

## Building Consent Authority

### Practice Note 001/14

## Planning of Inspections

### Background

Regulation 7(2)(e) requires that the Building Consent Authority (BCA) have a documented policy and procedure for how it plans, performs and manages inspections.

During the building process, a combination of inspections by Council and other parties along with Producer Statements shall be relied on to confirm that the building works comply with the Building Code and the Building Consent.

### Policy

As a policy, for all but the most unusual projects, the list of inspections (given further on in this document), shall be specified in the Schedule of Site Requirements, as applicable. In conjunction with third party verification for some aspects of the work, this will be considered satisfactory for the BCA to conclude that the project has been carried out in accordance with the Building Consent, meeting the requirements of Section 90 of the Building Act 2004.

### Guidance

During the technical assessment stage of processing of the Building Consent application, decisions regarding the particular types of Council inspections required for the project will be confirmed by the processing officer in accordance with the policy, and nominated in the Schedule of Site Requirements document (TRIM ref. 06/352611) that is an attachment to the Building Consent.

### Types of inspections

The following is the list of typical inspections and a brief description of each and the typical considerations of each:

- Excavation for foundations (piles, posts etc)  
*This is the first inspection generally for a timber floored building – it is a check of the building position and orientation on the site, of the ground conditions, and the position and depths of timber pile / post footings.*
- Excavation and reinforcing in foundations  
*This is for a concrete floored building – it is a check of the building position and orientation on the site, of the ground conditions, and the position and depths of foundations and the reinforcing content.*
- Under floor slab plumbing  
*A check of the drainage system beneath the slab – a check of the layout, materials used, falls, observation of the drainage system 'on test' – i.e. holding water.*
- Slab on ground prior to pouring concrete  
*A check of the slab, prepared for pouring concrete – a check of slab thickness, damp proof membrane and blinding material and reinforcing steel.*
- Foundation wall reinforcing  
*A check of the laying of the blockwork or construction of the formwork for the wall, reinforcing content, washout points to blockwork.*
- Waterproofing of retaining walls prior to backfill  
*A visual check of the membrane applied to the exterior of a retaining wall, extent of the membrane, protective blinding, drainage behind wall, suitability of fill material (free draining).*
- Other reinforcing steel as required  
*A check of any other reinforcing steel in a project not related to any of the previous inspections before concrete is poured – i.e. intermediate floors, masonry block walls, columns, beams, etc.*
- Timber sub floor prior to flooring being fixed  
*A check of the subfloor structure, subfloor structural connections, timber treatment, bearers, subfloor braces, prior to laying of flooring to permit easy visual inspection.*

- Fixings pre roofing and pre wrap  
*A comprehensive check of the assembly of the structural skeleton of the building – wall and roof framing, prior to fixing of wraps and claddings. A thorough check of framework and structural connections is carried out along with checks of external bracing elements (typically plywood sheets).*
- Direct fixed post wrap / flashing / cladding fixings  
*A check of the cladding and window installation during the cladding process for direct fixed claddings. At a minimum, a visual inspection of the installation of one window and the adjacent cladding to demonstrate that the flashing and cladding systems will meet the requirements of the manufacturers literature and the Building Code. A check of the roofing installation will generally be carried out at this stage concurrently.*
- Brick veneer check (first day / half height)  
*A check of the brick veneer under construction, a check of the laying of the brickwork, brick cavity width, brick ties, and of the condition of the wall wrap, etc.*
- Cavity battens  
*A check of the cavity battens, over the building wrap, prior to the fixing of the cladding. Batten position, vermin proofing, window installation and securing of wall wrap are checked. A check of the roofing installation will generally be carried out at this stage concurrently.*
- Pre-plaster  
*A check of the plaster substrate prior to applying any plaster coating.*
- Pre-lining including moisture content and plumbing under pressure  
*A check of the internal space of the building, before fixing of wall linings. Inspection includes a framing moisture content check, check of insulation installation, hot and cold water supply pipework, structural framework fixings required for wall bracing panels, and a check of the completed cladding installation and the weathertightness of the external envelope.*
- Fire separation wall during lining  
*Check of fire walls prior to lining – check of framing, structural fixings, penetrations and similar considerations.*
- All bracing panels  
*A check of internal wall bracing panels (typically plasterboard) and their fixings to the framing prior to being gib stopped. Position, length and type of wall brace will be checked against the consented design.*
- Drainage before any work is covered up including test, and including connection inspection if using Council system  
*A check of the sanitary and stormwater drainage systems and effluent disposal systems prior to backfilling trenches. A check of the layout, materials used, falls, observation of the drainage system 'on test' – i.e. holding water. A Drainage As-Built Plan is required to be submitted to Council by the drainlayer at this stage.*
- Final - when all work covered by the consent is completed  
*The last inspection of the building project. Final collection of paperwork – Producer Statements, Memoranda, As-Built plans, Electrical and Gas Certificates, Code Compliance Certificate Application form.*  
*On residential projects, It is also check of any outstanding items raised at previous inspections, hot water supply temperature check, and a check of final finishing items – bathrooms, kitchens, laundries, landscaping, driveways, smoke alarms etc.*  
*On commercial projects, access routes and facilities for persons with disabilities, carparks, emergency exits, signage and emergency lighting, water supply temperature check, etc.*
- Fireplace inspections:
  - *Free standing - after installation of heater but prior to installation of flue ceiling plate*
  - *Inbuilt - when fire place is prepared but prior to installation of heater*

- Swimming Pool inspections:
  - *Excavation prior to installation: in ground pools, prior to concreting or installing fibreglass insert.*
  - *Fencing and backflow device: check of fencing and barriers complying with the Fencing of Swimming Pools Act 1987, and backflow prevention device fitted to nearest hose tap to pool.*

## Third party verification and inspections

In some cases, third party verification that works are in accordance with the Building Code and Building Consent will be requested by the BCA for works it cannot reasonably verify through the normal inspections process. Verification of such works will in most cases be done by the person carrying out the particular works by providing a Producer Statement, often referred to as a 'Construction' or 'PS3', which details the works carried out, and a statement that the works are in accordance with the Building Code and Building Consent.

The BCA considers that third party verification is appropriate in cases where it is not possible or practicable to inspect the works itself, because it would require being on site for extended periods of time watching the works being carried out, or it is not practical to view the works before they are covered up in the construction sequence. The BCA considers the following items as being cases where third party verification is appropriate:

- Wet area (under tile) waterproofing membranes;
- Plaster coating systems;
- Tanking of below – ground walls.

Inspections by third parties are also considered by the BCA to be suitable to confirm compliance with the Building Code and the Building Consent in situations where the building work in question is outside the area of expertise of the inspectorate or requires specialist knowledge, judgement or testing to confirm compliance. Third part inspections are normally requested to be carried out by a CPEng Engineer, at the cost of the applicant. The BCA considers the following items as being examples where third party inspections are appropriate:

- Driving of timber piles;
- Confirming suitability of fill compaction;
- Depth of bored piles into subsoil layers;
- Any aspect of the design where the engineer has detailed that it should be inspected by the engineer.

Third party inspections by engineers typically results in the issue of a PS4 (Producer Statement – Construction Review). This should be forwarded on to Council as soon as practicable along with any other associated documentation. This information will be reviewed for acceptance by a building officer when received.