

**NATIONAL ENERGY CODE FOR BUILDINGS  
DRAWING REQUIREMENTS**

NECB submissions require the following items listed below to be shown on drawings. For an extensive list of drawing details for NECB Compliance see Subsection 2.2.2 of Division C of the NECB. Note items can be shown on NBC drawings sets or a separate NECB drawing set.

Part	Prescriptive Path
3	<ul style="list-style-type: none"> <li>Floor plan of the building giving the floor area of conditioned spaces and gross lighted area of each storey</li> <li>U-value overall thermal transmittance of all above-ground opaque building assemblies and assemblies in contact with the ground; provide assembly details and U-values in walls sections and assembly descriptions on drawings</li> <li>U-value overall thermal transmittance of all fenestration and doors provide in window schedule. Framing type and spacing must be included in effective thermal transmittance calculation. Note centre of glass value unacceptable; provide overall heat transfer for entire unit considering frame, glass edge and centre of glass</li> <li>Thermal bridging calculations to be detailed in table format including transmittance type (clear field, linear interface, point interface), transmittance description, transmittance area or length and transmittance values</li> <li>Air leakage: detail air barrier on wall sections, details and/or specifications. Note building envelope shall be designed with a continuous air barrier system. Provide leakage for fixed fenestration, as well as for operable windows/skylights/doors</li> <li>Indoor design temperatures for all spaces</li> </ul>
4	<ul style="list-style-type: none"> <li>Lighting power density (LPD) requirements for interior and exterior; indicate space-by-space or building area method and a summary table of calculated wattages/LPD. Table indicating number of fixtures and wattages along with total Lighting Power to be included in drawings</li> <li>Clearly indicate equipment to be excluded from interior calculation</li> <li>Show interior primary &amp; secondary side lighted areas. Also show day lighted areas under skylights</li> <li>Details of required interior and exterior lighting controls and lighting power including exits, entrances and facades. Show controls/sensors on drawings with symbol for interior and exterior spaces</li> </ul>
5	<ul style="list-style-type: none"> <li>HVAC equipment and efficiency; list individual components in equipment schedules, including any economizers</li> <li>Damper locations to be indicated on drawings</li> <li>Duct insulation to be included on drawing or specifications. Temperature difference and insulation thermal resistance values shown</li> <li>Piping insulation, to be included on drawings or specifications. Design operating temperature and piping insulation thickness values required.</li> <li>Show type(s) of fan systems and calculate power demand. Show commercial kitchen ventilation.</li> <li>Show type(s) of hydronic systems and calculate power demand of pumps</li> <li>Table of HVAC controls included</li> <li>Exhaust air system calculations shown, and energy recovery system indicated</li> </ul>
6	<ul style="list-style-type: none"> <li>Service Water Equipment and Efficiency; list in equipment schedules</li> <li>Service water storage tank insulation value shown</li> <li>Piping insulation to be included on drawings or specifications. Piping size and insulation thickness to be included for conditioned and unconditioned spaces on drawings or specifications.</li> <li>Shower and lavatory flow rates indicated</li> <li>Remote heater details provided, when required</li> <li>Pressure booster system details provided when required</li> <li>Pool heater, pump, and cover info included when applicable</li> </ul>
7	<ul style="list-style-type: none"> <li>Monitoring installation to be described and indicated on drawings if applicable (i.e. &gt; 250kVA)</li> </ul>
<b>Trade-off Path</b>	
3,4,5 & 6	<ul style="list-style-type: none"> <li>Prescriptive items <b>(as stated above)</b></li> <li>Trade-off calculations* Note Part 7 does not permit trade-offs to be used</li> </ul>
<b>Performance Path</b>	
8	<ul style="list-style-type: none"> <li>Prescriptive items <b>(as stated above)</b></li> <li>Modelling Report</li> </ul>

\*The above drawing requirements are only for NECB review. All other NBC drawings requirements still apply.