

# B3 Guidelines Version 3.2 revision 01 (Small Buildings Method)

Updated March 22, 2021



**Key:**

- No changes for small buildings
- Simplified path or documentation for small buildings
- Not required for small buildings

## Performance Management

### P.1 Design and Construction Process

P.1A - Develop Owner's Project Requirements (OPR) Document	A new template will be available for small buildings streamlining the P.1 requirements and combining OPR and BoD documents into one.
P.1B - Commissioning Plan (Cx Plan)	Small buildings may scale back commissioning to only HVAC systems and lighting controls.
P.1C - Develop Basis of Design (BOD) Document	A new template will be available for small buildings streamlining the P.1 requirements and combining OPR and BoD documents into one.
P.1D - Safety Risk Assessment of indoor air quality issues	A new template will be available for small buildings combining the P.1D IAQ safety risk assessment plan for occupied buildings under construction with the other IAQ plans in P.1E.
P.1E - Construction & Warranty Period Air Quality Management Plans	For the Construction IAQ plan, protection of HVAC equipment, replacement of filtration media, and building flush out are required for all buildings. Temporary construction ventilation, protection of absorptive/porous materials, offsite product preconditioning, and removal of moisture-damaged materials are not required for small buildings. For the Warranty Period IAQ plan, requirements for small buildings are reduced to just one CO2 test at 10-12 months after occupancy, plus a follow-up test if above the thresholds. The template for these plans is combined with P.1D for occupied buildings under construction.

### P.2 Operations Process

P.2A - Energy Efficient Operations Manual	Already not required for small buildings
P.2B - Post -Occupancy Evaluation	Buildings with less than 25 occupants are currently exempt. POEs are only available for buildings with office, lab, classroom/training, residence hall space types.

## Site & Water Guidelines

### S.1 Site and Water Connections

S.1A - Plant network connections	No change in this revision—to be updated separately
S.1A - Animal network connections	No change in this revision—to be updated separately
S.1A - Human network connections	No change in this revision—to be updated separately

### S.2 Site Water Quality and Efficiency

S.2A - Stormwater quantity & runoff	No change in this revision—to be updated separately
S.2B - Stormwater quality	No change in this revision—to be updated separately
S.2C - Site irrigation (no potable water after 5 year establishment)	No change in this revision—to be updated separately
S.2D - Building water consumption reduced by 50% compared to '92 EPA Act	No change

### S.3 Soil

S.3A - Soil description	No change in this revision—to be updated separately
S.3B - Greenfield sites	No change in this revision—to be updated separately
S.3C - Minimize soil disturbance	No change in this revision—to be updated separately
S.3D - Soil management and erosion control plans	No change in this revision—to be updated separately
S.3E - Bulk density limits	No change in this revision—to be updated separately
S.3F - Wetland buffer	No change in this revision—to be updated separately
S.3G - No topsoil exported from site	No change in this revision—to be updated separately
S.3H - Organic content in planting and seeding areas	No change in this revision—to be updated separately
S.3I - Urban soils management	No change in this revision—to be updated separately
S.3J - Atypical soils	No change in this revision—to be updated separately

### S.4 Vegetation

S.4A - Avoidance of critical sites	No change in this revision—to be updated separately
S.4B - Adequate tree conditions	No change in this revision—to be updated separately
S.4C - Vegetation selection	No change in this revision—to be updated separately
S.4D - Pollinator friendly vegetation	No change in this revision—to be updated separately
S.4E - Biomass target	No change in this revision—to be updated separately
S.4F - Site albedo minimum	No change in this revision—to be updated separately

### S.5 Animal Habitat Support

S.5A - Bird-safety Whole Building Threat Factor	If no "traps", alternative pathway S.5O can be used for small buildings
S.5B - Bird-safety Non-Enclosure Threat Factor	If no "traps", alternative pathway S.5O can be used for small buildings
S.5C - Bird-safety High Risk Surfaces	If no "traps", alternative pathway S.5O can be used for small buildings
S.5D - Bird-safety Traps	If no "traps", alternative pathway S.5O can be used for small buildings
S.5E - Bird-safety Lights Out Management procedures	If no "traps", alternative pathway S.5O can be used for small buildings
S.5F - Bird-safety First Year Monitoring	If no "traps", alternative pathway S.5O can be used for small buildings
S.5G - Protection of rare, threatened, endangered species	No change in this revision—to be updated separately
S.5H - Animal habitat provisions	No change in this revision—to be updated separately
S.5I - Aggregate illumination levels (Dark Sky Model Lighting Ordinance)	No change in this revision—to be updated separately
S.5O - Bird-safety Small Buildings Path - Average Glazing Threat Factor	New optional pathway that can replace S.5A through S.5F for small buildings that don't include any "traps" (see-through conditions less than 20 feet across). Requires windows to meet an average glazing threat factor based on window-to-wall ratio and whether or not the building is located in a "critical site" for bird habitat.

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## Energy & Atmosphere Guidelines

<b>E.1 Energy Efficiency</b>		
E.1A - Meet SB 2030 Energy & Carbon target		Use the SB 2030 Small Building Method (updated for 80% reduction) in lieu of energy modeling.
E.1B - Document energy consumption by energy type		No change
E.1C - Submetering and load disaggregation		Not required for small buildings
<b>E.2 Renewable Energy</b>		
E.2A - supply 2% of project's total energy consumption with renewables		Levelized Cost of Energy (LCOE) calculator (predesign phase) updated with adjusted costs for small installations
E.2B - Renewable Energy-Ready Roof or Site		For small buildings, solar-ready sites can be pursued rather than solar-ready roofs
<b>E.3 Efficient Equipment and Appliances</b>		
E.3A - Equipment & appliances meet Energy Star criteria		No change
E.3B - Process load equipment efficiency (FEMP)		Not required for small buildings
<b>E.4 Atmospheric Protection</b>		
E.4A - Refrigerant selection using EPA SNAP guidelines		No change, though likely limited applicability based on equipment size cutoffs in guideline
E.4B - Refrigerant leakage (automatic leak detection devices, inspections, etc)		No change, though likely limited applicability based on equipment size cutoffs in guideline
<b>E.5 EV Ready</b>		
E.5A - Electric Vehicle Supply Equipment (EVSE) infrastructure (conduit)		No change, guideline based on number of long-term parking spots provided

## Indoor Environmental Quality

<b>I.1 Low-Emitting Materials</b>		
I.1A - Interior Materials (green certifications)		Only required for top 5 interior materials by surface area for small buildings
I.1B - Wet Applied Materials (VOC limits and chemical restrictions)		No change
I.1C - Composite Wood Products (formaldehyde restrictions)		Not required for small buildings
I.1D - New furniture and furnishings (green certifications for VOC limits)		Not required for small buildings
<b>I.2 Moisture and Water Control</b>		
I.2A - Bulk water management		No change
I.2B - Moisture-safe design (Qualitative & Quantitative moisture analysis)		Not required for small buildings, but strongly recommended for projects incorporating high R-value assemblies (above code)
I.2C - Moisture safe construction (blower door test/building enclosure consultant)		No change
<b>I.3 Ventilation</b>		
I.3A - Outdoor air ventilation rate minimums per ASHRAE 62.1 or 62.2		No change
I.3B - Ventilation rate monitoring or yearly measurement		Not required for small buildings
I.3C - Ventilation requirements for printer/copier & chemical storage rooms		Not required for small buildings
I.3D - Minimum filtration requirements		No modifications for small buildings. Revised requirement for recirculated air from MERV 8 to MERC 11 for all projects.
I.3E - Permanent entryway dust/dirt control systems		Not required for small buildings
I.3F - Outdoor air intake minimum separation distances		No change
I.3G - ANSI CC-1000 Soil Gas Control Systems and radon testing		No change
<b>I.4 Thermal Comfort</b>		
I.4A - Passive thermal comfort (window properties and shading)		No change
I.4B - Active thermal comfort		ASHRAE 55 compliance documentation not required for small buildings. Commissioning and occupant control requirements retained.
<b>I.5 Lighting and Daylighting</b>		
I.5A - Meet IES lighting level and contrast guidelines		Not required for small buildings
I.5B - Bulbs provide CRI >= 80 and RoHS compliant		Not required for small buildings
I.5C - Daylighting levels		Daylight modeling may be replaced with an average 40% window-to-wall ratio (plus a minimum glazing visible transmittance of 0.65) for regularly occupied spaces at the building perimeter. This is combined with I.7B to ensure that most regularly occupied spaces are at the perimeter and receive adequate daylight. Requirement for controllable glare control devices is retained.
<b>I.6 Effective Acoustics</b>		
I.6A - ANSI Design Requirements for classrooms and other learning spaces		No change for educational facilities, clarification that this is intended to also apply to higher education
I.6B - Exterior source noise control (OITC ratings/background noise levels)		Not required for small buildings
I.6C - Internal source noise control (mech. noise, STC/IIC ratings, reverb time)		Only need to meet STC, IIC and prescriptive area-weighted noise reduction requirement (NRC)
I.6D - Audio induction loops in gathering spaces		No change
I.6E - Sound masking for spaces requiring additional sound privacy		No change
<b>I.7 View Space and Window Access</b>		
I.7A - Focal relief		Not required for small buildings
I.7B - Access to vision glazing in 75% of regularly occupied spaces		No change
<b>I.8 Ergonomics and Physical Activity</b>		
I.8A - Adjustable height workstations for 25%		No change, only applicable if furniture is part of the project scope
I.8B - Fully Adjustable chairs for all workstation seating		No change, only applicable if furniture is part of the project scope
I.8C - Bike storage		Not required for small buildings
I.8D - Easily visible and accessible staircase within sight of main entrance		Not required for small buildings
<b>I.9 Wayfinding and Universal Access</b>		
I.9A - Lighted exterior signs for parking and building entrances		Not required for small buildings
I.9B - Lighted interior signs and route design for visitors		Not required for small buildings
I.9C - Universal design principles (equitable and flexible use)		No change
I.9D - Quiet use/lactation room		No change

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## Materials and Waste

### M.1 Life Cycle Assessment of Materials

<input type="checkbox"/>	M.1A - Whole building life cycle assessment (LCA) and embodied GWP reduction	A whole building LCA model is not required. Small buildings may demonstrate compliance using the material selection impact calculator, unless a whole building LCA model is necessary to show required embodied carbon reduction is achieved.
<input type="checkbox"/>	M.1B - Product Life Cycle Assessments	Not required for small buildings

### M.2 Environmentally Preferable Materials

<input type="checkbox"/>	M.2A - Salvaged, recycled, bio-based, regional, responsibly sourced	Only required for most prevalent 5 materials by mass, volume, or cost; with the option to include additional materials if needed to achieve compliance.
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### M.3 Waste Reduction and Management

<input type="checkbox"/>	M.3A - Material Conservation and Waste Management Plan	Not required for small buildings
<input type="checkbox"/>	M.3B - Construction waste reduction	No change

### M.4 Health

<input type="checkbox"/>	M.4A - Materials free of likely hazardous materials	Not required for small buildings
<input type="checkbox"/>	M.4B - Mercury limits in compact fluorescent lamps	No change