

INFORMATION SHEET

NO. GB-01	
DATE	: July 1, 2014
CATEGORY	: Green Building
SUBJECT	: Green Building: Submittal Instructions per AB-093 (Updated 7/01/2014)
PURPOSE	: The purpose of this Information Sheet is to clarify submittal instructions for Green Building per AB-093
PURPOSE REFERENCE	 The purpose of this Information Sheet is to clarify submittal instructions for Green Building per AB-093 Attached AB-093, Implementation of Green Building Regulations

(1) SITE PERMIT SUBMITTAL:

Green Building: Submittal for Site Permit (Attachment C2 of AB-093) shall be submitted with all Site Permit submittals for new buildings.

(2) 1st ARCHITECTURAL AND/OR MEP ADDENDUM SUBMITTAL:

Full Green Building Checklists (Attachment C3: LEED, Attachment C4: Green Point Rated, Attachment C5: Submittal for non-residential additions, alterations, and new construction or Submittal Template C6, C7 (Currently optional), or C8 as required, along with green building requirements and their verification options, shall be submitted with 1st Architectural and/or MEP addendum to be routed to Mechanical for review.

Green Building Submittal Templates are provided in electronic format 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

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- 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 that may optionally be used to prepare LEED submittals. (You may use your own LEED checklist file.)
- 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 submittals. For more information – including guidelines and a list of all GreenPoint measures – please see: <u>www.builditgreen.org</u>.

Single Page Submittal Templates (Recommended)

Pre-formatted templates are provided for single-sheet submittals applying LEED (example Attachment C-3 in AB-093) and GreenPoint Rated (example Attachment C-4 in AB-093). Acquire the appropriate submittal template from the AB-093 "More Info" page, cut and paste a checklist for the appropriate green building standard, and complete the summary of "Requirements" and "Verification" forms in AB-093.

Submittal Layouts

Submittals shall 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.

Tom C. Hui, S.E., C.B.O. Director Department of Building Inspection Date

This Information Sheet is subject to modification at any time. For the most current version, visit our website at http://www.sfdbi.org

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ADMINISTRATIVE BULLETIN

AB-093		
DATE	:	Effective January 1, 2014 (Attachments/Forms updated July 1, 2014; 2013 Energy Code effective date)
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 the San Francisco Green Building Code effective January 1, 2014.
REFERENCE	:	2013 San Francisco Green Building Code; San Francisco Administrative Bulletin 005: Procedures for Approval of Local Equivalencies; California Title 24 Part 11; San Francisco Environment Code Chapter 7.
DISCUSSION	:	Approved construction documents, and completed projects must conform to the Green Building requirements established in the San Francisco Green Building Code, which combines all mandatory elements of the 2013 California Green Building Standards Code (CALGreen) and stricter local requirements.
		Herein, "locally required measures" refers to the combination of prescriptive measures required as a consequence of adopting the California Green Building Standards Code, local amendments, and other relevant local requirements.
		At various project milestones, particularly at the conclusion of construction, the Department of Building Inspection must verify that Green Building requirements have been met. Under these implementation procedures, the majority of 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 the San Francisco Green 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. Projects that submitted a complete application for building permit under prior versions of San Francisco green building codes must meet the requirements in effect at that time. Project sponsors should verify that they are meeting all applicable code requirements, which may modify the standards and procedures addressed in this Administrative Bulletin.

IMPLEMENTATION:

Green Building Requirements to be Applied

Green building requirements of the San Francisco Green Building Code apply to all new construction in San Francisco, as well as certain alterations and additions. To identify the green building requirements which apply to a project:

- Use Attachment A Table 1 of this bulletin to find the overall green building standard (LEED, GreenPoint Rated, or 'Locally Required Measures Only') that applies based on occupancy, project size, and whether the project is new construction or alteration. Attachment A, Table 1 also identifies the submittal required in order to confirm compliance with local requirements.
- Attachment B consists of four tables that summarize specific required measures:¹
 - Table 1: Requirements for projects meeting a LEED standard
 - o Table 2: Requirements for projects meeting a GreenPoint Rated standard
 - Table 3: Requirements for all non-residential projects that are not required to meet a LEED standard (includes certain new construction as well as certain additions and alterations)
 - Table 4: Requirements for residential additions and alterations

Mixed Occupancy Buildings

For mixed occupancy buildings where local standards reference a green building rating system (Attachment A, Table 1), the project sponsor may apply a single green building rating system to the entire building. Each portion of the building must meet the Local Requirements applicable to that occupancy.

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

The date of applicability of these Green Building requirements is January 1, 2014. Application of the Green Building requirements is 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.

However, San Francisco Building Code 13C remains applicable to project applications received between November 3, 2008 and December 31, 2013. For details, see the appropriate version of Administrative Bulletin 93: "Implementation of Green Building Regulations," as summarized in the following table:

¹ Attachments are provided for reference only. For complete details on any specific requirement, refer to San Francisco Green Building Code.

Applicability of green building requirements based on date of application for building permit in San Francisco:

Green Building Requirements	Effective Dates	See Administrative Bulletin 93 dated
San Francisco Building Code 13C (2007)	November 3, 2008 through December 31, 2010	September 24, 2008
San Francisco Building Code 13C (2010)	January 1, 2011 through July 17, 2012	January 1, 2011
San Francisco Building Code 13C (2010)	July 18, 2012 through December 31, 2013	July 18, 2012
San Francisco Green Building Code (2013)	January 1, 2014 through December 31, 2017	This bulletin

PROJECT SUBMITTAL REQUIREMENTS

Screening of Building Permit Applications for Applicability

Attachment A, Table 1 should be used to determine which green building requirements may apply. Department of Building Inspection staff will screen all building permit applications to confirm which Green Building regulations apply, as summarized in Attachment A, Table 1. Every application for Site Permit subject to these regulations must include a copy of Attachment C-2 ("Green Building: Site Permit Submittal.") Permit applications for new construction projects will not be accepted for processing without Attachment C-2, and permit applications for addition or alteration will not be accepted without Attachments C-3, C-4, C-5, C-6 C-7, or C-8 as applicable.

At the time of the first architectural or superstructure addendum, whichever comes first, the submittal package for all applicable projects must include a checklist incorporated into the project plans indicating the required green building measures.² This checklist must reference, as appropriate, location of green building features in the submittal documents. The Green Building Submittal (Attachments C-3, C-4, C-5, C-6, C-7, or C-8) shall include this checklist, shall detail the 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.

The Green Building Submittal may be reformatted as needed to conform to plan submittal size if all information is provided.

The Green Building Requirements may be documented as met in any of the following ways:

- Registration and submittal for certification under LEED. For buildings that propose this option, the permit applicant must provide submittal documentation showing that the project will meet the appropriate LEED certification requirements. See "Energy Compliance Guidelines for LEED projects" section below for details about energy compliance.
- 2. Registration and achievement of GreenPoint Rated status. For buildings that propose this option, the permit applicant must submit documentation showing that the project will meet the appropriate GreenPoint Rated certification requirements.

² Such a checklist is required for each applicable project, including where Form 3 or Form 8 is used to apply for permit.

- 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.
- 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.
- 5. Where neither LEED nor GreenPoint Rated is required, submit documentation of compliance with Locally Required Measures in effect at the time of permit submittal, as indicated.

Municipal projects, 3 of 5,000 square feet or larger, are required by San Francisco Environment Code Chapter 7 to obtain LEED Gold certification. For such projects, only "Option 1" above may be used.

Green Building Compliance Professional of Record

For options 3, 4, and 5 above, the owner or owner's agent must employ a Green Building Compliance Professional of Record who personally reviews and/or verifies, or directly supervises, persons who provide on-site review or verification of compliance with San Francisco Green Building Code requirements.

For compliance options 3, 4 and 5 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:

- 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 the GreenPoint Rater designation, or the project team shall include a person who is a GreenPoint Rater.
- For projects solely required to meet Locally Required Measures, such specialized understanding shall include either: ICC Certified CalGreen Inspector certification, the GreenPoint Rater designation, LEED accreditation, or equivalent training and certification as approved by the Director.

For residential alteration and addition projects which increase total conditioned floor area of the building by 1,000 square feet or less, a Green Building Compliance Professional of Record is not required.⁴ In such cases, the applicant may complete the green building submittal.⁵ Note that in all cases, applicable green building requirements apply to the entire project, and are not limited to the area of addition.

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.

³ Municipal projects are projects authorized by any Department of the City and County of San Francisco, including leasehold improvements.

⁴ Projects which are "major alterations" to residential occupancy (with project area of 25,000 square feet or greater; and significant structural upgrade; and significant mechanical, electrical, or plumbing) continue to require either registration and certification, or verification by a Green Building Compliance Professional of Record.

⁵ Procedures for verification of compliance for small residential alterations are expected to be reviewed by June 30, 2014, and are subject to revision.

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. Where a Green Building Compliance Professional of Record is responsible for verifying compliance with the requirements of the San Francisco Green Building Code, and no third party green building certification is to be achieved, project documents may be reviewed in detail in plan review and inspection, at standard hourly rates for staff time.

Compliance Guidelines: Energy

The 2013 San Francisco Green Building Code requires building permit submittals to show that they meet the compliance margin required by the applicable rating system, and the California Building Energy Efficiency Standards in effect at the time of permit submittal. In each case below, standard Title 24 Part 6 documentation must be prepared using software from the California Energy Commission *List of Approved Computer Programs for the Building Energy Efficiency Standards*. The following guidelines explain when additional calculations and documentation are required.

- Buildings meeting a LEED for Building Design and Construction, or LEED Core and Shell standard under this ordinance must prepare and submit all standard documentation required by the California Energy Commission to demonstrate compliance with the Title 24 Part 6 standard in effect on the date of permit application.⁶
 - Where the ASRHAE 90.1 option in LEED 2009 (or subsequent) rules are used to document 'points' are voluntarily earned for energy efficient design and construction, the supporting analysis must be submitted, and 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 all information required for LEED certification by the Green Building Certification Institute.
 - Where %-less-than-TDV calculations based on the Title 24 Part 6 standard applicable to the project are used to document that 'points' are voluntarily earned for energy efficient design and construction, the compliance margin cited in the PERF-1C submitted for compliance may be utilized without modification. Optionally, the PERF-1-GBO (Appendix D) form may be used to adjust the TDV compliance margin by (a) accounting for on-site photovoltaic electric generation not otherwise included in Title 24 Part 6 analysis, and/or (b) excluding systems subject to mandatory requirements in the California Energy Standards.⁷
- Buildings meeting a LEED for Homes or GreenPoint Rated standard must perform the standard Title 24, Part 6 performance analysis using California Energy Commission approved compliance software, and submit documentation to demonstrate that the proposed building both:
 - complies with the California Energy Efficiency Standards in effect on the date of application for building permit; AND,
 - meets the minimum energy efficiency requirements of the applicable green building rating system.

Where California Energy Commission approved compliance software is used to document the minimum energy efficiency requirements of the green building rating, all submittals related to

⁶ LEED BD&C (2009) and LEED CS (2009) minimum energy efficiency requirements are less strict than California Title 24 Part 6 (2008 or 2013).

⁷ California Energy Standards include mandatory requirements for certain systems in certain occupancies. California Energy Standards allow the substitution of designs that use less energy than the mandatory requirement, but the energy saved from such a substitution is excluded from performance-based compliance calculations, and does not affect %-less-than-TDV calculation summarized in PERF-1C. PERF-1-GBO provides an option to calculate %-less-than-TDV energy compliance margin based on the systems not subject to mandatory requirements. In other words, it allows one to calculate the compliance margin based only on the systems that contribute to performance-based code compliance.

compliance and the green rating system must be generated in the same compliance run. For example, for a GreenPoint Rated project, the compliance run number must be consistent throughout the compliance documentation AND the GPR-1 compliance certificate.

Compliance Guidelines: On-site Renewable Energy

The methodology used to calculate solar photovoltaic credit shall be the California Energy Commission PV Calculator (http://www.gosolarcalifornia.ca.gov/tools/nshpcalculator/index.php) or an SB 1 compliant calculator.

Compliance Guidelines: Construction Site Runoff Pollution Prevention

Construction site runoff pollution prevention requirements depend upon project size, occupancy, and location in areas served by combined or separate sewer systems. Projects required to meet a LEED standard (see Attachment A, Table 1) must - at minimum - prepare an erosion and sediment control plan (LEED prerequisite SSp1). However, more stringent local requirements may apply to any project, whether or not LEED is to be applied, such as a stormwater soil loss prevention plan or a Stormwater Pollution Prevention Plan (SWPPP). To confirm the construction site runoff pollution prevention requirements applicable to your project, please contact the SFPUC: <u>http://www.sfwater.org/index.aspx?page=235</u>.

Compliance Guidelines: Design for Post-Construction Stormwater Management

Projects that disturb 5,000 square feet or more of ground surface must meet local stormwater control requirements determined by the San Francisco Public Utilities Commission, and must submit a Stormwater Control Plan to the San Francisco Public Utilities Commission for approval. The SFPUC has developed San Francisco Stormwater Design Guidelines to aid project teams in meeting local requirements for stormwater controls, which are available online at: www.sfwater.org/sdg.

Compliance Guidelines: Water Efficient Irrigation

Projects that include 1,000 square feet or more of new or modified landscape are subject to the San Francisco Water Efficient Irrigation Ordinance.⁸ Details are available online at: www.sfwater.org/landscape.

New Large Commercial Interiors and Major Alterations to Existing Buildings

The application of San Francisco Green Building Code Sections 5.103.3 or 4.103.3 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 the San Francisco Green Building Code, 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 5.103.4 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. Note that all

⁸ The San Francisco Water Efficient Irrigation Ordinance is stricter than both the landscape irrigation efficiency measures in California's Green Building Standards (Title 24 Part 11) as well as California's Model Water Efficient Landscape requirements (AB 1881.)

first time commercial tenant interiors of less than 25,000 square feet must comply with all applicable CalGreen requirements.

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

For purposes of applying the specific provisions of San Francisco Green Building Code 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 Code.

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 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.

Requests for Approval of Equivalencies

Project sponsors wishing to submit alternates or equivalencies for the specific requirements referenced in the San Francisco Green Building Code or its referenced standards may do so as described in Administrative Bulletin 5, "Procedures for Approval of Local Equivalencies." Note that related state and local requirements continue to apply, including but not limited to, California Title 24 Part 11 Green Building Standards Code, SFPUC Stormwater Management Ordinance, and SFPUC Water Efficient Irrigation Ordinance.

- 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 coderelated 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.

Note that San Francisco Green Building Code (2013) recognized GreenPoint Rated v.6 and all LEED v.2009 rating systems (see SFGBC 101.10), and allows the application of more recent versions of these rating systems. New residential projects of any size may therefore utilize LEED for Homes Midrise, LEED BD+C, or GreenPoint Rated without triggering the above process for confirming equivalency. Similarly, major alterations to residential may use LEED BD&C, GreenPoint Rated Multifamily New Home, or GreenPoint Rated Multifamily Existing Home to comply, provided applicable local requirements are met.

Project Completion: Verification that Green Building Requirements are Met

Verification that green building requirements have been met requires either submittal of Attachment E, Green Building: Final Compliance Verification, or submittal of final certification as meeting LEED or GreenPoint Rated requirements, or both. **Final Compliance Verification documentation is required prior to final inspection.** Attachment E 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 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 provided a GreenPoint Rated certificate to the project.
- 3. If the project is built to meet LEED or GreenPoint Rated standards but will not be certified, then Attachment E must be signed by the Green Building Compliance Professional of Record.
- 4. If the project is built to meet locally required measures, then Attachment E must be signed by the Green Building Compliance Professional of Record. For residential alteration and addition projects which increase total conditioned floor area of the building by 1,000 square feet or less, the applicant may sign the green building submittal, and a Green Building Compliance Professional of Record is not required.⁹
- 5. 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 E must be signed by the Green Building Compliance Professional of Record.

⁹ Procedures for verification of compliance for small residential alterations are expected to be reviewed by June 30, 2014, and are subject to revision.

Temporary Certificate of Occupancy

A Temporary Certificate of Occupancy may be issued pending final compliance certification. However, no final Certificate of Completion may be issued until Green Building Final Compliance Verification (Attachment E of this bulletin) 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.

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Tom Hui, S.E., C.B.O., Director Department of Building Inspection

2/21/14 Date

Original version approved by the Building Inspection Commission on September 24, 2008, revision approved 2/19/2014

Attachments:

Attachment A, Table 1: Summary of requirements

Attachment A, Table 2: Additional requirements if a building is demolished

Attachment A, Table 3: Reduced requirements for retention of significant historical architectural features

Attachment B, Table 1: Requirements for projects meeting a LEED standard

Attachment B, Table 2: Requirements for projects meeting the GreenPoint Rated standard

Attachment B, Table 3: Requirements for non-residential projects when not required to meet a LEED standard (includes certain new construction as well as certain additions and alterations)

Attachment B, Table 4: Requirements for residential additions and alterations

Attachment C-1: Instructions for Green building submittals

Attachment C-2: Submittal for Site Permit

Attachment C-3: Submittal for LEED projects

Attachment C-4: Submittal for GreenPoint Rated projects

Attachment C-5: Submittal for non-residential additions, alterations, and new construction

Attachment C-6: Streamlined submittal for non-residential interior alterations

Attachment C-7: Submittal for residential additions and alterations

Attachment D: Supplementary energy compliance documentation

Attachment E: Final compliance verification

Attachment F: Recommended project implementation procedures

Attachment G: Selected green building resources

Attachment H: Review of Emergency Efficiency Requirements



San Francisco Green Building Code Attachment A, Table 1: Summary of Requirements

Instructions: Use the row below labelled, "Applicabillity" to find the column that best matches the occupancy and size of the project, and whether the project is new construction or alteration. The unshaded rows identify the green building standard that must be met, base number of points required, submittal form, and where to find additional detail in Attachment B.

		New Con	struction			Add	litions and Alteratio	ns		Municipal
Building Type	New Large Commercial	All Other New Non-Residential	New High-Rise Residential	New Low-Rise Residential	Major Alterations to Residential ²	Large First-Time Commerical Interiors	Major Alterations to Commerical	All Other Additions & Alterations to Commercial ¹	All Other Additions & Alterations to Residential ¹	New Const Addition or
Applicability (Occupancy, size, valuation, or scope)	A, B, I, M ≥25,000 sq. ft.	E, F, H, L, S, U any size, or A,B, I, M <25,000 sq. ft.	R ≥ 4 occupied floors	R 1 - 3 occupied floors	R ≥25,000 sq. feet; AND significant structural upgrade; ³ AND mechanical, electrical or plumbing	A, B, I, M ≥ 25,000 sq. ft.	B, M ≥25,000 sq. feet; AND significant structural upgrade; ³ AND mechanical, electrical or plumbing	A,B,I,M,E,F,H,L,S,U ≥1,000 sq ft addition or alteration of ≥\$200,000 value	R Addition of ≥1 square foot of conditioned area, volume, or size	All municipa ≥5,000 squ including le improve
Code Reference	5.103.1	5.103.2	4.103.2	4.103.1	4.103.3	5.103.4	5.103.3	CA Title 24 Part 11	CA Title 24 Part 11	SF Green Bui and Environ Chapt
Standard To Be Met	LEED Gold	None	GreenPoint Rated OR: LEED Silver	GreenPoint Rated OR: LEED Silver	GreenPoint Rated ² OR: LEED Gold	LEED Gold	LEED Gold	NA (CA Code)	NA (CA Code)	LEED
Base Number of Points Required Retention of historic features or demolition may adjust points required. See Attachment A, Tables 2 & 3	60 points	-	50 LEED points ⁴ OR: 75 GreenPoint Rated points	50 LEED points ⁴ OR: 75 GreenPoint Rated points	60 LEED points OR: 75 GPR points (If project area is <80% of gross floor area: 49 GPR points) ²	60 points	60 points	-	-	60 po
Submittal Form Required to summarize compliance	C-3: LEED	C-5: Non-residential	C-3: LEED OR C-4: GreenPoint Rated	C-3: LEED OR C-4: GreenPoint Rated	C-3: LEED OR C-4: GreenPoint Rated	C-3: LEED	C-3: LEED	C-5: Non-residential OR C-6: Streamlined for interior tenant improvements	C-7: Residential additions and alterations	C-8: Municip
For details, see:	Attachment B Table 1	Attachment B Table 3	Attachment B Table 1 for LEED OR Attachment B Table 2 for GPR	Attachment B Table 1 for LEED OR Attachment B Table 2 for GPR	Attachment B Table 1 for LEED OR Attachment B Table 2 for GPR	Attachment B Table 1	Attachment B Table 1	Attachment B Table 3	Attachment B Table 4	Submitt

1. When triggered, CalGreen requirements apply to the entire area of the project, and only to the area of the project, except water fixture and fitting efficiency requirements set by California Civil Code 1101.1. 2. Major alterations to residential occupancy that alter less than 80% of the building's gross floor area may apply the GreenPoint Rated Existing Multifamily Elements Rating System. In such cases, 49 points from the GreenPoint Rated Multifamily checklist must be achieved. When projects altering less than 80% of a residential building's gross floor area voluntarily seek GreenPoint Rated Existing Multifamily certification, then any number of points above the minimum of 49 will be accepted. In other words, voluntarily seeking GreenPoint Rated certification of the entire building does not raise the minimum requirement to 75 GPR points.

3. See p.6 of this bulletin for additional information about "significant structural upgrades".

4. In order to meet the LEED Silver requirement, projects that choose to use LEED for Homes or LEED for Homes Mid-Rise may adjust the Base Number of Points Required as needed.

See Attachment B for tables itemizing local requirements, including the 2013 California Green Building Standards Code and stricter local requirements.





Table 2: Additional Requirements in Case of Demolition

Attachment A Table 2

For new projects required to attain LEED	Demolished Building IS N	IOT a Historical Resource	Demolished Building IS a Historical Resource		
certification or GreenPoint Rated	LEED	GreenPoint Rated	LEED	GreenPoint Rated	
If new density will be less than 3x current density:	Obtain 6 additional LEED points	Obtain 20 additional GreenPoints	Obtain 10 additional	Obtain 25 additional	
OR: If new density is ≥3x current density:	Obtain 5 additional LEED points	Obtain 17 additional GreenPoints	LEED points	GreenPoints	



San Francisco Green Building Code

Table 3: Reduced requirements for retention ofsignificant historical architectural features

Significant Historical Architectural Feature	Percent Retained ¹	Reduction in total required LEED points ²	Reduction in total required GreenPoints ²
	At least 50%	2	7
Windows on Principal Façade(s)	At least 75%	3	11
	100%	4	15
Other windows	At least 50%	1	3
Other windows	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	At least 50%	2	7
significant interior spaces	100%	4	15
Other exterior ornamentation (e.g. cartouches, corbels, quins, etc.) visible from right-of-way	80%	1	3

¹ 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.

² 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.



San Francisco Green Building Code

Table 1: Requirements for projects meeting a LEED Standard

Attachment B Table 1

(Sheet 1 of 2)

Where code references are provided below: "CalGreen" refers to California Green Building Standards Code 2013 (Title 24 Part 11), and "SFGB" refers to San Francisco Green Building Code amendments. This summary is provided for convenience. See the San Francisco Green Building Code for details.

		New Large Commercial	New Mid Rise Residential	New High Rise Residential	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration
Locally Required LEED Measures	LEED Credit			Code Reference			
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance	LEED MR c2 (2 points)	SFGBC 5.103.1.3	Meet C&D ordinance only	SFGBC 4.103.2.3	Meet C&D ordinance only		
Energy Reduction Compared to Title-24 (or ASHRAE 90.1-2007)	LEED EA c1	LEED prerequisite (EAp2)	GPR or LEED prerequisite	GPR or LEED prerequisite	LEED pro (EAp2 Minir perforr	erequisite mum energy mance)	GPR or LEED prerequisite
Enhanced Commissioning of Building Energy Systems	LEED EA c3	SFGB 5.103.1.4	LEED prerequisite (EAp1.2 Testing & Verification)	(E	LEED pre Ap1 Fundament	erequisite al Commissioning	g)
Renewable Energy - Effective Jan 1, 2012, permit applicants must either: generate 1% of energy on-site with renewables, OR purchase renewable power, OR achieve an additional 10% beyond Title 24 2013.	LEED EA c2 OR EA c6 OR EA c1	SFGB 5.103.1.5	-	-	-	-	-
Indoor Water Efficiency - Reduce overall use of potable water within the building by specified percentage for showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals.	LEED WE c3	SFGB 5.103.1.2 (30% reduction)	CalGreen 4.303.1	SFGBC 4.103.2.2 (30% reduction)	LEED WE p1 /CalGreen 5.303.2	LEED WE p1 /CalGreen 5.303.2	LEED WE p1 /CalGreen 4.303.1
Water Efficient Irrigation - Projects with ≥ 1,000 square feet of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	LEED WE c1	(See "C	Complying with S	SF Admin Code 63 San Francisco's Water Efficient Irrigation Requirements" at www.sfwater.org/landscape.)			ents" at
Construction Site Runoff Pollution Prevention - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	LEED SS p1 ¹	SFGB 5.103.1.6	CalGreen 4.103.1.2	SFGBC - NPDES Phase II General 4.103.2.4.1 - Permit and other regulation			se II General her regulations.
Enhanced Refrigerant Management - Do not install equipment that contains CFCs or Halons	LEED EA c4	CalGreen 5.508.1.2	-	-	CalGreen 5.508.1.2	CalGreen 5.508.1.2	-
Indoor Air Quality Management During Construction - Meet SMACNA Guidelines for Occupied Buildings Under Construction, protect materials from moisture damage, protect return air grills	LEED EQ c3.1	SFGB 5.103.1.8	CalGreen 4.504.1	CalGreen 4.504.1	CalGreen 5.504.3	CalGreen 5.504.3	CalGreen 4.504.1
Low-Emitting Adhesives, Sealants, and Caulks - Adhesives and Sealants meet VOC materials meeting SCAQMD Rule 1168, aerosol adhesives meet Green Seal standard GS-36	LEED EQ c4.1	SFGB 5.103.1.9	CalGreen 4.504.2.1	CalGreen 4.504.2.1	SFGBC 5.103.3.2	SFGBC 5.103.3.2	SFGBC 4.103.3.2
Low-Emitting Paints and Coatings - Architectural paints and coatings meet Green Seal GS-11 standard, anti-corrosive paints meet GC-03, and other coatings meet VOC limits of SCAQMD Rule 1113	LEED EQ c4.2	SFGB 5.103.1.9	CalGreen 4.504.2.2	CalGreen 4.504.2.2	SFGBC 5.103.3.2	SFGBC 5.103.3.2	SFGBC 4.103.3.2
Low-Emitting Flooring, including Carpet - Hard surface flooring (vinyl, linoleum, laminate, wood, ceramic, and/or rubber must be Resilient Floor Covering Institute (RFCI) FloorScore certified; Carpet must meet Carpet and Rug Institute (CRI)	LEED EQ c4.3	SFGB 5.103.1.9	CalGreen 4.504.3 and 4.504.4	CalGreen 4.504.3 and 4.504.4	SFGBC 5.103.3.2	SFGBC 5.103.3.2	SFGBC 4.103.3.2
Low-Emitting Composite Wood - Composite wood and agrifiber must contain no added urea-formaldehyde resins, and meet applicable CARB Air Toxics Control Measure.	LEED EQ c4.4	SFGB 5.103.1.9	CalGreen 4.504.5	CalGreen 4.504.5	SFGBC 5.103.3.2	SFGBC 5.103.3.2	CalGreen 4.504.4
Recycling by Occupants: Provide adequate space and equal access for storage, collection and loading of compostable , recyclable and landfill materials. Exceeds requirements of LEED MR prerequisite 1.	LEED MRp1		SF (See D	SFBC 106A.3.3 and CalGreen 5.410.1; DBI Administrative Bulletin 088 for details)			

1) New residential "high rise" projects may use LEED for Homes Mid Rise certification or LEED BD&C as appropriate. New residential projects of any size have the option of using GreenPoint Rated (see table B2).

Attachment B Table 1 Continued: Requirements for projects meeting a LEED Standard

(Sheet 2 of 2)

Other Specific Local Requirements n some cases below, there is no corresponding LEED credit. In others, a requirement below may a correspond to a LEED credit which is stricter than he code provision - in which case the LEED credit is optional. Where a LEED credit is less strict, the stricter code-requirement must be met whether or not he LEED credit is achieved.		New Large Commercial	New Mid Rise Residential	New High Rise Residential	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration
Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater.	LEED SSC4.2	CalGreen 5.106.4 and SF Planning Code Sec 155	SF Planning Code Sec 155		CalGreen 5.106.4 and SF Planning Code Sec 15		SF Planning Code Sec 155
Designated parking: Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	LEED SSc4.3 and SSc4.4 are less strict.	CalGreen 5.106.5	-	-	CalGreen 5.106.5	CalGreen 5.106.5	-
Light pollution reduction: Meet California Energy Code minimum for Lighting Zones 1-4 with Backlight/Uplight/Glare ratings meeting CalGreen Table 5.106.8.	LEED SSc8 is more strict.	CalGreen 5.106.8	-	-	CalGreen 5.106.8	CalGreen 5.106.8	-
Stormwater Control Plan - Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC Stormwater Design Guidelines.	May meet LEED SS c6.1 or 6.2	SFGBC 5.103.1.6	SFGBC 4.103.2	SFGBC 4.103.2.4	-	SF Public Wo (SFPUC stormv	orks Code 4.2 vater ordinance)
Water Meters: Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if in buildings \geq 50,000 sq. ft.	N/A	CalGreen 5.303.1	-	-	CalGreen 5.303.1 (first time)	CalGreen 5.303.1 (addition only)	-
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings.	LEED EQc5 is more strict.	CalGreen 5.504.5.3	-	-	CalGreen 5.504.1.3	CalGreen 5.504.1.3	-
Air Filtration: Provide MERV-13 filters in residential buildings in air-quality hot-spots (or LEED credit IEQ 5).	LEED EQc5 is more strict.	-	SF Health Cod SF Building	e Article 38 and Code 1203.5	-	-	SF Health Code Article 38 and SF Building Code 1203.5
Acoustical Control: Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and fl oor-ceilings STC 40.	N/A	CalGreen 5.507.4	CBC 120	7 applies ³	CalGreen 5.507.4	-	CBC 1207 applies ³
Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.	N/A	CalGreen 5.407.2.1	LEED prerequisites	-	-	-	-
Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings.	N/A	CalGreen 5.407.2.2	LEED prerequisite (IDp2.1 and IDp2.2)	LEED prerequisite (IDp2.1 and IDp2.2)	CalGreen 5.407.2.2	CalGreen 5.407.2.2	-
Other CALGreen Requirements The following elements of the California Green Building Standard 24 Part 11) are superceded by stricter local requirements, or du state code as noted. To avoid duplication, no special green build documentation is required.	ds Code (Title plicate other ding	New Large Commercial	New Mid Rise Residential	New High Rise Residential	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration
Multiple showerheads serving one shower (CalGreen 5.303.2.1)	N/A	SF Housing Cod	e Ch 12 SF Build	ling Code Ch 13A	oprohibit more th	an one showerhe	ead per valve.
Wastewater reduction - Reduce generation of wastewater by 20% through installation of water-conserving fixtures (CalGreen 5.303.4)	N/A	Met via the wate	r use efficiency re	equirements of S	FGBC 5.103.1.2	or SFGBC 4.103	.2.2.
Outdoor potable water use - Submeter landscaping separately where landscaping covers 1,000-5,000 sq. ft. (over 5,000 sq. ft. already required.)	N/A	Met by complian	ce with Water Ef	ficient Irrigation C	Ordinance (SFAC	63)	
Irrigation controllers - Provide weather or soil moisture based controllers that automatically adjust in response to plants' needs as weather conditions change.	N/A	Met by complian	ce with Water Ef	ficient Irrigation C	ordinance (SFAC	63)	
Fireplaces and woodstoves - Install only direct-vent or sealed combustion appliances; comply with US EPA Phase II limits. (CalGreen 5.503.1)	N/A	If permission to install new woodburning fireplaces can be obtained, BAAQMD Regulation 6, Rule 3 applies and is equivalent.					
Environmental tobacco smoke (ETS) control - Prohibits smoking in buildings, and prohibits outdoor areas provided for smoking within 25 feet of building entries, outdoor air intakes and operable windows.	LEED EQp2 (equivalent and required)	Required by San Francisco Health Code 19F and 19I.					
Moisture control - Comply with California Building Code, CCR, Title 24, Part 2, Sections 1203 (Ventilation) and Chapter 14 (Exterior Walls). (CalGreen 5.505.1)	N/A	Comply with cited	d code		-	-	-
Carbon dioxide monitoring For buildings with demand control ventilation, install carbon dioxide sensors and ventilation controls in accord with California Energy Code. (CalGreen 5.506.2)	LEED EQc1 (LEED measure is more strict and not mandatory)	Comply with cited code				-	

1) New residential "high rise" projects may use LEED for Homes Mid Rise certification or LEED BD&C as appropriate. New residential projects of any size have the option of using GreenPoint Rated (see table B2).

²⁾ For projects required to meet a LEED standard, all LEED Prerequisites are required. Prerequisites corresponding to a CalGreen requirement are also included above.

³⁾ Residential buildings must meet acoustical requirements of California Building Code Section 1207



San Francisco Green Building Code

Table 2: Requirements for projects meeting a GreenPoint Rated standard (Sheet 1 of 1)

Attachment B Table 2

This table is a summary provided for convenience. See the San Francisco Green Building Code for details. Where code references are provided below: "CalGreen" refers to California Green Building Standards Code 2013 (Title 24 Part 11) "SFGB" refers to San Francisco Green Building Code amendments

	GreenPoint Single Family Measure Number	GreenPoint Multifamily Measure Number	Requirements for new residential ¹
Specific Locally Required Measures Measures that are mandatory in San Francisco but may be different or not required elsewhe	Specific Locally Required Measures Measures that are mandatory in San Francisco but may be different or not required elsewhere		
Construction Waste Management – 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling. Projects of 4 or more occupied floors must divert at least 75% of total debris.	A. 2.a	A. 2.a	SF Construction and Demolition Debris Diversion Ordinance (Ord. No.27-06) and SFGBC 4.103.2.3
Recycling by Occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials.	May meet M.4.a, and M.4.b	M.3.	SFBC 106A.3.3 (See DBI Administrative Bulletin 088 for details)
Energy Reduction Compared to Title-24	J. 2	J. 1.a.	GreenPoint Rated requirement
Construction Site Runoff Pollution Prevention - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	Q. 1.	Q. 1.	SFGBC 4.103.1.2 and 4.103.2.4, NPDES Phase II General Permit, and other local regulations.
Stormwater Control Plan - Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC guidelines.	Depending upon proje	ect design, stormwater	SFGBC 4.103.1.2 and 4.103.2.4
Water Efficient Irrigation - Projects that include 1,000 square feet or more of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	and irrigation re qualify for varic	quirements may ous GPR points.	SF Admin Code 63 (See the guide, <i>Complying with San Francisco's Water Efficient Irrigation Requirements</i> at www.sfwater.org/landscape.)
Additional Required Measures All CALGreen requirements for new residential construction (listed below) are required, and GreenPoint Rated certification will be obtained.	must be verified by the	e Rater whether or not	
Indoor Air Quality Management During Construction -Duct openings and other air distribution component openings must covered during construction.	A. 5.a	A.3.a.	CalGreen 4.504.1
Smart Irrigation Controller	C. 6.b	B.1.e.ii	CalGreen 4.304.1
All roofing has 3-year subcontractor warranty and 20-year Manufacturer Warranty	N/A	E. 2.a.	GreenPoint Rated requirement for multifamily
 Indoor Water Efficiency - Reduce overall use of potable water within the building by installing efficient showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals. Low Rise: 20% reduction High Rise: 30% reduction 	G.2-3	G. 1.a.i, G. 1.a.ii (if applicable), G. 1.b.i, G. 1.c, G. 1.d.i, G. 1.d.ii, G. 1.d.iv	Low Rise: CalGreen 4.103.1 (20% reduction below UPC/IPC 2006, et al) and SF Housing Code Ch 12 (Prohibits multiple showerheads per valve) High Rise: SFGBC 4.103.2.2 (30% reduction, and SF Housing Code Ch 12)
Mechanical Ventilation - Comply with ASHRAE 62.2 (as adopted in Title 24 Part 6)	N/A	H. 4.a	GreenPoint Rated / Title 24 Part 6 requirement for multifamily
Bathroom fans - ENERGY STAR and on timer or humidistat	Н. 8	H. 4.d.	CalGreen 4.506.1
Low-VOC Interior Wall/Celing Paints (<50 grams per liter VOCs regardless of sheen)	K.2-3	K. 3.a.i and K.3.a.ii	CalGreen 4.504.2.2 through 4.504.2.4
Low-VOC coatings - Meet SCAQMD Rule 1113	K.2-3	K.3.c.	CalGreen 4.504.2.2 through 4.504.2.4
Low VOC Caulks, Construction adhesives, and Sealants - Meet SCAQMD Rule 1168	K. 4	K.4.	CalGreen 4.504.2.1
Low-emitting Composite Wood - Meet California Air Resources Board Airborne Toxic Control Measure formaldehyde limits for composite wood	K. 7	K. 6.	CalGreen 4.504.5
Low-emitting flooring: All carpet systems, carpet cushion, carpet adhesive, and at least 50% of resilient flooring must be low-emitting	L.3 and L.4	L.3	CalGreen 4.504.3 and CalGreen 4.504.4
Incorporate GreenPoint Rated Checklist in Blueprints	N.1.	N.1.	GreenPoint Rated requirement
Operations and Maintenance Manuals and Training - Provide O&M Manual to Building Maintenance Staff	N. 4.a.	N. 3.a.	CalGreen 4.410.1
Design and Install HVAC System to ACCA Manual J, D, and S	H. 1.a.	H. 1.a.	CalGreen 4.507.2
Surface Drainage: Construction plans shall indicate how the site grading or drainage system will manage surface water flows.	Q. 2	Q. 2	CalGreen 4.106.3
Pest Protection - Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected against rodents.	Q.4	Q. 4	CalGreen 4.406.1
Fireplaces and woodstoves - Install only direct-vent or sealed-combustion appliances; comply with US EPA Phase II limits.	Q. 5	Q. 5	CalGreen 4.503.1. If permission to install new woodburning fireplaces can be obtained, BAAQMD Regulation 6, Rule 3 applies and is equivalent.
Capillary break for concrete slab on grade - Concrete slab on grade foundations required to have a vapor retarder must also have a capillary break.	Q. 6	Q. 6	CalGreen 4.505.2.1
Moisture content of building materials - Verify wall and floor framing does not exceed 19% moisture content prior to enclosure. Materials with visible signs of moisture damage shall not be installed.	Q. 7	Q. 7	CalGreen 4.505.3
HVAC Installer Qualifications - HVAC system installers must be trained and certified, or under the direct supervision of a person with such training or a contractor licensed to install HVAC systems.	Q. 8	Q.8	CalGreen 4.702.1

¹⁾ GreenPoint Rated is the default standard to be met by new residential projects of 3 occupied floors or less. However, any new residential building may choose to instead apply LEED, provided that all CalGreen requirements are met. For information about using LEED for compliance with the San Francisco Green Building Code, see Attachment B Table 1.



San Francisco Green Building Code

Table 3: Requirements for all non-residential projects that are not required to meet a LEED standard (Sheet 1 of 2)

The following itemizes requirements for new non-residential buildings that are not otherwise required to meet a green building standard (E, F, H, L, S, U occupancy of any size, or A, B, I, or M occupancy <25,000 sq. ft.), and for non-residential additions of \geq 1,000 sq ft or alterations of \geq \$200,000 value. In additions and alterations, requirements apply to areas and systems within the scope of the project. This summary is provided for convenience; see the San Francisco Green Building Code for details.

Specific Locally Required Measures Measures that are mandatory in San Francisco but may be different or not required elsewhere	All "Other" New Non-Residential	All "Other" Non-Residential Additions & Alterations	
Construction and demolition debris diversion – 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling.	SF Construction and Demolition Debris Diversion Ordinance (Ord. No.27-06)		
Recycling by occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials.	ing of SFBC 106A.3.3 and other local regulations (See DBI Administrative Bulletin 088 for details)		
Energy reduction compared to Title-24	N/A for initial permit applica	tion filed after January 1, 2014	
Construction site runoff pollution prevention - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	CalGreen 5.1 NPDES Phase II General Per	06.1, as well as mit and other local regulations.	
Stormwater Control Plan - Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC stormwater design guidelines.	SF Public Works Co	de Article 4.2, Sec. 147	
Water efficient irrigation - Projects that include 1,000 square feet or more of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	SF Admin Code 63 (See the guid Water Efficient Irrigation Requirem	de, Complying with San Francisco's ents at www.sfwater.org/landscape.)	
CalGreen Required Measures The California Green Building Standards Code (Title 24 Part 11) requires:	All "Other" New Non-Residential	All "Other" Non-Residential Additions & Alterations	
Bicycle parking - Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater.	CalGreen 5.106.4	CalGreen 5.106.4 - Applicable if 10 more more parking stalls are added.	
Fuel efficient vehicle and carpool parking - Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	CalGreen 5.106.2	CalGreen 5.106.2 - Applicable if 10 more more parking stalls are added.	
Light pollution reduction - Meet California Energy Code minimum requirements for Lighting Zones 1-4, with Backlight/Uplight/Glare ratings meeting CalGreen Table 5.106.8. Exemptions of California Energy Code Section 147 apply. Emergency lighting exempt.	CalGreen 5.106.8	-	
Water meters - In new buildings and additions, provide submeters for each tenant projected to consume more than 1,000 gal/day. In new buildings >50,000 sq ft and additions over 50,000 sq ft, provide submeter for each individual tenant space projected to consume more than 100 gal/day.	CalGreen 5.303.1	CalGreen 5.303.1 (additions only)	
Water Conserving Fixtures and Fittings - Reduce overall use of potable water within the building by 20% for showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals.	CalGreen 5.303.2 through 5.303.6	CalGreen 5.303.2 through 5.303.6 See also SFBC 13A.	
 Commissioning - For new buildings greater than 10,000 square feet, commissioning shall be included in the design and construction of the project to verify that the building systems and components meet the owner's project requirements. OR for buildings less than 10,000 square feet, testing and adjusting of systems is required. 	CalGreen 5.410.2 for new buildings >10,000 square feet Calgreen 5.410.4 for buildings ≤ 10,000 square feet	Calgreen 5.410.4 for buildings ≤ 10,000 square feet, and for systems that serve additions and alterations.	
Ventilation system protection during construction - Protect openings and mechanical equipment from dust and pollutants during construction. Do not use permanent HVAC equipment except to maintain required temperature range for material and equipment installation.	CalGreen 5.504.1.3 and 5.504.3	CalGreen 5.504.1.3 and 5.504.3	
Adhesives, sealants, and caulks - Comply with VOC limits in SCAQMD Rule 1168 VOC limits and California Code of Regulations Title 17 for aerosol adhesives.	CalGreen 5.504.4.1	CalGreen 5.504.4.1	
Paints and coatings - Comply with VOC limits in the Air Resources Board Architectural Coatings Suggested Control Measure and California Code of Regulations Title 17 for aerosol paints.	CalGreen 5.504.4.3.1	CalGreen 5.504.4.3.1	
 Carpet - All carpet must meet one of the following: 1. Carpet and Rug Institute Green Label Plus Program, 2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350), 3. NSF/ANSI 140 at the Gold level, 4. Scientific Certifications Systems Sustainable Choice, OR 5. California Collaborative for High Performance Schools EQ 2.2 and listed in the CHPS High Performance Product Database AND carpet cushion must meet Carpet and Rug Institute Green Label, AND indoor carpet adhesive & carpet pad adhesive must not exceed 50 g/L VOC content. 	CalGreen 5.504.4.4 through 5.504.4.4.2	CalGreen 5.504.4.4 through 5.504.4.4.2	
Composite wood - Meet CARB Air Toxics Control Measure for Composite Wood, including meeting the emission limits in CalGreen Table 5.504.4.5.	CalGreen 5.504.4.5	CalGreen 5.504.4.5	
 Resilient flooring systems - For 80% of floor area receiving resilient flooring, install resilient flooring complying with: 1. Certified under the REsilient Floor Covering Institute (RFCI) FloorScore program, 2. Compliant with the VOC-emission limits and testing requirements of California Department of Public Health 2010 Standard Method for the TEsting and Evaluation Chambers v.1.1, 3. Compliant with the Collaborative for High Performance Schools (CHPS) EQ2.2 and listed in the CHPS High Performance Product Database, OR 4. Certified under the Greenguard Children & Schools Program to comply with California Department of Public Health of Public Health criteria. 	CalGreen 5.404.4.4. and 5.504.4.6	CalGreen 5.404.4.4. and 5.504.4.6	
Air Filtration - Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings. Installed filters must be clearly labeled by the manufacturer indicating the MERV rating, and filter specification shall be included in the operation and maintenance manual.	CalGreen 5.504.5.3 through 5.504.5.3.1	CalGreen 5.504.5.3 through 5.504.5.3.1 Existing equipment is exempt	

Attachment B Table 3 Continued: Requirements All Other New Non-Residential Occupancies (Sheet 2 of 2)

CalGreen Required MeasuresAll "Other" NewAll "Other" Non-ResidentialThe California Green Building Standards Code (Title 24 Part 11) requires:Non-ResidentialAdditions & Alter				
Acoustical control - Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.	s CalGreen CalGreen 5.504.5.3 (Applie 5.507.4 addition, or alteration to enve			
CFCs and halons - Do not install equipment that contains CFCs or Halons.	CalGreen 5.508.1	CalGreen 5.508.1		
Sprinklers - Design and maintain landscape irrigation systems to prevent spray on structures.	CalGreen 5.407.2.1	CalGreen 5.407.2.1		
Grading and Paving - Construction plans must indicate how site grading or drainage will manage all surface water flows to keep water from entering buildings.	CalGreen 5.106.10	-		
Entries and openings - Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings.	CalGreen 5.407.2.2	CalGreen 5.407.2.2		
Supermarket refrigerant leak reduction - Applies to new commerical refrigeration systems containing refrigerants with Global Warming Potential (GWP) of 150 or greater, when installed in food stores with 8,000 square feet or more conditioned area utilizing either refrigerated display cases, walk-in coolers or freezers connected to remote compressor units or condensing units. Piping shall meet all requirements of 5.508.2 (all sections), and shall undergo pressure testing during installation prior to evacuation and charging. System shall stand unaltered for 24 hours with no more than a one pound pressure change from 300 psig. See 5.508.2 for details.	CalGreen 5.508.2	CalGreen 5.508.2		
Other CALGreen Requirements The following elements of the California Green Building Standards Code (Title 24 Part 11) are superceded by stricter local requirements, or duplicate other state code as noted. To avoid duplication, no special green building documentation is required.	All "Other" New Non-Residential	All "Other" Non-Residential Additions & Alterations		
Multiple showerheads serving one shower (CalGreen 5.303.3.3.2)	SF Housing Code Ch 12 SF Building Code Ch 13A prohibit more than o showerhead per valve. CalGreen 5.303.3.3.1 flow rate to 2.0 gpm.			
Wastewater reduction - Reduce generation of wastewater by 20% through installation of water-conserving fixtures	Comply with water efficiency requirements of CalGreen 5.303.4. or CBC Part 11 Section 5.712.3.2			
Outdoor potable water use - Submeter landscaping separately where landscaping covers 1,000-5,000 sq. ft. (over 5,000 sq. ft. already required.)	ft. Comply with Water Efficient Irrigation Ordinance (SFAC 63)			
Irrigation controllers - Provide weather or soil moisture based controllers that automatically adjust in response to plants' needs as weather conditions change.	Comply with Water Efficient Irrigation Ordinance (SFAC 63)			
Fireplaces and woodstoves - Install only direct-vent or sealed-combustion appliances; comply with US EPA Phase II limits.	If permission to install new woodburning fireplaces can be obtained, BAAQMD Regulation 6, Rule 3 applies and is equivalent.			
Environmental tobacco smoke (ETS) control - Prohibits smoking in buildings, and prohibits outdoor areas provided for smoking within 25 feet of building entries, outdoor air intakes and operable windows.	Required by San Francisco Health Code 19F and 19I.			
Moisture control - Comply with California Building Code, CCR, Title 24, Part 2, Sections 1203 (Ventilation) and Chapter 14 (Exterior Walls). (CalGreen 5.505.1)	Comply with cited code			
Carbon dioxide monitoring For new buildings and additions with demand control ventilation, install carbon dioxide sensors and ventilation controls in accord with California Energy Code. (CalGreen 5.506.2)	Comply with cited code			
Additional Requirements for New A, B, I, OR M Occupancy Projects 5,000 - 25,000 Square Feet (only)				
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance	SFGBC N/A 5.103.2.2			
Renewable Energy - Effective Jan 1, 2012, permit applicants must either: Generate 1% of energy on-site with renewables, OR Purchase renewable power meeting the criteria of LEED Energy and Atmosphere Credit 6, OR Achieve at least 10% efficiency beyond Title 24 2013	SFGBC N/A 5.103.2.3			



San Francisco Green Building Code

Attachment B Table 4: Requirements for residential additions, and alterations

Table 4

(Sheet 1 of 2)

The following itemizes requirements for additions to residential buildings, as well as alterations which increase the building's floor area, volume, or size. Except where noted, requirements apply only to areas and systems within the scope of the project. This summary is provided for convenience; see the San Francisco Green Building Code for details.

Specific Locally Required Measures Measures that are mandatory in San Francisco but may be different or not required elsewhere	All "Other" Residential Additions & Alterations
Construction and demolition debris diversion – 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling.	SF Construction and Demolition Debris Diversion Ordinance (Ord. No.27-06)
Recycling by occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials.	SFBC 106A.3.3 and other local regulations (See DBI Administrative Bulletin 088 for details)
Energy reduction compared to Title-24	N/A
Construction site runoff pollution prevention - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	CalGreen 4.106.2, as well as NPDES Phase II General Permit and other local regulations.
Stormwater Control Plan - Projects disturbing ≥5,000 square feet of ground surface must implement a Stormwater Control Plan meeting SFPUC stormwater design guidelines.	SF Public Works Code Article 4.2, Sec. 147
Water efficient irrigation - Projects that include 1,000 square feet or more of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance.	SF Admin Code 63 (See the guide, Complying with San Francisco's Water Efficient Irrigation Requirements at www.sfwater.org/landscape.)
CalGreen Required Measures The California Green Building Standards Code (Title 24 Part 11) requires:	All "Other" Residential Additions & Alterations
Indoor Air Quality Management During Construction - Duct openings and other air distribution component openings must covered during all phases of construction. Tape, plastic, sheetmetal, or other acceptable methods may be used to reduce the amount of water, dust, and debris entering the system.	CalGreen 4.504.1
Smart Irrigation Controller - Automatically adjust irrigation based on weather and soil moisture. Controllers must have either an integral or separate rain sensors that connects or communicates with the controller.	CalGreen 4.304.1
Indoor Water Efficiency - Plumbing fixtures and fittings shall comply with the following: Water closets \leq 1.28 gal/flush; urinals \leq 0.5 gal/flush, showerheads \leq 2.0 gpm @ 80 psi; residential lavatory faucet \leq 1.5 gpm; lavatory faucets in common and public use areas \leq 0.5 gpm @ 60 psi; metering faucets \leq 0.25 gal/cycle; and kitchen faucets \leq 1.8 gpm @60 psi (temporary increase to 2.2 gpm allowed, but must default to \leq 1.8 gpm).	CalGreen 4.303 (all sections)
Bathroom exhaust fans - Must be ENERGY STAR compliant, ducted to terminate outside the building, and controlled by humidistat capable of adjustment between relative humidity of less than 50% to maximum of 80%. Humidity control may be a separate component from the exhaust fan.	Calgreen 4.506.1
Low-VOC Interior Wall/Celing Paints - CARB VOC limits (CalGreen Table 4.504.3)	CalGreen 4.504.2.2
Low-VOC aerosol paints and coatings - Meet BAAQMD VOC limits (Regulation 8, Rule 49) and Product-Weighted MIR Limits for ROC. (CCR Title 17, Section 94520)	CalGreen 4.504.2.3
Low VOC Caulks, Construction adhesives, and Sealants - Meet SCAQMD Rule 1168. See CalGreen Tables 4.504.1 and 4.504.2.	CalGreen 4.504.2.1
Low-emitting Composite Wood - Meet California Air Resources Board Airborne Toxic Control Measure formaldehyde limits for composite wood. See CalGreen Table 4.504.5	CalGreen 4.504.5
Low-emitting flooring: All carpet systems, carpet cushion, carpet adhesive, and at least 80% of resilient flooring must be low-emitting	CalGreen 4.504.3 through 4.504.4
Operations and Maintenance Manuals and Training - Provide O&M Manual to Building Maintenance Staff. Due at the time of final inspection.	CalGreen 4.410.1
Design and Install HVAC System to ACCA Manual J, D, and S	CalGreen 4.507.2
Surface Drainage: Construction plans shall indicate how the site grading or drainage system will manage surface water flows.	CalGreen 4.106.3
Pest Protection - Annular spaces around pipes, electric cables, conduits, or other openings in sole/bottom plates at exterior walls shall be closed with cement mortar, concrete masonry, or a similar method acceptable to DBI for protection against rodents.	CalGreen 4.406.1
Fireplaces and woodstoves - Install only direct-vent or sealed-combustion appliances; comply with US EPA Phase II limits.	CalGreen 4.503.1

Ittachment B Table 4 Continued: Requirements for residential additions, and alterations Sheet 2 of 2)					
CalGreen Required Measures The California Green Building Standards Code (Title 24 Part 11) requires:	Residential Additions & Alterations				
 Capillary break for concrete slab on grade - Concrete slab on grade foundations required to have a vapor retarder must also have a capillary break, including at least one of the following: 1) A 4-inch (101.6 mm) thick base of 1/2-inch (12.7 mm) or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and a concrete mix design which will address bleeding, shrinkage and curling shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06. 2) A slab design specified by a licensed design professional. 	CalGreen 4.505.2.				
 Moisture content of building materials - Verify wall and floor framing does not exceed 19% moisture content prior to enclosure. Materials with visible signs of moisture damage shall not be installed. Moisture content shall be verified in compliance with the following: 1) Moisture content shall be determined with either a probe-type or a contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements in Section 101.8. 2) Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade-stamped end of each piece to be verified. 3) At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Manufacturers' drying recommendations shall be followed for wet-applied insulation products prior to enclosure 	CalGreen 4.505.3				
HVAC Installer Qualifications - HVAC system installers must be trained and certified in the proper installation of HVAC systems, such as via a state certified apprenticeship program, public utility training program (with certification as installer qualification), or other program acceptable to the Department of Building Inspection	CalGreen 702.1				



Instructions for Green Building Submittals

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 that may optionally be used to prepare LEED submittals. (You may use your own LEED checklist file.)
- 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 submittals. For more information including guidelines and a list of all GreenPoint measures please see: www.builditgreen.org.

Green Building: Site Permit Submittal

When applying for a Site Permit, use Attachment C-2: Green Building Site Permit Submittal. A LEED or GreenPoint checklist is not required at Site Permit, but will be required with the superstructure addendum.

Single Page Submittal Templates (Recommended)

Pre-formatted templates are provided for single-sheet submittals. 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" form

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

Green Building: Site Permit Submittal

BASIC INFORMATION:

These facts, plus the primary occupancy, determine which requirements apply. For details, see AB 093 Attachment A Table 1.

Project Name	Block/Lot	Address
Gross Project Area	Primary Occupancy	Number of occupied floors
Design Professional/Applicant: Sign & Date	•	7

ALL PROJECTS, AS APPLICABLI

Construction activity stormwater pollution prevention and site runoff controls - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.

Stormwater Control Plan: Projects disturbing ≥5,000 square feet must implement a Stormwater Control Plan meeting SFPUC Stormwater Design Guidelines

Water Efficient Irrigation - Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the SFPUC Water Efficient Irrigation Ordinance.

Construction Waste Management – Comply with the San Francisco Construction & Demolition Debris Ordinance

Recycling by Occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. See Administrative Bulletin 088 for details.

GREENPOINT RATED PROJECT

Proposing a GreenPoint Rated Project (Indicate at right by checking the box.)	
Base number of required Greenpoints:	75
Adjustment for retention / demolition of historic features / building:	
Final number of required points (base number +/- adjustment)	
GreenPoint Rated (i.e. meets all prerequisites)	
Energy Efficiency: Demonstrate a 10% energy use reduction compared to Title 24, Part 6 (2013).	
Meet all California Green Building Standards	

Code requirements (CalGreen measures for residential projects have been integrated into the GreenPoint Rated system.)

Notes

1) New residential projects of 4 or more occupied floors must us "New Residential High-Rise" column. New residential with 3 or f occupied floors must use the "New Residential Low Rise" column

2) LEED for Homes Mid-Rise projects must meet the "Silver" sta including all prerequisites. The number of points required to achi Silver depends on unit size. See LEED for Homes Mid-Rise Rati System to confirm the base number of points required.

	L
	Type of Project Proposed (Indicate at right)
	Overall Requirements:
	LEED certification level (includes prerequisites):
	Base number of required points:
	Adjustment for retention / demolition of historic features / building:
	Final number of required points
	(base number +/- adjustment)
	Specific Requirements: (n/r indicates a measure is
	Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debri Ordinance - LEED MR 2, 2 points
	Energy Use Comply with California Title-24 Part 6 (2013) and meet LEED min mum energy performance (LEED EA p2)
	Renewable Energy or Enhanced Energy Efficienc Effective 1/1/2012: Generate renewable energy on-site ≥1% of total annual energy cost (LEED EAc2)_OR
	Demonstrate at least 10% energy use reduction (compared to Tit 24 Part 6 2013), OR Purchase Green-E certified renewable energy credits for 35% of total electricity use (LEED EAc6)
	Enhanced Commissioning of Building Energy System
	Water Use - 30% Reduction LEED WE 3, 2 points
	Enhanced Refrigerant Management LEED EA 4
	Indoor Air Quality Management Plan LEED IEQ 3.1
	Low-Emitting Materials LEED IEQ 4.1, 4.2, 4.3, and 4.4
	Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater, or meet LEED credit SSc4.2.
	Designated parking: Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.
	Water Meters: Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if in building over 50,000 sq. ft.
	Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings (or LEED credit IEQ 5).
	Air Filtration: Provide MERV-13 filters in residential buildings in air-quality hot-spots (or LEED credit IEQ 5). (SF Health Code Article 3 and SF Building Code 1203.5)
	Acoustical Control: wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.



Instructions:

As part of application for site permit, this form acknowledges the specific green building requirements that apply to a project under San Francisco Green Building Code, California Title 24 Part 11, and related codes. Attachment C3, C4, C5, C6, C7, or C8 will be due with the applicable addendum. To use the form:

(a) Provide basic information about the project in the box at left. This info determines which green building requirements apply.

AND

(b) Indicate in one of the columns below which type of project is proposed. If applicable, fill in the blank lines below to identify the number of points the project must meet or exceed. A LEED or GreenPoint checklist is not required to be submitted with the site permit application, but using such tools as early as possible is strongly recommended.

Solid circles in the column indicate mandatory measures required by state and local codes. For projects applying LEED or GreenPoint Rated, prerequisites of those systems are mandatory. See relevant codes for details.

_						
LE	ED PR	OJECT	S			
	New Large Com- mercial	New Low Rise Residential	New High Rise Residential	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration
					1	[
	GOLD	SILVER	SILVER	GOLD	GOLD	GOLD
	60	2	50	60	60	60
				n/a		
				50		
is no	ot required)					
ion ebris	•	•	•	•	Meet C&D ordinance only	•
nini-	•	LEED prerequisite	•	•	LE prerequi	ED site only
n cy ⁄ Title	•	n/r	n/r	n/r	n/r	n/r
of						
ems			Мее	LEED prerequi	sites	
	•	Meet LEED	•	Mee	et LEED prerequ	isite
	•	n/r	n/r	•	•	n/r
		CalGreen 4.504.1	CalGreen 4.504.1	CalGreen 5.504.3	CalGreen 5.504.3	CalGreen 4.504.1
.4	•	•	•			•
e et or	•	See San Franc	cisco Planning	•	See San Fran Code	cisco Planning e 155
					n/r	n/r
in		n/r	n/r	•	(addition only)	n/r
)		n/r	n/r	•	•	n/r
in e 38	n/r	•	•	n/r	n/r	
r		See CB	C 1207		(envelope alteration & addition only)	n/r

OTHER APPLICA

Requirements below only apply when the references below are applicable to New No quirements for additions and alterations ca Requirements for additions or alterations a after.³

Type of Project Proposed (Chee

Energy Efficiency: Comply with Califor

Bicycle parking: Provide short-term and motorized parking capacity each, or meet Sa whichever is greater (or LEED credit SSc4.2)

Fuel efficient vehicle and carpool low-emitting, fuel efficient, and carpool/van po spaces.

Water Meters: Provide submeters for spa or >100 gal/day if in buildings over 50,000 sq

Indoor Water Efficiency: Reduce overa for showerheads, lavatories, kitchen faucets, wash

Commissioning: For new buildings great shall be included in the design and constructi

systems and components meet the owner's p **OR** for buildings less than 10,000 square fe

Protect duct openings and mechani

Adhesives, sealants, and caulks: VOC limits and California Code of Regulations

Paints and coatings: Comply with VOC Architectural Coatings Suggested Control Me Title 17 for aerosol paints.

- Carpet: All carpet must meet one of the following 1. Carpet and Rug Institute Green Label Plus Pro
- 2. California Department of Public Health Standar
- 01350), 3. NSF/ANSI 140 at the Gold level,
- 4. Scientific Certifications Systems Sustainable Ch 5. California Collaborative for High Performance S
- Performance Product Database
- AND carpet cushion must meet Carpet and Rug Ins AND indoor carpet adhesive & carpet pad adhesive

Composite wood: Meet CARB Air Toxics Co

Resilient flooring systems: For 80% resilient flooring complying with the VOC-emis for High Performance Schools (CHPS) criteria Covering Institute (RFCI) FloorScore program

Environmental Tobacco Smoke: Pr entries, outdoor air intakes, and operable win

Air Filtration: Provide at least MERV-8 fil mechanically ventilated buildings.

Acoustical Control: Wall and roof-ceilin walls and floor-ceilings STC 40.

CFCs and Halons: Do not install equipme

Additional Requirements for New

Construction Waste Management debris AND comply with San Francisco Cons

Renewable Energy or Enhanced E Effective January 1, 2012: Generate renewa annual energy cost (LEED EAc2), OR

demonstrate a 10% energy use reduction cor purchase Green-E certified renewable energy cre

BLE NON-RESIDENTIA	L PROJE	
neasure is applicable to the project. Code on-Residential buildings. Corresponding re- n be found in Title 24 Part 11, Division 5.7. pply to applications received July 1, 2012 or	Other New Non- Residential	Addition ≥1,000 sq ft OR Alteration ≥\$200,000 ³
ck box if applicable)		
nia Energy Code, Title 24, Part 6 (2013).		٠
l long-term bicycle parking for 5% of total n Francisco Planning Code Sec 155,	•	•
parking: Provide stall marking for old vehicles; approximately 8% of total	•	٠
aces projected to consume >1,000 gal/day, . ft.	•	Addition only
Il use of potable water within the building by 20% fountains, water closets, and urinals.	•	
ater than 10,000 square feet, commissioning ion of the project to verify that the building project requirements. et, testing and adjusting of systems is required.	•	(Testing & Balancing)
ical equipment during construction	•	
Comply with VOC limits in SCAQMD Rule 1168 Title 17 for aerosol adhesives.	•	٠
C limits in the Air Resources Board easure and California Code of Regulations	•	٠
: gram, rd Practice for the testing of VOCs (Specification		
hoice, OR Schools EQ 2.2 and listed in the CHPS High		
stitute Green Label, e must not exceed 50 g/L VOC content.		
ntrol Measure for Composite Wood		•
of floor area receiving resilient flooring, install sion limits defined in the 2009 Collaborative or certified under the Resilient Floor	•	•
rohibit smoking within 25 feet of building idows.	•	•
Iters in regularly occupied spaces of	•	
ngs STC 50, exterior windows STC 30, party	•	(envelope alteration & addition only)
ent that contains CFCs or Halons.	•	•
A, B, I, OR M Occupancy Projects 5	,000 - 25,000	Square Feet
 Divert 75% of construction and demolition truction & Demolition Debris Ordinance. 	•	Meet C&D ordinance only
nergy Efficiency able energy on-site equal to ≥1% of total		n/r
mpared to Title 24 Part 6 (2013), OR edits for 35% of total electricity use (LEED EAc6).	•	11/1

	Attachment C-2:	
sert Project Name / Titleblock here	Green Building:	
	Site Permit Submittal	

City and County of San Francisco Green Building Submittal: LEED P

LEED Scorecard Note: LEED for New Construction and Major Renovation Scorecard shown below. For projects using other LEED Rating Systems (such as Core & Shell, Commercial Interiors, or Homes Mid-Rise) to comply with San Francisco Green Building Requirements, replace this checklist with the LEED Checklist that applies to your project type. THE T HE 26 Points Sustainable Sites Press 1 Construction Activity Pollution Prevention Sile Selection Credit 1 Credit 2 Development Density & Community Connectivity Cost 3 Brownield Redevelopment Cont4.1 Alternative Transportation, Public Transportation Access Cont 42 Alternative Transportation, Bicycle Storage & Changing Rooms Cont43 Alternative Transportation, Low-Emitting & Fvel-Efficient Vehicles Cont 4.4 Alternative Transportation, Parking Capacity Conti 5.1 Sile Development, Protect or Residue Habitat Conti 52 Sile Development, Maximize Open Space Cost 6.1 Stonewater Design, Quantity Control Cost 62 Stonenater Design, Quality Control Graff 7.1 Heat Island Effect, Non-Roof Centi72 Heat Island Effect, Roof Creat 8 Light Pallution Reduction Ter T He Water Efficie 10 Po Procest 1.1 Water Lise Reduction, 20% Reduction Grant 1.1 Water Efficient Landscaping, Reduce by 50% Cost 12 Water Efficient Landscaping, No Petable Use or No Imgalion Cost 2 Innovative Wastervaler Technologies Creat 3.1 Water Use Reduction, 31% Reduction Creat 3.2 Water Use Reduction, 40% Reduction TH T HA 35 Poi Energy & Atmosphere Prov 1 Fundamental Commissioning of the Building Energy Systems Y Repirel Y Repired Press 2 Ministran Energy Performance: 17, New Bright 95, Editing Brightmakers Repired Peers 3 Fundamental Refrigerant Management Creati 1 Optimize Energy Performance 16129 12% New Buildings or 8% Existing Building Recovations 16% New Buildings or 12% Existing Building Renovations 20% New Buildings or 16% Existing Building Renovations 24% New Buildings or 20% Existing Building Renovations 26% New Buildings or 24% Existing Building Renovations 32% New Buildings or 26% Existing Building Renovations 30% New Buildings or 32%. Existing Building Renovations 40% New Buildings or 30%. Existing Building Renovations 44% New Buildings or 40%. Existing Building Renovations. 48% New Buildings or 44% Existing Building Renovations Creati 2 On-Sile Renewable Energy 1% Renewable Energy 5% Renewable Energy 9% Renewable Energy 13% Renewable Energy Grafi 3 Grafi 4 red Commissioning Enhanced Refrigerant Management Coll 5 Nessurement & Verification To T No Press 1 Storage & Collection of Recyclables Element of the lateral Gent 1.1 Building Reuse, Maintain 75% of Existing Walls, Froms & Roof Conti 12 Building Reuse, Maintain 87% of Existing Walls, Frans & Roof Cont 13 Building Reuse, Maintain 50% of Interior Non-Shuchural Elements Great 2.1 Construction Waste Management, Divert SDX from Disposal Conti 22 Construction Waste Management, Divert 75% from Disposal Creati 3.1 Naterials Reuse, 5% Creat 32 Naterials Reuse, 10% Cost 4.1 Recycled Content, 10% (post-consumer + % pre-consumer) Cost 4.2 Recycled Content, 20% (post-consumer + % pre-consumer) Croll 5.1 Regional Materials, 10% Educated, Processed & Manufactured Regionally Creat 52 Regional Materials, 20% Educated, Processed & Manufactured Regionally Cost 6 Rapidly Renewable Materials Cost 7 Certified Wood THE T HIS Indoor Environmental Quality 15 Points Percent Minimum MC Performance Repired Y Peers 2 Eminumental Tobacco Smale (ETS) Control Repáral Cost 1 Outdoor Air Deivery Manitoring Cost 2 Increased Ventilation Cost 3.1 Construction VA) Management Plan, During Construction Cont 32 Construction WQ Management Plan, Belore Occupancy Cont 4.1 Low-Emilling Materials, Adhesines & Sealants Conti42 Low-Emilling Materials, Paints & Costings Cost 43 Low-Emilling Naterials, Flooring Systems Cost 4.3 Cost 4.4 Low-Emilling Materials, Proceeds Wood & Agrificer Products Cost 4.4 Low-Emilling Materials, Composite Wood & Agrificer Products Cost 5 Indoor Chemical & Pollutant Source Control Cost 6.1 Controllability of Systems, Lighting Cost 6.2 Controllability of Systems, Thermal Comfort Cost 7.1 Thermal Comfort, Design Cont 72 Thermal Comfort, Verification Creat 8.1 Daylight & Views, Daylight 75% of Spaces Cent & Daylight & Views, Views for SDX of Spaces Ter T He Innovation & Design Process 6 Points Cost 1.1 Innovation in Design: Provide Specific Tile Cost 1.2 Innovation in Design: Provide Specific Tile Cost 1.3 Innovation in Design: Provide Specific Tile Cost 1.4 Innovation in Design: Provide Specific Tile Cost 1.4 Innovation in Design: Provide Specific Tile Cost 1.4 Innovation in Design: Provide Specific Tile Cost 1.5 Innovation in Design: Provide Specific Tile Cost 2 LEED[®] Accredited Professional THE T HE Regional Bonus Credits 4 Points Cont 1.1 Region Specific Environmental Priority: Region Defined Cont 1.2 Region Specific Environmental Priority: Region Defined Cont 1.3 Region Specific Environmental Priority: Region Defined Cost 14 Region Specific Environmental Priority: Region Defined Ter T He Project Totals (Certification Estimates) 110 Points Certified: 40.49 paints Silver: 50-59 paints Gold: 10-79 paints Platinum: 80+ paints Balt Carlin and

LEED prerequisites are required. For reference, a biler summary is in							
ummary of Green Building Requirements:	New Large Commercial	New Low-Rise Residential ¹	New High-Rise Residential ¹	First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration	
LEED certification level (includes prerequisites):	GOLD	SILVER	SILVER	GOLD	GOLD	GOLD	-
Base number of required Points:	60	²	50	60	60	60	-
Adjustment for retention / demolition of historic reatures / building.	'	<u> </u>		n/a		<u> </u>	-
Number of Points on LEED Checklist (Must be greater than requirement):							-
pecific Local Requirements: LEED (n/r indicates a measure is not required)	New Large Commercial	New Low-Rise Residential ¹	New High-Rise Residential ¹	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration	Reference (Indicate Plan Set Sheet & Detail, or Specification, where applica
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance (LEED MR c2, 2 points)		Meet C&D ordinance only	•		Meet C&D ordinance only		
Energy Reduction Compared to Title-24 Part 6 (2013) or ASHRAE 90.1-2007 (LEED EA p2 and EA c1)	Meet LEED prerequisite	Meet GPI prere	R or LEED quisite	Мее	t LEED prerec	quisite	
Enhanced Commissioning of Building Energy Systems		n/r		Meet LEED	prerequisite		
Renewable Energy or Enhanced Energy Efficiency – Effective 1/1/2012: Generate renewable energy on-site ≥1% of total annual energy cost (LEED EAc2), OR Demonstrate 10% energy use reduction compared to Title 24 Part 6 2013), OR Purchase Green-E certified renewable energy credits for 35% of total		n/r	n/r	n/r	n/r	n/r	
electricity use (LEED EAc6). Indoor Water Use - 30% Reduction		Meet LEED		Меє	t I FED prere		
LEED WE c3, 2 points Water Efficient Irrigation: Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the San Francisco Water				M: inc	ay apply if prc	oject apes	
Efficient Irrigation Ordinance. May meet LEED WE c1 Construction Site Runoff Pollution Prevention: Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices. LEED SS prerequisite 1		•	•	M; extends t	ay apply if pro eyond buildin	oject Ig envelope	
Enhanced Refrigerant Management		n/r	n/r			n/r	
Indoor Air Quality Management Plan LEED IEQ c3.1		CalGreen 4.504.1	CalGreen 4.504.1	CalGreen 5.504.3	CalGreen 5.504.3	CalGreen 4.504.1	
Leed IEQ c4.1	• · · · · ·	CalGreen 4.504.2.1	CalGreen 4.504.2.1	• · · ·			
Leed IEQ c4.2		CalGreen 4.504.2.2 CalGreen	CalGreen 4.504.2.2 CalGreen				
Leed IEQ c4.3		4.504.3 and 4.504.4	4.504.3 and 4.504.4				
LEW-Emitting Composite wood and Agringer Froducts LEED IEQ c4.4 Recycling by Occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. Exceeds requirements of LEED MR prerequisite 1. See Administrative Bulletin 088 for details.	•	4.504.5	CalGreen 4.504.5	•	•	•	
Specific Local Requirements: Other	New Large Commercial	New Low-Rise Residential ¹	New High-Rise Residential ¹	Large First Time Commerical Interior	Commercial Major Alteration	Residential Major Alteration	Reference (Indicate Plan Set Sheet & Detail, or Specification, where application
Stormwater Control Plan - Projects disturbing ≥ 5,000 square feet must implement a Stormwater Control Plan meeting SFPUC Stormwater Design Guidelines.			•	Ma extends b	ay apply if pro eyond buildin	oject ig envelope	
Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater. May meet LEED credit SS c4.2.	•	See San Planning	Francisco Code 155	•	•	See San Francisco Planning	
Designated parking: Mark 8% of total parking stalls for low-emitting, fuel efficient. and carpool/van pool vehicles.				•		Code 155	
Light pollution reduction: CMeet California Energy Code minimum for Lighting Zones 1-4 with Backlight/Uplight/Glare ratings meeting CalGreen Table 5 106 8		n/r	n/r		•	n/r	
Water Meters: Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if in building over 50,000 sq. ft.		n/r	n/r	n/r	CalGreen 5.712.3 ³	n/r	
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings. LEED credit IEQ c5 is stricter.		n/r	n/r		n/r	n/r	
Air Filtration: Provide MERV-13 filters in residential buildings in air- quality hot-spots. (SF Health Code Article 38 and SF Building Code 1203.5) May meet LEED credit IEQ c5	n/r	•	•	n/r	n/r	n/r	
Acoustical Control: Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.		see r	note 2		CalGreen 5.714.7 ³	n/r	
 Notes: 1) New residential projects of 4 occupied floors or greater Homes Mid-Rise rating system must use the "New Reside Mid-Rise Rating System to confirm the base number of pr 2) Residential buildings must meet acoustical requirement 3) CalGreen requirements began to apply to permit applic 	must use ential Hig bints requ its of Cali	e the "Ne h-Rise" c uired. ifornia Bu or for non-	w Reside olumn. Tł ilding Co [,] -residenti;	ntial High he numbe de Sectio al additio [,]	ו-Rise" co r of poin n 1207 ר and al	olumn. Ne its require	w residential projects which choose to apply the LEED for d to achieve Silver depends on unit size; see LEED for Ho received on or after July 1, 2012. This form is updated to re

REQUIREMENTS

Projects	its - 3.
VERIFICATION	ent C tal fo rojec
Instructions: Please indicate how fullfillment of green building requirements will be verified. A separate "FINAL COMPLIANCE VERIFICATION" form will be required prior to final Certificate of Completion. For details, see Administrative Bulletin 93. Project Name	Attachme Submit
Block/Lot	
Address	
Primary Occupancy	
Gross Building Area	
Option 1: Verification of compliance for this project will be provided via USGBC/GBCI certification under the LEED Rating system. No Green Building Compliance Professional of Record is required.	
Permit Applicant – Sign & Date	
OR	
Option 2: Verification of compliance will be provided by the Green Building Compliance Professional of Record:	here
Name	X
Firm	
Architectural or Engineering License	e e
 I am a LEED Accredited Professional # of 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 requirements of the San Francisco Green Building Code. 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 Compliance	Name / T
Professional of Record for this project.	ject
Professional of Record for this project.	roject
Professional of Record for this project. Licensed Professional: Sign & Date Affix professional stamp:	sert Project

City and County of San Francisco Green Building Submittal: GreenPoint Rated

INSTRUCTIONS

Build It Green provides GreenPoint Raters with a GreenPoints checklist; the checklist indicates only the measures which are not. Paste the GreenPoints checklist below. Indicate 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. Complete the **REQUIREMENTS** and **VERIFICATION** sections (at right). All GreenPoint prerequisites and CalGreen mandatory measures are required, and must be verified by the Green Building Compliance Professional of Record. New residential projects that choose to apply LEED must use the LEED submittal (C-3).



Name

Firm Architectural or Engineering License

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

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 requirements of the San Francisco Green Building Code. 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.

REQUIREMENTS

Project Name

Block/Lot

Address

Primary Occupancy

of occupied floors

Summary of Requirements:	Low-rise	High-rise	Major Alteration
ating Requirement: Number of GreenPoints required ncluding prerequisites and at least 10% energy use eduction compared to Title 24 Part 6 2013)			
djustment for retention / demolition of historic features / uilding:			
inal number of required points (base number +/- adjust- nent)			
onstruction activity stormwater pollution prevention nd site runoff controls	•	•	
tormwater Control Plan: Projects distrubing ≥ 5,000 quare feet must implement a Stormwater Control Plan neeting SFPUC Stormwater Design Guidelines	•	•	•
/ater Efficient Irrigation - Projects that include ≥ 1,000 quare feet of new or modified landscape must comply with the SFPUC Water Efficient Irrigation Ordinance.	•	•	•
Idoor Water Efficiency - Reduce overall use of potable ater by specified percentage for plumbing fixtures and tings.	CalGreen 4.303.1 (20% reduction)	SFGBC 4.103.2.2 (30% reduction)	CalGreen 4.303.1 (20% reduction)
onstruction Waste Management – 75% Diversion ND comply with San Francisco Construction & Demolition ebris Ordinance	Meet C&D ordinance only	•	Meet C&D ordinance only
eet all California Green Building Standards Code equirements and stricter local requirements Summarized in Administrative Bulletin 93 Table A-2.)	•	•	•

VERIFICATION

Instructions: Select Option 1 or Option 2 below to indicate how green building compliance will be verified. A separate "FINAL COMPLIANCE VERIFICATION" form will be required prior to Certificate of Completion. For details, see Administrative Bulletin 93.

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

Option 2:

The Green Building Compliance Professional of Record will verify compliance:

- 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:

Licensed Professional: Sign & Date

Affix professional stamp:

here Titleblock Name roject Π nsert

ated for \mathbf{O} N Attachment Submittal oint enP(Ð C

OR

INDOOR WATER USE

PRESCRIPTIVE APPROACH

Each fixture must not exceed the maximum flow rates in CalGreen Table 5.303.2.2. and 5.303.2.3

Fixture Type	Maximum Prescriptive Flow Rate	Referenced Standard from California Plumbing Code Table 1401.1	
Showerheads ²	2 gpm @ 80 psi	n/a	
Lavatory faucets - nonresidential	0.4 gpm @ 60 psi	ASME A112.18.1/CSA B125.1	
Kitchen faucets	1.8 gpm @ 60 psi	n/a	
Wash fountains	1.8 [rim space (in.)/20 gpm @ 60 psi]	n/a	
Metering faucets	.20 gallons/cycle	ASME A112.18.1/CSA B125.1	
Metering faucets for wash fountains	.20 [rim space (in.)/20 gpm @ 60 psi]	n/a	
Tank-type water closets	1.28 gallons/flush ¹ and EPA WaterSense Certified	U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification	
Flushometer valve water closets	1.28 gallons/flush ¹	ASME A112.19.2/CSA B45.1 - 1.28 gal (4.8 L)	
Urinals	0.5 gallons/flush	ASME A112.19.2/CSA B45.1 – 0.5 gal (1.9 L)	

1) For dual flush toilets, effective flush volume is defines as the average volume of two reduced flushes and one full flush. The referenced standard is ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – 1.28 gal (4.8 L).

2) The combined flow rate of all showerheads in one shower stall not exceed the maximum flow rate for one showerhead, or the shower shall be designed to allow only one showerhead to be in operation at a time (5.303.2.1).

PERFORMANCE APPROACH

___OR____

Instructions to applicant:

summarized below:

Fill in all blank cells in both tables below. The number of occupants using each fixture type must be the same in both the Baseline and Design cases. If there are no fixtures of a type in your project, enter "0" for number of occupants. Multiply each row to determine the amount of water used in each fixture type, then sum the last column to determine the total daily water use. Take 80% of this baseline case to be the maximum allowable water use (corresponding to the required 20% reduction). The Total Design Case Daily Water Usage use from Worksheet WS-2 must not exceed the Total Allowable Daily Water Usage from Worksheet WS-1.

V	Worksheet WS-1 (summary) - Baseline & Allowable Water Use						
Fixture Type	Daily use		Occupants ²		Baseline Flow Rate		Baseline Usage (gallons per day)
Showerhead	5 min.	х		х	2.0 gpm	=	
Showerhead - residential	8 min.	х		x	2.5 gpm	=	
Lavatory faucets	0.25 min.	х		x	0.5 gpm	=	
Lavatory faucets - residential	0.25 min.	x		x	2.2 gpm	=	
Kitchen faucets	4 min.	x		x	2.2 gpm	=	
Metering faucets	3	x		x	0.25 gal	=	
Water closets (all types)	1 male ¹ 3 female	x		x	1.28 gal	=	
Urinals	2 male	х		x	0.5 gal	=	
	Total Baseline Case Daily Usage:						
Total Allowable Daily Water Usage (Baseline Usage x 80%):							

1) The daily use number shall be increased to three if urinals are not installed in the room. 2) For non-residential occupancies, refer to table A, Chapter 4, 2010 California Plumbing Code for occupant load factors 3) Fixtures and fittings must meet the standards referenced in **California Plumbing Code Table 1401.1**, see above.

	Worksheet WS-2 (summary) - Design Water Use						
Fixture Type	Daily use		Occupants ²		Design Flow Rate		Design Usage (gallons per day)
Showerhead	5 min.	х		x		=	
Showerhead - residential	8 min.	х		x		=	
Lavatory faucets	0.25 min.	x		x		=	
Lavatory faucets - residential	0.25 min.	x		x		=	
Kitchen faucets	4 min.	х		x		=	
Metering faucets	3	х		x		=	
Water closets (all types)	1 male ¹ 3 female	x		x		=	
Urinals	2 male	x		x		=	
Total Design Case Daily Usage:							

EXISTING NONCOMPLIANT FIXTURES

All fixtures that are not compliant with the San Francisco Commercial Water Conservation Ordinance that serve or are located within the project area must be replaced with fixtures or fittings meeting the maximum flow rates and standards referenced above. For more information, see the Commercial Water Conservation Program Brochure, available at SFDBI.org. Noncompliant plumbing fixtures include:

(1) Any toilet manufactured for use more than 1.6 gallons of water per flush.

(2) Any urinal manufactured for use more than 1 gallon of water per flush.

(3) Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute.

(4) Any interior faucet that emits more than 2.2 gallons of water per minute.

Exceptions to this requirement are limited to situations where replacement of fixture(s) would detract from the historic integrity of the building, as determined by the Department of Building Inspection pursuant to San Francisco Building Code Chapter 13A.

City "Other" No

Instructions to applicant:

Check the box by each measure to indicate that you int the requirement can be verified. (If items in the "Refere

An abbreviated summary of each requirement is include LEED standard must use C-3 "Submittal for LEED Pro

Required Measures

Type of Project:

Construction Waste Management – 100% hauler to a registered facility and be processed for recy Construction & Demolition Debris Ordinance

Recycling by Occupants: Provide adequate sp of compostable, recyclable and landfill materials. - See

Energy Efficiency: Demonstrate compliance with

Construction Site Runoff Pollution Preve Pollution Prevention Plan (CalGreen 5.106.1)

Stormwater Control Plan: Projects disturbing Control Plan meeting SFPUC Stormwater Design Guide

Water Efficient Irrigation - Projects that includ must comply with the San Francisco Water Efficient Irri

Bicycle parking: Provide short-term and long-terr pacity each, or meet San Francisco Planning Code Sec

Fuel efficient vehicle and carpool parkin and carpool/van pool vehicles; approximately 8% of tot

Light pollution reduction: Meet California Ene 1-4, with Backlight/Uplight/Glare ratings meeting CalGr Code Section 147 apply. Emergency lighting exempt. Water Meters: Provide submeters for spaces proje buildings over 50,000 sq. ft.

Indoor Water Efficiency: Reduce use of potabl summarized in CalGreen Table 5.303.2.2 and 5.303.2.1 noncompliant fixtures in project area.

Commissioning: For new buildings greater than the design and construction of the project to verify that project requirements.

OR for buildings less than 10,000 square feet, as v tions, testing and adjusting is required.

Protect duct openings and mechanical e of permanent HVAC during construction to conditioning If permanent HVAC is used during construction, install immediately prior to occupancy, or, if the building is occ construction.

Adhesives, sealants, and caulks: Comply v California Code of Regulations Title 17 for aerosol adhe

Paints and coatings: Comply with VOC limits in Suggested Control Measure and California Code of Re

- **Carpet:** All carpet must meet one of the following: 1. Carpet and Rug Institute Green Label Plus Program 2. California Department of Public Health Standard Pr
- 3. NSF/ANSI 140 at the Gold level, 4. Scientific Certifications Systems Sustainable Choice
- 5. California Collaborative for High Performance Scho Product Database AND carpet cushion must meet Carpet and Rug Institu

AND indoor carpet adhesive & carpet pad adhesive mu Composite wood: Meet CARB Air Toxics Control

emission limits in CalGreen Table 5.504.4.5.

Resilient flooring systems: For 80% of floor a complying with: 1. Certified under the Resilient Floor Covering Institute

2. Compliant with the VOC-emission limits and testing 2010 Standard Method for the Testing and Evaluation (3. Compliant with the Collaborative for High Performan

High Performance Product Database, OR 4. Certified under the Greenguard Children & Schools

Public Health criteria. Environmental Tobacco Smoke: Prohibit sn

intakes, and operable windows. Air Filtration: Provide at least MERV-8 filters in regula

Acoustical Control: Wall and roof-ceilings STC !

floor-ceilings STC 40. **CFCs and Halons:** Do not install equipment that

Additional Requirements for New A

Construction Waste Management – Source demolition debris, AND 100% of mixed debris must be transp processed for recycling, in compliance with the San Francisc Renewable Energy or Enhanced Energy ≥1% of total annual energy cost (LEED EAc2). OR demonstrate a10% energy use reduction compared to T OR purchase Green-E certified renewable energy credits for

n-residential A REQUIR	Additions,	Alterations, or "Otl	ner" New Construction VERIFICATION	c-5: "Ot al Addi "Other"
tond to comply with the listed requirement. For each re	quiromant use the "Plan Set Loca	an" column to indicate where in the submittel decuments compliance with		enti enti or istru
ence" column are not applicable, indicate "N/A.")	equirement, use the Flan Set Loca			ns sid
ed for reference. Projects seeking LEED certification j	may use the C-3 "Submittal for LEE	Projects" as an alternative to this form. Projects required to meet a	Instructions: Indicate below which professional(s) are responsible for ensuring green building requirements are met. FINAL COMPLIANCE VERIFICATION form will be required prior to Certificate of Completion	Achr Achr Achr Atio
		Reference (Indicate Plan Set Sheet & Detail, or Specification, where applicable)	Project Name	On- ier
	Addit Other New ≥1,000 Non-Residential OR Alter >\$200	n q ft tion 00 ³	Block/Lot	A N H
of mixed debris must be transported by a registered cling, in compliance with the San Francisco	• •		Addross	
pace and equal access for storage, collection and loading	• •		Address	
h California Energy Code, Title 24 Part 6 (2013).			Primary Occupancy	
ention: Provide a construction site Stormwater				
≥ 5.000 square feet must implement a Stormwater			Gross Building Area	
lelines.			The Green Building Compliance Professional of Record	
igation Ordinance.	If applic Applicable if	0 more	for this project is:	
m bicycle parking for 5% of total motorized parking ca- c 155, whichever is greater.	more parkir are ado	stalls d.		
IG: Provide stall marking for low-emitting, fuel efficient, al spaces.	more parkir are add	stalls d.	Name	
ergy Code minimum requirements for Lighting Zones reen Table 5.106.8. Exemptions of California Energy	n/r			
ected to consume > 1,000 gal/day, or > 100 gal/day if in	Limited to addition	ea of nly	 Firm	
le water for newly installed fixtures and fittings as 3 (See "Indoor Water Efficiency" at left.) Replace all	• •			l e
10,000 square feet, commissioning shall be included in the building systems and components meet the owner's	•		Arabitaatural or Engineering Lieense	e e
well as newly installed equipment in additions or altera-	OR (Testin Adjusti	& 3)	Architectural of Engineering License	
equipment during construction Limit use g necessary for material and equipment installation. MERV-8 filters on returns, and replace all filters cupied during alteration, at the conclusion of	• •		□ I am a GreenPoint Rater	
with VOC limits in SCAQMD Rule 1168 VOC limits and	• •			
the Air Resources Board Architectural Coatings	• •		that approved construction documents and construction	O
n,			fulfill the requirements of San Francisco Green Building Code. It is my professional opinion that the requirements	
ractice for the testing of VOCs (Specification 01350),			of the San Francisco Green Building Code will be met.	
te Green Label			project will, for any reason, not substantially comply with	
ust not exceed 50 g/L VOC content.			these requirements, or if I am no longer the Green Building Compliance Professional of Record for the project.	
area receiving resilient flooring, install resilient flooring				
e (RFCI) FloorScore program, g requirements of California Department of Public Health Chambers v.1.1,				S S
s Program to comply with California Department of			Licensed Professional: Sign & Date	
noking within 25 feet of building entries, outdoor air			Affix professional stamp:	
arly occupied spaces of mechanically ventilated buildings.				l .≚
50, exterior windows STC 30, party walls and	(Limited to e alteration or	/elope Idition)		
contains CFCs or Halons. (CalGreen 5.508.1)	•			
, B, I, OR M Occupancy Projects 5,00	00 - 25,000 Square Feet			
separate and recycle at least 10% of construction and ported by a registered hauler to a registered facility and be co Construction & Demolition Debris Ordinance	Meet Cons & Demolition Ordinar	iction Debris e		Ū
Etticiency: Generate renewable energy on-site equal to itle 24 Part 6 2013), 55% of total electricity use (LEED EAc6).	n/r			
······································	· I			· -

Project Description

Project Name

Block/Lot

Address

Primary Occupancy

Gross Building Area

INDOOR WATER USE

Newly installed fixtures in the project area must comply with the PRESCRIPTIVE fixture and fitting flow rates below.

(To apply the PERFORMANCE APPROACH, use Submittal Template C-5.)

Fixture Type	Maximum Prescriptive Flow Rate	Referenced Standard (See California Plumbing Code Table 1401.1)
Showerheads ²	2 gpm @ 80 psi	n/a
Lavatory faucets - nonresidential	0.4 gpm @ 60 psi	ASMEA112.18.1/CSAB125.1
Kitchen faucets	1.8 gpm @ 60 psi	n/a
Wash fountains	1.8 [rim space (in.)/20 gpm @ 60 psi]	n/a
Metering faucets	.20 gallons/cycle	ASMEA112.18.1/CSAB125.1
Metering faucets for wash foun- tains	.20 [rim space (in.)/20 gpm @ 60 psi]	n/a
Tank-type water closets	1.28 gallons/flush ¹ AND EPA Water Sense Certified	U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification
Flushometer valve water closets	1.28 gallons/flush ¹	ASME A112.19.2/CSA B45.1 - 1.28 gal (4.8 L)
Urinals	0.5 gallons/flush	ASME A112.19.2/CSA B45.1 – 0.5 gal (1.9 L)

1) For dual flush toilets, effective flush volume is defines as the average volume of two reduced flushes and one full flush. The referenced standard is ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – 1.28 gal (4.8 L).

2) The combined flow rate of all showerheads in one shower stall not exceed the maximum flow rate for one showerhead, or the shower shall be designed to allow only one showerhead to be in operation at a time (CalGreen 5.303.3.3.2.)

EXISTING NONCOMPLIANT FIXTURES

All fixtures that are not compliant with the San Francisco Commercial Water Conservation Ordinance that serve or are located within the project area must be replaced with fixtures or fittings meeting the maximum flow rates and standards referenced above. For more information, see the Commercial Water Conservation Program Brochure, available at SFDBI.org. Noncompliant plumbing fixtures include:

(1) Any toilet manufactured for use more than 1.6 gallons of water per flush.

(2) Any urinal manufactured for use more than 1 gallon of water per flush.

(3) Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute.

(4) Any interior faucet that emits more than 2.2 gallons of water per minute.

Exceptions to this requirement are limited to situations where replacement of fixture(s) would detract from the historic integrity of the building, as determined by the Department of Building Inspection pursuant to San Francisco Building Code Chapter 13A.

Instructions:

This form is for commercial tenant improvement projects with >\$200,000 project valuation that are limited to the interior of the building. Check the box by each measure to indicate that you intend to comply with the listed requirement. For each requirement, use the "Plan Set Location" column to indicate where in the submittal documents compliance with the requirement can be verified. (If items in the "Reference" column are not applicable, indicate "N/A.") An abbreviated summary of each requirement is included for reference. Projects seeking LEED certification may voluntarily use the "LEED" submittal as an alternative to this form.

Required Measure

Construction Waste Management – 100% hauler to a registered facility and be processed for recyc Construction & Demolition Debris Ordinance.

Recycling by Occupants: Provide adequate sp of compostable, recyclable and landfill materials. See Ad

Adhesives, sealants, and caulks: Comply w California Code of Regulations Title 17 for aerosol adhes

Paints and coatings: Comply with VOC limits in Suggested Control Measure and California Code of Reg

- **Carpet:** All carpet must meet one of the following:
- 1. Carpet and Rug Institute Green Label Plus Program 2. California Department of Public Health Standard Pra
- 3. NSF/ANSI 140 at the Gold level, 4. Scientific Certifications Systems Sustainable Choice
- 5. California Collaborative for High Performance School Product Database AND carpet cushion must meet Carpet and Rug Institute
- AND indoor carpet adhesive & carpet pad adhesive mus Composite wood: Meet CARB Air Toxics Control

emission limits in CalGreen Table 5.504.4.5. Resilient flooring systems: For 80% of floor an

- complying with: 1. Certified under the Resilient Floor Covering Institute
- 2. Compliant with the VOC-emission limits and testing 2010 Standard Method for the Testing and Evaluation C
- 3. Compliant with the Collaborative for High Performan
- Performance Product Database, OR 4. Certified under the Greenguard Children & Schools
- Health criteria.(CalGreen 5.504.4.4 and 5.504.4.6)

Required Measure

Energy Efficiency: Demonstrate compliance with

- Testing and Adusting: (CalGreen 5.410.4 through 1. Develop and implement a plan of procedures fo applicable): HVAC; indoor and outdoor lighting
- irrigation; and water reuse systems.
- 2. Balance new HVAC systems before operation f 3. Provide the Owner or representative with a final
- 4. Provide the building representative with detailed

all guarantees/warranties for each system. Protect duct openings and mechanical ed of permanent HVAC during construction to conditioning permanent HVAC is used during construction, install MI prior to occupancy, or, if the building is occupied during a 5.504.1.3 and 5.504.3)

Air Filtration: Provide at least MERV-8 filters in reg ings. Installed filters must be clearly labeled by the man tion shall be included in the operation and maintenance Indoor Water Efficiency: Reduce use of potabl summarized in Table 5.303.2.3 (copied at left for referen

Notes:

1) This submittal form is required for all applicable projects submitting initial application for building permit beginning July 1, 2014. 2) Table above is a summary only. See full text of San Francisco Green Building Code for details.

City and County of San Francisco Green Building **For Interior Commercial Tenant Improvem**

Archit	ecture		I have been the require San France
;	Interior Alteration ≥\$200,000	(Indicate Plan Set Sheet & Detail, or Specification, as applicable)	for any rea Profession
of mixed debris must be transported by a registered cling, in compliance with the San Francisco	•		for Ar
pace and equal access for storage, collection and loading Iministrative Bulletin 088.	•		Name
vith VOC limits in SCAQMD Rule 1168 VOC limits and esives. (CalGreen 5.504.4.1)	•		Firm
the Air Resources Board Architectural Coatings gulations Title 17 for aerosol paints. (CalGreen 5.504.4.3.1)	•		
n, actice for the testing of VOCs (Specification 01350), e, OR iols EQ 2.2 and listed in the CHPS High Performance	•		Archite License Affix pr
st not exceed 50 g/L VOC content. Measure for Composite Wood including meeting the	•		
RFCI) FloorScore program, requirements of California Department of Public Health chambers v.1.1, nce Schools (CHPS) EQ2.2 and listed in the CHPS High Program to comply with California Department of Public	•		

Mechanical,	Elec	ctrical,	Plumbing

-			of Ruildi
es	Interior Alteration ≥\$200,000	(Indicate Plan Set Sheet & Detail, or Specification, as applicable)	or if I am
n California Energy Code, Title 24 Part 6 (2013).	•		for N
igh 5.410.4.5.1)			Name
or testing and adjusting new systems, including (as and controls; water heating; renewable energy; landscape			
or normal use.			Firm
I report of testing.			
d operating and maintenance instructions and copies of			
quipment during construction. Limit use necessary for material and equipment installation. If ERV-8 filters on returns, and replace all filters immediately alteration, at the conclusion of construction. (CalGreen	•		Archite
gularly occupied spaces of mechanically ventilated build-			
nufacturer indicating the MERV rating, and filter specifica- e manual. (CalGreen5.504.5.3 through 5.504.5.3.1)	•		Affix p
e water for newly installed fixtures and fittings as nce.) (CalGreen 5.303.2 and 5.303.3)			

bing Submittal: between the second state of the project sponsor to assure that approved construction documents and construction fulfill the requirements of San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Complexity the Department of Building Inspection if the project will, for any reason, not substantially comply with these requirements, or if I am no longer the Green Building Complexity. Green Building Compliance Professional of Record for the project. Green Building Compliance Professional of Record for Architectural Measures:	Attachment C-6: Interior Commercial Tenant Improvement
Name	
Firm	
Architectural or Engineering License Number	
Licensed Professional: Sign & Date Affix professional stamp:	
I have been retained by the project sponsor to assure that approved construction documents and construction fulfill the requirements of San Francisco Green Building Code. It is my professional opinion that the requirements of the San Francisco Green Building Code will be met. I will notify the Department of Building Inspection if the project will, for any reason, not substantially comply with these requirements, or if I am no longer the Green Building Compliance Professional of Record for the project. Green Building Compliance Professional of Record for the project . Green Building Compliance Professional of Record for Mechanical, Electrical, and Plumbing Measures : Name	ck here
Firm	
Architectural or Engineering License Number	e e e
Affix professional stamp:	Project Name /

INDOOR WATER USE

PRESCRIPTIVE APPROACH

All fixtures must not exceed flow rates summarized below (from CalGreen Tables 5.303.2.2. & 5.303.2.3

Fixture Type	Maximum Prescriptive Flow Rate	Referenced Standard from California Plumbing Code Table 1401.1
Showerheads ²	2 gpm @ 80 psi	n/a
Lavatory faucets - nonresidential	0.4 gpm @ 60 psi	ASME A112.18.1/CSA B125.1
Kitchen faucets	1.8 gpm @ 60 psi	n/a
Wash fountains	1.8 [rim space (in.)/20 gpm @ 60 psi]	n/a
Metering faucets	.20 gallons/cycle	ASME A112.18.1/CSA B125.1
Metering faucets for wash fountains	.20 [rim space (in.)/20 gpm @ 60 psi]	n/a
Tank-type water closets	1.28 gallons/flush ¹ and EPA WaterSense Certified	U.S. EPA WaterSense Tank-Type High-Efficiency Toilet Specification
Flushometer valve water closets	1.28 gallons/flush ¹	ASME A112.19.2/CSA B45.1 - 1.28 gal (4.8 L)
Urinals	0.5 gallons/flush	ASME A112.19.2/CSA B45.1 – 0.5 gal (1.9 L)

1) For dual flush toilets, effective flush volume is defines as the average volume of two reduced flushes and one full flush. The referenced standard is ASME A112.19.14 and USEPA WaterSense Tank-Type High Efficiency Toilet Specification – 1.28 gal (4.8 L).

2) The combined flow rate of all showerheads in one shower stall not exceed the maximum flow rate for one showerhead, or the shower shall be designed to allow only one showerhead to be in operation at a time (5.303.2.1). OR

PERFORMANCE APPROACH

Instructions to applicant:

Fill in all blank cells in both tables below. The number of occupants using each fixture type must be the same in both the Baseline and Design cases. If there are no fixtures of a type in your project, enter "0" for number of occupants. Multiply each row to determine the amount of water used in each fixture type, then sum the last column to determine the total daily water use. Take 80% of this baseline case to be the maximum allowable water use (corresponding to the required 20% reduction). The Total Design Case Daily Water Usage use from Worksheet WS-2 must not exceed the Total Allowable Daily Water Usage from Worksheet WS-1.

V	Worksheet WS-1 (summary) - Baseline & Allowable Water Use						
Fixture Type	Daily use		Occupants ²		Baseline Flow Rate		Baseline Usage (gallons per day)
Showerhead	5 min.	x		x	2.0 gpm	=	
Showerhead - residential	8 min.	x		x	2.5 gpm	=	
Lavatory faucets	0.25 min.	x		x	0.5 gpm	=	
Lavatory faucets - residential	0.25 min.	x		x	2.2 gpm	=	
Kitchen faucets	4 min.	x		x	2.2 gpm	=	
Metering faucets	3	x		x	0.25 gal	=	
Water closets (all types)	1 male ¹ 3 female	x		x	1.28 gal	=	
Urinals	2 male	x		x	0.5 gal	=	
			Total Basel	ine	Case Daily Usa	ige:	
Total Allowable Daily Water Usage (Baseline Usage x 80%):							

 The daily use number shall be increased to three if urinals are not installed in the room. 2) For non-residential occupancies, refer to table A, Chapter 4, 2010 California Plumbing Code for occupant load factors 3) Fixtures and fittings must meet the standards referenced in California Plumbing Code Table 1401.1. see above.

Worksheet WS-2 (summary) - Design Water Use							
Fixture Type	Daily use		Occupants ²		Design Flow Rate		Design Usage (gallons per day)
Showerhead	5 min.	х		x		=	
Showerhead - residential	8 min.	x		x		=	
Lavatory faucets	0.25 min.	x		x		=	
Lavatory faucets - residential	0.25 min.	x		x		=	
Kitchen faucets	4 min.	x		x		=	
Metering faucets	3	x		x		=	
Water closets (all types)	1 male ¹ 3 female	x		x		=	
Urinals	2 male	х		х		=	
Total Design Case Daily Usage:							

EXISTING NONCOMPLIANT FIXTURES

All fixtures that are not compliant with the San Francisco Residential Water Conservation Ordinance that serve or are located within the project area must be replaced with fixtures or fittings meeting the maximum flow rates and standards referenced above. For more information, see the Commercial Water Conservation Program Brochure, available at SFDBI.org. Noncompliant plumbing fixtures include:

(1) Any toilet manufactured for use more than 1.6 gallons of water per flush.

(2) Any urinal manufactured for use more than 1 gallon of water per flush.

(3) Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute. (4) Any interior faucet that emits more than 2.2 gallons of water per minute.

Exceptions to this requirement are limited to situations where replacement of fixture(s) would detract from the historic ntegrity of the building, as determined by the Department of Building Inspection pursuant to San Francisco Building Code Chapter 13A.

Instructions:

This form is for additions and alterations to residential occupancy which increase conditioned area, volume, or size of a residential building. See Administrative Bulleting 93, Attachment A, Table 1 for applicability. An abbreviated summary of each requirement is included for reference. Projects required to meet a LEED standard must use C-3 "Submittal for LEED Projects", and projects required to meet GreenPoint Rated must use the C-4 "Submittal for GreenPoint Rated Projects." Projects seeking certification may use the C-3 "Submittal for LEED Projects" or C-4 "Submittal for GreenPoint Rated" as alternatives to this form.

Check the box by each measure to indicate that you intend to comply with the listed requirement. For each requirement, use the "Plan Set Location" column to indicate where in the submittal documents compliance with the requirement can be verified. Requirements apply to areas and systems within the scope of addition and alteration. Where items are not applicable, indicate "N/A" in the "Reference" column.

Required Measures

Type of Project:

Construction and Demolition Debris: 100 facility and be processed for recycling, in compliance
Recycling by Occupants: Provide adequate compostable, recyclable and landfill materials Second
Water Efficient Irrigation: Projects that inclute the San Francisco Water Efficient Irrigation Ordin
Stormwater Control Plan: Projects disturbin meeting SFPUC Stormwater Design Guidelines.
Grading and paving: Construction plans sha water flows to keep water from entering the buildir
Smart Irrigation Controller: Automatically a have either an integral or separate rain sensors the sensor of the se
Indoor Water Efficiency: Install water-efficien Efficiency" at left.) Replace all noncompliant fixtures
Energy Efficiency: Comply with California Er
Pest Protection: Annular spaces around pipe exterior walls shall be closed with cement mortar,
Moisture content of building materials:
to enclosure. Materials with visible signs of moist compliance with the following: (CalGreen 4.505.3 1) Moisture content shall be determined with either verification methods may be approved by the enf 2) Moisture readings shall be taken at a point 2 fe piece to be verified.
3) At least three random moisture readings shall the enforcing agency provided at the time of appr visibly wet or have a high moisture content shall I Manufacturers' drying recommendations shall be
Capillary break for concrete slab on gra retarder must also have a capillary break, includin 1) A 4-inch (101.6 mm) thick base of 1/2-inch (12 in direct contact with concrete and a concrete mix For additional information, see American Concret 2) A slab design specified by a licensed design p
Fireplaces and woodstoves: Install only di Il limits. (CalGreen 4.503.1)
Design and Install HVAC System to AC
HVAC Installer Qualifications: HVAC systems, such as via a state certified apprintstaller qualification), or other program acceptable
Covering duct openings and protecting
and other air distribution component openings sh al, or other acceptable methods to reduce the am
Bathroom exhaust fans: Must be ENERGY
may be a separate component from the exhaust
Carpet: All carpet must meet one of the following
2. California Department of Public Health Stand
4 Scientific Certifications Systems Sustainable
5. California Collaborative for High Performance S
AND carpet cushion must meet Carpet and Rug AND indoor carpet adhesive & carpet pad adhesi
Resilient flooring systems: For 80% of floor
 Certified under the Resilient Floor Covering In Compliant with the VOC-emission limits and to
3. Compliant with the Collaborative for High Peri Performance Product Database, OR
4. Certified under the Greenguard Children & Sch
used on interior or exterior shall meet CARB Air Toxi
Interior paints and coatings: Comply with Control Measure and California Code of Regulati
Low-VOC aerosol paints and coatings: Weighted MIR Limits for ROC. (CalGreen 4.504.2
Low VOC Caulks, Construction adhesiv 4.504.1 and 4.504.2. (CalGreen 4.504.2.1)

City and County of San Francisco Green Building **Residential Additions and Alterations**

REQUIREMENTS

		Reference (Indicate Plan Set Sheet & Detail, or Specification, where applicable)	
	Residential Addition & Alteration		
% of mixed debris must be transported by a registered hauler to a registered with the San Francisco Construction & Demolition Debris Ordinance	•		
space and equal access for storage, collection and loading of e Administrative Bulletin 088.	•		
de \geq 1,000 square feet of new or modified landscape must comply with ince. (See the guide at www.sfwater.org/landscape)	•		
g ≥ 5,000 square feet must implement a Stormwater Control Plan See www.sfwater.org/sdg)	•		
indicate how the site grading or drainage system will manage surface a, such as swales, drains, or water retention gardens, (CalGreen 4,106,3)	•		
djust irrigation based on weather and soil moisture. Controllers must at connects or communicates with the controller.	•		
fixtures and fittings as summarized in CalGreen 4.303 (See "Indoor Water in project area (CalGreen 3.301.1.1, San Francisco Housing Code 12A)	•		
ergy Code (Title 24, Part 6 <mark>2013</mark>)	•		
, electric cables, conduits, or other openings in sole/bottom plates at concrete masonry, or a similar method acceptable to DBI for protection	•		
/erify wall and floor framing does not exceed 19% moisture content prior re damage shall not be installed. Moisture content shall be verified in) r a probe-type or a contact-type moisture meter. Equivalent moisture rcing agency and shall satisfy requirements in Section 101.8. et (610 mm) to 4 feet (1219 mm) from the grade-stamped end of each	•		
e performed on wall and floor framing with documentation acceptable to val to enclose the wall and floor framing. Insulation products which are e replaced or allowed to dry prior to enclosure in wall or floor cavities. collowed for wet-applied insulation products prior to enclosure			
de: Concrete slab on grade foundations required to have a vapor g at least one of the following: (CalGreen 4.505.2.) ' mm) or larger clean aggregate shall be provided with a vapor retarder design which will address bleeding, shrinkage and curling shall be used. Institute, ACI 302.2R-06. ofessional.	•		
ect-vent or sealed-combustion appliances; comply with US EPA Phase	•		
A Manual J, D, and S (CalGreen 4.507.2)	•		
m installers must be trained and certified in the proper installation of nticeship program, public utility training program (with certification as to the Department of Building Inspection. (CalGreen 702.1)	•		
mechanical equipment during construction: Duct openings Il covered during all phases of construction with tape, plastic, sheetmet- unt of water, dust, and debris entering the system.	•		
STAR compliant, ducted to terminate outside the building, and controlled ive humidity of less than 50% to maximum of 80%. Humidity control	•		
: (CalGreen 4.504.3) gram, rd Practice for the testing of VOCs (Specification 01350),			
choice, OR chools EQ 2.2 and listed in the CHPS High Performance Product Database stitute Green Label, e must not exceed 50 g/L VOC content.	•		
area receiving resilient flooring, install resilient flooring complying with: stitute (RFCI) FloorScore program, sting requirements of California Department of Public Health 2010 nambers v.1.1, ormance Schools (CHPS) EQ2.2 and listed in the CHPS High	● OR ●		
ols Program to comply with California Department of Public Health criteria.			
s Control Measure for Composite Wood. See CalGreen Table 4.504.5.	•		
OC limits in the Air Resources Board Architectural Coatings Suggested ns Title 17 for aerosol paints. See CalGreen Table 4.504.3.	•		
1eet BAAQMD VOC limits (Regulation 8, Rule 49) and Product- 3.)			
es, and Sealants: Meet SCAQMD Rule 1168. See CalGreen Tables			

g	Submittal:

VERIFICATION

Instructions:

Indicate below who is responsible for ensuring green building requirements are met. Projects that increase total conditioned floor area by ≥1,000 square feet are required to have a Green Building Compliance Professional of Record as described in Administrative Bulletin 93. For projects that increase total conditioned floor area by <1,000 square feet, the applicant or design professional may sign below, and no license or special qualifications are required.

NAL COMPLIANCE VERIFICATION form will be required prior to Certificate of mpletion.

roject Name

lock/Lot

ddress

rimary Occupancy

Gross Building Area

crease In Conditioned Floor Area

ojects that increase total conditioned floor area by ≥1,000 square feet: he Green Building Compliance Professional of Record for this project is:

ame

rm

rchitectural or Engineering License

- □ I am a LEED Accredited Professional
- □ I am a GreenPoint Rater
- □ I am an ICC Certified CalGreen Inspector

will assure that approved construction documents and onstruction fulfill the requirements of San Francisco reen Building Code. It is my professional opinion that the equirements of the San Francisco Green Building Code will e met. I will notify the Department of Building Inspection the project will, for any reason, not substantially comply ith these requirements, if I am no longer the Green uilding Compliance Professional of Record for the project if I am otherwise no longer responsible for assuring the ompliance of the project with the San Francisco Green uilding Code.

censed Professional: Sign & Date¹ ay be signed by the applicant when less than 1,000 square feet is added.)

ffix professional stamp:

Attachment C-7: Residential Additions and Alterations	Version: July 1, 2014
nsert Project Name / Titleblock here	

Green Building Submittal for San Francisco Municipal Government LEED Projects

LEED 2009 Scorecard Insert applicable LEED scorecard.

Instructions: This form is solely for projects owned or leased by the City and County of San Francisco and associated agencies. Select the column that corresponds to your project type. Fill in the blank lines to show that the number of points identified on your LEED checklist meets or exceeds the required number. For each applicable requirement, use the "Reference" column to indicate where in the submittal documents compliance with the requirement can be verified. (If items in the "Reference" column are not applicable, indicate "N/A.") All applicable LEED prerequisites are required.

Summary of Green Building Req

LEED certification level (includes pre-

Base number of required Points:

Adjustment for retention / demolition of Final number of required Points (base

Number of Points on LEED Checklist (Must be greater than requirement):

Specific Local Requirements: LEE

(n/r indicates a measure is not required)

Construction Waste Management -AND comply with San Francisco Construct Ordinance

Energy Efficiency

Demonstrate compliance with Title 24 Part 6 20 performance (EA 1) - generally demonstrated

Renewable Energy or Enhanced En Effective 1/1/2012: Generate renewable annual energy cost (LEED EAc2), OR Demonstrate a 10% energy use reduction (2013). (LEED EAc1, 8 points)

Enhanced Commissioning of Buildi

Water Use - 30% Reduction

Water Efficient Irrigation: Projects that new or modified landscape must comply Efficient Irrigation Ordinance. May meet L Construction Site Runoff Pollution construction site Stormwater Pollution Pre

SFPUC Best Management Practices. LEE Stormwater Control Plan - Projects di must implement a Stormwater Control Pla **Design Guidelines**

Enhanced Refrigerant Management

Indoor Air Quality Management Plan (during construction and before occup

Indoor Chemical Pollutant and Pollutar

Low-Emitting Materials

Recycling by Occupants: Provide add for storage, collection and loading of comp materials. See Administrative Bulletin 088

Specific Local Requirements: Ot

Lead Elimination: Eliminate building mat Environment Code Chapter 7, Section 709 Non-PVC Plastics: Eliminate building ma Environment Code Chapter 5, Sec. 509

Tropical Hardwood and Virgin Redwoo materials containing tropical hardwood an Environment Code Chapter 8

Bird-Safe Buildings: Comply with San Section 139 Standards for Bird-Safe Build Bicycle parking: Provide short-term an for 5% of total motorized parking capacity Planning Code Sec 155, whichever is greater (CalGreen 5.106.4)

Designated parking: Mark 8% of total fuel efficient, and carpool/van pool vehicle

Light pollution reduction: Meet California requirements for Lighting Zones 1-4, with meeting CalGreen Table 5.106.8. Exempt Section 147 apply. Emergency lighting ex

Water Meters: Provide submeters for sp more than 1,000 gal/day, or more than 10 50,000 sq. ft. (CalGreen 5.303.1)

Air Filtration: Provide at least MERV-8 spaces of mechanically ventilated building that LEED credit IEQ c5 is stricter.)

Acoustical Control: Wall and roof-ceili STC 30, party walls and floor-ceilings STC

Notes:

credit should be applied.

REQUIREMENTS

uirements:	New Construction and Major Alteration (LEED BD&C - aka 'NC')	Commerical Interior (LEED IDC- aka 'CI')	
requisites):	GOLD	GOLD	
	60	60	
f historic features / building:		n/a	
number +/- adjustment)		n/a	
D	New Construction and Major Alteration (LEED BD&C - aka 'NC')	Commerical Interior (LEED IDC- aka 'CI')	Reference (Indicate Plan Set Sheet & Detail, or Specification, where applicable)
75% Diversion ction & Demolition Debris	LEED MR 2 2 points	LEED MR 2 2 points	
013, and meet LEED minimum via ASHRAE 90.1-2007).	LEED EA 1 3 points	 Recommended: EA1.1: 2 points* EA1.2: 2 points* EA1.3: 5 points* EA1.4: 4 points* 	
ergy Efficiency – energy on-site ≥1% of total a compared to Title 24 Part 6	•	n/r	
ing Energy Systems	LEED EA 3	LEED EA 2*	
	LEED WE 3 : 2 points	• WE 1* : 6 points	
at include ≥ 1,000 square feet of with tthe San Francisco Water .EED WE c1	•	May apply if project includes landscapes	
Prevention: Provide a evention Plan and implement ED SS prerequisite 1	•	May apply if project extends beyond building envelope	
sturbing ≥ 5,000 square feet an meeting SFPUC Stormwater	LEED SS 6.1 or 6.2 as applicable	May apply if project extends beyond building envelope	
	LEED EA 4	CalGreen 5.714.8.1	
n ancy)	LEED IEQ 3.1 and IEQ 3.2	Required: LEED IEQ 3.1 Recommended: IEQ 3.2*	
nt Source Control	LEED IEQ 5	LEED IEQ 5 if applicable	
	LEED IEQ 4.1, 4.2, 4.3, and 4.4	Required: LEED IEQ 4.1, 4.2, 4.3, and 4.4 Recommended: IEQ4.5*	
equate space and equal access ostable, recyclable and landfill for details.	Exceeds requirements of LEED MR p1	Exceeds requirements of LEED MR p1	
her	New Construction and Major Alteration (LEED BD&C - aka 'NC')	Commerical Interior (LEED IDC- aka 'Cl')	Reference (Indicate Plan Set Sheet & Detail, or Specification, where applicable)
terials containing lead. 9(c)(7)(B) aterials containing PVC		•	
d: Eliminate all building		•	
Francisco Planning Code		•	
dings. d long-term bicycle parking each, or meet San Francisco ater. May meet LEED SS 4.2.	•	•	
parking stalls for low-emitting, es. (CalGreen 5.106.5)	Applies if ≥10 stalls added.	Applies if 10 or more stalls are	
ornia Energy Code minimum Backlight/Uplight/Glare ratings ions of California Energy Code empt. (CalGreen 5.106.8)	Applies only to new construction.	n/r	
baces projected to consume 0 gal/day if in building over	Applies to new construction, or only to area of addition.	Applies to area of addition	
filters in regularly occupied gs (CalGreen 5.504.5.3. Note	•	•	
ngs STC 50, exterior windows C 40. (CalGreen 5.507.4)	Applies to new construction and area of envelope alteration	Applies to area of envelope alteration	

1) This form is for municipal projects applying for a building permit on or after July 1, 2014. The table above is a summary only. See full text of referenced codes for details.

2) Environment Code Chapter 7 requires tenant improvements of 5,000 square feet or larger to be LEED Gold certified, but does not specify which LEED credits are required for interior tenant improvements. San Francisco Green Building Code and CalGreen include prescriptive requirements, which also apply. Items in the "Commercial Interior" column denoted with a "*" are commonly applied in municipal projects and recommended wherever practical by the Department of Environment, but are not mandatory. 3) References to specific LEED 2009 BD&C as well as ID&C credits are provided for your convenience. If the project is applying a different version of the LEED rating system, such as LEED BD&C v4, the corresponding substantively equivalent

VERIFICATION

Instructions:

Please indicate how fullfillment of green building requirements will be verified. A separate "FINAL COMPLIANCE VERIFICATION" form will be required prior to final Certificate of Completion. For details, see Administrative Bulletin 93.

Project Name

Block/Lot

Address

Primary Occupancy

Gross Building Area

PROJECT MANAGER:

I understand that Environment Code Chapter 7 requires all applicable projects to attain LEED Gold certification from the Green Building Certification Institute. No Green Building Compliance Professional of Record is required.

Project Manager – Sign & Date

Name

Agency/Firm

DESIGN PROFESSIONAL OF RECORD:

I understand that Environment Code Chapter 7 requires all applicable projects to attain LEED Gold certification from the Green Building Certification Institute. No Green Building Compliance Professional of Record is required.

Design Professional of Record: Sign & Date

Name

Agency/Firm Affix professional stamp:

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> \mathbf{O} Titleblock Φ Nam roject sert

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Green Building Ordinance:

Supplementary Energy Compliance Documentation

Special Energy Compliance Form

PERF-1-GBO

This form may be used to demonstrate energy equivalence using the Title 24 performance approach in cases where California energy standards do not allow specific systems to be considered in performance-based compliance calculations. In such cases, for fairness, the applicant may optionally calculate the TDV energy compliance margin based only on the systems that contribute to performance-based code compliance.

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)	Instruction
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.
TOTALS:			

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/tools/nshpcalculator/index.php





Green Building: Final Compliance Verification

This form is required prior to issuance of a final Certificate of Completion.

Address: _____

Permit Application Numbers:

Verification that the above referenced project has been constructed to comply with the requirements of the San Francisco Green Building Code is based upon one of the following:

Option 1: This project has submitted for certification 1" on the green building submittal), but is not yet certify that, to the best of my knowledge, the project with the green building requirements of San Franci	n under LEED or GreenPoint Rated ("Option ertified. As the Design Professional of Record, I t has been constructed to substantially comply sco's building codes.
Signed:	Date:
Affix professional stamp:	
Mandatory follow-up for Option 1: Evidence of L	FED or GreenPoint Rated certification
Staff Use Only: Proof of LEED or GreenPoint	Rated certification received:
Sign & Date:	
Option 2: This project will not utilize LEED or Gree compliance with the San Francisco Green Building Professional of Record for this project, I verify that referenced project has been constructed to substat requirements of San Francisco's building codes. [A	nPoint Rated certification to demonstrate Code. As the Green Building Compliance to the best of my knowledge the above ntially comply with the green building firx stamp below.]
Signed:	Date:
Affix professional stamp:	



Recommended Project Implementation Procedures

Introduction

LEED and GreenPoint Rated were selected by the Green Building Task Force for reference in San Francisco Green Building Code primarily because of their credibility, existing program infrastructure, and verification performed by qualified review bodies. Certification by referenced standards is not required but recommended.

For more information: www.usgbc.org, www.builditgreen.org

LEED Projects

- 1. Incorporate green building considerations from the beginning of project development.
- 2. Identify a Project Administrator who is a LEED Accredited Professional (reports to Green Building Compliance Professional of Record)
- 3. Register Project with Green Building Certification Institute
- 4. Develop Responsibility Matrix and assign credits to responsible team member(s)
- 5. Detailed design
- 6. Submit Design Credits to Green Building Certification Institute for review
- 7. Construction
- 8. Submit Construction Credits to Green Building Certification Institute for review
- 9. Maintain detailed project records showing that green building requirements have been met.

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-drywall) by GreenPoint Rater
- 8. Construction
- 9. Final Inspection by GreenPoint Rater
- 10. Maintain detailed project records showing that green building requirements have been met



Selected Green Building Resources

- SF Dept of Building Inspection <u>www.sfdbi.org</u>
- SF Environment Green Building Program <u>www.sfenvironment.org/greenbuilding</u>
- SF Public Utilities Commission for information on water-related policies such as:
 - Stormwater Management Ordinance and Stormwater Design Guidelines
 <u>www.sfwater.org/sdg</u>
 - Water Efficient Irrigation Ordinance <u>www.sfwater.org/landscape</u>
 - Construction site runoff requirements <u>www.sfwater.org/index.aspx?page=235</u>
 - Recycled Water <u>www.sfwater.org/index.aspx?page=687</u>
 - Commercial water conservation <u>www.sfwater.org/conservation</u>
 - Voluntary onsite use of alternative water sources for nonpotable applications, such as rainwater <u>www.sfwater.org/np</u>
- **US Green Building Council** (LEED Rating System) Numerous resources, including Reference Guides to the LEED Rating System(s), and workshops. <u>www.usgbc.org</u>
- US Green Building Council Northern California Chapter Network with local green building professionals. <u>www.usgbc-ncc.org</u>
- Green Building Certification Institute The site to register for LEED certification, as well as the LEED Accreditation Exam. <u>www.gbci.org</u>
- 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 / www.greenpointrated.org





Review of Energy Efficiency Requirements

This table reviews minimum energy efficiency requirements for projects subject to San Francisco's green building requirements, which are based on the city and state requirements in effect at the date of application for building permit. For additional information, please see "Compliance Guidelines: Energy" starting on page 5 of Administrative Bulletin 93 (this bulletin).

Project Type	Date of application for building permit			
	January 1, 2011 – December 31, 2013	January 1, 2014 – June 30, 2014	On or after July 1, 2014	
New Commercia	al			
New Large Commercial	+15% Reduction compared to Title 24 Part 6 (2008) or ASHRAE 90.1 (2007) AND 1% onsite renewable energy generation OR 10% additional energy efficiency or purchase renewable power	Demonstrate compliance with Title 24 Part 6 (2008) AND 1% onsite renewable energy generation OR 10% additional energy efficiency OR purchase renewable power	Demonstrate compliance with Title 24 Part 6 (2013) AND 1% onsite renewable energy generation OR 10% additional energy efficiency OR purchase renewable power	
All Other New Non- Residential	+15% Reduction compared to Title 24 Part 6 (2008)	Demonstrate compliance with Title 24 Part 6 (2008) only	Demonstrate compliance with Title 24 Part 6 (2013) only	
Additions and A	Iterations			
Large First-Time Commercial Interiors	+15% Reduction compared to Title 24 Part 6 (2008)	Meet prerequisite of rating system (LEED BD+C 2009 EAp2), demonstrate compliance with T24 Part 6 (2008)Meet prerequisite of rating system (LEED BD+C 2009 E demonstrate compliance with Part 6 (2013)		
Major Alteration to Commercial or Residential	 Meet prerequisite of rating system chosen for the entire project: LEED BD+C 2009 – Demonstrate compliance with T24 Part 6 (2008) OR GreenPoint Rated – 15% Reduction compared to Title 24 Part 6 (2008) 	 Meet prerequisite of rating system chosen for the entire project: GreenPoint Rated – 15% Reduction compared to Title 24 Part 6 (2008) OR LEED BD+C 2009 – Demonstrate compliance with T24 Part 6 (2008) OR LEED for Homes (including MidRise) – 15% Reduction compared to Title 24 Part 6 (2008) 	 Meet prerequisite of rating system chosen for the entire project: GreenPoint Rated – 10% Reduction compared to Title 24 Part 6 (2013) OR LEED BD+C 2009 – Demonstrate compliance with T24 Part 6 (2013) OR LEED for Homes (including MidRise) – 10% Reduction compared to Title 24 Part 6 (2013) 	
All Other Additions & Alterations to Commercial or Residential	Demonstrate compliance with Title 24 Part 6 (2008) only	Demonstrate compliance with Title 24 Part 6 (2008) only	Demonstrate compliance with Title 24 Part 6 (2013) only	

Attachment H Continued: Review of Energy Efficiency Requirements

(Sheet 2 of 2)

Project Type	Date of application for building permit			
	January 1, 2011 – December 31, 2013	January 1, 2014 – June 30, 2014	On or after July 1, 2014	
New Residenti	al			
New High-Rise Residential (≥4 occupied floors)	+15% Reduction compared to Title 24 Part 6 (2008)	Meet prerequisite of rating system chosen for the entire project:	Meet prerequisite of rating system chosen for the entire project:	
		• GreenPoint Rated – 15% Reduction compared to Title 24 Part 6 (2008) OR	• GreenPoint Rated – 10% Reduction compared to Title 24 Part 6 (2013) OR	
		• LEED BD+C 2009 – Demonstrate compliance with T24 Part 6 (2008) OR	• LEED BD+C 2009 – Demonstrate compliance with T24 Part 6 (2013) OR	
		LEED for Homes (including MidRise) – 15% Reduction compared to Title 24 Part 6 (2008)	• LEED for Homes (including MidRise) – 10% Reduction compared to Title 24 Part 6 (2013)	
New Low-Rise		Meet prerequisite of rating system chosen for the entire project:	Meet prerequisite of rating system chosen for the entire project:	
Residential (1-3 occupied	+15% Reduction compared to Title 24 Part 6 (2008)	GreenPoint Rated – 15% Reduction compared to Title 24 Part 6 (2008) OR	GreenPoint Rated – 10% Reduction compared to Title 24 Part 6 (2013) OR	
floors)		• LEED for Homes – 15% Reduction compared to Title 24 Part 6 (2008)	LEED for Homes – 10% Reduction compared to Title 24 Part 6 (2013)	