



GREEN BUILDING - PRESCRIPTIVE CHECKLIST

MULTI-FAMILY WITH FOUR OR MORE DWELLING UNITS

THESE REQUIREMENTS APPLY TO BUILDING PERMITS SUBMITTED ON OR AFTER OCTOBER 1, 2012

Following is a standardized checklist of CALGreen Mandatory Measures and Build It Green (BIG) requirements that may be used for multi-family buildings to comply with the green building requirements. Items that have been pre-selected are mandated by CALGreen or BIG. Use of the specific points achieved in this checklist is not required; a homeowner/architect can develop a project specific checklist to submit with a development permit application.

BIG Reference	Part of Plan Set	Reference	Description	Comments	City Use Only Field Insp. Verification
AA. Community Design and Planning	<input type="checkbox"/> Sheet: _____	Item 1a 1 Points	Develop Infill Sites - Project is an Urban Infill Development	Infill development reduces pressure to develop greenfields such as open space and farmland by redeveloping abandoned and underutilized sites and buildings. The majority of the residential projects in Sunnyvale will meet this requirement.	Initials: _____ Date: _____
AA. Community Design and Planning	<input type="checkbox"/> Sheet: _____	Item 6a 1 Point	Design for Safety & Vandalism Deterrence - Residence Entries Have Views to Callers (Windows or Double Peep Holes) & Can Be Seen By Neighbors	Design buildings and landscapes to deter crime and promote safety through casual observation and community interaction. At the front entrance install sidelights, doors with integral windows, double-height peepholes or equivalent features that allow occupants of all heights (minimum of 32" from finished floor) and capacities to recognize callers. Windows near the door in the same plane do not qualify. Windows on adjacent or opposite walls do qualify.	Initials: _____ Date: _____
A. Site	<input checked="" type="checkbox"/> Sheet: _____	Item 2a 0 Point Required CALGreen Mandatory	Divert/Recycle Job Site Construction Waste - Minimum 50% by Weight	The City of Sunnyvale has a franchise agreement with Specialty Solid Waste and Recycling. All solid waste materials are required to be disposed of by Specialty Solid Waste and Recycling, which takes all debris to the SMaRT Station. The SMaRT Station recycles a minimum of 50% of construction debris which qualifies for this credit.	Initials: _____ Date: _____
A. Site	<input checked="" type="checkbox"/> Sheet: _____	Item 3a 1 Point CALGreen Mandatory	Covering of duct openings and protection of mechanical equipment	In order to reduce indoor air pollutants, all duct and other air distribution component openings shall be covered with tape, plastic, sheet metal or other approved method to reduce the amount of dust or debris which may collect in the system. Opening shall be covered for all material is store on-site and at rough installation until the startup of the heating and cooling equipment.	Initials: _____ Date: _____
A. Site	<input type="checkbox"/> Sheet: _____	Item 4 1 Point	Use Recycled Content Aggregate (Minimum 25%)	Mining of virgin aggregate may disturb riverbeds and quarries. Recycled aggregate consists mainly of crushed concrete and crushed asphalt pavement. Use aggregate with a minimum of 25% recycled aggregate for the entire project, including: parking lots, walkways, landscape paving, and roadway base.	Initials: _____ Date: _____
A. Site	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	CALGreen Mandatory 4.106.2 Storm water management during construction	Storm water run-off can carry pollutants to the bay. Projects which disturb less than one acre of soil shall manage storm water run-off during construction. Incorporate the "Blueprint for a Clean Bay" plan sheet into the plan set.	Initials: _____ Date: _____

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A. Site	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	CALGreen 4.106.3 Design for surface water drainage away from buildings	Water intrusion into buildings can damage the structure as well as an increase in indoor air pollutants. The site shall be planned and developed to keep surface water from entering buildings. Construction plans shall indicate how the site grading or drainage system will manage surface water flows. This is also a California Residential Code requirement (Section R401.3).	Initials: _____ Date: _____
B. Landscaping	<input type="checkbox"/> Sheet: _____	Item 1b 2 Points	Mulch All Planting Beds a Minimum of 3 Inches	To reduce water consumption by slowing evapotranspiration, all soil surfaces in landscaped areas, excluding lawn area, shall contain a minimum of 3 inches of mulch. In order to maintain a minimum of 3 inches after settlement, initial mulch installation shall be 4 inches in depth. Do not place mulch directly against the plant stem or tree.	Initials: _____ Date: _____
B. Landscaping	<input type="checkbox"/> Sheet: _____	Item 1di 2 points	Minimize Turf Areas in Landscape Installed - Turf Shall Not Be Installed on Slopes Exceeding 10% or in Areas Less than 8 Feet Wide	In order to reduce the run-off and over-spraying that occurs in lawn irrigation, do not install lawn on slopes exceeding 10% or in isolated areas (driveway strips, medians) less than 8 feet wide on the shortest side. However, lawn may be installed in areas less than 8 feet wide when irrigated with subsurface irrigation or micro spray heads.	Initials: _____ Date: _____
B. Landscaping	<input type="checkbox"/> Sheet: _____	Item 1ei 2 points	Install High- Efficiency Irrigation Systems - System Uses Only Low-Flow Drip, Bubblers, or Low-Flow Sprinklers	Efficient irrigation systems apply only the amount of water that the plants need, with little or no waste through run-off, over watering or misting. Irrigate shrub areas with drip, bubblers, or low-flow sprinklers (micro spray) with a maximum flow rate of 1 gallon per minute. Irrigation in lawn areas shall use efficiency spray heads with a maximum flow rate of 1 inch per hour.	Initials: _____ Date: _____
B. Landscaping	<input checked="" type="checkbox"/> Sheet: _____	Item 1eii 3 points CALGreen Mandatory	Install High- Efficiency Irrigation Systems - System has Smart (Weather-Based) Controllers	Install a smart irrigation system which automatically adjusts the irrigation system frequency and/or duration based on changing weather. The smart irrigation system shall include the following features: <ul style="list-style-type: none"> • Automatic adjustments to the irrigation program based on external sensors • Multiple start times • Run-times able to support low-volume applications • Intervals for days of the week or same-day intervals • More than one operating program <p>The system shall include a rain sensing device that prohibits irrigation during rainy weather. Product specifications and product listing information is available on-line at www.BeWaterWise.com.</p>	Initials: _____ Date: _____
D. Foundation, Structural Frame and Building Envelope	<input type="checkbox"/> Sheet: _____	Item 1 1 point	Replace Portland Cement in Concrete with Recycling Flyash or Slag - Minimum 20% Flyash or Slag	Flyash is a byproduct of coal-burning power plants and slag is a byproduct of the steel industry. Both are typically sent to a landfill for disposal; however, they can be used as a replacement for a portion of the Portland cement in concrete. Many local concrete suppliers use a mix that includes 20% of flyash or slag.	Initials: _____ Date: _____

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D. Foundation, Structural Frame and Building Envelope	<input type="checkbox"/> Sheet: _____	Item 4e 1 point	Use Engineered Lumber - Oriented Strand Board (OSB) for Subfloor	Solid-sawn lumber is typically harvested from old-growth forests or large diameter trees. Alternatively, engineered lumber products come from small-diameter, fast-growing plantation trees. Use OSB as an alternative to plywood for subfloors.	Initials: _____ Date: _____
D. Foundation, Structural Frame and Building Envelope	<input type="checkbox"/> Sheet: _____	Item 4f 1 point	Use Engineered Lumber - Oriented Strand Board (OSB) for Wall and Roof Sheathing	Use OSB or other sheathing as an alternative to plywood for wall and roof sheathing.	Initials: _____ Date: _____
D. Foundation, Structural Frame and Building Envelope	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	CALGreen 4.505.2 Vapor retarder and capillary break is installed at slab on grade foundations	In order to resist moisture from penetrating the slab foundation, a capillary break consisted of a 4-inch thick base of 1/2 inch or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete unless a geotechnical engineer recommends otherwise.	Initials: _____ Date: _____
D. Foundation, Structural Frame and Building Envelope	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	CALGreen 4.505.3 19% moisture content of building framing materials	Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content.	Initials: _____ Date: _____
E. Exterior Finish	<input type="checkbox"/> Sheet: _____	Item 1b 1 point	Use Durable and Non-Combustible Siding Materials	In order to promote durability and reduce material consumption with long-lasting products, use metal, stone, brick, stucco, or fiber-cement for exterior building siding (excluding window/door trim).	Initials: _____ Date: _____
E. Exterior Finish	<input checked="" type="checkbox"/> Sheet: _____	Item 2a 0 Point Required	Durable Roofing - All Roofing Has 3-Year Subcontractor Warranty and a 20-Year Manufacturer Warranty	In order to promote durability and reduce material consumption with long-lasting products, roofing shall carry a 3-year subcontractor installation guarantee and at least a 20-year manufacturer's Warranty.	Initials: _____ Date: _____
E. Exterior Finish	<input type="checkbox"/> Sheet: _____	Item 2b 1 point	Use Durable and Fire Resistant Roofing Materials	In order to promote durability and reduce material consumption with long-lasting products, roofing materials for sloped roofs must have a minimum of a 40-year warranty and a 3-year workmanship guarantee and the roofing material or roof assembly must have a Class A fire rating (per ASTM E-180). Roofing materials for flat roofs must have a Class A fire rating (per ASTM E-180) and have a minimum of a 10-year material warranty and a 3-year workmanship guarantee.	Initials: _____ Date: _____
G. Plumbing	<input type="checkbox"/> opt. 1 Sheet: _____	Item 1a 2 points CALGreen Mandatory	Install Only High Efficiency Toilets (Dual-Flush or < 1.28 gpf) (Alternative: 20% water use reduction calculation method may be used - opt. 2)	To reduce potable water consumption and pressure on delivery and sewage infrastructure, install High Efficiency Toilets (HETs), which use less than 1.28 gpf. HETs are available in single or dual-flush, pressure-assist and conventional gravity-flush models. All toilets must be HETs.	Initials: _____ Date: _____

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G. Plumbing	<input type="checkbox"/> opt. 1 Sheet: _____	Item 1bi 1 points CALGreen Mandatory	High Efficiency Urinals with average flush rate \leq 0.5 gpf	To reduce potable water consumption and pressure on delivery and sewage infrastructure, install High Efficiency urinals with average flush rate that does not exceed 0.5 gpf.	Initials: _____ Date: _____
G. Plumbing	<input type="checkbox"/> opt. 1 Sheet: _____	Item 1c 3 points CALGreen Mandatory	Water Efficient Fixtures - High Efficiency Showerheads \leq 2.0 gpm at 80psi (Alternative: 20% water use reduction calculation method may be used - opt. 2)	To reduce potable water consumption and pressure on delivery and sewage infrastructure, install high efficiency showerheads with a flow rate of \leq 2.0 gpm at 80psi. When more than one showerhead is installed in a single shower, the combined flow rate shall not exceed 2.0 gpm or the shower shall be designed to only allow one showerhead to be in operation at a time.	Initials: _____ Date: _____
G. Plumbing	<input type="checkbox"/> opt. 1 Sheet: _____	Item 1d 1 point CALGreen Mandatory	Water Efficient Fixtures - High Efficiency Bathroom Faucets \leq 1.5 gpm at 60psi (Alternative: 20% water use reduction calculation method may be used - opt. 2)	To reduce potable water consumption and pressure on delivery and sewage infrastructure, install high efficiency bathroom faucets with a flow rate of \leq 1.5 gpm at 60 psi.	Initials: _____ Date: _____
G. Plumbing	<input type="checkbox"/> opt. 1 Sheet: _____	Item 1d 1 point CALGreen Mandatory	Water Efficient Fixtures - High Efficiency Kitchen and Utility Faucets \leq 1.8 gpm at 60psi (Alternative: 20% water use reduction calculation method may be used - opt. 2)	To reduce potable water consumption and pressure on delivery and sewage infrastructure, install high efficiency kitchen faucets with flow rate of \leq 1.8 gpm at 60 psi.	Initials: _____ Date: _____
G. Plumbing	<input type="checkbox"/> opt. 2 Sheet: _____	0 Point CALGreen Mandatory	CALGreen 4.303.1 As an alternative to prescriptive compliance, a 20% reduction in baseline water use shall be demonstrated through calculation	As an alternative to Water Efficient Fixture requirements above for showerheads, bathrooms faucets, kitchen faucets, and toilets, a 20% reduction in potable water use shall be demonstrated through calculations. These calculations are available in the CALGreen section 5.303.2.	Initials: _____ Date: _____
G. Plumbing	<input type="checkbox"/> Sheet: _____	Item 2a 2 points	Distribute Domestic Hot Water Efficiently - Insulate All Hot Water Pipes	To reduce water wasted at plumbing fixtures while waiting for hot water to arrive and save energy for heating water, insulate all hot water pipes from the water heater to the fixture. Pipe insulation must be a minimum of 1" foam on the entire run of the hot water piping system for pipe less than or equal to 2" diameter and 1.5" for pipe greater than 2" diameter.	Initials: _____ Date: _____

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H. HVAC	<input checked="" type="checkbox"/> Sheet: _____	Item 3bii 1 Point	Install Mechanical Ventilation System for Cooling - Install Whole House Fan	Whole house fans are used instead of an air conditioner to cool a house at night. They exhaust warm indoor air and bring in large volumes of cool outdoor air. Install a whole house fan that has an insulated, airtight sealed cover to prevent air and heat leakage through the fan assembly. The whole house fan shall be properly sized.	Initials: _____ Date: _____
H. HVAC	<input checked="" type="checkbox"/> Sheet: _____	Item 4a 0 Point Required	Advanced Mechanical Ventilation for IAQ - Compliance with ASHRAE 62.2 Mechanical Ventilation Standards	Mechanical fresh air ventilation helps maintain indoor air quality by ensuring a steady supply of fresh outdoor air for diluting and removing indoor air contaminants. Install a mechanical ventilation system that meets ASHRAE 62.2. This is also a requirement of the 2008 California Energy Efficiency Standards section.	Initials: _____ Date: _____
H. HVAC	<input checked="" type="checkbox"/> Sheet: _____	Item 4d 1 Point	Install ENERGY STAR Bathroom Fans Controlled by a Humidistat	Excessive moisture resulting from poor ventilation is one of the main causes of mold issues and building failures. Install ENERGY STAR fans controlled by a humidistat in all bathrooms and vent them to the outside.	Initials: _____ Date: _____
H. HVAC	<input type="checkbox"/> Sheet: _____	Item 6 1 point	Install Carbon Monoxide Alarms (or No Combustion Appliances in Living Space and No Attached Garage)	Carbon monoxide is a dangerous gas emitted from fuel-burning appliances such as stoves, cooktops, water heaters, furnaces, gas space heaters, and fireplaces, as well as from cars and gasoline powered landscape equipment. Alarms must be installed in areas with fuel burning appliances, such as in kitchens, in hallways near bedrooms, and near doors to attached garages.	Initials: _____ Date: _____
H. HVAC	<input checked="" type="checkbox"/> Sheet: _____	P. Item H1 4 points CALGreen Mandatory	Properly Design and Install HVAC System to ACCA Manual J, D, and S Recommendations	Design and install the HVAC system according to the results obtained from house-specific calculations using Manual J (the home's heat load calculation), Manual D (ductwork, design and sizing) and Manual S (equipment selection and sizing). This is also a requirement of the California Energy Efficiency Standards.	Initials: _____ Date: _____
H. HVAC	<input type="checkbox"/> Sheet: _____	P. Item H3 1 Point	Install High Efficiency HVAC Filter (MERV 6+)	HVAC filters remove particulates from the air. Install HVAC filters that have a minimum rating of MERV 6. These are typically the filters with corrugated material. These filters are recommended for cleaner air without compromising the performance of standard mechanical systems.	Initials: _____ Date: _____
H. HVAC	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	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	To reduce the pollutants resulting from burning wood, all fireplaces shall be gas-fueled and shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA Phase II emission limits.	Initials: _____ Date: _____

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H. HVAC	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	CALGreen 702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems	Installation of the HVAC systems is essential for the system to operate as efficiency as designed. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program (e.g. State contractor license).	Initials: _____ Date: _____
J. Building Performance	<input type="checkbox"/> Sheet: _____	Item 1a 30 Points	Design and Build High Performance Homes - 15% above Title 24	Design and build the home to exceed the minimum Title-24 Energy Efficiency Regulations by at least 15%.	Initials: _____ Date: _____
J. Building Performance	<input type="checkbox"/> Sheet: _____	Item 4 1 Point	Title 24 Prepared and Signed by a CABEC Certified Energy Plans Examiner (CEPE)	Certified Energy Plans Examiners (CEPE) have undergone a certification process by the California Association of Building Energy Consultants (CABEC) to demonstrate their experience and ability in completing energy compliance calculations.	Initials: _____ Date: _____
J. Building Performance	<input checked="" type="checkbox"/> Sheet: _____	0 Point CALGreen Mandatory	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	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 a similar approved method. Openings in the building envelope separating conditioned space from unconditioned space needed to accommodate gas, plumbing, electrical lines and other necessary penetrations must be sealed in compliance with the California Energy Efficiency Standards.	Initials: _____ Date: _____
K. Finishes	<input type="checkbox"/> Sheet: _____	Item 1a 1 Point	Design Entryways to Reduce Tracked-In Contaminants	The most effective way to avoid tracking contaminants into the home is for people to remove their shoes upon entering. Design and build a hard surface area at the home's main entrance that offers room to comfortably take off shoes. This area must also include a permanently installed shelves, drawers, or cubbies for shoe storage that is overtly obvious to visitors. Coat closets do not qualify.	Initials: _____ Date: _____
K. Finishes	<input type="checkbox"/> Sheet: _____	Item 2 1 Point	Use Recycled Content Paint	To encourage the use of recycled materials, use a recycled content paint with a minimum 20% recycled-content paint (post-consumer) on at least half of all exterior walls. Recycled-content can be post-industrial, post-consumer, or some combination thereof. Post-industrial (pre-consumer) recycled content is counted at half the rate of post-consumer recycled content.	Initials: _____ Date: _____

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K. Finishes	<input checked="" type="checkbox"/> Sheet: _____	Item 3a 1 Point CALGreen Mandatory	Use Low-VOC or Zero-VOC Paint - Low-VOC Interior Wall/Ceiling Paints (<50gpl VOCs)	Most interior paints contain volatile organic compounds (VOCs), a major class of indoor and outdoor air pollutants. Solvents contained in the product are released into the air, impacting indoor air quality and be may harmful to children and chemically sensitive individuals. Use low VOC primer and paint on all interior walls and ceiling (the trim is exempt). These products shall also meet the VOC limits in Table 4.504.3 of the 2010 California Green Building Code. ¹	Initials: _____ Date: _____
K. Finishes	<input checked="" type="checkbox"/> Sheet: _____	Item 3c 2 Points CALGreen Mandatory	Use Low-VOC Coatings that Meet SCAQMD Rule 1113	Conventional petroleum-based wood finishes can off-gas toxic compounds for months and can be harmful to children and chemically sensitive individuals. Use lower VOC wood finishes, stains or coatings that meet the South Coast Air Quality Management District (SCAQMD) Rule 1113 ² for Architectural Coatings standards. These products shall also meet the VOC limits in Table 4.504.3 of the 2010 California Green Building Code. ¹	Initials: _____ Date: _____
K. Finishes	<input checked="" type="checkbox"/> Sheet: _____	Item 4 1 Points CALGreen Mandatory	Use Low-VOC Caulks, Construction Adhesives and Sealants that Meet SCAQMD Rule 1168	Conventional caulks and construction adhesives may off-gas toxic compounds for months. Use caulks and adhesives that meet the South Coast Air Quality Management District (SCAQMD) Rule 1168 ³ for Adhesive and Sealant Applications standards. The limits in Table 4.504.1 and Table 4.504.2 of the 2010 California Green Building Code ¹ may be used to meet this requirement.	Initials: _____ Date: _____
K. Finishes	<input checked="" type="checkbox"/> Sheet: _____	0 Points CALGreen Mandatory	CALGreen 4.504.2.3 Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and VOC limits	Conventional caulks and construction adhesives may off-gas toxic compounds. Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC and regulations for toxic compounds and ozone depleting substances in Section 94522(a)3, 94522(c)(2) and 94522(d)(2) of California Code of Regulations, Title 17. ⁵ Paints and coatings shall also meet the VOC limits of the Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 49. ⁴	Initials: _____ Date: _____
K. Finishes	<input checked="" type="checkbox"/> Sheet: _____	Item 7 0 Point CALGreen Mandatory	Reduce Formaldehyde in Interior Finish - Meet Current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits	To reduce formaldehyde levels in indoor air, hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in CARB's Air Toxic Control Measure for Composite Wood. Formaldehyde limit: Hardwood plywood veneer core: < 0.05ppm Hardwood plywood composite core: < 0.08ppm Particleboard: < 0.09ppm Medium density fiberboard: < 0.11ppm Thin medium density fiberboard (8mm max): < 0.21ppm	Initials: _____ Date: _____

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L. Flooring	<input checked="" type="checkbox"/> Sheet: _____	Item 4 0 Point CALGreen Mandatory	All carpet and 50% of Resilient Flooring is low emitting	<p>To promote use of products that require less intensive natural resource use to manufacture, all carpet installed shall meet the testing and product requirements of one of the following:</p> <ul style="list-style-type: none"> • Carpet and Rug Institute's Green Label Plus Program. • California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350). • NSF/ANSI 140 at the Gold level. • Scientific Certifications Systems Indoor Advantage™ Gold. <p>All carpet cushion installed shall meet the requirements of the Carpet and Rug Institute Green Label program. All carpet pad adhesives used shall have VOC content no more than 50 gpl.</p> <p>Where resilient flooring is installed, at least 50% of floor area receiving resilient flooring shall comply with the VOC emission limits defined in the Collaborative for High Performance Schools (CHPS) Low-emitting Materials List or certified under the Resilient Floor Covering Institute (RFCI) FloorScore program.</p>	Initials: _____ Date: _____
M. Appliances and Lighting	<input type="checkbox"/> Sheet: _____	Item 1a 2 Points	Install ENERGY STAR Dishwasher	High efficiency dishwashers use less water and energy than conventional dishwashers. They reduce energy use by at least 31% and water use by at least 33% compared to conventional dishwashers. Install a dishwasher that is ENERGY STAR rated.	Initials: _____ Date: _____
M. Appliances and Lighting	<input type="checkbox"/> Sheet: _____	Item 1bi 3 Point	Install ENERGY STAR Clothes Washer	To reduce energy consumption, install clothes washers that meet ENERGY STAR and CEE Tier 2 requirements. (Modified Energy Factor ≥ 2.0 ; Water Factor ≤ 6.0)	Initials: _____ Date: _____
M. Appliances and Lighting	<input type="checkbox"/> Sheet: _____	Item 1ci 1 Point	Install ENERGY STAR Refrigerator - ENERGY STAR Qualified & < 25 Cubic Feet Capacity	Refrigerators and freezers are among the largest users of electricity in most homes. They can account for up to 25% of household energy use. Install a refrigerator that is ENERGY STAR rated and less than 25 cubic feet (including the freezer).	Initials: _____ Date: _____
M. Appliances and Lighting	<input type="checkbox"/> Sheet: _____	Item 3 1 Point	Install Built-In Recycling Center	To increase the rate of recycling by making it easier, co-locate trash & recycling into a two bin minimum (1 trash, 1 recycling) assembly built into kitchen cabinets. Separately located bins or bins in the garage utility room do not qualify.	Initials: _____ Date: _____
M. Appliances and Lighting	<input type="checkbox"/> Sheet: _____	Item 5a 1 Point	Install High-Efficacy Lighting	To reduce energy consumption for lighting, install high-efficacy lighting for all permanently installed luminaires in the home.	Initials: _____ Date: _____

BIG Reference	Part of Plan Set	Reference	Description	Comments	City Use Only Field Insp. Verification
N. Other	<input checked="" type="checkbox"/> Sheet: _____	Item 1 0 Point Required	Incorporate GreenPoint Rated Checklist (Green Building - Prescriptive Checklist) in Blueprints	Incorporating the GreenPoint checklist into the blueprints makes it easier for everyone involved—including the builder, homebuyer and municipality—to see which green features are included in the home. Include a copy of the GreenPoint checklist on a plan sheet as part of the plans submitted for the building permit review and issuance.	Initials: _____ Date: _____
N. Other	<input checked="" type="checkbox"/> Sheet: _____	Item 3a 1 Points CALGreen Mandatory	Develop an Operating and Maintenance Manual	<p>An operating and maintenance manual that includes the following information shall be provided to the building occupant or owner.</p> <ol style="list-style-type: none"> 1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure. 2. Operation and maintenance instructions for the following: <ol style="list-style-type: none"> a. Equipment and appliances, including water-saving devices and systems, HVAC systems, water-heating systems and other major appliances and equipment. b. Roof and yard drainage, including gutters and downspouts. c. Space conditioning systems, including condensers and air filters. d. Landscape irrigation systems. e. Water reuse systems. 3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations. 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30% - 60% and what methods an occupant may use to maintain the relative humidity level in that range. 6. Information about water-conserving landscape and irrigation design and controllers which conserve water. 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation. 8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc. 9. Information about state solar energy and incentive programs available. 10. A copy of all special inspection verifications required by the enforcing agency or the building codes. 	Initials: _____ Date: _____

ALTERNATIVE POINTS

Following are alternative items that may be used in place of the standard items listed above. When substituting items, ensure that the total points substituted are equal to or greater than the standard point items removed.

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AA. Community Design and Planning	<input type="checkbox"/> Sheet: _____	Item 2c 1 Points	Provide Dedicated, Covered & Secure Bicycle Storage for 15% of Residents	To encourage bicycling as an alternative to traveling by car, install bike racks/storage for for minimum 15% of the residents. Bike racks should be bolted to the ground.	Initials: _____ Date: _____
AA. Community Design and Planning	<input type="checkbox"/> Sheet: _____	Item 3bii 2 Points	Proximity to Public Transit - Located Within ½ Mile of Major Transit Stop (Commuter Train/Light Rail Transit System OR Two or More Planned/Current Bus Line Stops)	To encourage use of alternative transportation, locate developments in close proximity to public transit. Major transit stop is defined as a light rail, subway, passenger rail, ferry stop or at least two or more existing, or planned (and funded) bus lines, constituting 60 or more transit rides per weekday (combined bus, rail, and ferry) AND 40 weekend trips (weekend trips must be met on Saturday and Sunday).	Initials: _____ Date: _____
B. Landscaping	<input type="checkbox"/> Sheet: _____	Item 1a 2 Points	Group Plants by Water Needs (Hydrozoning)	Groups all plants in hydrozones in accordance with their respective water, cultural (soil, climate, sun and light) and maintenance needs. Zones should include at least high and low zones. Install separate irrigation valves for different zones. Turf is included in this measure. Landscapes with a single low watering zone meet the criteria for this measure.	Initials: _____ Date: _____
J. Building Performance	<input type="checkbox"/> Sheet: _____	Item 2 ____ % >15% ____ Points	Design and Build High Performance Homes - >15% above Title 24	Design and build the home to exceed the minimum Title-24 Energy Efficiency Regulations by at least 15%. 2 points for each additional 1% exceeding the 15%.	Initials: _____ Date: _____
K. Finishes	<input type="checkbox"/> Sheet: _____	Item 1b 1 Point	Entryway Permanent Walk-Off Systems	To reduce tracking contaminants into the home, install a deliberate and obvious hard surface area at every entrance to the building. A built-in, permanent walk-off mat or grill (for a minimum of 6 feet of continuous travel) shall be provided at the entrance to the building.	Initials: _____ Date: _____
M. Appliances and Lighting	<input type="checkbox"/> Sheet: _____	Item 2 1 Point	Common Laundry Facilities Are Provided for All Occupants	In order to reduce water and energy used in clothes washing by discouraging small loads, provide common laundry facilities. Locate clothes washers and dryers in central areas that are accessible to all occupants. Do not install clothes washers and dryers in individual units.	Initials: _____ Date: _____

Footnotes/Resources:

- ¹ 2010 California Green Building Standards Code (CALGreen)
http://www.hcd.ca.gov/codes/shl/2010_CA_Green_Bldg.pdf
- ² South Coast Air Quality Management District (SCAQMD) Rule 1113 for Architectural Coatings standards
<http://www.aqmd.gov/rules/reg/reg11/r1113.pdf>
- ³ South Coast Air Quality Management District (SCAQMD) Rule 1168 for Adhesive and Sealant Applications standards
<http://www.aqmd.gov/rules/reg/reg11/r1168.pdf>
- ⁴ Bay Area Air Quality Management District Regulation 8, Rule 49 - Aerosol Paint Products
<http://www.arb.ca.gov/drdb/ba/curhtml/r8-49.htm>
- ⁵ Searchable database for California Code of Regulations (See Title 17, Section 94522 for aerosol paints and coatings regulations)
<http://ccr.oal.ca.gov/linkedslice/default.asp?SP=CCR-1000&Action=Welcome>