



MEMORANDUM

DATE: November 1, 2012

TO: Planning and Transportation Commission

FROM: David Kornfield, Planning Services Manager

SUBJECT: SUMMARY OF GREEN BUILDING REGULATIONS

This memorandum summarizes the City's Green building regulations. As defined by the State code, the purpose of Green building regulations is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

Green Building Regulations

Los Altos was one of the first cities in the State to voluntarily adopt Green building regulations in 2007. Our original Green regulations were based on a partnership with a non-profit organization called Build It Green. Build It Green was established to promote healthy, energy- and resource-efficient homes in California. Our original Green regulations required single-family construction to incorporate certain measures based on Build It Green's GreenPoint check list, and required commercial and multiple-family construction to exceed State energy efficiency calculations by at least 15 percent. We adopted the original Green regulations understanding that the State was developing model regulations.

Following the State's effort, in 2010 Los Altos adopted the California Green Building Standards Code for new construction, referred to as CalGreen. CalGreen requires that:

- All new residential construction must:
 - Incorporate CalGreen mandatory measures for residential construction;
 - Exceed the State's minimum energy standards by 15 percent; and
 - May substitute 4Kw photovoltaic system in-lieu of exceeding energy standards by 15 percent.
- All new commercial, mixed-use, and public and community facilities must:
 - Incorporate CalGreen mandatory measures for non-residential construction;
 - Exceed the State's minimum energy standards by 15 percent; and
 - May substitute 4Kw photovoltaic system in-lieu of exceeding energy standards by 15 percent.

We maintained our municipal Green building requirements for additions to existing structures as follows:

- Single-family additions and alterations of main structures of 50 percent or greater excluding basements:
 - Must exceed the State's minimum energy standards by 15 percent;
 - May substitute 4Kw photovoltaic system in-lieu of exceeding energy standards by 15 percent; and
 - Use GreenPoint Checklist for compliance.
- Multiple-family, commercial, mixed-use, and public and community facilities structures:
 - Must exceed the State's minimum energy standards by 15 percent; and
 - May substitute 4Kw photovoltaic system in-lieu of exceeding energy standards by 15 percent.

The City's Green building regulations are available to the public at City Hall and on the City's website under Community Development Department, Building Division. The Green checklists are attached for reference.

Water Efficient Landscape Regulations

The City of Los Altos voluntarily adopted the State's model regulations for water efficiency in 1992. In 2010 we updated them to incorporate revisions to the State regulations. The water efficient landscape regulations apply to:

- Single-family development:
 - Homeowner installed landscape greater than 5,000 square feet of softscape; and
 - Developer installed landscape greater than 2,500 square feet of softscape.
- Public, commercial, and multiple-family private development with more than 2,500 square feet of landscape area; and
- Do not apply to historic properties.

A summary of the water efficient landscape regulations from the Department of Water Resources is attached for reference.

Climate Action Plan

City staff is working with a consultant to develop a Climate Action Plan with a goal to:

- Reduce green house gas emissions to 1990 levels (15 percent below our 2005 baseline); and
- Comply with the Sustainable Communities and Climate Protection Act of 2008 (SB375) and the Global Warming Solutions Act of 2006 (AB32).

The Climate Action Plan will evaluate the following sectors for green house gas reductions:

- Residential and commercial energy use;

- Solid waste;
- Transportation;
- Water use;
- Waste water; and
- Off-road vehicles and equipment.

The Climate Action Plan materials are available on the City's Environmental Commission website. As we develop the Climate Action Plan, public notice will be provided through the Environmental Commission. When adopted, we will amend the General Plan and zoning code, as necessary, through the Planning and Transportation Commission and City Council review process. We anticipate adopting the Climate Action Plan by Spring of 2013.

Attachments

Green Checklists

State Water Efficient Landscape Ordinance Summary



2010 CALGREEN RESIDENTIAL CHECKLIST

MANDATORY ITEMS

COMMUNITY DEVELOPMENT DEPARTMENT – BUILDING DIVISION
KIRK BALLARD, BUILDING OFFICIAL
ONE NORTH SAN ANTONIO ROAD • LOS ALTOS, CA 94022-3088
(650) 947-2752 • FAX (650) 947-2734 • WWW.LOSALTOSCA.GOV

PURPOSE:

The 2010 CALGreen Code applies to all newly constructed hotels, motels, lodging houses, dwellings, dormitories, condominiums, shelters, congregate residences, employee housing, factory-built housing and other types of dwellings with sleeping accommodations and new accessory buildings associated with such uses. Existing site and landscaping improvements that are not otherwise disturbed are not subject to the requirements of CALgreen.

Project Name: _____

Project Address: _____

Project Description: _____

Instructions:

1. The owner or owner's agent shall employ a licensed qualified green building professional experienced with the 2010 California Green Building Standards Codes to verify and assure that all required work described herein is properly planned and implemented in the project.
2. The licensed professional, in collaboration with the owner and the design professional shall sign and date **Section 1 – Design Verification** at the end of this checklist and have the checklist printed on the approved plans for the project.
3. Prior to final inspection by the Building Department, the licensed professional shall complete Column 3 and sign and date **Section 2 – Implementation Verification** at the end of this checklist and submit the completed form to the Building Inspector.

MANDATORY FEATURE OR MEASURE	COLUMN 2	COLUMN 3
	Project Requirements	Verification
<u>Planning and Design</u>		
Site Development		
4.106.2 A plan is developed and implemented to manage storm water drainage during construction.	☒	☐
4.106.3 The site shall be planned and developed to keep surface water away from buildings. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows.	☒	☐
Performance Approach		
A4.203.1 Exceed the <i>California Energy Code</i> requirements, based on the 2008 Energy Efficiency Standards requirements by 15 percent.	☒	☐

Water Efficiency and Conservation

Indoor Water Use

4.303.1 Indoor water use shall be reduced by at least 20 percent using one of the following methods.

1. Water saving fixtures or flow restrictors shall be used.
2. A 20 percent reduction in baseline water use shall be demonstrated.



4.303.2 When using the calculation method specified in Section 4.303.1, multiple showerheads controlled by a single valve shall not exceed maximum flow rates.



4.303.3 Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with specified performance requirements.



Outdoor Water Use

4.304.1 Automatic irrigation systems controllers installed at the time of final inspection shall be weather or soil moisture-based.



Material Conservation and Resource Efficiency

Enhanced Durability and Reduced Maintenance

4.406.1 Joints and openings. Annular spaces around pipes, electric cables, conduits or other openings in 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.



Construction Waste Reduction, Disposal and Recycling

4.408.1 Recycle and/or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition waste in accordance with one of the following:

1. Comply with a more stringent local construction and demolition waste management ordinance; or
2. A construction waste management plan per Section 4.408.2; or
3. A waste management company per Section 4.408.3; or
4. The waste stream reduction alternative per Section 4.408.4.



Building Maintenance and Operation

4.410.1 An operation and maintenance manual shall be provided to the building occupant or owner.



ENVIRONMENTAL QUALITY

Fireplaces

4.503.1 Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits where applicable. Woodstoves, pellet stoves, fireplaces shall also comply with applicable local ordinances.



Pollutant Control

4.504.1 Duct openings and other related air distribution component openings shall be covered during construction.



4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits.



4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits.



4.504.2.3 Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic compounds.



4.504.2.4 Documentation shall be provided to verify that compliant VOC limit finish materials have been used.



4.504.3 Carpet and carpet systems shall be compliant with VOC limits.



4.504.4 50 percent of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database or be certified under the Resilient Floor Covering Institute (RFCI) FloorScore program; or meet California Dept. of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350.)



4.504.5 Particleboard, medium density fiberboard (MDF) and hardwood plywood used in interior finish systems shall comply with low formaldehyde emission standards.



Interior Moisture Control

4.505.2 Vapor retarder and capillary break is installed at slab on grade foundations.



4.505.3 Moisture content of building materials used in wall and floor framing is checked before enclosure.



Indoor Air Quality and Exhaust

4.506.1 Exhaust fans which terminated outside the building are provided in every bathroom.



Environmental Comfort

4.507.1 Whole house exhaust fans shall have insulated louvers or covers which close when the fan is off. Covers or louvers shall have a minimum insulation value of R-4.2.



4.507.2 Duct systems are sized, designed, and equipment is selected using the following methods:
1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2004 or equivalent.
2. Size duct systems according to ANSI/ACCA 1 Manual D-2009 or equivalent.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2004 or equivalent.



Installer and Special Inspector Qualifications

Qualifications

702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.



702.2 Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.



Verifications

703.1 Verification of compliance with this code may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance



CALGREEN SIGNATURE DECLARATIONS

Project Name: _____

Project Address: _____

Project Description: _____

SECTION 1 – DESIGN VERIFICATION

Complete all lines of Section 1 – "Design Verification" and submit the completed checklist (Columns 2 and 3) with the plans and building permit application to the Building Department.

The owner and design professional responsible for compliance with CalGreen Standards have revised the plans and certify that the items checked above are hereby incorporated into the project plans and will be implemented into the project in accordance with the requirements set forth in the 2010 California Green Building Standards Code as adopted by the City of Los Altos.

Owner's Signature

Date

Owner's Name (Please Print)

Design Professional's Signature

Date

Design Professional's Name (Please Print)

Signature of Licensed Professional responsible for CalGreen compliance

Date

Name of Licensed Professional responsible for CalGreen compliance (Please Print)

Phone No.

Email Address for Licensed Professional responsible for CalGreen compliance

SECTION 2 – IMPLEMENTATION VERIFICATION

Complete, sign and submit the completed checklist, including column 3, together with all original signatures on Section 2 to the Building Department prior to Building Department final inspection.

I have inspected the work and have received sufficient documentation to verify and certify that the project identified above was constructed in accordance with this Green Building Checklist and in accordance with the requirements of the 2010 California Green Building Standards Code as adopted by the City of Los Altos.

Signature of Licensed Professional responsible for CalGreen Compliance

Date

Name of Licensed Professional responsible for CalGreen compliance (Please Print)

Phone No.

Email address for Licensed Professional responsible for CalGreen compliance



DIVISION A5.7

NON-RESIDENTIAL MANDATORY MEASURES

(Modified Table of Division 15.7 Non-Residential Voluntary Measures)

CALIFORNIA GREEN BUILDING STANDARDS VERIFICATION SUMMARY

Qualified Green Building Professional Signature: _____

Rater Certification No.: _____

Phone No.: _____

PROJECT ADDRESS: _____

FEATURE OR MEASURE	MANDATORY	QUALIFIED GREEN BUILDING PROFESSIONAL SHALL INITIAL EACH REQUIRED MEASURE IN THE FIELD AS IT APPLIES BELOW
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Requirements

Project meets all of the requirements of Division 5.1 through 5.5	X	
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Site Development

5.106.1 Storm water pollution prevention plan. For projects of one acre or less, develop a Storm Water Pollution Prevention Plan (SWPPP) that has been designed, specific to its site, conforming to the State Storm water NPDES Construction Permit or local ordinance, whichever is stricter, as is required for projects over one acre. The plan should cover prevention of soil loss by storm water run-off and/or wind erosion, of sedimentation and/or of dust/particulate matter air pollution.	X	
5.106.4 Bicycle parking and changing rooms. Comply with Sections 5.106.4.1 and 5.106.4.2; or meet local ordinance, whichever is stricter.	X	
5.106.4.1 Short-Term bicycle parking. If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.	X	

5.106.4.2. Long-Term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space.	X	
A5.106.5.2 Designated parking. Provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.6.2	X	
5.106.8 Light pollution reduction. Comply with lighting power requirements in the <i>California Energy Code</i> and design interior and exterior lighting such that zero direct-beam illumination leaves the building site. Meet or exceed exterior light levels and uniformity ratios for lighting zones 1-4 as defined in Chapter 10 of the <i>California Administrative Code</i> , using the following strategies: 1. Shield all exterior luminaires or use cutoff luminaires. 2. Contain interior lighting within each source. 3. Allow no more than .01 horizontal foot candle 15 ft beyond the site. 4. Contain all exterior lighting within property boundaries. Exception: See Part 2, Chapter 12, Section 1205.6 for Campus lighting requirements for parking facilities & walkways.	X X X X X	
5.106.10 Grading and paving. The site shall be planned and developed to keep surface water away from buildings. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows.	X	

Energy Efficiency **Performance Requirements**

5.201.1 Scope. The California Energy Commission will continue to adopt mandatory building standards. ¹	X	
A5.203.1 Energy performance. Using an Alternative Calculation Method approved by the California Energy Commission, calculate each nonresidential building's TDV energy and CO ₂ emissions and compare it to the standard or "budget" building. A5.203.1.1 Tier 1. Exceed California Energy Code Requirements, based on the 2008 Energy Efficiency Standards by 15 percent.	X (Cal Green Tier 1)	

Water Efficiency and Conservation **Indoor Water Use**

5.303.1 Meters. Separate meters shall be installed for the uses described in Sections 503.1.1 through 503.1.3. 5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows: 1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day. 2. For spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory or beauty salon or barber shop projected to consume more than 100 gal/day. 5.303.1.2 Excess consumption. Any building within a project or space within that building is to consume more than 1,000 Gal/day.	X X X	
5.303.2 20 percent savings. A schedule of plumbing fixtures & fittings that will reduce the overall use of potable water within the building by 20 percent shall be provided. (Calculate savings by Water Use Worksheets) 5.303.2.1 Multiple showerheads serving one shower. When single shower fixtures are served by more than one showerhead, the combined flow rate of all the showerheads shall not exceed the maximum flow rates specified in the 20 percent reduction column contained in Table 5.303.2.3 or the shower shall be designed to only allow one showerhead to be in operation at a time.	X X	

5.303.4 Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods: 1. The installation of water-conserving fixtures or 2. Utilizing nonpotable water systems.	As applicable X X	
5.303.6 Plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the requirements listed for each type in Items listed in Table 5.303.6. 1. Water closets (toilets) – flushometer type 2. Water closets (toilets) – tank type 3. Urinals 4. Public lavatory faucets 5. Public metering self-closing faucets 6. Residential bathroom lavatory sink faucets 7. Residential kitchen faucets 8. Residential shower heads 9. Single shower fixtures served by more than one Sowerhead.	As applicable X X X X X X X X X	

Outdoor Water Use

5.304.1 Water budget. A water budget shall be developed for landscape irrigation use. ¹	X	
5.304.2 Outdoor potable water use. For new water service, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscaped areas between 1,000 square feet and 5000 square feet.	X	
5.304.3 Irrigation design. In new nonresidential project with between 1,000 and 2,500 square feet of landscaped area (the level at which the MLO applies), install irrigation controllers and sensors which include the following criteria and meet manufacturer's recommendations. 5.304.3.1 Irrigation controllers. Automatic irrigation system controllers installed at the time of final inspection shall comply with the following: 1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change. 2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.	X As Applicable X	

Weather Resistance and Moisture Management

5.407.1 Weather protection. Provide a weather-resistant exterior wall and foundation envelope as required by {California Building Code} Section 1403.2 and {California Energy Code} Section 150, manufacturer's installation instructions or local ordinance, whichever is more stringent. ¹	X	
5.407.2 Moisture control. Employ moisture control measures by the following methods: 5.407.2.1 Sprinklers. Prevent irrigation spray on structures. 5.407.2.2 Entries and openings. Design exterior entries and openings to prevent water intrusion into buildings.	X X	

Construction Waste Reduction, Disposal and Recycling

5.408.1 Construction waste diversion. Establish a construction waste management plan or meet local ordinance, whichever is more stringent	X	
5.408.2 Construction waste management plan. Submit plan per this section to enforcement authority 5.408.2.1 Documentation. Provide documentation of the waste management plan that meets the requirements listed in Section 5.408.2 Items 1 thru 4 and the plan is accessible to the enforcement authority 5.408.2.2 Isolated jobsites. The enforcing agency may make exceptions to the requirements of this section when jobsites are located in areas beyond the haul boundaries of the diversion facility	X	
5.408.3 Construction waste. Recycle and/or salvage for reuse a minimum of 50 percent of nonhazardous construction and demolition debris or meet local ordinance, whichever is more stringent. Exceptions: 1. Excavated soil and land-clearing debris. 2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist. A5.408.3.1 Enhanced construction waste reduction. Divert to recycle or salvage nonhazardous construction and demolition debris generated at the site in compliance with one of the following: Tier 1. At least a 65 percent reduction Tier 2. At least an 80 percent reduction A5.408.3.1.1 Verification of compliance. A copy of the completed waste management report shall be provided. Exceptions: 1. Excavated soil and land-clearing debris 2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.	X	
5.408.4 Excavated soil and land clearing debris. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled.	X	

Building Maintenance and Operation

5.410.1 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.¹	X	
5.410.2 Commissioning. For new buildings 10,000 square feet and over, building commissioning for all building systems covered by T24, Part 6, process systems and renewable energy systems shall be included in the design and construction processes of the building project. Commissioning requirements shall include items listed in Section 5.410.2	X	
5.410.2.1 Owner's Project Requirements (OPR). Documented before the design phase of the project begins the OPR shall include items listed in Section 5.410.4.	X	
5.410.2.2 Basis of Design (BOD). A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project and updated periodically to cover the systems listed in Section 5.410.2.2.	X	
5.410.2.3 Commissioning plan. A commissioning plan describing how the project will be commissioned shall be started during the design phase of the building project and shall include items listed in Section 5.410.2.3.	X	
5.410.2.4 Functional performance testing shall demonstrate the correct installation and operation of each component, system and system-to-system	X	

interface in accordance with the approved plans and specifications.		
5.410.2.5 Documentation and training. A Systems manual and systems operations training are required.	X	
5.4.10.2.5.1 Systems manual. The systems manual shall be delivered to the building owner or representative and facilities operator and shall include the items listed in Section 5.410.2.5.1.	X	
5.410.2.5.2 Systems operations training. The training of the appropriate maintenance staff for each equipment type and/or system shall include items listed in Section 5.410.2.5.2.	X	
5.410.2.6 Commissioning report. A complete report of commissioning process activities undertaken through the design, construction and reporting recommendations for postconstruction phases of the building project shall be completed and provided to the owner or representative.	X	
5.410.4 Testing and adjusting. Testing and adjusting of systems shall be required for buildings less than 10,000 square feet.	X	
5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting system. Systems to be included for testing and adjusting shall include, as applicable to the project, the systems listed in Section 5.410.3.2.	X	
5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with industry best practices and applicable national standards on each system.	X	
5.410.4.3.1 HVAC balancing. Before a new space-conditioning system serving a building or space is operated for normal use, the system should be balanced in accordance with the procedures defined by national standards listed in Section 5.410.3.3.1.	X	
5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.	X	
5.410.4.5 Operation and maintenance manual. Provide the building owner with detailed operating and maintenance instructions and copies of guaranties/warranties for each system prior to final inspection.	X	
5.410.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency.	X	

Environmental Quality **Fireplaces**

5.503.1 Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace or a sealed woodstove and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150.	X	
5.503.1.1 Woodstoves. Woodstoves shall comply with US EPA Phase II emission limits.	As applicable X	

Pollutant Control

5.504.3 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 and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust or debris which may collect in the system.	X	
5.504.4 Finish material pollutant control. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.4.	X	
5.504.4.1 Adhesives, sealants, caulks. Adhesives and sealants used on the project shall meet the requirements of the following standards.		
1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2	X	
2. Aerosol adhesives and smaller unit sizes of adhesives and sealant or caulking	X	

compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.		
5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with Table 5.504.4.3 unless more stringent local limits apply.	X	
5.504.4.3.1 Aerosol paints and coatings. Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances (CCR, Title 17, Section 94520 et seq).	X	
5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency.	X	
5.504.4.4 Carpet Systems. All carpet installed in the building interior shall meet the testing and product requirements of the standards listed in Section 5.504.4.4	X	
5.504.4.4.1 Carpet Cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.	X	
5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 804.4.1.	X	
5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall be the requirements for formaldehyde as specified in Table 5.504.4.	X	
5.504.4.5.2 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following.	X	
1. Product certifications and specifications	As applicable	
2. Chain of custody certifications	X	
3. Other methods acceptable to the enforcing agency	X	
5.504.4.6 Resilient flooring systems. Comply with the VOC-emission limits defined in the 2009 CHPS criteria and listed on its Low-emitting Materials List (or Product Registry) or certified under the FloorScore program of the Resilient Floor Covering Institute.	X	
A5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.	X	
5.504.5.3 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 8.	X	

Interior Moisture and Radon Control

5.505.1 Indoor moisture control. Buildings shall meet or exceed the provisions of <i>California Building Code</i> , CCR, Title 24, Part 2, Sections 1203 and Chapter 14.1. ¹	X	
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Air Quality and Exhaust

5.506.1 Outside air delivery. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 121 of the <i>California Energy Code</i> , CCR, Title 24, Part 6 and Chapter 4 of CCR, Title 8 or the applicable local code, whichever is more stringent. ¹	X	
5.506.2 Carbon dioxide (CO₂) monitoring. For buildings equipped with demand control ventilation, CO ₂ sensors and ventilation controls shall be specified and installed in accordance with the requirements of the latest edition of the <i>California Energy Code</i> , CCR, Title 24, Part 6, Section 121(c). ¹	x	

<u>Outdoor Air Quality</u>

5.508.1 Ozone depletion and global warming reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2	As applicable	
5.508.1.1 CFCs. Install HVAC and refrigeration equipment that does not contain CFCs. ¹	X	
5.508.1.2 Halons. Install fire suppression equipment that does not contain Halons. ¹	X	

1. These measures are currently required elsewhere in statute or in regulation.

GreenPoint Rated Checklist: Single Family

The GreenPoint Rated checklist tracks green features incorporated into the home. A home is only

GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.

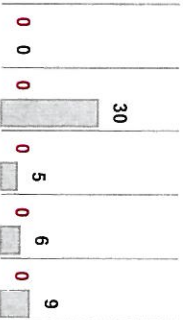
GreenPoint Rated is provided as a public service by Build It Green, a professional non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.

The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Energy (30), Indoor Air Quality/Health (5), Resources (6), and Water (9); and meet the prerequisites A.2.a, H10a., J.2., N.1, and Q0.

This checklist accommodates the verification of mandatory CALGreen measures but does not signify compliance unless accepted by enforcing agency. All CALGreen measures within the checklist must be selected as "Yes" or "N/A" for compliance with GreenPoint Rated. Build It Green is not a code enforcement agency.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit www.builditgreen.org/greenpointrated

Single Family New Home 4.2 / 2008 Title 24



Total Points Targeted: 0

Enter Project Name

A. SITE		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
1. Protect Topsoil and Minimize Disruption of Existing Plants & Trees								
TBD	a. Protect Topsoil and Reuse after Construction	0	1				1	
TBD	b. Limit and Delimitate Construction Footprint for Maximum Protection	0					1	
2. Divert/Recycle Job Site Construction Waste (Including Green Waste and Existing Structures)								
TBD	a. Required: Divert 50% (by weight) of All Construction and Demolition Waste (Recycling or Reuse) (CALGreen Code)	N				R		
TBD	b. Divert 100% of Asphalt and Concrete and 65% (by weight) of Remaining Materials	0				2		
TBD	c. Divert 100% of Asphalt and Concrete and 80% (by weight) of Remaining Materials	0				2		
3. Use Recycled Content Aggregate (Minimum 25%)								
TBD	a. Walkway and Driveway Base	0				1		
TBD	b. Roadway Base	0				1		
TBD		0	1					
4. Cool Site: Reduce Heat Island Effect On Site								
5. Construction Environmental Quality Management Plan, Duct Sealing, and Pre-Occupancy Flush-Out [This credit is a requirement associated with J4: EPA IAP]								
TBD	a. Duct openings and other related air distribution component openings shall be covered during construction. (CALGreen code if applicable)	0			1			
TBD	b. Full environmental quality management plan and pre-occupancy flush out is conducted (Prerequisite is A5a)	0			1			
B. FOUNDATION		Total Points Available in Site = 12	0					
			Possible Points					

Enter Project Name

TBD	1. Replace Portland Cement in Concrete with Recycled Fly Ash and/or Slag (Minimum 20%)	0							
TBD	2. Use Frost-Protected Shallow Foundation in Cold Areas (CEC Climate Zone 16)	0					1		
TBD	3. Use Radon Resistant Construction [*This credit is a requirement associated with J4: EPA IAP]	0					2		
TBD	4. Install a Foundation Drainage System [*This credit is a requirement associated with J4: EPA IAP]	0					2		
TBD	5. Moisture Controlled Crawlspace [*This credit is a requirement associated with J4: EPA IAP]	0				2			
TBD	6. Design and Build Structural Pest Controls a. Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections b. All Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation	0					1		
TBD	Total Points Available in Foundation = 12						0		
C. LANDSCAPE									
0%	Enter in the % of landscape area. (Projects with less than 15% of the total site area (i.e. total lot size) as landscape area are capped at 6 points for the following measures: C1 through C7 and C9 through C11.			Possible Points					
TBD	1. Group Plants by Water Needs (Hydrozoning)	0						2	
TBD	2. Mulch All Planting Beds to the Greater of 3 Inches or Local Water Ordinance Requirement	0						2	
TBD	3. Construct Resource-Efficient Landscapes a. No Invasive Species Listed by Cal-IPC Are Planted b. No Plant Species Will Require Shearing c. 75% of Plants Are Drought Tolerant, California Natives or Mediterranean Species or Other Appropriate Species	0				1		1	
TBD	4. Minimize Turf in Landscape Installed by Builder a. Turf Shall Not Be Installed on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less than 8 Feet Wide b. Turf is Small Percentage of Landscaped Area (2 Points for ≤25%, 4 Points for ≤10%)	0						1	
TBD	5. Plant Shade Trees	0	1	1				1	
TBD	6. Install High-Efficiency Irrigation Systems a. System Uses Only Low-Flow Drip, Bubblers, or Sprinklers b. System Has Smart (Weather-Based) Controller (CAL Green code if applicable)	0						2	
TBD	7. Incorporate Two Inches of Compost in the Top 6 to 12 Inches of Soil	0						2	
TBD	8. Rain Water Harvesting System a. Cistern(s) is Less Than 750 Gallons b. Cistern(s) is 750 to 2,500 Gallons c. Cistern(s) is Greater Than 2,500 Gallons	0						1	
TBD	9. Irrigation System Uses Recycled Wastewater	0						1	
TBD	10. Submetering for Landscape Irrigation	0						1	
TBD	11. Design Landscape to Meet Water Budget a. Install Irrigation System That Will Be Operated at ≤70% Reference ET (Prerequisites for Credit are C1. and C2.)	0						1	

Enter Project Name

TBD	b. Install Irrigation System That Will Be Operated at ≤50% Reference ET (Prerequisites for Credit are C1, C2, and C6a or C6b.)	Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
		0					1	
TBD	12. Use Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content E) Finger-Jointed or F) Local	0				1		
TBD	13. Reduce Light Pollution by Shielding Fixtures and Directing Light Downward	0	1					
D. STRUCTURAL FRAME & BUILDING ENVELOPE		Total Points Available in Landscape = 35	Possible Points					
TBD	1. Apply Optimal Value Engineering							
TBD	a. Place Joists, Rafter and Studs at 24-Inch On Center	0				3		
TBD	b. Door and Window Headers are Sized for Load	0				1		
TBD	c. Use Only Cripple Studs Required for Load	0				1		
TBD	2. Construction Material Efficiencies							
TBD	a. Wall and Floor Assemblies (Excluding Solid Wall Assemblies) are Delivered Panelized from Supplier (Minimum of 80% Square Feet)	0				2		
TBD	b. Modular Components Are Delivered Assembled to the Project (Minimum 25%)	0				2		
TBD	3. Use Engineered Lumber							
TBD	a. Engineered Beams and Headers	0				1		
TBD	b. Wood I-Joists or Web Trusses for Floors	0				1		
TBD	c. Engineered Lumber for Roof Rafters	0				1		
TBD	d. Engineered or Finger-Jointed Studs for Vertical Applications	0				1		
TBD	e. Oriented Strand Board for Subfloor	0				1		
TBD	f. Oriented Strand Board for Wall and Roof Sheathing	0		1		1		
TBD	4. Insulated Headers	0						
TBD	5. Use FSC-Certified Wood							
TBD	a. Dimensional Lumber, Studs and Timber (Minimum 40%)	0				2		
TBD	b. Panel Products (Minimum 40%)	0				2		
TBD	6. Use Solid Wall Systems (Includes SIPs, ICFs, & Any Non-Stick Frame Assembly)							
TBD	a. Floors	0				2		
TBD	b. Walls	0				2		
TBD	c. Roofs	0				1		
TBD	7. Energy Heels on Roof Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)	0		1				
TBD	8. Install Overhangs and Gutters							
TBD	a. Minimum 16-Inch Overhangs and Gutters	0				1		
TBD	b. Minimum 24-Inch Overhangs and Gutters	0		1				
TBD	9. Reduce Pollution Entering the Home from the Garage [*This credit is a requirement associated with J4: EPA IAP] a. Install Garage Exhaust Fan OR Build a Detached Garage b. Tightly Seal the Air Barrier between Garage and Living Area (Performance Test Required)	0			1			
TBD		0			1			
Total Points Available in Structural Frame and Building Envelope = 39		0						

Enter Project Name

E. EXTERIOR						Notes
	Points Achieved	Community	Energy	IAQ/Health	Resources	
TBD	0					
1. Use Environmentally Preferable Decking						
TBD	0					
2. Flashing Installation Techniques Specified and Third-Party Verified [*This credit is a requirement associated with J4: EPA IAP]						
TBD	0					
3. Install a Rain Screen Wall System						
TBD	0					
4. Use Durable and Non-Combustible Siding Materials						
TBD	0					
5. Use Durable and Fire Resistant Roofing Materials or Assembly						
Total Points Available in Exterior = 8						
F. INSULATION						
TBD						
1. Install Insulation with 75% Recycled Content						
TBD	0					
a. Walls						
TBD	0					
b. Ceilings						
TBD	0					
c. Floors						
Total Points Available in Insulation = 3						
G. PLUMBING						
TBD						
1. Distribute Domestic Hot Water Efficiently (Max. 5 points, G1a. is a Prerequisite for G1b-e)						
TBD	0					
a. Insulate All Hot Water Pipes [*This credit is a requirement associated with J4: EPA IAP]						
TBD	0					
b. Use Engineered Parallel Plumbing						
TBD	0					
c. Use Engineered Parallel Plumbing with Demand Controlled Circulation Loop(s)						
TBD	0					
d. Use Traditional Trunk, Branch and Twig Plumbing with Demand Controlled Circulation Loop(s)						
TBD	0					
e. Use Central Core Plumbing						
2. Water Efficient Fixtures						
TBD	0					
a. High Efficiency Showerheads ≤2.0 Gallons Per Minute (gpm) at 80 psi. (Multiple showerheads shall not exceed maximum flow rates) (CALGreen code if applicable)						
TBD	0					
b. High Efficiency Bathroom Faucets ≤ 1.5 gpm at 60psi (CALGreen code)						
TBD	0					
c. High Efficiency Kitchen and Utility Faucets ≤1.8 gpm (CALGreen code if applicable)						
TBD	0					
3. Install Only High Efficiency Toilets (Dual-Flush or ≤1.28 Gallons Per Flush (gpf)) (CALGreen code if applicable)						
Total Points Available in Plumbing = 12						
H. HEATING, VENTILATION & AIR CONDITIONING						
TBD						
1. Properly Design HVAC System and Perform Diagnostic Testing						
TBD	0					
a. Design and Install HVAC System to ACCA Manual J, D, and S Recommendations (CALGreen code if applicable)						
TBD	0					
b. Test Total Supply Air Flow Rates [*This credit is a requirement associated with J4: EPA IAP]						
TBD	0					
c. Third Party Testing of Mechanical Ventilation Rates for IAQ (meet ASHRAE 62.2) [*This credit is a requirement associated with J4: EPA IAP]						
2. Install Sealed Combustion Units						
TBD	0					
a. Furnaces [*This credit is a requirement associated with J4: EPA IAP]						
TBD	0					
b. Water Heaters						
TBD	0					
3. Install High Performing Zoned Hydronic Radiant Heating						

Enter Project Name

		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
TBD	4. Install High Efficiency Air Conditioning with Environmentally Preferable Refrigerants	0	1					
TBD	5. Design and Install Effective Ductwork							
TBD	a. Install HVAC Unit and Ductwork within Conditioned Space	0		1				
TBD	b. Use Duct Mastic on All Duct Joints and Seams [*This credit is a requirement associated with J4: EPA IAP]	0		1				
TBD	c. Pressure Relieve the Ductwork System [*This credit is a requirement associated with J4: EPA IAP]	0		1				
TBD	6. Install High Efficiency HVAC Filter (MERV 6+) [*This credit is a requirement associated with J4: EPA IAP]	0			1			
TBD	7. No Fireplace OR Install Sealed Gas Fireplace(s) with Efficiency Rating >60% using CSA Standards [*This credit is a requirement associated with J4: EPA IAP]	0			1			
TBD	8. Install ENERGY STAR Bathroom Fans on Timer or Humidistat (CALGreen code if applicable)	0			1			
TBD	9. Install Mechanical Ventilation System for Cooling (Max. 4 Points) a. Install ENERGY STAR Ceiling Fans & Light Kits in Living Areas & All Bedrooms b. Install Whole House Fan (Credit Not Available if H9c Chosen) (CALGreen code if applicable) c. Automatically Controlled Integrated System with Variable Speed Control	0		1				
TBD	10. Advanced Mechanical Ventilation for IAQ							
TBD	a. Required: Compliance with ASHRAE 62.2 Mechanical Ventilation Standards (as adopted in Title 24 Part 6) [*This credit is a requirement associated with J4: EPA IAP]	N			R			
TBD	b. Advanced Ventilation Practices (Continuous Operation, Sone Limit, Minimum Efficiency, Minimum Ventilation Rate, Homeowner Instructions)	0			1			
TBD	c. Outdoor Air Ducted to Bedroom and Living Areas of Home	0			2			
TBD	11. Install Carbon Monoxide Alarm(s) (or No Combustion Appliances in Living Space and No Attached Garage) [*This credit is a requirement associated with J4: EPA IAP]	0			1			
I. RENEWABLE ENERGY		0						
Total Points Available in Heating, Ventilation and Air Conditioning = 27								
TBD	1. Pre-Plumb for Solar Water Heating	0			Possible Points			
TBD	2. Install Wiring Conduit for Future Photovoltaic Installation & Provide 200 ft ² of South-Facing Roof	0			1			
0.0%	3. Offset Energy Consumption with Onsite Renewable Generation (Solar PV, Solar Thermal, Wind) Enter % total energy consumption offset, 1 point per 4% offset	0		25				
Total Available Points in Renewable Energy = 27		0						
J. BUILDING PERFORMANCE								
1. Building Envelope Diagnostic Evaluations					Possible Points			
TBD	a. Verify Quality of Insulation Installation & Thermal Bypass Checklist before Drywall [*This credit is a requirement associated with J4: EPA IAP]	0		1				
TBD	b. House Passes Blower Door Test [*This credit is a requirement associated with J4: EPA IAP]	0		1				

Enter Project Name

Enter Project Name						Notes
TBD	Points Achieved	Community	Energy	IAQ/Health	Resources	
c. Blower Door Results are Max 2.5 ACH ₅₀ for Unbalanced Systems (Supply or Exhaust) or Max 1.0 ACH ₅₀ for Balanced Systems (2 Total Points for J1b. and J1c.)	0		1			
TBD	0			1		
d. House Passes Combustion Safety Backdraft Test						
2. Required: Building Performance Exceeds Title 24 (Minimum 15%) (Enter the Percent Better Than Title 24. Points for Every 1% Better Than Title 24)	0		≥30			
3. Design and Build Near Zero Energy Homes (Enter number of points, minimum of 2 and maximum of 6 points)	0		6			
4. Obtain EPA Indoor airPlus Certification (Total 42 points, not including Title 24 performance; read comment)	0			2		
TBD	0		1			
5. Title 24 Prepared and Signed by a CABEC Certified Energy Plans Examiner (CEPE)	0					
6. Participation in Utility Program with Third Party Plan Review						
a. Energy Efficiency Program [*This credit is a requirement associated with J4: EPA IAP]	0		1			
TBD	0		1			
b. Renewable Energy Program with Min. 30% Better Than Title 24 (High Performing Home)	0		1			
TBD	0					
Total Available Points in Building Performance = 45+						
K. FINISHES						
TBD	0		Possible Points			
1. Design Entryways to Reduce Tracked-In Contaminants	0		1			
2. Use Low-VOC or Zero-VOC Paint (Maximum 3 Points)						
a. Low-VOC Interior Wall/Ceiling Paints (CAL Green code if applicable) (≤50 Grams Per Liter (gpl) VOCs Regardless of Sheen) [*This credit is a requirement associated with J4: EPA IAP]	0		1			
TBD	0					
b. Zero-VOC: Interior Wall/Ceiling Paints (≤5 gpl VOCs Regardless of Sheen)	0		2			
TBD	0					
3. Use Low-VOC Coatings that Meet SCAQMD Rule 1113 (CAL Green code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	0		2			
TBD	0					
4. Use Low-VOC Caulks, Construction Adhesives and Sealants that Meet SCAQMD Rule 1168 (CAL Green code if applicable)	0		2			
TBD	0				1	
5. Use Recycled-Content Paint	0					
6. Use Environmentally Preferable Materials for Interior Finish A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content or E) Finger-Jointed F) Local						
TBD	0				3	
TBD	0				2	
TBD	0				2	
TBD	0				2	
TBD	0				2	
TBD	0				2	
7. Reduce Formaldehyde in Interior Finish – Meet Current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates (CAL Green code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	N			0		

Enter Project Name

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
8. Reduce Formaldehyde in Interior Finish - Exceed Current CARB ATCM for Composite Wood Formaldehyde Limits Prior to Mandatory Compliance Dates								
TBD	a. Doors (90% Minimum)	0			1			
TBD	b. Cabinets & Countertops (90% Minimum)	0			2			
TBD	c. Interior Trim and Shelving (90% Minimum)	0			1			
TBD	9. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb	0			3			
Total Available Points in Finishes = 27		0	Possible Points					
L. FLOORING								
TBD	1. Use Environmentally Preferable Flooring (Minimum 15% Floor Area) A) FSC-Certified Wood, B) Reclaimed or Refinished, C) Rapidly Renewable, D) Recycled-Content, E) Exposed Concrete, F) Local. <i>Flooring Adhesives Must Meet SCAQMD Rule 1168 for VOCs.</i>	0				1		
TBD	2. Thermal Mass Floors (Minimum 50%)	0						
TBD	3. Low Emitting Flooring (Section 01350, CRI Green Label Plus, Floorscore [*This credit is a requirement associated with J4: EPA IAP])	0						
TBD	4. All carpet and 50% of Resilient Flooring is low emitting. (CAL Green code if applicable)	N						
Total Available Points in Flooring = 8		0	Possible Points					
M. APPLIANCES AND LIGHTING								
TBD	1. Install ENERGY STAR Dishwasher (Must Meet Current Specifications)	0		1			1	
TBD	2. Install ENERGY STAR Clothes Washer							
TBD	a. Meets ENERGY STAR and CEE Tier 2 Requirements (Modified Energy Factor 2.0, Water Factor 6.0 or less)	0		1			2	
TBD	b. Meets ENERGY STAR and CEE Tier 3 Requirements (Modified Energy Factor 2.2, Water Factor 4.5 or less)	0					2	
TBD	3. Install ENERGY STAR Refrigerator							
TBD	a. ENERGY STAR Qualified & < 25 Cubic Feet Capacity	0		1				
TBD	b. ENERGY STAR Qualified & < 20 Cubic Feet Capacity	0						
TBD	4. Install Built-In Recycling Center or Composting Center							
TBD	a. Built-In Recycling Center	0				1		
TBD	b. Built-In Composting Center	0				1		
TBD	5. Install High-Efficacy Lighting and Design Lighting System							
TBD	a. Install High-Efficacy Lighting	0		1				
TBD	b. Install a Lighting System to IESNA Footcandle Standards or Hire Lighting Consultant	0		1				
Total Available Points in Appliances and Lighting = 13		0	Possible Points					
N. OTHER								
TBD	1. Required: Incorporate GreenPoint Rated Checklist in Blueprints [*This credit is a requirement associated with J4: EPA IAP]	N				R		
TBD	2. Pre-Construction Kick-Off Meeting with Rater and Subs	0		1				
TBD	3. Homebuilder's Management Staff are Certified Green Building Professionals	0		1				

Enter Project Name

4. Develop Homeowner Education										NOTES											
TBD	a. Develop Homeowner Manual of Green Features/Benefits (CAL Green code if applicable) [*This credit is a requirement associated with J4: EPA IAP]										0		1								
TBD	b. Conduct Educational Walkthroughs (Prerequisite is N4a) [*This credit is a requirement associated with J4: EPA IAP]										0				1						
TBD	5. Install a Home System Monitor OR Participate in a Time-of-Use Pricing Program										0			1							
O. COMMUNITY DESIGN & PLANNING										Total Available Points in Other = 6											
TBD	1. Develop Infill Sites											Possible Points									
TBD	a. Project is an Urban Infill Development										0		1				1				
TBD	b. Home(s)/Development is Located within 1/2 Mile of a Major Transit Stop										0		2				2				
TBD	2. Build on Designated Brownfield Site										0		2								
TBD	3. Cluster Homes & Keep Size in Check																				
TBD	a. Cluster Homes for Land Preservation										0		1				1				
TBD	b. Conserve Resources by Increasing Density (10 Units per Acre or Greater)										0		2				2				
TBD	c. Home Size Efficiency										0						0				
	i. Enter Average Unit Square Footage																				
	ii. Enter Average Number of Bedrooms/Unit																				
4. Design for Walking & Bicycling																					
a. Site Has Pedestrian Access Within 1/2 Mile of Community Services:																					
TIER 1: Enter Number of Services Within 1/2 Mile																					
	1) Day Care 2) Community Center 3) Public Park 4) Drug Store																				
	5) Restaurant 6) School 7) Library 8) Farmer's Market 9) After School Programs 10) Convenience Store Where Meat & Produce are Sold																				
	TIER 2: Enter Number of Services Within 1/2 Mile																				
	1) Bank 2) Place of Worship 3) Laundry/Cleaners 4) Hardware																				
	5) Theater/Entertainment 6) Fitness/Gym 7) Post Office																				
	8) Senior Care Facility 9) Medical/Dental 10) Hair Care																				
	11) Commercial Office or Major Employer 12) Full Scale Supermarket																				
TBD	i. 5 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)										0		1								
TBD	ii. 10 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)										0		1								
TBD	b. Development is Connected with A Dedicated Pedestrian Pathway to Places of Recreational Interest Within 1/4 mile										0		1								
TBD	c. Install Traffic Calming Strategies (Minimum of Two):																				
	- Designated Bicycle Lanes are Present on Roadways:																				
	- Ten-Foot Vehicle Travel Lanes:										0		2								
	- Street Crossings Closest to Site are Located Less Than 300 Feet Apart:																				
	- Streets Have Rumble Strips, Bulbouts, Raised Crosswalks or Refuge Islands																				
5. Design for Safety & Social Gathering																					
TBD	a. All Home Front Entrances Have Views from the Inside to Outside Callers										0		1								
TBD	b. All Home Front Entrances Can be Seen from the Street and/or from Other Front Doors										0		1								

Enter Project Name

		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
TBD	c. Orient Porches (min. 100sf) to Streets and Public Spaces	0	1					
TBD	d. Development Includes a Social Gathering Space	0	1					
TBD	6. Design for Diverse Households (6a. is a Prerequisite for 6b. and 6c.)							
TBD	a. All Homes Have At Least One Zero-Step Entrance	0	1					
TBD	b. All Main Floor Interior Doors & Passageways Have a Minimum 32-Inch Clear Passage Space	0	1					
TBD	c. Locate Half-Bath on the Ground Floor	0	1					
TBD	d. Provide Full-Function Independent Rental Unit	0	1					
Total Achievable Points in Community Design & Planning = 35		0						
P. INNOVATION			Possible Points					
A. Site								
1. Stormwater Control: Prescriptive Path (Maximum of 3 Points, Mutually Exclusive with PA2.)								
TBD	a. Use Permeable Paving for 25% of Driveways, Patios and Walkways	0	1					
TBD	b. Install Bio-Retention and Filtration Features	0	2					
TBD	c. Route Downspout Through Permeable Landscape	0	1					
TBD	d. Use Non-Leaching Roofing Materials	0	1					
TBD	e. Include Smart Street/Driveway Design	0	1					
TBD	2. Stormwater Control: Performance Path (Mutually Exclusive with PA1); Perform Soil Percolation Test and Capture and Treat 85% of Total Annual Runoff	0	3					
C. Landscape								
TBD	1. Meet Local Landscape Program Requirement	0						
D. Structural Frame & Building Envelope								
1. Design, Build and Maintain Structural Pest and Rot Controls								
TBD	a. Locate All Wood (Siding, Trim, Structure) At Least 12" Above Soil	0				1		
TBD	b. All Wood Framing 3 Feet from the Foundation is Treated with Borates (or Use Factory-Impregnated Materials) OR Walls are Not Made of Wood	0				1		
TBD	2. Use Moisture Resistant Materials in Wet Areas: Kitchen, Bathrooms, Utility Rooms, and Basements [*This credit is a requirement associated with J4: EPA IAP]	0			1	1		
E. Exterior								
TBD	1. Vegetated Roof (Minimum 25%)	0	2	2				
G. Plumbing								
TBD	1. Greywater Pre-Plumbing (Includes Washing Machine at Minimum)	0					1	
TBD	2. Greywater System Operational (Includes Washing Machine at Minimum)	0					2	
TBD	3. Innovative Wastewater Technology (Constructed Wetland, Sand Filter, Aerobic System)	0					1	
TBD	4. Composting or Waterless Toilet	0					2	
TBD	5. Install Drain Water Heat-Recovery System	0		1				
TBD	6. Install a Hot Water Desuperheater	0		2				
H. Heating, Ventilation, and Air Conditioning								
TBD	1. Humidity Control Systems (Only in California Humid/Marine Climate Zones 1,3,5,6,7) [*This credit is a requirement associated with J4: EPA IAP]	0			1			
TBD	2. Design HVAC System to Manual T for Register Design	0		1				
K. Finishes								

Enter Project Name

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
TBD	1. Materials Meet SMART Criteria (Select the number of points, up to 5 points)	0						
N. Other								
TBD	1. Detailed Durability Plan and Third-Party Verification of Plan Implementation	0						
TBD	2. Educational Signage of Project's Green Features	0						
TBD	a. Promotion of Green Building Practices	0						
TBD	b. Installed Green Building Educational Signage	0						
TBD	3. Innovation: List innovative measures that meet green building objectives. Enter in the number of points in each category for a maximum of 4 points for the measure in the blue cells. Points achieved column will be automatically fill in based on the sum of the points in each category. Points and measures will be evaluated by Build It Green.	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
Total Achievable Points in Innovation = 33+		0						
Q. CALIFORNIA CALGreen CODE			Possible Points					
No	Home meets all applicable CAL Green measures listed in above Sections A - P of the GreenPoint Rated checklist.	N	R					
The following measures are mandatory in the CALGreen code and do not earn points in the GreenPoint Rated Checklist, but have been included in the Checklist for the convenience of jurisdictions. The GreenPoint Rater is not a code enforcement official. The measures in this section may be verified by the GreenPoint Rater at their own discretion and/or discretion of the building official.								
TBD	1. CALGreen 4.106.2 Storm water management during construction.	N						
TBD	2. CALGreen 4.106.3 Design for surface water drainage away from buildings.	N						
TBD	3. CALGreen 4.303.1 As an alternative to prescriptive compliance, a 20% reduction in baseline water use shall be demonstrated through calculation	N						
TBD	4. CALGreen 4.406.1 Joints and openings. Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected	N						
TBD	5. CALGreen 4.503.1 Gas fireplace shall be a direct-vent sealed-combustion type. Woodstove or pellet stove shall comply with US EPA Phase II emission limits	N						
TBD	6. CALGreen 4.505.2 Vapor retarder and capillary break is installed at slab on grade foundations.	N						
TBD	7. CALGreen 4.505.3 19% moisture content of building framing materials	N						
TBD	8. CALGreen 702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.	N						
Total Achievable Points in California Green Code = 0		0						

Summary							
Total Available Points in Specific Categories		35	96+	44	110	56	
Minimum Points Required in Specific Categories		50	0	30	5	6	9

Enter Project Name

Total Points Achieved

Points Achieved

0

0

Community

0

Energy

0

IAQ/Health

0

Resources

0

Water

Notes

Project has not yet met the following recommended minimum requirements:

- Total Project Score of At Least 50 Points
- Required measures:
 - A3a: 50% waste diversion by weight
 - H10a: Compliance with ASHRAE 62.2 Mechanical Ventilation Standards
 - J2: 15% above Title 24
 - N1: Incorporate GreenPoint Rated Checklist into blueprints
- Minimum points in specific categories:
 - Energy (30 points)
 - IAQ/Health (5 points)
 - Resources (6 points)
 - Water (9 points)



The Updated Model Water Efficient Landscape Ordinance

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Landscapes are essential to the quality of life in California. They provide areas for recreation, enhance the environment, clean the air and water, prevent erosion, offer fire protection and replace ecosystems lost to development.

California's economic prosperity and environmental quality are dependant on an adequate supply of water for beneficial uses. In California, about half of the urban water used is for landscape irrigation. Ensuring **efficient landscapes** in new developments and reducing water waste in existing landscapes are the most cost-effective ways to stretch our limited water supplies and ensure that we continue to have sufficient water for California to prosper.

The Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881, Laird) requires cities, counties, and charter cities and charter counties, to adopt landscape water conservation ordinances by January 1, 2010. Pursuant to this law, the Department of Water Resources (DWR) has prepared a Model Water Efficient Landscape Ordinance (Model Ordinance) for use by local agencies. The Model Ordinance was approved by the Office of Administrative Law on September 10, 2009. The Model Ordinance became effective on September 10.

All local agencies must adopt a water efficient landscape ordinance by **January 1, 2010**. The local agencies may adopt the state Model Ordinance, or craft an ordinance to fit local conditions. In addition, several local agencies may collaborate and craft a region-wide ordinance. In any case, the adopted ordinance must be as effective as the Model Ordinance in regard to water conservation.

For more information, please visit our web site at
<http://www.water.ca.gov/wateruseefficiency/landscapeordinance/>



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Important points to consider...



Water purveyors have an important role.

The enabling statute was directed to local agencies that make land use decisions and approve land development. Active participation by water purveyors can make the implementation, enforcement and follow-up actions of an ordinance more effective.

Most new and rehabilitated landscapes are subject to a water efficient landscape ordinance. Public landscapes and private development projects including developer installed single family and multi-family residential landscapes with at least 2500 sq. ft. of landscape area are subject to the Model Ordinance .

Homeowner provided landscaping at single family and multi-family homes are subject to the Model Ordinance if the landscape area is at least 5000 sq. ft

Existing landscapes are also subject to the Model Ordinance.

Water waste is common in landscapes that are poorly designed or not well maintained. Water waste (from runoff, overspray, low head drainage, leaks and excessive amounts of applied irrigation water in landscapes is prohibited by Section 2, Article X of the California Constitution.

Any landscape installed prior to January 1, 2010, that is at least one acre in size may be subject to irrigation audits, irrigation surveys or water use analysis programs for evaluating irrigation system performance and adherence to the Maximum Applied Water Allowance as defined in the 1992 Model Ordinance with an Evapotranspiration Adjustment Factor (ETAF) of 0.8. Local agencies and water purveyors (designated by the local agency) may institute these or other programs to increase efficiency in existing landscapes.

All new landscapes will be assigned a water budget.

The water budget approach is a provision in the statute that ensures a landscape is allowed sufficient water. There are two water budgets in the Model Ordinance; the Maximum Applied Water Allowance (MAWA) and the Estimated Total Water Use (ETWU).

The MAWA, is the water budget used for compliance and is an annual water allowance based on landscape area, local evapotranspiration and ETAF of 0.7. The ETWU is an annual water use estimation for design purposes and is based on the water needs of the plants actually chosen for a given landscape. The ETWU may not exceed the MAWA.

Water efficient landscapes offer multiple benefits.

Water efficient landscapes will stretch our limited water supplies. Other benefits include reduced irrigation runoff, reduced pollution of waterways, less property damage, less green waste, increased drought resistance and a smaller carbon footprint.

The Department of Water Resources will offer technical assistance.

The Department plans to offer a series of workshops, publications and other assistance for successful adoption and implementation of the Model Ordinance or local water efficient landscape ordinances. Information regarding these resources may be found on the DWR website: <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/> Questions on the Model Ordinance may be sent by e-mail to DWR staff at: mweo@water.ca.gov.