



INFORMATION SHEET

NO. GB-01

DATE : January 1, 2017

CATEGORY : Green Building

SUBJECT : **Green Building: Submittal Instructions per AB-093 (Updated 1/1/2017)**

PURPOSE : The purpose of this Information Sheet is to clarify submittal instructions for Green Building per AB-093

REFERENCE : Administrative Bulletin AB-093 Implementation of Green Building Regulations

DISCUSSION : The California Energy Commission has adopted the 2016 California Energy Code (CEC) effective January 1, 2017.

(1) SITE PERMIT SUBMITTAL:

Green Building: Submittal for Site Permit (Attachment GS-1 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 GS-2a: LEED, Attachment GS-2b: Green Point Rated, Attachment GS-3: Submittal for non-residential additions, alterations, and new construction or Submittal Template GS-4, GS-5 Residential Additions and Alterations, or GS-6 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

- 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.

Single Page Submittal Templates (Recommended)

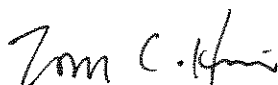
Pre-formatted templates are provided for single-sheet submittals applying LEED (example Attachment GS-2a in AB-093) and GreenPoint Rated (example Attachment GS-2b in AB-093). Acquire the appropriate submittal template from the AB-093 “More Info” page, cut and paste a checklist for the appropriate green 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. *on* 4/1/17 Date
 Director
 Department of Building Inspection

Attachment: Interim Administrative Bulletin AB-093

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



INFORMATION SHEET/ INTERIM ADMINISTRATIVE BULLETIN

NUMBER: AB-093
DATE: Effective January 1, 2017
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, 2017.

REFERENCE: 2016 San Francisco Green Building Code; San Francisco Administrative Bulletin 005: Procedures for Approval of Local Equivalencies; 2016 California Green Building Standards Code; 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 2016 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**

The San Francisco Green Building Code applies to all new construction in San Francisco, as well as most 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
 - 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, 2017. 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. San Francisco Green Building Code 2013 remains applicable to project applications received between January 1, 2014 and December 31, 2016. San Francisco Building Code 13C remains applicable to project applications received between November 3, 2008 and December 31, 2013. Addenda to site permits and revisions to permit applications received before the effective date of the ordinance are not required to meet the current green building requirements, unless such site permit addendum or revisions change the scope of the project such that current codes are generally applicable, or such that a project which was previously exempt from green building requirements would be covered. 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	Administrative Bulletin 93 Version
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, 2016	January 1, 2014
San Francisco Green Building Code (2016)	January 1, 2017 through December 31, 2019	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 completed Green Building Site Permit Submittal (GS-1) Permit applications for new construction projects will not be accepted for processing without Green Building Site Permit Submittal GS-1, and permit applications for addition or alteration will not be accepted without submittal GS-2, GS-3, GS-4, GS-5, or GS-6 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 (GS-1, GS-2, GS-3, GS-4, GS-5, or GS-6) 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.

Compliance with the Green Building Requirements may be documented in any of the following methods:

- 1) 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 projects³ of 10,000 square feet or larger are required to obtain LEED Gold certification by San Francisco Environment Code, Chapter 7. For such projects, only method 1) above may be used.

Green Building Compliance Professional of Record

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

For methods 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 no more than 1,000 square feet, a Green Building Compliance Professional of Record is not required.⁴ In such cases, the applicant may complete the green building submittal.⁵ 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 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 2016 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 California Energy Standards 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 California Energy Standards (Title 24, Part 6) in effect on the date of permit application.⁶
 - Where the ASRHAE 90.1 option in LEED v4 (or subsequent) rules are used to document 'points' being 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; 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 Title 24 Part 6 California Energy Standards are used to document that 'points' are 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, (b) excluding systems subject to mandatory requirements in the California Energy Standards, and/or (c) similar circumstances where energy efficiency savings can readily be documented via compliance software but California Energy Commission compliance rules do not recognize these savings. 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 that are not subject to mandatory requirements. In other words, it allows one to calculate the compliance margin on the systems that contribute to performance-based code compliance. Variable Refrigerant Flow systems are an example of this circumstance.

Buildings meeting a LEED for Homes or GreenPoint Rated standard must use 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

⁶ LEED BD&C (v4) and LEED CS (v4) minimum energy efficiency requirements are less strict than California 2013 and 2016 Title 24 Part 6 Energy Standards.

- Meets the minimum energy performance 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 compliance and the green rating system must be generated in a manner consistent with the guidance of the applicable green building rating system, and must faithfully represent the design as proposed. The most straightforward way to demonstrate compliance calculations are consistent with the calculations of the green building rating system is to use a single simulation run, so that the compliance run number is consistent throughout the compliance documentation and, for example, the GPR-PERF-1 compliance certificate. As noted above, separate compliance and green building simulation runs will be accepted for projects incorporating Variable Refrigerant Flow systems, until such time as the CEC has approved methodologies for accounting for the energy efficiency benefits of VRF systems in analysis for compliance.

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 a minimum, prepare an erosion and sedimentation control plan per LEED Sustainable Sites prerequisite 1. 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: <http://www.sfwater.org/index.aspx?page=235>.

Compliance Guidelines: Design for Post-Construction Stormwater Management

Projects that disturb 5,000 square feet or more of ground surface in the separate and combined sewer areas, or that create or replace 2,500 square feet or more of impervious surface in separate sewer areas, must meet Stormwater Management Requirements as 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 Management Requirements and 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 at least 1,000 square feet of new or modified landscape are subject to the San Francisco Water Efficient Irrigation Ordinance.⁷ 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 more than 25,000 gross square feet 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.

⁷ 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.)

The application of Section 5.103.4 to New Large Commercial Interiors requires that the first time tenant improvement work in an area of at least 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 first-time commercial tenant interior improvement work 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 which retain, rehabilitate or repair significant historical architectural features may receive credit toward Green Building requirements, per Attachment A, Table 3.

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

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

Demolition

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

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 Green Building Standards Code (Title 24 Part 11); 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 alternate must be separately presented.
2. Requests must be accompanied by a complete analysis of Green Building Code- and other code-related issues, and must be recommended by and signed by the Green Building Compliance Professional of Record. The analysis must include calculations or other documentation for each specific element of equivalency confirming that the equivalent proposal meets or exceeds the requirements of the Ordinance.

3. The Department of Building Inspection staff will review the equivalency and may, at its discretion, request review by other City staff or outside professional persons who are expert in the matter under review. The project sponsor will be responsible for all additional costs incurred for such review, including review time by City staff, charged at the hourly rate as set forth in the San Francisco Building Code, or direct costs for other consultant review.
4. The Department of Building Inspection staff may request additional information as part of the review.
5. The Department of Building Inspection will issue a decision to approve, deny or require modifications to any submitted alternate or equivalency.
6. Project sponsors may appeal any decision to the Deputy Director, Director, and appeal bodies as detailed in the San Francisco Building Code.

Note that the 2016 San Francisco Green Building Code recognized GreenPoint Rated v.7 and all LEED v4 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 completed using any of the following methods:

- 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 no more than 1,000 square feet, the applicant may sign the green building submittal, and a Green Building Compliance Professional of Record is not required.
- 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.

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.

Signed by:
Tom Hui, C.B.O., S.E. Director
Department of Building Inspection
Date: January XX, 2016

Original version approved by the Building Inspection Commission on September 24, 2008.

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: Instructions for Green Building Submittals

Forms for Submittal:

GS-1: Site Permit

GS-2: Green Building Rating (LEED or GreenPoint Rated)

GS-3: Other Nonresidential Additions, Alterations, and New Construction

GS-4: Nonresidential Interior-only Alterations

GS-5: Residential Additions and Alterations

GS-6: Municipal

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 Energy Requirements



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

Attachment A
Table 1

Instructions: Use the row below labeled, "Applicability" 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.

Building Type	New Construction				Additions and Alterations					Municipal Projects
	New Large Commercial	All Other New Non-Residential	New High-Rise Residential	New Low-Rise Residential	Major Alterations to Residential ²	Large First-Time Commercial Interiors	Major Alterations to Commercial	All Other Additions & Alterations to Commercial ¹	All Other Additions & Alterations to Residential ¹	New Construction, Addition or Alteration
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 municipal projects ≥5,000 square feet, including leasehold improvements
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 Building Code and Environment Code Chapter 7
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 Gold
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 points
Submittal Form Required to summarize compliance	GS-2a: LEED	GS-5: Non-residential	GS-2a: LEED OR GS-2b: GreenPoint Rated	GS-2a: LEED OR GS-2b: GreenPoint Rated	GS-2a: LEED OR GS-2b: GreenPoint Rated	GS-2a: LEED	GS-2a: LEED	GS-3: Non-residential OR GS-4: Interior-only tenant improvements	GS-5: Residential additions and alterations	GS-6: Municipal projects
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	Submittal GS-6

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 2016 California Green Building Standards Code and stricter local requirements.



San Francisco Green Building Code

Table 2: Additional Requirements in Case of Demolition

Attachment A
Table 2

For new projects required to attain LEED certification or GreenPoint Rated	Demolished Building IS NOT a Historical Resource		Demolished Building IS a Historical Resource	
	LEED	GreenPoint Rated	LEED	GreenPoint Rated
If new density will be less than 3x current density:	Obtain 6 additional LEED points	Obtain 20 additional GreenPoints	Obtain 10 additional LEED points	Obtain 25 additional GreenPoints
OR: If new density is $\geq 3x$ current density:	Obtain 5 additional LEED points	Obtain 17 additional GreenPoints		



San Francisco Green Building Code

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

**Attachment A
Table 3**

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

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
(Sheet 1 of 2)

Attachment B
Table 1

Where code references are provided below: "CALGreen" refers to California Green Building Standards Code 2016 (Title 24 Part 11), and "SFGBC" 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 ¹	Large First Time Commercial Interior	Commercial Major Alteration	Residential Major Alteration
Required LEED Measures	LEEDv4 Credit ²	Code Reference					
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance	LEEDv4 MRc1 (2 points)	SFGBC 5.103.1.3	Meet C&D ordinance only	SFGBC 4.103.2.3	Meet C&D ordinance only		
Energy Design Comply with Title 24 Part 6 (2016) and meet LEED energy prerequisites	LEEDv4 EAp2	LEEDv4 EAp2	GPR or LEED prerequisite		LEEDv4 EAp2	GPR or LEED prerequisite	
Enhanced Commissioning of Building Energy Systems	LEEDv4 EAc1	SFGBC 5.103.1.4	LEEDv4 H-MR EAp1.2	LEEDv4 EAp1			
Better Roofs – New buildings ≤ 10 floors must designate 15% of roof as Solar Ready, per Title 24 rules. Install photovoltaics or solar hot water systems in this area. With Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for solar energy systems. (Planning Code Sec 149)	LEEDv4 EAc5	SFGBC 5.201.1.2	SFGBC 4.201.2		SFGBC 5.201.1.2	-	-
Renewable Energy – New commercial buildings ≥ 11 floors must Generate ≥1% of annual energy cost on-site with renewables (LEEDv4 EAc5, 5 pts), OR Improve efficiency ≥10% beyond Title 24 Part 6 2016, OR Purchase Green-E renewable energy for 35% of electricity use (LEEDv4 EAc7).	LEEDv4 EAc5 OR EAc7 OR EAc2	SFGBC 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. Repair all leaks.	LEEDv4 WEc2 (2 points)	SFGBC 5.103.1.2 (30% reduction)	CalGreen 4.303.1	CalGreen 4.303.1	LEEDv4 WEp2 /CalGreen 5.303.2		LEED WEp2 /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.	LEEDv4 WEc1	SF Admin Code 63 (See "Complying with San Francisco's Water Efficient Irrigation Requirements" at www.sfwater.org/landscape .)					
Construction Site Runoff Pollution Prevention – Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	LEEDv4 SSp1 ¹	SFGBC 5.103.1.6	CalGreen 4.103.1.2	SFGBC 4.103.2.4.1	-	NPDES Phase II General Permit and other regulations.	
Enhanced Refrigerant Management – Do not install equipment that contains CFCs or Halons	LEEDv4 EAc6	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	LEEDv4 IEQc3	SFGBC 5.103.1.8	CalGreen 4.504.1		CalGreen 5.504.3		CalGreen 4.504.1
Low-Emitting Adhesives, Sealants, and Caulks – Adhesives and Sealants meet VOC materials meeting SCAQMD Rule 1166, aerosol adhesives meet Green Seal standard GS-36	LEEDv4 IEQc2, 3 points	SFGBC 5.103.1.9	CalGreen 4.504.2.1		SFGBC 5.103.3.2	SFGBC 4.103.3.2	
Low-Emitting Paints and Coatings – Paints and coatings meet Green Seal GS-11 standard, anti-corrosive paints meet GC-03, and other coatings meet SCAQMD Rule 1113		SFGBC 5.103.1.9	CalGreen 4.504.2.2		SFGBC 5.103.3.2	SFGBC 4.103.3.2	
Low-Emitting Flooring, including Carpet - Hard flooring must be Resilient Floor Covering Institute FloorScore certified; Carpet must meet Carpet and Rug Institute (CRI) Green Label Plus; Carpet Cushion must meet CRI Green Label.		SFGBC 5.103.1.9	CalGreen 4.504.3 and 4.504.4		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.		SFGBC 5.103.1.9	CalGreen 4.504.5		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.	LEEDv4 MRp1	SFGBC 106A.3.3 and CalGreen 5.410.1; (See 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).

² LEED v4 does not assign numbers to credits. For convenience, in this bulletin and submittals, LEED credits are numbered corresponding to the order they appear in LEEDv4 checklists and reference documents.

Attachment B Table 1 Continued: Requirements for projects meeting a LEED Standard
(Sheet 2 of 2)

Other Specific Local Requirements In some cases below, there is no corresponding LEED credit. In others, a requirement may correspond to a LEED credit which is stricter than the code provision, and the LEED credit is optional. Where a LEED credit is less strict, the stricter code-requirement must be met whether or not the LEED credit is achieved.		New Large Commercial	New Mid Rise Residential	New High Rise Residential	Large First Time Commercial 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.	LEEDv4 LTc6	CalGreen 5.106.4 and SF Planning Code Section 155	SF Planning Code Section 155		CalGreen 5.106.4 and SF Planning Code Section 155		SF Planning Code Sec 155
Clean Air Vehicle Parking – Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	LEEDv4 LTc6 and LTc8 are less strict.	CalGreen 5.106.5	-	-	CalGreen 5.106.5		-
Wiring for Electric Vehicle Charging – Install electrical systems to provide power to EV chargers at number of spaces indicated. Installation of chargers is not required. See CalGreen 4.106.4 or 5.106.5.3 for detail.	Relates to LEEDv4 LTc8	CalGreen 5.106.5.3	CalGreen 4.106.4	CalGreen 4.106.4	CalGreen 5.106.5.3	-	-
Light pollution reduction – Meet California Energy Code minimum for Lighting Zones 1-4 with Backlight/Uplight/Glare ratings meeting CalGreen Table 5.106.8.	LEEDv4 SSc6 is more strict.	CalGreen 5.106.8	-	-	CalGreen 5.106.8		-
Stormwater Control Plan – Projects disturbing ≥5,000 sq ft in combined or separate sewer areas, or replacing ≥2,500 impervious sq ft in separate sewer area, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements.	LEEDv4 SSc4 is more strict.	SFGBC 5.103.1.6	SFGBC 4.103.2	SFGBC 4.103.2.4	-	SF Public Works Code 4.2 (SFPUC stormwater ordinance)	
NonPotable Water – New buildings ≥40,000 square feet must calculate a water budget. New buildings ≥250,000 square feet must use available alternate water sources for toilet and urinal flushing and irrigation.	May contribute to LEEDv4 WEc1, WEc2, and SSc4	SF Health Code 12C	SF Health Code 12C	SF Health Code 12C	-	-	-
Water Meters – Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if in buildings ≥ 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		-
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 Code Article 38 and SF Building 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 floor-ceilings STC 40.	N/A	CalGreen 5.507.4	CBC 1207 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-H prerequisite (IDp2.1 and IDp2.2)		CalGreen 5.407.2.2		-
Other CALGreen Requirements The following elements of the California Green Building Standards Code (Title 24 Part 11) are superseded by stricter local requirements, or duplicate other state code as noted. To avoid duplication, no special green building documentation is required.		New Large Commercial	New Mid Rise Residential	New High Rise Residential	Large First Time Commercial Interior	Commercial Major Alteration	Residential Major Alteration
Multiple showerheads serving one shower (CalGreen 5.303.2.1)	N/A	SF Housing Code Ch 12 SF Building Code Ch 13A prohibit more than one showerhead per valve.					
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 compliance 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.	N/A	Met by compliance 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. (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 outdoor areas for smoking within 25 feet of building entries, air intakes & operable windows.	LEEDv4 IEQp2	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 code			-	-	-
Carbon dioxide monitoring – Buildings with demand control ventilation, install CO ₂ sensors and ventilation controls in accord with Energy Code. CalGreen 5.506.2	N/A	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 LEED v4 does not assign numbers to credits. For convenience, in this bulletin and submittals, LEED credits are numbered corresponding to the order they appear in LEEDv4 checklists and reference documents.



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 2016 (Title 24 Part 11)
 "SFGBC" 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 elsewhere			Code Reference
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.			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.			SFBC 106A.3.3 (See DBI Administrative Bulletin 088 for details)
Energy Design – Select and meet one of the four GreenPoint Rated v7 energy prerequisite paths. In homes with electric-only heating and water heating, installation of photovoltaics in compliance with Better Roofs requirements (below) may fulfill the GreenPoint Rated All Electric Path.			GreenPoint Rated requirement
Better Roofs – New buildings ≤ 10 floors must designate 15% of roof as Solar Ready (or 250 sq ft for single family homes), per Title 24 rules. Install photovoltaics or solar hot water systems in this area. With Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for solar energy systems.			SF Planning Code Section 149 SFGBC 4.201.2
Construction Site Runoff Pollution Prevention – Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.			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 sq ft in combined or separate sewer areas, or replacing ≥2,500 impervious sq ft in separate sewer area, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements.			SFGBC 4.103.1.2 and 4.103.2.4
NonPotable Water – New buildings ≥40,000 square feet must calculate a water budget. New buildings ≥250,000 square feet must use available alternate water sources for toilet and urinal flushing and irrigation.	Depending upon project design, stormwater and irrigation requirements may qualify for various GPR points.		SF Health Code Chapter 12C (See <i>Nonpotable Water Program</i> at www.sfwater.org)
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, <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 must be verified by the Rater whether or not GreenPoint Rated certification will be obtained.			
Wiring for Electric Vehicle Charging – Install electrical systems to provide power to EV chargers at number of spaces indicated. Installation of chargers is not required.			CalGreen 4.106.4
Indoor Air Quality Management During Construction – Duct openings and other air distribution component openings must be covered during construction.			CalGreen 4.504.1
Smart Irrigation Controller			CalGreen 4.304.1
All roofing has 3-year subcontractor warranty and 20-year Manufacturer Warranty			GreenPoint Rated requirement for multifamily
Indoor Water Efficiency – Reduce indoor water use via efficient showerheads, lavatories, kitchen faucets, wash fountains, water closets, and urinals.			CalGreen 4.301 through 4.302
Mechanical Ventilation - Comply with ASHRAE 62.2 (as adopted in Title 24 Part 6)			GreenPoint Rated / Title 24 Part 6 requirement for multifamily
Bathroom fans - ENERGY STAR and on timer or humidistat			CalGreen 4.506.1
Low-VOC Interior Wall/Ceiling Paints (<50 grams per liter VOCs regardless of sheen)			CalGreen 4.504.2.2 through 4.504.2.4
Low-VOC coatings - Meet SCAQMD Rule 1113			CalGreen 4.504.2.2 through 4.504.2.4
Low VOC Caulks, Construction adhesives, and Sealants - Meet SCAQMD Rule 1168			CalGreen 4.504.2.1
Low-emitting Composite Wood - Meet California Air Resources Board Airborne Toxic Control Measure formaldehyde limits for composite wood			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			CalGreen 4.504.3 and CalGreen 4.504.4
Incorporate GreenPoint Rated Checklist in Blueprints			GreenPoint Rated requirement
Operations and Maintenance Manuals and Training - Provide O&M Manual to Building Maintenance Staff			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 plates at exterior walls shall be protected 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. 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.			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.			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.			CalGreen 4.702.1
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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)

Attachment B
Table 3

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 ≥1,000 sq ft or alterations of ≥\$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.

Local Requirements 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.	SFBC 106A.3.3 and other local regulations (See DBI Administrative Bulletin 088 for details)	
Energy design – Comply with California Energy Standards	Title 24 Part 6 2016	
Better Roofs – New buildings ≤ 10 floors must designate 15% of roof as Solar Ready, per Title 24 rules. Install photovoltaics or solar hot water systems in this area. With Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for solar energy systems.	SFGBC 5.201.1.2 Planning Code Section 149	n/r
Construction site runoff pollution prevention – Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	CalGreen 5.106.1, as well as NPDES Phase II General Permit and other local regulations.	
Stormwater Control Plan – Projects disturbing ≥5,000 sq ft in combined or separate sewer areas, or replacing ≥2,500 impervious sq ft in separate sewer area, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements.	SF Public Works Code Article 4.2, Sec. 147 (See Stormwater Management Requirements and Design Guidelines, www.sfwater.org)	
NonPotable Water – New buildings ≥40,000 square feet must calculate a water budget. New buildings ≥250,000 square feet must use available alternate water sources for toilet and urinal flushing and irrigation.	SF Health Code Chapter 12C	n/r
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 Complying with San Francisco's Water Efficient Irrigation Requirements, www.sfwater.org)	
CalGreen Requirements 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.
Wiring for Electric Vehicle Charging – Install electrical systems to provide power to EV chargers at 6% of spaces. Installation of chargers is not required.	CalGreen 5.106.5.3 through 5.106.5.3.5	n/r
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	n/r
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, as well as newly installed equipment in additions or alterations, testing and adjusting 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 7.0 and 7.1 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 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 Measures The California Green Building Standards Code (Title 24 Part 11) requires:	All "Other" New Non-Residential	All "Other" Non-Residential Additions & Alterations
Acoustical control - Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.	CalGreen 5.507.4	CalGreen 5.504.5.3 (Applies to addition, or alteration to envelope)
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 commercial 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 superseded 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 one 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.)	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	



San Francisco Green Building Code

Table 4: Requirements for residential additions, and alterations
(Sheet 1 of 2)

Attachment B
Table 4

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	All "Other" Residential Additions & Alterations
Measures that are mandatory in San Francisco but may be different or not required elsewhere	
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 (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)
Energy design – Comply with California Energy Standards	Title 24 Part 6 (2016)
Construction site runoff pollution prevention - Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices.	CalGreen 4.106.2, 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, Section. 147
NonPotable Water – New buildings ≥40,000 square feet must calculate a water budget. New buildings ≥250,000 square feet must use available alternate water sources for toilet and urinal flushing and irrigation	N/A
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 <i>Complying with San Francisco's Water Efficient Irrigation Requirements</i> at www.sfwater.org)
CalGreen Required Measures	All "Other" Residential Additions & Alterations
The California Green Building Standards Code (Title 24 Part 11) requires:	
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 ≤1.28 gal/flush; urinals ≤0.5 gal/flush, showerheads ≤2.0 gpm @ 80 psi; residential lavatory faucet ≤1.5 gpm; lavatory faucets in common and public use areas ≤0.5 gpm @ 60 psi; metering faucets ≤0.25 gal/cycle; and kitchen faucets ≤1.8 gpm @60 psi (temporary increase to 2.2 gpm allowed, but must default to ≤1.8 gpm).	CalGreen 4.303 (all sections)
Wiring for Electric Vehicle Charging – Install electrical systems to provide power to EV chargers at indicated percentage of spaces. Installation of chargers is not required.	N/A
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/Ceiling 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

Attachment 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
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
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

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		

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 GS2, GS3, GS4, or GS5 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 or code references indicate 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.

ALL PROJECTS, AS APPLICABLE	
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 sq ft in combined or separate sewer areas, or replacing ≥2,500 impervious sq ft in separate sewer area, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements.	•
NonPotable Water: New buildings ≥40,000 square feet must calculate a water budget. New buildings ≥250,000 sq ft must use available alternate water sources for toilet and urinal flushing and irrigation (SF Health Code 12C).	•
Water Efficient Irrigation: Projects with ≥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 PROJECTS	
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)	•
Better Roofs: Buildings of 10 occupied floors or less must install photovoltaics or solar hot water systems in the 15% of roof area designated as Solar Ready per Title 24 Part 6 (2016). With Planning Department Approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for all or a portion of solar energy systems. (See Planning Code Sec 149)	•
Energy Efficiency: Meet one GreenPoint Rated v7 energy compliance path. In homes with electric-only heating and water heating, installation of photovoltaics in compliance with San Francisco Better Roofs (above) may meet the All Electric path.	•
Meet all California Green Building Standards Code requirements for residential projects have been integrated into the GreenPoint Rated system.	•

LEED PROJECTS						
	New Large Commercial	New Low Rise Residential	New High Rise Residential	Large First Time Commercial Interior	Commercial Major Alteration	Residential Major Alteration
Type of Project Proposed (Indicate at right)						
Overall Requirements:						
LEED certification level (includes prerequisites):	GOLD	SILVER	SILVER	GOLD	GOLD	GOLD
Base number of required points:	80	75	50	60	60	60
Adjustment for retention / demolition of historic features / building:				n/a		
Final number of required points (base number +/- adjustment)				60		
Specific Requirements: (n/r indicates a measure is not required)						
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance - LEEDv4 MRc1, 2 points	•	•	•	•	Meet C&D ordinance	•
Energy Design Comply with California Title-24 Part 6 (2016) and meet LEED minimum energy performance (LEEDv4 EA p2)	•	LEED prerequisite	•	•	LEED prerequisite only	
Better Roofs: Buildings of 10 occupied floors or less must: install photovoltaics or solar hot water systems in the 15% of roof area designated as Solar Ready Area per Title 24 Part 6 (2016). With Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for all or a portion of solar energy systems. (See Planning Code Sec 149)	•	•	•	n/r	n/r	n/r
Renewable Energy or Enhanced Energy Efficiency Buildings of 11 or more occupied floors must: Generate renewable energy on-site ≥1% of total annual energy cost (LEEDv4 EA c5, 5 points), OR Demonstrate at least 10% energy use reduction compared to Title 24 Part 6 (2016), OR Purchase Green-E certified renewable energy credits for 35% of total electricity use (LEEDv4 EA c7).	•	n/r	n/r	n/r	n/r	n/r
Enhanced Commissioning LEEDv4 EA c1	•				Meet LEED prerequisite	
Water Use - 30% Reduction LEEDv4 WE c2, 2 points	•				Meet LEED prerequisite	
Enhanced Refrigerant Management CalGreen 5.508.1.2, may contribute to LEEDv4 EA c6	CalGreen 5.508.1.2	n/r	n/r	CalGreen 5.508.1.2	CalGreen 5.508.1.2	
Indoor Air Quality Management Plan LEEDv4 IEQ c3	•	CalGreen 4.504.1	CalGreen 4.504.1	CalGreen 5.504.3	CalGreen 5.504.3	CalGreen 4.504.1
Low-Emitting Materials LEEDv4 IEQ c2, 3 points	•	•	•	•	•	•
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 LEEDv4 L1c6.	•				See San Francisco Planning Code Section 155	See San Francisco Planning Code Section 155
Designated parking: Mark 8% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	•				n/r	n/r
Wiring for Electric Vehicle Charging: Install electrical systems to provide power to EV chargers at number of spaces indicated. Installation of chargers is not required.	6% of spaces CalGreen 5.106.5.3	3% of spaces CalGreen 4.106.4	3% of spaces CalGreen 4.106.4	6% of spaces CalGreen 5.106.5.3	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	•	Addition only	n/r
Air Filtration: Provide at least MERV-8 filters in occupied spaces of mechanically ventilated buildings. LEEDv4 IEQ c3	•	n/r	n/r	•	•	n/r
Air Filtration: Provide MERV-13 filters in residential buildings in air quality hot-spots. SF Health Code Article 39 and SF Building Code 1233.5.	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 CBC 1207	•	Envelope alteration & addition only	n/r

OTHER APPLICABLE NON-RESIDENTIAL PROJECTS		
Requirements below only apply when the measure is applicable to the project. Code references below apply to Non-Residential buildings. Corresponding requirements for additions and alterations can be found in Title 24 Part 11, Division 5.7.	Other New Non-Residential	Addition ≥1,000 sq ft OR Alteration ≥200,000
Type of Project Proposed (Check box if applicable)		
Energy: Comply with California Energy Code (Title 24 Part 6 2016)	•	•
Better Roofs: Buildings of 10 occupied floors or less must: install photovoltaics or solar hot water systems in the 15% of roof area designated as Solar Ready Area per Title 24 Part 6 (2016). With Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for all or a portion of solar energy systems. (See Planning Code Sec 149)	•	•
Bicycle parking: Provide short- and long-term bicycle parking for 5% of motorized parking capacity, or San Francisco Planning Code Sec 155, whichever is greater.	•	•
Wiring for Electric Vehicle Charging: Prepare electrical systems for future installation of EV chargers at 8% of parking spaces. See CalGreen 5.106.5.3	•	•
Fuel efficient vehicle and carpool parking: Designate and mark 8% of parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	•	•
Water Meters: Provide submeters for spaces projected to consume >1,000 gal/day, or >100 gal/day if in buildings over 50,000 sq. ft.	•	Addition only
Indoor Water Conservation: All water leaks must be repaired, and all plumbing fixtures not compliant with SFBC 136 must meet current California Plumbing Code.	•	•
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.	•	(Testing & Balancing)
Protect duct openings and mechanical equipment during construction	•	•
Adhesives, sealants, and caulks: Comply with VOC limits in SCAQMD Rule 1188 VOC limits and California Code of Regulations Title 17 for aerosol adhesives.	•	•
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.	•	•
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 0150), 3. NFAFAME 140 at the Gold level, 4. Scientific Certification 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.	•	•
Composite wood: Meet CARB Air Toxics Control Measure for Composite Wood	•	•
Resilient flooring systems: For 80% of floor area receiving resilient flooring, install resilient flooring complying with the VOC-emission limits defined in the 2009 Collaborative for High Performance Schools (CHPS) criteria or certified under the Resilient Floor Covering Institute (RFCI) FloorScore program.	•	•
Environmental Tobacco Smoke: Prohibit smoking within 25 feet of building entries, outdoor air intakes, and operable windows.	•	•
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings.	•	•
Acoustical Control: Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceilings STC 40.	•	(envelope alteration & addition only)
CFCs and Halons: Do not install equipment that contains CFCs or Halons.	•	•

Notes

- 1) New residential projects of 4 or more occupied floors must use the "New Residential High-Rise" column. New residential with 3 or fewer occupied floors must use the "New Residential Low-Rise" column.
- 2) LEED for Homes Mid-Rise projects must meet the "Silver" standard, including all prerequisites. The number of points required to achieve Silver depends on unit size. See LEED for Homes Mid-Rise Rating System to confirm the base number of points required.

GS-1: Green Building Site Permit Submittal

Insert Project Name / Titleblock here

San Francisco Green Building Submittal: LEED Projects

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.

REQUIREMENTS

Instructions:
Select one column below that corresponds to your project type. Fill in the front lines to show that the number of points identified on your LEED checklist meets or exceeds the required number. Each prerequisite is indicated by an "X" or code reference is mandatory. For each applicable requirement, use the "Reference" column to indicate where in the submittal documents compliance with the requirement can be confirmed. (If items in the "Reference" column are not applicable, indicate "N/A.")

All LEED prerequisites are required. For reference, a brief summary is included for local requirements where a LEED credit is not required.

Summary of Green Building Requirements:	New Large Commercial	New Low-Rise Residential	New High-Rise Residential	Large New Time Commercial Interior	Commercial Major Alteration	Residential Major Alteration	Reference
LEED certification level (includes prerequisites):	GOLD	SILVER	SILVER	GOLD	GOLD	GOLD	
Base number of required Points:	50	50	50	70	90	50	
Adjustment for retention / demolition of historic features / building:	_____	_____	_____	_____	_____	_____	
Final number of required Points (base number +/- adjustment):	_____	_____	_____	_____	_____	_____	
Number of Points on LEED Checklist (Must be greater than requirement):	_____	_____	_____	_____	_____	_____	
Requirements that Correspond To LEED (# indicates a measure is not required)	New Large Commercial	New Low-Rise Residential	New High-Rise Residential	Large New Time Commercial Interior	Commercial Major Alteration	Residential Major Alteration	Reference (Indicate Plan Set Sheet & Detail, or Specification, where applicable)
Construction Waste Management – 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance, LEEDv4 MRc1, 2 points	●	●	●	●	●	●	
Energy Design Comply with Title 24 Part 6 (2016) and meet LEED minimum energy performance, LEEDv4 EA2	●	●	●	●	●	●	
Enhanced Commissioning of Building Energy Systems LEEDv4 EA6	●	●	●	●	●	●	
Detour Roofs: Buildings of 10 occupied floors or less must: install photovoltaic or solar hot water systems in the roof area designated as Solar Ready Area per Title 24 Part 6 (2016). Hills Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for all or a portion of solar energy systems. (See Planning Code Sec. 149)	●	●	●	●	●	●	
Renewable Energy or Enhanced Energy Efficiency: Buildings of 21 occupied floors must: Generate renewable energy on-site ≥1% of total annual energy cost (LEED EA6, 5 points), OR Demonstrate 10% energy use reduction compared to Title 24 Part 6 (2016), OR Purchase Green-E certified renewable energy credits for 30% of total electricity use (LEEDv4 EA7)	●	●	●	●	●	●	
Indoor Water Use – 30% Reduction LEED v4c2, 2 points	●	●	●	●	●	●	
Water Efficient Irrigation: Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance. May meet LEEDv4 WGr1	●	●	●	●	●	●	
NonPotable Water: New buildings ≥30,000 square feet must calculate a water budget. New buildings ≥20,000 square feet must use available alternate water sources for toilet and urinal flushing and irrigation. (San Francisco Health Code 12C)	●	●	●	●	●	●	
Construction Site Runoff Pollution Prevention: Provide a construction site Stormwater Pollution Prevention Plan and implement SFPUC Best Management Practices, LEEDv4 SSP1	●	●	●	●	●	●	
Enhanced Refrigerant Management California 5508.1.2, may contribute to LEEDv4 EA6	CalGreen 5508.1.2	●	●	●	●	●	
Indoor Air Quality Management Plan LEEDv4 IEQ3	●	●	●	●	●	●	
Low-Emitting Materials LEEDv4 IEQc2, 3 points	●	●	●	●	●	●	
Recycling for Occupants: Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. LEED MRp1 See Administrative Bulletin 088 for details.	●	●	●	●	●	●	
Other Requirements	New Large Commercial	New Low-Rise Residential	New High-Rise Residential	Large New Time Commercial Interior	Commercial Major Alteration	Residential Major Alteration	Reference (Indicate Plan Set Sheet & Detail, or Specification, where applicable)
Stormwater Control Plan – Projects disturbing ≥5,000 square feet in combined or separate sewer areas, or replacing ≥2,500 impervious sq ft in separate sewer areas, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements.	●	●	●	●	●	●	
Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total authorized parking capacity each, or meet San Francisco Planning Code Sec 155, whichever is greater. May meet LEEDv4 LEp.	●	●	●	●	●	●	
Designated parking: Meet 5% of total parking stalls for low-emitting, fuel efficient, and carpool/van pool vehicles.	●	●	●	●	●	●	
Wiring for Electric Vehicle Charging: Install electrical systems to provide power to EV chargers at number of spaces indicated. Installation of chargers is not required. See CalGreen 4.104.4 or 4.105.5.1 for details.	●	●	●	●	●	●	
Light pollution reduction: Meet California Energy Code minimum for Lighting Zones 1-4 with Backlight/Uplight/Downlight ratings meeting CalGreen Table 5.10.6A, may contribute to LEEDv4 SS2.	●	●	●	●	●	●	
Water Meters: Provide submeters for meters installed to consume more than 1,000 gallons/day, or more than 100 gallons/day in buildings over 50,000 square feet.	●	●	●	●	●	●	
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings. LEEDv4 IEQ c3 is satisfied.	●	●	●	●	●	●	
Air Filtration: Provide MERV-13 filters in residential buildings in air quality hot-spots. (SF Health Code 10B and SF Building Code 1203.5) May contribute to LEEDv4 IEQc3	●	●	●	●	●	●	
Acoustical Control: Wall and roof-ceiling STC 50, exterior windows STC 30, party walls and floor-ceiling STC 40.	●	●	●	●	●	●	

Notes:
1) New residential projects of 4 occupied floors or greater must use the "New Residential High-Rise" column. New residential projects which choose to apply the LEED for Homes Mid-Rise rating system must use the "New Residential High-Rise" column. The number of points required to achieve Silver depends on unit size, see LEED for Homes Mid-Rise Rating System to confirm the base number of points required.
2) Residential buildings must meet acoustical requirements of California Building Code Section 1207.

VERIFICATION

Instructions:
Please indicate how fulfillment 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 55.

Project Name _____

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:

Name _____

Firm _____

Architectural or Engineering License
 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 requirements, or if I am no longer the Green Building Compliance Professional of Record for this project.

Licensed Professional: Sign & Date _____

Affix professional stamp: _____

GS-2a: Submittal for LEED Projects

Version: January 8, 2017

Insert Project Name / Titleblock here

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 will be completed, omitting those 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 pages & detail, or specification section number/number/location. Complete the REQUIREMENTS and VERIFICATION sections (at right). All GreenPoint prerequisites and California 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).

REQUIREMENTS

Project Name _____
 Block/Lot _____
 Address _____
 Primary Occupancy _____

of accepted floors _____

Summary of Requirements:	Low-rise	High-rise	Major Alteration
Rating Requirement: Number of GreenPoints required, including all prerequisites	_____	_____	_____
Adjustment for retention or demolition of historic features and buildings	_____	_____	_____
Final number of required points (base number +/- adjustments)	_____	_____	_____
Construction activity stormwater pollution prevention and site runoff controls	●	●	●
Stormwater Control Plan - Projects disturbing 25,000 square feet in contained or separate sewer areas, or replacing 25,000 impervious sq ft in separate sewer areas, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements.	●	●	●
Water Efficient Irrigation - Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the SFPUC Water Efficient Irrigation Ordinance.	●	●	●
Indoor Water Efficiency - Install compliant fixtures. Fix leaks.	●	●	SFBC13A
Nonpotable Water: New buildings 240,000 square feet must calculate a water budget. New buildings ≥250,000 sq ft must use available alternate water sources for toilet and urinal flushing and irrigation. San Francisco Health Code 12C	●	●	nt
Construction Waste Management - 75% Diversion AND comply with San Francisco Construction & Demolition Debris Ordinance	●	●	Construction & Demolition Ordinance
Meet all California Green Building Standards Code requirements and stricter local requirements (Summarized in Administrative Bulletin 83 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 90.

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.

Point Rater - Name _____ Contact Phone No: _____
 Point Rater - Sign & Date _____
 Applicant - Sign & Date _____

OR
Option 2:
 The Green Building Compliance Professional of Record will verify compliance:

Name _____
 Firm _____

Architectural or Engineering License
 I am a Certified GreenPoint Rater
 I am NOT a Certified GreenPoint Rater
 GreenPoint Rated Projects Completed: _____

I am above licensed professional a not a Certified GreenPoint Rater, additional signature by a Certified GreenPoint Rater is required.

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 the project.

Sealed Professional Sign & Date _____
 Affix professional stamp:

GS2b:
 Submittal for
 GreenPoint Rated

Insert Project Name / Titleblock here

City and County of San Francisco Green Building Submittal: "Other" Non-residential Additions, Alterations, or "Other" New Construction

INDOOR WATER EFFICIENCY

Each fixture must not exceed the maximum flow rates in CalGreen 5.502:

Fixture Type	Maximum Prescriptive Flow Rate
Showerheads ¹	2 gpm @ 80 psi
Lavatory faucets - non-residential	0.5 gpm @ 60 psi
Kitchen faucets	1.8 gpm @ 80 psi default
Wash fountains	1.8 gpm/20 (in space inches @ 60 psi)
Metering faucets	.20 gallons/cycle
Metering faucets for wash fountains	.20 (in space (in.)/20 gpm @ 60 psi)
Tank-type water closets	1.28 gallons/flush ² and EPA WaterSense Certified
Flushometer valve water closets	1.28 gallons/flush ²
Urinals	Wall mount: 0.125 gallons/flush Floor mount: 0.5 gallons/flush

Notes:
 1) For dual flush toilets, effective flush volume is defined as the average volume of two reduced flushes and one full flush. The referenced standard is ASME A112.18.14 and USGWA WaterSense Tank-Type High Efficiency Toilet Specification - 1.28 gpf (4.9 L).
 2) The maximum flow rate of all showerheads in one shower stall must 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 (5.503.2).

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 of like type, meeting the maximum flow rate and standards referenced above. For more information, see the Commercial Water Conservation Program Brochure, available at SFPUC.org. Noncompliant plumbing fixtures include:
 (1) Any toilet manufactured to use more than 1.6 gallons of water per flush.
 (2) Any urinal manufactured to 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 uses 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.

REQUIREMENTS

Instructions to applicant:
 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 forms 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 use the GS-2a "Submittal for LEED Projects" as an alternative to this form. Projects required to meet a LEED standard must use GS-2a "Submittal for LEED Projects".

Required Measures	Reference	
	(Indicate Plan Set Sheet & Detail, or Specification, where applicable)	
Type of Project:	Other New Non-Residential	Addition ≥1,000 sq ft OR Alteration ≥500,000 ²
Construction Waste Management: 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling. In compliance 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 008.	●	●
Energy Design: Demonstrate compliance with California Energy Code, Title 24 Part 6 (2015).	●	●
Construction Site Runoff Pollution Prevention: Projects disturbing ≥ 5,000 square feet must submit a construction site erosion and sediment control plan to SFPUC for approval. (See www.sfpuc.org)	●	● if applicable
Stormwater Control Plan: Projects disturbing ≥5,000 square feet in combined or separate sewer areas or existing ≥2,500 square feet in separate sewer areas, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements. (See www.sfpuc.org)	●	● if applicable
Water Efficient Irrigation - Projects that include ≥ 1,000 square feet of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance. (See www.sfpuc.org/landscaping)	●	● if applicable
Bicycle parking: Provide short-term and long-term bicycle parking for 5% of total motorist parking capacity each, or meet San Francisco Planning Code Section 105, whichever is greater. (CalGreen 5.106.4)	●	● Applicable if 10 more more parking stalls are added.
Fuel efficient vehicle and carpool parking: Provide stall marking for low-emitting, fuel efficient, and carpool/van pool vehicles, approximately 8% of total spaces.	●	● Applicable if 10 more more parking stalls are added.
Wiring for Electric Vehicle Charging: Install electrical systems to provide power to EV chargers at 8% of spaces. Installation of chargers is not required. See CalGreen 5.106.5.3 for detail.	●	● N/A
Light pollution reduction: Meet California Energy Code minimum requirements for Lighting Zones 1-4, with Backlighting high-glare ratings meeting California Title 5, 106.8. Exceptions of California Energy Code Section 147 apply. Emergency lighting exempt. (CalGreen 5.106.8)	●	● N/A
Water Meters: Provide submeters for spaces projected to consume > 1,000 gallons, or >100 gallons in buildings over 50,000 sq. ft. (CalGreen 5.503.1)	●	● Limited to area of addition only
Indoor Water Efficiency: Install compliant fixtures. Replace all non-compliant fixtures in project area. Fix leaks. (See "Indoor Water Efficiency" at left).	●	●
Non-Potable Water: New buildings ≥40,000 square feet must prepare water budget calculations. New buildings ≥250,000 square feet must construct, operate, and maintain using available alternate water sources for toilet and urinal flushing and irrigation. (San Francisco Health Code 12C)	●	● N/A
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. (CalGreen 5.410.2 through 5.410.4.1)	●	● OR (Testing & Adjusting)
OR for buildings less than 10,000 square feet, as well as newly installed equipment in additions or alterations, testing and adjusting is required. (CalGreen 5.410.4, all sections)	●	●
Protect duct openings and mechanical equipment during construction: Limit use of permanent HVAC during construction to conditioning necessary for material and equipment installation. If permanent HVAC is used during construction, install MERV-8 filters on returns, and replace all filters immediately prior to occupancy, or if the building is occupied during alteration, at the completion of construction. (CalGreen 5.504.1.2 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)	●	●
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)	●	●
Carpet: All carpet must meet one of the following: (CalGreen 5.504.4.4) 1. Carpet and Rug Institute Green Label Plus Program. 2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 0135D). 3. NSF/ANAB 140 at the Gold level. 4. Scientific Certification Systems Sustainable Choice, OR 5. California Collaborative for High Performance Schools EQ2.2 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.	●	●
Composite Wood: Meet CARB Air Toxics Control Measure for Composite Wood including meeting the emission limits in CalGreen Table 5.504.4.5	●	●
Resilient flooring systems: For 80% of floor area receiving resilient flooring, install resilient flooring complying with: (CalGreen 5.504.4.6) 1. Certified under the Resilient Floor Coatings Institute (RFCI) FloorCoat program. 2. Compliant with the VOC-emissions 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 criteria.	●	●
Environmental Tobacco Smoke: Prohibit smoking within 25 feet of building entries, outdoor air intakes, and operable windows. (CalGreen 5.504.7)	●	●
Air Filtration: Provide at least MERV-8 filters in regularly occupied spaces of mechanically ventilated buildings. (CalGreen 5.504.5.3)	●	●
Acoustical Control: Wall and roof-ceilings STC 50, exterior windows STC 30, party walls and floor-ceiling STC 40. (CalGreen 5.507.4)	●	● (limited to envelope alteration or addition)
CFCs and Halons: Do not install equipment that contains CFCs or Halons. (CalGreen 5.508.1)	●	●

VERIFICATION

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.

Project Name _____

Block/Lot _____

Address _____

Primary Occupancy _____

Gross Building Area _____

The Green Building Compliance Professional of Record for this project is:

Name _____

Firm _____

Architectural or Engineering License

I am a LEED Accredited Professional

I am a GreenPoint Rater

I am an ICC Certified CalGreen Inspector

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.

Licensed Professional: Sign & Date _____

Affix professional stamp:

GS-3: Non-Residential Additions, Alterations, or "Other" New Construction

Version: January 2, 2017

Insert Project Name / Titleblock here

City and County of San Francisco Green Building Submittal: For Interior Commercial Tenant Improvement

Project Description

Project Name _____

Block/Lot _____

Address _____

Primary Occupancy _____

Gross Building Area _____

Instructions:

This form is for commercial tenant improvement projects with >\$200,000 project valuation that are limited to the interior of the building. Projects seeking LEED certification may voluntarily use the "LEED" submittal as an alternative to this form. An abbreviated summary of each requirement is included for reference.

1. For each requirement that is applicable to the scope of the project, 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.")

2. In the boxes at right, indicate which professional(s) are responsible for ensuring green building requirements are met.

FINAL COMPLIANCE VERIFICATION form will be required prior to Certificate of Completion.

INDOOR WATER EFFICIENCY

Each fixture must not exceed the maximum flow rates in CalGreen 5.303:

Fixture Type	Maximum Prescriptive Flow Rate
Showerheads ¹	2 gpm @ 80 psi
Lavatory faucets - nonresidential	0.5 gpm @ 60 psi
Kitchen faucets	1.8 gpm @ 60 psi default
Wash fountains	1.8 gpm/20 [rim space inches @ 60 psi]
Metering faucets	.20 gallons/cycle
Metering faucets for wash fountains	.20 gallons per cycle/ 20 [rim space inches @ 60 psi]
Tank-type water closets	1.28 gallons/flush ² and EPA WaterSense Certified
Flushometer valve water closets	1.28 gallons/flush ²
Urinals	Wall mount: 0.125 gallons/flush Floor mount: 0.5 gallons/flush

Notes:

- For dual flush toilets, effective flush volume is defined 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).
- 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).

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 SFDPI.org. Noncompliant plumbing fixtures include:

- Any toilet manufactured for use more than 1.6 gallons of water per flush.
- Any urinal manufactured for use more than 1 gallon of water per flush.
- Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute.
- 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.

Architecture		
Required Measure	Interior Alteration >\$200,000	Reference (Indicate Plan Set Sheet & Detail, or Specification, as applicable)
Construction Waste Management: 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling, in compliance 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 098.	●	
Adhesives, sealants, and caulks: Comply with VOC limits in SCAQMD Rule 116B VOC limits and California Code of Regulations Title 17 for solvent adhesives. (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 solvent paints. (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 EO 2.3 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.	●	
Composite Wood: Meet CHPS All Trades Control Measure for Composite Wood including meeting the emission limits in CalGreen Table 5.504.4.6.	●	
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) EQ2.3 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 criteria. (CalGreen 5.504.4.4 and 5.504.4.5)	●	

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 Architectural Measures:

Name _____

Firm _____

Architectural or Engineering License Number _____

Licensed Professional: Sign & Date _____

Affix professional stamp: _____

Mechanical, Electrical, Plumbing		
Required Measures	Interior Alteration >\$200,000	Reference (Indicate Plan Set Sheet & Detail, or Specification, as applicable)
Energy Efficiency: Demonstrate compliance with California Energy Code, Title 24 Part 6 (2016).	●	
Testing and Adjusting: (CalGreen 5.410.4 through 5.410.4.5.1) 1. Develop and implement a plan of procedures for testing and adjusting new systems, including gas applicable HVAC indoor and outdoor lighting and controls, water heating, renewable energy, landscape irrigation, and water reuse systems. 2. Balance new HVAC systems before operation for normal use. 3. Provide the Owner or representative with a final report of testing. 4. Provide the building representative with detailed operating and maintenance instructions and copies of all warranties/warrantors for each system.	●	
Protect duct openings and mechanical equipment during construction. List use of permanent HVAC during construction to conditioning necessary for materials and equipment installation. If permanent HVAC is used during construction, install MERV-8 filters on returns, and replace all filters immediately prior to occupancy, or if the building is occupied during alteration, at the conclusion of construction. (CalGreen 5.504.1.3 and 5.504.2)	●	
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 5.504.3.3 through 5.504.3.3.1)	●	
Indoor Water Efficiency: Install compliant fixtures. Replace all noncompliant fixtures in project area. Fix leaks. (See "Indoor Water Efficiency" at left.)	●	

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 Mechanical, Electrical, and Plumbing Measures:

Name _____

Firm _____

Architectural or Engineering License Number _____

Licensed Professional: Sign & Date _____

Affix professional stamp: _____

GS-4: Interior Commercial
Tenant Improvement

Insert Project Name / Titleblock here

City and County of San Francisco Green Building Submittal: Residential Additions and Alterations

REQUIREMENTS

The following items are required for all additions and alterations to residential occupancy which increase conditioned area, volume, or size of a residential building. Requirements apply only to areas and systems within the scope of addition and alteration, with the exception of "Existing Noncompliant Plumbing Fixtures" (below). An abbreviated summary of each requirement is included for reference. To determine if this form is appropriate for a project, see Administrative Bulletin #3, Attachment A, Table 1. 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.

- Construction and Demolition Debris:** 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling, in compliance with the San Francisco Construction & Demolition Debris Ordinance (San Francisco Building Code Chapter 13B and Environment Code Chapter 14)
- Recycling by Occupants:** Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. - See Administrative Bulletin 088.
- Water Efficient Irrigation:** Projects that include $\geq 1,000$ square feet of new or modified landscape must comply with the San Francisco Water Efficient Irrigation Ordinance. (See www.sfwater.org/landscape)
- Stormwater Control Plan:** Projects disturbing $\geq 5,000$ square feet in combined or separate sewer areas, or replacing $\geq 2,500$ impervious sq ft in separate sewer area, must implement a Stormwater Control Plan meeting SFPUC Stormwater Management Requirements. (See www.sfwater.org/sfpuc)
- Grading and paving:** Construction plans shall indicate how the site grading or drainage system will manage surface water flows to keep water from entering the building, such as swales, drains, or water retention gardens. (CalGreen 4.106.3)
- Smart Irrigation Controller:** Automatically adjust irrigation based on weather and soil moisture. Controllers must have either an integral or separate rain sensor that connects or communicates with the controller. (CalGreen 4.304.1)
- Indoor Water Efficiency:** Install water-efficient fixtures and fittings as summarized in CalGreen 4.303.1. Replace all noncompliant fixtures in project area (San Francisco Housing Code 12A)
- Energy Efficiency:** Comply with California Energy Code (Title 24, Part 8 2016)
- Rodent Proofing:** Annular spaces around pipes, electric cables, conduits, or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing with cement mortar, concrete masonry, or a similar method acceptable to the San Francisco Department of Building Inspection. (CalGreen 4.408.1)
- Moisture content:** Verify wall and floor framing shall be verified to not exceed 19% moisture content prior to enclosure as detailed below. Materials with visible signs of moisture damage shall not be installed. (CalGreen 4.505.3)
 - 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 101.6.
 - 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.
- 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: (CalGreen 4.505.2)
 - 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.
- Fireplaces and woodstoves:** Install only direct-vent or sealed-combustion appliances; comply with US EPA Phase II limits. (CalGreen 4.503.1)
- Design and Install HVAC System to ACCA Manual J, D, and S** (CalGreen 4.507.2)
- 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)
- Covering duct openings and protecting mechanical equipment during construction:** Duct openings and other air distribution component openings shall be covered during all phases of construction with tape, plastic, sheetmetal, or other acceptable methods to reduce the amount of water, dust, and debris entering the system. (CalGreen 4.504.1)
- ENERGY STAR Compliant 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 4.505.1)
- Carpet:** All carpet must meet one of the following: (CalGreen 4.504.3)
 1. Carpet and Rug Institute Green Label Plus Program,
 2. California Department of Public Health Standard Practices 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 EO 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.
- Resilient flooring systems:** For 80% of floor area receiving resilient flooring, install resilient flooring complying with (CalGreen 4.504.4):
 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) EQC2.2 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 criteria.
- Composite wood products:** Hardwood plywood, particleboard, and medium density fiberboard composite wood products used on interior or exterior shall meet CARB Air Toxics Control Measure for Composite Wood. See CalGreen Table 4.504.5.
- Interior 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. See CalGreen Table 4.504.3.
- Low-VOC aerosol paints and coatings:** Meet BAAQMD VOC limits (Regulation 6, Rule 49) and Product-Weighted MIR Limits for ROC. (CalGreen 4.504.2.3.)
- Low VOC Caulks, Construction adhesives, and Sealants:** Meet SCAQMD Rule 116B. See CalGreen Tables 4.504.1 and 4.504.2. (CalGreen 4.504.2.1)

VERIFICATION

Indicate below who is responsible for ensuring green building requirements are met. Projects that increase total conditioned floor area by $\geq 1,000$ square feet are required to have a Green Building Compliance Professional of Record as described in Administrative Bulletin #3. 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.

FINAL COMPLIANCE VERIFICATION form will be required prior to Certificate of Completion.

Project Name _____

Block/Lot _____

Address _____

Primary Occupancy _____

Gross Building Area _____

Increase In Conditioned Floor Area _____

I will 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, if I am no longer the Green Building Compliance Professional of Record for the project, or if I am otherwise no longer responsible for assuring the compliance of the project with the San Francisco Green Building Code.

Licensed Professional: Sign & Date
(May be signed by the applicant when less than 1,000 square feet is added.)

Affix professional stamp:

Projects that increase total conditioned floor area by $\geq 1,000$ square feet:
The Green Building Compliance Professional of Record for this project is: _____

Green Building Compliance Professional - Name and Contact Phone Number _____

Green Building Compliance Professional - Firm _____

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

Green Building Compliance Professional - Sign & Date _____

Signature by a professional holding at least one of the above certifications is required. If the Licensed Professional does not hold a certification for green design and/or inspection, this section may be completed by another party who will verify applicable green requirements are met.

WATER EFFICIENCY

Fixture Type	Maximum Prescriptive Flow Rate
Showerheads ¹	2.0 gpm @ 80 psi per valve and per showerhead ²
Lavatory faucets - residential	1.5 gpm @ 60 psi
Lavatory faucets - common and public use areas	0.5 gpm @ 60 psi
Metering faucets	.25 gallons/cycle
Kitchen faucets	1.5 gpm @ 60 psi default, allowed to temporarily increase to 2.2 gpm
Tank-type water closets	1.28 gallons/flush and EPA WaterSense Certified
Flushometer valve water closets	1.28 gallons/flush
Urinals	Wall mount: 0.125 gallons/flush Floor mount: 0.5 gallons/flush

¹ For dual flush toilets, effective flush volume is defined 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 shall 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 4.303.1.3)

EXISTING NONCOMPLIANT PLUMBING 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 at left. For more information, see the DBI brochure, "San Francisco's Residential Energy and Water Conservation Requirements", available at SFPDBI.org, and also see the "Residential Water Conservation" section of the SFPUC website - SFWATER.org.

Noncompliant plumbing fixtures include:

- Any toilet manufactured for use more than 1.6 gallons of water per flush.
- Any urinal manufactured for use more than 1 gallon of water per flush.
- Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute.
- 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.

GS-5: Residential Additions and Alterations

Insert Project Name / Titleblock here

**Green Building Submittal GS-6 for
San Francisco Municipal Government LEED Projects Is Under Revision.
Contact the Municipal Green Building Coordinator for Questions**

**GS-6: Municipal
Projects (LEED v4)**

Version: January 3, 2017



Attachment C

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.



Supplementary Energy Compliance Documentation

Attachment D

Special Energy Compliance Form

PERF-1-GBO

This attachment is reserved for a form that in prior code cycles was used to demonstrate compliance with local energy efficiency requirements 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. As of January 1, 2017, it is not necessary to prepare a separate form to document compliance with San Francisco Green Building Code 2016 energy requirements.

The energy requirements of the San Francisco Green Building Code 2016 are limited to the solar photovoltaic or solar thermal compliance options under San Francisco Better Roofs requirements, and minimum energy prerequisites of GreenPoint Rated and LEED for Homes. Credit for photovoltaic systems is addressed by the PV Compliance credit in existing Title 24 rules. Similarly, GreenPoint Rated and LEED for Homes each provide guidance on how to document compliance, so



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 under LEED or GreenPoint Rated ("Option 1" on the green building submittal), but is not yet certified. As the Design Professional of Record, I verify that, to the best of my knowledge, the project has been constructed to substantially comply with the green building requirements of San Francisco's building codes.

Signed: _____ Date: _____

Affix professional stamp:

Mandatory follow-up for Option 1: Evidence of LEED 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 GreenPoint Rated certification to demonstrate compliance with the San Francisco Green Building Code. As the Green Building Compliance Professional of Record for this project, I verify that to the best of my knowledge the above referenced project has been constructed to substantially comply with the green building requirements of San Francisco's building codes. **[Affix 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 under these rating systems 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



ATTACHMENT G

Selected Green Building Resources

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



ATTACHMENT H

Review of Energy 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	July 1, 2014 – December 31, 2016	On or after January 1, 2017
New Commercial				
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	Comply with Title 24 (2008) AND 1% onsite renewable energy generation OR 10% additional energy efficiency OR purchase renewable power	Comply with Title 24 (2013) AND 1% onsite renewable energy generation OR 10% additional energy efficiency OR purchase renewable power	Comply with Title 24 (2016) AND Better Roofs or Renewables (see below)
New Commercial 5,000 to 25,000 square feet	+15% Reduction compared to Title 24 Part 6 (2008)	Comply with Title 24 Part 6 (2008) AND 1% onsite renewable energy generation OR 10% additional energy efficiency OR purchase renewable power	Comply with Title 24 Part 6 (2008) AND 1% onsite renewable energy generation OR 10% additional energy efficiency OR purchase renewable power	Recategorized as 'All Other New Nonresidential' below
All Other New Nonresidential	+15% Reduction compared to Title 24 Part 6 (2008)	Comply with Title 24 Part 6 (2008)	Comply with Title 24 Part 6 (2013)	Comply with Title 24 (2016) AND Better Roofs or Renewables (see below)
New Residential				
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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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) 	Meet prerequisite of rating system chosen for the entire project: <ul style="list-style-type: none"> • GreenPoint Rated (any energy path) OR • LEEDv4 BD+C 2009 OR • LEED for Homesv4 (including MidRise) AND Better Roofs or Renewables (see below)

New Residential, continued				
	January 1, 2011 – December 31, 2013	January 1, 2014 – June 30, 2014	On or after July 1, 2014	On or after January 1, 2017
New Low-Rise Residential (1-3 occupied floors)	+15% Reduction compared to Title 24 Part 6 (2008)	Meet prerequisite of rating system chosen for the entire project: <ul style="list-style-type: none"> • GreenPoint Rated – 15% Reduction compared to Title 24 Part 6 (2008) OR • LEED for Homes – 15% Reduction compared to Title 24 Part 6 (2008) 	Meet prerequisite of rating system chosen for the entire project: <ul style="list-style-type: none"> • GreenPoint Rated – 10% Reduction compared to Title 24 Part 6 (2013) OR • LEED for Homes – 10% Reduction compared to Title 24 Part 6 (2013) 	Meet prerequisite of rating system chosen for the entire project: <ul style="list-style-type: none"> • GreenPoint Rated (any energy path) OR • LEED for Homes AND <ul style="list-style-type: none"> • Better Roofs or Renewables (see below)
Additions and Alterations				
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 EAp2), demonstrate compliance with T24 Part 6 (2013)	Meet prerequisite of rating system (LEEDv4 BD+C)
Major Alteration to Commercial or Residential	Meet prerequisite of rating system chosen for the entire project: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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) 	Meet prerequisite of rating system chosen for the entire project: <ul style="list-style-type: none"> • GreenPoint Rated (any energy path) OR • LEEDv4 for Homes (including MidRise) • LEEDv4 BD+C –OR
All Other Additions & Alterations, Commercial or Residential	Comply with Title 24 (2008)	Comply with Title 24 (2008)	Comply with Title 24 (2013)	Comply with Title 24 (2016)

Better Roofs – New buildings ≤ 10 floors must designate 15% of roof as Solar Ready, per Title 24 rules. Install photovoltaics or solar hot water systems in this area. With Planning Department approval, projects subject to SFPUC Stormwater Requirements may substitute living roof for solar energy systems.

Renewable Energy – New commercial buildings ≥ 11 floors must either:
 Generate ≥1% of annual energy cost on-site with renewables (LEEDv4 EAc5, 5 pts), OR
 Improve efficiency ≥10% beyond Title 24 Part 6 2016, OR
 Purchase Green-E renewable energy for 35% of electricity use (LEEDv4 EAc7).

