# INFORMATIONAL GUIDE

Revised: 2022 September 22

Revised: 2022 September 22

# Permits and Inspections for New Single and Two Family Dwellings

The purpose of this brochure is to provide owners and builders with information on the types of permits and inspections required for the construction of single family and two family dwellings in the City of Burnaby.

"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."

# **Permits**

# **Building permits**

A building permit is required for all new construction, exterior additions, pools, chimneys, house moves, temporary buildings/structures, demolitions, interior finishing, renovations and accessory buildings.

Home owner or authorized agent may apply for a demolition permit or a building permit. For more information please refer to our brochure "Who can apply for a building permit?" A building permit must be obtained prior to issuance of any electrical, heating, plumbing and gas permits that may be required to complete the construction.

For information on the application requirements for a building permit, please call 604-294-7130 or refer to our brochure "<u>Building Application Requirements for New Single and Two Family Dwellings</u>". In addition, brochures on the related subjects are available at our counter or from our webpage.

# Electrical, heating, plumbing and gas permits

Electrical, heating, plumbing and gas permits are applied for and issued by the Building Department only to contractors who are licenced in the trade. An exception, for electrical and plumbing permits, is made for an owner of a single-family dwelling who must complete a <a href="https://example.com/home-declaration">home-owner declaration</a> stating they will be doing the work and either occupy or intend to occupy the house after the work is completed.

The following additional information may be required of a home owner:

- for an electrical permit the owner will be required to take a simple test and provide proof
  of electrical qualifications; and
- for a plumbing permit a schematic drawing of the plumbing rough-in to ascertain the owner's knowledge of drainage, venting and water pipe sizing.

For information on the application procedure for electrical, heating, plumbing and gas permits, please call 604-294-7130.

## Sewer permits

A permit for a storm and/or sanitary sewer connection is obtained from the Engineering Department. At the time of application, you should confirm that the connection inverts are low enough to accommodate the following.

- the foundation drain system for connection to the storm sewer; and
- the building drain invert for connection to the sanitary sewer.

A plumbing permit for the installation of on-site services is also required in additional to this sewer permit.

If the subsurface drainage system is installed at an elevation where pumping is necessary, please refer to the information bulletin on the "<u>Storm Sump Pump</u>". For information on sewer permits, please contact the Engineering Department at 604-294-7460.

# Temporary saw service permits

A permit for temporary saw service is obtained from the Building Department. The service pole location must be confirmed with B.C. Hydro (604-528-1746) as soon as possible. Temporary electrical service may be obtained for construction purposes after an electrical permit has been obtained and the service pole and panel have been inspected and approved by a City Electrical Inspector.

# **General information**

#### Water service connection

The Engineering Department must be consulted if a new water service is needed. Services larger than 20 mm diameter (3/4 inch) may also require an estimate. For information, please contact the Engineering Department at 604-294-7460.

# **Temporary Hydro Connection (T.C.P.)**

Electrical connection may be obtained prior to completion of construction. The service equipment must be installed then inspected and approved by a City Electrical Inspector. A minimum of one receptacle must be installed and completed. Location of metre base must be confirmed with B.C. Hydro.

To protect the service equipment, all outside doors and windows must be installed in order to secure the building or a lockable weather-proof cabinet must be provided.

# Location of supply and service conductors and equipment

B.C. Hydro must be contacted to determine the nearest hydro pole that will be used to supply power to the premises. Service entrance cap for overhead service must be located so that the service conductors are minimum one metre from any window. Location of the metre base must be acceptable to both the electrical inspector and B.C. Hydro authorities. The B.C. Electrical Code requires that service box (panel) be located as close as practical to the point where the consumer's service conductors enter the building, otherwise, an overcurrent device may be required ahead of the panel.

# **Inspections**

Requests for inspections may be made by telephone (604-294-7130) at least one day prior to required inspection. The request may be made from 8:30 a.m. to 3:00 p.m. for an inspection the following business day.

Please provide the following information:

- the permit number of building, heating, plumbing, gas or electrical permits
- the address of the property
- the type of inspection requested
- the mobile phone # and name of site contact person

All building plans and documents that have been reviewed by the Building Department and returned to the applicant as part of the building permit must be available on site (in the plastic weather protection bag provided) for all inspections.

Portable toilet must be provided on site for the use of the construction workers. Any builder who fails to maintain a portable toilet on site may have their inspection privileges suspended.

# **Inspection Schedule**

This schedule describes the inspections that are performed during construction.

#### The sequence of inspections may vary between projects and contractors:

	temporary saw service (can be done at different stage) foundation formwork / form foundation/roof drainage and exterior foundation wall damp-proofing sanitary sewer or combined (storm/sanitary) sewer storm sewer rough-in plumbing (under slab) sheathing and rainscreen mock up rough-in plumbing (above ground) foundation insulation and slab damp-proofing (floor slab and crawl space) gas vents and gas piping rough-in wiring, temporary hydro connection (T.C.P.) heating (hydronic) frame (forced air heating rough-inspection will be done at the same time) insulation (vapour barrier) final plumbing final gas final electrical	(Electrical) (Building) (Plumbing) (Plumbing) (Plumbing) (Plumbing) (Building) (Plumbing) (Building) (Gas) (Electrical) (Plumbing) (Building) (Building) (Building) (Building) (Electrical) (Plumbing) (Electrical)
•	final building (for Occupancy Certificate)	(Building)

# **Inspection Details**

#### Foundation formwork / form

This building inspection takes place after completion of foundation forms and prior to placing concrete. The following must be on the job site for inspection:

- Field Memo from engineers. For specific requirements please refer to the "<u>Letters of Assurance</u>" brochure.
- Posting survey of the property prepared by a B.C. Land Surveyor. Please refer to the information bulletin "Legal Survey Requirements".
- Foundation form survey prepared by a B.C. Land Surveyor. This survey is required for all new construction and major additions.

The owner/contractor may be required to obtain verification that written permission has been received from adjacent property owners for any encroachment or trespass. The owner/contractor must be aware of the limits of any encroachment/trespass agreements.

# Foundation/roof drainage and exterior foundation wall damp-proofing

This plumbing inspection takes place after completion of the foundation drainage system and roof drainage lines (two pipe system). Damp-proofing, if required, of the exterior foundation wall should also be completed and inspected at this stage. A 150 mm (6 inch) gravel cover must be applied over the foundation drain tile **after** the system has been inspected and approved.

# Sanitary sewer or combined sanitary/storm sewer

This plumbing inspection takes place after the pipes are laid, properly bedded and a water test is applied.

#### Storm sewer

This plumbing inspection takes place after the pipes are laid and properly bedded, usually at the same time as the sanitary sewer inspection. The storm water sump should also be completed and inspected at this stage.

## **Sheathing Inspection**

When the outside envelope and the roof are completed the contactor must call for a sheathing inspection. At the same time and a mock up of the rainscreen installation around a window must be ready for inspection. Please refer to our brochure "Rainscreen for Single and Two Family Dwellings" for more details.

# **Rough-in plumbing**

This plumbing inspection takes place after the installation of drainage, vents and water piping. A water test must be applied to the drainage and venting.

**Note:** If a structural suspended slab is used (as noted below) all the underground piping must be tied to the slab rebar.

# Foundation and/or slab insulation and slab damp-proofing (floor slab and crawl space)

This building inspection takes place after the installation of the foundation wall and/or slab insulation, the UV polyethylene (6 mil) over the base material and, where there is in-slab hydronic heating, after the installation of mesh and piping.

For all slabs on grade, where the fill material depth exceeds 450 mm (18 inches), confirmation of the quality and compaction of fill material by an accredited testing company is required, or the slab is designed and approved by a professional engineer as a structural suspended slab.

Confirmation of the quality and compaction of backfill material for crawl spaces may also be required.

# Gas vents and gas piping

The gas inspection takes place after the installation of the rough-in gas piping, type B vents and/or direct vent fireplace inserts. Fire stopping of B vents at floor and ceiling joists must be complete at this time (blocking off of joists with sheet metal installed both top and bottom).

# Rough-in hydronic heating

This inspection takes place after the installation of all in-slab piping for hydronic heating system. A heating calculation and design is required.

# Rough-in wiring

This electrical inspection takes place after the service conduit and conductors, main service panel, grounding, branch circuit wiring, outlet boxes and wiring splices have been completed.

#### **Frame**

This building inspection takes place after the completion of all frame work and approval of the rough-in plumbing, gas vent, electrical wiring and heating. The building inspector will also carry out rough-in forced air heating inspection at the same time. The following are required on the job site for this inspection:

- city inspection reports accepting the rough-in work by sub-trades;
- field review memo from Structural Engineer. (Refer to "Letter of Assurance" brochure)
- Certification of rough-in forced air heating system if applicable
- Mechanical Ventilation Checklist (available at the Building Department counter);
- truss layout (reviewed by structural engineer of record) and signed and sealed truss drawings;

# Insulation (vapour barrier)

This building inspection takes place after the installation of insulation and vapour barrier.

For permits that are applied for after September 01, 2019 a mid-construction blow door test is required prior to insulation inspection. The test result should be within 1.5 ACH of the assumed airtightness.

# Final plumbing

This plumbing inspection takes place after all plumbing fixtures are installed and operational.

# Final gas

This gas inspection takes place after all gas appliances are installed and operational.

# **Final heating (hydronic)**

This heating inspection takes place after all heating equipment has been installed and is operational. A heating certificate is required.

#### Final electrical

This electrical inspection takes place after all receptacles, fixtures and appliances have been installed and connected.

# **Final building (for Occupancy Certificate)**

This building inspection takes place after final inspection and approval of the electrical, heating, plumbing and gas system.

<u>Certification of the heating systems</u> and <u>certification of minimum thermal resistance of insulation</u> are required for those permits that were applied for before September 01, 2019.

A final blower door test and the <u>Energy Compliance Report (As-Built)</u> are required for those permits that are applied for after 2019 September 01.

After final inspection and approval of the building, an Occupancy Certificate will be issued for new construction. This certificate must be obtained prior to the new house being occupied.

# **Further information**

Please call the Building Department at 604-294-7130.

Q:\Brochures-Bulletins & Zoning Information\Brochures\Current\Permits and Inspections for New SFD and TFT REV 2019 September 06.docx