SB 2030 Compliance Method for Projects with Partial Mechanical Upgrades

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The method outline below may be used for SB 2030 projects beginning the SD phase (or equivalent) on or after January 1, 2015 and prior to the implementation of the anticipated 2020-2024 SB 2030 Standard. This method may be updated as new standards become available, project teams should verify that they are using the correct version.

This compliance method for SB 2030 projects is a set of prescriptive equipment efficiency requirements for projects with partial mechanical upgrades, such as the replacement of a single piece of equipment (e.g. a boiler). Projects with substantial mechanical system upgrades or alterations are ineligible to use this method, and must pursue the typical SB 2030 process. Projects below a certain square footage may be eligible to use the Small Buildings Method, please see http://b3mn.org/2030energystandard/index.html for more details. Please contact the SB 2030 Coordinator (sb2030@b3mn.org) if you are unsure of which method to use.

Consistent with the intent of the SB 2030 program, compliance with this method will demonstrate that a building is aggressively incorporating cost-effective energy efficiency upgrades that far exceed minimum energy code requirements. Projects complying with the requirements in this document will be considered compliant with the SB 2030 program upon review and approval from the SB 2030 Review Team. Qualifying projects using this method of SB 2030 compliance will use the B3 Guidelines Tracking Tool to document the design of the project but are not required to track their energy consumption in operations.
Qualifying projects choosing to apply the *SB 2030 Compliance Method for Projects with Partial Mechanical Upgrades* must meet all of the energy efficient equipment requirements listed in Part 1 and Part 2 below, wherever the type of equipment listed is installed or replaced as part of the SB 2030 project (including any concurrent work at the project site).

Limited variances for specific portions of the requirements may be granted only if the project team can document that a specific requirement cannot be met due to special programmatic requirements or due to a lack of cost-effectiveness. The SB 2030 program defines cost-effective energy efficiency measures as having simple paybacks within 15-years.

Please notify the SB 2030 Coordinator (sb2030@b3mn.org) of the project's intent to use the *SB 2030 Compliance Method for Projects with Partial Mechanical Upgrades* at the time of project creation. Once the qualification of the project is verified, a B3 Guidelines Tracking Tool file will be created.

B3 Guidelines Tracking Tool Entry

Project teams using this method must complete and upload the Building Strategy Checklist in the project's Tracking Tool file for each phase. At the Construction Documents phase, in lieu of simulation documentation, the design team shall provide the relevant construction documents and specifications related to each identified equipment or assembly per the relevant sections of Parts 1 and 2 below.

Part 1. Mandatory Equipment Requirements

EnergyStar Applicable Equipment: The building owner/occupant must install EnergyStar rated equipment wherever applicable. If final procurement of equipment is to be handled by the contractor, specifications shall include language stating this requirement. Equipment includes, but is not limited to the following:

- Appliances
- Computers
- Other Office Equipment
- CFL Light Fixtures
- Light Bulbs
- Small HVAC Equipment
- Televisions

Hot Water Fixtures: Replaced showerheads and faucets (including aerators) shall meet the flow rate requirements listed below or be WaterSense labeled products.

- Lavatory Faucets ≤ 1.5 gallons per minute
- Kitchen Faucets ≤ 2.0 gallons per minute
- Showerheads ≤ 2.0 gallons per minute

Part 2. Prescriptive Building Design

Project teams must document that the design meets all of the applicable "Mandatory" and "Prescriptive" requirements in each section of the ANSI/ASHRAE/IES Standard 90.1-2013 -- Energy Standard for Buildings except Low-Rise Residential Buildings related to all equipment installed or replaced as part of the project, including concurrent work on the project. Project teams may NOT use the "Energy Cost Budget Method" in lieu of the "Prescriptive" requirements.

Note that the guidance provided within the "Mandatory" and "Prescriptive" sections may provide more than one option (e.g. the Building Type Method and the Space by Space Method for lighting power densities). In the case of multiple methods available for a specific system, compliance with any of the available options will be acceptable.

Partial mechanical upgrades must meet all of the requirements in the following sections that are applicable to the equipment being installed or replaced:

- HVAC Equipment: *Section 6.3 or both Sections 6.4 and 6.5.*
- Service Water Heating Equipment: *Sections 7.4 and 7.5.*

Controls meeting the ASHRAE 90.1 -2013 requirements are required even if the previous systems did not include similar controls.