BUILDING INSPECTIONS

AND HOW TO MAKE THEM RUN SMOOTHLY



Now you've got your building consent, you're no doubt eager to get started. But please take the time to read this brochure. It could save you a lot of delays and money later. The brochure has a simple aim: to help you understand what the council must inspect at each stage of your building project, and what you in turn need to do beforehand to ensure each inspection goes off without a hitch. All it takes is a little organisation – and consulting this booklet at each stage of your project.

Technical stuff

First, some information about inspections themselves. When you ring to book an inspection, be sure to have ready your building consent number. It's on the front of your consent document. The council will need to know your name, phone number and the type of inspection you want. Ring **570 6754** between 8am and 5pm Monday to Friday. Please give at least 24 hours' notice. Before ringing, make sure you have completed every aspect of the stage you want inspected. If there is unfinished work, the inspector will have to return – and you will face an extra inspection fee.

Book every inspection

It is vital you arrange an inspection at each stage listed above. This is a condition of your building consent. If you continue on without one, it is quite likely the council will later make you undo work in order to make an inspection possible (for example, removing plasterboard from interior walls, in the case of a pre-line inspection, so bracing, insulation and moisture content can be checked). Failure to get an inspection will also delay – and could jeopardize – your code compliance certificate.

Engineering inspections

When your building involves an engineer (whether for structural, fire design, mechanical or geotechnical work), the council recommends that you co-ordinate that person's site inspections, where applicable, with those by the council inspector. An inspection by an engineer does not cancel your obligation to call a council inspector if the work relates to the compulsory inspections listed above. Engineers must provide a PS4 producer statement confirming the work they have overseen complies with the submitted designs, as well as supplying site inspection notes detailing the type of inspection, what was inspected, where it was inspected and the extent of that inspection.

Damaged footpaths and roads

Remember to repair any damage you have caused to kerbs, footpaths and road crossings in the course of construction work before booking your final inspection. The council will not issue a code compliance certificate unless you have completed this work.

Final inspection and code compliance certificate

When you finish building work, the council will carry out a final inspection and – providing the work complies and you have paid any outstanding fees – issue a code compliance certificate. This is a formal statement, issued under section 95 of the Building Act 2004, confirming that you have carried out work in compliance with your building consent. (See your building consent for the paperwork you must submit with your application for a code compliance certificate.) Any work found not to comply during the final inspection must be put right before a certificate can be issued. In some serious cases, the council may issue a notice to fix. This is an order, prescribed by the Building Act 2004, that details the work you must carry out to correct problems, and how long you have to complete that work.

You are legally required to apply for a code compliance certificate once you finish work, and the council has 20 working days to grant or decline your application. If you do not apply for a certificate within two years of getting your building consent, the council is legally required to decide whether to issue one. A last legal point: your building consent will lapse if you do not start work within 12 months of the date of issue.

Altering your plans

People change their minds. That's a fact of life. If you decide to vary your plans or the types of materials specified in those plans, you need to seek approval first. How the council responds will depend on whether the proposed changes are minor or major. A building inspector will tell you immediately which category your plan change falls into.

Examples of minor amendments include changing:

- The position of a door or window without altering wall bracing.
- Insulation to one with a higher R value.
- A timber treatment to a higher level.
- The position of wall bracing.

Examples of major amendments include changing:

- Where you position the building.
- The size of the building.
- Foundations.
- The amount of wall bracing.
- Structural elements (such as trusses and beams).
- Interior or exterior cladding.
- Roofing material.
- Layouts of kitchens, bathrooms and laundries.

In the case of a minor change, you will need to provide a copy of the altered plan, which the inspector will usually note as approved and work can proceed. In the case of major amendments, you will have to lodge a formal application along with your amended plan. (There is a processing fee.) Work must stop in the particular area affected by the proposed change, though all other work on site can continue. Always tell the inspector about any changes you have in mind. Remember, inspectors are there to help as well as to inspect. They have a wealth of industry knowledge and can suggest the best course of action.

The building site

Builders and other tradespeople often bring their dogs on site. If that's the case on your building site, please ensure they always keep their pets under control.

Noise - whether construction related or music from tradespeople's radios – can be another problem. Few people object to music if it's kept to a reasonable level during working hours. The same goes for construction noise, although strictly speaking, noise limits are controlled by the Resource Management Act 1991 and standard NZS 6803:1999, which the council applies. (See section 7 for noise limits.) Only emergency work or work not possible because of public safety or traffic hazards can be undertaken outside normal working hours.

The council has the power to issue fines in these matters. However, it would prefer that people on site simply showed some consideration towards neighbours. An example is pile-driving. It causes a lot of ground shaking and vibration, which not surprisingly can alarm immediate house owners. Contact neighbours beforehand. Let them know when you intend to start pile-driving and explain what it involves. These steps can allay fears and nip in the bud any potential conflict.

Dust and dirt are inevitable on a building site, but you can minimise the nuisance to neighbours. Don't tear up more vegetation than you need to and cover any stockpiled sand with sheeting. A little planning can go a long way, particularly when managing sediment and site water run-off. For technical details, see Greater Wellington regional council's erosion and sediment control guidelines (issued in April 2003).

Step-by-step guide to inspections

Now we get to the nub of the matter. What follows is a detailed checklist for every inspection you are likely to need on your building site.*

The description of each inspection is broken into parts:

- When you should call for an inspection.
- What work you need to complete beforehand.
- What the inspector will look at.

Not every step will necessarily apply to you. For example, if you've chosen a timber floor, you probably won't need a concrete slab inspection. Some steps are frequently optional, such as wood burners and retaining walls. Inspections are listed below in their logical sequence.

* Does not include some specialist inspections for multiresidential, commercial and industrial buildings. If these apply in your case, they will be listed in your building consent.

1. Site inspection

Call for an inspection:

 When you have identified or had a surveyor put in boundary markers, so the inspector can clearly identify the "set-out" of the building and, where applicable, any retaining walls. (The setout consists of a series of temporary posts and string lines showing where a structure will go.) If you have a surveyor's report showing the set-out, submit this instead of calling for an inspection.

Before the inspector arrives, you should:

- Have ready, if necessary, a copy of the surveyor's report.
- Take the opportunity to discuss your project with the inspector and hear firsthand how the inspection process will run. You can get valuable advice on how to proceed and what to watch out for as your project progresses.
- Book an on-site meeting with a compliance officer if your project involves a resource consent (phone 560 1044). The officer will run through a checklist of things to make sure your project runs as smoothly as possible. This service is included in your resource consent application fee. Using it could avoid difficulties later on.

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check boundary markers. (If there are none, a registered surveyor must establish or confirm the set-out).
- Confirm that the site's contours match those shown on your plans.
- Confirm that the general scale of your proposed work matches that shown on your plans.
- Check the firmness of the ground with a penetrometer, a device that tests the strength of soil.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

2. Foundations (for concrete slab)

Call for an inspection:

 When you have completed all the formwork (boxing), excavated the footings and put the reinforcing in place.

Before the inspector arrives, you should:

- Ensure that building set-out complies with consent documents and has been measured from the datum. (Datum is a land surveying term that means a reference point, in practice usually near the roadside, from which all measurements on a piece of land are taken.)
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so inspectors can, if necessary, consult them.
- Avoid ordering concrete until after you have passed this inspection.

The inspector will:

 Check the dimensions of the formwork and its position on the site, in particular its distance from the nearest boundary. (Distances from boundaries are critical because of building height or daylight considerations.)

- Check footings are the correct size and excavated to solid ground.
- Check reinforcing for correct size, spacing, overlaps and concrete cover, as well as that it is adequately tied and secured and matches the details shown in the consent documents.
- Check for sub-floor vents if you have ring foundations.
- Check that ground clearances from floor level are sufficient, as measured from the datum.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work* if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

* Full title: Memorandum from licensed building practitioner: Record of building work.

3. Piles

Call for an inspection:

- After you have excavated all the holes but before installing piles. (If you are using engineer-designed piles, you should arrange for your engineer to carry out his/her inspection at the same time as the council inspector.)
- Have piles on site, ready for installing.

Before the inspector arrives, you should:

- Ensure that building set-out complies with consent documents and has been measured from the datum. (Datum is a land surveying term that means a reference point, in practice usually near the roadside, from which all measurements on a piece of land are taken.)
- Advise your engineer of the inspection.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

 Measure the layout of the piles to confirm it complies with your plans and check that the piles are positioned correctly in relation to the nearest boundary. (Distances from boundaries are critical because of building height or daylight considerations.)

- Check that the pile holes are correct the size and depth and reach down to solid ground.
- Check that the piles are on site and meet the required treatment level (H5).
- Check that the cut ends of piles are not put in the ground (or if the piles are at this point only stacked on site, advise that no cut ends are to go in the ground).
- Check that ground clearances from floor level are sufficient, as measured from the datum.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

4. Pre-slab plumbing (concrete slab)

Call for an inspection:

 After you have installed all underground plumbing and drainage pipes but before installing the damp-proof membrane and reinforcing mesh and backfilling.

Before the inspector arrives, you should:

- Make sure your plumber or drainlayer is suitably qualified and licensed or supervised by someone who is, and also ensure that this person is on site during the inspection.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

- Check the positioning of wastepipes, drains and heating pipes.
- Check the fall of these pipes and that, where they will pass through concrete, they are either sleeved or wrapped in plastic or sealing tape.

5. Pre-slab building (concrete slab)

Call for an inspection:

 When you have placed all the damp-proof membrane, sealed all overlaps and penetrations, and installed reinforcing mesh using sufficient chairs in the correct places.

Before the inspector arrives, you should:

- Advise your engineer to be on site for the inspection.
- Have a copy of the engineer's report available if the engineer has already carried out an inspection.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check ground clearance to ensure the slab, once poured, will allow for future site works around it and to ensure that the ground drains away from the building.
- Check damp-proof membrane, sand blinding, taping of overlaps and penetrations.
- Check reinforcing steel or mesh for size, spacing, overlaps, concrete cover and support.
- Check, in the case of brick veneer houses, that rebates protrude from the foundations and that a membrane barrier is laid on the rebate.
- Check, where applicable, the cast-in connections (bottom-plate fixings).
- Check that there are thickenings in the slab where it will support load-bearing walls.
- Re-check that ground clearances from floor level are sufficient, as measured from the datum.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

6. Sub-floor (suspended timber floor)

Call for an inspection:

After you have completed sub-floor connections, joists, blocking and any suspended plumbing pipes, but before you fit any flooring or base boards.

Before the inspector arrives, you should:

- Advise your engineer to be on site for the inspection.
- Have a copy of the engineer's report available if the engineer has already carried out an inspection.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so inspectors can, if necessary, consult them.

The inspector will:

- Check the height and connections of the piles, the crawl space between floor and ground, and the damp-proof membrane.
- Check that cut pile ends are sealed.
- Check the strength and durability of the bracing connections.
- Check the sub-floor framing to ensure it uses correctly treated timber and that the loadbearing components are correctly supported.
- Check that the subfloor is properly insulated and protected.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

7. Drainage

Call for an inspection:

 After you have installed sewer and stormwater pipes and they are under test, but before you backfill. (You must also have ready for the inspector an "as-laid" drainage plan.)

Before the inspector arrives, you should:

- Ensure, if applicable, that you have ready a copy of the as-laid drainage plan.
- Ensure drains are uncovered during inspection
- Ensure drains are under test at the time of inspection.
- Ensure, in the case of on-site effluent disposal systems, that you have a copy of the engineer's certificate ready.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check the size of trenches.
- Check that pipes are supported by bedding material.
- Check, where necessary, that there is adequate clearance between trenches and foundations.
- Check that approved materials have been used.
- Check that pipes are sealed properly.
- Check that pipes have sufficient fall (gradient) and connect properly to mains.
- Check that drainage trenches have been backfilled.
- Check that the ground slopes away sufficiently from the building to the sump.
- Check that the top of gullies are sufficiently above the surrounding ground.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

8. Pre-wrap

Call for an inspection:

After you have completed roof and wall framing, including any exterior sheet bracing, but before installing building wrap (building paper, RAB board or plywood).

Before the inspector arrives, you should:

• Ensure the inspector will have safe, unimpeded access to the site.

 Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check structural framing, including the roof structure.
- Check the timber treatment, the size of the structural members and their spacing.
- Check the sub-linings, wind barriers (usually building paper or plywood) and exterior wall bracing.
- Check the connections, structure and fixings of framing.
- Check the waterproof rebate, in the case of masonry and brick veneer buildings.
- Check that windows and doors have been positioned where the plans show, and have the dimensions shown on the plans.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed carpenter who carried out or supervised the work must first complete the form.)

9. Pre-clad

Call for an inspection:

After you have installed building wrap, window and door flashing tape, cavity systems (where applicable) and flashing systems, but before installing joinery.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

- Check the building wrap and roofing underlay, including their absorbency and overlaps and whether they are sufficiently taut.
- Check the cavity is closed at the top and closed off from the subfloor and attic spaces.

- Check battens' size, timber treatment (H3.1 minimum) and layout (which includes checking there are no horizontal obstructions).
- Check the building wrap is the correct type and correctly installed.
- Check the installation of flashing tape around all openings.
- Check other flashings.
- Check cavity battens and closers, in the case of a cavity system.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

10. Weathertightness (monolithic cladding systems)

Call for an inspection:

After you have installed the exterior cladding, the flashings are in place and you have fitted air seals to openings, but before you have applied the coating system.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check EIFS cladding or fibre cement sheets, including their fixing, layout, control joints, joint reinforcement and mouldings (edges, corners and around penetrations).
- Check clearances around cladding, noting in particular clearance from ground.
- Check flashings, in particular between each storey and around all penetrations.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work.
 (The licensed building practitioner who carried

out or supervised the work must first complete the form.)

11. Pre-stucco

Call for an inspection:

After the pre-clad inspection when you have the reinforcing mesh and flashings in place.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check cavity battens and closers.
- Check control joints. (Note that an extra inspection is necessary if you are not using a proprietary jointing system. This takes place after the first scratch coat, when the control joints have been formed.)
- Check backing, mesh and spacers.
- Confirm proposed curing method.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

12. Pre-line (plumbing)

Call for an inspection:

• When the plumbing is installed and a plumber is ready to subject it to a pressure test.

Before the inspector arrives, you should:

- Ensure a suitably qualified and experienced plumber carries out the work.
- Ensure the inspector will have safe, unimpeded site access.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that plumbing pipework has been correctly installed in, and fixed to, framing; that it has been connected to an approved supply; and that it will pass a pressure test.
- Check that the correct materials have been used in plumbing pipework.
- Check that pipework is correctly insulated.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

13. Pre-line (building)

Call for an inspection:

 After the building exterior is weathertight and you have installed structural components (including bracing), insulation and fire-rated systems, but before you line the walls.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that the building is closed in and that penetrations such as flashings and scribers are weathertight.
- Check that windows and doors are appropriate for wind zone, that where necessary they have been fitted with safety glass, and that they open sufficiently for ventilation purposes.
- Check framing, in particular its size, spacing, timber treatment and cut-outs for services (such as plumbing and wiring).
- Check moisture content of walls.
- Check that timber fixings match those shown on the plans.
- Check the length of, and number of, bracing walls.
- Check that the insulation material specified in the plans has been installed, and that it has been installed correctly.
- Check air sealing around penetrations.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

 Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

14. Wet-area membranes, decks, roofs and shower areas

Call for the first inspection:

 After you have installed outlets and flashings, but before you apply the membrane. Call for the second inspection after you have applied the membrane.

Before the inspector arrives, you should:

- Ensure an applicator approved by the manufacturer or supplier applies the membrane.
- Get a product and installation warrantee for the membrane.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check the substrate material, fixing and joint preparation.
- Return for a second inspection to check the installed membrane.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

15. Post-line

Call for an inspection:

 After you have installed interior linings, but before you plaster-stop and fit skirting and scotia.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so inspectors can, if necessary, consult them.

The inspector will:

- Check that the correct type of sheet lining and brace lining has been used and that the linings have been correctly fixed to the framing.
- Check that any fire-rated or wet-area wall linings are correctly installed.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

16. Brick veneer

Call for an inspection:

• When you have veneer at half height and all flashings are in place.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that washouts are clear of mortar and will allow moisture to escape.
- Check the joints are cleanly struck.
- Check the brick ties are in place and fixed with screws.
- Check the correct type of brick tie is used
- Check cavities are the right width.
- Check cavities are clear of mortar.
- Check cavities are clear of services.
- Check all flashings are in place.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

 Ask for a record of building work if this stage of your project involves restricted building work.
(The licensed building practitioner who carried out or supervised the work must first complete the form.)

17. Fire walls (post-line)

Call for an inspection:

After installing fire-rated walls, but before concealing them. You must seal any penetrations (by pipes or wiring, for example) to the same fire rating as the walls themselves.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that fire-rated materials have been installed where the plans specify and that they are of the correct fire rating.
- Check that all penetrations have been sealed properly.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

18. Retaining wall (foundations)

Call for an inspection:

After you have excavated foundations, but before you pour the concrete.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that excavation work for the foundations has reached solid ground.
- Check that the size of the pile holes, along with the number of pile holes, matches that shown on your plans.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

19. Retaining wall (concrete or block)

Call for the first inspection:

 After you have applied the waterproof membrane system and installed perforated drainage, but before you backfill.

Before the inspector arrives, you should:

- Ensure a registered mason carries out the block work.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that reinforcing details match those in your plans, and that it is overlapped correctly and tied securely.
- Check that block cavities are washed out and clean.
- Check that joints are cleanly struck.
- Check the washout openings.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Check that subsoil drain is below slab level, is protected with geotech fabric, and has sufficient fall to a silt trap.
- Check the waterproof membrane, including the junction with any floor slab damp-proof membrane.

- Check that the waterproof membrane is protected and backfilled with suitable drainage material.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

20. Retaining wall (timber)

Call for the inspection:

 When you have dug pile holes down to solid ground, or to the depth specified by your engineer, and, where applicable, that the holes are angled correctly.

Before the inspector arrives, you should:

- Ensure there is sufficient clearance for the posts.
- Ensure the posts are on site.
- Refrain from ordering or pouring concrete until after the inspection.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

- Check that the size, depth and number of pile holes match that shown on your plans.
- Check that there will be sufficient clearance for the piles.
- Inspect the piles for correct timber treatment and grade.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

21. Retaining wall (pre-backfill) Call for an inspection:

 After laying subsoil drain, but before backfilling.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that the subsoil drain has been laid correctly.
- Check that there is adequate bedding material covering the subsoil drain.
- Check that the retaining wall has been built in accordance with your plans.
- Check (in the case of timber retaining walls) that horizontal members have the correct timber treatment.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

22. Concrete block wall

Call for an inspection:

 When you have completed all masonry block work to pour height, installed reinforcing rods and created washout openings.

Before the inspector arrives, you should:

- Ensure a registered mason carries out block work.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that reinforcing details match those in your plans, and that it is overlapped correctly and tied securely.
- Check that block cavities are washed out and clean.
- Check that joints are cleanly struck.
- Check the washout openings.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).
- Ask for a record of building work if this stage of your project involves restricted building work. (The licensed building practitioner who carried out or supervised the work must first complete the form.)

23. Free-standing wood burner

Call for an inspection:

 When you have installed the wood burner and fitted smoke detector(s).

Before the inspector arrives, you should:

- Loosen the ceiling collar sufficiently that the inspector can check the clearance between the flue and the ceiling.
- Ensure smoke detectors are installed and work.
- Ensure the installer has completed and signed a form (ECB-FORM-268) confirming he/she has correctly installed a Ministry for the Environment-approved wood burner.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

- Check there is sufficient clearance between the wood burner and the back of the wall, between the flue and the back of wall, and between the wood burner and any curtains.
- Check there is sufficient clearance between the front of the wood burner and the front of the hearth.
- Check that seismic restraint bolts secure the wood burner to the hearth.
- Check there is a ceiling collar around the flue.

- Check there is sufficient clearance between the flue and the ceiling.
- Check that the flue is properly shielded where it passes through another storey.
- Check that the flue, where it penetrates the roof, is weatherproof; that it is sufficiently high to clear the roofline; and that guy wires, if they are specified, properly restrain the flue.
- Check that smoke detectors are installed in accordance with the plans and that they work.

24. Inbuilt wood burner

Call for inspections:

Before you install the wood burner, making sure you have installed smoke detectors by the time of the final inspection.

Before the inspector arrives for the first visit, you should:

- Ensure the chimney space is clear so the inspector can check the condition of the chimney.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

Before the inspector arrives for the second visit, you should:

- Ensure the installer has completed and signed a form (ECB-FORM-267) confirming he/she has correctly installed a Ministry for the Environment-approved wood burner.
- Ensure smoke detectors are installed and work.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

On the first visit, the inspector will:

• Check the condition of the chimney.

On the second visit, the inspector will:

 Check that there is sufficient clearance between the wood burner and the back of the chimney space.

- Check there is sufficient clearance between the front of the wood burner and the front of the hearth.
- Check that seismic restraint bolts secure the wood burner to the hearth.
- Check that the flue capping is weatherproof.
- Check that smoke detectors are installed in accordance with the plans and that they work.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

25. Wetback

Call for an inspection:

 After you have installed pipes from the wetback to the hot-water cylinder, but before lining any walls that would conceal the pipes.

Before the inspector arrives, you should:

- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that the pipework matches that shown in the plans and that the flow-and-return layout is correct.
- Check that the pipework is correctly insulated.
- Check that the pipework is clear of combustible materials such as wall linings.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

26. Solar water heating

Call for an inspection:

 When you have installed the solar heating panel(s) and all the pipes connecting the panel(s) to the building's plumbing.

Before the inspector arrives, you should:

- Ensure all piping related to the panel(s) has been left exposed to allow inspection.
- Ensure the inspector will have safe, unimpeded access to the site.

 Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

The inspector will:

- Check that the location and orientation of the panel(s) match that shown in the plans.
- Check that the pipework has been installed correctly.
- Check that all valves are installed in accordance with the plans.
- Tell you what your next inspection will be (or what you must do before a re-inspection of this stage).

27. Final inspection

Get ready for a final inspection:

- By completing all work and passing all previous inspections.
- By submitting an application form (ECB-FORM-278) for a code compliance certificate, ensuring you enclose all the necessary certificates and guarantees. This includes records of building work (if not already supplied at each stage) from every licensed building practitioner who has carried out or supervised any restricted building work. (The council will call you to arrange a time to carry out the final inspection.)

Before the inspector arrives, you should:

- Pay any development contribution fees.
- Ensure power and gas are turned on so the inspector can check the water temperature from taps.
- Ensure the inspector will have safe, unimpeded access to the site.
- Ensure plans and supporting documents are on site so the inspector can, if necessary, consult them.

- Confirm that the work complies with your plans and associated documents.
- Follow up any outstanding work noted during previous inspections.
- Check that the correct roofing material has been installed (especially applicable in sea spray-prone areas).

- Check the roof fixings and flashings.
- Check the walls (including cladding), decks (for slip resistance), door and window flashings, subfloor ventilation and brick cavity vents.
- Check that there is sufficient clearance between the bottom of the exterior cladding and the ground.
- Check the size of, and brackets for, downpipes and spouting.
- Check that downpipes terminate at stormwater drains or other approved disposal system.
- Check any spreaders on the roof.
- Check4 overflow boxes for internal gutters and overflow pipes for internal decks.
- Check stairs, including their dimensions, handrails and slip resistance.
- Check the fixings and gaps of safety barriers.
- Check the fencing of any swimming pool.
- Check that the surfaces of bathroom, toilet, kitchen and laundry areas are impervious to water and easy to clean.
- Check that seismic restraint straps are fitted around the hot water cylinder.
- Check the hot water cylinder's valves and overflow drain.
- Check the water temperature at taps.
- Check waste venting, terminations and air admittance valves.
- Check taps, stop valves and cistern overflows.
- Confirm that smoke detectors are installed according to the plans and work.
- Check that gas cylinders are secured in place.
- Check that, where disabled access is necessary, all ramps, stairs, hallways, doors, toilets and signs comply with the plans and approved accessibility report.