

# CITY OF MILPITAS

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# 2022 CALGREEN MANDATORY MEASURES WITH 2023 MMC AMENDMENTS CHECKLIST (RESIDENTIAL)

This checklist applies to newly constructed buildings, and additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration. (301.1.1)

Parenthetical references are to the noted section of the 2022 *California Green Building Code*, unless stated otherwise. [MMC] indicates text amended by Chapter 19 of Title II of the 2023 *Milpitas Municipal Code*.

Feature or Measure	Required
<b>RESIDENTIAL MANDATORY MEASURES</b>	
<b>Site Development (4.106)</b>	
<p><b>Projects less than one acre:</b> Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction.</p> <p><b>Projects one acre or more:</b> Newly constructed projects or additions shall comply with Milpitas Municipal Code Title 2 Chapter 13 for erosion and sediment controls, the City of Milpitas Enforcement Response Plan for Construction Site Control, and the California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit requirements.</p>	
Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings.	
<p><b>Electric vehicle (EV) charging for new construction.</b> [MMC] New construction shall comply with sec. 4.106.4.1, 4.106.4.2, and 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with <i>California Electrical Code</i> (CEC), Article 625.</p>	
<p><b>One- and two-family dwellings and Townhouses with attached private garages. [MMC]</b></p> <p><b>New Construction.</b> If one vehicle space is provided, it shall be a Level 2 EV Ready space. If a second vehicle space is provided, it shall be provided with a Level 1 EV Ready space.</p> <p><b>Existing Building.</b> Parking additions shall provide electrical capacity and EV infrastructure in accordance with the requirements of 4.106.4.1.1.</p>	
<p><b>New multifamily dwellings with residential parking facilities.</b></p> <p><b>New Construction. [MMC]</b></p> <p>25% of vehicle spaces for dwelling units shall have access to EVCS with Level 2 EV Ready infrastructure. At least 50% of the required EV chargers shall be equipped with J1722 connectors. 75% of vehicle spaces for dwelling units shall be Low Power Level 2 EV Ready.</p>	
<p><b>New Construction. Affordable Housing. [MMC]</b></p> <p>20% of vehicle spaces for dwelling units shall have access to EVCS with Level 2 EV Ready infrastructure. At least 50% of the required EV chargers shall be equipped with J1722 connectors. 20% of vehicle spaces for dwelling units shall be Low Power Level 2 EV Ready. 60% of vehicle spaces for dwelling units shall have access to Level 1 EV Ready infrastructure.</p> <p>Note: The total number of EV spaces should be 100% of dwelling units or 100% of parking spaces, whichever is less.</p>	
<p><b>Existing Buildings. [MMC]</b></p> <ol style="list-style-type: none"> <li>When new vehicle spaces are added and the work requires a building permit, 10% of the total number of vehicle spaces added shall be EVCS Level 2 Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready.</li> </ol>	

2. When new vehicle spaces are added and ALMS is installed, the ALMS must be designed to deliver no less than 2.2 kVa (110/120 volt, 20-ampere).	
3. When electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.	
<b>Electric Vehicle Ready Space Signage. [MMC]</b> Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emissions Vehicle Signs and Pavement Markings) or its successor(s).	
<b>Location. [MMC]</b> EVCS shall comply with at least one of the following options:	
1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.	
2. The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.	
<b>Dimensions. [MMC]</b> The charging spaces shall be designed to comply with the following:	
1. The minimum length of each EVCS space shall be 18 feet.	
2. The minimum width of each EVCS space shall be 9 feet.	
3. One in every 25 charging spaces, but not less than one, shall also have an 8-foot-wide minimum aisle. A 5-foot-wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet.	
a. Slope for the EV space and the access aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.	
<b>Direct current fast charging stations. [MMC]</b> One DCFC may be substituted for up to five (5) EVCS to meet the requirements of 4.106.4.1 and 4.106.4.2. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.	
<b>Hotels and motels.</b>	
<b>1. EV ready parking spaces with receptacles.</b>	
a. 40% of the total number of parking spaces shall be equipped with Low Power Level 2 EV charging receptacles.	
b. 208/240V EV charging receptacles shall comply with one of the following configurations:	
1. For 20-ampere receptacles, NEMA 6-20R	
2. For 30-ampere receptacles, NEMA 14-30R	
3. For 50-ampere receptacles, NEMA 14-50R	
<b>2. EV ready parking spaces with EV chargers.</b>	
a. 10% of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least 50% of the required EV chargers shall be equipped with J1722 connectors.	
<b>Dimensions.</b> The charging spaces shall be designed to comply with the following:	
1. The minimum length of each EVCS space shall be 18 feet.	
2. The minimum width of each EVCS space shall be 9 feet.	
<b>Electric Vehicle Ready Space Signage.</b> Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emissions Vehicle Signs and Pavement Markings) or its successor(s).	
<b>ENERGY EFFICIENCY (4.201)</b>	
For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.	
<b>WATER EFFICIENCY AND CONSERVATION</b>	
<b>Indoor Water Use (4.303)</b>	
All noncompliant plumbing fixtures in any single-family and multi-family residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to final inspection. (See also California Civil Code sec. 1101.4 and 1101.5)	
<b>Water closets.</b> The effective flush volume of all water closets shall not exceed 1.28 gpf. Tank-type water	

<p>closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.</p> <p><b>Note:</b> The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.</p>	
<p><b>Urinals.</b> The effective flush volume of wall-mounted urinals shall not exceed 0.125 gpf, and other urinals shall not exceed 0.5 gpf.</p>	
<p><b>Single showerheads.</b> Showerheads shall have a max. flow rate of not more than 1.8 gpm at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.</p>	
<p><b>Multiple showerheads serving one shower.</b> When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gpm at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.</p>	
<p><b>Residential lavatory faucets.</b> The max. flow rate of residential lavatory faucets shall not exceed 1.2 gpm at 60 psi. The min. flow rate of residential lavatory faucets shall not be less than 0.8 gpm at 20 psi.</p>	
<p><b>Lavatory faucets in common and public use areas.</b> The max. flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gpm at 60 psi.</p>	
<p><b>Metering faucets.</b> Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.</p>	
<p><b>Kitchen faucets.</b> The max. flow rate of kitchen faucets shall not exceed 1.8 gpm at 60 psi.</p>	
<p><b>Outdoor Water Use (4.304)</b></p>	
<p><b>Outdoor potable water use in landscape areas.</b> Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.</p>	
<p><b>Water Reuse Systems (4.305)</b></p>	
<p><b>(RESERVED)</b></p>	
<p><b>MATERIAL CONSERVATION AND RESOURCE EFFICIENCY</b></p>	
<p><b>Enhanced Durability and reduced Maintenance (4.406)</b></p>	
<p><b>Rodent proofing.</b> Annular spaces around pipes, electric cables, conduits, or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry, or similar method acceptable to the enforcing agency.</p>	
<p><b>Construction Waste Reduction, Disposal and Recycling (4.408)</b></p>	
<p><b>Construction waste management.</b> Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with either sec. 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.</p>	
<p><b>Documentation.</b> Documentation shall be provided to the City of Milpitas Solid Waste Division which demonstrates compliance prior to final inspection.</p>	
<p><b>Building Maintenance and Operation (4.410)</b></p>	
<p><b>O&amp;M Manual.</b> An operation and maintenance manual shall be available in the building at the time of final inspection.</p>	
<p><b>Recycling by Occupants.</b> Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.</p>	
<p><b>ENVIRONMENTAL QUALITY</b></p>	
<p><b>Fireplaces (4.503)</b></p>	

<b>Bay Area Air Quality Management District.</b> Only gas fireplaces, pellet-fueled devices, or E.P.A. certified wood-burning devices may be installed in new buildings, added to or replace wood-burning devices in existing buildings, or be used when reconstructing or repairing a wood-burning device [Milpitas Municipal Code II-15].	
Gas fireplace shall be a direct-vent sealed-combustion type. Woodstove or pellet stove shall comply with US EPA New Source Performance Standards (NSPS) emission limits.	
<b>Pollutant Control (4.504)</b>	
<b>Cover vent openings.</b> At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered.	
<b>Finish material pollutant control.</b> Adhesives, sealants, and caulk shall be compliant with VOC limits as shown in Table 4.504.1 or 4.504.2, as applicable.	
Aerosol adhesives and smaller unit sizes of adhesives and sealant or caulking compounds (no more than 1 pound in weight no more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements.	
<b>Paints and coatings.</b> Paints, stains, and other coatings shall be compliant with VOC limits as shown in Table 4.504.3.	
<b>Aerosol Paints and Coatings.</b> Shall meet the Product-Weighted MIR limits for ROC and comply with the BAAQMD percent VOC by weight of product limits of Regulation 8, Rule 49.	
<b>Carpet.</b> All carpet and carpet cushion shall meet the requirements of the CDPH "Standard Method for the Testing of Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers".	
<b>Carpet adhesive.</b> Shall meet the requirements of Table 4.504.1.	
<b>Resilient flooring systems.</b> At least 80% of floor area receiving resilient flooring shall meet the requirements of CDPH "Standard Method for the Testing of Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers".	
<b>Composite wood products.</b> Hardwood plywood, particleboard, and medium density fiberboard (MDF) used on interior or exterior of the building shall comply with formaldehyde emission limits per Table 4.504.5.	
<b>Documentation.</b> Verification of compliance shall be provided to the City building inspector.	
<b>Interior Moisture Control (4.505)</b>	
<b>Concrete Slab Foundations.</b> Concrete slab foundations required to have a vapor retarder by the California Building Code or the California Residential Code shall have a capillary break installed in compliance with section 4.505.2.1.	
<b>Moisture content of building materials.</b> Building materials with visible signs of water damage shall not be installed.	
Wall and floor framing shall not to exceed 19% moisture content at time of enclosure. Moisture content shall be verified in compliance with section 4.505.3.	
Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure.	
<b>Indoor Air Quality and Exhaust (4.506)</b>	
<b>Bathroom exhaust fans.</b> Each bathroom shall be mechanically ventilated, and exhaust fans shall be ENERGY STAR rated and ducted to terminate outside.	
Unless functioning as a component of a whole house ventilation system, bathroom exhaust fans must be controlled by a humidity control adjustable between a relative humidity range of $\leq 50\%$ to max. 80%.	
<b>Environmental Comfort (4.507)</b>	

<p><b>Heating and air-conditioning systems.</b> Shall be sized, designed, and have their equipment selected using the following methods:</p> <ol style="list-style-type: none"> <li>1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2016 (Residential Load Calculation), ASHRAE handbooks or other equivalent design methods.</li> <li>2. Size duct systems according to ANSI/ACCA 1 Manual D-2016 (Residential Duct Systems) or other equivalent design software or methods.</li> <li>3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014 or other equivalent design methods.</li> </ol>	
<b>INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS</b>	
<b>Qualifications (702)</b>	
<p><b>Installer training.</b> HVAC system installers are trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program.</p>	
<p><b>Special inspection.</b> Special inspectors employed by the owner or owner's agent shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection to be performed and shall have a certification or qualifications acceptable to the enforcing agency.</p> <p><b>Note:</b> Special Inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with CALGreen.</p>	
<b>Verifications (703)</b>	
<p><b>Documentation.</b> Documentation used to show compliance with CALGreen shall include, but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency, which demonstrate substantial conformance.</p>	