



## 2019 PAMC GREEN BUILDING ORDINANCE SIGNIFICANT CHANGES

EFFECTIVE: JANUARY 1<sup>ST</sup>, 2020 | KEY: 1. Code Added 2. Code Removed

Code Section	2016 PAMC 5393 Code	2019 PAMC 5481 Code	Reason for Change
16.14.070, Section 202 amended – Definitions added.	<b>DEDICATED IRRIGATION METER</b>	Definition deleted	City of Palo Alto Utilities (CPAU) does not allow independent 3 <sup>rd</sup> party water meters, meters must be CPAU approved/issued.
16.14.070, Section 202 amended – Definitions added.	<b>CALGREEN PLANS EXAMINER</b>	Definition deleted	The ICC Green Building, Green Building certification title has been changed to CALGreen Inspector/Plans Examiner certification.
16.14.070, Section 202 amended – Definitions added.	<b>CALGREEN INSPECTOR:</b> A Calgreen Inspector is an individual certified through the International Code Council (ICC) for demonstrating knowledge and application of Green Building concepts during inspection. For projects that require a Calgreen Inspector verification, the Inspector must be contracted directly with the owner and may not be a contractor or employee of the design or construction firm.	<b>CALGREEN INSPECTOR:</b> <u>An individual certified through the International Code Council (ICC) CALGreen Inspector/Plans Examiner Certification for demonstrating knowledge and application of Green Building concepts during plan review and inspection. For projects that require a CALGreen Inspector/Plans Examiner verification,</u> the Inspector must be contracted directly with the owner and may not be a contractor or employee of the design or construction firm.	The previous definition has been deleted and was replaced. The ICC Green Building, GB certification title has been changed to CALGreen Inspector/Plans Examiner certification.
16.14.070, Section 202 amended – Definitions added.	<b>GREEN POINT RATER</b>	Definition deleted	The Green Point Rating system is no longer used in Palo Alto.
16.14.070, Section 202 amended – Definitions added.	<b>INVASIVE PLANTS</b>	Definition deleted	PAMC Title 8 will be incorporating a Landscape Technical Manual in addition to the Tree Technical Manual, and will cover non-indigenous vegetation species.
16.14.070, Section 202 amended – Definitions added.	<b>MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.</b> The California Department of Water Resources Model Water Efficient Landscape Ordinance (or “Model Water Ordinance) ordinance regulating new construction and rehabilitated landscape project design, installation and maintenance. The Model Water Ordinance assigns a Maximum Applied Water Allowance (MAWA) based on landscaped area and climatological parameters. The City of Palo Alto has adopted more stringent compliance regulations in this code than the Model Water Ordinance; however, the Model Water Ordinance is referenced as the guiding document for water use calculations, irrigation system design, and water waste prevention.	<b>MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.</b> The California Department of Water Resources Model Water Efficient Landscape Ordinance.	The definition of local ordinance has been deleted and a note that California Department of Water Resources (DWR) MWELo shall be used has been added.
16.14.070, Section 202 amended – Definitions added.	<b>SALVAGE.</b> Salvage means the controlled removal of construction or demolition debris/ material from a building, construction, or demolition site for the purpose of on- or off-site reuse, or storage for later reuse. Examples include air conditioning and heating systems, columns, balustrades, fountains, gazebos, molding, mantels, pavers, planters, quoins, stair treads, trim, wall caps, bath tubs, bricks, cabinetry, carpet, doors, ceiling fans, lighting fixtures, electrical panel boxes, fencing, fireplaces, flooring materials of wood, marble, stone or tile, furnaces, plate glass, wall mirrors, door knobs, door brackets, door hinges, marble, iron work, metal balconies, structural steel, plumbing fixtures, refrigerators, rock, roofing materials, siding materials, sinks, stairs, stone, stoves, toilets, windows, wood fencing, lumber and plywood.	<b>SALVAGE.</b> <u>Salvage means the controlled removal of items and material from a building,</u> construction, or demolition site for the purpose of on- or off-site reuse, or storage for later reuse. Examples include air conditioning and heating systems, columns, balustrades, fountains, gazebos, molding, mantels, pavers, planters, quoins, stair treads, trim, wall caps, bath tubs, bricks, cabinetry, carpet, doors, ceiling fans, lighting fixtures, electrical panel boxes, fencing, fireplaces, flooring materials of wood, marble, stone or tile, furnaces, plate glass, wall mirrors, door knobs, door brackets, door hinges, marble, iron work, metal balconies, structural steel, plumbing fixtures, refrigerators, rock, roofing materials, siding materials, sinks, stairs, stone, stoves, toilets, windows, wood fencing, lumber and plywood.	The definition has been reworded and is consistent with PAMC Title 5.24 Deconstruction and Construction Materials Management Ordinance. This ordinance is effective July 1, 2020.

Code Section	2016 PAMC 5393 Code Section Title	2019 PAMC 5481 Code Section Title	Reason for Change
16.14.070, Section 202 amended – Definitions added.	<b>SQUARE FOOTAGE.</b> For application of green building requirements, square footage means all new and replacement square footage, including basement areas (7 feet or greater in height) and garages, except that unconditioned garage space shall only count as 50%. Areas demolished shall not be deducted from the total new construction square footage. Square footage may also apply to landscapes, in which case it is the total surface area of the site not covered by impervious surfaces.	<b>New SQUARE FOOTAGE.</b> For application of green building requirements, -square footage means all new square footage, including basement areas (7 feet or greater in height).	The definition was simplified for new construction only. The unconditioned garage space was removed from the square footage for green building requirements and aligns with the CALGreen code.
16.14.080 Section 301 amended – voluntary tiers added	<p><b>301.1.1 Residential additions and alterations. [HCD]</b>  <b>Tier 1 adopted.</b> All residential building additions or alterations exceeding 1000 square feet must meet California Green Building Standards Code Mandatory plus Tier 1 requirements, as amended by this Chapter and as applicable to the scope of work.</p> <p><b>Note:</b> On and after January 1, 2014, residential buildings undergoing permitted alterations, additions or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.</p>	<p><b>301.1.1 Residential additions and alterations. [HCD]</b>  <b>Tier 1 adopted (Residential).</b> All residential building additions and/or alterations exceeding 1000 square feet must meet CALGREEN MANDATORY plus Tier 1 requirements, as amended by this Chapter and as applicable to the scope of work.  <u>For tier 1 projects, the area of alterations will include any construction or renovation to an existing structure other than repair or addition. Alterations include remodeling, reconstruction, historic restoration, changes or rearrangements of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full height partitions. Normal maintenance, reroofing, painting or wall papering, floor finishes, or replacement-in-kind of mechanical, plumbing and electrical systems are not alterations for the purposes of establishing scope of Tier 1 projects. The area of alteration should be limited to the footprint of the component(s) being altered. This does not exclude mandatory CALGreen requirements.</u>  <b>Exception:</b> Attached and detached Accessory Dwelling Units, ADU conversions of existing structures shall meet the California Green Building Standards Code Mandatory requirements only.</p>	<p>The definition for Residential Tier 1 area of alterations has been revised to clarify that changes to structural elements and plan configurations are considered to trigger requirements. This excludes changes for maintenance. Replacement of existing MEP systems are not part of the alteration scope for Green Building purposes.</p> <p>A definition that the area of the structural wall/partition changes should be limited to the footprint of the wall and not include the area encompassed by the walls being added and/or removed. This change was added due to challenges of remodel projects without any additions meeting Tier 1 requirements.</p> <p>An ADU exception was added to address the impracticalities of existing structures being converted to ADUs.</p> <p>2016 Note has been deleted: SB407 / Civil Code 1101.1 requires that on or before Jan 1, 2017, all non-complaint plumbing fixtures shall be replaced for single-family residences and on or before Jan 1, 2019 all multi-family residences and commercial properties shall replace non-compliant fixtures.</p>
16.14.080, Section 301.3 Non-residential additions and alterations. [BSC]	Section 301.3 <b>Tier 1 adopted.</b> Nonresidential alterations (including tenant improvements or renovations) of 5,000 square feet that include replacement or alteration of at least two of the following: HVAC system, building envelope, hot water system, or lighting system, must comply with Mandatory California Green Building Standards Code plus Tier 1 requirements, as amended by this Chapter and as applicable to the scope of work.	Section 301.3 <b>Tier 1 adopted.</b> Non-residential alterations (including tenant improvements or renovations) of 5,000 square feet that include replacement or alteration of at least two of the following: HVAC system, building envelope, hot water system, or lighting system, must comply with CALGREEN MANDATORY plus Tier 1 requirements, as amended by this Chapter and as applicable to the scope of work.	For Non-residential projects, Tier 1 alterations will apply to area > 5,000 sf and the replacement of two or more building systems. The alteration of two systems was deleted.
16.14.080, 301.1.2 Residential new construction – Tier 2 adopted	<b>301.4 Residential new construction – Tier 2 adopted.</b> All newly constructed Residential Buildings must meet California Green Building Standards Code Mandatory plus Tier 2 requirements, as amended by this Chapter and as applicable to the scope of work.	<p><b>301.1.2 Residential new construction – Tier 2 adopted.</b> All newly constructed Residential Buildings must meet California CALGREEN MANDATORY plus Tier 2 requirements, as amended by this Chapter and as applicable to the scope of work.</p> <p><b>Exception:</b> Free standing detached Accessory Dwelling Units, ADU's of new construction shall meet the following:</p>	This section has been renumbered and the ADU Exception was added due to impracticality of Tier 2 requirements on small ADU structures.

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		<ol style="list-style-type: none"> <li>1. <u>California Green Building Standards Code Mandatory plus Tier 2 prerequisite requirements.</u></li> <li>2. <u>No Planning and Design electives.</u></li> <li>3. <u>Two (2) Water Efficiency and Conservation electives.</u></li> <li>4. <u>Two (2) Material Conservation and Resource Efficiency electives.</u></li> </ol> <p><u>One (1) Environmental Quality elective.</u></p>	
<b>16.14.080, Section 301.6 Special Inspector Requirements.</b>	<b>301.6 Special Inspector Requirements.</b> Residential project owners subject to Calgreen Mandatory plus Tier 1 or Tier 2 requirements shall contract a special inspector in accordance with section 702.2 of this code, as amended.	<b>301.6 Special Inspector Requirements.</b> Residential and <del>Non-residential</del> project owners subject to CALGREEN MANDATORY plus Tier 1 or Tier 2 requirements shall contract a Special Inspector in accordance with section 702.2 of CALGreen, as amended.	Non-residential Tier 1 and Tier 2 projects now require a third-party Green Building Special Inspector (GBSI).
<b>16.14.090, Section 702.2 Special Inspection</b>	<b>702.2 Special Inspection.</b> When required by the enforcing agency, the owner or responsible entity acting as the owner’s agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector. The city shall maintain a list of pre-approved Special Inspectors in accordance with this section. The owner shall contract a Special Inspector meeting one of the following; 1) Certification by a national or regional green building program: <b>ICC Certified Plans Examiner and ICC Certified Calgreen Inspector:</b> Contract a Calgreen Plans Examiner and Calgreen Inspector to provide third-party verification of compliance prior to Permit Issuance and prior to Final Inspection. This Special Inspector may fulfill both requirements if the individual, or company, maintains both the Calgreen Plans Examiner and Calgreen Inspector designation.	<b>702.2 Special Inspection.</b> When required by the enforcing agency, the owner or responsible entity acting as the owner’s agent shall employ one or more Special Inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special Inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a Special Inspector. The city shall maintain a list of pre-approved Special Inspectors in accordance with this section. <u>The owner shall contract a Special Inspector from the pre-approved list meeting one of the following:</u> 1) Certification by a national or regional green building program: <b>ICC Certified CALGreen Inspector/Plans Examiner:</b> Contract a CALGreen Inspector to provide third-party verification of compliance prior to Permit Issuance and prior to Final Inspection. <del>This Special Inspector may fulfill both requirements if the individual, or company, maintains both the Calgreen Plans Examiner and Calgreen Inspector designation.</del>	The Special Inspection section has been revised to reflect the change in the ICC certification title to ICC Certified CALGreen Inspector/Plan Examiner.
<b>16.14.100, Section 303.1.2 Cumulative construction</b>	<b>303.1.2 Cumulative construction.</b> Cumulative construction over any two-year period, or a project completed in phases, shall be considered as a single project, subject to the highest level of green building requirements for that project, unless exempted by the Director of Development Services as impractical for compliance. If a project is developed in phases, such as a core and shell development following by a tenant improvement, regardless of ownership each phase will be subject to the green building requirements which apply to the scope of work constructed as part of that phase.	<b>Deleted</b>	This section on Cumulative Construction was deleted due to the impracticalities of phased residential projects and phased non-residential projects already addressed in the CALGreen base code.
<b>16.14.130, Section A4.105 Deconstruction and Reuse of Existing Materials.</b>	<b>Section A4.105.1 and A4.105.2 Deconstruction and Reuse of Existing Materials.</b> Sections A4.105.1 and A4.105.2 are adopted as Tier 1 and Tier 2 elective measures and are amended to read: <b>A4.105.1 General.</b> Existing buildings on the site are deconstructed and the salvaged materials are reused. Reused materials or products must comply with the current building standards requirements or be an accepted alternate method or material. Salvaged materials may be reused onsite or for a different project. The Chief Building Official may require	<b>Section A4.105.1</b> <u>Section A4.105.1 is adopted as an elective measure effective through June 30, 2020. Starting July 1, 2020 per Chapter 5 of the Municipal Code, Section A4.105.1 is not adopted as an elective measure. See Chapter 5 of the Municipal Code for the local deconstruction requirements.</u> <b>Section A4.105.2</b> <u>is adopted as a Tier 1 and Tier 2 elective measure.</u> <b>A4.105.2 Reuse of materials.</b> Nonhazardous materials which can be easily reused include but are not limited to the following: 1. Light fixtures 2. Plumbing fixtures	The Deconstruction and Construction Materials Ordinance under Title 5.24 has been adopted and will be effective July 1, 2020. This ordinance will supersede the existing CALGreen Deconstruction and Reuse of Existing Materials elective.

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	<p>documentation confirming that salvageable materials have been reused.</p> <p><b>A4.105.2 Reuse of materials.</b> Non-hazardous materials which can be easily reused include but are not limited to the following:</p> <ol style="list-style-type: none"> <li>1. Light fixtures</li> <li>2. Plumbing fixtures</li> <li>3. Doors and trim</li> <li>4. Masonry</li> <li>5. Electrical devices</li> <li>6. Appliances</li> <li>7. Foundations or portions of foundations</li> </ol> <p><b>Note:</b> Reused material must be in compliance with the appropriate Title 24 requirements.</p>	<ol style="list-style-type: none"> <li>3. Doors and trim</li> <li>4. Masonry</li> <li>5. Electrical devices</li> <li>6. Appliances</li> <li>7. Foundations or portions of foundations</li> </ol> <p><b>Note:</b> Reused material must be in compliance with the appropriate Title 24 requirements.</p>	
<p><b>16.14.135, Section A4.105.3 Deconstruction Survey.</b></p>	<p><b>A4.105.3 Deconstruction Survey.</b> All single-family residential dwelling units required to obtain a demolition permit shall complete a deconstruction survey provided by third party approved by the Chief Building Official. The survey shall include a list of materials that are reusable in the project, as well as the values of such materials.</p>	<p><b>Deleted</b></p>	<p>The Deconstruction and Construction Materials Ordinance under Title 5.24 has been adopted and will be effective July 1, 2020. This ordinance will supersede the existing CALGreen Deconstruction elective.</p>
<p><b>16.14.170, Section A4.106.10 Light Pollution Reduction.</b></p>	<p><b>A4.106.10 Light pollution reduction.</b></p> <p><b>Exceptions:</b></p> <ol style="list-style-type: none"> <li>1. Luminaires that qualify as exceptions to the <i>California Energy Code</i>.</li> <li>2. Emergency lighting.</li> <li>3. One- and two-family dwellings.</li> </ol>	<p><b>A4.106.10 Light pollution reduction.</b></p> <p><b>Exceptions:</b></p> <ol style="list-style-type: none"> <li>1. Luminaires that qualify as exceptions to the <i>California Energy Code</i>.</li> <li>2. Emergency lighting.</li> <li>3. One- and two-family dwellings.</li> </ol> <p>Note: The International Dark-Sky Association (IDA) and the Illuminating Engineering Society of North America (IESNA) have developed a Model Lighting Ordinance (MLO). The MLO was designed to help municipalities develop outdoor lighting standards that reduce glare, light trespass, and skyglow. The model ordinance and user guides for the ordinance may be accessed at the International Dark-Sky Association web site.</p>	<p>The exceptions under A4.106.10 have been revised and the note for the IDA was added to align with the 2019 CALGreen code.</p>
<p><b>16.14.220, Section A4.304.3 Irrigation Metering Device.</b></p>	<p>Section A4.304.2.1 is adopted as a Tier 1 and Tier 2 prerequisite and is amended to read:</p> <p><b>A4.304.2.1 Irrigation Metering Device.</b> Dedicated irrigation meters are to be installed in all new construction and rehabilitated landscapes when the landscape is greater than 1,000 square feet.</p>	<p>Section A4.304.3 is amended to added and adopted as a Tier 1 and Tier 2 <u>elective measure</u> and shall read as follows:</p> <p><b>A4.304.3 Irrigation Metering Device.</b> Dedicated irrigation meters from CPAU are to be installed in all new construction and rehabilitated landscapes when the landscape is greater than 1,000 square feet.</p>	<p>The irrigation metering device has been revised to be an elective measure from a prerequisite. This section was renumbered to align with the 2019 CALGreen Building Standards code.</p>
<p><b>16.14.230, Section A4.305 Water Reuse Systems</b></p>	<p>Sections A4.305.1 through A4.305.3 are adopted as Tier 1 and Tier 2 electives and are amended to read:</p> <p><b>A4.305.1 Graywater.</b> Alternative plumbing piping is installed to permit the discharge from the clothes washer and other fixtures (except toilets and kitchen sinks) to be used for an irrigation system in compliance with the California Plumbing Code.</p>	<p>Sections <u>A4.305.1</u> and <u>A4.305.2</u> are adopted as elective measures. Section A4.305.3 is adopted as Tier 1 and Tier 2 elective measures and are amended to read:</p> <p><b>A4.305.1 Graywater.</b> Alternative plumbing piping is installed to permit the discharge from the clothes washer and other fixtures (except toilets and kitchen sinks) to be used for an irrigation system in compliance with the California Plumbing Code. <u>In the event that the whole house graywater system is installed in compliance with the</u></p>	<p>This section has been revised to allow whole house graywater systems to count as 3 electives under Water Efficiency and Conservation as discussed in the Green Building Advisory Group (GBAG) Technical Advisory Committee (TAC) meetings.</p>

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		<u>California Plumbing Code, then this measure shall count as 3 electives.</u>	
<b>16.14.230, Section A4.305 Water Reuse Systems</b>	<b>A4.305.3 Recycled water for landscape irrigation.</b> Recycled water is used for landscape irrigation.	<b>A4.305.3 Recycled water for landscape irrigation.</b> Recycled water <u>pipng shall be</u> used for landscape irrigation.	The wording for this section has been changed for clarification.
<b>16.14.230, Section A4.305 Water Reuse Systems</b>	<b>A4.305.5 Laundry to Landscape Infrastructure.</b> Newly constructed Residential Buildings with a landscape area of any size shall install an independent plumbing drainage system including a trap and vent that shall begin near the interior laundry fixtures and will terminate at the exterior of the home. This piping system will be capped at all outlets and will assist in the future installation of a "Laundry-to-Landscape" irrigation system. A complete irrigation system installation shall meet the requirements of the California Plumbing Code 1502.1.1, Clothes Washer System. Exception: Laundry fixtures located below grade.  <b>A4.305.5.1 Identification.</b> Independent laundry to landscape capable system shall be labeled as "LAUNDRY-TO-LANDSCAPE CAPABLE" and be readily visible to the user.	Deleted	Challenges related to this measure were discussed during the Green Building Advisory Group (GBAG) Technical Advisory Committee (TAC) meetings. L2L infrastructure had many logistics issues and with the event of ultra-low-flow washing machines being installed in new construction, the graywater from laundry systems was insufficient and rarely used for irrigation.
<b>16.14.260, Section A4.408.1 Enhanced Construction Waste Reduction.</b>	<b>A4.408.1 Enhanced Construction Waste Reduction.</b> Nonhazardous construction and demolition debris generated at the site is diverted to recycle or salvage in compliance with the following:  Tier 1 and Tier 2. At least an 80-percent reduction. Any mixed recyclables that are sent to mixed-waste recycling facilities shall include a qualified third party verified facility average diversion rate. Verification of diversion rates shall meet minimum certification eligibility guidelines, acceptable to the local enforcing agency.	<b>A4.408.1 Enhanced Construction Waste Reduction.</b> Nonhazardous construction and demolition debris generated at the site is diverted to recycle or salvage in compliance with the following:  <u>Projects with a given valuation of \$25,000 or more must have at least an 80-percent reduction.</u> Any mixed recyclables that are sent to mixed-waste recycling facilities shall include a qualified third party verified facility average diversion rate. Verification of diversion rates shall meet minimum certification eligibility guidelines, acceptable to the local enforcing agency.	This section has been revised to clarify that project valuation \$25,000 or more shall have at least 80% waste reduction.
<b>16.14.265, Section A4.504.1 Compliance with formaldehyde limits.</b>	None	Section A4.504.1 is adopted as a Tier 1 and Tier 2 elective measure	This section was added to clarify that the formaldehyde limits are Tier 1 and Tier 2 electives.
<b>16.14.295 Section 5.106.8 Light pollution reduction</b>	<b>5.106.8 Light pollution reduction.</b> Outdoor lighting systems shall be designed and installed to comply with the following: 1. The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and 2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and 3. Allowable BUG ratings not exceeding those shown in Table A4.106.10; or 4. Comply with a local ordinance lawfully enacted pursuant to Section 101.7 of this code, whichever is more stringent. Projects may use an approved equal reference standard for light fixtures where BUG ratings are unavailable. <b>Exceptions:</b> 1. Luminaires that qualify as exceptions in Section 140.7 of the California Energy Code.	<b>5.106.8 Light pollution reduction.</b> Outdoor lighting systems shall be designed and installed to comply with the following: 1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and 2. <u>Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);</u> 3. <u>Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and</u> 4. Allowable BUG ratings not exceeding those shown in <u>Table 5.106.8 [N],</u> or 5. Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent. Projects may use an approved equal reference standard for light fixtures where BUG ratings are unavailable.	This section has been revised to align with language in the 2019 CALGreen Building Standards code.

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	<p>2. Emergency lighting.</p> <p>3. Building façade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.</p> <p>Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs, and methods of construction.</p>	<p><b>Exceptions:</b></p> <ol style="list-style-type: none"> <li>1. Luminaires that qualify as exceptions in Section 140.7 of the California Energy Code.</li> <li>2. Emergency lighting.</li> <li>3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.</li> </ol> <p>Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.</p>	
<p><b>16.14.300, Section 5.305.1.3 Dual Plumbing.</b></p>	<p><b>5.303.5 Dual plumbing.</b> New buildings and facilities shall be dual plumbed for potable and recycled water systems for toilet flushing when recycled water is available. All building projects for which CPAU recycled water service is available must install dual Plumbing and use recycled water for toilet and urinal flushing when the building area is greater than 10,000 square feet or where installation of 25 or more toilets and urinals is proposed. All projects for which CPAU recycled water service is not yet available must install dual plumbing for use of recycled water for toilet and urinal flushing when the building area exceeds 100,000 square feet or where installation of 100 or more toilets and urinals is proposed.</p>	<p><b>5.305.1.3 Dual plumbing.</b> New buildings and facilities shall be dual plumbed for potable and recycled water systems for toilet flushing when recycled water is available. All building projects for which CPAU recycled water service is available must install dual Plumbing and use recycled water for toilet and urinal flushing when the building area is greater than 10,000 square feet or where installation of 25 or more toilets and urinals is proposed. All projects for which CPAU recycled water service is not yet available must install dual plumbing for use of recycled water for toilet and urinal flushing when the <u>building area exceeds 50,000 square feet or where installation of 50 or more toilets and urinals is proposed.</u></p>	<p>This section has been renumbered to align with the 2019 CALGreen code. The threshold for Dual Plumbing in new construction has been lowered to 50,000 sf or 50 or more toilets and urinals, as recommended by the Green Building Advisory Group (GBAG) – Technical Advisory Committee (TAC) committee.</p>
<p><b>16.14.350, Section 5.304.5 Potable water elimination.</b></p>	<p><b>5.304.5 Potable water elimination.</b> Recycled water infrastructure for irrigation systems is required for all projects for which CPAU recycled water service is available. All projects for which CPAU recycled water service is not yet available must install recycled water infrastructure for irrigation when the landscape area exceeds 1,000 square feet. Dedicated irrigation meters are to be installed in all new construction and rehabilitated landscapes when the landscape is greater than 1,000 square feet</p>	<p><b>Deleted</b></p>	<p>Refer to Chapter 16.12.030 New Construction; recycled water for irrigation . This entire section has been deleted as it conflicts with 16.12.030 requirements.</p>
<p><b>16.14.360, Section 5.304.2 Invasive species prohibited</b></p>	<p><b>5.304.6 Invasive species prohibited.</b> All nonresidential new construction, additions, and alterations shall not install invasive species in a landscape area of any size.</p>	<p><b>5.304.2 Invasive species prohibited.</b> All non-residential new construction, additions, and alterations shall not install invasive species in a landscape area of any size.</p>	<p>This section has been renumbered to avoid conflict with 2019 CALGreen Section 5.304.6 Outdoor potable water use in landscape areas.</p>
<p><b>16.14.365, Section 5.306 Non-residential enhanced water budget.</b></p>	<p><b>5.305.1 Non-residential enhanced water budget.</b> Non-residential buildings anticipated to use more than 1,000 gallons of water a day shall complete an Enhanced Water Budget Calculator as established by the Chief Building Official.</p>	<p><b>5.306 Non-residential enhanced water budget.</b> Non-residential buildings anticipated to use more than 1,000 gallons of water a day shall complete an Enhanced Water Budget Calculator as established by the Chief Building Official <u>or designee.</u></p>	<p>This section has been renumbered to avoid conflict with the 2019 CALGreen Section 5.305.1 for Recycled water supply system. The wording has been slightly modified.</p>
<p><b>16.14.410, SECTION 5.506 Indoor Air Quality</b></p>	<p><b>None</b></p>	<p><u>Section 5.506.3 Added as mandatory to read:</u></p> <p><b><u>Section 5.506.3 Indoor Air Quality Management Plan. All commercial and multi-family projects must submit an Indoor Air Quality Management Plan (IAQ) with building permit application in accordance with the Sheet Metal and Air Conditioning Contractors National Association (SMACNA IAQ) Guidelines for Occupied Buildings Under Construction, 2nd edition ANSI/SMACNA 008-2008.</u></b></p>	<p>The IAQ Management Plan was added by recommendation from the Green Building Advisory Group (GBAG) GBAG Technical Advisory Committee (TAC) meetings.</p>

Code Section	2016 PAMC 5393 Code Section Title	2019 PAMC 5481 Code Section Title	Reason for Change
16.14.420, Section A4.106.8 Electric Vehicle (EV) Charging.	<b>A4.106.8.1 Definitions.</b>	<b><del>A4.106.8.1</del> Definitions.</b>	The section label number A4.106.8.1 has been deleted for clarity.
16.14.420, Section A4.106.8 Electric Vehicle (EV) Charging.	<b>A4.106.8.2 Single Family Residences.</b> The following standards apply to newly constructed detached and attached single family residences.	<b><u>A4.106.8.1 New one-family, two-family and townhouse dwellings.</u></b> The following standards apply to newly constructed detached and attached single family, <u>two-family and townhouse residences.</u>	This section for single family residences has been renumbered to align with the 2019 CALGreen code and was redefined to include two-family and townhouse dwellings to be consistent with the CALGreen code, CRC and CBC.
16.14.420, Section A4.106.8 Electric Vehicle (EV) Charging.	<b>A4.106.8.3 Multi-Family Residential Structures.</b> The following standards apply to newly constructed residences in a multi-family residential structure, except as provided in section A4.106.8.4.	<b><u>A4.106.8.2 New Multi-Family Dwellings.</u></b> The following standards apply to newly constructed residences in a multi-family residential structure, except as provided in section A4.106.8.2.1.	This section has been renumbered and has been clarified to apply to “new” multi-family dwellings. The reference 2019 CALGreen section has also be updated.
16.14.420, Section A4.106.8 Electric Vehicle (EV) Charging.	<b>A5.106.5.3.3 Hotels.</b> The following standards apply newly constructed hotels. (a) In general. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for at least 30% of parking spaces, among which at least 10% (and no fewer than one) shall be EVSE Installed. (b) Accessible spaces. Projects shall comply with the 2016 California Building Code requirements for accessible electric vehicle parking. (c) Minimum total circuit capacity. The property owner shall ensure sufficient circuit capacity, as determined by the Chief Building Official, to support a Level 2 EVSE in every location where Circuit Only, EVSE-Ready Outlet or EVSE Installed is required. Location. The EVSE, receptacles, and/or raceway required by this section shall be placed in locations allowing convenient installation of and access to EVSE. Location of EVSE or receptacles shall be consistent with all City guidelines, rules, and regulations.	<b><u>A4.106.8.3 New Hotels.</u></b> The following standards apply to newly <u>constructed hotels.</u> (a) In general. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for at least 30% of parking spaces, among which at least 10% (and no fewer than one) shall be EVSE Installed. (b) Accessible spaces. Projects shall comply with the 2019 California Building Code requirements for accessible electric vehicle parking. (c) Minimum total circuit capacity. The property owner shall ensure sufficient circuit capacity, as determined by the Chief Building Official or designee, to support a Level 2 EVSE in every location where Circuit Only, EVSE-Ready Outlet or EVSE Installed is required. Location. The EVSE, receptacles, and/or raceway required by this section shall be placed in locations allowing convenient installation of and access to EVSE. Location of EVSE or receptacles shall be consistent with all City guidelines, rules, and regulations.	Section A4.106.8.3 for New Hotels has been moved to the Residential Structures section from the non-residential section. This organization aligns with the CALGreen Building Standards Code.