

Attachment B, Table 4



San Francisco Green Building Code

Table 4: Requirements for Residential Additions, and Alterations

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**Attachment B
Table 4**

The following itemizes requirements for additions to residential buildings, as well as alterations which increase the building's floor area, volume, or size. Except where noted, requirements apply only to areas and systems within the scope of the project. This summary is provided for convenience; see the San Francisco Green Building Code for details.

Specific Locally Required Measures Measures that are mandatory in San Francisco but may be different or not required elsewhere	All "Other" Residential Additions & Alterations
Construction Discards Management - 100% of mixed debris must be taken by a Permitted Transporter to a Registered facility for recycling and recovery. Submit a Material Reduction and Recovery Plan (MRRP) demonstrating ≥65% recovery. For more information, see DBI Information Sheet GB-02 or contact: debrisrecovery@sfgov.org / 415-355-3799.	SF Construction and Demolition Debris Recovery Ordinance (Environment Code Ch 14) CalGreen 4.408.2, and CalGreen 4.408.5
Recycling by occupants – Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. To help estimate adequate space for collection by hauler, see supporting materials including a design guide and calculator at: www.sfenvironment.org/refusecalculator .	SFBC 106A.3.3 and other local regulations (See DBI Administrative Bulletin 088)
Energy design – Comply with California Energy Standards	Title 24 Part 6 (2022)
Construction site runoff pollution prevention - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	CalGreen 4.106.2, NPDES Phase II General Permit and other local regulations.
Stormwater Control Plan – Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC stormwater design guidelines.	SF Public Works Code Article 4.2, Section. 147
NonPotable Water – New buildings ≥40,000 square feet must calculate a water budget. New development projects ≥100,000 square feet must install and operate an onsite water reuse system using available rainwater, graywater, and foundation drainage for toilet and urinal flushing and irrigation	N/A
Water efficient irrigation – Projects that include 1,000 square feet or more of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	SF Admin Code 63 (See <i>Complying with San Francisco's Water Efficient Irrigation Requirements</i> at www.sfwater.org)
CalGreen Required Measures The California Green Building Standards Code (Title 24 Part 11) requires:	All "Other" Residential Additions & Alterations
Indoor Air Quality Management During Construction -Duct openings and other air distribution component openings must covered during all phases of construction. Tape, plastic, sheetmetal, or other acceptable methods may be used to reduce the amount of water, dust, and debris entering the system.	CalGreen 4.504.1
Smart Irrigation Controller - Automatically adjust irrigation based on weather and soil moisture. Controllers must have either an integral or separate rain sensors that connects or communicates with the controller.	CalGreen 4.304.1
Indoor Water Efficiency - Plumbing fixtures and fittings shall comply with the following: Water closets ≤1.28 gal/flush; urinals ≤0.5 gal/flush, showerheads ≤1.8 gpm @ 80 psi; residential lavatory faucet ≤1.5 gpm; lavatory faucets in common and public use areas ≤0.5 gpm @ 60 psi; metering faucets ≤0.25 gal/cycle; and kitchen faucets ≤1.8 gpm @60 psi (temporary increase to 2.2 gpm allowed, but must default to ≤1.8 gpm).	CalGreen 4.303 (all sections)
Wiring for Electric Vehicle Charging – Install electrical systems to provide power to EV chargers. Installation of chargers is not required.	N/A
Bathroom exhaust fans - Must be ENERGY STAR compliant, ducted to terminate outside the building, and controlled by humidistat capable of adjustment between relative humidity of less than 50% to maximum of 80%. Humidity control may be a separate component from the exhaust fan.	Calgreen 4.506.1
Low-VOC Interior Wall/Ceiling Paints - CARB VOC limits (CalGreen Table 4.504.3)	CalGreen 4.504.2.2
Low-VOC aerosol paints and coatings - Meet BAAQMD VOC limits (Regulation 8, Rule 49) and Product-Weighted MIR Limits for ROC. (CCR Title 17, Section 94520)	CalGreen 4.504.2.3
Low VOC Caulks, Construction adhesives, and Sealants - Meet SCAQMD Rule 1168. See CalGreen Tables 4.504.1 and 4.504.2.	CalGreen 4.504.2.1
Low-emitting Composite Wood - Meet California Air Resources Board Airborne Toxic Control Measure formaldehyde limits for composite wood. See CalGreen Table 4.504.5	CalGreen 4.504.5
Low-emitting flooring: All carpet systems, carpet cushion, carpet adhesive, and at least 80% of resilient flooring must be low-emitting	CalGreen 4.504.3 through 4.504.4
Operations and Maintenance Manuals and Training - Provide O&M Manual to Building Maintenance Staff. Due at the time of final inspection.	CalGreen 4.410.1
Design and Install HVAC System to ACCA Manual J, D, and S	CalGreen 4.507.2

Attachment B Table 4 Continued: Requirements for residential additions, and alterations
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CalGreen Required Measures The California Green Building Standards Code (Title 24 Part 11) requires:	Residential Additions & Alterations
Surface Drainage: Construction plans shall indicate how the site grading or drainage system will manage surface water flows.	CalGreen 4.106.3
Pest Protection - Annular spaces around pipes, electric cables, conduits, or other openings in sole/bottom plates at exterior walls shall be closed with cement mortar, concrete masonry, or a similar method acceptable to DBI for protection against rodents.	CalGreen 4.406.1
Fireplaces and woodstoves - Install only direct-vent or sealed-combustion appliances; comply with US EPA Phase II limits.	CalGreen 4.503.1
Capillary break for concrete slab on grade - Concrete slab on grade foundations required to have a vapor retarder must also have a capillary break, including at least one of the following: 1) A 4-inch (101.6 mm) thick base of 1/2-inch (12.7 mm) or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and a concrete mix design which will address bleeding, shrinkage and curling shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06. 2) A slab design specified by a licensed design professional.	CalGreen 4.505.2.
Moisture content of building materials - Verify wall and floor framing does not exceed 19% moisture content prior to enclosure. Materials with visible signs of moisture damage shall not be installed. Moisture content shall be verified in compliance with the following: 1) Moisture content shall be determined with either a probe-type or a contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements in Section 101.8. 2) Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade-stamped end of each piece to be verified. 3) At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Manufacturers' drying recommendations shall be followed for wet-applied insulation products prior to enclosure	CalGreen 4.505.3
HVAC Installer Qualifications - HVAC system installers must be trained and certified in the proper installation of HVAC systems, such as via a state certified apprenticeship program, public utility training program (with certification as installer qualification), or other program acceptable to the Department of Building Inspection	CalGreen 702.1