposal of stormwater etc.

This is a good time to apply for a PIM (project information memorandum) from the council. A PIM is required by law under the Building Act and must accompany every building consent application.

Usually your designer will handle this for you if they are lodging the consent on your behalf. It also assists the designer in identifying any site issues that aren't covered in a LIM report and may be relevant to the design.

A PIM can only be applied for once you have initial sketch plans, which must be attached to the application. The PIM is a more comprehensive report than a LIM and will provide additional information on the site, such as drainage and stormwater disposal.

The PIM will include confirmation that you may carry out the proposed building development subject to the usual resource consent, building consent and any other necessary authorisations. It may also confirm that the proposed development may indeed not be permitted to proceed, unless amendments are made to the concept plans.

Materials selection

After initial discussions with your designer, you will come to some basic decisions regarding materials. As you enter the next phase in the design process, you will need to firm up on these as it will have a great bearing on cost.

Most people generally think only in terms of the overall appearance of a home and focus on the exterior cladding and roof. You need to look beyond this and make decisions about windows and doors, kitchen and bathroom cabinetry, plumbing and electrical fittings and a myriad of other items.

Don't forget that once the house is built, there are still many other costs associated with floor covering, window treatments, furnishing and landscaping. To help you with these decisions you can employ an Interior Designer. Interior Designers come under DINZ (Designers Institute of New Zealand). They can help you make quality decisions about a broad range of interior products available.



Revising the design

The next step is to develop concept plans in a clear design direction.

It is rare for a designer to anticipate your every preference and desire and so the initial concept plans

will invariably require some modification.

Often, you will be much clearer on exactly what you want after seeing the plans and will be able to provide better guidance for the designer.

The design is then progressed to the “developed design” phase which is where more detail is incorporated into the plans.

While final concept plans are not sufficient to build from, they are suitable for clarifying construction costs and checking that the design is “on budget”. They usually also include sufficient detail to apply for resource consent should this be required.

It is important to remain in close contact with your designer through the whole process. If you have concerns, raise them as they occur and don't leave it until the end.

Your wish list

In order to have your project accurately costed, you need to develop a full schedule of all materials and fittings.

This is where projects can easily go off the rails in a budgeting sense.

It is common once you get closer to realising your dreams and aspirations to get carried away with the excitement of the project and include the best of everything in your specifications.

Keep sight of the big picture and be mindful of the original budget you set. The specifications for your home are required by the designer to be included in the final plans and documentation so detailing can be completed and information related to building consent incorporated. The more accurate the specification, the more accurate the quotes will be.

Final plans

Final plans are the construction working drawings. They are generated from the concept plans and are used for quoting final costs, submitting to council for building consent and are used by the contractors to construct the building. They accompany all documentation and detailing from specialist consultants such as engineers, surveyors etc.

Choosing contractors and getting quotes

There are two ways of going about costing your building project. One is to engage a quantity surveyor at the beginning of the project. This enables accurate budgeting which is monitored as the project evolves and provides

you with a benchmark to evaluate costings as they come in.

It also provides a level of security that nothing has been missed in the tender process.

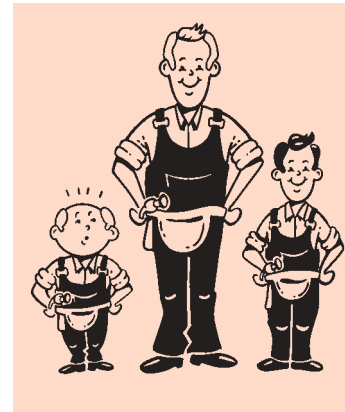
The alternative to using a quantity surveyor is to seek tenders from at least three contractors. If the prices from all three are similar, there is a good chance they will be realistic and accurate.

If they are vastly different, you will have to establish what that means. Has the low one missed something? Is the high price over-inflated or accurately anticipating the cost and difference in quality and professionalism?

Do you appoint a project manager to oversee the whole process?

This depends on how you decide to run the project. If you run a labour only contract, this requires you to act as project supervisor for the entire process, including organising your own builder, sub-contractors and purchase of materials.

The alternative is to engage an experienced project manager to oversee the process on your behalf. Or put the project in the hands of a builder who is prepared to give you a total cost which covers everything including materials, engaging sub-contractors and full site supervision and coordination.



In this case, it is in the contractor's interests that the project be managed well as there will be direct responsibilities under his contract. This form of building contract is ideal when you are looking to distance yourself from the day-to-day hassles related to building projects and want an all-up cost and definitive completion date.

This also reduces your risk of budget overruns. Generally, the designer's input is sufficient to monitor the project quality provided they are commissioned to do so. This is normally a part of their scope of work included in the design fee, but this should be clarified at the outset.

Reality check

When the prices come in, they are sometimes higher than what you originally budgeted. You will need to think carefully about how you can change things to reduce the cost.

This will involve going back to your designer or quantity surveyor to isolate where cost overruns are occurring and to discuss options for trimming back.

It's important to check with your designer to ensure that any proposed alterations don't affect the design in any way that may affect the building or resource consents. If construction does not match the drawings a consent is issued on, you will have problems getting building inspection approvals.



All systems go

Often due to time pressures the building consent is lodged with council immediately on completion of the working drawings. This allows for the

processing of the consent while the project is out for tender so that when the building contract is signed, you have consent and the project can start straight away.

However, any amendments to the drawings made after lodging the consent must be notified to the council. If the amendments are notified to the council while the consent is still being processed

there is no additional fee. If the consent has been issued prior to the amendments, then a new consent for the amendments must be lodged, which involves an additional fee.

It is important to establish a building contract. This is to reduce your risk should things go wrong and provide a base to which you can seek arbitration should disputes arise and reach a stalemate.

It is advisable to have your designer set up a building contract for you under their appropriate governing body or the project manager if you have one.

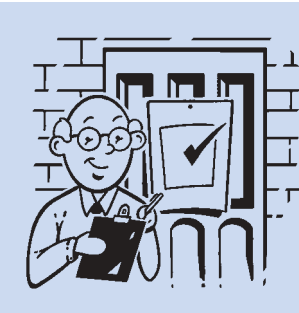
Regular inspections

The building consent issued by the council and based on your plans covers all areas of construction, structure, finishing, services etc.

The Building Act requires that all these areas are inspected through the different stages of the construction process.

Each inspection is passed and signed off by the council inspector on the consent documents before the next stage of construction can continue. If these inspections are not requested and signed off, the inspector can insist work be dismantled and reconstructed to meet approval.

On completion of the project, a last inspection must be requested for final approval. Once this has been completed a code compliance certificate can be issued, indicating that the minimum requirements of the building code have been met.



The objective of this publication is to provide a general overview of the steps involved in planning and building a new home or renovation. Every attempt has been made to ensure this information is correct. However, Winstone Wallboards accepts no liability for any omission, inaccuracies or changes in required procedures. If you are in any doubt about any part of the building process, seek advice from your designer, builder or territorial authority.