

BOARD of SUPERVISORS



City Hall
1 Dr. Carlton B. Goodlett Place
Room 244
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May 12, 2016

SENT CERTIFIED MAIL (Return Receipt Requested)
ingrid.neumann@energy.ca.gov

Ingrid Neumann
California Energy Commission
Media and Public Communications Office
1516 Ninth Street, MS-29
Sacramento, CA 95814-5512

SUBJECT: Transmittal of San Francisco Green Building Code and Environment Code Amendments

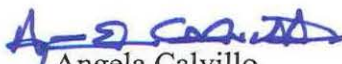
Dear Ingrid:

Pursuant to California Health & Safety Code Section 17958.7, enclosed please find a certified copy of the following legislation, sponsored by Supervisor Scott Wiener, which was finally passed by the Board of Supervisors of the City and County of San Francisco on April 26, 2016, and approved by the Mayor on May 6, 2016:

- **Ordinance No. 71-16 (File No. 160154)** – Ordinance amending the Green Building Code and the Environment Code to establish requirements for certain new building construction facilitating development of renewable energy facilities; updating provisions of the Green Building requirements for City buildings; setting an operative date of January 1, 2017; providing findings as to local conditions pursuant to the California Health and Safety Code; directing the Clerk of the Board of Supervisors to transmit the ordinance to appropriate State officials; and affirming the Planning Department's determination under the California Environmental Quality Act.

If you have any questions or require additional information, please contact Alisa Somera, Legislative Deputy Director, at (415) 554-7711 or by e-mail at: alisa.somera@sfgov.org.

Sincerely,


Angela Calvillo
Clerk of the Board

c: Supervisor Scott Wiener, Board of Supervisors
Barry Hooper, Department of the Environment
Kacia Brockman, Department of the Environment



City and County of San Francisco

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

Certified Copy

Ordinance

160154 **[Green Building, Environment Codes - Better Roof Requirements for Renewable Energy Facilities]**

Sponsors: Wiener; Breed and Farrell

Ordinance amending the Green Building Code and the Environment Code to establish requirements for certain new building construction facilitating development of renewable energy facilities; updating provisions of the Green Building requirements for City buildings; setting an operative date of January 1, 2017; providing findings as to local conditions pursuant to the California Health and Safety Code; directing the Clerk of the Board of Supervisors to transmit the ordinance to appropriate State officials; and affirming the Planning Department's determination under the California Environmental Quality Act.

4/19/2016 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

4/19/2016 Board of Supervisors - PASSED ON FIRST READING AS AMENDED

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

4/19/2016 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

4/26/2016 Board of Supervisors - FINALLY PASSED

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

5/6/2016 Mayor - APPROVED

STATE OF CALIFORNIA
CITY AND COUNTY OF SAN FRANCISCO

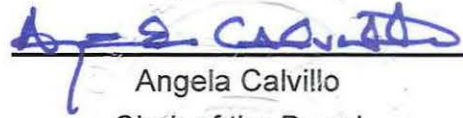
CLERK'S CERTIFICATE

I do hereby certify that the foregoing Ordinance is a full, true, and correct copy of the original thereof on file in this office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City and County of San Francisco.

May 12, 2016

Date



Angela Calvillo

Angela Calvillo
Clerk of the Board

1 [Green Building, Environment Codes - Better Roof Requirements for Renewable Energy
2 Facilities]

3 **Ordinance amending the Green Building Code and the Environment Code to establish**
4 **requirements for certain new building construction facilitating development of**
5 **renewable energy facilities; updating provisions of the Green Building requirements for**
6 **City buildings; setting an operative date of January 1, 2017; providing findings as to**
7 **local conditions pursuant to the California Health and Safety Code; directing the Clerk**
8 **of the Board of Supervisors to transmit the ordinance to appropriate State officials; and**
9 **affirming the Planning Department’s determination under the California Environmental**
10 **Quality Act.**

11 NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
12 **Additions to Codes** are in *single-underline italics Times New Roman font*.
13 **Deletions to Codes** are in *strikethrough italics Times New Roman font*.
14 **Board amendment additions** are in double-underlined Arial font.
15 **Board amendment deletions** are in ~~strikethrough Arial font~~.
16 **Asterisks (* * * *)** indicate the omission of unchanged Code
17 subsections or parts of tables.

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

19 Section 1. CEQA Findings. The Planning Department has determined that the actions
20 contemplated in this ordinance comply with the California Environmental Quality Act
21 (California Public Resources Code Sections 21000 et seq.). Said determination is on file with
22 the Clerk of the Board of Supervisors in File No. 160154 and is incorporated herein by
23 reference. The Board affirms this determination.

24 / / /

25 / / /

1 Section 2. General Findings.

2 (a) The California Building Standards Code is contained in Title 24 of the California
3 Code of Regulations, and consists of several parts that are based upon model codes with
4 amendments made by various State agencies. The California Green Building Standards
5 Code, also known as the CALGreen Code, is Part 11 of Title 24 of the California Code of
6 Regulations, and San Francisco has enacted the San Francisco Green Building Code as
7 amendments to the 2013 California Green Building Standards Code.

8 (b) Local jurisdictions are required to enforce the California Green Building Standards
9 Code but they may also enact more stringent standards when reasonably necessary because
10 of local conditions caused by climate, geology, or topography.

11 (c) The Building Inspection Commission considered the applicable sections of this
12 ordinance at a duly noticed public hearing on March 16, 2016. The Commission on the
13 Environment considered the applicable sections of this ordinance at a duly noticed public
14 hearing on March 22, 2016.

15
16 Section 3. Findings Regarding Local Conditions Required by the California Health and
17 Safety Code.

18 (a) California Health & Safety Code Section 17958.7 provides that before making any
19 changes or modifications to the California Green Building Standards Code and any other
20 applicable provisions published by the State Building Standards Commission, the governing
21 body must make an express finding that each such change or modification is reasonably
22 necessary because of specified local conditions, and the findings must be filed with the State
23 Building Standards Commission before the local changes or modifications go into effect.

1 (b) The Board of Supervisors expressly declares that the following amendments to the
2 San Francisco Green Building Code are reasonably necessary because of local climatic,
3 topological, and geological conditions as listed below.

4 (1) As a coastal city located on the tip of a peninsula, San Francisco is
5 vulnerable to sea level rise, and human activities releasing greenhouse gases into the
6 atmosphere cause increases in worldwide average temperature, which contribute to melting of
7 glaciers and thermal expansion of ocean water – resulting in rising sea levels.

8 (2) San Francisco is already experiencing the repercussions of excessive CO₂
9 emissions as rising sea levels threaten the City's shoreline and infrastructure, have caused
10 significant erosion, increased impacts to infrastructure during extreme tides, and have caused
11 the City to expend funds to modify the sewer system.

12 (3) Some people in San Francisco, such as the elderly, may be particularly
13 vulnerable to higher temperatures resulting from climate changes.

14 (4) Installing solar will help San Francisco meet its goals under
15 Ordinance No. 81-08, to have a greenhouse gas-free electric system by 2030 and to reduce
16 greenhouse gas emissions citywide to 40% below 1990 levels by 2025 and 80% by 2050.

17 (5) It is reasonably necessary to require building owners to take steps to reduce
18 the energy consumed by inefficient building operations and produce renewable, low-carbon
19 electricity, or capture solar heat, in order to reduce pollution, benefit biodiversity, improve
20 resilience to climate change by reducing localized heat islands, and reduce the global
21 warming effects of energy consumption.

22 (6) Installing solar heating or solar energy systems benefits the health, welfare,
23 and resiliency of San Francisco and its residents.

24 (c) Requiring solar water heating and/or solar photovoltaics at the time of new
25 construction is more cost-effective than installing the equipment after construction because

1 workers are already on-site, permitting and administrative costs are lower, and it is more cost-
2 effective to include such systems in existing construction financing. Based upon the findings
3 of a cost-effectiveness study performed on the more stringent local standards contained in the
4 City's proposed amendments to the 2013 San Francisco Green Building Code, the Board of
5 Supervisors hereby determines that these local energy standards are cost-effective and will
6 save more energy than the standards contained in the 2013 California Green Building
7 Standards (CALGreen) Code (Title 24 Part 11) and the 2013 California Energy Standards
8 (Title 24 Part 6). A copy of the cost-effectiveness study is on file with the Clerk of the Board of
9 Supervisors in File No. 160154.

10
11 Section 4. The Green Building Code is hereby amended by revising Sections 202 and
12 301.1, adding Sections 4.201.2 and 5.201.1.2, and deleting Sections 5.103.1.5 and 5.103.2.3,
13 to read as follows:

14 **SEC. 202. DEFINITIONS.**

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

18 HIGH-RISE RESIDENTIAL BUILDING. For the purposes of this code, a building that is
19 of Occupancy Group R and is four stories or greater.

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

24 LARGE COMMERCIAL BUILDING. A commercial building or addition of Group B, M,
25 A, or I occupancy that is 25,000 gross square feet or more.

1 LEED® and LEED® CHECKLIST. The Leadership in Energy and Environment Design
2 rating system, certification methodology, and checklist of the United States Green Building
3 Council (USGBC).

4 LOW-RISE RESIDENTIAL BUILDING. For the purposes of this code, a building that is
5 of Occupancy Group R and is three stories or less or that is a one or two family dwelling or
6 townhouse.

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

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

14 NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building
15 (or new construction) is a building that has never before been used or occupied for any
16 purpose and does not include additions, alterations or repairs.

17 NEW LARGE COMMERCIAL INTERIORS. First-time tenant improvements where
18 areas of such construction are over 25,000 gross square feet or more in Group B or M
19 occupancy areas of existing buildings.

20 NONRESIDENTIAL COMPLIANCE MANUAL. The document published by the California
21 Energy Commission to aid in compliance and enforcement of the Title 24 California Building Energy
22 Standards, for buildings of nonresidential occupancy and high-rise residential buildings.

23 RESIDENTIAL COMPLIANCE MANUAL. The document published by the California Energy
24 Commission to aid in compliance and enforcement of the Title 24 California Building Energy
25 Standards, for low-rise residential buildings.

1
2 **SEC. 301.1. SCOPE.**

3 Buildings in the City and County of San Francisco shall be designed to include the
4 green building measures specified as mandatory under the California Green Building
5 Standards Code (CalGreen).

6 Additional green building requirements established by the City and County of San
7 Francisco are mandatory for:

- 8 (1) Newly constructed Group R occupancy buildings,
9 (2) Newly constructed buildings of Group B, M, A, and I occupancies that are
10 25,000 gross square feet or more,
11 (3) New first-time build-outs of commercial interiors that are 25,000 gross
12 square feet or more in buildings of Group B or M occupancies, and
13 (4) Major alterations that are 25,000 gross square feet or more in existing
14 buildings of Group B, M or R occupancies, where interior finishes are removed and significant
15 upgrades to structural and mechanical, electrical and/or plumbing systems are proposed.

16 Exempt from additional local requirements of this chapter, unless otherwise noted, are:

- 17 (1) Any new building in which laboratory use of any occupancy classification is the
18 primary use, and
19 (2) Any building undergoing renovation in which the area of renovation will be primarily
20 for laboratory use of any occupancy classification.

21 (3) Any new building of Group B occupancy where electronic data processing an Internet
22 Service Exchange, as defined in Section 102 of the Planning Code, will be the primary function
23 use is exempt from the solar energy requirements of Section 5.201.1.2. All other relevant sections of
24 this code shall apply.
25

1 / / /

2 **SEC. 4.201.2. RENEWABLE ENERGY AND BETTER ROOFS**

3 (a) Newly constructed Group R occupancy buildings of 10 occupied floors or less and that
4 apply for a building permit on or after January 1, 2017 shall install solar photovoltaic systems and/or
5 solar thermal systems in the solar zone required by California Code of Regulations (CCR), Title 24,
6 Part 6 Section 110.10.

7 (b) The minimum solar zone area for the project shall be calculated under Title 24, Part 6,
8 Section 110.10(b) through (e), as applicable, and Residential Compliance Manual Chapter 7 or
9 Nonresidential Compliance Manual Chapter 9, as applicable, except as provided below.

10 (1) For single family residences, Exceptions 3 and 5 to Title 24, Part 6,
11 Section 110.10(b)1A may be applied in the calculation of the minimum solar zone area. Exceptions 1,
12 2, 4, 6, and 7 may not be applied in the calculation.

13 (2) For Group R Occupancy buildings other than single family residences,
14 Exceptions 3 and 5 to Title 24, Part 6, Section 110.10(b)1B may be applied in the calculation of the
15 minimum solar zone area. Exceptions 1, 2, and 4 may not be applied in the calculation.

16 (3) Buildings with a calculated minimum solar zone area of less than 150 contiguous
17 square feet due to limited solar access under Exception 5 to Title 24, Part 6, Section 110.10(b)1A or
18 Exception 3 to Title 24, Part 6, Section 110.10(b)1B are exempt from the solar energy requirements in
19 this Section 4.201.2.

20 (c) The sum of the areas occupied by solar photovoltaic collectors and/or solar thermal
21 collectors must be equal to or greater than the solar zone area. The solar zone shall be located on the
22 roof or overhang of the building, or on the roof or overhang of another structure located within
23 250 feet of the building or on covered parking installed with the building project. Solar photovoltaic
24 systems and solar thermal systems shall be installed in accord with: all applicable State code
25 requirements, including access, pathway, smoke ventilation, and spacing requirements specified in

1 CCR Title 24, Part 9; all applicable local code requirements; manufacturer's specifications; and the
2 following performance requirements:

3 (1) Solar photovoltaic systems: The total nameplate capacity of photovoltaic collectors
4 shall be at least 10 Watts_{DC} per square foot of roof area allocated to the photovoltaic collectors.

5 (2) Solar thermal systems: Single family residential solar domestic water heating
6 systems shall be OG-300 System Certified by either the Solar Rating and Certification Corporation
7 (SRCC) or the International Association of Plumbing and Mechanical Officials (IAPMO). Solar
8 thermal systems installed in all Group R occupancy buildings other than single family residences shall
9 use collectors with OG-100 Collector Certification by SRCC or IAPMO, shall be designed to generate
10 annually at least 100 kBtu per square foot of roof area allocated to the solar thermal collectors.
11 Systems with at least 500 square feet of collector area shall include a Btu meter installed on either the
12 collector loop or potable water side of the solar thermal system.

13
14 ~~**SEC. 5.103.1.5. RENEWABLE ENERGY.**~~

15 ~~Effective January 1, 2012, permit applicants must submit documentation verifying either:~~

16 ~~(1) Acquisition of renewable on-site energy or purchase of green energy credits in accord with~~
17 ~~LEED EA2 or EA6, or~~

18 ~~(2) Achieve a 10% compliance margin over Title 24 Part 6 2013 California Energy Standards.~~

19
20 ~~**SEC. 5.103.2.3 RENEWABLE ENERGY.**~~

21 ~~Effective January 1, 2012, permit applicants must submit documentation verifying that either:~~

22 ~~(1) Acquisition of renewable on-site energy or purchase of green energy credits in accord with~~
23 ~~LEED EA2 or EA6, or~~

24 ~~(2) In addition to meeting 5.103.2.5 Energy Performance requirement, achieve an additional~~
25 ~~10% compliance margin over Title 24 Part 6 (2013) California Energy Standards.~~

1
2 **SEC. 5.201.1.2. RENEWABLE ENERGY AND BETTER ROOFS**

3 (a) Newly constructed buildings of nonresidential occupancy that are of 10 occupied floors or
4 less, are 2000 square feet or greater in gross floor area, and apply for a building permit on or after
5 January 1, 2017 shall install solar photovoltaic systems and/or solar thermal systems in the solar zone
6 required by California Title 24, Part 6 Section 110.10.

7 (b) The required solar zone area for the project shall be calculated under California of
8 Regulations (CCR), Title 24, Part 6, Section 110.10(b) through (e) and Nonresidential Compliance
9 Manual Chapter 9, as applicable; provided, however that Exceptions 3 and 5 to Title 24, Part 6,
10 Section 110.10(b)1B may be applied in the calculation of the minimum solar zone area and Exceptions
11 1, 2, and 4 shall not be applied in the calculation. Buildings with a calculated minimum solar zone
12 area of less than 150 contiguous square feet due to limited solar access under Exception 3 are exempt
13 from the solar energy requirements in this Section 5.201.2.

14 (b) The sum of the areas occupied by solar photovoltaic collectors and/or solar thermal
15 collectors must be equal to or greater than the solar zone area. The solar zone shall be located on the
16 roof or overhang of the building, or on the roof or overhang of another structure located within 250
17 feet of the building or on covered parking installed with the building project. Solar photovoltaic
18 systems and solar thermal systems shall be installed in accord with all applicable state and local code
19 requirements, manufacturer's specifications, and the following performance requirements:

20 (1) Solar photovoltaic systems: The total nameplate capacity of photovoltaic collectors
21 shall be at least 10 Watts_{DC} per square foot of roof area allocated to the photovoltaic collectors.

22 (2) Solar thermal systems: Solar thermal systems installed to serve non-residential
23 building occupancies shall use collectors with OG-100 Collector Certification by the Solar Rating and
24 Certification Corporation (SRCC) or the International Association of Plumbing and Mechanical
25 Officials (IAPMO), shall be designed to generate annually at least 100 kBtu per square foot of roof

1 area allocated to the solar thermal collectors, and, for systems with at least 500 square feet of collector
2 area, shall include a Btu meter installed on either the collector loop or potable water side of the solar
3 thermal system.

4
5 Section 5. The Environment Code is hereby amended by adding Chapter 26,
6 consisting of Section 2601, to read as follows:

7 **CHAPTER 26: BETTER ROOF REQUIREMENTS**

8 **SEC. 2601. BETTER ROOF IMPLEMENTATION.**

9 (a) Purpose. The purpose of this Section 2601 is to track and support improvement of
10 requirements for newly constructed buildings which will increase the utility of rooftops by ensuring
11 development of renewable energy resources.

12 (b) The Department of the Environment shall:

13 (1) Review and propose technical requirements for rooftop photovoltaic and solar
14 thermal systems and their performance and components, where not otherwise governed by applicable
15 state or local codes. The Department of Building Inspection and the Planning Department may
16 contribute to the cost of technical support as well as the cost of public information programs
17 supporting the implementation of the Better Roof program.

18 (2) Recommend revisions to the Better Roof requirements of San Francisco Green
19 Building Code Sections 4.201.2 and 5.201.1.2 based on project data and other new information, to
20 support the City's goals for greenhouse gas emissions reduction, environmental justice, provision of
21 renewable energy, development of Zero Net Energy Buildings, biodiversity, and pollution prevention.

22 (c) Reporting. The Environment Director shall collaborate with the Department of Building
23 Inspection, the Department of Planning, and the Public Utilities Commission to prepare and publish an
24 annual report on the renewable energy resources developed in compliance with this Chapter 26, San
25

1 Francisco Green Building Code Section 4.201.2, and San Francisco Green Building Code
2 Section 5.201.1.2 et seq.

3
4 Section 6. The Environment Code is hereby amended by amending Section 706, to
5 read as follows:

6 **SEC. 706. SAN FRANCISCO-SPECIFIC LEED CREDIT REQUIREMENTS FOR**
7 **MUNICIPAL CONSTRUCTION PROJECTS.**

8 (a) As part of the LEED Gold certification requirement for municipal construction
9 projects, the projects must achieve the following LEED credits:

10 (1) Stormwater Management. The LEED Project Administrator shall submit
11 documentation verifying that a construction project that is located outside the City and County
12 of San Francisco achieves the LEED SS6.2 credit. Construction projects located within the
13 City and County of San Francisco shall implement the applicable stormwater management
14 controls adopted by the San Francisco Public Utilities Commission (the "SFPUC"). All
15 construction projects shall develop and implement construction activity pollution prevention
16 and stormwater management controls adopted by the SFPUC, and achieve LEED
17 prerequisite SSP1 or similar criteria adopted by the SFPUC, as applicable.

18 (2) Indoor Water Use Reduction. The LEED Project Administrator shall submit
19 documentation verifying a minimum 30% ~~percent~~ reduction in the use of indoor potable water,
20 as calculated to meet and achieve LEED credit WE3.2.

21 ~~(3) Energy Performance. Using an Alternative Calculation Method (ACM) approved by~~
22 ~~the California Energy Commission, the LEED Project Administrator shall calculate the project's~~
23 ~~energy use, and compare it to the standard or "budget" building to achieve LEED credit EA1 by either:~~

24 ~~(A) A 15 percent compliance margin over Title 24, Part 6, 2008 California~~
25 ~~Energy Standards; or,~~

1 (B) Document compliance with Title 24, Part 6, 2008 California Energy
2 Standards, including submittal of all standard documentation, and additionally demonstrate that the
3 project achieves a 15 percent or greater compliance margin over the ASHRAE 90.1 2007 energy cost
4 baseline using the published LEED 2009 rules. Such analysis shall include all on-site building energy
5 use, including exterior and security lighting, elevators, all process loads, and receptacle loads.

6 (3) (4) Renewable Energy. The LEED Project Administrator shall confer with
7 SFPUC on renewable energy opportunities for municipal construction projects, including
8 photovoltaics, solar hot water and wind power. ~~Space allocation and infrastructure for future
9 renewable energy installations shall be included in municipal construction projects, as advised by
10 SFPUC, including but not limited to structural capacity, wiring conduits, supply and return piping, and
11 control wiring.~~ The LEED Project Administrator shall submit documentation verifying that
12 either:

13 (A) The project meets LEED prerequisite EA 1 Energy Performance
14 requirement and demonstrates compliance with Title 24, Part 6 California Energy Standards in effect
15 at the time of the permit application; and, At least 1 percent of the building's energy costs are offset by
16 on-site renewable energy generation, achieving LEED credit EA 2, including any combination
17 of: photovoltaic, solar thermal, wind, biofuel based electrical systems, geothermal heating, geothermal
18 electric, wave, tidal, or low impact hydroelectric systems, or as specified in Section 25741 of the
19 California Public Resources Code; or,

20 (B) The project includes a combination of photovoltaic and/or solar thermal
21 area meeting the requirements of San Francisco Green Building Code Chapter 5, Division 5.2, or
22 demonstrates applicability of exceptions therein. In addition to meeting LEED prerequisite EA 1
23 Energy Performance requirement, achieve an additional 10 percent compliance margin over Title 24,
24 Part 6, 2008 California Energy Standards, for a total compliance margin of at least 25 percent.
25

1 ~~(4)~~ ~~(5)~~ Commissioning. The LEED Project Administrator shall submit
2 documentation verifying that the facility has been or will meet the criteria necessary to achieve
3 LEED credit EA 3.0 (Enhanced Commissioning), in addition to LEED prerequisite EAp1
4 (Fundamental Commissioning of Building Energy Systems.)

5 ~~(5)~~ ~~(6)~~ Enhanced Refrigerant Management. The LEED Project Administrator
6 shall submit documentation verifying that the project will reduce ozone depletion, while
7 minimizing direct contribution to climate change, achieving LEED credit EA 4.

8 ~~(6)~~ ~~(7)~~ Construction Debris Management. The LEED Project Administrator shall
9 submit documentation verifying the diversion of a minimum of ~~75%~~ ~~percent~~ of the project's
10 construction and demolition debris, as calculated to achieve LEED credit MR2.2. The project
11 must also satisfy the requirements of Section 708.

12 ~~(7)~~ ~~(8)~~ IAQ Management: During Construction. The LEED Project Administrator
13 shall submit documentation verifying that the sponsoring City department has prepared and
14 implemented an Indoor Air Quality Management Plan that achieves LEED credit EQ 3.1. This
15 requirement includes meeting or exceeding the recommended Control Measures of the Sheet
16 Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for
17 Occupied Buildings under Construction, 2nd Edition 2007, ANSI-SMACNA 008-2008
18 (Chapter 3).

19 ~~(8)~~ ~~(9)~~ IAQ Management: Before Occupancy. The LEED Project Administrator
20 shall submit documentation verifying that the sponsoring City department has prepared and
21 implemented an Indoor Air Quality Management Plan that achieves LEED credit EQ 3.2.

22 ~~(9)~~ ~~(10)~~ Low Emitting Materials. The LEED Project Administrator shall submit
23 documentation verifying that the project is using low-emitting materials, subject to onsite
24 verification, achieving LEED credits EQ 4.1. EQ 4.2. EQ 4.3. and EQ 4.4 wherever applicable:
25

1 (A) Adhesives, sealants and sealant primers shall achieve LEED credit
2 EQ 4.1. including compliance with South Coast Air Quality Management District (SCAQMD)
3 Rule #1168, amended January 7, 2005.

4 (B) Interior paints and coatings applied on-site shall achieve LEED credit
5 EQ 4.2. including:

6 (i) Architectural paints and coatings shall meet the VOC content
7 limits of Green Seal Standard GS-11 (1st Edition, 1993).

8 (ii) Anti-corrosive and anti-rust paints applied to interior ferrous
9 metal substrates shall not exceed the VOC content limit of Green Seal Standard GC-03 (2nd
10 Edition, 1997) of 250 g/L.

11 (iii) Clear wood finishes, floor coatings, stains, primers, and
12 shellacs applied to interior elements shall not exceed SCAQMD Rule 1113 (2004) VOC
13 content limits.

14 (C) Flooring systems shall achieve LEED credit EQ 4.3 Option 1.
15 including:

16 (i) Interior carpet shall meet the testing and product requirements
17 of the Carpet and Rug Institute Green Label Plus program.

18 (ii) Interior carpet cushioning shall meet the requirements of the
19 Carpet and Rug Institute Green Label program.

20 (iii) Hard surface flooring, including linoleum, laminate flooring,
21 wood flooring, ceramic flooring, rubber flooring, and wall base shall be certified as compliant
22 with the FloorScore standard, provided, however, that ~~100% percent~~ reused or ~~100% percent~~
23 post-consumer recycled hard surface flooring may be exempted from this LEED credit EQ 4.3
24 requirement. Projects exercising this exemption for hard surface flooring shall otherwise be
25 eligible (or LEED credit EQ 4.3.)

1 (D) Interior composite wood and agrifiber products shall achieve LEED
2 credit EQ 4.4 by containing no added urea formaldehyde resins. Interior and exterior
3 hardwood plywood, particleboard, and medium density fiberboard composite wood products
4 shall additionally meet California Air Resources Board Air Toxics Control Measure for
5 Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections.

6 (E) Project sponsors are encouraged to achieve LEED Pilot Credit 2:
7 Persistent Bioaccumulative Toxic Chemicals Source Reduction: Dioxins and Halogenated
8 Organic Compounds. This standard is consistent with Environment Code Chapter 5: Non-PVC
9 Plastics.

10 ~~(10) (11)~~ Indoor Chemical and Pollutant Source Control. The LEED Project
11 Administrator shall submit documentation verifying that the project will minimize and control
12 the entry of pollutants into buildings and later cross contamination of regularly occupied areas,
13 achieving LEED credit EQ 5.

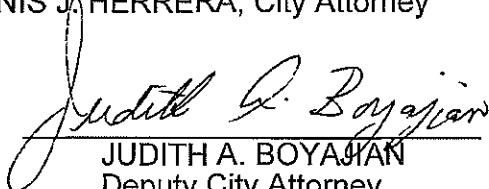
14
15 Section 7. Effective Date; Operative Date. This ordinance shall become effective 30
16 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor
17 returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it,
18 or the Board of Supervisors overrides the Mayor's veto of the ordinance. This ordinance shall
19 become operative on January 1, 2017.

20
21 Section 8. Transmittal to State Officials. The Clerk of the Board of Supervisors is
22 hereby directed to transmit this ordinance, upon enactment, to the California Building
23 Standards Commission for filing, pursuant to the applicable provisions of California law.

1 Section 9. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors
2 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,
3 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal
4 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment
5 additions, and Board amendment deletions in accordance with the "Note" that appears under
6 the official title of the ordinance.

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9 APPROVED AS TO FORM:
10 DENNIS J. HERRERA, City Attorney

11
12 By:


13 JUDITH A. BOYAJIAN
14 Deputy City Attorney

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City and County of San Francisco
Tails
Ordinance

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 160154

Date Passed: April 26, 2016

Ordinance amending the Green Building Code and the Environment Code to establish requirements for certain new building construction facilitating development of renewable energy facilities; updating provisions of the Green Building requirements for City buildings; setting an operative date of January 1, 2017; providing findings as to local conditions pursuant to the California Health and Safety Code; directing the Clerk of the Board of Supervisors to transmit the ordinance to appropriate State officials; and affirming the Planning Department's determination under the California Environmental Quality Act.

April 11, 2016 Land Use and Transportation Committee - RECOMMENDED

April 19, 2016 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

April 19, 2016 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

April 19, 2016 Board of Supervisors - PASSED ON FIRST READING AS AMENDED

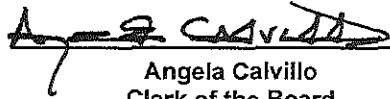
Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

April 26, 2016 Board of Supervisors - FINALLY PASSED

Ayes: 11 - Avalos, Breed, Campos, Cohen, Farrell, Kim, Mar, Peskin, Tang, Wiener and Yee

File No. 160154

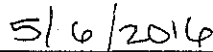
I hereby certify that the foregoing
Ordinance was FINALLY PASSED on
4/26/2016 by the Board of Supervisors of
the City and County of San Francisco.



Angela Calvillo
Clerk of the Board



Mayor



Date Approved