

Energy Efficiency Compliance 2017 NECB - Prescriptive Path Form (2017 National Energy Code for Buildings)

Information and Drawing Requirements

Project Information	
Project Address	BPA Number
Coordinating NECB Design Professional Name	

Prescriptive compliance requires drawings that detail items referred to in the **NECB Drawings Requirements** handout.

Part 3 – Building Envelope			
For Additions: fenestration is being calculated for (select one):		<input type="checkbox"/> Addition only <input type="checkbox"/> Addition & existing combined	
General		Proposed	NECB Limit
Gross wall area (m ²)			N/A
Total window area (m ²)			N/A
Total exterior door area (m ²)			N/A
Gross roof area (m ²)			N/A
Total skylight area (m ²)			< 0.02*(gross roof area)
Exposed floor areas (m ²)			N/A
			HDD @ 18° HDD @ 15°
Overall Thermal Transmittance – U (W/(m ² ·K))	FDWR (%)		≤ 0.287* ≤ 0.347*
Opaque walls (above ground)			≤ 0.210 ≤ 0.247
Opaque walls (in contact with ground)			≤ 0.284 ≤ 0.284
Roofs (above ground)			≤ 0.138 ≤ 0.156
Roofs (in contact with ground)			≤ 0.284 ≤ 0.284
Floors (above ground)			≤ 0.162 ≤ 0.183
Floors (in contact with ground)			≤ 0.757 for 1.2m ≤ 0.757 for 1.2m
Air Leakage (L/(s·m ²))	Opaque doors		≤ 1.9 ≤ 1.9
Fixed fenestration and curtain walls			≤ 0.20
Operable windows, skylights, and doors			≤ 0.5
Operable revolving and auto sliding doors			≤ 5

Part 4 – Lighting	
Proposed building IILP (Installed Interior Lighting Power) (kW) (not to exceed the ILPA below)	
Interior Lighting Power Method: (Select One Below)	
<input type="checkbox"/> ILPA (Interior Lighting Power Allowance - building area method)	Lighting power density (W/m ²)
OR	Gross lighted Area (m ²)
	Proposed ILPA building area method (kW)
<input type="checkbox"/> ILPA (Interior Lighting Power Allowance – space-by-space method)*	Proposed ILPA space-by-space method (kW)
*Provide a detailed line-by-line breakdown of spaces, their floor area (m ²), the associated lighting power densities (W/m ²) and the resulting lighting power allowances (kW)	
Proposed building exterior lighting power (kW) (to be less than exterior lighting basic site allowance below)	
Exterior lighting zone	
Exterior lighting basic site allowance (W)	
Interior lighting controls are designed in accordance with Subsection 4.2.2.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exterior lighting controls are designed in accordance with Subsection 4.2.4.	<input type="checkbox"/> Yes <input type="checkbox"/> No

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Part 5 – Heating, Ventilating and Air-Conditioning Systems				
	Proposed		NECB Limit	
	Constant Volume	Variable Air Volume	Constant Volume	Variable Air Volume
Fan system power demand (W/Ls))			≤ 1.6	≤ 2.65
Commercial kitchen design ventilation rate (L/s)			<input type="checkbox"/> < 1410 L/s <input type="checkbox"/> Demand control provided	
Economizer system required in conformance with Articles 5.2.2.7. Air economizer has been designed to Article 5.2.2.8. or Article 5.2.2.9.(circle one)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No			
Temperature controls been designed in conformance with Subsection 5.2.8.	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Type of ventilation system operation	<input type="checkbox"/> Continuous <input type="checkbox"/> Non-continuous			
Percentage of outdoor air at design airflow conditions (%)				
Energy recovery system required	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Energy recovery system efficiency (%)				

Please provide details of proposed HVAC equipment and component specifications for the building, using the table below:
(Please note if more space is needed, please submit a separate list using the same format) Table 5.2.12.1

Component or Equipment	Cooling or Heating Capacity, kW	Standard	Rating Conditions	Performance Rating

Part 6 – Service Water Systems		
	Proposed	NECB Limit
Shower heads (L/min)		≤ 7.6 L/min
Lavatories (L/min)		≤ Private 5.7 L/min ≤ Public 1.9 L/min

Please provide details of the proposed service water heating equipment specifications for the building, using the table below:
(Please note if more space is needed, please submit a separate list using the same format) Table 6.2.2.1.

Component or Equipment	Input	Capacity (L)	V _t (L)	Input/V _t (W/L)	Standard	Rating Conditions	Rated Performance

Part 7 – Power Systems		
	Proposed	NECB Limit
Load carrying capacity (kVA)		<input type="checkbox"/> < 250 kVA <input type="checkbox"/> Monitoring system provided

Please provide a description of each system, detailing its function, design details, and performance characteristics.

Compliance Confirmation		
Effective thermal transmittance including the effects of thermal bridging has been calculated as per Article 3.1.1.7	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Building energy prescriptive compliance meets NECB 2017	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Drawings submitted are in conformance with NECB Drawings Requirements	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Declaration	
Signature of Coordinating NECB Design Professional who has completed this form:	
Signature _____	Date _____