



## 2020 NATIONAL BUILDING CODE – ENERGY COMPLIANCE PATHWAYS

The 2020 NBC Section 9.36 introduces three compliance options for energy efficiency in housing and small buildings. Each pathway ensures energy performance equivalent to or exceeding Tier 2 of the Tiered Energy Performance requirements.

Building Address: \_\_\_\_\_

Owner/Applicant: \_\_\_\_\_

Date: \_\_\_\_\_

Pathway Selected:

- Tiered Prescriptive
- Tiered Performance
- National Energy Code

### Summary Table

Pathway	Best For	Key Requirements	Verification Method
Tiered Prescriptive	Simple low-rise housing	10 points minimum	Field inspection & test results
Tiered Performance	Custom builds	Energy modeling	Software report
NECB 2020	Larger or mixed-use buildings	NECB standards	Compliance checklist

### Pathway 1: Tiered Prescriptive Compliance (Tier 2 – 10 Points Minimum)

Method: Achieve 10 points through performance upgrades that increase overall building efficiency.

#### How to Earn Points (Tier 2 Examples):

Upgrade Measure	Description	Points Available	Points Achieved
Increased insulation in wall assembly	Exceeds minimum RSI value of Tier 1	13.6	
Decrease in window U-value / increase in ER rating	Better-performing windows/doors	4.6	
Improved HRV efficiency	Sensible Heat-Recovery Efficiency $\geq 60\%$	3.5	
Gas-fired or heat pump water heater	Uniform Energy Factor $\geq 0.79$ Energy Efficiency $\geq 2.35$	4.9	
Air tightness verified by blower door test	$\leq 2.0$ ACH@50Pa	13.4	
Reduced building volume (heated space)	$\leq 390$ m <sup>3</sup> (13,772 ft <sup>3</sup> )	10	
<b>Total Points</b>	<b>Must be <math>\geq 10</math></b>	<b>49.5</b>	

Compliance Documentation Attached:  Yes  No



**Pathway 2: Tiered Performance Compliance (Tier 2 – Energy Modeling)**

Method: Energy modeling comparison between a Reference House and the Proposed House. The proposed design must demonstrate equal or better energy performance than the reference model as defined in the NBC 2020.

**How It Works:**

1. Energy model both reference and proposed house using approved software (e.g., HOT2000, EnergyPlus, etc).
2. Submit modeling summary showing annual energy consumption (MJ/m<sup>2</sup>) and GHG intensity.
3. Confirm all major systems are modeled accurately (HVAC, service water heating, building envelope, air tightness).

<b>Energy Performance &gt;300m3 Volume</b>	<b>Target Energy Performance Tier 2</b>	<b>Actual Energy Performance</b>	<b>Meets/Exceeds Tier 2 (✓)</b>
% Heat Loss Reduction	≥5%		
% improvement OR % House Energy Target	≥10% ≤ 90%		
<b>Energy Performance ≤300m3 Volume</b>	<b>Target Energy Performance Tier 2</b>	<b>Actual Energy Performance</b>	<b>Meets/Exceeds Tier 2 (✓)</b>
% Heat Loss Reduction	≥ 0%		
% improvement OR % House Energy Target	≥ 0% ≤100%		

\*Peak cooling load in the proposed house shall not be greater than the peak cooling load in the reference house.

**Pathway 3: 2020 National Energy Code for Buildings (NECB 2020)**

Method: Follow the prescriptive or performance compliance paths under NECB 2020. Typically used for larger or mixed-use buildings beyond Part 9.

**Compliance Options:**

- Prescriptive: Meet or exceed all NECB minimum insulation, fenestration, and mechanical system efficiencies.
- Trade-Off: Balance over- and under-performance across envelope components.
- Performance: Model proposed design to use less energy than NECB reference model.
- Submit Form 11 – Commitment Certificate: Resource Conservation Measures – Energy Requirements (Field Review of Construction)