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Energy Efficiency Requirements for Part 3 Buildings

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This bulletin is to inform owners, designers, and contractors of the energy efficiency requirements for Part 3 Buildings under the BC Building Code.

Summary

- Part 10 of the BC Building Code (BCBC) provides three energy efficiency compliance pathways for Part 3 buildings: ASHRAE 90.1, the NECB, or the Energy Step Code.
- Applicants/Professionals are required to submit energy efficiency declaration forms with their building permit application to demonstrate conformation of their chosen energy efficiency pathway.

Application Requirements

All permit applications for new Part 3 buildings must include the following at the time of building permit submission.

1. [Energy Efficiency Design Verification Report \(PL-55\)](#)

The Design Verification Report is typically completed by the Coordinating Registered Professional (CRP). This report identifies the energy efficiency compliance pathway chosen for the project. Further, the report identifies the various Registered Professionals that will be responsible for designing to the selected regulation.

2. [Energy Intensity Report \(PL-49\)](#)

The Energy Intensity Report is only required for projects seeking to comply with the BC Energy Step Code. The City of Richmond currently requires Energy Step Code compliance for new constructions of Group C, D, and E occupancies. Please refer to bulletin Building-40 for details.

In addition, depending on the compliance path pursued, **additional documentation is required as outlined below** and shall be submitted to EnergyReports@richmond.ca with the site address and report title in the email subject (e.g. "6911 No. 3 Road – Pre-construction Report").

ASHRAE Standard 90.1 (2019)

Prescriptive/Trade-Off Path (Sections 5 to 10):

1. A complete list of all the characteristics and specifications of the components and systems covered by the Standard (e.g. U-value, SHGC, visual transmittance of windows) such that compliance can be verified to the satisfaction of the Building Official. It is the responsibility of the CRP to collect this information from the responsible parties and consolidate them in a concise and complete form.

Energy Cost (Section 11) or Performance (Appendix G) Paths:

1. An energy modelling report as per the EGBC and AIBC Joint Professional Practice Guidelines for Whole Building Energy Modelling Services. All information specified in the applicable section of the Standard (Section 11.7 or Section G1.3), must be included in the report. Please submit the modelling report as an attachment to the Energy Efficiency Design Verification Report.
2. Energy modelling software must be in accordance with Section 2.3 of the BC Hydro New Construction Program's Energy Modelling Guideline (2019).

See over →

NECB (2020)

Prescriptive/Trade-Off Path:

1. A complete list of all the characteristics and specifications of the components and systems covered by the Standard (e.g. U-value, SHGC, visual transmittance of windows) such that compliance can be verified to the satisfaction of the Building Official. It is the responsibility of the CRP to collect this information from the responsible parties and consolidate them in a concise and complete form.

Performance Path:

1. An energy modelling report as per the EGBC and AIBC Joint Professional Practice Guidelines for Whole Building Energy Modelling Services (2018), included as an attachment to the Energy Efficiency Design Verification Report.

Energy Step Code

1. Part 3 Energy Design Report, completed by a Registered Professional.
2. Full energy modelling report signed and sealed by a Registered Professional for the proposed buildings.
3. Plan drawings clearly showing all energy efficiency upgrades (e.g. wall assemblies including the type of air barrier).

Refer to Bulletin Building-40 for details on Energy Step Code requirements for Part 3 buildings.

Requirements at Final Inspection

Upon substantial completion of the project and prior to Final Inspection, the following must be submitted to the Building Inspector.

1. Energy Compliance Report

The Energy Compliance Report is typically completed by the CRP. The report confirms reviews have been conducted by the various Registered Professionals and provides assurance that the project has been substantially completed to comply with the selected energy regulation.

References

City of Richmond, [Interior Finishing, Alterations Plan Review Application](#) (PL-25b)

City of Richmond, [New/Additions Plan Review Application](#) (PL-25a)

City of Richmond, [Building-40: Energy Step Code: Part 3 Buildings](#)

City of Richmond, [Energy Efficiency Design Verification Report](#) (PL-55)

City of Richmond, [Energy Intensity Report](#) (PL-49)

City of Richmond, [Energy Compliance Report](#) (PL-44)

Should you have any questions, comments, or suggestions concerning this bulletin, please reference the Bulletin number and email building@richmond.ca or call the Building Approvals General Inquiries line at 604-276-4118.