

## **Appendix H**

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**Appendix H: *Administrative Bulletin 0-93*. San Francisco  
Department of Building Inspection. January 1, 2010.**





**DEPARTMENT OF BUILDING INSPECTION**  
**City & County of San Francisco**  
**1660 Mission Street, San Francisco, California 94103**

**ADMINISTRATIVE BULLETIN**

**NO. AB-093**

**DATE :** January 1, 2010 (supersedes version of 9/24/08 based on code changes)

**SUBJECT:** Administration and General Design

**TITLE:** **Implementation of Green Building Regulations**

**PURPOSE :** The purpose of this Administrative Bulletin is to detail standards and procedures for the implementation of the Green Building requirements of Chapter 13C of the San Francisco Building Code effective January 1, 2010

**REFERENCE :** 2007 San Francisco Building Code, Chapter 13C

**DISCUSSION :** Project submittal documents, approved construction documents, and completed projects must conform to the Green Building code requirements that are established in Chapter 13C of the San Francisco Building Code. At various project time points, particularly at the conclusion of construction, the Department of Building Inspection must be provided with verification that all Green Building requirements have been met. Under these implementation procedures, this verification is required to be provided to the Department of Building Inspection via a formal third-party certification under green building rating systems referenced in Chapter 13C of the San Francisco Building Code or by a third-party licensed design professional.

Note: Future local, state or other regulations may change the scope and implementation of Green Building requirements. Project sponsors should verify that they are meeting all such requirements, which may modify the standards and procedures addressed in this Administrative Bulletin.

**IMPLEMENTATION:**

**Green Building Requirements to be Applied**

The Green Building performance requirements and timelines of Chapter 13C are summarized in Attachment A, Table 1 of this bulletin. For mixed occupancy buildings, that portion of the building containing an occupancy classification covered by this ordinance shall meet the green building requirements for that occupancy. For mixed occupancy buildings containing any combination of B, R and M occupancies, the project sponsor may select a single occupancy classification to determine which green building standards to apply to the entire building.

### **Applicability of Green Building regulations based on date of Building Permit Application**

Under the current Chapter 13C regulations, the date of applicability of these Green Building requirements is November 3, 2008. Application of the Green Building requirements will be based on the date of submittal of a building permit application.

In the case of Site Permits, the effective date shall be the date that the Site Permit application (not an addendum) is filed with the Department of Building Inspection. Neither addenda to site permits nor revisions to permit applications received before the effective date of the ordinance will be required to meet the green building requirements, unless such site permit addendum or revisions change the scope of the project such that a project that would have been previously exempt from green building requirements would be covered.

### **New Large Commercial Interiors and Major Alterations to Existing Buildings**

The application of Section 1304C.3 to Major Alterations to Existing Buildings is based on a determination as to whether a "significant upgrade" is proposed to both the structural system and to one or more of the mechanical, electrical and/or plumbing systems in an area of 25,000 gross square feet or more in a Group B, M or R occupancy. For the purpose of enforcement of Chapter 13C, a significant structural upgrade shall be determined to take place when a structural alteration takes place in thirty percent or more of the area of proposed construction. Areas to be counted toward the thirty percent include areas tributary to the vertical load carrying components (joists, beams, columns, walls and other structural components) that have been or will be removed, added or altered.

The application of Section 1304C.3 to New Large Commercial Interiors requires that the first time tenant improvement work in an area over 25,000 square feet must meet the green building standards detailed in the ordinance. This requirement applies regardless of the date of construction of the building.

### **Historic Building Requirements for "Historic Resources" Based on Planning Department Determination**

For purposes of applying the specific provisions of Chapter 13C related to historic buildings, the Planning Department shall determine whether a building is an historical resource. This Planning Department review applies a standard based on the California Environmental Quality Act (CEQA) as to whether a structure is or might be considered an "historic resource". Based on such information, the Green Building Compliance Professional of Record shall assure that submittal documents properly reflect the requirements of the Ordinance.

Projects that retain, rehabilitate or repair significant historical architectural features may receive credit toward Green Building requirements, per Attachment A, Table 3.

### **Alternate Building Code Applicability Under the California Historical Building Code, Based on Department of Building Inspection Qualification**

For buildings that are qualified to use the California Historical Building Code, project sponsors may apply the alternate provisions of that code. Buildings are determined to be qualified to use the California Historical Building Code upon specific request to the Department of Building Inspection. This broader standard differs from the determination of an "historic resource" by the Planning Department; determination that a building qualifies to use the California Historical Building Code does not classify the building as an "historic resource." Buildings that qualify to use the California Historical Building Code include buildings that are on federal, state or local adopted lists or surveys, or buildings that are determined by the City to be eligible for such a list or survey, or buildings that have otherwise been determined by the City to be potential historic resources. The Department of Building Inspection coordinates with the Planning Department on the review of such requests for qualification. Alternate code provisions for historic buildings are to be applied on either a case-by-case, item-by-item basis, or, where specifically addressed in the California Historical Building Code, may apply to general provisions or alternatives.

## **Demolition**

For a replacement building which is to be constructed on a site on which one or more buildings were demolished after the effective date of this ordinance, the Planning Department, during the course of permit review, shall confirm applicable Green Building requirements. Additional Green Building requirements for these projects may be found in Attachment A, Table 2.

## **Project Submittal Requirements**

### **Screening of Building Permit Applications for Applicability**

All documentation required to demonstrate compliance with the 2008 Title 24 Building Energy Efficiency Standards must be submitted per Section 1303C of the Green Building Ordinance.

Department of Building Inspection staff will screen all building permit applications to determine if Green Building regulations apply to that project. If it is determined that Green Building regulations apply, Department of Building Inspection staff will verify that a copy of the "Green Building Submittal" form (Attachment B-2 or B-3), confirming that the submittal conforms with the Green Building Ordinance, is properly completed and incorporated into permit submittal documents. Permit applications will not be accepted for processing without this form.

Every permit application for a building covered by the Green Building Ordinance, including revisions and addenda to projects covered by these regulations, must be accompanied by a copy of Attachment B, Green Building Submittal form.

Submittal documents for all projects must include a checklist incorporated into the project plans indicating the required green building features, referencing, as appropriate, location of green building features in the submittal documents. Where submittal documents do not contain a complete set of construction details, such as in a site permit application, the submitted Attachment B shall, at a minimum, detail the specific green building requirements to be met and shall indicate which addendum or other document will provide compliance details for each required performance measure or credit.

LEED or GreenPoint Rated checklists in the format similar to Attachment B-2 or B-3 will be sufficient to meet this submittal requirement. This submittal checklist may be reformatted as needed to conform to plan submittal size if all information is provided.

**Compliance with the submittal requirements of Chapter 13C, Green Building Requirements, may be met in any of four ways:**

1. Registration and submittal for certification under LEED. For buildings that propose to meet LEED standards, the permit applicant must provide submittal documentation showing that the project will meet the appropriate LEED standards. See "Energy Compliance Guidelines for LEED projects" section below for details about energy compliance. Such projects must meet all requirements of the 2008 Title 24 Building Energy Efficiency Standards
2. Registration and achievement of GreenPoint Rated status. For buildings that propose to meet GreenPoint Rated standards, the permit applicant must provide submittal documentation showing that the project will meet the appropriate GreenPoint Rated standards. The GreenPoint Rated standard requires energy performance at least 15% better than required by 2008 Title 24 Building Energy Efficiency Standards in effect at the time of permit submittal. All projects required to be GreenPoint Rated or equivalent (e.g. 50 or more Green Points) must meet this prerequisite.

3. Documentation of compliance with either LEED or GreenPoint Rated standards without registration and certification from those systems. The Green Building Compliance Professional of Record must provide submittal documentation showing that the project will meet the appropriate standards.

Projects using GreenPoint Rated must document energy performance at least 15% better than required by 2008 Title 24 Building Energy Efficiency Standards in effect at the time of permit submittal.

For LEED projects, see “Energy Compliance Guidelines for LEED projects” section below for details about energy compliance.

4. Registration and submittal for another rating system or documentation of equivalency as approved by the Director. For buildings that propose to meet such alternate standards, the Green Building Compliance Professional of Record must provide submittal documentation detailing compliance with the proposed standards.

For both case 3 and 4 above, the qualifications for Green Building Compliance Professional of Record include a license or registration as an Architect or Engineer, and specialized understanding of Green Building standards and technologies, except that

- for LEED projects, such specialized understanding shall include LEED accreditation and successful completion of at least one LEED certified project
- for GreenPoint Rated projects, such specialized understanding shall include GreenPoint Rater, or the project team shall include a person who is a GreenPoint Rater.

The Department of Building Inspection may request verification of such training or experience and may make an administrative determination as to the qualification of a person to act as such a Green Building Compliance Professional of Record.

A Green Building Compliance Professional of Record is responsible for providing verification to the Department of Building Inspection that all Green Building design and construction requirements are met.

### **Energy Compliance Guidelines for LEED projects**

The conformance of San Francisco's green building ordinance with California Energy Code requires that certain building permit submittals must be shown to exceed the state's 2008 Building Energy Efficiency Standards. The following guidelines explain when additional calculations and documentation, beyond the standard Title 24 submittals, are required. Attachment C, Supplementary Energy Compliance Documentation, provides a sample form that may be used to document such additional energy efficiency compliance.

Any building meeting a LEED standard under this ordinance must demonstrate energy compliance using one of the following methods:

1. Using the published LEED 2009 rules, submit documentation to demonstrate that the proposed building has an annual energy cost at least 10% less than a LEED baseline building (2008 Title 24 or ASHRAE 90.1-2007.) This analysis must include a detailed accounting of all on-site building energy use, including all exterior and security lighting, elevators, all process loads and receptacle loads. Documentation to be retained in the records of the project must include the full set of information required for USGBC LEED certification, or

2. Perform the standard 2008 Title 24 performance analysis and submit documentation to demonstrate that the proposed building uses at least 15% less TDV energy than the standard design, excluding exterior lighting, process and receptacle loads in the %-less-TDV energy calculation. LEED-equivalent energy points for this calculation method are listed in Table 1, or
3. For projects already registered under LEED v2.2, use the published LEED v2.2 rules to demonstrate the proposed building has an annual energy cost at least 14.0% less than a LEED baseline building (ASHRAE-90.1-2004.) This analysis must include a detailed accounting of all on-site building energy use, including all exterior and security lighting, elevators, all process loads and receptacle loads. Documentation to retained in the records of the project must include the full set of information required for USGBC LEED certification;

In all cases, applicants are required to:

- a) Submit all standard Title 24 performance documentation to confirm compliance with California standards using software from the California Energy Commission *List of Approved Computer Programs for the 2008 Building Energy Efficiency Standards* to run Title 24 calculations, and
- b) Submit documentation to demonstrate that the proposed building meets LEED 2009 Minimum Energy Performance prerequisite (EAp2) using one of the three methods described above.

**Table 1: Energy Equivalence of Title 24 Energy Performance with LEED EAc1 points<sup>1</sup>**

LEED 2009 Energy Cost Budget Method: Exceed the Baseline by	Equivalent Requirement: %-Less -than 2008 Title 24 Proposed TDV Energy: Exceed Standard Design by <sup>1</sup>	LEED Points Earned (EAc1)
10.0%	15.0%	2 (Minimum)
13.5%	18.5%	3
17.0%	22.0%	4
20.5%	25.5%	5
24.0%	29.0%	6
27.5%	32.5%	7
31.0%	36.0%	8
34.5%	39.5%	9
38.0%	43.0%	10

*Note: Receptacle and Process loads may be excluded from the %-better-than-Title 24 TDV energy calculation Option 2 above.*

For major renovation projects using the LEED NC standard, energy performance standards may be reduced as detailed in that LEED standard, but in no case shall such reduction fall below the California Energy Code requirements. (Certain exceptions may apply for Historic Buildings as noted above.)

<sup>1</sup> Energy performance equivalence in Table 1 is derived from analyses conducted for the City and County of San Francisco solely for the purpose of implementing local green building requirements. It does not represent the opinion of ASHRAE or USGBC, and should not be relied upon for submittals to the Green Building Certification Institute for LEED certification.

## On-site Renewable Energy

The methodology used to calculate solar photovoltaic credit shall be the California Energy Commission PV Calculator or an SB 1 compliant calculator. Installation of solar PV systems shall meet all requirements specified in the "Guidelines for California's Solar Electric Incentive Programs Pursuant to Senate Bill 1" available online at <http://www.gosolarcalifornia.ca.gov/nshpcalculator/index.html>.

## Stormwater Design Compliance

In order to assure compliance with green building stormwater management requirements, San Francisco Public Utilities Commission, Urban Watershed Management Program will provide guidelines for review and approval of all such plans. Application packets, including interim guidelines, are available online at <http://stormwater.sfwater.org>.

## Requests for Approval of Equivalencies

Project sponsors wishing to submit alternates or equivalencies for the specific requirements referenced in Chapter 13C or its referenced standards may do so by these methods:

1. With project submittal documents or at any later date, provide a specific request to use an alternate or equivalent method of compliance. Each alternative must be separately presented.
2. Requests must be accompanied by a complete analysis of the Green Building and other code-related issues, and must be recommended by and signed by the Green Building Compliance Professional of Record. The analysis must include calculations or other documentation for each specific element of equivalency confirming that the equivalent proposal meets or exceeds the requirements of the Ordinance.
3. The Department of Building Inspection staff will review the equivalency and may, at its discretion, request review by other City staff or outside professional persons who are expert in the matter under review. The project sponsor will be responsible for all additional costs incurred for such review, including review time by City staff, charged at the hourly rate as set forth in the San Francisco Building Code, or direct costs for other consultant review.
4. The Department of Building Inspection staff may request additional information as part of the review.
5. The Department of Building Inspection will issue a decision to approve, deny or require modifications to any submitted alternate or equivalency.
6. Project sponsors may appeal any decision to the Deputy Director, Director, and appeal bodies as detailed in the San Francisco Building Code.

## Project Completion: Verification that Green Building Requirements are Met

Verification that green building requirements have been met requires either submittal of Attachment D, Green Building: Final Compliance Verification, or submittal of final certification as meeting LEED or GreenPoint Rated requirements. Attachment D may be filled out in any of the following ways:

1. If the project has been submitted for certification under LEED, project shall provide documentation that US Green Building Council/Green Building Certification Institute has certified the project.
2. If the project has been submitted to be GreenPoint Rated, project shall provide documentation that Build It Green has certified the project.
3. If project is built to meet LEED or GreenPoint Rated standards but will not be certified, then Attachment D must be signed by the Green Building Compliance Professional of Record.



4. If the Director has approved use of an alternate rating system, or documentation of equivalency as approved by the Director. For buildings that propose to meet such alternate standards, then Attachment D must be signed by the Green Building Compliance Professional of Record.

### **Temporary Certificate of Occupancy**

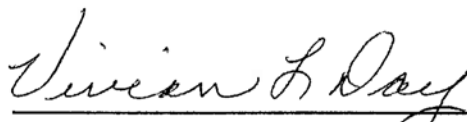
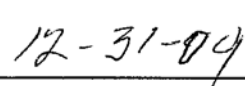
While a Temporary Certificate of Occupancy may be issued pending final compliance certification, no final Certificate of Completion may be issued until Attachment D: Green Building: Final Compliance Verification has been received, reviewed and accepted by the Department of Building Inspection.

### **Quality Assurance and Compliance Review**

All projects are subject to comprehensive review by the Department of Building Inspection or its agents; all project sponsors must maintain comprehensive records to allow verification that all requirements have been met; buildings that receive certification through LEED or GreenPoint Rated will generally be accepted as being fully compliant. It is the intent of the Department of Building Inspection to undertake comprehensive review of a significant percentage of green building projects.

### **Failure to Comply with Green Building Requirements**

Failure to meet all required Green Building requirements will subject a project sponsor to all of the enforcement and abatement remedies detailed in the San Francisco Building Code.

 _____ Vivian L. Day, C.B.O., Director Department of Building Inspection	 _____ Date
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Approved by the Building Inspection Commission September 24, 2008

Attachment A, Table 1, Green Building Ordinance: Summary of Performance Standards and Timelines  
Attachment A, Table 2, Additional Requirement if a Building has been Demolished  
Attachment A, Table 3, Retention of Significant Historical Architectural Features  
Attachment B-1, Green Building Submittal - Instructions  
Attachment B-2, Green Building Submittal sample – LEED  
Attachment B-3, Green Building Submittal sample – GreenPoint Rated  
Attachment B-4, Green Building Submittal tools – Requirements template and Verification template  
Attachment C, Supplementary Energy Compliance Documentation  
Attachment D, Final Compliance Verification  
Attachment E, Recommended Project Implementation Procedures  
Attachment F, Selected Green Building Resources  
Attachment G, Text of Chapter 13C Green Building Requirements



## Green Building Ordinance: Summary of Requirements

### Table 1: Performance Standards and Timelines

## Attachment A

### Table 1

Building Type	Requirement and Code Reference	Effective Date				
		November 3, 2008	2009	2010	2011	2012
1304C.2. New Group B and M Occupancy Buildings						
New Mid-Size Commercial Buildings: 5,000 to 25,000 sq ft (1304C.2.1)	Rating Requirement (1304C.2.1.1)	Submit LEED checklist; no certification required				
	Commisioning of Building Systems (1304C.2.1.2)	No Requirement	Commission the building's energy related systems (LEED prerequisite EAp1)		PLUS: Enhanced Commissioning (LEED credit EA3)	
	Water Efficient Landscaping (1304C.2.1.3)	No Requirement	Min. of 50% reduction in use of potable water for landscaping (LEED credit WE1)			
	Water Use Reduction (1304C.2.1.4)	No Requirement	Min. of 20% reduction of potable water use (LEED prerequisite WEp1)		Min. of 30% reduction in potable water use (LEED credit WE3)	
	Stormwater Management (1304C.0.3)	Comply with "SFPUC Stormwater Design Guidelines". As Applicable: LEED NC SS 6.1 and SS 6.2.				
	Construction Debris Management (1304C.2.1.5)	No Requirement	Divert at least 75% of construction debris (LEED credit MR 2, 2 points)			
	Renewable Energy (1304C.2.1.7)	No Requirement				
New Large Commercial Buildings ≥ 25,000 sq ft (1304C.2.2)	Rating Requirement (1304C.2.2.1)	Achieve LEED Certified	Achieve LEED Silver certification			Achieve LEED Gold certification
	Water Efficient Landscaping (1304C.2.2.2)	Min. of 50% reduction in use of potable water for landscaping (LEED credit WE1)				
	Water Use Reduction (1304C.2.2.3)	Min. of 20% reduction of potable water use (LEED prerequisite WEp1)			Min. of 30% reduction in potable water use (LEED credit WE3)	
	Stormwater Management (1304C.0.3)	Comply with "SFPUC Stormwater Design Guidelines". As Applicable: LEED NC SS 6.1 and SS 6.2.				
	Construction Debris Management (1304C.2.2.4)	Divert at least 75% of construction debris (LEED credit MR 2, 2 points)				
	Energy (1304C.2.2.5 AND 1304C.2.2.6)	Commission the building's energy related systems (LEED prerequisite EAp1)		PLUS: Enhanced Commissioning (LEED credit EA3)		Renewable on-site energy or purchase renewable energy credits (select LEED credit EA2 or EA6)
1304C.3. New Large Commercial Interiors, OR Major Alterations to Existing Buildings with B, M, and R Occupancies >25,000 sq ft						
New Commercial Interiors or Alterations to Existing B, M, or R occupancy >25,000 sq ft (1304C.3)	Rating Requirement (1304C.3.2.1)	Achieve LEED Certified	Achieve LEED Silver certification			Achieve LEED Gold certification
	Use of Low-Emitting Materials (1304C.3.2.2)	Use low-emitting materials for adhesives, sealants, paints, coatings, and carpets, as applicable (LEED credits IEQ4.1, IEQ4.2, and IEQ4.3)				



## Green Building Ordinance: Summary of Requirements

### Table 1: Performance Standards and Timelines

## Attachment A

### Table 1

Building Type	Requirement and Code Reference	Effective Date				
		November 3, 2008	2009	2010	2011	2012
1304C.1. New Group R Occupancy Buildings						
Small Residential: 4 or fewer units (1304C.1.1)	Rating Requirement (1304C.1.1)	Submit GreenPoints new home construction checklist; no points required	Submit GreenPoints new home construction checklist; 25 GreenPoints required	GreenPoint Rated; minimum 50 GreenPoints		GreenPoint Rated; minimum 75 GreenPoints
	Stormwater Management (1304C.0.3)	Meet "SFPUC Stormwater Design Guidelines"				
Midsize Residential: 5+ units and < 75' height to highest occupied floor (1304C.1.2)	Rating Requirement (1304C.1.2)	Submit GreenPoints multi-family checklist; no points required	Submit GreenPoints new home construction checklist; 25 GreenPoints required	GreenPoint Rated; minimum 50 GreenPoints	GreenPoint Rated; minimum 75 GreenPoints	
	Stormwater Management (1304C.0.3)	Comply with "SFPUC Stormwater Design Guidelines" As Applicable: LEED NC SS 6.1 and SS 6.2.				
High-Rise Residential: 5+ units and ≥ 75' height to highest occupied floor (1304C.1.3)	Rating Requirement (1304C.1.3.1)	Achieve LEED Certified OR GreenPoint Rated with minimum 50 points, plus requirements below		Achieve LEED Silver certification OR GreenPoint Rated with minimum 75 points Additionally achieve requirements below		
	Water Efficient Landscaping (1304C.1.3.2)	Min. of 50% reduction in use of potable water for landscaping (LEED credit WE1.1)				
	Water Use Reduction (1304C.1.3.3)	Min. of 20% reduction of potable water use (LEED prerequisite WEp1)			Min. of 30% reduction in potable water use (LEED credit WE3)	
	Stormwater Management (1304C.0.3)	Comply with "SFPUC Stormwater Design Guidelines" As Applicable: LEED NC SS 6.1 and SS 6.2.				
	Construction Debris Management (1304C.1.3.4)	Divert at least 75% of construction debris (LEED credit MR 2, 2 points)				



## Green Building Ordinance: Summary of Requirements

### Table 2: Additional Requirements in Case of Demolition

## Attachment A Table 2

For All Project Types, Except as noted below:	Demolished Building IS NOT a Historical Resource		Demolished Building IS a Historical Resource	
	LEED	GreenPoint Rated	LEED	GreenPoint Rated
If new density will be less than 3x current density:	<b>Total Required</b> LEED Points Increased by 10%	Obtain 20 additional GreenPoints	Obtain an additional 10% of <b>Total Available</b> LEED Points	Obtain 25 additional GreenPoints
OR: If new density is >3x current density:	<b>Total Required</b> LEED Points Increased by 8%	Obtain 17 additional GreenPoints		
OR: If new density is >4x current density:	<b>Total Required</b> LEED Points Increased by 6%	Obtain 15 additional GreenPoints		

Requirements for Mid-Sized Commercial where project includes demolition of existing building(s)		
Year	Baseline (Demolition does not include a Historical Resource)	Requirement, in addition to Baseline, for Demolition of Historical Resource)
2009	<ul style="list-style-type: none"> <li>• LEED PR 1 - Fundamental Commissioning</li> <li>• LEED WE 1 - Water efficient landscaping (50% reduction)</li> <li>• LEED WE 3 - 30% Reduction in potable water use</li> <li>• LEED MR 2 - Construction Debris Management (75% diversion - 2 LEED Points)</li> </ul>	• Obtain 1 additional LEED point from: MR 3, MR 4, MR 5, MR 6, or MR 7
2010 (in addition to above)	• LEED EA 3 - Enhanced Commissioning	None
2011 (in addition to above)	Either: <ul style="list-style-type: none"> <li>• LEED EA 2 - Generate at least 3% of electricity with on-site renewables,</li> <li>• OR EA 6 - Purchase renewable energy credits for 35% of electricity needs for 2 years</li> </ul>	None
2012 (in addition to above)	• Obtain 1 additional LEED point from: MR 3, MR 4, MR 5, MR 6, or MR 7)	• Obtain a total of 2 additional LEED points from: MR 3, MR 4, MR 5, MR 6, or MR 7)



## Green Building Ordinance: Summary of Requirements

## Attachment A

**Table 3: Retention of Significant Historical Architectural Features**

**Table 3**

Significant Historical Architectural Feature	Percent Retained <sup>1</sup>	Reduction in total required LEED points <sup>2</sup>	Reduction in total required GreenPoints <sup>2</sup>
Windows on Principal Façade(s)	At least 50%	2	7
	At least 75%	3	11
	100%	4	15
Other windows	At least 50%	1	3
	100%	2	6
Exterior doors on principal façade(s)	100%	1	3
Siding or wall finish on principal façade(s)	80%	1	4
Trim & Casing on Wall Openings on Principal Façade(s)	100%	1	3
Roof cornices or decorative eaves visible from right-of-way	100%	1	3
Sub-cornices, belt courses, water tables, and running trim visible from right-of-way	80%	1	3
Character-defining elements of significant interior spaces	At least 50%	2	7
	100%	4	15
Other exterior ornamentation (e.g. cartouches, corbels, quins, etc.) visible from right-of-way	80%	1	3

<sup>1</sup> Retention includes the rehabilitation and repair of character-defining features that conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

<sup>2</sup> As summarized above, these measures are afforded greater weight by the City and County of San Francisco than in the reference green building rating systems. The table is presented as a reduction in local requirements for consistency in cases where projects are both meeting local requirements and seeking LEED certification or to be GreenPoint Rated.



# Green Building Submittal - Instructions

Green Building Submittal Templates are provided in electronic format for your convenience via the Department of Building Inspection website.

## Locating Documents

From the Department of Building Inspection website, navigate to Administrative Bulletins. In the entry for AB-093 "Implementation of Green Building Regulations," click "More Info." The "More Info" page contains:

- This bulletin
- Single page pre-formatted submittal templates
- Electronic version of each element of the submittal template, for optional custom layouts when necessary. (Typically used for smaller-format submittals split into multiple pages for legibility.)
- Spreadsheet with LEED checklists for preparation of submittals.
- DBI does not provide a checklist for GreenPoints projects. A qualified GreenPoint Rater (as specified in the narrative of this bulletin) has the tools necessary to prepare a project-specific GreenPoints checklist for inclusion in submittals. For more information – including guidelines and lists of all possible GreenPoints measures - please see: [www.builditgreen.org](http://www.builditgreen.org).

## Single Page Submittal Templates (Recommended)

Pre-formatted templates are provided for single-sheet submittals applying LEED standards (example Attachment B-2) and GreenPoint Rated (example Attachment B-3). Acquire the appropriate submittal template from the AB-093 "More Info" page, cut & paste a checklist for the appropriate green building standard, and complete the summary of "Requirements" and "Verification" forms.

## Optional Custom Layouts

When necessary, such as cases where submittals must be split into multiple pages to maintain legibility, acquire the separate electronic files containing each element of the submittal template:

- Checklist for the appropriate green building standard,
- Summary of "Requirements" form, and
- "Verification" forms

Prepare the submittal as appropriate. To be complete, a multi-page submittal must include completed versions of each of these three elements.

LEED Checklist

City and County of San Francisco  
Green Building Requirements  
LEED Rating System

Attachment B-2  
Submittal Example:  
LEED

CREDIT	CREDIT CATEGORY	Possible Points	Verification, Sheet and Detail Number
24	SS - Sustainable Sites	26 Points	
R	Prereq 1 Construction Activity Pollution Prevention	Required	xx
1	Credit 1 Site Selection	1	xx
5	Credit 2 Development Density & Community Connectivity	5	xx
0	Credit 3 Brownfield Redevelopment	1	xx
6	Credit 4.1 Alternative Transportation: Public Transportation Access	6	xx
1	Credit 4.2 Alternative Transportation: Bicycle Storage & Changing Rooms	1	xx
3	Credit 4.3 Alternative Transportation: Low-Emitting and Fuel-Efficient Vehicles	3	xx
2	Credit 4.4 Alternative Transportation: Parking Capacity	2	xx
0	Credit 5.1 Site Development: Protect or Restore Habitat	1	xx
1	Credit 5.2 Site Development: Maximize Open Space	1	xx
1	Credit 6.1 Stormwater Design: Quantity Control	1	SFPUC stormwater submittal, page XX.X
1	Credit 6.2 Stormwater Design: Quality Control	1	SFPUC stormwater submittal, page XX.X
1	Credit 7.1 Heat Island Effect, Non-Roof	1	xx
1	Credit 7.2 Heat Island Effect, Roof	1	Title 24 compliance document page XX.XX
1	Credit 8 Light Pollution Reduction	1	xx
6	WE - Water Efficiency	10 Points	
R	Prereq 1 Water Use Reduction - 20% Reduction	Required	xx
2	Credit 1 Water Efficient Landscaping: Reduce by 50% (2 pt), or No Potable Water Use or No Permanent Irrigation (4 pt)	2 or 4	xx
0	Credit 2 Innovative Wastewater Reuse	1	xx
4	Credit 3 Water Use Reduction	4	xx
24	EA - Energy & Atmosphere	59 Points	
R	Prereq 1 Fundamental Commissioning	Required	xx
R	Prereq 2 Minimum Energy Performance	Required	xx
R	Prereq 3 Fundamental Refrigerant Management	Required	xx
10	Credit 1 Optimize Energy Performance	10	30 % New Buildings % Existing Buildings
7	Credit 2 On-Site Renewable Energy	7	13 % Renewable Energy
2	Credit 3 Enhanced Commissioning	2	Enhanced Commissioning
2	Credit 4 Enhanced Refrigerant Management	2	Enhanced Refrigerant Management
3	Credit 5 Measurement & Verification	3	Measurement & Verification
0	Credit 6 Green Power	0	Green Power
9	MR - Materials & Resources	11 Points	
R	Prereq 1 Storage & Collection	Required	xx
1	Credit 1.1 Building Reuse: Materials	1	65 % Reuse
0	Credit 1.2 Building Reuse: Materials	0	65 % Reuse
2	Credit 2 Construction Waste Management	2	75 % Recycled or Salvaged
1	Credit 3 Materials Reuse: 5%	1	5 % Reuse
1	Credit 4 Recycled Content: 10%	1	10 % of Content
2	Credit 5 Regional Materials: 20%	2	20 % of Materials
1	Credit 6 Rapidly Renewable Materials	1	Rapidly Renewable Materials
1	Credit 7 Certified Wood	1	Certified Wood
14	IEQ - Indoor Environmental Quality	24 Points	
R	Prereq 1 Minimum IAQ Performance	Required	xx
R	Prereq 2 Environmental Tobacco Smoke Prohibition	Required	xx
1	Credit 1 Outdoor Air Delivery	1	Outdoor Air Delivery
1	Credit 2 Increased Ventilation	1	Increased Ventilation
1	Credit 3.1 Construction IAQ Management Plan	1	Construction IAQ Management Plan
1	Credit 3.2 Construction IAQ Management Plan	1	Construction IAQ Management Plan
1	Credit 4.1 Low-Emitting Materials	1	Low-Emitting Materials
1	Credit 4.2 Low-Emitting Materials	1	Low-Emitting Materials
1	Credit 4.3 Low-Emitting Materials	1	Low-Emitting Materials
0	Credit 4.4 Low-Emitting Materials	0	Low-Emitting Materials
1	Credit 5 Indoor Chemical & Pollutant Source Control	1	Indoor Chemical & Pollutant Source Control
1	Credit 6.1 Controllability of Systems	1	Controllability of Systems
1	Credit 6.2 Controllability of Systems	1	Controllability of Systems
1	Credit 7.1 Thermal Comfort: Design	1	Thermal Comfort: Design
1	Credit 7.2 Thermal Comfort: Verification	1	Thermal Comfort: Verification
1	Credit 8.1 Daylight & Views: Design	1	Daylight & Views: Design
1	Credit 8.2 Daylight & Views: Verification	1	Daylight & Views: Verification
5	ID - Innovation & Design Process	5 Points	
1	Credit 1.1 Innovation in Design	1	Innovation in Design
1	Credit 1.2 Innovation in Design	1	Innovation in Design
1	Credit 1.3 Innovation in Design	1	Innovation in Design
1	Credit 1.4 Innovation in Design	1	Innovation in Design
1	Credit 1.5 Innovation in Design	1	Innovation in Design
1	Credit 2 LEED Accredited Professional	1	LEED Accredited Professional
4	RP - Regional Priority Credits	4 Points	
1	Credit 1.1 Regional Priority: SS	1	Regional Priority: SS
0	Credit 1.2 Regional Priority: WE	0	Regional Priority: WE
1	Credit 1.3 Regional Priority: EA	1	Regional Priority: EA
1	Credit 1.4 Regional Priority: MR	1	Regional Priority: MR
1	Credit 1.5 Regional Priority: IEQ	1	Regional Priority: IEQ
1	Credit 1.6 Regional Priority: ID	1	Regional Priority: ID
86	Totals	110	
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 points to 110			

INSTRUCTIONS

This is an illustrative example of acceptable layout for a Green Building Submittal. A blank template is available for your convenience. The layout of the Green Building Submittal may be adjusted as needed, but the submittal must include:

- Completed **REQUIREMENTS** section (at right)
- Completed **VERIFICATION** section (at right).
- **LEED checklist** indicating the points that will be achieved and the locations each applicable credit is shown project documents, including plan set page & detail, or specification section name/number/location. Specifications are not submittal documents, but are subject to review.

All submittal information must be legible.

The REQUIREMENTS and VERIFICATION sections of this submittal may be downloaded from:  
[www.sfgov.org/dbi](http://www.sfgov.org/dbi) - Under Administrative Bulletins, near AB-093

REQUIREMENTS

Block/Lot

Address

Primary Occupancy

Gross Building Area

Project is:

- ☐ New Construction
- ☐ Major Alteration
- ☐ New Large Commercial Interior

Summary of Green Building Requirements:	Required and will be Met	Not Required
Rating Requirement: _____ LEED points	<input type="checkbox"/>	<input type="checkbox"/>
LEED certification level (includes prerequisites) _____	<input type="checkbox"/>	<input type="checkbox"/>
Supplemental Green Building Measures Required by Chapter 13C:		
SFPUC Stormwater Design Guidelines	<input type="checkbox"/>	<input type="checkbox"/>
Water Efficient Landscaping - 50% Potable Water Reduction LEED WE 1.1	<input type="checkbox"/>	<input type="checkbox"/>
Water Use - 20% Reduction LEED WEp 1	<input type="checkbox"/>	<input type="checkbox"/>
Water Use - 30% Reduction LEED WE3.1	<input type="checkbox"/>	<input type="checkbox"/>
Construction Waste Management – 75% Diversion LEED MR 2.2	<input type="checkbox"/>	<input type="checkbox"/>
Fundamental Commissioning of Building Energy Systems LEED EA prerequisite 1	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced Commissioning LEED EA 3	<input type="checkbox"/>	<input type="checkbox"/>
Either: 3% of energy supplied by On-Site Renewable Energy OR: Green Power (LEED EA 2.1) OR (LEED EA 6)	<input type="checkbox"/>	<input type="checkbox"/>
Low-Emitting Materials Number of IEQ credits required: ____ (Choose from LEED IEQ 4.1, 4.2, 4.3, and 4.4)	<input type="checkbox"/>	<input type="checkbox"/>

To Be completed by DBI Intake Staff

Chapter 13C Requirements Verified by:

Name & Date

Notes:

VERIFICATION

Option 1:

Verification of compliance for this project will be provided by USGBC/GBCI certification under the LEED Rating system. No Green Building Compliance Professional of Record is required.

Permit Applicant – Sign & Date

OR

Option 2:

This project will not be LEED certified. The Green Building Compliance Professional of Record for this project is:

Name

Firm

Architectural or Engineering License

☐ I am a LEED Accredited Professional  
Certified LEED Projects Completed: \_\_\_\_\_

To the best of my knowledge, it is my professional opinion the Green Building requirements of the City of San Francisco will be met for the above referenced project. I have been retained by the project sponsor to review all submittal documents and assure that approved construction documents and construction properly reflect the Green Building requirements of Chapter 13C. I will notify the Department of Building Inspection if I believe to the best of my knowledge that the project will, for any reason, not substantially comply with these green building requirements, or if I am no longer the Green Building Compliance Professional of Record for this project.

Licensed Professional: Sign & Date

Affix professional stamp:

LEED

Green Building Submittal: LEED  
City and County of San Francisco

LEED

Project Name





Attachment B-4 Continued: Custom submittal layouts must include a “Requirements” form detailing the standards applicable to the project. (Available via [www.sfgov.org/dbi](http://www.sfgov.org/dbi).)

# REQUIREMENTS

The form at left is required for projects where LEED standards apply.

Block/Lot

Address

Primary Occupancy

Gross Building Area

Project is:

- ☐ New Construction
- ☐ Major Alteration
- ☐ New Large Commercial Interior

Summary of Green Building Requirements:	Required and will be Met	Not Required
Rating Requirement: _____ LEED points	<input type="checkbox"/>	<input type="checkbox"/>
LEED certification level (includes prerequisites) _____	<input type="checkbox"/>	<input type="checkbox"/>
Supplemental Green Building Measures Required by Chapter 13C:	Required and will be Met	Not Required
SFPUC Stormwater Design Guidelines	<input type="checkbox"/>	<input type="checkbox"/>
Water Efficient Landscaping - 50% Potable Water Reduction LEED WE 1.1	<input type="checkbox"/>	<input type="checkbox"/>
Water Use - 20% Reduction LEED WEp 1	<input type="checkbox"/>	<input type="checkbox"/>
Water Use - 30% Reduction LEED WE3.1	<input type="checkbox"/>	<input type="checkbox"/>
Construction Waste Management – 75% Diversion LEED MR 2.2	<input type="checkbox"/>	<input type="checkbox"/>
Fundamental Commissioning of Building Energy Systems LEED EA prerequisite 1	<input type="checkbox"/>	<input type="checkbox"/>
Enhanced Commissioning LEED EA 3	<input type="checkbox"/>	<input type="checkbox"/>
Either: 3% of energy supplied by On-Site Renewable Energy OR: Green Power (LEED EA 2) OR (LEED EA 6)	<input type="checkbox"/>	<input type="checkbox"/>
Low-Emitting Materials: Number of IEQ credits required: _____ (Choose from LEED IEQ 4.1, 4.2, 4.3, and 4.4)	<input type="checkbox"/>	<input type="checkbox"/>

To Be completed by DBI Intake Staff

Chapter 13C Requirements Verified by:

Name & Date

Notes:

The form at left is required for projects where LEED standards apply.

# VERIFICATION

## Option 1:

Verification of compliance for this project will be provided by GBCI certification under the LEED Rating system. Green Building Compliance Professional of Record is not required.

\_\_\_\_\_  
Permit Applicant – Sign & Date

OR

## Option 2:

This project will not be LEED certified. The Green Building Compliance Professional of Record for this project is:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Firm

\_\_\_\_\_  
Architectural or Engineering License

☐ I am a LEED Accredited Professional.

Certified LEED Projects Completed: \_\_\_\_\_

To the best of my knowledge, it is my professional opinion the Green Building requirements of the City of San Francisco will be met for the above referenced project. I have been retained by the project sponsor to review all submittal documents and assure that approved construction documents and construction properly reflect the Green Building requirements of Chapter 13C. I will notify the Department of Building Inspection if I believe to the best of my knowledge that the project will, for any reason, not substantially comply with these green building requirements, or if I am no longer the Green Building Compliance Professional of Record for this project.

\_\_\_\_\_  
Licensed Professional: Sign & Date

Affix professional stamp:

The form at left is required for projects where Green Point Rated standards apply.

# REQUIREMENTS

Date

Block/Lot

Address

Primary Occupancy

# of Dwelling Units

Height to highest occupied floor

Summary of Green Building Requirements:	Required and will be Met	Not Required
Rating Requirement: _____GreenPoints	<input type="checkbox"/>	<input type="checkbox"/>
GreenPoint Rated (i.e. includes prerequisites)	<input type="checkbox"/>	<input type="checkbox"/>
Supplemental green building measures required by Chapter 13C:		
SFPUC Stormwater Design Guidelines	<input type="checkbox"/>	<input type="checkbox"/>

To Be completed by DBI Intake Staff

Chapter 13C Requirements Verified by:

Name: \_\_\_\_\_

Date:\_\_\_\_\_

Notes:

# VERIFICATION

**SELECT OPTION 1 OR OPTION 2:**

## Option 1:

**Verification of compliance for this project will be provided by a GreenPoint Rater under the GreenPoint Rated system. No Green Building Compliance Professional of Record is required.**

Green Point Rater – Name

Contact Phone No:

Green Point Rater – Sign & Date

Permit Applicant – Sign & Date

**OR**

## Option 2:

**This project will not be GreenPoint Rated. The Green Building Compliance Professional of Record for this project is:**

Name

Firm

Architectural or Engineering License

- ☐ I am a Certified GreenPoint Rater  
☐ I am NOT a Certified GreenPoint Rater

GreenPoint Rated Projects Completed: \_\_\_\_

If the above licensed professional is not a Certified GreenPoint Rater, additional signature by a Certified GreenPoint Rater is required:

Green Point Rater – Name (Print) & Contact Phone No

Green Point Rater – Sign & Date

To the best of my knowledge, it is my professional opinion the Green Building requirements of the City of San Francisco will be met for the above referenced project. I have been retained by the project sponsor to review all submittal documents and assure that approved construction documents and construction properly reflect the Green Building requirements of Chapter 13C. I will notify the Department of Building Inspection if I believe to the best of my knowledge that the project will, for any reason, not substantially comply with these green building requirements, or if I am no longer the Green Building Compliance Professional of Record for this project.

Licensed Professional: Sign & Date

Affix professional stamp:

Attachment B-4  
Continued:

Custom submittal layouts must include a “Verification” form, indicating how compliance will be verified.

The form at left is required for for projects where GreenPoint Rated standards apply.

Available from  
[www.sfgov.org/dbi](http://www.sfgov.org/dbi)



**Green Building Ordinance:**  
**Supplementary Energy Compliance Documentation**

**Attachment  
C**

**Special Energy Compliance Form**

**PERF-1-GBO**

*To demonstrate LEED energy equivalence using the 2008 Title 24 performance approach*

Project Name/Address:			
Date of T24 Report:		Conditioned Floor Area (SF):	

**1. Input Data from Title PERF-1, Part 2 of 3**

Energy Component	Standard Design (TDV KBtu/sf-yr)	Proposed Design (TDV KBtu/sf-yr)	Instructions
Space Heating			Input Space Heating for every project.
Space Cooling			Input Space Cooling for every project.
Indoor Fans			Input Indoor Fans for every project.
Heat Rejection			Input Heat Rejection if including Mechanical compliance.
Pumps & Misc.			Input Pumps & Misc. if including Mechanical compliance.
DHW			Input DHW if service hot water is modeled for compliance.
Lighting			Input Lighting if including Lighting compliance.
<b>TOTALS:</b>			

**2. Calculate Solar Photovoltaic (PV) System Credit in the Proposed Design:**

*When a proposed solar PV system is to receive credit, Annual TDV Production is obtained using the CEC PV Calculator which can be downloaded for free at:*

[http://www.gosolarcalifornia.ca.gov/nshpcalculator/download\\_calculator.html](http://www.gosolarcalifornia.ca.gov/nshpcalculator/download_calculator.html)

Annual TDV Production (TDV KWh/yr)			Solar PV Credit (TDV KBtu/sf-yr)	
	X 3.413 (Floor Area)			[used in Step #3]
TOTAL Proposed Design			Revised Proposed Design (TDV KBtu/sf-yr)	
[from above]			- Solar PV Credit =	

**3. Verify LEED Equivalent Energy Performance**

Revised Proposed Design (TDV KBtu/sf-yr)		Standard Design (TDV KBtu/sf-yr)	
[from above]	must be 15% <	[from above]	

Revised Proposed Design is < Standard Title 24 by (%):
--

Revised 12/28/09



## Green Building: Final Compliance Verification

As the Green Building Compliance Professional of Record for the project at

Address: \_\_\_\_\_

Permit Application Numbers: \_\_\_\_\_

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I verify that, to the best of my knowledge, the above referenced project has been constructed to substantially comply with the green building requirements of the San Francisco building codes.

Mandatory follow-up for this project includes:

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Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Affix professional stamp here:



# Green Building Recommended Project Procedures for Green Building Implementation

## ***Introduction***

1. Certification by referenced standards is not required but recommended.
2. LEED and GreenPoint Rated were selected by the Green Building Task Force primarily because of their credibility, existing program infrastructure, and verification performed by qualified review bodies.
3. For more information: [www.usgbc.org](http://www.usgbc.org), [www.builditgreen.org](http://www.builditgreen.org)

## **LEED Projects**

1. Identify Project Administrator who is a LEED Accredited Professional (reports to Green Building Compliance Professional)
2. Register Project with USGBC
3. Develop Responsibility Matrix and assign credits to responsible design team member
4. Fill out preliminary LEED Checklist
5. Detailed design
6. Design Credits to USGBC for review
7. Construction
8. Construction Credits to USGBC for review
9. Maintain detailed project records showing that green building requirements have been met (DBI Q/A)

## **GreenPoint Rated Projects**

1. Identify Project Administrator who is a Certified GreenPoint Rater (reports to Green Building Compliance Professional)
2. Register Project with Build It Green
3. As early in design process as possible, work with GreenPoint Rater to fill out GreenPoint Rated Checklist
4. Design
5. Plan Review Assessment by GreenPoint Rater
6. Construction
7. Rough Inspection (pre-dywall) by GreenPoint Rater
8. Construction
9. Final Inspection by GreenPoint Rater
10. Maintain detailed project records showing that green building requirements have been met (DBI Q/A)



## **Green Building: Selected Resources**

- **SF Dept of Building Inspection** – [www.sfgov.org/dbi](http://www.sfgov.org/dbi)
- **SF Environment Green Building Program** – [www.sfenvironment.org/our\\_programs/](http://www.sfenvironment.org/our_programs/)
- **US Green Building Council – LEED Rating System** – [www.usgbc.org](http://www.usgbc.org) – Numerous resources, including Reference Guides to the LEED Rating System(s), find workshops, and register for LEED certification.
  - **US Green Building Council Northern California Chapter** – [www.usgbc-ncc.org](http://www.usgbc-ncc.org) – Network with local green building professionals.
  - **Green Building Certification Institute:** [www.gbci.org](http://www.gbci.org) – The site to register for the LEED Accreditation Exam. As of Jan 1, 2009, [www.gbci.org](http://www.gbci.org) will assume the duties of processing LEED registrations and certifications.
- **Build It Green** – Learn the GreenPoint Rated System, identify opportunities to network, learn more about green building, obtain the Residential Guidelines referenced by GreenPoint Rated, and identify local Certified GreenPoint Raters – [www.builditgreen.org](http://www.builditgreen.org)

**A “Handbook to Building Green” in San Francisco, comprised of helpful information and more extensive references, is available at the Green Building Display in the DBI Permit Center lobby.**





## **Green Building Ordinance Text**

Search:

Search

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San Francisco Building Inspection Commission (BIC) Codes

BUILDING CODE 2007 Edition

Chapter 13C. GREEN BUILDING REQUIREMENTS

1

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## Chapter 13C

### GREEN BUILDING REQUIREMENTS

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[Added 9-4-2008 by Ord. No. 180-08]

#### SECTION 1301C – INTENT

The purpose of this chapter is to promote the health, safety and welfare of San Francisco residents, workers, and visitors by minimizing the use and waste of energy, water and other resources in the construction and operation of the City and County of San Francisco's building stock and by providing a healthy indoor environment. The green building practices required by this chapter will also further the goal of reducing the greenhouse gas emissions in the City and County of San Francisco to 20 percent below 1990 levels by the year 2012, as stated in Board of Supervisors Resolution No. 158-02 and the City's 2004 Climate Action Plan.

#### SECTION 1302C – DEFINITIONS

For the purposes of this chapter, certain terms are defined as follows:

**DEMOLITION** means, where the existing building is determined to be an historical resource under the California Environmental Quality Act, proposed removal of sufficient material from an existing building to meet the definition in Planning Code Section 1005(f), or, where the existing building is determined not to be an historical resource under the California Environmental Quality Act, proposed removal of sufficient material from an existing building to meet the definition in Planning Code Section 317(b)(2), whether the occupancy of the existing building is residential or commercial.

**GREENPOINT RATED, GREENPOINTS and GREENPOINTS CHECKLIST** mean the residential green building rating system and checklist and certification methodology of the non-profit organization Build It Green.

**HIGH-RISE BUILDING** means a building that meets the definition of "high-rise building" in Section 202 of this Code.

**HIGH-RISE RESIDENTIAL BUILDING** means a Group R occupancy residential building that is a high-rise building.

**HISTORICAL RESOURCE** is a property that meets the terms of the definitions in Section 21084.1 of the CEQA Statute (The California Environmental Quality Act [Public Resources Code Section 21084.1]) and Section 15064.5 of the CEQA Guidelines, as determined by the San Francisco Planning Department.

**LARGE COMMERCIAL BUILDING** means a commercial building or addition of Group B or M occupancy that is 25,000 gross square feet or more or is a high-rise building.

**LEED® and LEED® Checklist** mean the Leadership in Energy and Environment Design rating system, certification methodology, and checklist of the United States Green Building Council (USGBC).

**MAJOR ALTERATIONS** means alterations where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems are proposed where areas of such construction are 25,000 gross square feet or more in Group B, M or R occupancies of existing buildings.

**MID-SIZE COMMERCIAL BUILDING** means a commercial building of Group B or M occupancy that is 5,000 or more and less than 25,000 gross square feet, and is not a high-rise building.

**MID-SIZE RESIDENTIAL BUILDING** means a Group R occupancy residential building that has five or more dwelling units and is not a high-rise building.

**NEW LARGE COMMERCIAL INTERIORS** means first-time tenant improvements where areas of such construction are over 25,000 gross square feet or more in Group B or M occupancy areas of existing

buildings.

**SMALL RESIDENTIAL BUILDING** means a Group R occupancy building that has four or fewer dwelling units and is not a high-rise building.

#### **SECTION 1303C – SCOPE**

Projects in the City and County of San Francisco that are within the scope of this chapter are: (1) newly constructed Group R occupancy buildings, (2) newly constructed commercial buildings of Group B or M occupancies that are 5,000 gross square feet or more, (3) new first-time build-outs of commercial interiors that are 25,000 gross square feet or more in buildings of Group B or M occupancies, and (4) major alterations that are 25,000 gross square feet or more in existing buildings of Group B, M or R occupancies, where interior finishes are removed and significant upgrades to structural and mechanical, electrical and/or plumbing systems are proposed.

Exempt from this chapter are (1) City and County of San Francisco projects, which are subject to Chapter 7 of the San Francisco Environment Code, (2) any new building in which laboratory use of any occupancy classification is the primary use, and (3) any building undergoing renovation in which the area of renovation will be primarily for laboratory use of any occupancy classification.

All buildings within the scope of this chapter must meet or exceed the energy requirements contained in the 2005 California Building Energy Efficiency Standards, including California Code of Regulations, Title 24, Parts 1 and 6, or the version of those standards that is applicable at the time a permit application is filed. If the increased minimum energy efficiency standards specified in this chapter do not apply, a project must comply with the applicable California Building Energy Efficiency Standards.

#### **SECTION 1304C – GREEN BUILDING REQUIREMENTS**

**1304.0 Applicability.** The following green building requirements shall apply to all projects within the scope of this chapter. Wherever reference is made to the LEED® or GreenPoint Rated systems, a comparable equivalent rating system may be used if approved by the Director. The applicable LEED®, GreenPoint Rated or equivalent versions of performance standards for any applications subject to this chapter, regardless of application dates, are:

**LEED®-CI v2.0 - LEED® for Commercial Interiors (June 2005)**

**LEED®-CS v2.0 - LEED® for Core and Shell (July 2006)**

**LEED®-NC v2.2 - LEED® for New Construction (July 2007)**

**GreenPoint Rated (GPR) – GPR v2007 (March 2007)**

Wherever specific LEED® prerequisites or credits are cited, such references are to LEED® -NC v2.2. More recent LEED® and GreenPoint Rated versions may be used, provided the credits and points achieved are as or more stringent than LEED® -NC v2.2 or GPR v2007.

Wherever the LEED® or GreenPoint Rate systems include a minimum energy or other performance requirement, the permit applicant may choose to meet the minimum performance requirements with an alternative equivalent method approved by the Director.

**1304C.0.1 Compliance.** Compliance with any of these requirements may be verified and/or certified by any means, including third-party equivalent, as approved by the Director.

**1304C.0.2 Solar electric systems.** The installation of any solar photovoltaic energy system must meet all installation criteria the California Energy Commission's Guidebook "Eligibility Criteria and Conditions for Incentives for Solar Energy Systems." An energy credit from solar photovoltaic (PV) energy systems may be used to demonstrate compliance with the Ordinance's general compliance requirements. This credit is available if the solar PV energy system is capable of generating electricity from sunlight, supplying the electricity directly to the building, and the system is connected, through a reversible meter, to the utility grid. The methodology used to calculate the energy equivalent to the photovoltaic credit shall be the CECPV Calculator, using the most recent version prior to the permit application date, which may be found on the web site of the California Energy Commission.

**1304C.0.3 Stormwater.** Stormwater management shall meet the "Best Management Practices"

and “Stormwater Design Guidelines” of the San Francisco Public Utilities Commission, and shall meet or exceed the applicable LEED SS 6.1 and 6.2 guidelines.

**1304C.0.4 Solid waste.** Areas provided for recycling, composting and trash storage, collection and loading, including any chute systems, must be designed for equal convenience for all users to separate those three material streams, and must provide space to accommodate a sufficient quantity and type of containers to be compatible with current methods of collection.

**1304C.0.5 Building demolition.** Applications subject to this Section, whereby construction of a new building is proposed within five years of the demolition of a building on the site, where such demolition occurred after the effective date of this ordinance, shall be subject to the following requirements:

**1304C.0.5.1** The sustainability requirements for new buildings pursuant to Sections 1304C.1, et seq. shall be increased as follows:

**1304C.0.5.1.1** For projects attaining a LEED® certification and where the building demolished was an historical resource, the required points shall be increased by 10 percent of the total available in the required LEED® system. Where the building demolished was not an historical resource, the required points shall be increased by 10 percent of the total required of the applicable LEED certification requirements absent a demolition. For projects opting to be GreenPoint Rated, 25 additional points must be achieved, where the building demolished was an historical resource, or 20 additional points must be achieved where the building demolished was not an historical resource. The Director shall determine, on a case-by-case basis, increased requirements in similar proportions for projects achieving compliance using other green building rating systems.

For projects subject to 1304C.2.1, Mid-Size Commercial Buildings, and this Section 1304C.0.5, where the building demolished was not an historical resource, the following requirements apply:

The water use reduction required in 1304C.2.1.4 shall take effect on January 1, 2009, and permit applicants must submit documentation to verify that a minimum 30 percent reduction in the use of potable water was achieved. (LEED® WE3.2)

The enhanced commissioning required by Section 1304C.2.1.6 shall take effect January 1, 2010.

The energy generation or purchase required by Section 1304C.2.1.7 shall take effect January 1, 2011.

Effective January 1, 2012 permit applicants must submit documentation to verify achievement of one additional credit in accord with LEED® MR3, MR4, MR5, MR6, or MR7.

In addition to the above, where the building demolished was an historical resource, effective January 1, 2009 through January 1, 2011 permit applicants must submit documentation to verify achievement of one additional credit in accord with LEED® MR3, MR4, MR5, MR6, or MR7. Effective January 1, 2012, two additional credits in accord with LEED® MR3, MR4, MR5, MR6, or MR7 are required.

**1304C.0.5.1.2** Except where the demolished building was determined to be an historical resource, if the occupant loads of the commercial portion of the replacement structure calculated in accord with Section 1004 of this Code and the number of dwellings in the residential portion are each tripled, for those buildings attaining LEED® certification, the required points shall be increased by 8 percent of the total points required absent a demolition. For such projects pursuant to demolitions opting to be GreenPoint Rated, 17 additional points must be achieved. Where occupant loads and residential density are quadrupled, the required points for projects attaining LEED® certification shall be increased by 6% of the total required absent a demolition, and for those opting to be GreenPoint Rated, 15 additional points must be achieved. The Director shall determine, on a case-by-case basis, appropriate increased requirements in similar proportions for projects achieving compliance using other green building rating systems.

**1304C.0.6 On-site retention of historical features.** For alterations of buildings determined to be historical resources, additional points or credits shall be granted for retention and in-situ reuse or restoration of certain character defining features, as follows:

**TABLE 1304C-A**

<b>SIGNIFICANT HISTORICAL ARCHITECTURAL FEATURES</b>	<b>PERCENT RETAINED*</b>	<b>LEED POINTS FOR RETENTION</b>	<b>GREENPOINTS FOR RETENTION</b>
* Retention includes the rehabilitation and repair of character defining features that conform to the			

## **Secretary of the Interior's Standards for the Treatment of Historic Properties.**

**1304C.0.7 Maintenance of required features.** Any structure subject to this chapter shall maintain the green building features required herein, regardless of subsequent alterations, additions, or changes of use, unless subject to more stringent requirements.

### **1304C.1 Requirements for New Group R Occupancy Buildings.**

**1304C.1.1 Small Residential Buildings.** Upon the operative date of this chapter , the permit applicant must submit a GreenPoints New Home Construction Checklist but no points are required to be achieved. Effective January 1, 2009, applicants must submit documentation demonstrating that a minimum of 25 GreenPoints from the checklist will be achieved. Effective January 1, 2010 through 2011, a new building must be GreenPoint Rated and applicants must submit documentation demonstrating that a minimum of 50 GreenPoints from the checklist will be achieved. Effective January 1, 2012, a new building must be GreenPoint Rated and applicants must submit documentation demonstrating that a minimum of 75 GreenPoints from the checklist will be achieved.

**1304C.1.2 Midsize Residential Buildings.** Upon the operative date of this chapter , permit applicants must submit a GreenPoints Multifamily Checklist but no points are required to be achieved. Effective January 1, 2009, applicants must submit documentation demonstrating that a minimum of 25 GreenPoints from the checklist will be achieved. Effective January 1, 2010, a new building must be GreenPoint Rated and applicants must submit documentation demonstrating that a minimum of 50 GreenPoints from the checklist will be achieved. Effective January 1, 2011, a new building must be GreenPoint Rated and applicants must submit documentation demonstrating that a minimum of 75 GreenPoints from the checklist will be achieved.

### **1304C.1.3 High-Rise Residential Buildings.**

**1304C.1.3.1 Rating requirement.** Upon the operative date of this chapter, permit applicants must submit documentation to achieve LEED® “Certified” certification. Effective January 1, 2010, applicants must submit documentation to achieve a LEED® “Silver” certification. Alternatively, GreenPoint Rated 50 points minimum may be achieved to meet this requirement upon the operative date of this ordinance, and GreenPoint Rated 75 points minimum effective January 1, 2010, providing all LEED®-NC Prerequisites are also met.

**1304C.1.3.2 Water efficient landscaping.** Upon the operative date of this chapter, permit applicants must submit documentation verifying that a minimum 50 percent reduction in use of potable water for landscaping was achieved. (LEED® WE1.1)

**1304C.1.3.3 Water use reduction.** Upon the operative date of this chapter, permit applicants must submit documentation demonstrating achievement of a minimum 20 percent reduction in the use of potable water. (LEED® WE3.2) Effective January 1, 2011, the required reduction in use of water is 30 percent. (LEED® WE3.2)

**1304C.1.3.4 Construction debris management.** Effective January 1, 2009, permit applicants must submit documentation to verify that diversion of at least 75 percent of the project's construction debris was achieved. (LEED® MR2.2)

### **1304C.2 Requirements for New Group B and M Occupancy Buildings.**

#### **1304C.2.1 Mid-Size Commercial Buildings.**

**1304C.2.1.1 Rating requirement.** Upon the operative date of this chapter, permit applicants must complete and submit a LEED® Checklist but no points are required to be achieved.

**1304C.2.1.2 Fundamental commissioning of the building energy systems.** Effective January 1, 2009, permit applicants must submit documentation prepared by a Commissioning Agent demonstrating compliance with LEED® EA Prereq 1.

**1304C.2.1.3 Water efficient landscaping.** Effective January 1, 2009, permit applicants must submit documentation verifying that a minimum 50 percent reduction in use of potable water for landscaping was achieved. (LEED® WE1.1)

**1304C.2.1.4 Water use reduction.** Effective January 1, 2009, and effective through 2010, permit

applicants must submit documentation demonstrating achievement of a minimum 20 percent reduction in the use of potable water. (LEED® WE3.1) Effective January 1, 2011, the required reduction in use of water is 30 percent. (LEED® WE3.2)

**1304C.2.1.5 Construction debris management.** Effective January 1, st 2009, permit applicants must submit documentation to verify that diversion of at least 75 percent of the project's construction debris was achieved. (LEED® MR2.2)

**1304C.2.1.6 Enhanced commissioning.** Effective January 1, 2011, a new building must achieve enhanced commissioning. (LEED® EA3.0)

**1304C.2.1.7 Energy.** Effective January 1, 2012, permit applicants must submit documentation to verify renewable on-site energy or purchase green energy credits in accord with LEED® EA2 or EA6.

#### **1304C.2.2 New Large Commercial Buildings.**

**1304C.2.2.1 Rating requirement.** Upon the operative date of this chapter, permit applicants must submit documentation to achieve LEED® "Certified" Certification. Effective January 1, 2009, permit applicants must submit documentation to achieve a LEED® Silver rating. Effective January 1, 2012, permit applicants must submit documentation to achieve a LEED® Gold rating.

**1304C.2.2.2 Water efficient landscaping.** Upon the operative date of this chapter, permit applicants must submit documentation verifying that a minimum 50 percent reduction in use of potable water for landscaping was achieved. (LEED® WE1.1)

**1304C.2.2.3 Water use reduction.** Upon the operative date of this chapter, permit applicants must submit documentation demonstrating achievement of a minimum 20 percent reduction in the use of potable water. (LEED® WE3.2) Effective January 1, 2011, the required reduction in use of potable water is 30 percent. (LEED® WE3.1)

**1304C.2.2.4 Construction debris management.** Upon the operative date of this chapter, permit applicants must submit documentation to verify that diversion of at least 75 percent of the project's construction debris was achieved. (LEED® MR2.2)

**1304C.2.2.5 Enhanced commissioning.** Effective January 1, 2010, a new building must achieve enhanced commissioning. (LEED® EA3.0)

**1304C.2.2.6 Energy.** Effective January 1, 2012, permit applicants must submit documentation to verify achievement of renewable on-site energy or purchase of green energy credits in accord with LEED® EA2 or EA6.

#### **1304C.3 New Large Commercial Interiors and Major Alterations to Existing Buildings.**

**1304C.3.2.1 Rating requirement.** Upon the operative date of this chapter, permit applicants for such construction must submit documentation to achieve LEED® "Certified" Certification. Effective January 1, 2009, applicants must submit documentation to achieve a LEED® Silver rating. Effective January 1, 2012, applicants must submit documentation to achieve a LEED® Gold rating.

**1304C.3.2.2 Use of low-emitting materials.** Upon the operative date of this chapter, permit applicants for alterations subject to this subsection must submit documentation to verify the use of low-emitting materials under LEED® EQ4.1, 4.2, and 4.3.

### **SECTION 1305C – IMPLEMENTATION**

Rules and regulations regarding the implementation of this chapter shall be detailed in an Administrative Bulletin to be prepared and issued by the Department of Building Inspection.

### **SECTION 1306C – HARDSHIP OR INFEASIBILITY EXEMPTION**

**1306C.1 Exemption.** If a permit applicant for a project believes that circumstances exist that make it a hardship or infeasible to meet fully the requirements of this chapter, the applicant may apply to the Director for an exemption as set forth below. In applying for an exemption, the burden is on the permit applicant to demonstrate hardship or infeasibility.

**1306C.2 Application.** A permit applicant seeking an exemption shall submit the following information in

support of the application:

1. the maximum number of credits or other compliance that the permit applicant believes is practical or feasible
2. the circumstances that the permit applicant believes make it a hardship or infeasible to comply fully with this chapter. Such circumstances may include, but are not limited to, availability of markets for materials to be recycled, availability of green building materials and technologies, and compatibility of green building requirements with other regulations.

**1306C.3 Granting an Exemption.** If the Director determines that it is a hardship or infeasible for the applicant to meet fully the requirements of this chapter based on the information submitted with the application for an exemption, the Director shall determine the maximum feasible number of credits or other compliance reasonably achievable for the project and shall indicate this on the documentation submitted by the permit applicant. If an exemption is granted, the permit applicant must achieve the number of credits or compliance the Director determines to be achievable and shall comply with this chapter in all other respects.

**1306C.4 Exemption for Historic Structure.** The Director shall grant an exemption for an historic structure if the Director determines that compliance with certain requirements would impair the structure's historic integrity. The historic structure shall comply with this chapter in all other respects.

**1306C.5 Denial of Exemption.** If the Director determines that it is possible for the application to meet fully the requirements of this chapter, the Director shall notify the permit applicant in writing. The permit applicant must then submit all documentation required by Section [1304C](#). If the applicant does not submit the documentation within the time period required by Section 106A.3.7, or the documentation does not comply with the requirements of Section [1304C](#), the Director shall disapprove the building permit.

#### **SECTION 1307C – APPEAL**

Determinations of the Director related to this chapter are appealable to the Building Inspection Commission pursuant to the procedure set forth in Chapter 77 of the San Francisco Administrative Code. Denial of a building permit is appealable to the Board of Appeals pursuant to the procedure set forth in Section 8 et seq. of the San Francisco Business and Tax Regulations Code.

#### **SECTION 1308C – ENFORCEMENT**

The applicant's failure to build a project in accordance with approved construction documents and plans shall be subject to the procedures governing abatement of unsafe structures set forth in Section [102A](#) of this Code. In addition, the Director may require other reasonable green building measures to mitigate the failure to comply fully with this chapter.

#### **SECTION 1309C – CONFLICT WITH OTHER PROVISIONS OF THIS OR OTHER CODES**

In the event that the requirements of this chapter conflict with other provisions of this Code or the other codes enforced by the Department of Building Inspection, the requirements of this chapter shall apply and the more restrictive building design standards of this or the other codes shall prevail.

#### **SECTION 1310C – OPERATIVE DATE**

This ordinance shall become operative 90 days after it is adopted by the Board of Supervisors and signed by the Mayor. If, however, the California Energy Commission has not approved the legislation by that time, this ordinance shall not become operative until the Energy Commission has approved it.

#### **Notes**

- 1 This section contains a change from the original publication of the 2007 San Francisco Building Code.

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