

# Guide to building inspections

June 2022

## INTRODUCTION TO OUR GUIDE

### Purpose

The purpose of this guide is to provide information for customers requesting inspection bookings. This guide is aimed at providing customers with more knowledge about the content of the inspection to ensure the correct inspection type is booked

- Book a building consent inspection
- Allocate work to competent employees or contractors
- Complete Building Consent inspections and documentation

### On-line inspection booking procedures

Please ensure you follow the “Book a building consent inspection” process when booking inspections. You can book online at [Building inspections Far North District Council \(fndc.govt.nz\)](https://fndc.govt.nz)

When using the standby list, please ensure the work is completed and is ready for the inspection.

### Restricted building work

Restricted building work (RBW) applies to residential construction; it does not apply to outbuildings, commercial construction or low rise apartments. In all instances, if RBW is involved the Licensed Building Practitioners (LBPs) details must be recorded when the inspection is booked. Note that as there are multiple LBP classes, one LBP for the whole job is very unlikely.

### Amendments

Pathway prevents a person from booking an inspection if an amendment has been lodged; however, if the amendment does not impact on construction an inspection can proceed. A good example of this is when construction has not started and the client wants to change the internal linings. As the internal linings don't happen until after the framing, cavity wrap and preline inspections there is no reason why the inspection for the foundations cannot occur. Please refer the caller to the Team Leader for Inspections who can unlock this restriction.

### 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. Note plans must be printed to the correct scale.

### 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

The purpose of this inspection is to ensure all inspections have been undertaken; work is physically completed as per the Building Consent and required documentation available.

### Site safety

On site personnel must ensure that the site is clean and free of hazards. If necessary they must provide the inspector safe access to the relevant parts of the site. 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 may notify WorkSafe.

### Multi-unit sites or super-lots

When taking bookings on multi-unit sites or super-lots it is important to ascertain exactly where the building work is taking place and for which unit, level or block within the development.

## Multi-Unit Sites



## SITE MEETINGS

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### 201: Minor Variation

A minor variation is a minor modification, addition, or variation to a building consent that does not deviate significantly from the plans and specifications to which the building consent relates.

A minor variation (MV) may be asked for by either the owner or the building inspector, if the MV has been asked for by the owner the inspector must agree that it is a MV. The owner must then complete the necessary paperwork; fill in the form and have the plans changed to reflect the MV (two copies), then book a MV inspection for the inspector to review the MV application. If approved? the inspector will stamp and approve on site and level a copy for the onsite fil, the other copy with be taken to the office to be placed on the property file.

All minor variations should be applied for and approved as they come up in the course of construction. If they are not completed in due course the inspector may holt construction and allow no further inspections until the MV's have been cleared.

The link below will take you to the MBIE guidance on minor variations

<https://www.building.govt.nz/projects-and-consents/build-to-the-consent/making-changes-to-your-plans/minor-variations-guidance/>

Should you need further guidance or wish to speak to someone please contact the inspections team leader.

### 203: Site meetings

Miscellaneous 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 inspection or the work has been stopped.

The purpose of the miscellaneous 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 miscellaneous site meeting in order to have all the people involved in the project on site at the same time.

Miscellaneous site meetings also include pre-construction meetings which are held at the beginning of complex and large-scale developments.

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.

# FOUNDATIONS

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There are 3 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	These inspections undertaken by an engineer

Foundation inspections are carried out on buildings, retaining walls and swimming pools

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.

These inspections must include a location (siting) check in reference to the boundaries to ensure the placement of the foundation/building work is as per plan. If boundaries pegs cannot be located a survey certificate will be required.

In some cases it may be necessary for an engineer to inspect this work as well as Council.

## 209A Strip Footings Foundations

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, that the correct steel reinforcing has been installed.

This inspection takes place before the concrete is placed.

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

### Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## 209B Bored Pile Foundations

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 placed.

The inspector will check the depth and width of the hole and its location.

### Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## 209C Driven Pile Foundations

Driven piles are not 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 his site observations, a producer statement (PS4). A pile driving certificate (PS3) and pile driving logs from the contractor driving the piles is also required to demonstrate compliance.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Foundations LBP



## 209D Swimming Pool Foundation

This inspection involves checking the hole that houses 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. This inspection may also be checked by an engineer.

Restricted Building Work

- N/A



## FOUNDATIONS FOR STAND-ALONE RETAINING WALLS

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Stand-alone retaining walls are retaining walls erected as a stand-alone wall or can be incorporated into a building. If it is a standalone wall then it will usually be constructed like one of the pictures below.

The purpose of this inspection is to check the type of construction and the materials used are in accordance with the approved plans

This work may also be inspected by an engineer and may be done at the same time as a siting inspection.

Restricted Building Work

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

### 209E Pole Retaining Wall Foundation

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 size and location of the holes. This inspection takes place prior to the concrete being placed.

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 water that gets caught behind the wall.

Restricted Building Work

- N/A

### 209F Keystone Retaining Wall Foundation

This type of wall is held together by nylon reinforcing pins; each block is layered on top of another.

The purpose of the inspections is to ensure that the wall has been constructed as shown on the approved plans and is the correct height

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 water that gets caught behind the wall.

Restricted Building Work

- N/A

### How many inspections on a retaining wall? This depends on the type of wall.

If a concrete block retaining wall is installed we will do 3-4 inspections

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

If a timber post retaining wall is installed we will do 2-3 inspections



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

If a keystone retaining wall is installed we will do 2-3 inspections

- The footing the wall sit on
- The drainage behind the wall (if not inspected at footing inspection); and
- A final inspection when all work is complete

## UNDER SLAB PLUMBING

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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

### 212 Under-slab plumbing

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

The pipe work must be on test; this means that the pipes are full of water. The certifying plumber must be on site.

An as-built plan from the certifying plumber is required at time of the inspection.

Restricted Building Work

N/A but plumbers license required on site





## 213 CONCRETE FLOORS

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There are three main types of floor slab

- a concrete slab-on-grade
- a 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.

These are other types of floor slabs; these maybe referred to as suspended slabs, tray deck slabs or tilt slabs. Nib walls also fall into this category of inspections.

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

### 213A Raft floor slab

Raft slabs are engineer designed and usually comprise polystyrene pods laid on the ground with spaces between. Reinforcing steel is placed between the spaces.

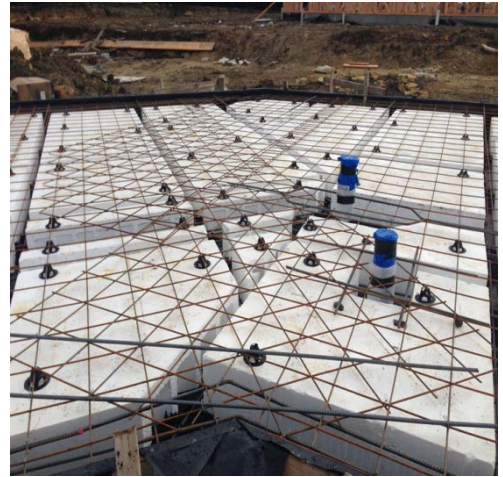
The purpose of this inspection is to check that the reinforcing steel has been properly installed. This inspection takes place before any concrete is poured.

Siting can also be carried out at this inspection if it is a raft slab.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



### 213B Concrete slab-on-grade

The purpose of this inspection is confirm that the membrane (plastic) is not damaged; that reinforcing mesh is tied and the floor is at an appropriate height

This inspection takes place before any concrete is poured.

If there is any plumbing in the slab this should have been inspected before this inspection.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



### 213C Suspended slabs, tray deck slabs or precast concrete suspended slabs

These floors are either poured on top of metal formwork, or pre-cast concrete panels, both are left in place. The formwork is supported 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/ precast concrete suspended slab is adequately attached to the structure.

#### Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## 214 Precast Walls / Tilt Walls

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

The purpose of this inspection is to check how the precast unit is attached / secured to the building.

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

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## 217 Subfloor Framing

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.

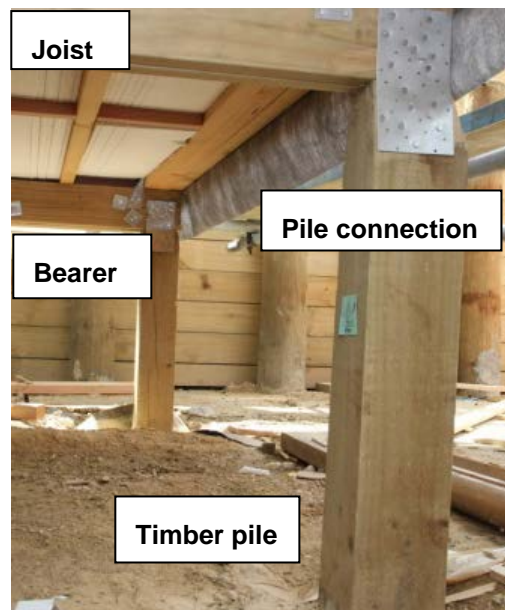
The purpose of this inspection is to check the subfloor framing layout (size and location); bracing and connections (nails and nail plates).

Subfloor insulation can also be checked at this inspection. These days, timber floors are less common than concrete floors.

### Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP



## REINFORCED CONCRETE

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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, wash-outs 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'. In some cases an engineer may also inspect this work

### 221A Concrete Block Foundation Wall

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 properly installed and that the block work is clean and tidy.

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

If the height of the wall is  $\geq 1.2\text{m}$  the block layer must leave holes in the bottom of the wall; these are called washouts.

(This inspection is also used as a bond beam inspection in this type of construction.)

Restricted Building Work

These licenses are to be on site at time of inspection:

- Brick and Block LBP



### 221B Concrete Block Retaining Foundation Wall

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.

The purpose of this inspection is to check that the reinforcing steel has been properly installed and that the block work is clean and tidy.

(This inspection is also used as a bond beam inspection in this type of construction.)

Sub-soil drainage can be inspected during this inspection. Sub-soil drains are required at the base of the retaining wall, to drain away any water that gets caught behind the wall.



Restricted Building Work

These licenses are to be on site at time of inspection:

- Brick and Block LBP

## 221C Reinforced In-situ Concrete Foundation Walls

The purpose of this inspection is to check that the reinforcing steel has been properly 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

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## 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. An engineer may also inspect this work

## 221D Reinforced Concrete Columns and Beams

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

This inspection takes place before any concrete is poured.

An engineer may also inspect this work

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## 221E Concrete Nib Wall

Nib walls are used in situations where there is a lack of clearance from the bottom of the cladding to the external ground or paving. The concrete nib is formed to raise the bottom plate of the wall and as a result the bottom of the cladding can be raised. The nib is formed with formwork and will be secured to the floor slab with reinforcing steel.

The purpose of this inspection is to make sure there will be a good key between the existing floor slab and the new concrete and to check the reinforcing steel.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Foundations LBP



## FRAMING INSPECTIONS

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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.

Wall framing may also be referred to as pre-wrap; pre-cladding; structural framing; structural connections; deck framing; sub-floor framing or sub-floor insulation.

The purpose of this inspection is to ensure all framing sizes, connections and treatment is consistent with the approved building consent. In many cases an engineer may also be inspecting these elements.

### 222A Wall and Roof Framing

Wall framing inspections cover wall framing, mid-floor framing and roof framing. Safe access (scaffolding or stairs) must be provided.

The purpose of this inspection is to check framing layout (size and location); bracing and connections (nails and nail plates).

Framing can refer to timber or steel structures. Note: If there is a membrane roof or deck; the substrate is also inspected at this inspection. (Refer page 23 for photo)

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LB



### 222B Skillion roof

This inspection is carried out to check roof framing, moisture content; bracing; insulation and fixings.

This inspection is carried out prior to installation of the roof cladding.

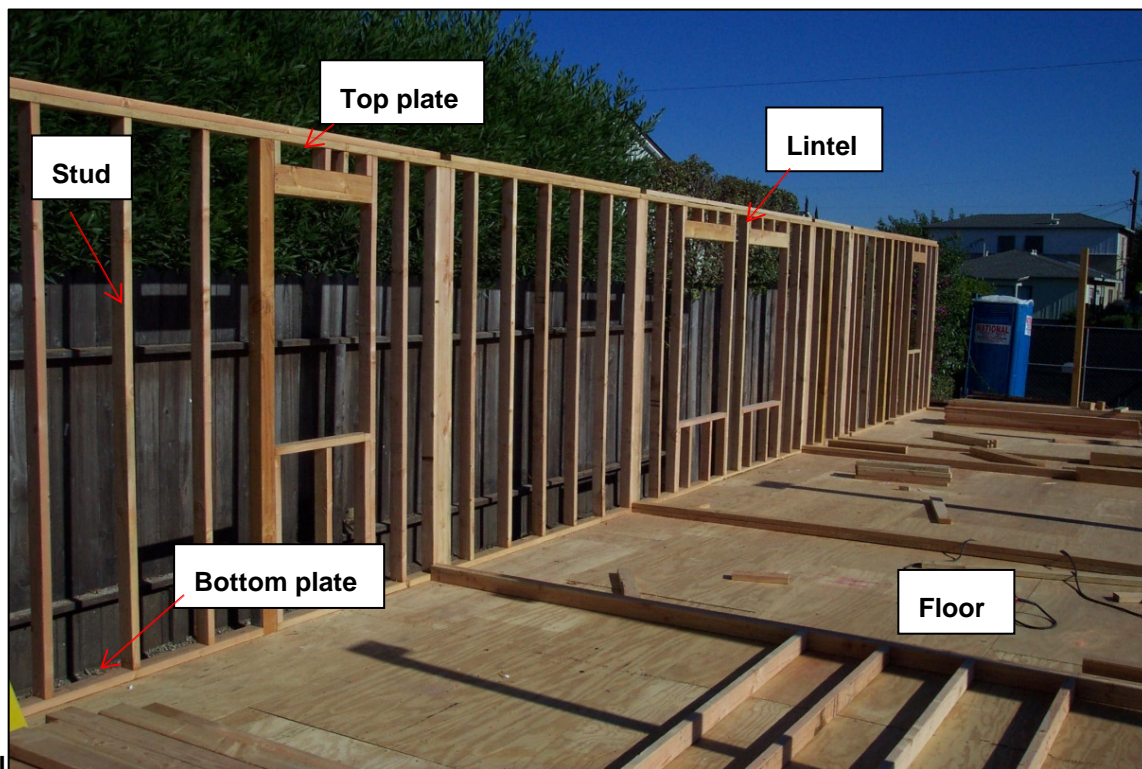
Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LB



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



Roof framing comprises trusses or rafters as in the photo below.





# CAVITY WRAP 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, timber battens are fixed on top of the wrap.

The cavity wrap inspection may also be known as building paper, building wrap, battens, flashing, rigid backing, underlay, rigid air barrier

## 223 Cavity Wrap

The purpose of this inspection is to check that the wrap is secure and has no tears in it.

The inspector will check that the wrap is not damaged and that tapes are applied appropriately. They will also ensure that any penetrations for pipes and wires are sealed properly.

Windows are usually in at this inspection and will also be checked to make sure all flashings are installed correctly.

### Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP



# CLADDING INSPECTIONS

The cladding inspection occurs after the cavity wrap inspection. A cavity wrap inspection must have been undertaken. However, there is one exception to this rule and that is when the cladding is brick veneer where a half high inspection of the brick veneer is undertaken.

The cladding inspection is also known as the external envelope, envelope; or sheet cladding. It may also be referred to by the name of the cladding e.g. brick veneer, plaster, weatherboard, etc.

## 225 Brick Veneer

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.

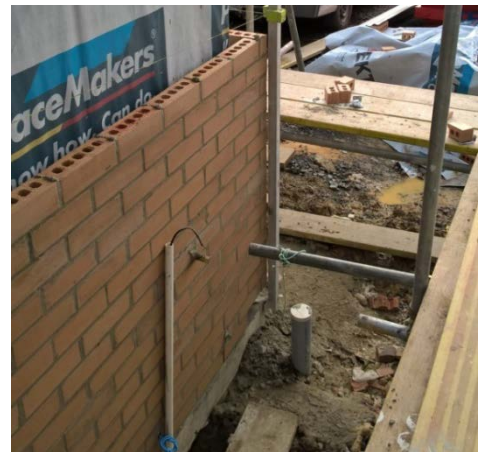
The purpose of this inspection is to check the brick ties and the width of the cavity.

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

### Restricted Building Work

These licenses are to be on site at time of inspection:

- Brick and Block LBP (Brick Veneer)



## 226A Cladding

The purpose of this inspection is to check that the building is weathertight and all external claddings are in place (roof and wall cladding and joinery).

Cladding types:

Weatherboard; Linea; corrugated iron; sheet claddings; plywood; board and batten etc.

### Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP



Roofing inspections are often not called but are a critical part of ensuring the building is weathertight. The best time to inspect roof claddings is when the roofer is there and scaffolding is in place. The inspector must be provide with safe access to the roof

#### Restricted Building Work

These licenses are to be on site at time of inspection:

- Roofer LBP
- Carpentry LBP (light profile metal roofing only)

### 226B: Solid Plaster Systems

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

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

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

#### Restricted Building Work

These licenses are to be on site at time of inspection:

- External Plaster LBP



### 226C: EIFS

External Insulated Finishing Systems (EIFS) use polystyrene as a backing board before plaster and paint is applied.

The purpose of these inspections is to check the material and fixings and occurs before the plaster is applied.

The cladding system should be completed and if possible the person who installed the cladding on site.

#### Restricted Building Work

These licenses are to be on site at time of inspection:

- External Plaster LBP



## 226D: Other plaster systems

Aerated concrete panels or other sheet materials, which have a plaster finish applied.

The purpose of these inspections is to ensure that the material and fixings that are being used are the same as the approved plans. This inspection occurs before the plaster is applied.

The cladding system should be completed and if possible the person who installed the cladding on site.

Restricted Building Work

These licenses are to be on site at time of inspection:

- External Plaster LBP



## PRELINE BUILDING

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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. That means all plumbing (pipes) and electrical (cables) work must be completed. Insulation may also be included in this inspection or occur as a stand-alone inspection.

The purpose of the preline inspection is to ensure that:

- the building is weathertight
- the framing is dry
- all bracing connections have been installed
- all structural connections have been installed
- plumbing and other services have been installed
- that insulation has been installed

Preline inspection may also be known as moisture test

### 229A Preline Building

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

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

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP
- Roofer LBP



### 229B Preline Plumbing

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 preline building. The water supply pipes must be under pressure test to check for any leaks in the system.

The plumber (with licence) must be on site at the time of inspection.

Restricted Building Work

- N/A



## 229C Insulation

The purpose of this inspection is to make sure that the correct insulation has been installed and that it has been correctly fitted. Insulation labels must be on site and fixed to frame to verify R (insulation) values

Restricted Building Work

- N/A



## 229D Fireplace chimney inspection

The purpose of this inspection is to make sure that the clearances and fixings are correct for the appliance that is to be installed. If there is an existing chimney that is to have a retrofitted appliance the condition of the existing chimney must be assessed for integrity to prevent spread of fire.

Restricted Building Work

- N/A



## POST LINE INSPECTIONS

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The post line inspection refers to the internal linings and occurs after the preline inspections have been completed. This inspection occurs before any plaster has been applied.

Post line inspections are also known as gib nail, gib lining, wall bracing, sheet bracing, sheet lining, dri-wall and acoustic (sound proofing).

### 237A Post line

The purpose of this inspection is to check that the correct linings have been installed and check bracing elements have been correctly fixed.

This inspection occurs before any plastering, painting, decorating, skirting's or scotia are installed.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP



### 237B Fire Rated Linings

Fire rated linings are also known as fire ratings, passive fire protection measure and fire wall

The purpose of this inspection is to check that the correct linings have been installed and that they have been correctly fixed.

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

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP (linings only)



## DRAINAGE INSPECTIONS

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There are several types of drainage inspections and they may occur at any time during the construction period. In fact, with sites getting smaller and smaller it is not uncommon for the drainage to be the first inspection.

There are two types of drainage:-

- Storm water (roof and rain water)
- Foul water (grey or dirty water includes waste from toilet, sinks, swimming pools etc)

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

### 241A Drainage (conventional)

The inspection of storm water and foul water pipes before the pipes are buried.

The purpose of this inspection is to check that there is enough fall on the pipe and that they are the right size.

The pipework must be under test to confirm there are no leaks in the system.

The registered drain layer must be on site and provide an as-built plan at the time of the inspection.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Drain layer licence



### 241B Stormwater soakage, soak pit, soak hole

When there is no public stormwater drainage available or there is a problem with the capacity of the system soakage is required.

The purpose of this inspection is to check the size and depth of the hole and its location.

The drain layer must be on site and provide an as-built plan at the time of the inspection.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Drain layer license





### 241C Stormwater tanks, dual purpose, rainwater, detention or retention tank

When there is no public stormwater drainage available or there is a problem with the capacity of the system rainwater collection tanks are required.

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

Detention tanks hold the stormwater discharge and slowly drip feed it into the public system. This is beneficial during heavy rainfall to reduce the peak load pressure on the public system.

The drain layer must be on site and provide an as-built plan at the time of the inspection.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Drain layer licence



### 241D Effluent disposal system, septic tank, effluent field

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

The inspector will check the installation of the effluent system prior to covering-up the effluent disposal field.

The drain layer must be on site and provide an as-built plan at the time of the inspection.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Drain layer license



# CERTIFICATE FOR PUBLIC USE

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## 302 Certificate for Public Use

A Certificate for Public Use (CPU) inspection only happens on premises that are open to the public e.g. schools, shopping centres, stadiums, etc. 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 purpose of the inspection is to confirm whether the building is safe to be used; we do this by checking:

- security fences are in place separating the unfinished work from the finished work
- life safety features are operational (fire alarms, sprinklers, etc.)
- that the building has good signage in place for emergencies; and
- that the building is safe to use



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

# WATERPROOFING AND MEMBRANE TANKING INSPECTIONS

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

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

## 300A Tanking and Sub-Soil Drains

All retaining walls below ground require a tanking membrane (waterproof layer) to stop ground water coming through the wall.

The purpose of this inspection is to check the application of the membrane.

Subsoil drainage is also checked at this inspection.

Restricted Building Work

- N/A



## 300B Membrane Substrate Roof, Deck and Gutter

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

1<sup>st</sup> inspection - the purpose of this inspection is to check the substrate (floor) is installed correctly and has appropriate fall.

Restricted Building Work

These licenses are to be on site at time of inspection:

- Carpentry LBP



## 300C Membrane Roof, Deck and Gutter

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

2<sup>nd</sup> inspection - the purpose of this inspection is to check the product used and water tightness of the membrane (flood testing required).

Restricted Building Work

These licenses are to be on site at time of inspection:

- Roofer LBP



## 300D Internal Waterproofing

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

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

Restricted Building Work

- N/A



## FINAL INSPECTIONS

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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:

- Form 6 – the 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
- Engineer observations and site records. Etc.

There are additional requirements for commercial buildings (A draft compliance schedule showing the specified systems that have been installed in the completed building) and the requirement for a Certificate of public use for those buildings that will be open to the public before the CCC is issued.

### 306A Final Inspection Residential

The purpose of this inspection is to ensure all building work is completed. This includes:-

- Smoke alarms
- Painting and decorating
- Floor coverings in wet areas
- Fixtures & fittings (plumbing)
- Electrical work
- Gas installations
- Driveways and paving
- Landscaping Etc.

Power must be connected and hot water on.



### 306B Final Inspection Commercial

The purpose of this inspection is to ensure all building work is completed. This includes:-

- Fire alarms, sprinklers, lifts, escalators, etc. ( specified systems)
- 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
- Landscaping
- Signage Etc.



### 306C Final inspection Swimming pool

The final inspection cannot occur until the fencing inspection has been approved.

The purpose of this inspection is to check the finished construction of the pool, the installation of the pump and backwash. The inspector will also look at the pool fencing and gates, safety glass, slip resistance and other Building Code issues.

Smoke alarms will also be checked at this inspection.

Restricted Building Work

- N/A



### 306D Final Inspection Solid fuel heating appliances (Freestanding/Built-In)

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 free-standing or built-in (inserted into an existing space).

A wet back means that the appliance is connected via pipes to the hot water system and therefore heats water. If a wet back has been installed we need the details of the Certifying Plumber.

Built in appliances typically require two inspections. The first one (229D) is to check the space that the appliance will be installed in (this could include an old fireplace).

The second inspection (305D) is to check the physical installation of the appliance. Smoke alarms will also be checked at this inspection.

Restricted Building Work

- N/A



### 306E On-site Wastewater Disposal System

The purpose of this inspection is to ensure all building work is completed to the Building consent approved design. There are generally two types of on-site wastewater and disposal system.

1. Primary Treatment system – The most common system is the septic tank with land disposal via standard trenches.
2. Secondary treatment system-The most common is a package aeration plant with land disposal via pressure compensated dripper lines.

The final inspection is to ensure both the waste water treatment system and the land disposal system have been completed. This includes:-



- As built drainage plan, showing the location of the treatment system and the land disposal system.
- Commissioning statement from the installer.
- Electrical certificate.
- Service agreement
- PS3 from the drain layer

### 306F Accessory Buildings

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

Outbuildings are usually detached from the main building and include but are not limited to garage, carport, shed, deck, gazebo, greenhouse, bridge, sleep out, etc.

Power must be connected and storm water drainage completed.

Restricted Building Work

- N/A



### 306G Retaining Walls

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

Outbuildings are usually detached from the main building and include but are not limited to garage, carport, shed, deck, gazebo, greenhouse, bridge, sleep out, etc.

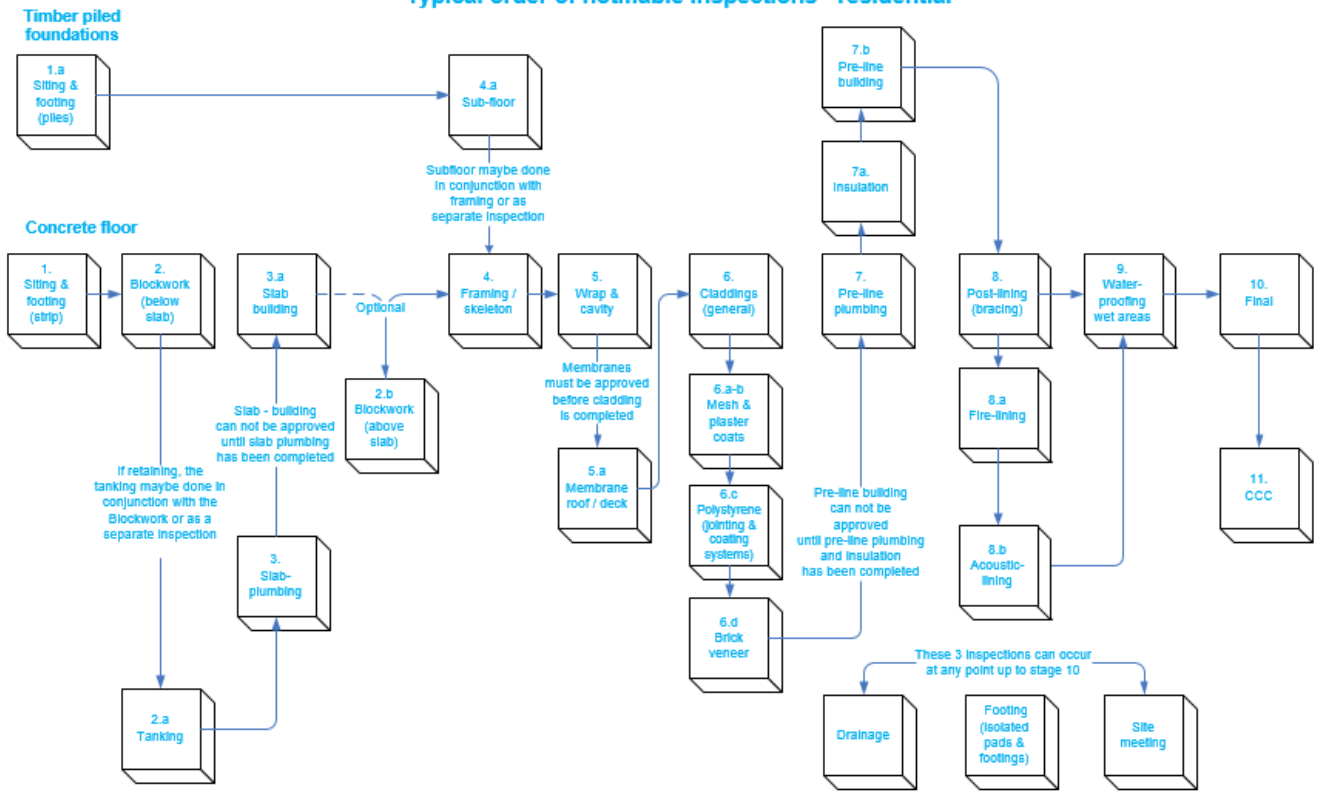
Power must be connected and storm water drainage completed.

Restricted Building Work

- N/A

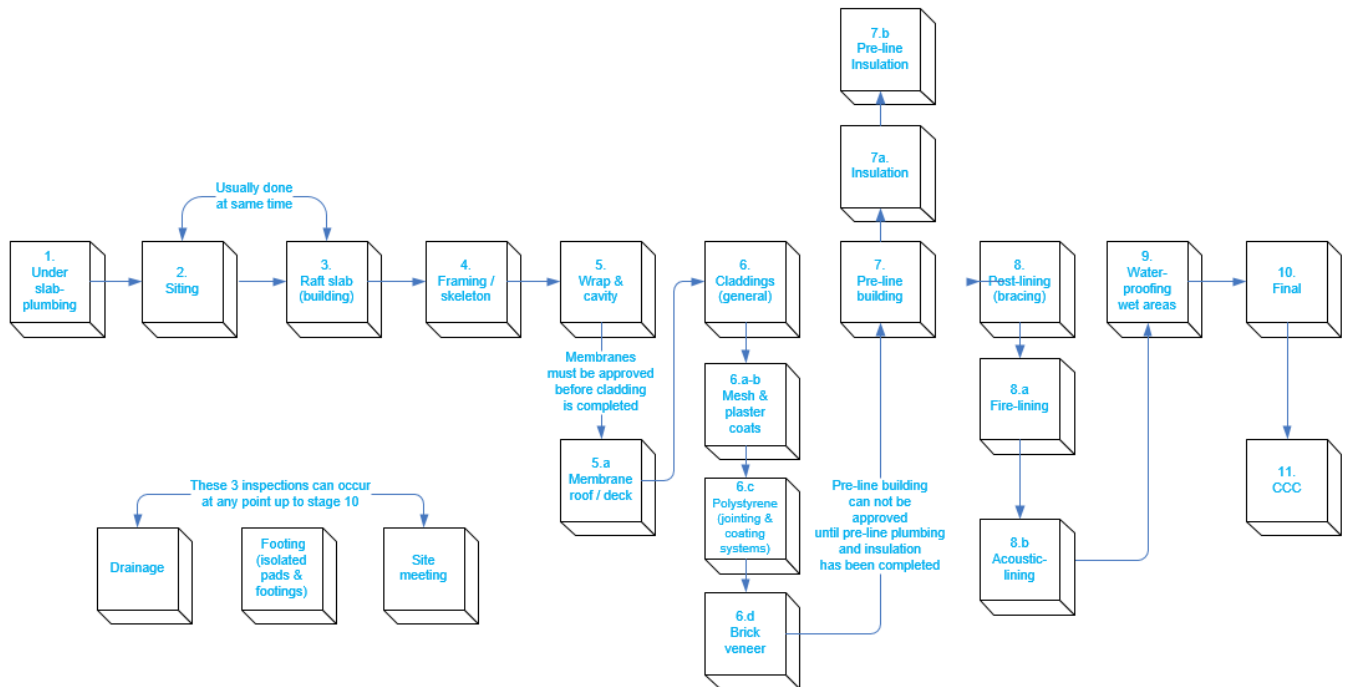


### Typical order of notifiable inspections - residential

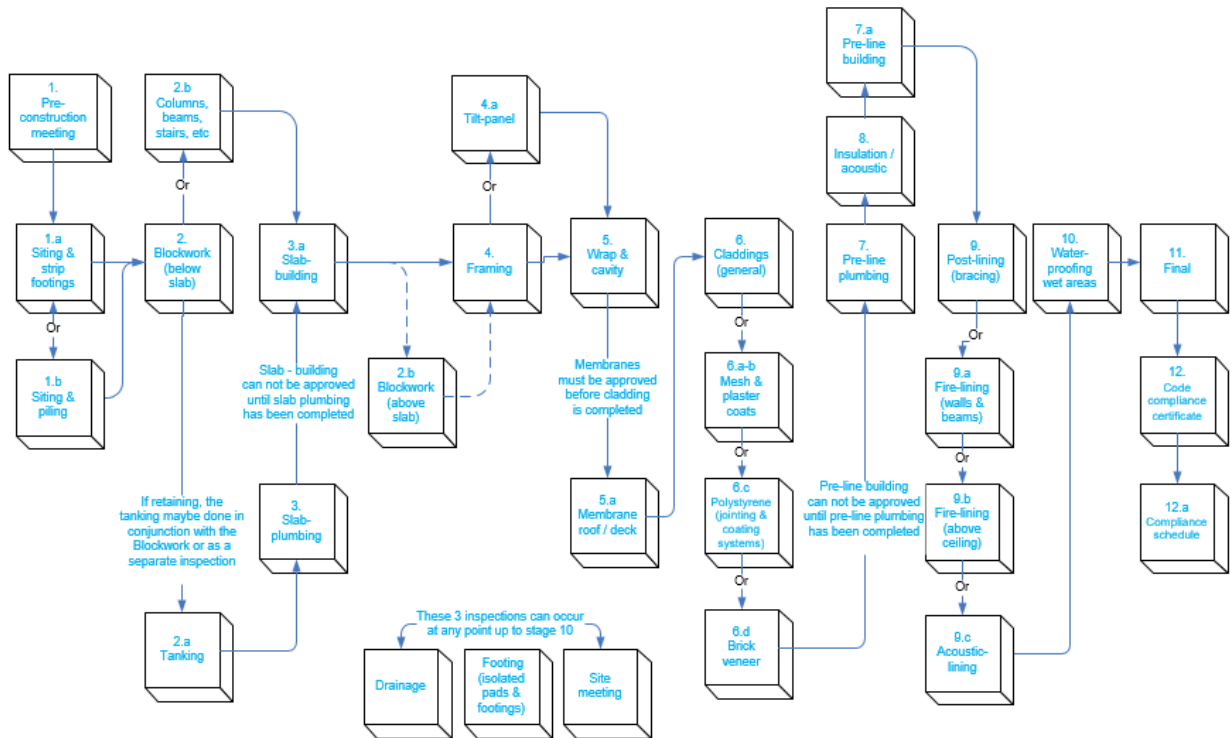


Any of the above inspections may occur more than once, for example there maybe 2 or more blockwork or slab inspections. When there is a slab plumbing, this should occur before slab building, similarly when there is a pre-line plumbing this should occur before the pre-line building it is also possible for some inspections to occur at the same time.

### Typical order of notifiable inspections – residential (raft slab)



## Typical order of notifiable inspections – commercial



Any of the above inspections may occur more than once, for example there may be multiple inspections of any type. When there is a slab plumbing, this should occur before 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.



Inspection type	RBW	Element of RBW	License Classes	Comments
Under slab drainage; plumbing preline or drainage	NO	N/A	N/A	Copy of Certifying plumber / drainlayer license to be sighted at time of inspection
Foundation	YES	Primary structure	Foundations LBP Carpentry LBP	
Concrete Block / Concrete reinforcing	YES	Primary structure	Brick and Block LBP	Structural Masonry and / or Masonry Veneer
Concrete floor slab	YES	Primary structure	Foundation LBP Carpentry LBP	Copy of Certifying plumbers license to be sighted at time of inspection
Subfloor or Framing	YES	Primary structure	Carpentry LBP Roofing LBP	Roofing LBP details only required if roofing started
Cavity Wrap	YES	External envelope	Carpentry LBP	
Wall Cladding	YES	External envelope	Carpentry LBP Brick and Block LBP External Plaster LBP	If brick – Brick / Block LBP If timber – Carpentry LBP If plaster – External Plaster LBP
Preline Building	YES	Primary structure / External envelope	Carpentry LBP Roofer LBP	Copy of Certifying plumbers license to be sighted at time of inspection
Roof cladding	YES	External envelope	Carpentry LBP Roofer LBP Registered Plumber/ Gasfitter	Certifying plumbers are licensed to carry out roofing jobs e.g.: Flashing of penetrations to any roof type (or roofing material) or the installation of any lightweight metal profiled roof. Plumber must provide registration # for the inspection to proceed.  LBP Carpentrys can also carry out lightweight profile metal roofing e.g. Corrugated iron / tin  If the LBP Carpentry is completing roofing please record in your booking notes eg: Corrugated iron roof completed by LBP Carpentry.
Postline	YES	Primary structure	Carpentry LBP	
Final	NO	N/A	N/A	