

TABLE G3.1 Modeling Requirements for Calculating Proposed and Baseline Building Performance

No.	Proposed Building Performance	Baseline Building Performance
<p>1. Design Model</p> <p>(a) The simulation model of the <i>proposed design</i> shall be consistent with the design documents, including proper accounting of fenestration and opaque envelope types and areas; interior lighting power and controls; HVAC system types, sizes, and controls; and service water heating systems and controls. All end-use load components within and associated with the building shall be modeled, including, but not limited to, exhaust fans, parking garage ventilation fans, snow-melt and freeze-protection equipment, facade lighting, swimming pool heaters and pumps, elevators and escalators, refrigeration, and cooking.</p> <p>(b) All conditioned spaces in the <i>proposed design</i> shall be simulated as being both heated and cooled even if no heating or cooling system is to be installed, and temperature and humidity control set-points and schedules shall be the same for <i>proposed</i> and <i>baseline building designs</i>.</p> <p>(c) When the <i>performance rating method</i> is applied to buildings in which energy-related features have not yet been designed (e.g., a lighting system), those yet-to-be-designed features shall be described in the <i>proposed design</i> exactly as they are defined in the <i>baseline building design</i>. Where the space classification for a space is not known, the space shall be categorized as an office space.</p>	<p>The <i>baseline building design</i> shall be modeled with the same number of floors and identical conditioned floor area as the <i>proposed design</i>.</p>	
<p>2. Additions and Alterations</p> <p>It is acceptable to predict performance using building models that exclude parts of the <i>existing building</i> provided that all of the following conditions are met:</p> <p>(a) Work to be performed in excluded parts of the building shall meet the requirements of Sections 5 through 10.</p> <p>(b) Excluded parts of the building are served by HVAC systems that are entirely separate from those serving parts of the building that are included in the building model.</p> <p>(c) Design space temperature and HVAC system operating set-points and schedules on either side of the boundary between included and excluded parts of the building are essentially the same.</p> <p>(d) If a declining block or similar utility rate is being used in the analysis and the excluded and included parts of the building are on the same utility meter, the rate shall reflect the utility block or rate for the building plus the <i>addition</i>.</p>	<p>Same as Proposed Design</p>	
<p>3. Space Use Classification</p> <p>Usage shall be specified using the building type or space type lighting classifications in accordance with 9.5.1 or 9.6.1. The user shall specify the space use classifications using either the building type or space type categories but shall not combine the two types of categories. More than one building type category may be used in a building if it is a mixed-use facility. If space type categories are used, the user may simplify the placement of the various space types within the building model, provided that building-total areas for each space type are accurate.</p>	<p>Same as Proposed Design</p>	