

**RESOLUTION NO. 3913**

**A RESOLUTION OF THE TOWN OF SAN ANSELMO TOWN COUNCIL  
ESTABLISHING GREEN BUILDING STANDARDS**

**WHEREAS**, the San Anselmo Town Council approved an ordinance amending the municipal code including; creating Chapter 19 Green Building Requirements; Amendments to Chapter 1 – Construction Codes of Title 9; Amending Chapter 12.16 (California Plumbing Code) to include a requirement for insulating hot water pipes when exposed during remodeling; Amending Chapter 12.12 (California Building Code) to include a requirement for installation of a radiant barrier during reroofing; and

**WHEREAS**, the San Anselmo General Plan 1989 promotes energy and resource efficiency in new construction and the 2007-2014 Preliminary Draft The Housing Element encourages the development of Green Building policies and programs for new residential development and existing residential units; and

**WHEREAS**, the San Anselmo 2005 Greenhouse Gas Emissions Analysis determined that of the four sectors studied (Residential, Commercial/Industrial, Transportation and Waste Generation) the residential sector produced the second highest quantity of emissions (34.2%) behind transportation (52.1%); and

**WHEREAS**, the California Global Warming Solutions Act of 2006, known as AB 32, established a statewide goal of reducing greenhouse gas emissions to 1990 levels by 2020 and to a level 80% below 1990 levels by 2050, and directs the California Air Resources Board to develop a strategy to achieve such reductions; and

**WHEREAS**, the California Air Resources Board adopted its Climate Change Scoping Plan on December 12, 2008, which identified the imposition of mandatory green building techniques as achieving 15% of the AB 32 greenhouse gas reduction goal for 2020; and

**WHEREAS**, the California Public Utilities Commission has adopted a goal of 40% improved energy efficiency in all buildings by 2020; and

**WHEREAS**, the San Francisco Bay Conservation and Development Commission has indicated that the level of San Francisco Bay has increased by 8 inches over the past century and projects that sea level will rise between 20 and 55 inches by 2100, which will inundate properties currently valued at over \$48 billion dollars cumulatively, will inundate over 700 miles of state and local roadways, and will require the installation of seawalls and levee increases costing over \$1 billion; and

**WHEREAS**, the United Nations Intergovernmental Panel on Climate Change has warned that failure to address the causes of global climate change within the next few years will result in significantly increasing sea levels and frequency of wildland fires and reduced freshwater resources, which will significantly increase the cost of providing local governmental services and protecting public infrastructure; and

energy use, 68% of total electricity consumption, 12% of total freshwater consumption, 40% of all raw materials used, and 38% of total carbon dioxide emissions; and

**WHEREAS**, the total energy consumption by residential dwelling units in Marin County increased from 619 million kWh to 734 million kWh (a 19% increase) from 1995 to 2000; and

**WHEREAS**, the California Health and Safety Code Sections 18938 and 17958 provide that the California Building Standards Code establishes building codes and standards for all building throughout the State, and Section 17958.5 provides that a local government may establish more stringent building standards if they are reasonably necessary due to local climatic, geological or topographical conditions; and

**WHEREAS**, California Assembly Bill 210 states that a city is authorized to change or modify green building standards if the California Building Standards Commission determines such changes are reasonably necessary because of local climatic, geological or topographical conditions, and Section 18941.5(2)(b) of the California Health and Safety Code states that, "neither the State Building Standards Law contained in this part, nor the application of building standards contained in this section, shall limit the authority of a city or county to establish more restrictive building standards, including, but not limited to, green building standards, reasonably necessary because of local climatic, geological, or topographical conditions;" and

**WHEREAS**, the Public Resources Code Section 25402.1(h)(2) states that a local enforcement agency may adopt more restrictive energy standards when they are cost-effective and approved by the California Energy Commission; and

**WHEREAS**, green building is a practice of design, construction and maintenance techniques that have been demonstrated to have a significant positive effect on energy, water and resource conservation, waste management and pollution generation and on the health and productivity of building occupants over the life of the building; and

**WHEREAS**, green building benefits are spread throughout the systems and features of a building. Green buildings can include, among other things, the use of certified sustainable wood products, extensive use of high-recycled-content products; recycling of waste that occurs during deconstruction, demolition and construction; orientation and design of a building to reduce the demand on the heating, ventilating, and air conditioning systems; the use of heating, ventilating, and air conditioning systems that provide energy efficiency and improved air quality; enhancement of indoor air quality by selection and use of construction materials that do not emit chemicals that are toxic or irritating to building occupants; the use of water conserving methods and equipment; and installation of alternative energy methods for supplemental energy production; and

**WHEREAS**, in recent years, green building design, construction and operational techniques have become increasingly widespread. Many homeowners, businesses, and building professionals have voluntarily sought to incorporate green building techniques into their projects. A number of local and national systems have been developed to serve as guides and rating systems for green building practices. The U.S. Green Building Council, developer of the Leadership in Energy and Environmental Design (LEED®) Green Building Rating Systems, has become a leader in promoting and guiding green building, particularly for non-residential structures. Build It Green has developed

the New Home, Existing Home and Multi-Family Green Building Guidelines and associated GreenPoints Calculators, which have been adopted for use in approximately 70 Bay Area jurisdictions; and

**WHEREAS**, it is estimated that construction of buildings in accordance with the GreenPoint Rated and LEED® rating systems results in average energy savings of approximately 20% compared with buildings constructed in accordance with current minimum standards of the state building code; and

**WHEREAS**, representatives of all municipalities within Marin County and of the county government participated in a collaborative effort known as the Marin Green BERST (Green Building, Energy Retrofit and Solar Transformation) Task Force, held meetings on June 11, July 13, September 29 and 30, and November 19, 2009 and endorsed a model green building ordinance recommended by a Technical Advisory Committee comprised of over 50 experts in the fields of architecture, building construction, green building, building energy systems, energy conservation, water conservation, building inspection, planning and real estate over the course of 11 meetings; and

**WHEREAS**, study sessions on the proposed model green building regulations were held by the San Anselmo Town Council on June 22, 2010 and by the San Anselmo Planning Commission on March 1, 2010, March 15, 2010, May 3, 2010 and a joint public workshop with the Council and the Commission was held on April 12, 2010; and

**WHEREAS**, on May 3, 2010 the San Anselmo Planning Commission conducted a public hearing and recommended adoption of the proposed Municipal Code amendments to the Town Council;

**NOW THEREFORE, BE IT RESOLVED** that the Town Council of the Town of San Anselmo adopts the following Standards for Compliance and Incentives for administration of Green Building regulations contained in Chapter 19 of the San Anselmo Municipal Code:

**Standards for Compliance**

All covered projects shall be constructed using the green building standards listed on Table A for residential projects and on Table B for non-residential projects.

**TABLE A**  
**GREEN BUILDING STANDARDS FOR**  
**RESIDENTIAL NEW CONSTRUCTION AND REMODELS**

<b>Project Type</b> <i>Residential New (RN)</i> <i>Residential Remodel (RR)</i>	<b>Covered Project</b>	<b>Rating System</b>	<b>Minimum Compliance Threshold</b>	<b>Energy Budget Below CA Title 24</b>	<b>Verification</b>
<b><u>Single-Family or Two-Family Residential: New Construction</u></b>					
<b>RN1</b>	500-2,499 sq. ft. (per unit)	GPR <sup>3</sup> New Home	75 points	15%	<i>Requires Independent Third Party Green Point Rater and Approved Certification from Build It Green<sup>1</sup></i>
<b>RN2</b>	2,500-3,999 sq. ft. (per unit)	GPR <sup>3</sup> New Home	100 points	15%	<i>Same as above (RN1)</i>
<b>RN3</b>	4,000-5,499 sq. ft. (per unit)	GPR <sup>3</sup> New Home	125 points	20%	<i>Same as above (RN1)</i>
<b>RN4</b>	5,500-6,999 sq. ft. (per unit)	GPR <sup>3</sup> New Home	150 points	30%	<i>Same as above (RN1)</i>
<b>RN5</b>	7,000+ sq. ft. (per unit)	GPR <sup>3</sup> New Home	200 points	Net zero energy	<i>Same as above (RN1)</i>
<b><u>Multi-Family Residential: New Construction</u></b>					
<b>RN6</b>	Less than 1,000 sq. ft. average unit size	GPR <sup>3</sup> Multi-Family	60 points	15%	<i>Same as above (RN1)</i>
<b>RN7</b>	1,000+ sq. ft. average unit size	GPR <sup>3</sup> Multi-Family	75 points	15%	<i>Same as above (RN1)</i>

**TABLE A  
GREEN BUILDING STANDARDS FOR  
RESIDENTIAL NEW CONSTRUCTION AND REMODELS (continued)**

Project Type Residential New (RN) Residential Remodel (RR)	Covered Project	Rating System	Minimum Compliance Threshold	Energy Budget Below CA Title 24	Verification
<b>Single-Family or Two-Family Residential: Remodels (including additions to existing buildings)</b>					
RR1	Less than \$50,000 valuation	n/a	<p>On plans submitted for building permit, indicate <b>at least two (2)</b> of the following measures, which shall be installed prior to final inspection:</p> <ul style="list-style-type: none"> <li>a. Install insulation on exposed hot water pipes in unconditioned areas(G1) <sup>2</sup>;</li> <li>b. Install radiant barrier when reroofing and removing/replacing more than 50% of the sheathing(J2);</li> <li>c. Install R-8 insulation wrap on heating and/or cooling ducts(H6);</li> <li>d. Install duct work under attic insulation(H6);</li> <li>e. Install R-36 or greater insulation in attic space of project area(J2);</li> <li>f. Install blow-in insulation in existing walls(J2);</li> <li>g. Install low-e or low-e<sup>2</sup> windows;</li> <li>h. Install one or more Energy Star ® appliances(M1-3);</li> <li>i. Install one or more low flow water fixtures(G3);</li> <li>j. Install one or more bathroom fans with a timer or humidistat(H9);</li> <li>k. Install a minimum of 20% recycled flyash and/or slag content cement in foundation work (B1);</li> <li>l. Install vapor barrier or foundation drainage system to control crawl space moisture (B3);</li> <li>m. Install engineered lumber(D2);</li> <li>n. Install FSC Certified Lumber(D3);</li> <li>o. Install a high efficiency furnace(H3);</li> <li>p. Install at least one Carbon Monoxide Alarm(H12);</li> <li>q. Apply low (&lt;50 g/L) or no (&lt;5 g/L) VOC (Volatile Organic Compounds) in paints and stains for interior walls and ceilings(K2);</li> <li>r. Install environmentally preferable materials for interior finishes (i.e. cabinets, shelving, doors, etc.)(K6)</li> </ul>	NA	Town of San Anselmo Plan Check

**TABLE A**  
**GREEN BUILDING STANDARDS FOR**  
**RESIDENTIAL NEW CONSTRUCTION AND REMODELS (continued)**

Project Type Residential New (RN) Residential Remodel (RR)	Covered Project	Rating System	Minimum Compliance Threshold	Energy Budget Below CA Title 24	Verification
<b>Single-Family or Two-Family Residential: Remodels (including additions to existing buildings)</b>					
RR2	\$50,000-\$99,999 valuation or less than 500 sq. ft. <sup>1</sup>	GPR <sup>3</sup> Existing Home	<ol style="list-style-type: none"> <li>1. Submit a completed GreenPoint Rated Existing Home Checklist and;</li> <li>2. Submit a completed HERSII or Building Performance Institute home performance audit and;</li> <li>3. On plans submitted for building permit, indicate <b>at least five (5)</b> of the following measures, which shall be installed prior to final inspection:               <ol style="list-style-type: none"> <li>a. Install Insulation on exposed hot water pipes in unconditioned areas(G1)<sup>2</sup>;</li> <li>b. Install radiant barrier when reroofing and removing/replacing more than 50% of the sheathing(J2);</li> <li>c. Install R-8 insulation wrap on heating and/or cooling ducts(H6);</li> <li>d. Install duct work under attic insulation(H6);</li> <li>e. Install R-36 or greater insulation in attic space of project area(J2);</li> <li>f. Install blow-in insulation in existing walls(J2);</li> <li>g. Install low-e or low-e<sup>2</sup> windows;</li> <li>h. Install one or more Energy Star ® appliances(M1-3);</li> <li>i. Install one or more low flow water fixtures(G3);</li> <li>j. Install one or more bathroom fans with a timer or humidistat(H9);</li> <li>k. Install a minimum of 20% recycled flyash and/or slag content cement in foundation work (B1);</li> <li>l. Install vapor barrier or foundation drainage system to control crawl space moisture (B3);</li> <li>m. Install engineered lumber(D2);</li> <li>n. Install FSC Certified Lumber(D3);</li> <li>o. Install a high efficiency furnace(H3);</li> <li>p. Install at least one Carbon Monoxide Alarm(H12);</li> <li>q. Apply low (&lt;50 g/L) or no (&lt;5 g/L) VOC (Volatile Organic Compounds) in paints and stains for interior walls and ceilings(K2);</li> <li>r. Install environmentally preferable materials for interior finishes (i.e. cabinets, shelving, doors, etc.)(K6)</li> </ol> </li> </ol>	NA	Town of San Anselmo Staff Plan Check

**TABLE A**  
**GREEN BUILDING STANDARDS FOR**  
**RESIDENTIAL NEW CONSTRUCTION AND REMODELS (continued)**

Project Type Residential New (RN) Residential Remodel (RR)	Covered Project	Rating System	Minimum Compliance Threshold	Energy Budget Below CA Title 24	Verification
<b>Single-Family or Two-Family Residential: Remodels (including additions to existing buildings)</b>					
RR3	\$100,000-\$149,999 valuation or 500-749 sq. ft. <sup>1</sup>	GPR Existing Home – Elements	25 points	NA	<ul style="list-style-type: none"> <li>• Requires at a minimum a licensed contractor or licensed architect to verify the minimum number of compliance threshold points               <ul style="list-style-type: none"> <li>○ Project does not require certification with Build It Green®</li> </ul> </li> </ul>
RR4	\$150,000-\$299,999 valuation or 750-999 sq. ft. <sup>1</sup>	GPR Existing Home – Elements	35 points	NA	Same as above (RR3)
RR5	\$300,000+ valuation or 1,000+ sq. ft. <sup>1</sup>	GPR Existing Home – Whole House	50 points + 20% improvement in HERSII or Building Performance Institute home performance audit results or a minimum HERSII score of 100	NA	Requires Independent Third Party Green Point Rater and Approved Certification from Build It Green

<sup>1</sup> Project valuation will be the primary determinate in establishing the Minimum Compliance Threshold for the project; however, when the valuation is uncertain or in the opinion of the building official does not accurately reflect the project scope then the square footage range of the area being modified will be used to determine the Minimum Compliance Threshold for the project.

<sup>2</sup> The letter and number at the end of each measure (i.e. (G1)) refers to the section in the Build It Green Existing Home Checklist.

<sup>3</sup> GPR - Build It Green GreenPoint Rated

**TAB E B:**

**GREEN BUILDING STANDARDS FOR  
COMMERCIAL NEW CONSTRUCTION AND RENOVATIONS**

<b>Project Type</b> <i>Commercial New (CN)</i> <i>Commercial Renovation (CR)</i>	<b>Covered Project</b>	<b>Rating System</b>	<b>Minimum Compliance Threshold</b>	<b>Energy Budget Below CA Title 24</b>	<b>Verification</b>
<b>Commercial New Construction (including additions to existing buildings):</b>					
<i>CN1</i>	2,000-4,999 sq. ft. of new floor area	LEED <sup>®1</sup> New Construction or Core & Shell	Checklist submittal + compliance with prerequisites		LEED <sup>®</sup> AP <sup>2</sup> with GreenPoint Rater or BPIC <sup>4</sup>
<i>CN2</i>	5,000-49,999 sq. ft. of new floor area	Same as Above (CN1)	LEED <sup>®1</sup> Silver	15%	LEED <sup>®</sup> AP <sup>2</sup> with GreenPoint Rater or BPIC <sup>4</sup>
<i>CN3</i>	50,000+ sq. ft. of new floor area	Same as Above (CN1)	LEED <sup>®1</sup> Gold	15%	United States Green Building Counsel Certified
<b>Commercial Renovations:</b>					
<i>CR1</i>	Less than \$250,000 valuation or 500-4,999 sq. ft. <sup>3</sup>	LEED <sup>®1</sup> Commercial Interiors or Operations & Maintenance	<b>Voluntary</b> compliance with both of the following prerequisites: A) WE P1 (Water Efficiency–Baseline Requirements only) B) EA P3 (Fundamental Refrigerant Management) for renovations of ≥50% of the building interior area <b>Voluntary</b> compliance with: A) EA C1.3 (Optimize Energy Performance – HVAC) for renovations of ≥50% of the building interior area		None
<i>CR2</i>	\$250,000 to \$5 million valuation or 5,000-24,999sq.ft. <sup>3</sup>	Same as Above (CR1)	Same as above, but mandatory instead of voluntary.		Town of San Anselmo Plan Check
<i>CR3</i>	More than \$5 million valuation or 25,000+ sq.ft. <sup>3</sup>	Same as Above (CR1)	LEED <sup>®1</sup> Silver		LEED <sup>®</sup> AP <sup>2</sup> with GreenPoint Rater or BPIC <sup>4</sup>

<sup>1</sup> LEED - Leadership in Energy and Environmental Design

<sup>2</sup> LEED AP Leadership in Energy and Environmental Design Accredited Professional

<sup>3</sup> Project valuations will be the primary determinate in establishing the Minimum Compliance Threshold for the project; however, when the valuation is uncertain or in the opinion of the building official does not accurately reflect the project scope then the square footage range of the area being modified will be used to determine the Minimum Compliance Threshold for the project.

<sup>4</sup> BPIC – Building Performance Institute Certification



**SOLAR ELECTRIC SYSTEMS**

A solar photovoltaic (PV) energy system may be used to meet the Energy Budget Below CA Title 24 Part 6 requirements of this resolution which exceed 15%. To qualify for energy credits, the PV energy system must be capable of generating electricity from sunlight, supply the electricity directly to the building and the system is connected, through a reversible meter, to the utility grid. The installation of any qualifying PV energy system must meet all installation criteria contained in the California Energy Commission's Guidebook "Eligibility Criteria and Conditions for Incentives for Solar Energy Systems." The methodology used to calculate the energy equivalent to the PV credit shall be the CECPV Calculator, using the most recent version, provided by the California Energy Commission.

**EXCEPTIONS**

The following shall not be included as Covered Projects:

- 1. Buildings which are temporary.
- 2. Building area which is not or is not intended to be conditioned space.
- 3. Any requirement which would impair the historic integrity of any building listed on a local, state or federal register of historic structures.

The following shall not be included in project valuation:

- 1. Improvements primarily intended for seismic upgrades or required disabled access.
- 2. Installation of renewable energy systems.

The foregoing Resolution No. 3913 was approved at a Regular Meeting of the Town Council of the Town of San Anselmo, California, held on the 22nd day of June, 2010 and ordered passed to print by the following vote, to wit:

AYES: Councilmembers: Coleman, Greene, McInerney, Thornton

NOES: Councilmembers: Kroot

ABSENT: Councilmembers: None

*Barbara Thornton*

Barbara Thornton, Mayor

ATTEST:

*Barbara Chambers*  
Barbara Chambers, Town Clerk