

Amendment of the Whole
7/7/08
Further Amended
7/14/08

FILE NO. 080063

ORDINANCE NO.

1 [Green Building Requirements.]

2

3 **Ordinance amending the San Francisco Building Code by adding Chapter 13C to**
4 **impose green building requirements on (1) newly constructed Group R occupancy**
5 **residential buildings, (2) newly constructed commercial buildings of Group B or M**
6 **occupancies that are 5,000 gross square feet or more, (3) new alterations to new or**
7 **existing first-time build-outs of commercial interiors that are 25,000 gross square feet**
8 **or more in area buildings of Group B or M occupancies, and (4) major alterations to**
9 **existing buildings that are 25,000 gross square feet or more in area existing buildings**
10 **of Group B, M, or R occupancies, where interior finishes are removed and significant**
11 **upgrades to structural and mechanical, electrical and/or plumbing systems are**
12 **proposed; exempting (1) City projects, which are subject to covered by Chapter 7 of the**
13 **San Francisco Environment Code, (2) any new building in which laboratory use of any**
14 **occupancy classification is the primary use, and (3) any building undergoing**
15 **renovation in which the area of renovation will be primarily for laboratory use of any**
16 **occupancy classification, and to authorize the Director of Building Inspection to grant**
17 **an exemption from some of the requirements on the grounds of hardship or**
18 **infeasibility and require the Director to grant an exemption if compliance would**
19 **compromise the historical integrity of an historic structure; imposing additional**
20 **requirements on demolitions and credits for the reuse of historic structures; providing**
21 **that the requirements become effective operative 90 days after adoption if the**
22 **California Energy Commission has approved it by that time; enactment of the**
23 **ordinance and increase over the following five-year period; adopting findings,**
24 **including environmental findings, ~~and findings required by California Health and Safety~~**
25 **Code Section 17958.5, and California Energy Code findings; and directing the Clerk of**

1 **the Board of Supervisors to forward this ordinance to the California Building Standards**
2 **Commission upon final passage.**

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4 Note: Additions are *single-underline italics Times New Roman*;
5 deletions are ~~*strikethrough italics Times New Roman*~~.
6 Board amendment additions are double underlined.
7 Board amendment deletions are ~~strikethrough normal~~.

8 Be it ordained by the People of the City and County of San Francisco:

9 Section 1. The Board of Supervisors of the City and County of San Francisco hereby
10 finds and declares as follows:

11 (a) CEQA Findings. The Planning Department has determined that the actions
12 contemplated in this Ordinance are in compliance with the California Environmental Quality
13 Act (California Public Resources Code section 21000 et seq.). Said determination is on file
14 with the Clerk of the Board of Supervisors in File No. _____ and is incorporated
15 herein by reference.

16 (b) Findings Required by California Health & Safety Code Section 17958.5.

17 (i) San Francisco is located at the tip of a peninsula and is served by the electricity
18 grid at a single point, the Martin Substation. This single point of service makes San Francisco
19 uniquely vulnerable to supply disruptions. Making San Francisco's building stock more energy
20 efficient will reduce San Francisco's energy consumption and decrease its vulnerability to
21 supply disruptions.

22 (ii) The world's leading climate scientists have documented a clear global warming
23 trend and the unmistakable impact of human activities on that trend. As a coastal city
24 surrounded on three sides by water, San Francisco is extremely vulnerable to climate change
25 caused by global warming and the associated rise in sea levels. Construction of more energy

1 efficient buildings can help San Francisco reduce its share of the greenhouse gas emissions
2 that are a significant contributor to global warming.

3 (iii) In 2002, in response to the global warming threat, the Board of Supervisors
4 adopted unanimously Resolution No. 158-02, which, among other things, established for San
5 Francisco a greenhouse gas emissions reduction target of 20 percent below 1990 levels by
6 the year 2012 and called for continued actions toward achieving these goals.

7 In Resolution No. 158-02, the Board found that global warming and the associated rise
8 in sea levels would be particularly devastating to San Francisco and that a Green Building
9 Program, among other efforts, was a critical component in a local action plan for climate
10 protection. The Board further found that greenhouse gas reduction activities would contribute
11 substantially to the achievement of many of the City's highest priority goals, including but not
12 limited to: energy security and cost reduction, affordable housing, mobility and transportation
13 choices, solid waste reduction and recycling, reliable and affordable water supply, urban and
14 rural forest protection, sustainable economic development, and clean air.

15 (iv) In response to Board Resolution No. 158-02, San Francisco's Department of
16 Environment and Public Utilities Commission published a Climate Action Plan for San
17 Francisco in September 2004. The Plan states that in San Francisco, the impacts of climate
18 change will be variable and widespread and identifies a number of specific serious impacts
19 that global warming and the associated rise in sea levels would have on San Francisco's
20 weather, water resources, physical landscape, ecosystem, human health, economy, and
21 infrastructure.

22 (v) The City's Climate Action Plan found that energy use in buildings and facilities is
23 responsible for approximately 50 percent of San Francisco's greenhouse gas emissions. In
24 1990, San Francisco's total energy consumption was about 5,000 gigawatt-hours of electricity
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1 and 300 million therms of natural gas. San Francisco's energy use resulted in a total of
2 approximately 4.5 million tons of CO₂ emissions released into the atmosphere in 1990: 1.7
3 million tons of CO₂ was released by the City's 300,000 households, 1.5 million tons of CO₂
4 was released by the City's 32,000 businesses, 894,000 tons of CO₂ was released by the
5 City's industrial sector, and 402,000 tons of CO₂ was released by the City's municipal
6 buildings and facilities.

7 The Climate Action Plan states that the potential for CO₂ reductions through electricity
8 and gas savings in San Francisco's buildings is tremendous and that key actions required to
9 reach this potential include incorporating policies in both the private and public sectors such
10 as designing new buildings beyond code and implementing energy efficient retrofit projects in
11 existing buildings. Reducing electricity demand means in-city power plants run less, creating
12 fewer emissions.

13 (vi) As a participant in the Cities of Climate Protection campaign sponsored by the
14 International Council on Local Environmental Initiatives, San Francisco has joined with more
15 than 500 cities around the world to inventory its emissions of greenhouses gases, set
16 reduction targets, and take action to meet those targets.

17 (vii) In recent years, green building design, construction and operational techniques
18 have become increasingly widespread. Many homeowners, businesses and building
19 professionals have voluntarily sought to incorporate green building techniques into their
20 projects. A number of local and national systems have been developed to serve as guides to
21 green building practices. At the national level, the U.S. Green Building Council, developer of
22 the Leadership in Energy and Environmental Design (~~LEED™~~) (LEED®) Green Rating System
23 and ~~LEED™~~ LEED® Reference Guide, has become a leader in promoting and guiding green
24 building. At the local level, Build It Green and StopWaste.Org have developed residential
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1 green building standards appropriate for smaller projects, and which over twenty Bay Area
2 cities and counties have employed.

3 (viii) Starting in 2004, ~~the City~~ San Francisco has enacted legislation or adopted
4 programs to mandate or encourage the use of green building standards in San Francisco and
5 to reduce the City's impacts on the environment.

6 In 2004, the City enacted Chapter 7 of the San Francisco Environment Code, which,
7 among other things, requires all new City construction and major renovation projects to
8 achieve a LEED® Silver certification from the US Green Building Council. In 2006, the City
9 adopted Ordinance No. 27-06 mandating the recycling of construction and demolition debris.

10 In 2006, the City adopted two programs to encourage the use of green building
11 standards in the private sector. First, the San Francisco Building and Planning Departments
12 developed criteria to reduce the cost of solar permits and streamline the permitting process.
13 Solar permits now cost less than \$90 and can be issued over the counter, without the delays
14 of in-house reviews. The Department of Building Inspection has estimated that 90 percent of
15 photovoltaic system applications meet the requirements for the streamlined permit process.
16 Second, the San Francisco Department of Building Inspection, Planning Department, and
17 Department of the Environment established a priority permitting process for ~~LEED~~ LEED®
18 Gold certified, or equivalent, building projects. ~~Eight~~ Seventeen projects have presently been
19 accepted, ~~with four more pending.~~

20 (ix) In 2004, the City and County of San Francisco committed to the goals of
21 diverting over 75 percent of its waste from landfill by the year 2010 and to achieve Zero Waste
22 to landfill by 2020. These ambitious targets can only be realized through continued
23 implementation and expansion of recycling and composting programs, increased construction
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1 and demolition debris recycling, and source reduction programs in the public and private
2 sectors.

3 (x) In 2006, the State enacted the California Global Warming Solutions Act of 2006
4 (AB 32), which added Section 38501 et seq. to the California Health and Safety Code. This
5 legislation requires, among other actions, that by January 1, 2008, the State Air Resources
6 Board approve a statewide greenhouse gas emissions limit that is equivalent to the emissions
7 level in 1990. This ordinance will further the State's efforts to reduce greenhouse gas
8 emissions statewide by reducing San Francisco's emissions.

9 (xi) In 2007, Mayor Gavin Newsom established a Task Force on Green Building for
10 the City and County of San Francisco comprised of ten members from San Francisco's
11 ownership, developer, financial, architectural, engineering, and construction community. The
12 mission of the Task Force was to advise and recommend to the City's policy makers
13 mandates, incentives, education, and outreach in order to increase the number and improve
14 the quality of green buildings in San Francisco and to assess the impacts of the Task Force's
15 recommendations. The Task Force issued its Report and Recommendations in June 2007.

16 (xii) In its Report, the Green Building Task Force Report recommends that ~~the City~~
17 San Francisco take a leadership role in addressing environmental impacts, which include
18 consumption of natural resources, accelerated effects on climate change, and increased
19 pollution. It further recommends that ~~as the City~~ San Francisco look at a broad range of
20 policies and programs to improve sustainability and recognize that construction activity for and
21 operational energy used by buildings are primary contributors to man-made CO₂ production
22 and have significant other impacts on air quality, landfill, transportation, energy consumption,
23 resource use, and occupant health and productivity. The Task Force Report states that it is
24 essential that sustainable practices become standards of the building industry.

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1 (xiii) By implementing the recommendations of the Mayor's Task Force on Green
2 Building, this ordinance continues San Francisco's efforts to address environmental impacts in
3 order to improve the health and economic well being of the City's residents, workers and
4 visitors, and to mitigate the effects of global warming on the City's weather, water resources,
5 physical landscape, ecosystem, human health, economy, and infrastructure.

6 Some of the significant cumulative benefits this ordinance is very conservatively
7 expected to achieve through 2012 are: reducing CO₂ emissions by 60,000 tons, saving
8 220,000 megawatt hours of power, saving 100 million gallons of drinking water, reducing
9 wastewater and stormwater by 90 million gallons of water, reducing construction and
10 demolition waste by 700 million pounds, increasing the valuations of recycled materials by
11 \$200 million, reducing automobile trips by 540,000, and increasing green power generation by
12 37 thousand megawatt hours.

13 (xiv) Demolition of an existing building results in the loss of the energy and materials
14 that were embodied in the original construction, and can result in the loss of a cultural
15 resource as well. Demolition and new construction consumes still more energy and materials.
16 Thus, a principle of green construction is that "the greenest building is the one that already
17 exists." Preservationists have estimated that it takes decades for an energy-efficient new
18 building to conserve the amount of energy lost in demolishing an existing building, and that a
19 green rehabilitation can greatly improve energy efficiency without compromising historic fabric
20 and without the loss of embodied resources. Preservation, rehabilitation, and reuse of existing
21 structures should be encouraged.

22 (c) Findings required by Public Resources Code Section 25402.1(h)(2) and Section
23 10-106 of the California Code of Regulations, Title 24, Part 1, Locally Adopted Energy
24 Standards ("Section 10-106").

1 (i) Public Resources Code Section 25402.1(g) provides that the building
2 department of every city, county, or city and county shall enforce Section 25402(a) and (b),
3 Section 25402.1, and the rules and regulations of the California Energy Commission adopted
4 pursuant thereto. Section 25402(a) requires the Commission to prescribe, by regulation,
5 lighting, insulation climate control system, and other building design and construction
6 standards that increase the efficiency in the use of energy for new residential and new
7 nonresidential buildings. Section 25402(b) requires the Commission to prescribe, by
8 regulation, performance-based energy conservation design standards for new residential and
9 new nonresidential buildings.

10 (ii) Public Resources Code Section 25402.1(h)(2) and Section 10-106 authorize the
11 adoption and enforcement of more stringent local energy standards, provided that the local
12 jurisdiction makes a determination that the local standards are cost effective and will save
13 more energy than the current Statewide standards and the local jurisdiction files an
14 application for approval with the California Energy Commission together with documentation
15 supporting the cost-effectiveness determination. A proposed ordinance may take effect only
16 after the California Energy Commission has reviewed and formally approved the proposed
17 local energy standards.

18 (iii) Based upon the findings of a study of this Ordinance performed by Gabel
19 Associates LLC, the Board of Supervisors hereby determines that the Ordinance's standards
20 are cost effective and will save more energy than the current Statewide standards.

21 (iv) This Ordinance establishes increased minimum energy efficiency standards
22 within the City and County of San Francisco for certain new construction, additions and
23 alterations; and is intended to supplement the 2005 California Building Energy Efficiency
24 Standards, as specified in California Code of Regulations, Title 24, Parts 1 and 6 ("2005
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1 Standards. Compliance with the applicable California Building Energy Efficiency Standards is
2 required even if the increased minimum energy efficiency standards specified in this
3 Ordinance do not apply.

4 (v) On April 23, 2008, the California Energy Commission adopted California
5 Building Energy Efficiency Standards, as specified in California Code of Regulations, Title 24,
6 Parts 1 and 6, that are expected to go into effect on July 1, 2009 ("2008 Standards"). This will
7 require the Board of Supervisors to make a determination that the local standards are cost
8 effective and will save more energy than the 2008 Standards, file an application for reapproval
9 of this Ordinance with the California Energy Commission together with documentation
10 supporting the cost-effectiveness determination, and receive approval from the California
11 Energy Commission prior to the effective date of the 2008 Standards in order for the
12 Ordinance to remain in effect after July 1, 2009.

13 (vi) Given that the purpose of this Ordinance is to adopt stricter local energy
14 efficiency standards for the construction of new buildings within the City and County of San
15 Francisco, the Board of Supervisors recognizes that the adoption of new standards without
16 additional education and training for City staff responsible for enforcement of the standards
17 could diminish compliance and potentially undermine the efficacy of the Ordinance.
18 Therefore, in order to ensure greater compliance and enforcement of the applicable green
19 building standards, to better equip the staff of the Department of Building Inspection, and to
20 provide a greater resource to the City's building community, the City and County of San
21 Francisco will seek out additional education and training opportunities for staff in green
22 building technologies, including in the areas of energy standards, building energy technology
23 and energy code implementation.

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1 Section 2. The San Francisco Building Code is hereby amended by adding Chapter
2 13C, to read as follows:

3 Chapter 13C

4 GREEN BUILDING REQUIREMENTS

5 SECTION 1301C - INTENT

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

14 SECTION 1302C - DEFINITIONS

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

16 ~~ADEQUATE SPACE FOR WASTE means that areas provided for the collection and~~
17 ~~separate storage of trash, composting, and commingled recycling shall be designed to~~
18 ~~accommodate containers compatible with current methods and frequency of local collection.~~
19 ~~The recycling and compost storage areas shall be enclosed and integral to the structure of the~~
20 ~~project and be designed to be as accessible and as convenient as that for trash areas for all~~
21 ~~tenants, residents, and service providers, and must met or exceed the requirements of~~
22 ~~Administrative Bulletin 088.~~

23 ~~APPLICANT means any individual, firm, Limited Liability Company, association,~~
24 ~~partnership, political subdivision, government agency, industry, public or Private Corporation,~~
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1 ~~or any other entity that applies to the City for permits to construct a project within the scope of~~
2 ~~this ordinance.~~

3 CITY means the City and County of San Francisco.

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

11 GREENPOINT RATED, GREENPOINTS and GREENPOINTS CHECKLIST mean the
12 residential green building rating system and checklist and certification methodology ~~used by of~~
13 the non-profit organization Build It Green ~~or an equivalent organization and rating system~~
14 approved by the Director in consultation with the Director of the Department of the
15 Environment.

16 HIGH-RISE BUILDING means a building that meets the definition of “high-rise building”
17 in Section 202 of this Code.

18 HIGH-RISE RESIDENTIAL BUILDING means a Group R occupancy residential
19 building that is a high-rise building more than 75 feet in height to the highest occupied floor.

20 ~~MIXED-USE means a building with residential and commercial or retail or a~~
21 ~~combination of residential, commercial and retail. If the building is more than 75 feet in height,~~
22 ~~the HIGH-RISE RESIDENTIAL BUILDING requirements shall apply. If the building is 75 feet~~
23 ~~or less in height, the MID-RISE MULTIFAMILY REQUIREMENTS shall apply.~~

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

5 LARGE COMMERCIAL BUILDING means a commercial building or addition of Group
6 B or M occupancy that is 25,000 gross square feet or more or is a high-rise building over 75
7 feet in height.

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

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

16 MID-SIZE COMMERCIAL BUILDING means a commercial building of Group B or M
17 occupancy that is ~~more than~~ 5,000 or more and less than 25,000 gross square feet, and is not
18 a high-rise building (~~less than 75 feet in height to the highest occupied floor~~).

19 MID-SIZE MULTIFAMILY RESIDENTIAL BUILDING means a Group R occupancy
20 residential building that has five or more dwelling units and is not a high-rise building (~~75 feet~~
21 ~~or less in height to the highest occupied floor~~).

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

1 ~~RECYCLING AND COMPOSTING SPACE~~ means that areas provided for the
2 collection and separate storage of trash to landfill, materials for commingled recycling and for
3 composting shall be designed to accommodate sufficient quantity of recycling and composting
4 containers adequate for the building occupants, and compatible with current methods and
5 frequency of local collection. All areas designated for the collection, storage and loading of
6 materials for recycling and for composting must be integral to the structure of the project and
7 be at least as accessible and as convenient as that for trash areas for all tenants, residents,
8 and service providers, and, if applicable, must meet or exceed the requirements of
9 Administrative Bulletin 088. Any building designed with a chute system for trash disposal
10 must provide additional chutes for composting (which includes food waste) and for
11 commingled recycling, or must provide alternative installations such as turntable systems
12 designed to keep trash separate from materials for recycling and composting.

13 SMALL RESIDENTIAL BUILDING means a Group R occupancy building that has four
14 or fewer dwelling units and is not a high-rise building (less than 75 feet in height to the highest
15 occupied floor).

16 SECTION 1303C – SCOPE

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

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

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

14 SECTION 1304C – GREEN BUILDING REQUIREMENTS

15 1304.0 Applicability. The following green building requirements shall apply to all
16 projects within the scope of this chapter. Wherever reference is made to the LEED LEED® or
17 GreenPoint Rated systems, a comparable equivalent rating system may be used if approved
18 by the Director ~~in consultation with the Director of the Department of the Environment.~~ The
19 applicable LEED LEED®, GreenPoint Rated or equivalent requirements ~~are those in effect at~~
20 ~~the time a complete application for a building (or site) permit is filed with the Department of~~
21 ~~Building Inspection.~~

22 ~~The versions of performance standards for any applications subject to this chapter~~
23 ~~legislation, regardless of application dates, are:~~

24 LEED® LEED-CI v2.0 - LEED® LEED for Commercial Interiors (June 2005)
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1 LEED® LEED-CS v2.0 - LEED® LEED for Core and Shell (July 2006)
2 LEED-EB - LEED for Existing Building: Operations and Maintenance (Version 2008)
3 LEED for Homes Program Pilot Rating System Version 1.11a (January 2007)
4 LEED® LEED-NC v2.2 - LEED® LEED for New Construction (July 2007)
5 LEED for Retail – New Construction and Major Renovations (Pilot Version 2.0, October
6 2007)

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

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

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

15 1304C.0.1. Compliance. Verification of eCompliance with any of the these
16 requirements may be done verified and/or certified by any means manner of approval,
17 including third-party equivalent, if as approved by the Director.

18 1304C.0.2. Solar electric systems. The installation of any solar photovoltaic energy
19 system must meet all installation criteria the California Energy Commission’s Guidebook
20 “Eligibility Criteria and Conditions for Incentives for Solar Energy Systems.” An energy credit
21 from solar photovoltaic (PV) energy systems may be used to demonstrate compliance with the
22 Ordinance’s general compliance requirements. This credit is available if the solar PV energy
23 system is capable of generating electricity from sunlight, supplying the electricity directly to the
24 building, and the system is connected, through a reversible meter, to the utility grid. The

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1 methodology used to calculate the energy equivalent to the photovoltaic credit shall be the
2 CECPV Calculator, using the most recent version prior to the permit application date, which
3 may be found on the web site of the California Energy Commission.

4 1304C.0.3. Stormwater. Stormwater management shall meet the "Best Management
5 Practices" and "Stormwater Design Guidelines" of the San Francisco Public Utilities
6 Commission, and shall meet or exceed the applicable LEED SS 6.1 and 6.2 guidelines.

7 1304C.0.4. Solid waste. Areas provided for recycling, composting and trash storage,
8 collection and loading, including any chute systems, must be designed for equal convenience
9 for all users to separate those three material streams, and must provide space to
10 accommodate a sufficient quantity and type of containers to be compatible with current
11 methods of collection.

12 1304C.0.5. Building demolition. Applications subject to this Section, whereby
13 construction of a new building is proposed within five years of the demolition of a building on
14 the site, where such demolition occurred after the effective date of this ordinance, shall be
15 subject to the following requirements:

16 1304C.0.5.1. The sustainability requirements for new buildings pursuant to Sections
17 1304C.1, et seq. shall be increased as follows:

18 1304C.0.5.1.1. For projects attaining a LEED® certification and where the building
19 demolished was an historical resource, the required points shall be increased by 10 percent of
20 the total available in the required LEED® system. Where the building demolished was not an
21 historical resource, the required points shall be increased by 10 percent of the total required of
22 the applicable LEED certification requirements absent a demolition. For projects opting to be
23 GreenPoint Rated, 25 additional points must be achieved, where the building demolished was
24 an historical resource, or 20 additional points must be achieved where the building
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1 demolished was not an historical resource. The Director shall determine, on a case-by-case
2 basis, increased requirements in similar proportions for projects achieving compliance using
3 other green building rating systems.

4 For projects subject to 1304C.2.1, Mid-Size Commercial Buildings, and this Section
5 1304C.0.5, where the building demolished was not an historical resource, the following
6 requirements apply:

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

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

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

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

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

21 1304C.0.5.1.2. Except where the demolished building was determined to be an
22 historical resource, if the occupant loads of the commercial portion of the replacement
23 structure calculated in accord with Section 1004 of this Code and the number of dwellings in
24 the residential portion are each tripled, for those buildings attaining LEED® certification, the
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1 required points shall be increased by 8 percent of the total points required absent a
2 demolition. For such projects pursuant to demolitions opting to be GreenPoint Rated, 17
3 additional points must be achieved. Where occupant loads and residential density are
4 quadrupled, the required points for projects attaining LEED® certification shall be increased
5 by 6% of the total required absent a demolition, and for those opting to be GreenPoint Rated,
6 15 additional points must be achieved. The Director shall determine, on a case-by-case basis,
7 appropriate increased requirements in similar proportions for projects achieving compliance
8 using other green building rating systems.

9 1304C.0.6. On-site retention of historical features. For alterations of buildings
10 determined to be historical resources, additional points or credits shall be granted for retention
11 and in-situ reuse or restoration of certain character defining features, as follows:

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<u>SIGNIFICANT HISTORICAL ARCHITECTURAL FEATURES</u>	<u>PERCENT RETAINED *</u>	<u>LEED POINTS FOR RETENTION</u>	<u>GREENPOINTS FOR RETENTION</u>
<u>Windows @ principal façade(s)</u>	<u>At least 50</u>	<u>2</u>	<u>7</u>
<u>Windows @ principal façade(s)</u>	<u>At least 75</u>	<u>3</u>	<u>11</u>
<u>Windows @ principal façade(s)</u>	<u>100</u>	<u>4</u>	<u>15</u>
<u>Other windows</u>	<u>At least 50</u>	<u>1</u>	<u>3</u>
<u>Other windows</u>	<u>100</u>	<u>2</u>	<u>6</u>
<u>Exterior doors @ principal façade(s)</u>	<u>100</u>	<u>1</u>	<u>3</u>
<u>Siding or wall finish @ principal façade(s)</u>	<u>80</u>	<u>1</u>	<u>4</u>
<u>Trim & casing @ wall openings on principal façade(s)</u>	<u>100</u>	<u>1</u>	<u>3</u>
<u>Roof cornices or decorative eaves visible from right-of-way</u>	<u>100</u>	<u>1</u>	<u>3</u>
<u>Sub-cornices, belt courses, water tables, and running trim visible from right-of-way</u>	<u>80</u>	<u>1</u>	<u>3</u>
<u>Character-defining elements of significant interior spaces</u>	<u>At least 50</u>	<u>2</u>	<u>7</u>
<u>Character-defining elements of significant interior spaces</u>	<u>100</u>	<u>4</u>	<u>15</u>
<u>Other exterior ornamentation (e.g. cartouches, corbels, quoins, etc.) visible from right-of-way</u>	<u>80</u>	<u>1</u>	<u>3</u>

* Retention includes the rehabilitation and repair of character-defining features that conform with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

1 1304C.0.7 Maintenance of required features. Any structure subject to this Chapter
2 43C shall maintain the green building features required herein, regardless of subsequent
3 alterations, additions, or changes of use, unless subject to more stringent requirements.

4 1304C.1. Requirements for New Group R Occupancy Buildings Construction.

5 1304C.1.1. Small Residential Buildings. ~~Beginning ninety days after~~ Upon the
6 operative effective date of this chapter ordinance, the permit applicant must submit a
7 GreenPoints New Home Construction Checklist but no points are required to be achieved.
8 Effective January 1, st 2009, applicants ~~for new buildings~~ must submit documentation
9 demonstrating that a minimum of 25 GreenPoints from the checklist will be achieved.
10 Effective January 1, st 2010 through 2011, a new building must be GreenPoint Rated and
11 applicants for new buildings must submit documentation ~~to be GreenPoint Rated and must~~
12 achieve demonstrating that a minimum of 50 GreenPoints from the checklist will be achieved.
13 Effective January 1, st 2012, a new building must be GreenPoint Rated and applicants a new
14 building must submit documentation demonstrating that ~~be GreenPoint Rated and must~~
15 achieve a minimum of 75 GreenPoints from the checklist will be achieved.

16 1304C.1.2. Midsize Multifamily Residential Buildings. ~~Beginning ninety days after~~ Upon
17 the operative effective date of this chapter ordinance, the permit applicants must submit a
18 GreenPoints Multifamily Checklist but no points are required to be achieved. Effective
19 January 1, st 2009, applicants ~~for new buildings~~ must submit documentation demonstrating
20 that a minimum of 25 GreenPoints from the checklist will be achieved. Effective January 1, st
21 2010, a new building must be GreenPoint Rated and applicants must submit documentation
22 demonstrating that ~~to achieve~~ a minimum of 50 GreenPoints from the checklist will be
23 achieved. Effective January 1, st 2011 ~~and thereafter~~, a new building must be GreenPoint

1 Rated and applicants must submit documentation demonstrating that ~~to achieve~~ a minimum of
2 75 GreenPoints from the checklist will be achieved.

3 ~~1304C.1.2.1. Recycling and compostable waste. Beginning ninety days after the~~
4 ~~effective date of this ordinance, permit applicants must submit documentation that designates~~
5 ~~adequate on-site space for trash, recyclables and compostable waste as defined in 1302C.~~

6 1304C.1.3. High-Rise Residential Buildings.

7 1304C.1.3.1. Rating requirement. ~~Beginning ninety days after~~ Upon the operative
8 ~~effective date of this chapter ordinance, permit applicants for new buildings must submit~~
9 ~~documentation to achieve LEED® LEED “Certified” certification from the USGBC, or an~~
10 ~~approved equivalent. Effective January 1, st 2010 and thereafter, applicants for new buildings~~
11 ~~must submit documentation to achieve a LEED® LEED “Silver” certification from the USGBC,~~
12 ~~or an approved equivalent. Alternatively, GreenPoint Rated 50 points minimum may be~~
13 ~~achieved to meet this requirement upon the effective date of this ordinance, and GreenPoint~~
14 ~~Rated 75 points minimum effective January 1, 2010, providing all LEED®-NC Prerequisites~~
15 ~~are also met.~~

16 ~~1304C.1.3.2. Recycling and compostable waste. Beginning ninety days after the~~
17 ~~effective date of this ordinance, permit applicants must submit documentation that designates~~
18 ~~adequate on-site space for recycling and compostable waste in addition to adequate on-site~~
19 ~~space for trash, as defined in 1302C.~~

20 1304C.1.3.23. Water efficient landscaping. ~~Beginning ninety days after~~ Upon the
21 ~~operative effective date of this chapter ordinance, permit applicants must submit~~
22 ~~documentation verifying that ~~to achieve~~ a minimum 50 percent reduction in use of potable~~
23 ~~water for landscaping was achieved. (LEED® LEED WE1.1)~~

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25

1 ~~c. stormwater to be reused on site to the extent feasible.~~

2 ~~Compliance with the performance measures can be achieved by implementing the~~
3 ~~stormwater management design standards described by the Port and the SFPUC in “The San~~
4 ~~Francisco Stormwater Design Guidelines”.~~

5 1304C.2. Requirements for New Group B and M Occupancy Buildings. Commercial
6 Construction

7 1304C.2.1. Mid-Size Commercial Buildings.

8 1304C.2.1.1. Rating requirement. ~~Beginning January 1, 2009~~ Upon the operative date
9 of this chapter, permit applicants must complete and submit a LEED® LEED Checklist but no
10 points are required to be achieved. ~~Effective January 1st 2009, a select list of five LEED~~
11 ~~credits must be achieved, increasing to six credits January 1st 2011 and seven credits~~
12 ~~January 1st 2012.~~

13 ~~1304C.2.1.2. Recycling and compostable waste. Beginning ninety days after the~~
14 ~~effective date of this ordinance, permit applicants must submit documentation that designates~~
15 ~~adequate on-site space for trash, recyclables and compostable waste, as defined in 1302C.~~

16 1304C.2.1.2. Fundamental commissioning of the building energy systems. Effective
17 January 1, 2009, permit applicants must submit documentation prepared by a Commissioning
18 Agent demonstrating compliance with LEED® EA Prereq 1.

19 1304C.2.1.3. Water efficient landscaping. ~~Beginning~~ Effective January 1, 2009, permit
20 applicants must submit documentation verifying that ~~demonstrating achievement of a~~
21 ~~minimum 50 percent reduction in use of potable water for landscaping was achieved.~~ (LEED®
22 LEED WE1.1)

23 1304C.2.1.4. Water use reduction. ~~Beginning~~ Effective January 1, 2009, and effective
24 through 2010, permit applicants must submit documentation ~~to~~ demonstrating achievement of
25

1 a minimum 20 percent reduction in the use of potable water. (LEED® LEED WE3.1)
2 Effective January 1, st 2011 ~~and thereafter~~, the required reduction in use of water is 30
3 percent. (LEED® LEED WE3.1)

4 1304C.2.1.5. Construction debris management. Effective January 1, st 2009 ~~and~~
5 ~~thereafter~~, permit applicants must submit ~~documented verification~~ documentation to verify that
6 diversion of at least 75 percent of ~~it's~~ the project's construction debris was achieved. (LEED®
7 LEED MR2.1)

8 1304C.2.1.6. Enhanced commissioning. Effective January 1, st 2011 ~~and thereafter~~, a
9 new building must achieve enhanced commissioning. (LEED® LEED EA3.0)

10 ~~1304C.2.1.7. Stormwater management. Beginning ninety days after the effective date~~
11 ~~of this ordinance, permit applicants must submit documentation demonstrating achievement of~~
12 ~~the required stormwater management performance measures for buildings within those areas~~
13 ~~served by separate or combined sewers. These provisions are for stormwater quantity and~~
14 ~~quality and are designed to meet or exceed the requirements of LEED SS6.1 and SS6.2.~~
15 ~~————The performance measures for developments within the area served by separate~~
16 ~~sewers require the capture and treatment of:~~

- 17 a. ~~————The 85th percentile 24-hour event, determined as the maximized capture of~~
18 ~~stormwater volume for the drainage area of concern; or~~
19 b. ~~————The volume of annual runoff based on a unit basin storage water quality~~
20 ~~volume, to achieve 80 percent or more volume treatment.~~

21 ~~The performance measures for developments in the combined sewer areas require:~~

- 22 a. ~~————the capture or detention of 80 percent or more of the annual runoff volume,~~
23 ~~based on a unit basin storage volume;~~
24 b. ~~————a minimum of 25 percent of the surface setback to be pervious; and~~

25

1 ~~c. stormwater to be reused on site to the extent feasible.~~

2 Compliance with the performance measures can be achieved by implementing the
3 stormwater management design standards described by the Port and the SFPUC in “The San
4 Francisco Stormwater Design Guidelines.”

5 1304C.2.1.78. Energy. Effective January 1, st 2012, permit applicants must submit
6 documentation to verify renewable on-site energy or purchase green energy credits ~~under~~ in
7 accord with LEED® LEED EA2 and EA6.

8 1304C.2.2. New Large Commercial Buildings.

9 1304C.2.2.1. Rating requirement. ~~Beginning ninety days after~~ Upon the operative
10 effective date of this chapter ordinance, permit applicants must submit documentation to
11 achieve LEED® LEED “Certified” Certification. Effective January 1, st 2009, 2010 and 2011,
12 ~~a new building permit applicants~~ must submit documentation to achieve a LEED® LEED
13 Silver rating. Effective January 1, st 2012, ~~a new building permit applicants~~ must submit
14 documentation to achieve a LEED® LEED Gold rating.

15 ~~1304C.2.2.2. Recycling and compostable waste. Effective January 1st 2009 and~~
16 ~~thereafter, a permit applicant must submit documentation designating adequate on-site space~~
17 ~~for compostable and recycling waste, in addition to trash.~~

18 1304C.2.2.23. Water efficient landscaping. ~~Effective 90 days after passage and~~
19 ~~thereafter~~ Upon the operative date of this chapter, permit applicants must submit
20 documentation verifying that a minimum 50 percent reduction in use of potable water for
21 landscaping was achieved. (LEED® LEED WE1.1)

22 1304C.2.2.34. Water use reduction. ~~Beginning ninety days after the effective date of~~
23 ~~this ordinance~~ Upon the operative date of this chapter, permit applicants must submit
24 documentation ~~verifying that~~ demonstrating achievement of a minimum 20 percent reduction
25

1 in the use of potable water ~~was achieved~~. (LEED® LEED WE3.1) Effective January 1, st
2 2011 ~~and thereafter~~, the required reduction in use of potable water is 30 percent. (LEED®
3 LEED WE3.1)

4 1304C.2.2.45. Construction debris management. ~~Beginning ninety days after~~ Upon the
5 operative effective date of this chapter ordinance, permit applicants must submit
6 documentation to verify that diversion of at least 75 percent of ~~it's~~ the project's construction
7 debris was achieved. (LEED® LEED MR2.1)

8 1304C.2.2.56. Enhanced commissioning. Effective January 1, st 2010 ~~and thereafter~~,
9 a new building must ~~submit documentation to~~ achieve enhanced commissioning. (LEED®
10 LEED EA3.0)

11 ~~1304C.2.2.7. Stormwater management. Beginning 90 days after the effective date of~~
12 ~~this ordinance, permit applicants must submit documentation demonstrating achievement of~~
13 ~~the required stormwater management performance measures for buildings within those areas~~
14 ~~served by separate or combined sewers. These provisions are for stormwater quantity and~~
15 ~~quality are designed to meet or exceed the requirements of LEED SS6.1 and SS6.2.~~

16 ~~The performance measures required for developments within the areas served by~~
17 ~~separate sewers include the capture and treatment of:~~

- 18 a. ~~_____ The 85th percentile 24-hour event, determined as the maximized capture of~~
19 ~~stormwater volume, for the drainage area of concern; or~~
20 b. ~~_____ The volume of annual runoff based on a unit basin storage water quality~~
21 ~~volume, to achieve 80 percent or more volume treatment.~~

22 ~~The performance measures required for developments in the combined sewer areas~~
23 ~~shall capture or detain 80 percent or more of the annual runoff volume based on a unit basin~~
24 ~~storage volume and include:~~

25

- 1 a. ~~_____ a 25 percent reduction of the site runoff coefficient for water quality; and~~
2 b. ~~_____ the capture of 80 percent or more of the annual runoff volume based on a unit~~
3 ~~basin storage volume.~~

4 Further information on requirements of design and implementation of stormwater
5 performance measures is included in "The San Francisco Stormwater Design Guidelines."

6 1304C.2.2.68. Energy. Effective January 1, ~~st~~ 2012, ~~a new building permit applicants~~
7 must submit documentation to verify achievement of renewable on-site energy or purchase of
8 green energy credits in accord with LEED® LEED EA2 and EA6.

9 1304C.3. New Large Commercial Interiors and Major Alterations to Existing Buildings.

10 1304C.3.2.1. Rating requirement. ~~Beginning ninety days after the effective date of this~~
11 ~~ordinance~~ Effective January 1, 2009, permit applicants for such construction alterations to
12 ~~existing Large Commercial Buildings of 25,000 gross square feet or more or where interior~~
13 ~~finishes are removed and significant upgrades to structural and mechanical, electrical and~~
14 ~~plumbing systems are proposed~~, must submit documentation to achieve LEED® LEED
15 "Certified" Certification. Effective January 1, ~~st~~ 2009, 2010, and 2011, ~~the alterations~~
16 applicants must submit documentation to achieve a LEED® LEED Silver rating. Effective
17 January 1, ~~st~~ 2012, ~~the alterations~~ applicants must submit documentation to achieve a
18 LEED® LEED Gold rating.

19 1304C.3.2.2. Use of low-emitting materials. ~~Beginning ninety days after~~ Upon the
20 operative ~~effective~~ date of this chapter ordinance, permit applicants for alterations as
21 described in subsection 1304C.3.2.1 must submit documentation to verify the use of low-
22 emitting materials under LEED® LEED EQ4.1, 4.2, and 4.3.

1 1305C - Implementation. Rules and regulations regarding the implementation of this
2 chapter shall be detailed in an Administrative Bulletin to be prepared and issued by the
3 Department of Building Inspection.

4 1306C - Hardship or Infeasibility Exemption

5 1306C.1. Exemption. If a permit applicant for a project believes that circumstances
6 exist that make it a hardship or infeasible to meet fully the requirements of this chapter, the
7 applicant may apply to the Director for an exemption as set forth below. In applying for an
8 exemption, the burden is on the permit applicant to demonstrate hardship or infeasibility.

9 1306C.2. Application. A permit applicant seeking an exemption shall submit the
10 following information in support of the application:

11 1. the maximum number of credits or other compliance that the permit applicant
12 believes is practical or feasible

13 2. the circumstances that the permit applicant believes make it a hardship or
14 infeasible to comply fully with this chapter. Such circumstances may include, but are not
15 limited to, availability of markets for materials to be recycled, availability of green building
16 materials and technologies, and compatibility of green building requirements with other
17 regulations.

18 1306C.3. Granting an Exemption. If the Director determines that it is a hardship or
19 infeasible for the applicant to meet fully the requirements of this chapter based on the
20 information submitted with the application for an exemption, the Director shall determine the
21 maximum feasible number of credits or other compliance reasonably achievable for the
22 project and shall indicate this on the documentation submitted by the permit applicant. If an
23 exemption is granted, the permit applicant must achieve the number of credits or compliance

1 the Director determines to be achievable and shall comply with this chapter in all other
2 respects.

3 1306C.4. Exemption for Historic Structure. The Director shall grant an exemption for
4 an historic structure if the Director determines that compliance with certain requirements
5 would impair the structure's historic integrity. The historic structure shall comply with this
6 chapter in all other respects.

7 1306C.5. Denial of Exemption. If the Director determines that it is possible for the
8 application to meet fully the requirements of this chapter, the Director shall notify the permit
9 applicant in writing. The permit applicant must then submit all documentation required by
10 Section 1304C. If the applicant does not submit the documentation within the time period
11 required by Section 106A.3.7, or the documentation does not comply with the requirements of
12 Section 1304C, the Director shall disapprove the building permit.

13 1307C - Appeal. Determinations of the Director related to this chapter are appealable
14 to the Building Inspection Commission pursuant to the procedure set forth in Chapter 77 of the
15 San Francisco Administrative Code. Denial of a building permit is appealable to the Board of
16 Appeals pursuant to the procedure set forth in Section 8 et seq. of the San Francisco
17 Business and Tax Regulations Code.

18 1308C. Enforcement. The applicant's failure to build a project in accordance with
19 approved construction documents and plans shall be subject to the procedures governing
20 abatement of unsafe structures set forth in Section 102A of this Code. In addition, the Director
21 may require other reasonable green building measures to mitigate the failure to comply fully
22 with this chapter.

23 1309C. Conflict With Other Provisions of This or Other Codes. In the event that the
24 requirements of this chapter conflict with other provisions of this Code or the other codes
25

1 enforced by the Department of Building Inspection, the requirements of this chapter shall
2 apply and the more restrictive building design standards of this or the other codes shall
3 prevail.

4 1310C. Operative Date. This ordinance shall become operative 90 days after it is
5 adopted by the Board of Supervisors and signed by the Mayor. If, however, the California
6 Energy Commission has not approved the legislation by that time, this ordinance shall not
7 become operative until the Energy Commission has approved it.

8 Section 3. The Clerk of the Board of Supervisors is hereby directed to forward this
9 ordinance to the California Building Standards Commission upon final passage.

10

11 APPROVED AS TO FORM:
12 DENNIS J. HERRERA, City Attorney

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14 By: _____
15 JUDITH A. BOYAJIAN
16 Deputy City Attorney

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