# **Building Permits: Blueprint Requirements**



### **Blueprints: Full Set of Plans**

Prior to applying for a building permit in the online permitting system, you must gather all the information you will need for the permit application.

A full set of digital plans (in a pdf format) must be provided (both Architectural and Structural). The Geotechnical Engineer may need to provide a report.

For a full list of details refer to the <u>Building</u> Bylaw 710-2022:

- Section 10.4 for simple buildings such as houses or other Part 9 buildings, or
- Section 10.2 for complex buildings that are Part 3 buildings such as those >600m<sup>2</sup> or greater than three storeys in building height or of an occupancy type that is regulated by Part 3 of the building code.

## A full set of plans

A Building Code Compliance Summary including the applicable edition of the building code, such as without limitation whether the building is designed under Part 3 or Part 9 of the building code, major occupancy classification(s) of the building, building area and building height, number of streets the building faces, and accessible entrances, work areas, washrooms, firewalls and facilities;

A copy of a Site Plan prepared by a BC Land Surveyor showing the north bearing and dimensions of your lot, legal description and civic address, location and dimensions of any existing statutory right of ways, easements, or covenants showing setbacks to the proposed building, and the proposed building and any existing buildings including setbacks to all property lines, and any adjacent street or lane names, setbacks to the natural boundary of any lake, swamp, pond or watercourse, as well as private sewage disposal systems, water supply system or storm drainage system.

The Architectural site plan shall also show a Zoning Compliance Summary Table, a Parking Plan and Driveway location, length, width, and width at road.

Foundation plan showing the size and construction of strip footings, pad footings; size, height and construction of foundation walls; pad strip footings under point loads; strip footings under bearing walls. The foundation plan needs to include the location and size of radon vent pipes.

Floor plans (as many as needed for as many floors you have including basements) showing the dimensions and uses of all areas, including: the dimensions and height of crawl and roof spaces; the location, size and swing of doors; the location, size and opening of windows; floor, wall, and ceiling finishes; plumbing fixtures; structural elements; and stair dimensions. All floor plans need to include the location and size of radon vent pipes as they progress through the roof.

Also, provide the location and type of: hot water system, heating system (eg: integrated forced air, hydronic, electric baseboard, split ductless), ventilation system (ducted forcedair, HRV (heat recovery ventilator). BCBC 9.32.4.

Roof plan showing type of construction (truss or joist size, spacing and span); roof outline and the distance to the furthest projection (fascia) from the wall line. A copy of engineered truss plan layouts with any point loads noted on them as well as the individual truss designs including bearing points and their specified loads will need to be supplied.

Engineered beams, lintels, trusses and floor joists will need to be supplied with the application along with truss, beam, lintel and floor layouts with point loads showing. These don't need to be the sealed copy as those will need to be supplied prior to the Framing Inspection.

Four elevation views (label north, south, east, west) include elevations of all sides of the building showing finish details, roof slopes, windows, doors, the grade, the maximum building height line to mid-point of a gable roof (and an average of grades if on a sloped lot), ridge height, spatial separation calculations table for each building view but in particular the

sides (Note that you must half the limiting distance for this calculation where lots are not in a 10-minute Fire Response Area BCBC 9.10.14.3. and 9.10.15.3.), and natural and finished grade to comply with the building code and to illustrate that the building or structure conforms with the Village zoning requirements.

Cross Section(s) through the building illustrating foundations, drainage, ceiling heights and construction systems; include cross-sectional details drawn at an appropriate scale and at sufficient locations to illustrate that the building or structure substantially conforms to the building code; and as many detail views as needed to show the construction.

**Envelope assemblies** shown on Architectural and Structural drawings must <u>exactly match</u> those used in the Energy model. The first page of the Pre-construction Energy Report must be reproduced in the architectural drawings section sheets.

**Air Barrier Strategy:** Air barriers control leakage into and out of the building envelope. Uncontrolled air leakage can lead to moisture issues from condensation, excessive heat loss, and poor indoor air quality.

The air barrier strategy must be presented in the architectural drawings through a "red-line diagram" for each building section, showing how the proposed air barrier will fully encircle the building envelope. See sample diagram next page.

Details at critical junctions must clearly show the viability and constructability of the proposed air barrier. This includes any location where a horizontal or horizontally inclined element intersects with a vertical or vertically oriented element. As well as windows and doors. Show a detail.

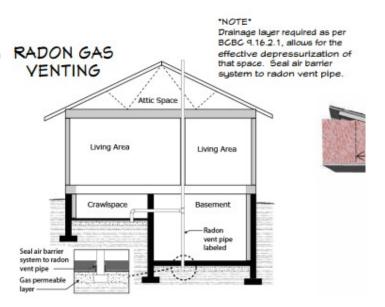
The air barrier material and location must be clearly indicated on Section details. The primary air barrier material element must be called out on all assemblies.

**Details** These pages should include: a diagram of a **complete soil gas (radon) system** from foundation through the roof with piping details (Soil Gas Control BCBC 9.13.4.);

# Red Line Test Red Ine indicates confinuous air barrier Attic space Bedroom 2 Bedroom 1 Living area Dining area Kitchen Confinuous air barrier

"One should be able to take any section of a building on paper, put a red pen on the paper, and trace the building's air barrier without lifting the pen. Eventually, the red line of the pen should connect to the starting point."

Source: The Journal of Light Construction (www.jlconline.com/training-the-trades/air-barrier-basics\_o)



### **Need Help?**

Contact the Lytton Building Department for help during business hours by email building@lytton.ca and we will get back to you as soon as possible.