



City of Millbrae

2022 CALIFORNIA GREEN BUILDING CODE CHECKLIST FOR ADDITIONS OR ALTERATIONS TO EXISTING NON-RESIDENTIAL BUILDINGS

Building additions of 1,000 square feet or more AND/OR building alterations with a permit valuation of \$200,000 or more must be designed to include Mandatory Green Building Measures. Please copy into your plan set.

In the column labeled "Plan Reference" specify where each Measure can be found on the plans.

Green Building Measure	Plan Reference
SITE DEVELOPMENT (5.106)	
Storm Water. Newly constructed projects which disturb less than one acre of land shall prevent the pollution of storm water runoff from the construction activities through local ordinance per 2022 CGC §5.106.1	
BMP. Include a plan for Best Management Practices (BMP) on the plans. 2022 CGC §5.106.1.2	
Short-Term Bicycle Parking. If an addition or alteration adds 10 or more visitor vehicular parking spaces provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking being added, with a minimum of one two-bike capacity rack. 2022 CGC § 5.106.4.1.1.	
Long-term bicycle parking. For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility. 2022 CGC § 5.106.4.1.3.	
WATER EFFICIENCY AND CONSERVATION (5.303)	
Meters. Separate sub-meters or metering devices shall be installed for the uses described in 2022 CGC §5.303.1.1 and §5.303.1.2. Buildings in excess of 50,000 square feet: Separate sub-meters shall be installed as follows: <ol style="list-style-type: none">1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gal/day, including but not limited to, spaces used for laundry or cleaner, restaurant for food service, medical or dental office, laboratory or beauty salon or barber shop.2. Where separate sub-meters for individual building tenants are infeasible, for water supplied to the following subsystem:<ol style="list-style-type: none">a. Makeup water for cooling towers where flow through is greater than 500 GPM.b. Makeup water for evaporative coolers greater than 6 GPM.c. Steam and hot-water boilers with energy input more than 500,000 Btu/h.	
Excess Consumption. A separate sub-meter or metering device shall be provided for any tenant within a building that is projected to consume more than 1,000 gallons/day. 2022 CGC § 5.303.1.2	



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<p>Areas of addition or alteration. For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Sections 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building. 2022 CGC § 5.303.5</p>	
<p style="text-align: center;">WEATHER RESISTANCE AND MOISTURE MANAGEMENT (5.407)</p>	
<p>Weather protection. Provide a weather-resistant exterior wall and foundation envelope as required by 2022 <i>California Building</i> §1403.2 (weather protection), the manufacturer's installation instructions, or local ordinance, whichever is more stringent. 2022 CGC § 5.407.1</p>	
<p>Moisture Control. Employ moisture control measures by the following methods:</p> <p>Sprinklers. Prevent irrigation spray on structures per 2022 CGC § 5.407.2.1.</p> <p>Entries and openings. Design exterior entries and openings to prevent water intrusion into buildings. 2022 CGC § 5.407.2.2.</p>	
<p style="text-align: center;">CONSTRUCTION WASTE REDUCTION, DISPOSAL, AND RECYCLING (5.408)</p>	
<p>Construction Waste Diversion. A minimum of 65% of the non-hazardous construction and demolition waste generated at the site will be diverted to an offsite recycle, diversion, or salvage facility. 2022 CGC § 5.408.1</p>	
<p>Universal waste. Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills 2022 CGC § 5.408.2</p>	
<p style="text-align: center;">BUILDING MAINTENANCE AND OPERATION (5.410)</p>	
<p>Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of nonhazardous materials for recycling including paper, corrugated cardboard, glass, plastics, and metals. 2022 CGC § 5.410.1</p>	
<p>Additions. All additions constructed within a 12-month period under single or multiple permits, resulting in an increase of > 30% floor area, shall provide recycling areas on site. 2022 CGC §5.410.1.1</p>	
<p>Testing and Adjusting. Testing and adjusting of systems shall be required for new system to serve an addition or alteration. 2022 CGC § 5.410.4</p>	



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Operation and Maintenance Manual. Provide the building owner with detailed operating and maintenance instructions and copies of guarantees/warranties for each system prior to final inspection. 2022 CGC § 5.410.1	
FIREPLACES (2022 CGC §5.503)	
Fireplaces. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace or a sealed woodstove or a pellet stove and refer to residential requirements in the 2022 California Energy Code, Title 24, Part 6, Subchapter 7, § 150.	
POLLUTANT CONTROL (2022 CGC §5.504)	
Temporary Ventilation. The permanent HVAC system shall only be used during construction if necessary to condition the area or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a MERV of 8, based on ASHRAE 52.2-1999 or an average efficiency of 30% based on ASHRAE 52.1.1992. Replace all filters immediately prior to occupancy. 2022 CGC §5.504.1.	
Covering of Duct Openings and Protection of Mechanical Equipment During Construction. At the time of rough installation or during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution openings shall be covered with tape, plastic, sheet metal or other acceptable methods, to reduce the amount of dust or debris which may collect in the system. 2022 CGC § 5.504.3.	
Finish Material Pollutant Control. Finish materials shall comply with 2022 CGC § 5.504.4.1 through § 5.504.4.4.	
Adhesives, sealants and caulk. Adhesives, sealants and caulk used on the project shall meet the requirements of the standards listed in 2022 CGC §5.504.4.1.	
Paints and Coatings. Architectural paints and coatings shall comply with 2022 CGC Table 5.504.4.3 unless more stringent local limits apply.	
Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. 2022 CGC § 5.504.4.3.2.	
Carpet Systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the standards listed in 2022 CGC § 5.504.4.4.	
Composite Wood Products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in 2022 CGC Table 5.504.4.5	
Resilient Flooring Systems. 80 percent of the floor area receiving resilient flooring shall comply with at least one of the pollutant control measures listed in 2022 CGC § 5.504.4.6.	



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Verification of Compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits. 2022 CGC §5.504.4.6.1	
Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air prior to occupancy that provides at least a MERV of 13. MERV 13 filters shall be installed after any flushed-out or testing and prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. Exception: Existing mechanical equipment. 2022 CGC §5.504.5.3	
INDOOR MOISTURE CONTROL (2022 CGC §5.505)	
Buildings shall meet or exceed the provisions of the 2022 California Building Code, Sec. 1202 (Ventilation) and Chapter 14 (Exterior Walls) for indoor moisture control. 2022 CGC § 5.505.1	
INDOOR AIR QUALITY (2022 CGC §5.506)	
For mechanically or naturally ventilated spaces in buildings meet the minimum requirements of Section 120.1 (ventilation requirement) of the 2022 California Energy Code. 2022 CGC §5.506.1	
For buildings or additions equipped with demand control ventilation, CO2 sensors and ventilation controls shall be specified and installed in accordance with the 2022 California Energy Code, Sec. 120.1(c) (4). 2022 CGC § 5.506.2	
ENVIRONMENTAL COMFORT (2022 CGC §5.507)	
Acoustical Control. Employ building assemblies and components with STC values determined in accordance with ASTM E90 and ASTM E413 or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in 2022 CGC § 5.507.4.1 or § 5.507.4.2.	
OUTDOOR AIR QUALITY (2022 CGC § 5.508)	
Ozone Depletion and Greenhouse Gas Reductions. Installation of HVAC, refrigeration and fire suppression equipment shall comply with 2022 CGC §5.508.1.1 or §5.508.1.2.	
Supermarket Refrigerant Leak Reduction. New commercial refrigeration systems shall comply with 2022 CGC §5.508.2 when installed in retail food stores with 8,000 square feet or more of condition area, and that utilize either refrigerated display cases, or walk-in coolers, or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high- GWP) refrigerant with a GWP of 150 or greater. 2022 CGC § 5.508.2	



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Responsible Designer's Declaration	Contractor's Declaration Statement
I hereby certify that this project has been designed to meet the requirements of the 2022 Green Building Code.	I hereby certify, as the builder or installer, under permit listed herein, that this project will be constructed to meet the requirements of the 2022 Green Building Code.
Name:	Name:
Address:	Address:
City/State/Zip:	City/State/Zip:
Signature:	Signature:
Date:	Date: