



CITY OF OAKLAND'S GREEN BUILDING ORDINANCE FOR



PRIVATE DEVELOPMENT PROJECTS

"City of Oakland's Sustainable Green Building Requirements for Private Development Ordinance to Establish Environmentally Sustainable Regulations for Building Construction, Remodeling, Landscaping and Demolition" - Oakland Municipal Code Chapter 18.02

The City of Oakland has long recognized the importance of green building and becoming a more sustainable city. The City's commitment to this effort began in 1998 with adoption of the Sustainable Community Development Initiative. One of those goals was to "Develop a Sustainable City", by "maximizing socially and environmentally sustainable growth, including conserving natural resources. Language pertaining to energy, water conservation within buildings and landscapes was included in planning documents such as the Open Space and Recreation Element of the General Plan (1998) and the Housing Element (2004). In 2005 the City adopted a civic green building ordinance requiring green performance in major civic projects. Also in 2005, the City of Oakland joined many other municipalities in signing the United Nations World Environment Day Urban Environmental Accords which committed the City to address energy, waste reduction, urban design, urban nature, transportation, environmental health and water.

In 2007, policy makers began the process of adopting a Green Building Ordinance for Private Development Projects. After an extensive public process including multiple stakeholder meetings, community meetings, and public hearings, the Oakland City Council adopted the Green Building Ordinance for Private Development Projects on October 19, 2010 (13040 C.M.S.) This Ordinance became effective on January 1, 2011.

The purpose and intent of the Ordinance is to promote economic development and enhance the health, safety and welfare of Oakland's residents, workers, and visitors through the integration of environmentally sustainable strategies in building construction and landscapes within the City.

To see the entire ordinance and other information pertaining to green building, please visit Oakland's Green Building Website at www.oaklandgreenbuilding.com.

What is Green Building?

Green building is a sustainable, holistic, whole systems approach to the life-cycle of building which includes the building's location, design, construction, operation, and finally demolition.

In practical terms, green buildings reduce energy use, conserve water indoors and out, limit waste during construction and operation, and promote healthy indoor air quality. Green building techniques include choosing an appropriate location away from habitats and greenfields near infill development or on an already developed lot and near transit; orienting a building to take advantage of passive heating and cooling; and reusing buildings or, alternatively, using recycled or sustainable products that preserve nonrenewable natural resources. These buildings also include installation of high efficiency systems to

reduce energy and water consumption. Green buildings benefit an occupant's health through the use of healthy building materials, including zero to low Volatile Organic Compound (VOC) and formaldehyde free products.

Green landscapes improve water quality and enhance wildlife habitat by reducing fertilizer and pesticide use. In addition, green landscapes nurture healthy soils and, prevent erosion and runoff, reduce waste through use of recycled content hardscape materials, and conserve water and energy.

Why is Green Building important?

The demolition and construction of buildings and landscapes have an impact on the environment, the economy, and our health. In the US, according to the Environmental Protection Agency (EPA), buildings account for:

- 36% of total energy use
- 65% of electricity consumption
- 39% of carbon dioxide emissions
- 30% of greenhouse gas emissions
- 30% of raw materials use
- 26% of waste output
- 13% of potable water consumption
- Furthermore, Americans spend 90% of their time indoors and typically indoor air pollution is 2-5 times worse inside than outside.

In California, buildings are the second largest contributor to California's greenhouse gas emissions. The California Air Resources Board estimates that one-quarter of the greenhouse gases emitted in California can be attributed to buildings. Furthermore, 7% of the all materials disposed of in Alameda County landfills are from landscape construction, renovation and maintenance and the largest use of urban water is for landscape watering. Addressing these statistics is important to achieving the state's and Oakland's sustainable goals.

What projects does Oakland's Green Building Ordinance apply to? What projects are exempt?

The extent to which your development or construction will be regulated by the Green Building Ordinance depends upon the type of work you are doing and how large the project is. In general the ordinance applies to the following project types.

- Residential New Construction
- Residential Additions and Alterations to Single-Family Homes
- Non-Residential New Construction
- Non-Residential Additions and Alterations
- Removal of a Historic Resource and New Construction
- Affordable Housing Construction receiving City/Redevelopment Agency Funds
- Mixed-Use Construction
- Construction requiring a Landscape Plan

The ordinance does not apply to the following project types.

- Fences, decks, arbors, pergolas, retaining wall, and sign construction only.
- Secondary dwelling units, as defined in the Oakland Planning Code Section 17.102.360 only.
- Repair or replacement of roof covering, fenestration, and façade materials only.
- Group U detached accessory buildings which do not exceed 1,000 square feet of floor area only.
- Construction, additions, and alterations which are exempted from the permitting requirements both of the Oakland Building Construction Code and the Oakland Planning Code. Factory-built buildings approved by the State of California and manufactured housing approved by the United States Department of Housing and Urban Development.
- City and Redevelopment Agency capital improvement construction, alterations, and additions which are subject to Chapter 15.68 of the Oakland Municipal Code or the Bay-Friendly Landscaping Guidelines.
- Seismic retrofits only.
- Fire repairs to buildings that are damaged less than 75% of the current replacement cost per Section 17.114.120 of the Oakland Planning Code.

What green building standards is the Ordinance based on?

The Ordinance references national, statewide, and local green building rating systems (standards). The applicable rating systems/standards are summarized below. **Only these rating systems can be used to comply with the Ordinance.**

Leadership in Energy and Environmental Design (LEED)

LEED is a national green building program developed by the U.S. Green Building Council (USGBC) and is typically used for commercial, civic, and high-rise residential projects. LEED is a point based system. Projects must pre-qualify by meeting several pre-requisites. The project team then designs green features into the project to qualify for points from a specific checklist. The points are tallied to achieve a green building rating. There are also a minimum number of points required to be achieved in the Energy Efficiency category. The USGBC or the Green Building Certification Institute (GBCI) reviews the documentation and certifies that the project is a LEED building having met the requirements. LEED is not tied directly to the California Building Code. For LEED projects, the Ordinance requires that a LEED Accredited Professional (AP) be a member of the project team.

In the Oakland Green Building Ordinance, the LEED rating system is used for 1) new construction, 2) remodeling of non-residential (commercial and civic non-City) projects that are over 25,000 S.F. in size and 3) possibly mixed use projects. The Ordinance specifies which checklist should be used (Required) and which checklists are considered “Alternate.” In general, “Alternate” checklists either include more stringent green building measures or measures more applicable to the specific project. For example, a new school could choose either the LEED New Construction Checklist or the LEED for Schools checklist. Only the “Alternate” checklists listed are applicable to the project. The checklist identifies which points are available for inclusion in the project. **Applicants should visit the website (www.oaklandgreenbuilding.com and the Policies and Requirements page) to view the applicable requirements (thresholds) and download the interactive checklists. A completed checklist is required for a complete permit application.**

LEED Checklists

- New Construction and Major Renovations Checklist
- Existing Building Operation and Maintenance Checklist: **Alternate**
- Commercial Interiors Checklist **Alternate**
- Core and Shell Development Checklist **Alternate**
- Schools New Construction and Major Renovations Checklist **Alternate**
- New Home Checklist: **Alternate**
- Retail Checklist: **Alternate**

Build It Green and GreenPoint Rated

Build It Green developed the GreenPoint Rated green building rating system. GreenPoint Rated is based solely in California with practices that exceed the California Building Code. This program is standard for residential projects. Build It Green does not have a rating system for commercial projects. GreenPoint Rated is a point based system. Projects must pre-qualify by meeting several pre-requisites. The project team then designs green features into the project to qualify for points from a specific checklist. The points are tallied to achieve a green building rating. Build It Green reviews the documentation and certifies that the project is a GreenPoint Rated building having met the requirements. A GreenPoint Rater is required.

In the Oakland Green Building Ordinance, the Build It Green rating system is used for 1) new construction, 2) remodeling of residential projects and 3) possibly mixed use projects. The Ordinance specifies which checklist should be used and identifies which points are available for inclusion in the project. There are no “Alternate” checklists for residential projects. **Applicants should visit the website (www.oaklandgreenbuilding.com and the Policies and Requirements page) to view the applicable requirements (thresholds) and download the interactive checklists. A completed checklist is required for a complete permit application.**

GreenPoint Rated Checklists

- Existing Home Checklist (for additions and alterations to a single family house or duplex): **The ordinance only requires that the Elements label be met, not the Whole House label.¹**
- Single-Family New Construction Checklist
- Multi-Family New Construction Checklist

**** Note: Currently there is no checklist for multi-family building (3 units+) additions or alterations but City staff anticipates that this will be available in the Fall of 2011. Until this rating system is developed additions or alterations to multi-family buildings cannot submit a checklist and, therefore are not mandated to include “green” features or systems in the project and reach certification. However, City staff does encourage applicants of these projects to include as many “green” construction techniques as possible using the Multi-Family New Construction guidelines.**

¹ Under the Existing Home Green Points Checklist, Build It Green offers two certification labels: Elements and Whole House. The Elements label is for smaller remodels such as a kitchen or bathroom remodel or addition. The Whole House label is for larger more comprehensive remodels that generally affect the building’s mechanical, plumbing, and electrical system.

StopWaste.Org's Small Commercial Checklist and Bay-Friendly Basic Landscape Checklist

StopWaste.Org of the Alameda County Waste Management Authority has developed the Small Commercial Checklist for non-residential projects where LEED is infeasible or impractical and the Bay Friendly Basic Landscape Checklist for landscape projects. Neither of these checklists is point based. A measure is either applicable and must be incorporated into the project or not applicable. In general, both checklists contain best management practices and easily attainable green building features. The Small Commercial Checklist and the Bay Friendly Basic Landscape Checklist do not have a third party rater or certification process like LEED or GreenPoint Rated. However, a project applicant can hire a qualified Bay Friendly landscape professional to help implement the requirements. The City will verify compliance with these checklists.

In the Oakland Green Building Ordinance, the StopWaste.Org Small Commercial Checklist is generally used for non-residential (commercial and civic non-City) projects that are under 25,000 S.F. The Bay Friendly Basic Landscape Checklist is used for all projects that require a landscape plan. The Ordinance specifies which checklist should be used (Required) and which checklists are considered "Alternate." In general, "Alternate" checklists either include more stringent green building measures or measures more applicable to the specific project. These checklists are not point based. Either the point is applicable to the project or is not applicable. **Applicants should visit the website (www.oaklandgreenbuilding.com and the Policies and Requirements page) to view the applicable requirements (thresholds) and download the interactive checklists. A completed checklist is required for a complete permit application.**

StopWaste.Org: Green Building in Alameda County

- Small Commercial Checklist
- Bay Friendly Basic Landscape Checklist
- Bay Friendly Scorecard for Home Landscapes: **Alternate**
- Bay Friendly Scorecard for Commercial and Civic Landscapes: **Alternate**

Again, all of the rating systems and checklists can be reviewed by visiting the Green Building website at www.oaklandgreenbuilding.com.

How does the state's green building code (CALGreen) relate to the City's Ordinance?

The state of California recently adopted the new Green Building Code known as CALGreen. CALGreen applies only to new construction of residential and non-residential projects and includes both mandatory measures and voluntary Tiers. The City of Oakland adopted the CALGreen mandatory measures but did not adopt the Tiers.

LEED is not tied directly to the California Building Code. This means that LEED will be more stringent for certain green measures, equal to CALGreen for some measures, and less stringent than CALGreen for other measures. A project that must meet LEED per the City's Ordinance might need to implement extra green features to meet both the LEED and the state Green Building Code requirements (CALGreen).

GreenPoint Rated is based solely in California with practices that meet or exceed the California Building Code including CALGreen Building Code and Title 24. The GreenPoint Rated checklists include all of the CALGreen mandatory measures.

The Small Commercial Checklist is also tied to the California Building Code. The checklist includes many of the CALGreen mandatory measures. Non-residential new construction projects that are under the City's threshold (5,000 S.F.) for compliance with the Small Commercial Checklist will only need to meet CALGreen.

City staff has provided reference guides on the website (www.oaklandgreenbuilding.com) that show the differences between CALGreen, LEED, and GreenPoint Rated.

What does the Ordinance require for my project?

The Ordinance requires that:

- 1) the project applicant complete the applicable green building checklist,
- 2) the project applicant retain a LEED Accredited Professional (AP) for non-residential LEED projects or GreenPoint Rater for residential projects to review the plans and attest that the project can meet the Ordinance,
- 3) the project meet state green building requirements (CALGreen) for residential and non-residential new construction projects,
- 4) the project meet all the pre-requisites per the green building checklist, the required number of points in the checklist credit categories, and a minimum level of green building per the Green Building Ordinance, and
- 5) if applicable, attain third-party certification if the Ordinance requires a project to use a LEED or GreenPoint Rated checklist. For projects using the Small Commercial Checklist or the Bay Friendly Basic Landscape Checklist, the City will certify that the project has complied with the Ordinance.

In general, a project must meet the following minimums:

- Residential New Construction – **50 points on a Greenpoint Rated Checklist**
- Residential Additions and Alterations to Single-Family Homes - **25 points on a Greenpoint Rated Checklist**
- Non-Residential New Construction and Additions or Alterations under 25,000 Square feet – **All applicable points**
- Non-Residential New Construction and Additions and Alterations over 25,000 Square feet – **LEED Silver (50-59 points)**
- Removal of a Historic Resource and New Construction – **LEED Gold (60-79 points) or 75 points on a Greenpoint Rated Checklist**
- Affordable Housing Construction receiving City/Redevelopment Agency Funds - **50 points on a Greenpoint Rated Checklist or which ever point requirement was noted on the funding application**
- Mixed-Use Construction – **LEED Silver (50-59 points) or 50 points on a Greenpoint Rated Checklist**
- Construction requiring a Landscape Plan – **All applicable points**

What is required to be submitted to the Planning and Zoning Division?

Green Building Application Form: The application form must be signed and completed. Original signatures or clear & legible copies are required. All submittal requirements indicated in the application form must also be submitted in addition to the materials required for Green Building.

Applicable and Completed Green Building Checklist

Permit Plans: The plans should show in general notes, individual drawings, details, and specifications as appropriate, the green building measures that will be implemented to achieve compliance with the ordinance. Label green building checklist features on plans (site plan, elevations, floor plans, details, rendering, etc). Ideally the applicant should provide a chart on the plans broken into 1) the number of credits detailed in the plans and 2) the number of credits anticipated in the project description. This will facilitate plan review.

Signed Statement by the Green Building Certifier (i.e. the GreenPoint Rater or LEED AP): The Ordinance requires that this person must review the plans and attest that the project meets the minimum requirements of the ordinance.

Copy of Green Building Certifier's licensing certificate: This could be the actual certificate issued by the rating program or a printout of the person's information from the applicable rating program's website.

Other documentation as needed to determine compliance: This will be determined by the project case planner upon review of the project.

How will my project be reviewed by the Planning and Zoning Division for compliance with the Ordinance?

The City will determine whether the project is subject to the Ordinance and which checklist should be completed and submitted. Upon submittal of a permit application, the City will ensure that all the documentation listed above has been submitted. If the documentation has not been submitted the project will be considered incomplete until the documentation has been submitted. The City will review the green building checklist for accuracy and will determine whether the project has met the minimum requirements of the Ordinance. If the project has met the requirements and the City is recommending approval of the project, the case planner will attach conditions to ensure the development or work is carried out in conformance with the Ordinance. If the project is not meeting the requirements, then the City cannot approve the application. The project applicant must revise the application to meet the Ordinance or submit an application for an Unreasonable Hardship Exemption if there are extraordinary or extenuating circumstances and the project cannot meet the requirements.

Unreasonable Hardship circumstances do not mean economic hardship; rather, the statement "the public interest is not served by strict adherence to the Ordinance" refers to physical attributes of the site or building that do not allow for the green building pre-requisites to be met or other the minimum standards of the Ordinance to be fully met. However, the project must still meet all Building Code requirements including the Title 24, Part 6 energy requirements and CALGreen. An applicant can apply for either a partial or whole exemption. However, the Unreasonable Hardship Exemption is a discretionary decision and the Director of Planning can approve, deny, and/or determine the maximum feasible credits for the project. This decision is appealed to the City Planning Commission.

What is required for approval of a Planning and Zoning permit and compliance with the Green Building Ordinance?

If the project meets the Ordinance and the City is recommending approval of the project, approval of the project can be issued. The following are the conditions of permit approval that will be required for

projects in order to comply with the Ordinance. (This list is not inclusive and other conditions may be imposed).

The applicant will be required to:

- Submit specific green building information to the Building Services Division during the building plancheck and construction inspection process.
- Conform to Title 24 Energy Efficiency and the mandatory measures of the state Green Building Code (CALGreen).
- Meet all pre-requisites of the appropriate green building rating system and checklist.
- Meet the minimum requirements (point/certification level) of the Green Building Ordinance.
- Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to either Build It Green or the Green Building Certification Institute and attain the minimum certification/point level identified in the Ordinance.
- Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Planning and Zoning Division, the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level per the Ordinance.

What is required to be submitted to the Building Services Division?

Green Building Application Form: The application form must be signed and completed. Original signatures or clear & legible copies are required. All submittal requirements indicated in the application form must also be submitted.

The Applicable and Completed Green Building Checklist approved during review of the Planning and Zoning Permit

Permit Plans: The plans should show in general notes, individual drawings, details, and specifications as appropriate, the green building measures that will be implemented to achieve compliance with the ordinance.

Signed Statement by the Green Building Certifier (i.e. the GreenPoint Rater or LEED AP) during review of the Planning and Zoning Permit and a new Signed Statement by the Green Building Certifier (i.e. the GreenPoint Rater or LEED AP) that the project still meets the requirements of the Ordinance: The Ordinance requires that this person must review the plans and attest that the project meets the minimum requirements of the ordinance.

Other documentation as needed to determine compliance: This will be determined by the project case planner upon review of the project.

Can I substitute or eliminate green building points during the plancheck, and/or inspections phase?

Yes. The City understands that as a project goes from conceptual design through the construction documents process and into construction that a lot can change. Therefore, substitution or elimination of points is permitted. However, there are some criteria:

- The project applicant must meet the minimum requirement for certification. For example, a new single-family home must meet 50 points per Build It Green's GreenPoint Rated Single-Family Home New Construction Checklist. A project applicant can not eliminate points to go below this

requirement. Staff recommends trying to achieve extra green building points so that the project has a buffer. In this way the project applicant will be more assured of reaching certification.

- The project applicant must meet the minimum number of green building points in each green building category within the specific rating system. For example, in Build It Green's Single-Family New Construction Checklist a project must meet 9 points in the Water category. The applicant can not go below 9 points for this category. Neither can the project applicant go below 9 and add a point in the Energy category to try and meet the 50 points. All of the minimum points in each category must be achieved.
- For affordable housing projects that involve City funds, please check with the Housing and Community Development Division for the implications of substitution or elimination of points with that process. Those rules govern in this instance.
- The substitution or elimination shall only occur at the request of the applicant and the applicant shall submit a Request for Revision Plancheck indicating the green building points to be omitted or changed. This request will be reviewed by the Building Services Division, the Planning and Zoning Division and if the project involves a historic resource, a Historic Preservation Planner must re-review the project.

Green Building Ordinance Helpful Hints

- ◆ Familiarize yourself with the green building rating systems, checklists and the glossary of green building terms by reviewing the Green Building Resource webpage.
- ◆ Inform professionals working on your project about the Green Building Ordinance requirements as green building starts in the pre-planning or pre-design phase.
- ◆ The City cannot provide green building design services. Retain a GreenPoint Rater or LEED AP (Green Building Certifier) on your project team as soon as possible. Applicants must use a Green Building Certifier, for applicable project types, who are accredited to rate a building under the appropriate green building rating system noted in the Ordinance. Not only are these professionals required to be on the project team but if consulted early enough they can help you design your project to include even more green features, thereby saving you time and money. Budget for this person in your scope of work from the beginning. You can find a Green Building Certifier by visiting www.oaklandgreenbuilding.com and the Resources page.
- ◆ Incorporate green building features from the applicable checklist into the design of the project in order to meet the Green Building Ordinance. Trying to incorporate green features after the project has been designed will almost always be more costly. While the green building rating systems and checklists are divided into individual green building points, in reality each measure is closely integrated with other design strategies. Try to remember that a building is a complex interconnection of systems. If you think in terms of building systems such as electrical and energy systems, rather than isolated points on a checklist, designing the building will be easier and more cost effective.
- ◆ Incorporate easy to install green building features/systems into the project and then work your way up to harder to achieve points.
- ◆ Build a cushion of several points over the minimum required. In this way as the project evolves from pre-planning to actual construction, you have the flexibility to substitute or eliminate points to suit

your specific project type and budget. This is allowed by the Ordinance as long as the minimum requirements are met.

- ◆ Complete the checklist by downloading it from the website (www.oaklandgreenbuilding.com and the Policies and Requirements page). Several of the checklists are interactive and tally the points for you in the appropriate categories. This will be much easier than trying to complete the checklist by hand.
- ◆ Budget for submittal of documentation and the third-party certification, if applicable, from the beginning. Costs of certification can be found by visiting the following websites:

<http://www.builditgreen.org/rating-process--fees/>

<http://www.gbci.org/certification/resources/project-registration-fees.aspx>

<http://www.gbci.org/main-nav/building-certification/resources/fees/current.aspx>

Use the following quick checklist before you submit you application:

- Have you reviewed the Ordinance and determined that your project must comply with the Ordinance?
- Have you received the appropriate green building checklist applicable to your project?
- Have you visited the Green Building website (www.oaklandgreenbuilding.com) to learn more about the Ordinance and green building in general?
- Have you retained a Green Building Certifier and has that person helped design or reviewed the plans for compliance with the Ordinance?
- Does your project meet the minimum requirements (point or certification level) per the Ordinance?
- Has the Green Building Certifier confirmed that at this stage the project can meet the minimum requirements of the Ordinance and attested to that on the application form?
- Have you completed and included all the necessary documents with your application (see below)?
- Do you understand that your project may need to obtain a third-party certification after construction?

For information regarding Oakland Green Building Ordinance, visit the Green Building Website at www.oaklandgreenbuilding.com.