

TIMARU



DISTRICT COUNCIL

Te Kaunihera ā-Rohe
o Te Tihi o Maru



GETTING IT RIGHT FIRST TIME!

YOUR GUIDE TO THE BUILDING INSPECTION PROCESS

This is intended as a guide only, to help you prepare for inspections by Timaru District Council Building Inspectors.

The intention of this booklet is to help prevent failed inspections and to save money and time.

Failed inspections may result in additional costs that will need to be paid prior to the issue of the Code Compliance Certificate.

This information will be updated regularly when requirements change so please ensure you have the most recent version.

The latest version is available for download from the Council website (www.timaru.govt.nz).

Each building site is unique and will have its own individual requirements so it's important you read the documents and pay particular attention to any conditions or endorsements.

Prior to starting any building work you need to ensure the consent has been paid for and you have received your consent. It is your responsibility to determine if a Resource Consent is required and, if so, that the Resource Consent has been applied for and approved.

All consent documentation must be kept on site at all times. To help identify your particular site, please ensure adequate signage is in place, especially in remote or rural locations.

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When booking an inspection

- What is your consent number and address?
- What is your phone number and email address?
- What type of inspection?
Refer to inspection schedule and the order in which the inspections are listed in the consent documents
- Any amendments relevant to the inspection being booked must be approved by Council before the inspection can be accepted (see page 18 for guidance on amendments)
- What day would you like the inspection?
- Morning or afternoon? Contact name and phone number of the person on-site, and lock box (or gate) code
- Rural properties can be difficult to find – signs at the gate are helpful (provide rapid no or nearest no)
- Are you 100% ready for inspection?

Foundation inspection

Including standard concrete foundations, block foundations and piles

- Confirm boundary peg locations and lot number
- Check building is sited as per consent plan
- Check FFL off datum
- Strip vegetation from building platform
- Excavate foundations – ensure foundations are plumb and level at base with all loose material removed
- Check firm bearing achieved
- Check consent documentation for special geotechnical or engineer requirements, including engineer's inspections
- Ensure foundation width and depth measurements are as specified
- Check reinforcing is installed as detailed including type, size, and spacing. Ensure reinforcing is correctly lapped, and supported with adequate cover
- Fit waste sleeves, ensuring adequate grade is achieved
- Sub-floor ventilation locations
- Book pre-pour inspections prior to booking concrete
- Provide compaction certificate from engineer / PS4 for made up ground

Piles inspection

- Confirm siting as on previous page
- Check location for standard, anchor and brace piles
- Check adequate pile depth, width or diameter is achieved
- If piles are driven, provide driving log and engineer's certificate

Blockwork inspection

- Correct type of block
 - Correct number of courses
 - Horizontal and vertical reinforcing tied and centred in block
 - Clean outs in place, reinforcing tied
 - Bond beam reinforcing as detailed, i.e. stirrups
 - Control joints in place
 - Temporary bracing or propping required
 - Engineer's inspection completed (if required)
- Engineer's site notes and PS4 may be required*

Compacted hardfill pre-DPM inspection

- Confirm any special requirements, i.e. engineer's hard fill inspection
- Building platform scraped to depth specified
- Correct hard fill used, compacted in a maximum of 150mm layers
- Set down for under floor insulation
- Binding layer in place, i.e. sand, crusher dust - 25mm deep max or building paper
- Slab base level
- Slab thickenings formed in place
- Pipework in place, laid with adequate grade, lagging in place, bedded in sand

Pre-pour slab inspection

- DPM laid - lapped and taped at joins
- Mesh reinforcing in place, correct type, lap, support and cover
- Slab ties in place
- Slab thickenings in place as per consent, check truss plan
- Slab thickness and level correct
- Free joint in place if required
- Rebates in place
- Under slab insulation in place (if required)
- Waste pipes in position, correct number and location, gradients, ballast, pipe insulation
- HWC copper relief pipe in place
- Electrical earth bar to mesh installed (if wet area floor)
- Engineer's inspection complete, if required
- Engineer's site notes and PS4 may be required.
- "As Built" truss design submitted to Council
- Water test of under slab drainage - AS.3500

Sub-floor inspection

- Correct pile size, treatment and height
- Bearer size, treatment and spacing
- Adequate bearing on piles
- Joist size, treatment and spacing
- Solid blocking in place
- Dwangs in place for brace panel hold downs
- Fixings - Stainless Steel (within 600mm of the ground or within sea spray zone) or galvanised
- Insulation in place, adequate access and ventilation
- DPM to ground if specified

First floor framing inspection (multiple level)

- Correct joist size, spacing and treatment levels to wet areas
- Connections completed
- Boundary joists in place
- Solid blocking completed
- Structural steel in place
- Hold downs completed
- Beam support completed
- Flooring in place, correct treatment and fixings
- Pipes and services installed
- Engineer's inspection if required
Engineer's site notes and PS4 may be required

Pre-membrane inspection

- Support framing in place, correct treatment and spacing
- Minimum fall achieved as shown in consent documents
- Ply substrate complete, H 3.2 sheets staggered, angle fillet in place
- Stainless screw fixings in place at correct spacing
- Scuppers, outlets and overflow relief in place
- Drip edge in place



Structure / pre-roof inspection

- All previous site instructions completed
- "As Built" truss design approved by Council - variation
- Control cuts to slab completed
- Framing, correct grade, treatment and spacing
- DPC to plates
- Plate hold downs completed
- Frame connections complete
- Truss and rafter connections complete
- Purlin size, spacing and fixings as detailed
- Z nails to outriggers
- Roof bracing completed - including gable end / roof strap / roof plane and dragon ties
- Stud to top plate fixings
- Lintel hold downs and fixings completed
- Lintel sizes checked
- Post / beam connections completed
- Valley board in place – ends supported
- Brace hold downs completed
- Locations checked
- Bracing ply completed with all fixings in place
- Bottom chord restraints in place
- Fire wall hold downs and solid blocking completed
- Engineer's inspection completed, if required

Engineer's site notes and PS4 may be required

Building wrap inspection

- All previous site instructions completed
- Correct building wrap selected - i.e. direct fix, cavity, metal framing or cladding. Wrap must be approved for specific applications
- Wrap installation - wrap securely fastened with adequate lap
- Wrap returned in to openings, adequate bottom plate cover achieved, wrap above rebates
- Slab edge protection completed – i.e. DPM / Mulseal
- Sill tapes in place - must be installed as per manufacturer's installation details
- Thermal break in place (steel frame)
- Penetrations sealed through wrap / pipes / wires etc
- Wrap supported with blue banding to prevent insulation sagging
- Fire walls - correct linings installed to outer face

Note: For ease of inspection - do not complete air seals to openings at this stage.

Mid-height veneer inspection

- Cavity - min 40mm achieved and no more than 70mm
- Cavity clean and clear of mortar
- Brickwork - max 20mm overhang at foundation. If overhang is greater than 20mm, a solution is required
- Brick ties in place, spacing and fixings
- Weep holes in place, including columns at correct spacing
- Slip joints in place
- Minimum brick panel size achieved (230mm)
- Flashings in place - DPC jamb and sill flashing with 15mm minimum kick out
- Lintel bars, shelf angles in position with flashing tape or additional layer of wrap over
- WANZ support bars in place – full length, level, fixings completed. Galvanized or stainless steel
- All panels as close as possible to half high

Pre-clad inspection

Including all types of weatherboard and sheet claddings.

- All previous site instructions complete
- Cavity battens in place – correct size, treatment and spacing set out as per cladding specifications
- Cavity closers in place
- Flashings:
 - All appropriate flashings / back flashings in place
 - Head flashings in place – turn ups to ends, sealed to wrap
 - Sill trays in place for direct fix claddings
 - Back flashings in place at change of cladding junctions
- WANZ support bars - full length, level, fixing complete at required spacing
- AAC Cladding cavity system to be installed as per consent plans or amendment approved

Note: Builders must use manufacturer's installation instructions for each specific product to achieve the cladding system requirements.

For mid heights sheet cladding inspections - inspectors require a partially clad building with some flashings, support bars, cavity battens, back flashings and fixings visible to give an overall assessment, confirming manufacturers installation instructions are being followed.

Pre-line / building / plumbing inspection

- All previous instructions completed
- Exterior claddings completed including all roof flashings and penetrations (weather tight)
- Temporary weather proofing may be required to garage doors, chimney caps etc

Insulation:

- Wall and ceiling insulation complete, snug fit, clearances to roof underlay. Correct R value

Air Seals:

- Complete to all openings including meter box and garage door jambs
- Window identification labels and safety glass labels in place
- Backing rod in place behind air seal to prevent over filling cavity
- Packers sealed over
- Silicone sealant in place to narrow gaps

Pipework:

- Pipework completed, clipped and lagged outside insulation
- Pressure tested
- Correct pipework size / runs / distance to HWC
- Solar pipework installed
- Gas pipework installed.
- Wastes and vents in place, soil stacks, fire collars

Framing:

- Hold downs to bottom plates including all brace elements complete
- Flush boxes are 90mm minimum from brace panel edges
- Moisture content
- Ceiling battens - spacing and fixings
- Stiffeners in place to stud / plate penetrations over 35mm diameter
- Solid blocking for ceiling diaphragms - penetrations to be in middle third each way
- Metal angles in place to tiled showers fixed at 300mm centres
- Solid blocking to fire walls
- Fire wall penetrations suitably fire rated

Pre-stop inspection

- All previous site instructions completed
- Correct linings in place
- Bracing completed – appropriate linings and fixings in place as per brace system used
- Wet area water-resistant linings in place as specified
- Fixings completed to tiled areas as required
- Fire walls - appropriate linings and fixings completed as per system requirements
- Diaphragm ceilings completed fixings as specified by manufacturer and approved consent plans
- Penetrations located as specified by manufacturer
- Manhole access openings have been located in the middle third as per manufacturer's requirements in a ceiling diaphragm

Tanking inspection

- All previous instructions completed
- Membrane:**
- Tanking product as specified in building consent
- Required number of coats applied
- Bandaging to internal/external corners
- Slope achieved to recess and floor
- Penetrations sealed
- Accredited or approved applicator
- Inspection carried out prior to any tiles being laid
- PS3 to be provided by accredited applicator

Pre-plaster inspection – ACC panels

- All previous instructions completed
- All panels in place, fixings complete
- Control joints in place as per manufacturer's requirements
- Proprietary flashing systems completed to openings and cladding junctions
- Base of cladding flashings in place
- Clearances to cladding at apron flashings etc
- Penetrations sealed
- Reinforcing to cut panels primed
- Rebate coated with bituminous emulsion if required (check installation specifications)

Drainage inspection

- Drain layers details and registration number available
- Stormwater, sewer pipework laid in position and exposed with correct inspection point locations
- Adequate grade achieved
- Pipework supported, laid in chip or clean sand
- Sumps and soak holes completed
- Water test on to sewer
- Primer used on glued joints
- Septic tank system and location as per consent
- As-laid plan accurately drawn
- Inspection openings, terminal vents
- Manhole - structure and launching
- Oil interceptor - grease trap

Note: If “As Built” drainage plan provided - dimensions to all connections at dwelling including stormwater, inspections and change of direction must be shown with clear dimensions from the building.

Effluent field inspection

- Field to be located as per consent
- Correct type and size
- Field to be fenced from vehicles and stock
- PS3 to be provided by installer
- As built drainage plan



Heating unit inspection

Note: If an inbuilt heating unit is to be installed - Council require a completed pre-installation inspection.

- Ensure fire being installed is as per consent
- Installation to be carried out in strict accordance with the manufacturer's instructions including:
 - Hearth type and size
 - Seismic restrings
 - Unit clearances to combustibles
 - Flue shielding
 - Flue type, flue connections, spacers
 - Ceiling penetrations as per flue system specifications
 - Number of flues and clearances to combustibles
 - Ceiling plate - ventilated?
 - Flue / roof penetration - additional support, soaker flashings
 - Flue height and support
 - Wetback installation - HWC open vented
 - Header / top up tank required to rural installations
 - Smoke alarms in place
 - Installer's sheet received
 - Room/heating unit ventilation in place (if required)

Note: It is very important that the heating unit and flue system is installed EXACTLY as per the manufacturer's specifications - e.g. if a flue penetration requires a square hole, then do not cut a round hole!



Final inspection

A final inspection is carried out when all other listed inspections have been completed and passed, and all detail on approved consent documentation has been completed.

Sometimes, other than the final inspection, there will be inspections (including effluent field, heating unit and solar hot water system) which need to also be completed. Please ensure that these inspections are also booked in so additional time has been allocated. This assists us in distributing all the inspection bookings.

This is the last opportunity the Council has to inspect the completed building and it is therefore important that all aspects of the building are complete.

In order for the Council to carry out this inspection, the building must be completed to a standard where it has a good chance of passing. It is not designed to provide a list for the contractor to complete!

Some of the following are items that are commonly identified as failed items at final inspection. These items should be checked by the contractor prior to inspection:

- Electrical / gas certificate
- Application for CCC
- LBP memorandums
- AS built drainage plan
- Producer statements

Final external

- | | |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Finished ground level, clearances to cladding | <input type="checkbox"/> Ventilation / weep holes in place to brick or stonework veneers |
| <input type="checkbox"/> Paved area levels / falls and stormwater control completed | <input type="checkbox"/> Drainage venting to sewer completed |
| <input type="checkbox"/> Finished height of gully traps | <input type="checkbox"/> Snow straps in place to spouting |
| <input type="checkbox"/> Stormwater disposal complete – i.e. strip drains, sumps, down pipes | <input type="checkbox"/> Vermin proofing completed, i.e. below garage door reveals and at cladding junctions |
| <input type="checkbox"/> Soffit / window / doors sealed | <input type="checkbox"/> Hot water cylinder relief drains terminating in a safe location |
| <input type="checkbox"/> Drain ventilation installed and flashed etc | <input type="checkbox"/> 190mm maximum step down from door openings |
| <input type="checkbox"/> Mechanical vents complete | |
| <input type="checkbox"/> Cladding / soffits painted | |

Final internal

- Hot water must be on to check temperature
- HWC seismic restraints in place top / middle / bottom
- Smoke alarms to be in place
- Window manufacturer's identification stickers in place
- Check that showers are not leaking by directing water into the corners
- Gas hob protection in place if required
- Ventilation to all rooms where hot water tap in place (scullery)
- Fixtures to be sealed to wall
- All plumbing work / fit off to be completed

Final roof space

- Insulation to be tidy and cut neatly around all ducting
- Down lights are CA rated with insulation cut neatly around
- Down light transformers above the insulation
- Mechanical vents - ducting to be connected
- Screw fixings missing purlins and at hips
- Vertical insulation unsupported

Final paperwork

- We would like all producer statements and required paperwork to be available at time of final inspection. (Refer to attached final inspection copy)
- LBP information prepared / completed
- Producer statements must be completed fully and contain:
 - Consent number
 - Address
 - Date
 - Type of work covered
 - Signature (from the person who completed / supervised the work)

Farm shed - final

- Timber treatment, size and span as per design
- Roof / wall bracing in place
- Roof / wall claddings securely fastened, flashings in place, ground clearances checked
- Post / rafter connections in place
- Solid blocking to rafters
- Purlin, girt fixings completed
- Stormwater disposal as per building consent
- Completed Form 6.
- Electrical certificate - if power connected to shed
- If steel frame shed - all portal frame connections, hold downs and bracing to be completed

Swimming pool - final

- Fencing in place - to minimum 1.2m height
- No gaps to be wider than 100mm
- No artificial or natural footholds that allow access to pool area
- Pool gate in place - must open away from pool
- Gate to be self-closing, min 1.5m above ground level to latch
- No objects that can be used as climbing device within 1.2m of pool fence, including trees, tables etc
- Backflow preventer fitted to nearest outside tap
- Completed Form 6
- Electrical certificate
- Excavation inspection completed
- All pre-pour inspections completed (if applicable)
- Producer Statement Construction (PS3)

Dealing with amendments

Getting amendments approved quickly is essential otherwise your job might grind to a halt.

Some amendments can be approved and documented by the Building Inspector but others need to be delivered to Council for processing and approval. Examples listed below should not be taken as a comprehensive list. The Building Inspector can give you some guidance on the type of work that could be approved on site.

Minor amendments that can be done on-site are:

- Minor bracing panel change with bracing calculations checked for overall bracing unit numbers
- Moving a window slightly (bracing panels may need to be considered)
- Gas hot water unit changed (to another brand of similar function)
- Foundation reinforcing – three HD12's can be substituted for two HD16's
- Tiled shower being installed when acrylic shown on plans
- An additional tanking membrane inspection will be required with membrane details documented at the tanking membrane inspection
- Building wrap changes – types / Eco-Barrier plywood etc

As a general rule the following work would be sent to Council for review and approval. You must include a completed amendment application form which can be downloaded from timaru.govt.nz.

Examples of major amendments are:

- A change of heating unit
- Major changes to bracing
- Changes to roof and wall claddings
- Rib-raft type found / slab system changed to standard foundation and slab (and vice-versa)

Helpful hints

- Arrange written approval from the owner or agent when changes from the building consent are being proposed. Often a simple building wrap change can cause frustration if the designer / agent / owner is unaware of it.
- To avoid delays it is vital that the following documentation is provided:
 - Amendment application is signed by owner / agent. If an agent is applying, the owner must sign the agent authorisation
 - Specific installation / construction details
 - Amended plans using the most recently consented drawings
 - Highlight or cloud the specific changes for ease of processing
 - Ensure original Design Memorandum is still applicable. This may require the applicant to provide a revised memorandum specific to the amendment. If in doubt, please consult the original designer
 - Applicants should be aware that, under the Building Act, amendments may legally take 20 working days to process
 - The size of the amendment in no way relates to the amount of time it may take to be processed

Notes