

Inspection Schedule

Inspection Schedule for all Standard (Part 9) Buildings – New / Additions / Renovations

Purpose

The goal of the Building & Plumbing Inspections is to ensure the minimum standards for health, safety, accessibility as well as provisions for water and energy conservation are being met by confirming that buildings and their systems generally conform to relevant Bylaws, the BC Building & Plumbing Codes and other applicable standards.

On many occasions inspection requests have been delayed or rejected because the project was not ready for the inspection or required documentation was not provided prior to or during the inspection. This not only delays the progress of the project but also creates delays for other projects that the Building staff are working on.

In order to reduce delays and improve communication, the following inspection schedule describes the inspections that may be performed during Part 9 (Standard) construction projects and the minimum requirements that will be reviewed at each phase.

Please refer to the project permit condition letter as part of the approved permit package.

Implementation

Booking Inspections

Inspections can be booked at a minimum 24 hours in advanced via the inspection line at 250-494-1373. Having a contact person on site is beneficial to the inspector but is not mandatory unless outlined by the Inspector. An inspection notice will be left on site within the permit package.

Inspection Status

Inspectors will audit at each inspection. (See List) Inspectors will qualify the site audit to allow for continuation of the project, partial approval or rejecting and possibly requesting that all work cease if substantial issues arise.

The following are inspection conditions:

Pass: Substantial compliance. OK to proceed with work.

Partial: Minor Deficiencies to be corrected or confirmed prior to next inspection. OK to proceed as directed by inspector.

Fail: Major deficiencies recorded. No further inspections or work until corrected and recalled for review.

Stop Work: Substantial issue or re-occurring deficiencies recorded such as substantial changes to approved drawings or creating a hazardous condition to neighbouring properties. No further work allowed until deficiencies reviewed and corrected. Potential fines can result for failure to stop work.

Not ready for called inspection

At times unforeseen delays occur which may prevent you from being prepared for your scheduled inspection. This inspection status will be marked as cancelled and you will not be penalized for future inspections. (To avoid errors, inspectors will not re-book inspections.)

If you are not ready (i.e. form work not completed) and or have not provided the necessary paperwork required then this will be recorded as a Fail and require re-inspection. Multiple re-inspections will result in penalty fees.

Re-Inspections & change to drawings

Each project is allotted re-inspections however if more than two re-inspections are required for a particular stage of work than a re-inspection fee of \$100 will be required to be paid prior to the next inspection.

Any changes to the approved plans are to be reviewed with the Building Department for approval prior to any further inspections being scheduled. Continuing with construction with a significant variance to the approved drawings may result in a \$100 fine. Significant changes from the approved drawings particularly as part of a Development Permit, may also result in a “stop work” to the project. Significant changes may be charged a Plan Check fee minimum of \$100 based on the time involved for staff to review the amendments.

General Information

The approved plans are to be on site for review by the Building Inspector and permit card must be posted so as to be visible from the street. Failure to provide this information may result in no inspections performed and a fine may be issued.

Please note that inspections are not a guarantee of workmanship or full compliance of Code requirements. The inspection is a visual audit of that stage of construction at that periods of time during the site visit. Compliance to the BC Building Code and other regulations are the responsibility of the owner / agent and the contractor during the course of construction.

*Where a Registered Professional (RP) is involved (Engineer, Architect), field inspection reports are to be provided prior to or at the time of the scheduled inspection. Unless otherwise arranged with the Inspector, an approval cannot be provided without the RP confirmation that the work is substantially approved for the next phase of construction. Also, if conditions are observed or variations to the as built work arise, the Inspector may require the involvement of a Professional Engineer or Architect to be involved prior to the project continuing.

Inspections:

Site

This inspection may be performed as part of the plan checking process or be a scheduled inspection prior to the start of construction.

The following will be reviewed on site:

- Lay of the land in relation to proposed drawings to review for existing structures and geographic features that may impact the construction or neighbouring properties;
- Site drainage/ retaining in relation to the drawings and neighbouring properties;
- Site safety plan to be in place
- Permit card and approved permit package to be on site;
- The Building Inspector may request the involvement of a Registered Professional if existing site conditions warrant additional third party reviews.

Note: No new construction (framing or placing of footing forms) or removal of soil shall take place until a permit is issued. Please contact the Inspector to confirm prior to any work on site.

Footing / Excavation – 9.12, 9.15 & Part 8 BCBC

Placement of footing forms prior to pouring concrete

The following will be reviewed on site:

Item	Partial	Fail	Stop Work
Permit Card Posted			
Approved permit package to be on site			

Working in a protected area – Riparian / steep slope etc.			
On site layout in compliance with permit drawings			
Site Safety (Part 8 2018 BCBC) – impact to neighbouring properties / municipal lands			
Geotechnical and/or structural engineer (if applicable) to provide applicable field review and testing reports			
Exposed soil conditions - requires Geotechnical review			
Cold weather conditions			
Stepped footings (lack of footing bearing support)			
Pad footing sizes			
Minimum frost protection or finished grade clearances			
Survey required			
Other			

Foundation – 9.15 BCBC

Placement of foundation forms prior to pouring concrete – to confirm Zoning setback requirements, consistency with drawings and ensure that the structural loads of the building will be safely transferred to the surrounding soil.

The following will be reviewed on site:

Item	Partial	Fail	Stop Work
Previous inspections completed			
Permit card posted			
Approved permit package to be on site			
Site safety (Part 8 2018 BCBC) – impact to neighbouring properties / municipal lands			
Working in a protected area – Riparian / steep slopes etc.			
On site layout in compliance with permit drawings			
Structural engineer (if applicable) to provide applicable field review and testing reports			
Cold weather conditions			
Height & thickness of wall as per approved plan			
Lateral support – keyway			
Anchorage			
Laterally supported or unsupported wall			

Horizontal and vertical reinforcement for ICF walls (Part 9 prescriptive)			
Potential impact for finished grades or frost protection			
Survey required			
Other			

If Survey required then is shall be submitted 7 days after foundation pour or prior to next scheduled inspection.

Damproofing / Drain Tile / Roof Drains 9.13, 9.14 BCBC, Part 2 BCPC:

To ensure there is adequate coverage from the ingress of water and drainage pipe is placed in the correct manner.

The following will be reviewed on site:

- Deficiencies from previous inspections;
- Location certificate to be submitted (see permit conditions and drawings);
- Foundation walls to be laterally braced (if required to be reviewed by engineer);
- Walls to have holes & recesses from tie removal sealed with cement mortar or damproofing material;
- Damproofing material standards;
- Moisture protection for interior finishes;
- Top of foundation drain pipe to below bottom of interior basement / crawl space slab;
- Window and door well drainage;
- Type and size of drainage pipe to be identified (foundation & roof);
- Foundation drainage pipe to be drained to a dry well not less than 5m from building foundation – roof drains to be drained to separate rock pit;
- Requirements for next inspection

Geotechnical Engineer to submit inspection field report to confirm if it is unnecessary to install foundation / roof drainage pipe to rock pit / drywell.

Water and Sewer Services 9.31 BCBC, Part 2 BCPC:

Installation of water & sewer pipes prior to backfilling to confirm placement, materials and to ensure that they will operate properly under test.

The following will be reviewed on site:

Sanitary Sewer

- Installation of backwater valve is mandatory for gravity drainage systems connecting to Municipal works;
- Pipe slope, size, depth and bedding;
- Material and standard of pipe to be identified;
- Cleanout placement (one at property line and one by foundation, and one every fifty feet);
- Working pressure air test;
- Municipal connection (inspection chamber for new buildings) – See works and Utilities Department;
- Material on site for compaction over pipe;
- Depth of pipe for frost protection;

Domestic Water Service

- Depth of pipe for frost protection;
- Material and standard of pipe to be identified;

- Relationship to sanitary sewer pipe if in the same trench;
- Size of water distribution pipe as sized for fixture count;
- Working pressure air test;
- Municipal services connection;
- Provisions for air testing

Please ensure that required service sizing and materials are in compliance with approved drawing and or permit.

Plumbing under slab – 9.31 BCBC, Part 2 BCPC:

Installation of under slab water & sewer pipes prior to placement of soil gas barrier and pouring of concrete

The following will be reviewed on site:

- Deficiencies from previous inspection;
- Piping identified, slope & sizing;
- Piping layout and arrangement;
- Floor drains;
- Sump pumps & venting;
- Working pressure test – air

Please ensure that required service sizing and materials are in compliance with approved drawings and or permit.

Note: The BC Building Code requires a pressure test consisting of a water columns of at least 3 meters (9.8') to all joints.

Soil Gas Control – 9.13.4 BCBC:

Protection from soil gas ingress in to building and to ensure provisions for radon mitigation

The following will be reviewed on site:

- Deficiencies from previous inspection;
- Minimum 100 mm granular fill material (or approved alternate solution);
- Location of air barrier;
- Air barrier sealed around penetrations & perimeter;
- Air barrier lapped at seams;
- Placement of thermal break insulation where slab at or near grade or heated slabs;
- Requirements for next inspection

Rough in Plumbing – Part 2 BCPC:

To ensure the placement, materials and testing to Code to ensure proper operation to provide the occupants with a healthy / safe environment.

The following will be reviewed on site:

Drain Waste and Vent

- Piping slope, materials & sizing for low loads;
- Piping layout and arrangement;
- Support of piping;
- Arrangement and size of venting pipes;
- Traps;

- Sump pumps and venting;
- Working pressure test – air;
- Piping material;
- Support for piping;
- Protection from contamination of water piping;
- Location of piping (protect from freezing);
- Working pressure test – air

Note: The BC Building Code requires a pressure test consisting of a water column of at least 3m (9.8') to all joints

Water Distribution

- Piping material and support;
- Protection from contamination of water piping;
- Location of piping (protection from freezing);
- Working pressure test

Note the BCPC requires pressure test that is as least equal to the maximum service pressure or an air pressure test of not less than 700kPa for at least 2 hours.

Sheathing Membrane & Flashing – 9.27, 9.28 BCBC:

This is to limit the probability of deterioration, which could lead to structural failure of exterior walls or elements supported or protected by exterior walls, which could lead to harm persons.

The following will be reviewed on site:

- Deficiencies from previous inspection;
- Material standard performance requirements of CAN / CGSB-51.32M;
- Horizontally applied, upper sheet to overlap 100mm;
- Seams to be taped as per manufacturer guidelines;
- Flashing material;
- Flashing above & below openings – End dams;
- Second Plane of protection and penetration

Framing – 9.23 BCBC:

(R/I plumbing, mechanical system & electrical wiring to be in place prior to framing inspection) – to ensure that the structural loads of the building are transferred to the house foundation.

The following will be reviewed on site:

- Deficiencies from previous inspection;
- Mechanical ventilation checklist & heat loss calculations to be provided;
- Sealed copy of truss & beam design to be on site;
- Proof of approved Electrical & Gas rough-ins – provide copy on site or to inspector;
 - Electrical “Declaration of Compliance”
 - Gas “Notification of Completion, Installation or Alteration”
- Spatial separations / limiting distance;
- All sub trades to be roughed in;

- Windows (safety glass / emergency egress), exterior doors and roof in place;
- Roof truss, rafter, ceiling / floor joist installation – spans / bracing / nailing / hangars;
- Roof ventilation;
- Roof & wall sheathing thickness;
- Continuous fire separation between units (if applicable);
- Fire blocking or Fire stops (where applicable);
- Point loads carries down to foundation;
- Support of joists & beams;
- Cut, notched and drilled framing members;
- Sizing and spacing of wall studs;
- Anchorage of building frame / nail patterns;
- Columns, centrally located on footing pad or foundation wall – sized and attachments;
- Lintel sizing for window / door openings;
- Stair construction – rise run, uniformity, head clearance;
- Wooden stair stringers to be mechanically fastened top and bottom;
- Ramp slopes (where applicable);
- Termite control;
- Building height and zoning setbacks (projections) – review proposed finished grades;
- Development permit conformance (if applicable);
- requirements for next inspection

Insulation and Vapour Barrier – 9.25 BCBC

To ensure sufficient insulation, vapour and air systems are installed to prevent condensation and that the energy conservation standards are complied with (Part 10 BCBC)

The following will be reviewed on site:

- deficiencies from previous inspection;
- Review fire blocking or fire stopping where not inspected at framing inspection;
- RSI value, type & installation between wall studs, foundation, crawlspace, floor joists, attic space;
- Placement of air / vapour barrier – lapped & sealed;
- Attic and crawl space ventilation;
- Requirements for next inspection.

Occupancy and Completion of Project

Prior to occupancy of a building or part thereof after construction, an Occupancy Permit must be obtained when required.

The Occupancy Permit may be withheld until the building or a part thereof complies with the health and safety requirements of the Building Bylaw or other applicable bylaws.

Prior to Occupancy:

An occupancy certificate may be issued by a Building Inspector if life, health and safety requirements as it pertains to the Building Code have been met. A time limit will be set by the Inspector for Completion. Depending on the type of project and Occupancy and Completion inspection can be completed at the same time or arranged as phased inspections.

Please note that verification from other City Departments or third party agencies may be required prior to Occupancy Inspections for commercial and multi-family projects. Please refer to your projects permit condition letter and contact your Building Inspector prior to booking inspections.

For any building renovations, alterations, or new construction where Gas or Electrical systems are being installed, altered, removed, or modified in any way that may require a permit from the BC Technical Safety Authority, copies of the Declaration of compliance and or notice of completion forms may be requested before completion of the building permit. For phased occupancies, the electrical contractor is to provide a declaration indicating that the specific units are completed.

Required Completion:

A completion inspection and certificate will be issued once all authorized work has been completed and there are no apparent substantive deficiencies including Development Permit requirements if applicable. Typically building permits will expire after 24 months.

Failure to obtain an Occupancy or Completion Certificate could result in daily fines and further enforcement action such as a Section 57 Notice on Title.

Occupancy (Partial Occupancy)

To provide an environment of health and safety for occupants. All outstanding fees (i.e. re-inspection) are to be paid.

The following will be reviewed on site:

- All relevant paperwork to be submitted prior to field inspection:
 - Electrical – “Declaration of Compliance”;
 - Gas – Gas “Notification of Completion, Installation or Alteration”;
 - On-site sewerage installation confirmation (if applicable);
 - Ventilation checklist, heat loss calculations;
 - Schedules CB and Schedule CA (if applicable);
 - Sub-contractor list;
 - As-builts if required
- Deficiencies from previous inspection;
- General conformance with approved permit drawings;
- Fire Alarm Systems commissioned (if applicable);
- Access to principle door – note accessible requirements (if applicable);
- Accessibility standards – Part 3.8 BCBC (if applicable);
- Fire stopping or Fire blocking systems complete;
- Interior and exterior handrails and guards;
- Functioning smoke alarms and carbon monoxide detectors;
- Floor coverings in place (where required);
- Access to crawl space and attic;
- Attic insulation levels and exposed insulation;
- Completion of soffits;
- Functioning ventilation system (bathrooms & kitchen);
- Confirm plumbing cleanouts and shut offs;
- Radon piping completed;
- Plumbing fixtures – approved material and connected;
- Heating system operational;

- Required egresses – bedroom windows and exits;
- Doors between garage and house – weather stripped and self-closing;
- Dead bolt latches, door viewer.

Completion of Project (Final Occupancy)

To confirm exterior work is completed and all other deficiencies are complete. Please refer to your permit condition letter for specifics to your project.

The following will be reviewed on site:

- Previous Occupancy Inspection deficiencies;
- Development Permit conditions review (where applicable) – any security and landscaping deposits will be returned at the completion of the project;
- Retaining and drainage systems complete;
- Grading around building is sloped away from foundation;
- Clearances from grade to cladding;
- All penetrations in exterior cladding sealed;
- Flashing / end dams above openings in place;
- Downspouts attached and drained to a suitable location (as directed by geotechnical engineer where applicable “Schedule CB”);
- Address numbers visible from street

Please contact Development Services at 250-494-1373 for further information.