

# GUIDE TO BOOKING INSPECTIONS



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# **Chapter 1:** Booking Inspections

# **Booking Inspections**

### Purpose

The purpose of this guide is to describe each type of inspection to ensure the correct one is selected, whether during the processing of an application or when booking an inspection.

It's designed for:

- Processing officers to identify and select the appropriate inspection during processing and consent issuance.
- Phone booking staff to assist with inspection bookings.
- Applicants booking inspections online.

Please note that the list of items inspected during each type of inspection is not exhaustive. Additional items may be inspected depending on the specific details of the project or site conditions.

### **Inspection Types and Codes**

Each inspection type has a unique code (e.g., ICB 2, ICB 3). These codes are primarily for internal use by processing officers to enter inspections into the system. When booking an inspection, applicants and staff can simply use the main code (e.g., ICB) without the number. The only exceptions to this are IF1 (residential final) and IF2 (commercial final).

### Inspection booking

You can book inspections online by logging into your **myAuckland** account or via the Council call centre on phone 09 301 0101.

The following information will be required at the time of booking:

- a building consent number
- the contact details of the person who will meet the inspector on-site, and
- any licensed building practitioners' details who have carried out or supervised the restricted building work associated with the inspection (if applicable).

To reduce instances of intentional bulk booking, customers are limited to a maximum of four inspections at any one time for each consent (residential or commercial).

**Note**: As inspections are completed, new inspections can be booked. Grouped bookings for multiple consents at the same address can also be booked online however these will not be confirmed straight away as the inspections team will need to allocate these to a free Inspector before confirming the booking.

Booking timeframes will vary during the year based on demand. During busy times, if a preferred booking date is full, you can book for the next available date and select the option to have the inspection placed in a standby list. Where there are cancellations, Inspectors can bring your inspection forward and undertake the inspection earlier.

### Restricted building work

Restricted building work (RBW) applies to **residential** construction. It does not apply to outbuildings, commercial construction or apartments over 10m in height.

For more information on RBW refer to the <u>MBIE</u> webpage.

In all instances, if RBW is involved the Licenced Building Practitioner's (LBPs) details must be recorded when the inspection is booked. In addition to this, any inspection for RBW will need to have all the LBPs who have carried out or supervised the work, present their LBP license to the Inspector for recording of their details. LBPs that are not present at the time of inspection will need to be contactable so the Inspector can validate their license being used on the project.

### Amendments

When an amendment application is still in the processing stage (not issued yet), inspections are unable to be booked online. Where an inspection is in an area not associated with the amendment, a request can be made via the call centre to request for a Team Leader to assess and approve the inspection booking. Upon approval, the system will then default back to no bookings until the amendment is issued.

### Plans and specifications

The approved plans and specifications must be on site for inspection. **No plans – no inspection**. If the inspection fails because there are no plans on site, normal inspection fees will be applied, and a new inspection will need to be rebooked.

The following documents must be in hard copy format:

- plans
- site specific reports, e.g., geotech report, fire report, etc.
- building consent booklet, including the building consent conditions, advice notes and inspection schedule

The remainder can be in softcopy format but must be accessed through a laptop or tablet device (not on a smart phone).

### Plumbing and drainage

Where the work involves plumbing and drainage, a registered drainlayer or certifying plumber must be on site and provide an as-built plan at the time of an under-slab plumbing or drainage inspection. **No as-built plans no inspection**. If the inspection fails because there are no as-built drainage plans available this inspection is chargeable and a new inspection will need to be booked.

### **Final inspections**

In the case where a final inspection has been failed or further documentation has been requested, this action must be satisfied within 60 working days, or another full final inspection will need to be undertaken. Final inspections will require all services and electricity to be connected at the time of the inspection.

### Site safety

On site personnel must ensure that the site is clean, and all safety hazards addressed and notified to all visitors including Inspectors. An Inspector will not carry out an inspection where there are unmanaged risks and hazards on site.

If the inspection fails because the site is unsafe, this inspection is chargeable and a new inspection will need to be booked. In some cases, the Inspector will notify WorkSafe where there is a breach of health and safety that needs to be escalated.

# Chapter 2: Inspection Types

# **Coordination Meetings: Site and Pre-Construction**

### Pre-construction meeting (PCO)

Pre-construction meetings are crucial for complex projects, large-scale developments, and recladding jobs. They also serve a crucial purpose in situations involving:

#### **Excavations near Boundaries**

When retaining walls are planned within 1 metre of a property line, a pre-construction meeting is mandatory. This meeting focuses on determining the methodology for protecting the excavation and ensuring the safety of neighbouring structures.



#### **Site Cuts Requiring Consents**

If your project involves cuts that require building consent, a pre-construction meeting is necessary. This meeting is to discuss how (non-exhaustive list):

- Surface water will be managed to protect the neighbouring properties from being flooded.
- Safety from falling will be managed.
- Erosion on neighbouring properties / public areas will be prevented.

#### Meetings for Additions and Alterations Consents with Pools

A pre-construction meeting before beginning the construction of the addition and alteration project, which includes the new pool. The purpose of this meeting is to ensure that all the details provided during the consenting stage are accurate. The purpose of the pre-construction meeting is to discuss how the project will proceed, who the parties are, and any building consent issues that may affect the job.

This meeting will occur before work has started. The project manager will need to ensure that they have all consent documentation available for the meeting.

### Site meetings (IME)

Site meetings are called when the customer or the Inspector wants to discuss issues in relation to their consent. This may be where the job has problems, there are missed or multiple failed inspections or the work has been stopped. They can also be used to assess and process minor variation requests.

The purpose of the site meeting is to ensure all parties get consistent information and they know what is required in regard to passing inspections.

Often Inspectors will request that the customer books a site meeting in order to have all the people involved in the project on site at the same time.



# Foundations

### Siting (IFO 1)

A siting inspection is generally undertaken with another inspection such as a footing, foundation or a raft slab inspection.

The purpose of a siting inspection is to check and confirm that the proposed building is being located in the correct place on the correct site.

Inspectors will check the boundary pegs to confirm that the building is on the correct lot. They will also check that the finished floor level is appropriate.

Builders may need to put a stringline between boundary pegs so that the Inspector can confirm that the measurements between the building and the boundary lines are consistent with the approved plans.



In some cases, Council may accept a siting certificate from a registered surveyor confirming the building location and the finished floor levels.

Note: If you are unable to locate survey pegs a registered Land Surveyor's certificate may be required.

### Foundation types

Foundation inspections are carried out on **buildings**, **retaining walls** and **swimming pools**. There are four different types of foundations, some of these types are also known by other names.

Footing / foundation types	Also known as
Strip footings	Footings, foundations, under-pinning, pre-pour
Bored piles	Pile holes, post holes, retaining wall footings, deck posts and veranda posts
Driven piles	
Screw piles	

The purpose of the foundation inspection is to confirm the foundations have been constructed to the approved plans and that ground conditions are appropriate for the work.

This inspection can be combined with the siting (IFO) inspection. In some cases, it may be necessary for an engineer to inspect this work as well as Council.

### Bored Piles (IFO 2)

A hole or series of holes are drilled in the ground. A timber pile or post is then placed in the hole before it is filled with concrete. The hole may also have reinforcing steel placed in it.

This inspection takes place prior to the concrete being poured.

The Inspector will check the depth, width, and location of the holes. The pile types, size, and the other construction requirements will also be checked against the approved plans prior to the placement of concrete.

#### **Restricted Building Work**

Carpentry LBP Foundation LBP



# Strip Footings (IFO 3)

A strip footing is an excavated trench in which reinforcing steel and concrete is placed.

The purpose of this inspection is to ensure that the ground conditions are appropriate, and that the correct steel reinforcing has been installed.

This inspection takes place before the concrete is poured.

The Inspector will check the depth and width of the excavation, its location, and the type and size of the steel reinforcing that has been placed in the footing.

#### **Restricted Building Work**



### Driven Piles (Not inspected by Council)

Driven piles are <u>not</u> inspected by Council staff. They are inspected and certified by an engineer.

Driven piles are 'driven' or hammered into the soil and can be timber, concrete or steel.

The engineer must provide site observations and a producer statement (PS4). A pile driving certificate (PS3) and pile driving logs from the person installing the screw piles will also be required. The PS3 and PS4 are to be provided at CCC stage.

### **Restricted Building Work**

Foundation LBP

### Screw Piles (Not inspected by Council)

Screw piles are not inspected by Council staff. They are inspected and certified by an engineer.

Screw piles are typically installed using a hydraulic or electric motor that rotates the pile into the ground. The installation process is relatively quick and easy, and it does not require the use of heavy machinery or excavation.

The engineer must provide site observations, and a producer statement (PS4). A screw pile driving certificate (PS3) and pile logs from the person installing the screw piles will be also required. The PS3 and PS4 are to be provided at CCC stage.

#### **Restricted Building Work**

Foundation LBP

### Swimming Pool Foundations (IFO 3)

This inspection involves checking the excavation for the pool and may include a siting inspection.

The purpose of the inspection is to ensure that the ground is suitable, and the work is being done to the approved building consent.

This inspection takes place prior to the concrete being placed or the pool being inserted. Depending on the construction monitoring specified in the PS1 by the engineer at the design stage, an inspection from an engineer may also be required.







# Retaining walls

### Concrete Block or Concrete Reinforced Retaining Walls (ICB 1)

A stand-alone retaining wall is a freestanding structure separate from any other building. These walls are typically constructed like the examples shown in the pictures below.

The purpose of this inspection is to check the construction type and materials used for the retaining wall match the approved plans. This inspection may be done at the same time as a siting inspection.



Depending on the construction monitoring specified in the PS1 by the engineer at the design stage, an inspection from an engineer may also be required.

If the retaining wall forms part of the building and is to have membrane tanking, the foundation also needs to have a DPM or membrane tanking.

#### **Restricted Building Work**

This type of work is <u>not</u> considered restricted building work because it is not directly linked or attached to the primary structure of the house.

### Timber Retaining Walls (IFO 4)

Retaining wall footings are similar to bored pile footings. A series of holes are drilled, and posts are then placed in the hole before it is filled with concrete.

The purpose of this inspection is to check the depth, width, and location of the holes. The post type, size, and the other construction requirements will also be checked prior to the placement of concrete. This inspection takes place prior to the concrete being poured.

Sub-soil drains can be inspected during this inspection. Sub-soil drains are required at the base of the retaining wall to drain away any build-up of water behind the wall.



# Keystone Retaining Wall (IF1 or IF2)

This type of wall, which may include sub-soil drains if needed, is typically inspected once construction is complete, during the final inspection. The Keystone retaining wall is held together by nylon pins, with each block stacked on top of another. Sub-soil drains are required at the base of the retaining wall, to drain away any build-up of water behind the wall.

The purpose of the inspection is to ensure the wall matches the approved plans and is the correct height. If the height of the wall exceeds one metre, a barrier may be required.

### **Restricted Building Work**

N/A



For more information on retaining walls refer to Auckland Council Practice Note: AC2231 Retaining walls

The number of inspections on a retaining wall depends on the type of wall being built:

#### **Concrete Block Retaining Wall: 3-4 Inspections**

- The footing the wall sits on
- The concrete block
- The drainage behind the wall (if not inspected during the block inspection)
- A final inspection when all work is complete.

#### **Timber Post Retaining Wall: 2-3 Inspections**

- The footing the posts sit in
- The drainage behind the wall (if not inspected during the footing inspection)
- A final inspection when all work is complete.

### Keystone Retaining Wall: 2-3 Inspections

- The footing the wall sits on
- The drainage behind the wall (if not inspected during the footing inspection)
- A final inspection when all work is complete.

# Concrete block or concrete reinforced foundation walls and retaining walls

### Block Foundation Walls (ICB 1)

Block foundation walls are constructed on top of the strip footing around the footprint or perimeter of the building. Some walls may also be placed within the footprint of the building.

This type of inspection can be referred to as a header block, a bond-beam, block work, block-fill, or masonry. Several inspections may also be called for block work depending on the height of the wall. These are typically referred to as 'lifts'. Depending on the construction monitoring specified in the PS1 by the engineer at the design stage, an inspection from an engineer may also be required.

### **Restricted Building Work**

Brick and Block LBP

### Concrete Reinforced Block (ICB 1)

A concrete block inspection involves checking the blocks and the reinforcing steel inside the blocks.

The purpose of this inspection is to check that the reinforcing steel has been correctly installed, the cells are clear of mortar, and to confirm that the construction and tolerances of the blockwork are in accordance with the approved design.

A concrete block inspection takes place before any concrete is poured.

If the height of the wall is ≥1.2m the block layer must leave holes in the bottom of the wall. These are called washouts. More than one inspection may be required depending on the height of the concrete block wall.

Restricted Building Work Brick and Block LBP



# Concrete Block When Retaining the Ground (ICB 1)

Sometimes the block wall will be retaining ground. If the wall is also retaining ground, waterproofing or tanking is required to be placed on the back face of the wall to stop moisture penetrating the wall. If the retaining wall forms part of the building and is to have membrane tanking, the foundation also needs to have a DPM or membrane tanking.

The purpose of this inspection is to check that the reinforcing steel has been correctly installed, the cells are clear of mortar, and that the blockwall construction and tolerances are in accordance with the approved design.

Sub-soil drainage and tanking can be inspected during this inspection. Sub-soil drains are required at the base of the retaining wall to drain away any build-up of water behind the wall.

### **Restricted Building Work**

Brick and Block LBP

### Concrete Foundation Walls (ICB 1)

If the foundation walls are not being constructed with concrete blocks, another way to build the walls is by using formwork.

This type of inspection can also be referred to as an in-situ foundation wall.

### Reinforced Concrete Foundation Walls (ICB 1)

The purpose of this inspection is to check that the reinforcing steel has been correctly installed and that the form work is adequate and will withstand the pressure of concrete being poured.

This inspection takes place before any concrete is poured.

#### **Restricted Building Work**







## Concrete Nib Wall (ICB 1)

The nib is formed using formwork and will be secured to the floor slab with reinforcing steel. The purpose of this inspection is to ensure there will be a good bond between the existing floor slab and the new concrete, as well as to check the reinforcing steel and any water-stops that have been specified.

Nib walls are utilised in situations where there is insufficient clearance from the bottom of the cladding to the external ground or paving. The concrete nib is formed to elevate the bottom plate of the wall, allowing adequate cladding clearance to be achieved.

**Note:** There used to be a separate inspection for reclad nib walls, but now this inspection is incorporated into an ICB inspection.



# Other types of concrete inspections

In commercial and larger scale residential construction, the building is constructed in a different manner. Rather than using concrete masonry, columns (posts) and beams are constructed using formwork and reinforcing steel. Depending on the construction monitoring specified in the PS1 by the engineer at the design stage, an inspection from an engineer may also be required.

### Concrete reinforced columns and beams (ICB 2)

The purpose of this inspection is to check that the reinforcing steel has been correctly installed.

This inspection takes place before any concrete is poured.

Depending on the construction monitoring specified in the PS1 by the engineer at the design stage, an inspection from an engineer may also be required.

### **Restricted Building Work (if applicable)**

Carpentry LBP Foundations LBP



### Precast fixings (ICB 3)

Precast concrete includes prefabricated walls, slabs, or beams that are manufactured off-site and then transported to the construction site for installation. Precast concrete units (such as panels and beams) are positioned and secured in place upon arrival.

The purpose of this inspection is to verify that the precast units are attached and secured to the building in accordance with the approved building consent.

**Restricted Building Work (if applicable)** 



### Precast Walls / Tilt Walls (ICB 3)

Precast concrete units (wall panels) are put in place and propped before being secured.

The purpose of this inspection is to ensure the precast unit is properly attached and secured by verifying that the brackets, bolts, washers, and inserts are in place.

Precast concrete panels are often prefabricated in a factory and transported to the site.

**Restricted Building Work** 



# **Concrete floors**

There are three main types of concrete floor slabs:

- Concrete slab-on-grade
- Raft floor slab
- Suspended floors

A concrete slab-on-grade is built on top of footings and block work whereas a raft slab is constructed directly on top of the ground in one pour. If the floor is a slab-on-grade type, then the slab inspection will usually occur after the foundation (IFO), concrete block (ICB) and under slab plumbing (IPP) inspections have been approved. If it is for a raft type slab, then this would normally occur after the under slab (IPP) inspection has been approved.

These are other types of floor slabs which may be referred to as suspended slabs or composite steel flooring systems.

If there is any plumbing in the slab, this must be inspected before the slab is prepared for concrete.

### Concrete slab-on-grade (ISF 2)

The purpose of this inspection is to check that the hard fill has been compacted, the DPM is in position, and that the steel reinforcing is tied and supported on chairs.

This inspection takes place before any concrete is poured. If there is any plumbing in the slab, this should have been inspected at the IPP2 (under slab plumbing inspection) prior to this inspection.

#### **Restricted Building Work**



### Raft floor slab (ISF 2)

Raft slabs are an engineered designed floor and usually comprise of polystyrene pods laid on the ground with spaces (ribs) between. Reinforcing steel is placed between the ribs.

The main purpose of this inspection is to check that the reinforcing steel has been correctly installed and that the DPM is in position. This inspection takes place before any concrete is poured.

Siting can also be carried out at this inspection.

If there is any plumbing in the slab this should have been inspected at the IPP2 (under slab plumbing inspection) prior to this inspection.

#### **Restricted Building Work**

Carpentry LBP Foundations LBP

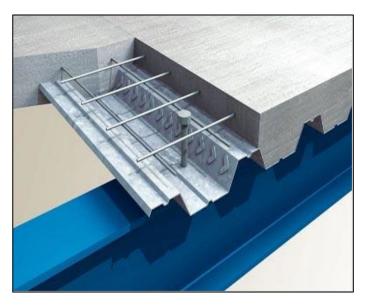


### Suspended slabs (ISF 2)

These floors are poured on top of metal formwork which is left in place. The formwork may need to be propped temporarily to ensure it can support the weight of the concrete.

The purpose of this inspection is to make sure there is adequate support for the formwork. The steel is in place and the formwork is adequately attached to the structure.

Restricted Building Work Carpentry LBP Foundations LBP



# Framing inspections

Framing inspections are undertaken once the foundations / slab or flooring is complete. Framing is the structure (walls, floors and roof framing) that sit above the ground floor and occurs before any internal or external linings or wraps have been placed.

The purpose of this inspection is to ensure all framing sizes, connections and treatment is consistent with the approved building consent. Depending on the construction monitoring specified in the PS1 by the engineer at the design stage, an inspection from an engineer may also be required.

### Subfloor framing / subfloor bracing (IFG 1)

Subfloor framing refers to the structural elements under a timber floor and may include the insulation. Subfloor framing predominately applies to timber structural elements, but concrete and steel structural elements can also be used.

The purpose of this inspection is to check the subfloor framing layout (size and location), bracing, and that the fixings and connections have been installed in accordance with the approved consent.

Subfloor insulation can also be checked at this inspection.

Restricted Building Work Carpentry LBP

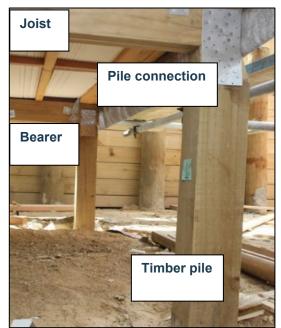
# Wall and Roof Framing (IFG 2)

The purpose of this inspection is to check hold-down connections, wall and roof framing members, beams and lintels, midfloor joists, membrane deck, roof or gutter substrates before the membrane is applied and that bracing connections are in place.

Safe access (scaffolding) must be provided. Framing can refer to <u>timber</u> or <u>steel</u> structures.

### **Restricted Building Work**

Carpentry LBP







Wall framing comprises studs, top plates, bottom plates and lintels.

Roof framing comprises trusses or rafters.



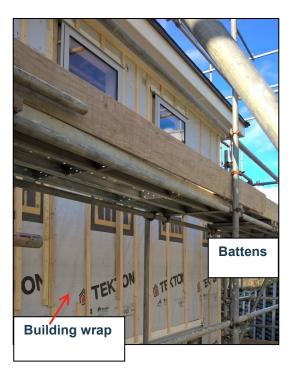
# Wrap, Cavity and Cladding inspections

Cavity wrap inspections occur after the framing inspection. The cavity wrap is the building paper or the rigid air barrier (RAB) that is wrapped around the building before the cladding is fixed.

If the building is designed with a cavity, battens are fixed on top of the wrap and will be inspected at the same time as the wrap.

The cavity wrap inspection may also refer to building paper, building wrap, battens, flashings, rigid backing, underlay, and the rigid air barrier.

The cladding inspection occurs after the cavity wrap inspection.

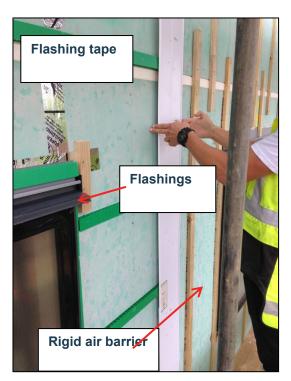


### Wraps (ICA 1) and Cavity (ICA 2)

The purpose of this inspection is to check that the wrap / rigid air barrier is installed correctly in accordance with the manufacturer's specifications and that the battens, flashings, and any dissimilar cladding junctions have been completed in accordance with the approved consent.

The Inspector will check that the wrap is not damaged and that flashing tapes are applied appropriately. They will also ensure that any penetrations for pipes and wires are sealed correctly. If the cladding is installed on a cavity, the Inspector will check that the cavity battens, cavity closers and flashings are all in place.

### Restricted Building Work Carpentry LBP



### Stucco 3-coat cavity system (ICL 1)

Solid Plaster inspections require several inspections over the course of the work. Plaster inspections may also be referred to as stucco, render or solid plaster.

The inspections occur once the substrate is prepared, and then between every coat of plaster.

The purpose of these inspections is to check the substrate, fixings, and the application of the plaster coats.

#### Restricted Building Work External Plaster LBP



## Brick Veneer (ICL 2)

This inspection must be called before the brick work reaches half the finished height hence the reason it is often called a half height inspection.

The purpose of this inspection is to check the brick ties, cavity width, lintel bars and shelf angles (if required) and that the brickwork construction and tolerances are in accordance with the approved design.

An additional inspection is required for 2-storey high brick veneer once the brick veneer reaches the height of the windows on the first floor.

### **Restricted Building Work**

Brick and Block LBP (Brick Veneer)



# Weatherboards and Sheet claddings Cladding (ICL 3)

The purpose of this inspection is to check that the building is weathertight, and all external claddings are in place (including joinery) and installed in accordance with the approved specifications and details.

#### Cladding Type Examples

Weatherboards, profiled metal, sheet claddings, plywood, board and batten, schist cladding substrate.

### **Restricted Building Work**

Carpentry LBP



### Monolithic claddings (ICL 4)

Cladding types that fall under this inspection includes:

- External Insulated Finishing Systems (EIFS) that use polystyrene as a backing board before plaster and paint is applied.
- Aerated concrete panels or other sheet materials, which have a plaster finish applied.

The purpose of these inspections is to ensure that the cladding system has been correctly installed including fixings, control joints, penetrations, backing blocks, reinforcing tapes, and any other proprietary products are all installed. This inspection occurs before the plaster is applied.

### **Restricted Building Work**

External Plaster LBP





# Roof Cladding (ICL 5)

Roofing inspections are a critical part of ensuring the building is weathertight. The purpose of this inspection is to check the roof cladding, fixings, and the flashings. The Inspector must be provided with safe access to the roof.

#### **Restricted Building Work**

Roofer LBP Carpentry LBP (light profile metal roofing only)



# Preline Plumbing, Preline building and Insulation

The preline inspection occurs after the cladding has been inspected and the building is weathertight. The building and plumbing inspections may be carried out independently or together. A preline building inspection cannot occur until the preline plumbing has been approved.

The purpose of the preline inspection is to ensure that:

- The building is weathertight
- The moisture content of the framing is at an acceptable level
- All bracing and structural connections have been installed (if not previously checked)
- Plumbing and other services have been installed
- Insulation has been installed

**Important:** If a builder wants a **preline building + plumbing + insulation** inspection, this is booked as **one inspection** not three separate inspections. It is also important to record that the inspection includes **plumbing** in the comments field so that we can ensure we send someone with the right competency.

### Preline building (IPB 1)

The purpose of the preline inspection is to make sure that the timber is dry enough for the internal linings to be fitted.

Bracing connections may also be checked at this inspection.

The moisture content for timber framing must be 18% or less before the installation of any internal linings.

#### **Restricted Building Work**

Carpentry LBP

### Preline Plumbing (IPP 1)

The purpose of this inspection is to check and test the installation of the water supply pipes and the waste pipes.

This inspection must be done before or at the same time as the preline building. The water supply pipe work must be under pressure test and the sanitary plumbing must be full of water or an air test is being carried out to check for any leaks in the system.

Ideally, the certifying plumber or a licensed person working under their direction is available on site.





### Insulation (IPB 2)

The purpose of this inspection is to check the installation of the wall, ceiling and mid-floor insulation (thermal and acoustic), and to also to check that the exterior joinery R-values meet the H1 requirements prior to the installation of interior linings.



# **Post line Inspections**

### Post line (IPL)

The purpose of this inspection is to check that the correct linings have been installed and that the bracing, fire, and acoustic elements have been correctly fixed off. This inspection also includes inspecting the fixings of ceiling diaphragms, and acoustic / fire rated ceilings.

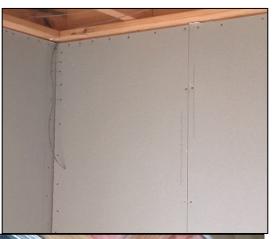
This inspection occurs before any plastering has been installed.

Fire collars, fire sealants and other fire protection measures may also be checked at this inspection.

If the proposed FRR / acoustic system has more than one layer an additional **IPL inspection** will be required.

For more information on acoustic testing refer to Auckland Council's Practice Note <u>AC2204</u> G6 airborne and impact sound.

Restricted Building Work Carpentry LBP (linings only)





# Waterproofing and membrane tanking inspections

Waterproofing or membrane tanking inspections occur at various stages throughout the build.

- 1. Membrane (above ground) decks, gutters, roofs, etc
- 2. Tanking (below ground)
- 3. Waterproofing (internal wet areas)

### Membrane Roof, Deck and Wet Areas (ITK 1)

Membrane roof, deck and gutters are part of the external envelope and must be weathertight.

The purpose of this inspection is to check the installation of the product used and watertightness of the membrane (a flood or flow test is required). The substrate for the roof, deck or gutter should have been checked at the framing inspection.

# Restricted Building Work

Roofing LBP



### Internal waterproofing (ITK 1)

Wet area membranes refer to internal applications such as bathrooms and toilets.

The Inspector will check that the membrane is installed as per the manufacturer's specifications.

**Note:** If the applicator is an approved PS3 author for internal waterproofing an inspection is not required, simply record their registration details.



### Tanking and Sub-Soil Drains behind retaining walls (ITK 2)

Below ground retaining walls may require a tanking membrane (waterproof layer) to stop ground water ingress through the wall.

The purpose of this inspection is to check that the application of the membrane is installed in accordance with the manufacturer's specifications and the approved consent.

Subsoil drainage is also checked at this inspection. This must be connected to an approved outfall via a sump.



# Drainage and Under-slab Inspections

There are several types of drainage inspections, and they may occur at any time during the construction period.

There are two types of drainage:

- Storm water (roof and driveway/impervious surfaces)
- Foul water (grey or dirty water includes waste from toilet, sinks, etc)

It is the method of collection and disposal that differentiates the inspection type.

### Drainage (conventional) (IDT 1)

The inspection of storm water and foul water pipes should occur before the pipes are buried. The purpose of this inspection is to check the size, gradient, location, and the installation of the pipes.

The pipework must be under test (either water or air) to confirm there are no leaks in the system.

Ideally the certifying drainlayer or a licensed person working under their direction is on site and an as-built plan must be provided at the time of the inspection.

### Restricted Building Work N/A



# Stormwater tanks, detention, retention, dual purpose or rainwater (IDT 5 & 6)

Rainwater or retention tanks hold water collected from the roof for re-use.

Detention tanks hold the stormwater discharge and release it slowly it into the public system. This is beneficial during heavy rainfall to reduce the peak flow into the public system.

Ideally the certifying drainlayer or a licensed person working under their direction is on site, and an as-built plan must be provided at the time of the inspection.



### Stormwater on-site disposal systems (IDT 8)

When there is no public stormwater drainage available an onsite disposal system is required.

The purpose of this inspection is to check the on-site disposal system is as per the stormwater report and location.

Ideally the certifying drainlayer or a licensed person working under their direction is on site, and an as-built plan must be provided at the time of the inspection.

# **Restricted Building Work**

N/A



## Effluent disposal system, septic tank, effluent field (IDT 9)

When there is no public foul water or sewer system available the foul water must be collected and disposed of on-site via a septic tank and effluent disposal system (usually only rural areas).

The Inspector will check the installation of the effluent system location and area prior to covering-up the effluent disposal field.

Ideally the certifying drainlayer or a licensed person working under their direction is on site, and an as-built plan must be provided at the time of the inspection.

### **Restricted Building Work**

N/A

### Stormwater Kerb Discharge

Sometimes, if there isn't a public stormwater system available, applicants may be allowed to discharge stormwater to the kerb.

Stormwater kerb discharge inspections are rare and require approval from the development engineer.

Refer to the advice note in AC1174 to see if this has been allowed for.





### Under-slab plumbing (IPP 2)

Any plumbing that is laid underneath a concrete floor slab must be inspected before the floor slab preparation begins. The inspection must be done before the polythene (plastic) and reinforcing mesh is laid. The under-slab plumbing inspection is to ensure that any services that run under the slab are appropriate.

The purpose of this inspection is to check the size, gradient, location, and the installation of the pipes.

The pipe work must be on test. This means that the pipes are full of water, or an air test is being carried out.



Ideally the certifying drainlayer or a licensed person working under their direction is on site, and an as-built plan must be provided at the time of the inspection.

# Reclad inspections

Reclad inspections occur over, and above other inspections listed in this document and involve buildings that have suffered damage as a result of water getting into the building envelope.

In all cases a pre-construction meeting is held before construction commences to discuss how repairs will take place.

### RECLAD - Pre-Construction Meeting (IRM 2)

Convened before any cladding removed and construction commences. To be attended by owner/agent, builder/contractor, consultant, relevant professionals and Council staff.

This meeting will ensure everyone has a full understanding of the project and discuss any issues relating to the building consent.

### RECLAD – Strip Off Inspection (IRS 2)

This inspection, attended by the builder, building consultant, other relevant professionals and Council staff is undertaken once all cladding and wraps have been removed. It provides the building consultant with the opportunity to identify any damage to the framing and confirm the remedial works required to the framing.

An expert report must be provided to Council documenting the outcome of any testing of the framing, which assists in determining what timber, if any, needs replacing.

Where timber framing is replaced, it must be replaced to meet the minimum treatment levels specified in NZS3602 (for example lintels being replaced must meet current standards for spans and size, which may not necessarily be like for like).

All timber framing that is not being removed shall have an approved onsite timber preservative applied. It is important to recognise that any required remedial work undertaken may affect existing structural elements (such as point load supports and bracing), fire or acoustic ratings. This may require an amendment to the building consent to manage these problems.

#### Select Framing Inspection (IFG) when booking an inspection type.

Restricted Building Work Carpentry LBP





## RECLAD – Remedial inspection (IRW 1)

This inspection follows the strip off inspection.

The purpose of this inspection is to inspect the timber framing, bracing, and the fire and acoustic building elements that have been replaced or affected, before being covered with building wrap.

Select Framing Inspection (IFG) when booking an inspection type.

Restricted Building Work Carpentry LBP



### Audit Residential (ARE)

As an alternative to Council inspecting every element of a building, the contractor may propose a quality assurance (QA) program to demonstrate compliance and reduce the number of inspections council need to carry out.

The Inspector will conduct regular audits during the construction period to confirm the QA process, as agreed in the pre-construction meeting, is being followed. This will involve checking the QA documentation (completed since the last audit) and conducting a "walk-through" inspection to confirm the building work is in accordance with the approved building consent.

Audit frequencies can vary between weekly to monthly depending on the complexity or risk profile of the project.

Additionally, this type of inspection is required when the consent involves manufacturing and / or site assembly process of the modular components. Adherence to this audit regime is mandatory.

**Note**: Residential audits are rarely undertaken, and is dependent on the ability of the builder, and trust between the builder and the Inspector. It is mostly used for the foundation group where we can depend on the engineers overseeing the work, which could also be completed using a waivered inspection too.

### Audit Commercial (ACO)

In large-scale commercial construction, construction audits offer an alternative to frequent council inspections. This approach streamlines the process by reducing the number of needed inspections through a contractorimplemented quality assurance (QA) program.

The Council Inspector verifies the agreed-upon QA program (Memorandum of Understanding) through regular on-site audits and a comprehensive review of supporting documentation such as ITP.

Key aspects to consider include:

- Frequency adjustments
  - Audits are conducted regularly, with the frequency adapted based on project complexity. More frequent checks are recommended at the outset.
- Rigorous documentation review
  - A significant volume of QA documentation is meticulously reviewed to ensure adherence to proper procedures and compliance with regulations.

This approach, with its flexibility in audit frequency and meticulous documentation review, aims to strike a balance between reducing the council's inspection burden and ensuring compliance with building regulations through a well-managed and robust QA program.

# **Final Inspections**

Final inspections are extremely important. This is the last time that we will attend site therefore all building work must be completed. All building consents require a final inspection.

A final inspection does not mean that a CCC will be issued. The applicant must apply for a CCC and have all documentation available for the Inspector.

Documentation includes but is not limited to:

- Application for CCC
- Energy works certificates for gas and electrical work
- Drainage as-built plans
- Records of Work provided by all LBPs involved in the job (for restricted building work)
- Engineer observations and site records
- Installation and commissioning certificates for specified systems, e.g., lifts, sprinklers, fire alarms (applies to commercial inspections, unless a cable car has been installed).

### Final Inspection (Residential) (IF1)

The purpose of this inspection is to ensure all building work is completed. This includes but is not limited to:

- Smoke alarms
- Painting and decorating
- Floor coverings in wet areas
- Fixtures & fittings (plumbing)
- Electrical work
- Gas installations
- Driveways and paving
- Finished ground levels and landscaping

Power must be connected and the hot water turned on.

Final inspections for Outbuildings such as a detached garage, carport, shed, deck, gazebo, greenhouse, bridge, or a sleep out are also inspected at this inspection.

The power must be connected, and the stormwater drainage must be completed.





# Solid Fuel Appliance Inspections (IF1)

Heating appliances that use a medium (e.g. firewood) to provide heat require a final inspection once installed. Solid fuel heating appliances may also be referred to as free-standing fireplace, solid fuel burner, wood burner, etc. Appliances may be freestanding or built-in (inserted into an existing space).

The purpose of this inspection is to ensure that the appliance has been installed correctly (clearances from combustible surfaces) and properly secured. Smoke alarms will also be checked at this inspection.

If the installation is not done by a council-approved producer statement author, a final inspection is required to be booked to show that the work complies with the consent documentation.

If a producer statement author is used to install the solid fuel heating, in addition to applying for a building consent, the applicant will also need to:

- complete an agreement to provide a producer statement, and
- submit the producer statement (PS3) after the installation is complete to obtain the CCC.

**Note:** A wet-back water heating system will always require a final inspection. The plumbing installation for a wet-back system is also required to be carried out or supervised by a certifying plumber.

**Built in appliances** typically require two inspections. The first one is to check the space that the appliance will be installed in (this could include an old fireplace). The second inspection is to check the physical installation of the appliance. Smoke alarms will also be checked at this inspection.





# Swimming pool inspections

If building work includes a swimming/spa pool or an associated barrier, the barrier component must be inspected and approved by the Inspector as part of the final inspection. Any Building Inspector on site for other inspections also has a duty of care to ensure any residential pool with a maximum depth of water of 400 mm or more that is filled or partly filled has a compliant barrier in place prior to the final inspection. The pool cannot be filled until it has a means of restricting access to it.

# Swimming Pool (IF1)

The purpose of this inspection is to check the finished construction of the new pool, the pool barrier, and the installation of the pump and backwash. The Inspector will also look at the safety glass, slip resistance and other Building Code requirements.

Smoke alarms will also be checked at this inspection.

Restricted Building Work N/A



### Pool Fencing (SWP)

This inspection should take place every 3 years for the purpose of ensuring the existing pool has an adequate means of restricting access to the pool by unsupervised children under 5 years of age.

This inspection is performed by the Swimming Pool Fencing Team and they are only looking at the pool barrier. Alternatively, the owner of the pool may choose to hire an independent qualified pool inspector to carry out the inspection. If this is the case, then the Council needs to be notified so that the inspection record can be updated.



# Final inspection (Commercial) (IF2)

The purpose of this inspection is to ensure all building work is completed.

This includes but is not limited to:

- Fire alarms, sprinklers, lifts, escalators, etc.
- Painting and decorating
- Floor coverings
- Fixtures and fittings (plumbing)
- Electrical work and gas installations
- All services commissioned (power and water on, etc.)
- Driveways and paving
- Finished ground levels and landscaping
- Signage



# Certificate for Public Use (CPU)

A Certificate for Public Use (CPU) inspection only happens on premises that are open to the public, e.g., schools, shopping centres, stadiums, and a CCC has not yet been issued.

A CPU inspection will be requested when some of the building work is incomplete, but the customer wants to open the premises.

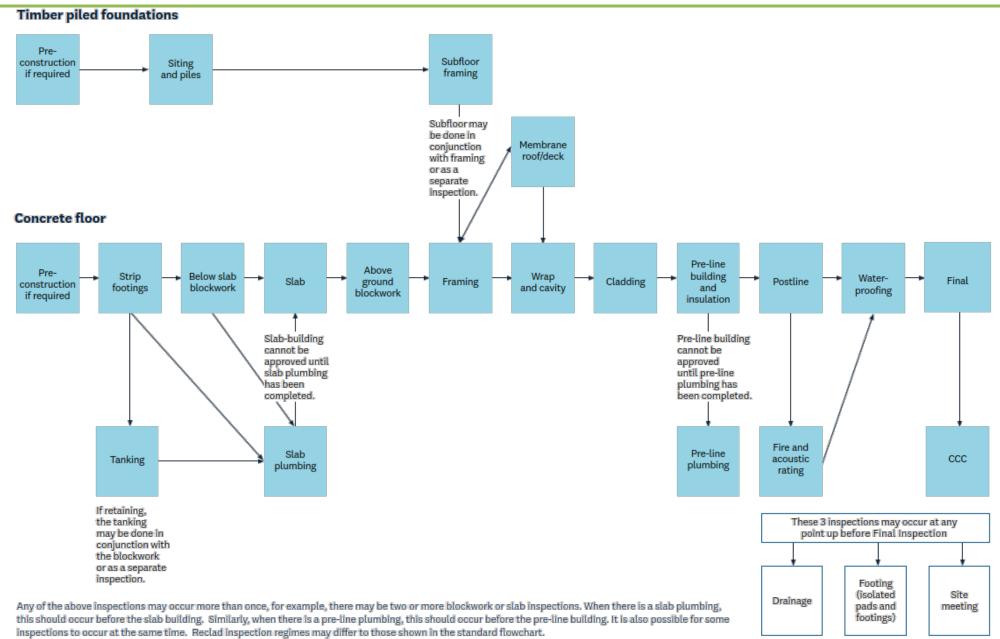
The Inspector must determine whether the building is safe to be used by checking:

- Hoardings are in place separating the incomplete building work from the areas open to the public
- Life safety features are operational (fire alarms, sprinklers)
- Operational / non-operational specified systems
- Fire egress and accessible routes throughout the building



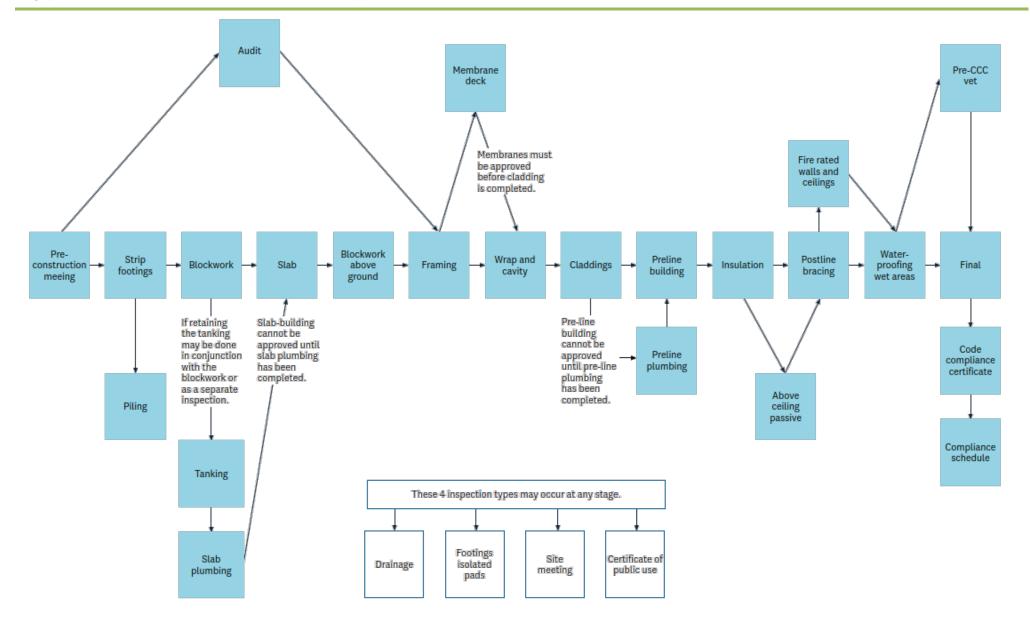
Photo shows new classroom block being constructed in an existing school. The existing school separated by fencing.

# Typical order of notifiable inspections – Residential



January 2025

# Typical order of notifiable inspections - Commercial



Any of the above inspections may occur more than once, for example, there may be two or more blockwork or slab inspections. When there is a slab plumbing, this should occur before the slab building. Similarly, when there is a pre-line plumbing, this should occur before the pre-line building, It is also possible for some inspections to occur at the same time. Reclad inspection regimes may differ to those shown in the standard flowchart.



AC1824 (V.3)