

Guide to the 2025 Vancouver Building By-law

Understanding Energy and Greenhouse Gas Emissions
Compliance Paths for 1-3 Storey Residential Buildings



Effective as of September 15, 2025



vancouver.ca/files/cov/building-by-law-guide-1-3-storey.pdf



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Introduction

The City of Vancouver has introduced changes to the Vancouver Building By-law (VBBL) including updates to the energy and greenhouse gas emissions compliance requirements¹ for new construction of single-family and multi-family for residential buildings of 3-storeys and under².

These changes went into effect on March 1 and September 15, 2025 and applies to all new permits. This guide will help you identify the code changes and how to navigate the various energy and GHG emissions compliance paths.

The update includes:

- simplifying or consolidating prescriptive requirements for various building components;
- additional paths for demonstrating energy and greenhouse gas emissions compliance;
- greater flexibility in meeting building airtightness specific targets;
- improved alignment with BC’s Energy Step Code and Zero Carbon Step Code requirements.

These changes will have an impact on what types of building systems are specified, and how a low-rise residential building is designed and documented. As a builder, developer or individual involved in a new 1-3 storey residential building, you need to be aware of these changes and how to apply them to any project’s permit application submitted after September 15, 2025.

A. Update to Part 10 of VBBL

Here is a brief summary of the 2025 updates for energy and greenhouse gas emissions compliance in the VBBL and their potential implications on new construction projects.

Energy and GHG Emissions Compliance Paths

The 2022 VBBL Update introduced three paths for meeting energy compliance. On March 1, 2025, the VBBL was updated to include three greenhouse gas emissions compliance options.

The Energy Compliance Paths introduced to the VBBL in 2022 are similar to the Province’s Energy Step Code (ESC), while the GHG Emissions Compliance Paths introduced in the 2025 VBBL are similar to the Province’s Zero Carbon Step Code (ZCSC). Together they are Vancouver’s frameworks for improving energy efficiency and for limiting GHG emissions from building operations.

A few things to know about the VBBL’s Energy and GHG Emissions Compliance Paths:

- 1. VBBL’s GHG Emissions Compliance Paths are distinct from Energy Compliance paths, but are related as both use energy modelling to demonstrate compliance. Refer to the **flow chart on page 4** for use of energy models.
- 2. VBBL’s GHG Emissions Compliance Paths consider only operational emissions from energy-using equipment, not the embodied emissions associated with building materials or construction.
- 3. Under the VBBL, embodied carbon requirements are found in Section 10.4. Low Carbon Materials and Construction, however these requirements do not apply to 1-3 storey residential buildings.

2022 VBBL Update Energy Compliance Paths, effective January 1, 2022	
Energy Prescriptive Path (Path 1)	Ensure each building component meets or exceeds the code prescribed targets.
Energy Performance Path (Path 2)	Conduct energy modelling of the design to ensure both the energy demand (TEDI) and energy use (MEUI) is lower than the code targets. An ‘Adjusted TEDI’ formula was introduced in September 15, 2025 to accommodate slight variations in local climate.
Passive House Path (Path 3)	Achieve third party Passive House Certification ³

2025 VBBL Greenhouse Gas Emissions Compliance Paths (Table 10.2.2.4.B), effective March 1, 2025

GHG Emissions Performance Path 1: GHG	The building's maximum operational GHG emissions must not exceed: 265 kgCO _{2e} /a
GHG Emissions Performance Path 2: GHG + GHGI	The building's maximum operational GHG emissions: Maximum GHGI Emissions 1.5 kgCO _{2e} /m²a; AND maximum GHG emissions 500 kgCO _{2e} /a
GHG Emissions Prescriptive Path: Building Energy Systems	All building systems are supplied by electricity.

The introduction of these paths is intended to provide more flexibility for building designs to meet energy and greenhouse gas emissions compliance targets. Energy modeling is required for demonstrating compliance to these targets. See the **flow chart on page 4** for a quick reference to the different compliance paths available and what types of models are required. To further understand each Energy Compliance Path and what may be the most appropriate for your project, see the dedicated sections later in this guide.

Building Definitions

Requirements for "Residential buildings of 1-3 storeys" and "Residential buildings with not more than two principal dwelling units" were consolidated in 2022. Most building requirements are consistent for all residential building types based on a square metre of floor space area. References to laneway homes, subsidiary homes, or other specific residential types have been removed.

Electrification and Gas-fired Equipment

If following Path 1, all mechanical systems used for space heating and hot water are required to be electrically operated (i.e. electric hot water heaters, boilers, and heat pumps). Natural gas systems are allowed if following Path 3, but must meet requirements of 10.2.2.12., for domestic hot water heaters, and 10.2.2.13. for furnaces/makeup air units/boilers). Note, while gas systems are also allowed in Path 2, the building must still meet one of the three greenhouse gas emissions compliance paths.

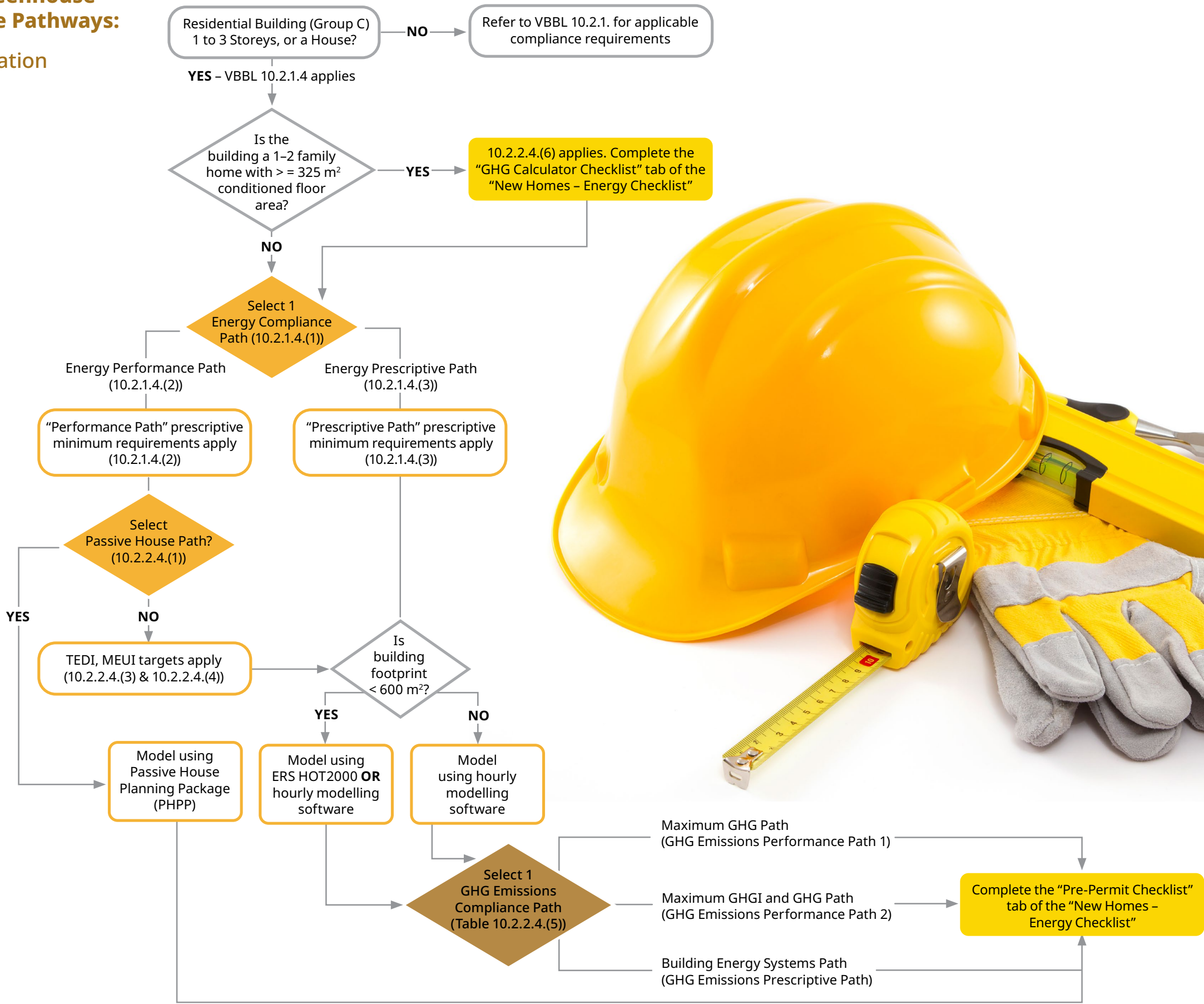
Gas for Cooking

All three Energy Compliance Paths allows the use of gas for cooking, as well as both Performance Paths for Greenhouse Gas Emissions Compliance.

Prescriptive Performance Updates for Energy Compliance

Prescriptive requirements for various building components have been updated in the 2025 VBBL to achieve greater levels of energy efficiency. For specific value changes, please see the **Appendix on page 9**.

2025 VBBL Energy and Greenhouse Gas Emissions Compliance Pathways:
Energy Model & Documentation Requirements



B. Navigating Energy Compliance for Homes in VBBL 2025

Each Energy Compliance Path in the VBBL – Prescriptive, Performance and Passive House – have their own special requirements and considerations, which are outlined in the following section. The information presented here is not a complete tally of all requirements and should be read alongside the 2025 VBBL, however specific clauses have been provided for reference.

For 1-3 storey Residential Buildings, or those with no more than two principal dwellings, all the following aspects of a building are subject to the requirements of Part 10 – Energy Efficiency of the VBBL:

10.2.1.4.	Overall Requirements
10.2.1.4.(2)	Building Energy and Emissions (Performance and PH Path Only)
10.2.1.4.(3)	Prescriptive Path
10.2.2.6.	Opaque Envelope
10.2.2.7.	Fenestration
10.2.2.8.	Vestibules
10.2.2.9.	Sub-metering Provisions
10.2.2.10.	Lighting Provisions
10.2.2.11.	Hot Water Tank Piping
10.2.2.12.	Domestic Hot Water Heaters
10.2.2.13.	Domestic Boilers
10.2.2.14.	Domestic Heat Pumps, Furnaces, or Make Up Air Units
10.2.2.15.	Gas Fireplaces
10.2.2.16.	Wood Fireplaces
10.2.2.17.	Heat Recovery Ventilators
10.2.2.19.	Exterior Heated Space (for residential buildings with more than 2 principal dwelling units)
10.2.2.20.	Documentation
10.2.2.21.	Airtightness Testing

Mandatory Provisions

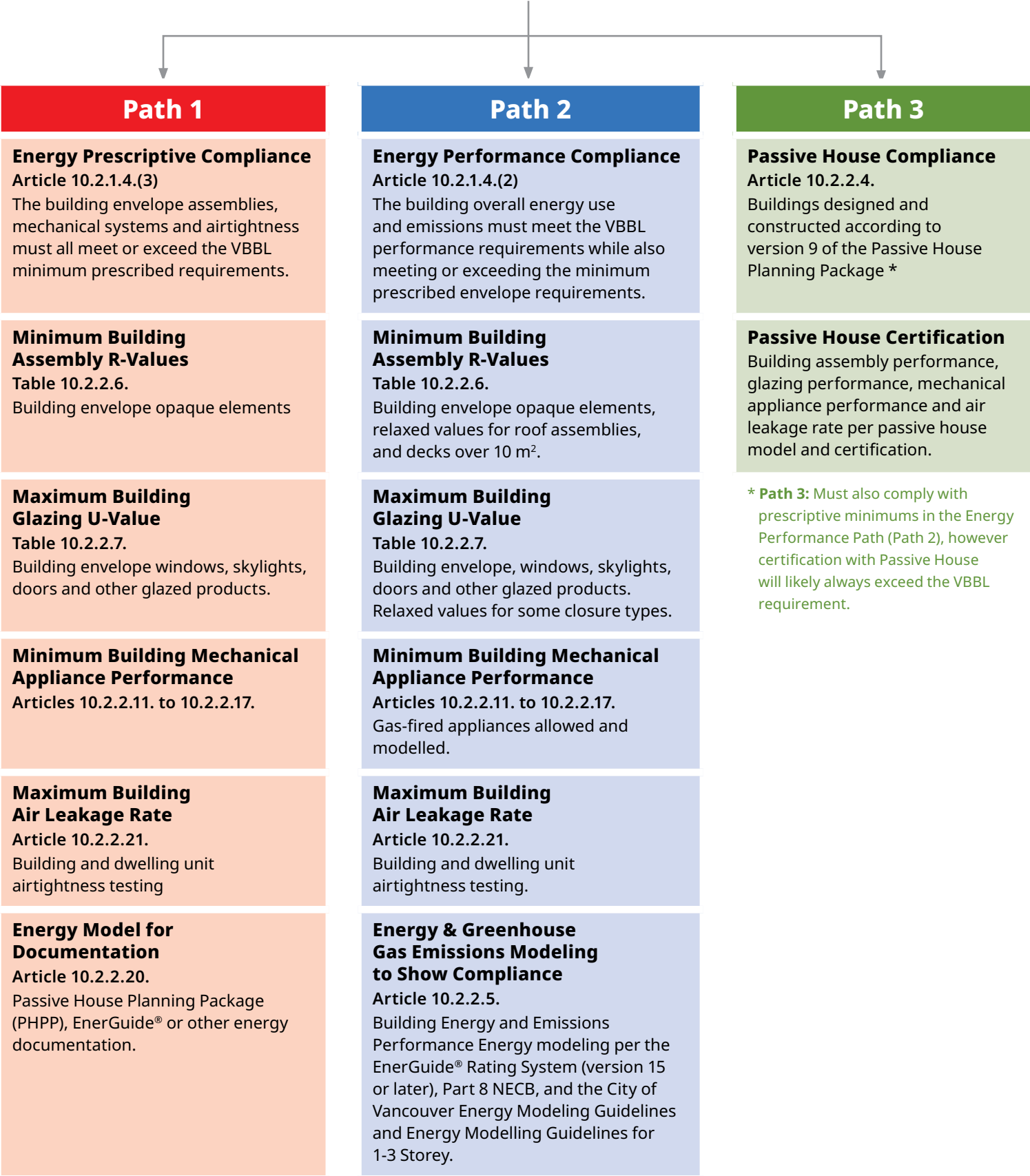
Each of these articles may set out different requirements for these systems depending on the path chosen, and on the system being used. There are still mandatory provisions within many of these articles that must be followed, regardless of the Energy Compliance Path chosen.

This includes, but not limited to:

- Providing heat recovery ventilators
- Providing control systems for HRV and heat pump systems
- Providing sub-metering of building hot water and gas usage for heating/hot water
- Conducting air leakage testing

The chart to the right highlights the primary differences between each Energy Compliance Path with regards to the different sections of the 2025 VBBL. This chart can be used for reference when reading each of the following Energy Compliance Path overview sections.

VBBL Section 10.2.: Energy Compliance Pathways for 1-3 Storey Residential Construction



C. Energy Compliance Path 1: Prescriptive

The Energy Prescriptive Path 1 lays out prescriptive requirements for various building components, including different envelope assemblies, mechanical appliances and building airtightness. These prescriptive requirements include minimum or maximum performance values, such as equipment efficiency or thermal transmittance, as well as specific conditions under which these values would apply. For instance, there are stricter prescriptive window U-value performance requirements for a single-family home over 325 m² of floor space and when the window to wall ratio is greater than 30%.

Path 1 considers that if all components meet or exceed the code prescribed values, the building is deemed to comply with the energy efficiency intent of Section 10.2. of the VBBL. If one or more components do not meet the prescriptive target, the whole building does not comply, even if there are other components that are significantly better.



Appliances for Space Heating and Hot Water

For the 2025 VBBL, Path 1 does not allow for the use of gas-fired appliances for hot water or space heating systems, except for gas fireplaces which have a limit on combined total rated input of < 60,000 BTU/hr from all gas fireplaces within the building. Otherwise, all systems must use electricity, such as an electric hot water tank or electric heat pump.

EnerGuide® Rating

Projects following the Prescriptive Path are still required to provide documentation as per Article 10.2.2.20. This includes an EnerGuide® Rating System Audit or HOT2000 modelling report. This means that a building energy model is still required for the Energy Prescriptive Path, along with the reported energy metrics results, but these metrics are not used for compliance. See the Energy Performance Path 2 for considerations regarding energy modelling.

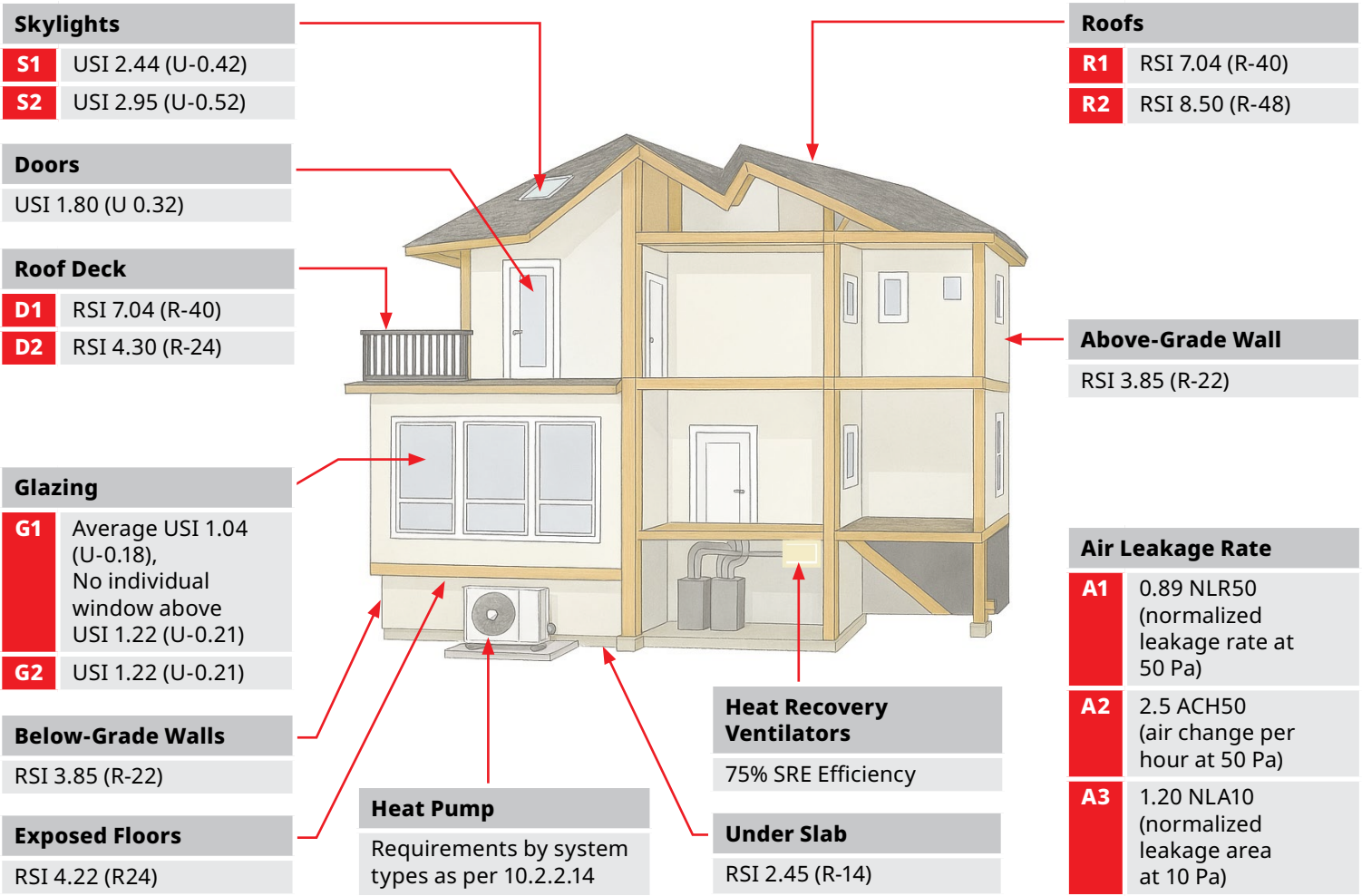
Greenhouse Gas Emission Compliance Paths

A project choosing Path 1 can select either of the two GHG emissions performance paths (GHG or GHG + GHGI), or the prescriptive path (Building Energy Systems) to demonstrate compliance to GHG emissions. See 10.2.2.4.(5).

Larger Homes

Additionally, for buildings over 325 m² of conditioned space, you must provide calculations as per the EnerGuide® rating system to show the greenhouse gas footprint is no greater than 2,000 kgCO_{2e}/year, inclusive of exterior equipment. Complete the *GHG Calculator in the New Homes – Energy Checklist*.

Energy Compliance Path 1 VBBL Article 10.2.1.4.(3) Minimum Prescriptive Compliance Pathway Requirements



- G1** Window-to-wall ratio ≥ 30%, and One-Family Dwelling with conditioned space ≥ 325 m²
- G2** All Other
- S1** Skylights (not larger than 1220 mm in both directions), roof windows and sloped glazing systems
- S2** Skylights larger than 1220 mm in both directions
- D1** Area > 10.0 m²
- D2** Area ≤ 10.0 m²
- R1** Roof Assemblies
- R2** Attic Spaces

Path Summary

- Need to meet prescriptive performance targets for envelope and mechanical components.
- Most straight forward path to follow.
- Can be inflexible as there are no tradeoffs allowed.
- Does not allow gas-fired appliances for space heating and hot water heating.
- Gas cooking is permitted under this path.
- Requires an air leakage test.
- Still requires an energy model for documentation, but not to demonstrate compliance.
- Select one of three GHG Emissions Compliance Paths to demonstrate compliance to 10.2.2.4.(5).
- Larger homes over 325 m² of conditioned space have a specific GHG limit that includes exterior equipment.

D. Energy Compliance Path 2: Performance

If the project chooses not to comply with the Energy Prescriptive Path 1, the next option is the Energy Performance Path 2. This path takes a different approach by looking at the overall energy use and emissions intensity from the whole building using an energy model, rather than evaluating each component on its own.

This simulated version of the building inputs the rated performance of all the building components (including mechanical, enclosure and electrical systems) and analyzes the building energy use over a typical year. This is then compared to the energy performance metrics targets within the VBBL⁴. For 1-3 storey residential buildings, these metrics are:

Thermal Energy Demand Intensity (TEDI, kWh/m²/a) – The amount of energy required by the building spaces to maintain comfortable conditions, per m² of conditioned floor area per year. This is mainly a function of the envelope performance and heat recovery of the ventilation system. An ‘Adjusted TEDI’ formula is provided to reflect local climate conditions.

Mechanical Energy Use Intensity (MEUI, kWh/m²/a) – The amount of energy used by the mechanical systems to deliver the appropriate conditioning to the building spaces, along with domestic hot water systems, per m² of conditioned floor area per year. Mechanical systems included in the MEUI are space-heating, space-cooling, fans, service water heating equipment, pumps, and auxiliary HVAC equipment.

Greenhouse Gas Intensity (GHGI, kg eCO_{2e}/m²/a) – The amount of greenhouse gas emissions associated with the operation of all energy on site, per m² of conditioned floor area per year. This is determined by multiplying the site energy use by provided emissions factors for different types of fuel (natural gas or electricity), divided by the floor area.

BC Energy Step Code – The targets for TEDI and MEUI in the 2025 VBBL are aligned with the BC Energy Step Code – Step 4.

Greenhouse Gas Emission Compliance Paths

A project choosing Path 2 can select either of the two GHG emissions performance paths (GHG or GHG + GHGI), or the prescriptive path (Building Energy Systems) to demonstrate compliance to GHG emissions. See 10.2.2.4.(5).

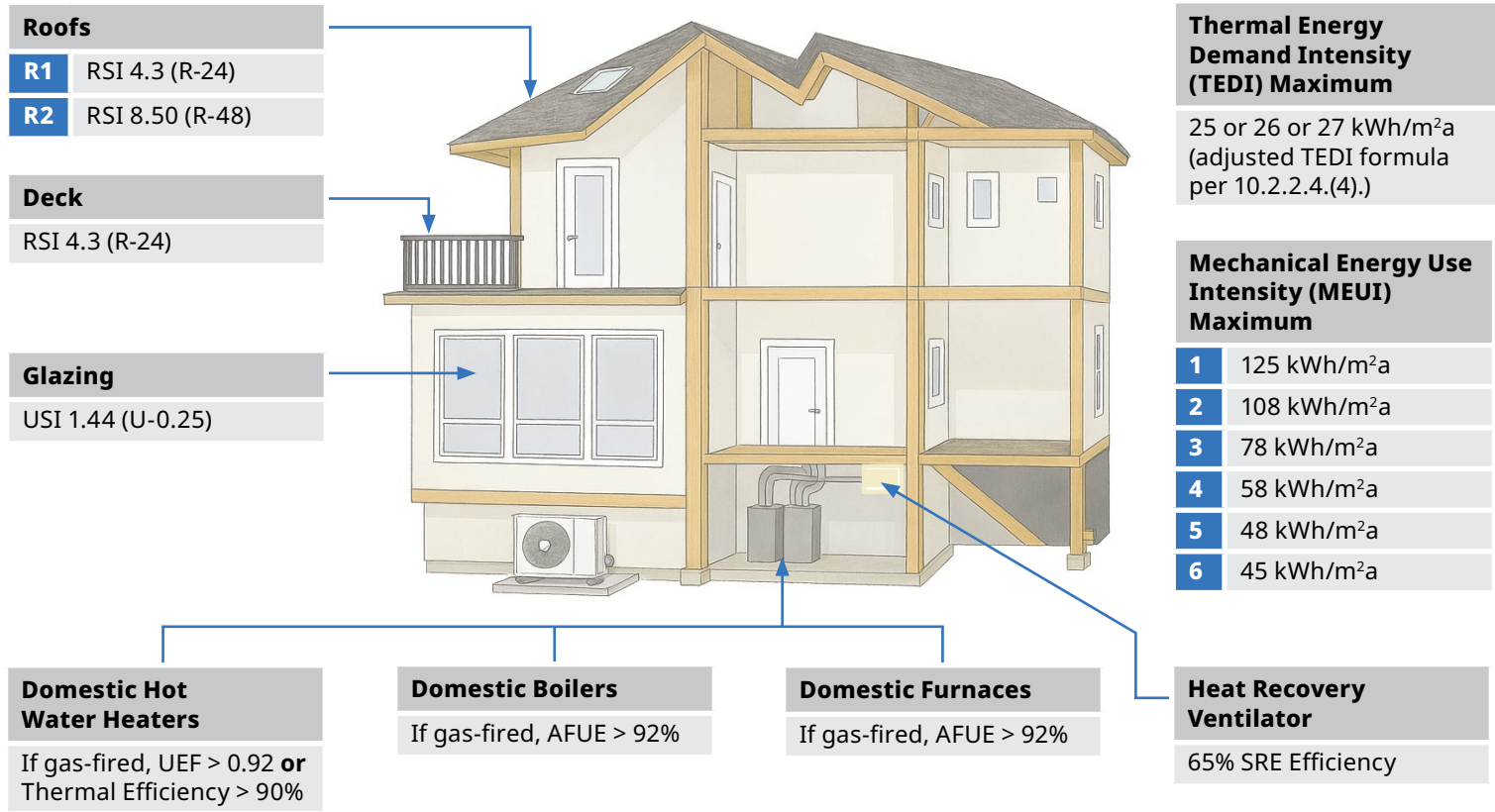
Other Considerations

Prescriptive Requirements – While Path 2 is performance based, the building is still subject to prescriptive requirements. This includes the performance of building components. However, for the envelope these requirements are less stringent compared to Path 1. This can provide more flexibility for using different building envelope systems on projects. See the figure on the right for an overview of prescriptive requirements.

Appliances for Space Heating and Hot Water – For the 2025 VBBL Update, Path 2 allows for the use of natural gas heating and hot water systems. However, note that using a natural gas system may impact meeting the GHGI targets and would need to be confirmed through the energy model. Gas fireplaces are allowed with a limit on combined total rated input of < 60,000 BTU/hr from all gas fireplaces within the building.

Energy Advisors – For buildings, an Energy Advisor typically creates a HOT2000 model. Energy Advisors are certified to conduct energy assessments and modelling, and will determine these metrics for the project. They are also required to complete energy compliance checklists and other permitting documentation for the City of Vancouver. See the *New Homes – Energy Checklist*.

Energy Compliance Path 2: VBBL Sentence 10.2.2.5. Performance Compliance Pathway Certification Performance



All other minimum prescription requirements for Path 2 are the same as Path 1.

- 1 For dwellings ≤ 50 m² (538 ft) of conditioned floor area
- 2 For dwellings ≤ 75 m² (807 ft) of conditioned floor area
- 3 For dwellings ≤ 120 m² (1,292 ft) of conditioned floor area
- 4 For dwellings ≤ 165 m² (1,776 ft) of conditioned floor area
- 5 For dwellings ≤ 210 m² (2,260 ft) of conditioned floor area
- 6 For dwellings > 210 m² (2,260 ft) of conditioned floorspace

- R1 Roof Assemblies
- R2 Attic Spaces

Path Summary

- Compliance is based on meeting TEDI, MEUI targets.
- Needs to be demonstrated through an energy model, typically completed by an Energy Advisor.
- Still need to be better than prescriptive targets, but these targets are relaxed compared to the Energy Prescriptive Path.
- Can provide more flexibility for envelope building components.
- Allows gas-fired appliances for space heating and hot water heating; and gas cooking is permitted.
- Requires an air leakage test.
- Select one of three GHG Emissions Compliance Paths to demonstrate compliance to 10.2.2.4.(5).
- Larger homes over 325 m² of conditioned space have a specific GHG limit that includes exterior equipment.

E. Energy Compliance Path 3: Passive House

The third option for energy compliance is to pursue Passive House Certification (Path 3). The Passive House Standard is an international program that aims to create net-zero ready buildings through efficient building design, high performance envelopes and mechanical systems, heat recovery ventilation and airtight construction.

This approach is similar to the Path 2, in that the building is modelled and must meet specific performance metrics that are similar to TEDI and MEUI, however they are much more stringent⁵. A building is deemed to comply with Part 10 of the VBBL if the project achieves Passive House Certification. Refer to the figure to the right for an overview of Passive House requirements.

The certification process involves using a Passive House Consultant who will model the building using specific Passive House Planning Package (PHPP) software and will help design the building around meeting the Passive House targets. The project design and PHPP is submitted to a third party Passive House Certifier, who will further verify the project has been designed in accordance with the Passive House standard. At the end of the project the project is reviewed by the Certifier again, including site photos and commissioning testing, to provide the final confirmation for the project.

Pursing Passive House Certification can be onerous if you are not familiar with the performance expectations and should not be approached like typical construction. There are no specific minimum performance for building systems, per se, as long as the overall Passive House energy targets for certification are met. However it is unlikely to achieve these targets unless very high performance systems are used.

The recommended performance of these systems (R-value of assemblies, U-value of glazing etc.) to meet Passive House targets will likely exceed the prescriptive targets in the VBBL. There are also more requirements for documentation from the project team and quality assurance/control from the builder throughout the design and construction process. This is intended to provide greater assurance that the building will be durable, to provide greater interior comfort and is resilient to future climate conditions.

There are several educational and certification courses available for homeowners, builders and tradespeople for designing and constructing Passive House buildings available in the Lower Mainland⁶. There are also numerous design and construction companies that specialize in delivering Passive House buildings.

Greenhouse Gas Emission Compliance Paths

A project pursuing the Passive House Path for energy compliance does not need to demonstrate compliance to the GHG emissions limits of 10.2.2.4.(5).

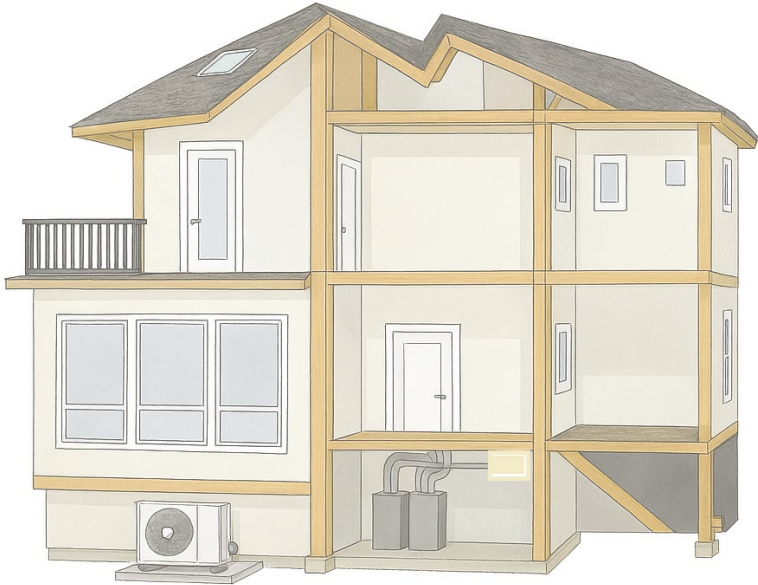
Other Considerations

Suitable Products – Meeting the Passive House standard requires very high-performance materials, components and systems, as well as suitable documentation required for the certification process. As this is a European based standard, values may be required as per European standards, which can be significantly different than typical North American practice. This includes glazing U-values, thermal bridging calculations, and heat recovery efficiency. While there is a growing number of North American manufacturers that have this information, the availability of products suitable for Passive House is more limited than common construction.

Energy Compliance Path 3: VBBL Sentence 10.2.1.4.(2) Requirements

Software	
PHPP	Certification with Version 9 of the Passive House Planning Package

Space Heating Maximum	
	15 kWh/m ² a demand or 10 W/m ² load



Cooling	
	15 kWh/m ² a demand or 10 W/m ² load

Primary Energy Renewable Demand	
Classic	60 kWh/m ² a
Plus	45 kWh/m ² a
Premium	30 kWh/m ² a

Air Leakage Rate	
	0.6 ACH ₅₀

Incentives for Passive House Buildings – As Passive House buildings significantly reduce operating emissions from buildings and support the City of Vancouver’s Climate Emergency Action Plan, the City provides a zoning incentives and variances for residential projects in the R1, RT, and RA districts that are certified to the Passive House standard.

Passive House projects can apply for an exclusion of floor area, and variances to height, yard and building depth regulations, provided the project can show it will achieve Passive House certification.



For more information, see the Zero Emission Buildings in R1, RT and RA Districts Bulletin: vancouver.ca/zebr1

Builders pursuing a zero emission standard such as Passive House should obtain early advice on meeting VBBL requirements from a registered professional.

Different certification classes of Passive House, Classic, Plus, or Premium is provided based on the level of overall energy use and energy generation achieved.

Path Summary

- Subject to achieving Passive House Certification through third party verification.
- Quite stringent, systems will likely far exceed the prescriptive values of the 2025 VBBL Update.
- Limitations on product availability suitable for Passive House.
- Will require additional consultants on the project (Passive House Consultant) and verifiers (Passive House Certifier).
- Gas-fired appliance allowed for space heating and hot water heating, and gas cooking is permitted. Gas fireplaces are allowed with a limit on combined total rated input of < 60,000 BTU/hr from all gas fireplaces within the building.
- Not required to demonstrate compliance to GHG emissions limits of 10.2.2.4.(5).
- City may provide additional incentives.

Appendix: VBBL 2022 to 2025 Update Summary

For readers that are already familiar with the VBBL, the following table outlines the major changes between the 2022 VBBL Update and 2025 VBBL, including specific values and clauses for reference.

- **Windows, Skylights, Doors** – Better performance, likely triple glazed for projects pursuing Path 1
 - **Roofs Assemblies** – Simplified requirements for all roofs
 - **Domestic Hot Water Systems** – Must be electrically operated, for projects pursuing Path 1
- **Heating System** – Must be electrically operated for projects pursuing Path 1
 - **Heat Pump Efficiency** – New controls and performance requirements, including heating/cooling capacity and SEER/EER/HSPF/COP
 - **Gas Fireplaces** – Combined total rated input limit from all gas fireplaces within a building
- **Heat Recovery or Energy Recovery Ventilators** – Separate equipment efficiency requirements for Path 1 and Path 2
 - **Airtightness Test Requirements** – Provided three options for maximum air leakage rates to demonstrate compliance

2025 VBBL FOR 1-3 STOREY RESIDENTIAL BUILDINGS – QUICK REFERENCE FOR ENERGY COMPLIANCE PATHS									
Item	2022 VBBL				2025 VBBL				Reference Clause(s) in 2025 VBBL
Energy Compliance Paths	Path 1 – Prescriptive; Path 2 – Performance, or Path 3 – Passive House								10.2.1.4. 10.2.2.4.
Path 2 Targets	Conditioned Floor Area	MEUI (kWh/m²a)	TEDI (kWh/m²a)	GHGI (kgCO _{2e} /m²a)	Conditioned Floor Area	MEUI (kWh/m²a)	Adjusted TEDI (kWh/m²a)	GHGI (kgCO _{2e} /m²a)	10.2.2.4.(3)(b) 10.2.2.4.
	≤ 50 m²	125	20	3	≤ 50 m²	125	25,26,27*	3	
	≤ 75 m²	108			≤ 75 m²	108			
	≤ 120 m²	78			≤ 120 m²	78			
	≤ 165 m²	58			≤ 165 m²	58			
	≤ 210 m²	48			≤ 210 m²	48			
	> 210 m²	45			> 210 m²	45			
Path 3 Targets	Conform design to the Passive House Standard criteria. Must use PHPP v9 or newer, prepared by a Passive House Designer/Consultant								10.2.2.4.(1)
Minimum Effective Thermal Resistance of Assemblies	Roof Type	Conditioned Floor Area	Path 1	Path 2/3	Type		Path 1	Path 2/3	10.2.2.6.
	Roof Assemblies for Houses (Residential Buildings With Not More Than Two Principal Dwelling Units) Roof Assemblies Other	< 110 m²	RSI 5.28 (R-30)	RSI 4.3 (R-24)	Roof Assemblies		RSI 7.04 (R-40)	RSI 4.3 (R-24)	
		≥ 110 m²	RSI 7.0 (R-40)	RSI 4.3 (R-24)	Attic Spaces		RSI 8.5 (R-48)	RSI 8.5 (R-48)	
		All	RSI 7.0 (R-40)	RSI 5.28 (R-26)					
					Decks	Area > 10.0 m²	RSI 7.04 (R-40)	RSI 4.3 (R-24)	
						Area ≤ 10.0 m²	RSI 4.3 (R-24)		

* Please refer to the climate map provided in the Appendix on page 12.

Appendix: VBBL 2022 to 2025 Update Summary *(continued)*

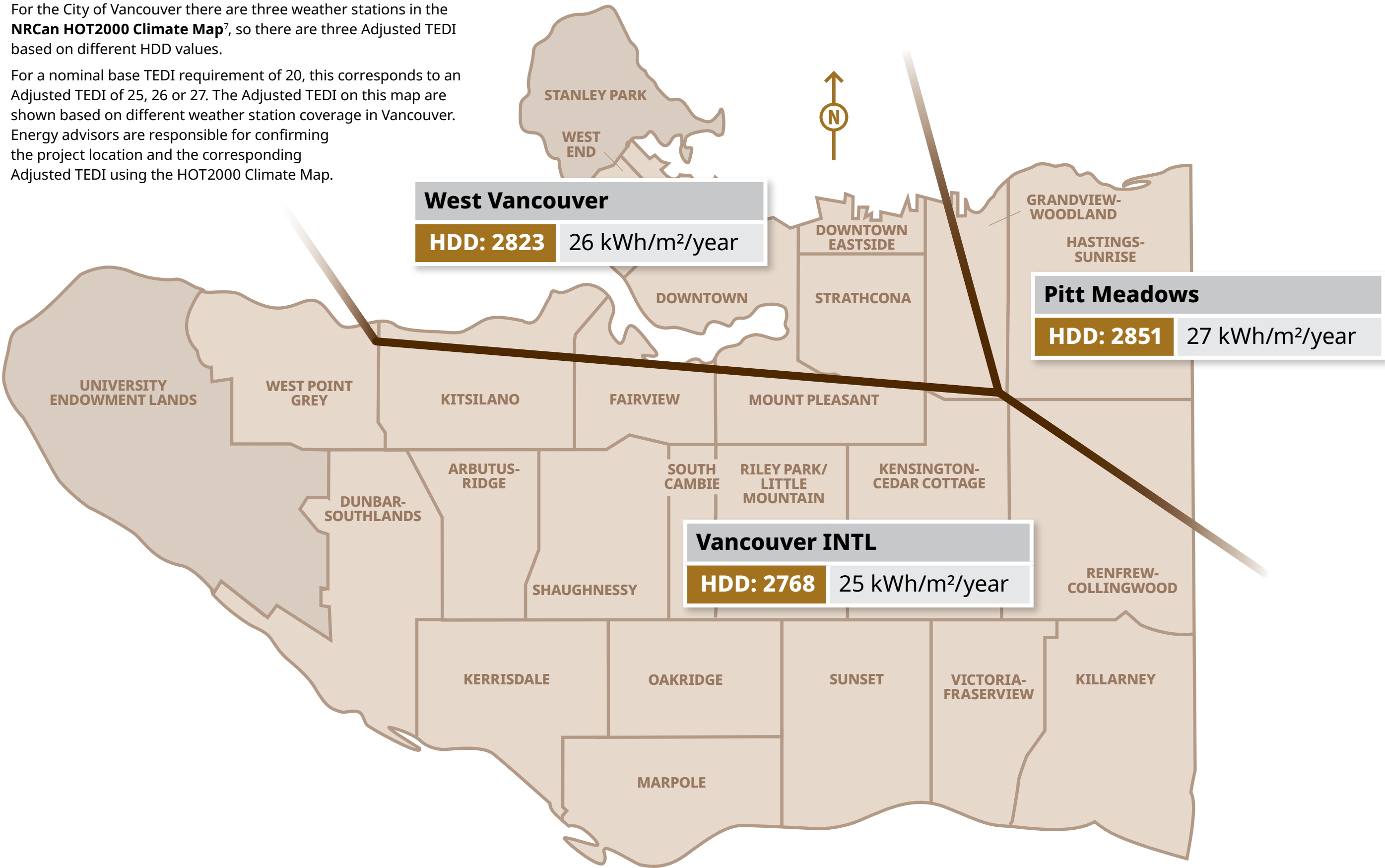
2025 VBBL FOR 1-3 STOREY RESIDENTIAL BUILDINGS – QUICK REFERENCE FOR ENERGY COMPLIANCE PATHS									
Item	2022 VBBL				2025 VBBL				Reference Clause(s) in 2025 VBBL
Thermal Transmittance of Exterior Closures and Fenestration	Type	Condition	Path 1	Path 2/3	Type	Condition	Path 1	Path 2/3	10.2.2.7.
	Windows and sliding doors or folding doors with glazing or Curtain Wall or Window Wall	Window to wall ratio is ≥ 30% and/or single-family dwelling ≥ 325 m²	Average USI 1.04 (no single window greater than USI 1.22)	USI 1.44 (U-0.25)	Windows and sliding doors or folding doors with glazing or Curtain Wall or Window Wall	Window to wall ratio is ≥ 30% and single-family dwelling ≥ 325 m²	Average USI 1.04 (No single window greater than USI 1.22)	USI 1.44 (U-0.25)	
		All other	USI 1.22 (U-0.21)	USI 1.44 (U-0.25)		All other	USI 1.22 (U-0.21)	USI 1.44 (U-0.25)	
Domestic Hot Water Heaters	Path 1		Path 2/3		Path 1		Path 2/3		10.2.2.12.
	Electrically operated		Gas-heated hot water heaters shall have a thermal efficiency of not less than 90%		Electrically operated		Gas-heated hot water heaters shall have a uniform energy factor of not less than 0.92 or a thermal efficiency of not less than 90%		
Domestic Boilers	Path 1		Path 2/3		Path 1		Path 2/3		10.2.2.13.
	Electrically operated		Annual Fuel Utilization efficiency (AFUE) of 92%+		Electrically operated		Annual Fuel Utilization efficiency (AFUE) of 92%+		
Domestic Heat Pumps, Furnaces or Makeup Air Units	Path 1		Path 2/3		Path 1		Path 2/3		10.2.2.14.
	• Electrically operated controls for heat pumps with supplemental heating and programmable set back thermostats • Minimum system performance as per Table 10.2.2.14.		• Same as Prescriptive, but gas-fired systems are allowed with Annual Fuel Utilization efficiency (AFUE) of 92%+		• Electrically operated controls for heat pumps with supplemental heating and programmable set back thermostats • Minimum system performance as per Table 10.2.2.14.		• Same as Prescriptive Path, but gas-fired systems are allowed with Annual Fuel Utilization efficiency (AFUE) of 92%+ • Minimum system performance as per Table 10.2.2.14.		
Heat Recovery Ventilators or Energy Recovery Ventilators	Conditioned Floor Area		Sensible Heat Recovery at 0°C		Path 1		Path 2/3		10.2.2.17.
	≤ 110 m²		65%		Sensible Heat Recovery Efficiency (SRE) at 0°C: 75%		Sensible Heat Recovery Efficiency (SRE) at 0°C: 65%		
	> 110 m²		75%						
Building and Dwelling Unit Airtightness Testing	Ground Oriented Dwelling Units		2.5 Air changes per hour at 50 Pa		Airtightness levels for all buildings				10.2.2.21.
	Ground Oriented Dwelling Units, Alternative Measure		Normalized leakage area of 1.7 cm²/m² at 10 Pa		ACH50 = 2.5, NLA10 = 1.2 cm²/m², or NLR50 = 0.89 L/s-m²				

Note: Gross floor area measured from inside exterior walls of the largest single dwelling located on the site

Appendix: City of Vancouver Climate Map for Adjusted TEDI

For the City of Vancouver there are three weather stations in the **NRCan HOT2000 Climate Map**⁷, so there are three Adjusted TEDI based on different HDD values.

For a nominal base TEDI requirement of 20, this corresponds to an Adjusted TEDI of 25, 26 or 27. The Adjusted TEDI on this map are shown based on different weather station coverage in Vancouver. Energy advisors are responsible for confirming the project location and the corresponding Adjusted TEDI using the HOT2000 Climate Map.



Endnotes

- 1 As per Section 10.2. – Energy Efficiency of the VBBL
- 2 Under the definitions in Part 9 – Housing and Small Buildings of the VBBL
While the focus of this guide is for new construction, note that many of these items will also apply to upgrades and alterations to existing buildings, along with other requirements or stipulations
- 3 <https://www.passivehousecanada.com/passive-house-building-certification>
- 4 For more information on energy performance metrics and energy modelling refer to the *BC Energy Step Code* and the *BC Energy Step Code Builder Guide*, available at <https://energystepcode.ca> and <https://www.bchousing.org/home>
- 5 Space Heating Demand and Primary Energy Renewable targets in Passive House exceed the performance targets of Step 5 of the BC Energy Step Code
- 6 <https://www.passivehousecanada.com>
- 7 <https://nrcan-rncan.maps.arcgis.com/apps/webappviewer/index.html?id=1b218b42e6cd4c1e866003fce58e7256>

Disclaimer

If there are any discrepancies between what this document indicates and the Vancouver Building By-law, what is indicated in the VBBL takes precedence and is correct.



vancouver.ca/vbbl-guide-for-homes



Notes

Important information:
Please have this translated

معلومات مهمة: البحث على الترجمة

重要资讯: 请找人为你翻译

重要資訊: 請找人為你翻譯

اطلاعات مهم: لطفا درخواست کنید
که این اطلاعات را برای شما ترجمه کنند

RENSEIGNEMENTS IMPORTANTS:
Prière de les faire traduire

重要な情報: これを翻訳してください

중요정보: 번역해주세요

Informação importante:
Favor solicitar tradução

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INFORMACIÓN IMPORTANTE:
Busque a alguien que le traduzca

MAHALAGANG IMPORMASYON:
Mangyaring isalin ito

TIN TỨC QUAN TRỌNG:
Xin hãy dịch sang tiếng Việt



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Planning, Urban Design & Sustainability
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