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Municipality:	City of Boulder
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Title:	City of Boulder Green Building and Green Points Program
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Abstract

The City of Boulder, Colorado, just 25 miles northwest of Denver, lies within Boulder Valley east of Rocky Mountain National Park. Boulder is known for its outdoor activities, including cycling and running, and has earned a reputation as “green” city due to the City’s walkability, transit oriented development, green building techniques, and overall aesthetically pleasing design. The Green Points Program (“Green Points”), created in 1996, was the first mandated municipal residential dwelling building code in the country. Boulder’s green building practices are a response to several issues, including energy and climate change, protection of natural resources, and educating the Boulder community about sustainable construction.

Boulder’s green building code requirements are mandatory for all new construction, remodels, or additions to residential structures, including single-unit dwellings, multi-unit dwellings, and dwellings within mixed use developments. Residential dwellings are divided into groups based on square footage, and each group has a minimum Green Point requirement ranging from twenty to sixty points. For example, new buildings between 3,001 to 5,000 square feet must achieve 40 Green Points in the resource conservation category, where one green point is awarded for each HERS rating score below the HERS index rating requirement. These 40 Green Points can be achieved by various methods, including 3 points for a site that is greater than 90% permeable surface (for example, less pavement) and up to 10 points for sufficiently insulated windows. Energy star appliances can also yield up to 6 points, including 2 points for an energy star refrigerator. The Green Points Program employs several unique techniques outside of energy efficiency practices including material use (Forest-Stewardship-Council-certified wood), waste management and high-efficiency fixtures. Exemptions from the Green Points requirements are given to buildings that will, upon construction, be Leadership in Energy and Environmental Design (LEED) Silver certified. The city manager is also enabled to make reasonable interpretations with respect to modifications to meeting the Green Points requirements.

The ordinance includes minimum energy efficiency standards that are derived from and set to exceed the city’s Energy Conservation and Insulation Code (IECC), and these standards are also based on the size of a building or unit. For example, new buildings from 3,001 to

5,000 square feet must demonstrate an energy efficiency level that is 50% more energy efficient than the standards in the IECC from 2006. Additionally, Boulder's code mandates sustainable practices in the construction phase with respect to deconstruction materials, reuse and waste management, and recycling.

Resource

ORDINANCE NO. 7565

AN ORDINANCE AMENDING TITLE 10, B.R.C. 1981, BY ADDING CHAPTER 10-7.5, "GREEN BUILDING AND GREEN POINTS PROGRAM"; REPEALING SUBSECTION 10-5.5.2(y) AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. Title 10, B.R.C. 1981, is amended by repealing Subsection 10-5.5-2(y), "Resource Conservation – Green Points and replacing it with the addition of a new Chapter 10-7.5, "Green Building and Green Points Program" to read:

TITLE 10 STRUCTURES

Green Building and Green Points Program

REVISED CODE OF BOULDER, COLORADO

TITLE 10: STRUCTURES

Chapter 10-7.5: Green Building and Green Points Program

§ 10-7.5-1 to § 10.7.5.-7

§ 10-7.5-1 Legislative Intent and Purpose.

The purpose of this chapter is to protect the public health safety and welfare by regulating residential construction with the intent to conserve energy, water and other natural resources, preserve the health of our environment through optional and mandatory requirements related to design, construction, operations, recycling, and deconstruction This chapter has the following additional purposes:

(a) It provides criteria for rating the environmental performance of residential construction practices and provides guidelines for documentation that demonstrates conformance with the criteria;

(b) It encourages cost-effective and sustainable residential building methods, by encouraging conservation of fossil fuels, water and other natural resources, reduction of greenhouse gas emissions, recycling of construction materials, reducing solid waste and improving indoor air quality;

(c) It identifies the specific requirements for complying with the Green Points Program and how the program interfaces and exceeds the 2006 International Energy Conservation Code adopted in Chapter 10-7, "Energy Conservation and Insulation Code," B.R.C. 1981;

(d) It includes mandatory green building requirements to ensure that construction waste and deconstruction materials are recycled, reused, or otherwise diverted from landfills, and minimum requirements to ensure that dwellings are constructed in an efficient manner; and

(e) It includes provisions intended to provide for joint administration with the processing of building permits for remodeling, adding on, and constructing dwelling units.

§ 10-7.5-2 Scope and Administration.

(a) Scope.

The provisions of this chapter apply to the following:

(1) New construction, remodels, or additions to a dwelling, including without limitation single-unit dwellings, multi-unit dwellings, and dwellings within mixed use developments.

(2) Any two or more building permits for the same structure that are applied for in any 12 month period shall be considered as one application for the purpose of meeting the requirements of Sections 10-7.5-3, "Mandatory Green Building Requirements" and 10-7.5-4, "Resource Conservation – Green Points," B.R.C. 1981.

(3) The requirements of this chapter shall apply to construction activities of all types of dwellings unless the context clearly indicates otherwise.

(4) The requirements of this chapter are in addition to and do not replace the requirements within the Boulder Revised Code, including without limitation all of the life safety codes, the historic preservation ordinance, the land use code and the City of Boulder Design and Construction Standards.

(b) Administration.

The Green Points Program shall be administered applied, and interpreted in accordance with Chapter 1, "Administration," Chapter 2, "Definitions," of the International Building Code (IBC) and the International Residential Code (IRC) as adopted with amendments by Sections 10-5-2, "Adoption of International Building Code with Modifications," and 10-5.5-2, "Adoption of International Residential Code with Modifications," B.R.C. 1981.

(c) Inspection and Compliance.

No person shall fail to comply with the requirements of this chapter. No person shall construct in violation of a Green Points approval. All approvals and inspections of Green Point's applications and requirements shall be done in conjunction with a residential building permit application and field inspections. An application shall be made on a form that is approved by the city manager. The applicant shall demonstrate compliance with all of the provisions of this chapter prior to the issuance of a certificate of occupancy by the city manager.

(d) Exceptions.

Any structure that includes dwellings that are pursuing a U.S. Green Building Council's LEEDT (Leadership in Energy and Environmental Design) Silver Certification or comparable green building rating certification or higher will be exempt from the Green Points requirements. No person that applies for this exception shall fail to complete the LEEDT certification process and receive such certification within six months after the final inspection on the building permit. The city manager may grant an extension to this time period if a request is made by the applicant and the applicant demonstrates a good cause as to why additional time is needed to complete the certification.

§ 10-7.5-3 Mandatory Green Building Requirements.

(a) Energy Efficiency – New Dwelling Units.

An applicant for a building permit for each new dwelling shall demonstrate that the building is more energy efficient than a building that meets the minimum requirements of Chapter 10-7, "International Energy Conservation and Insulation Code," B.R.C. 1981. Table 1 lists the minimum energy efficiency requirements.

TABLE 1A - Tiers for Energy Efficiency Thresholds

Type of Project	Square Footage	Energy Efficiency Thresholds Above Code
New Construction	Up to 3,000	30 percent more energy efficient than 2006 IECC
New Construction	3,001-5,000	50 percent more energy efficient than 2006 IECC
New Construction	5,001 and up	75 percent more energy efficient than 2006 IECC
Multi-Unit Dwellings	Applies to all	30 percent more energy efficient than 2006 IECC

(b) Thresholds for Application of New Construction Standards to Entire Building as the Result of an Addition.

Any addition which meets any of the thresholds described below will require that the conditioned floor area of the entire building be upgraded to meet new construction standards for energy efficiency in Subsection 10-7.5-3(a), B.R.C. 1981.

(1) The addition is 100 percent or more than the conditioned floor area of the existing dwelling unit and the dwelling unit will have a total conditioned floor area after the addition to the dwelling unit that is up to 3,000 sq. ft in size.

(2) The addition is 50 percent or more than the conditioned floor area of the existing dwelling unit and the dwelling unit will have a total conditioned floor area after the addition to the dwelling unit that is from 3,001 to 5000 sq. ft in size.

(3) The addition is 25 percent or more than the conditioned floor area of the existing dwelling unit and the dwelling unit will have a total conditioned floor area after the addition to the dwelling unit that is over 5001 sq. ft in size.

(c) Energy Efficiency – Additions and Remodels.

An applicant for a building permit for a remodel or an addition to a dwelling that does not exceed the thresholds in subsection (b) above shall demonstrate that it meets the energy efficiency requirements of this section. A building permit for an addition to or a remodel of a dwelling unit shall meet one of the following standards:

(1) Requirement if upgrading the energy efficiency of the entire structure. The applicant may demonstrate that the entire building meets the HERS requirements that are described in Table 1B below; or

(2) Requirement for the new addition or the area of the house that is subject to a remodel. The applicant may demonstrate that the addition or the area of the building subject to a remodel meets the requirement of the IECC for the remodel area or addition as described in Table 1B below. Building permits under this requirement shall also meet the following:

(A) Complete a blower door test before application for the building permit to determine whether the building has a fresh air infiltration rate of no more than 0.5 natural air changes per hour (NACH) compliance rating. If this standard is exceeded, then the applicant shall meet the requirement of paragraph (B).

(B) Improve, repair and seal the dwelling unit, verified by a subsequent blower door test and prior to a certificate of occupancy or completion that demonstrates that:

(i) for buildings that had an air infiltration rate of 1.0 NACH or greater, then the building shall have a NACH 50 percent or less than the original blower door test,

(ii) for all other buildings, the building has an air infiltration rate of not greater than 0.5 NACH compliance rating.

TABLE 1B - Tiers for Energy Efficiency Thresholds

Total Conditioned Area	HERS Rating	Increased efficiency above the IECC
Up to 3,000	100	15 percent
3,001 – 5,000	85	30 percent
5,001 and up	70	50 percent

(3) Remodels – Limitations. A remodel that does not substantially remove the interior finish of the thermal envelope of the conditioned space is not required to meet the energy efficiency requirements of Table 1B.

(d) Compliance with Energy Efficiency Requirements.

A dwelling that is required to meet the energy efficiency requirements for new construction shall demonstrate that it meets such standard by:

(1) Using the Home Energy Rating System (HERS). The HERS rating will be used for the verification of energy performance of new construction. A HERS rating shall be performed by a rater accredited by the Residential Energy Services Network (RESNET);

(2) For multidwelling projects, through a HERS rating sampling protocol authorized and approved by the city manager; or

(3) For multidwelling projects, by demonstrating that the energy efficiency has been achieved by using the methodology in section 404, "Simulated Performance Alternative" or section 506, "Total Building Performance" of the 2006 International Energy Conservation Code.

(e) Energy Audit.

An applicant for a building permit for an addition to a dwelling or a remodel of a dwelling shall be required to obtain an energy audit. The applicant shall provide proof of the completion of the energy audit with a building permit application. The energy audit of the house shall quantify the annual energy performance of the building according to generally accepted standards for energy audits approved by the city manager. An energy audit or an optional HERS rating report will indicate how efficiently the building is operating and where inefficiencies are occurring.

(f) Lighting Efficiency.

Prior to final inspection for an addition to a dwelling or a remodel of a dwelling the applicant shall install energy efficient lamps (light bulbs) with a luminous efficacy of 40 lumens per watt or above in at least 50 percent of the existing home's light fixtures.

(g) Direct Vent Furnace.

When the scope of the work of an addition to a dwelling or a remodel of a dwelling requires replacement of a furnace, the furnace shall be replaced with a direct vent unit that has a minimum 90 percent AFUE.

(h) Direct Vent Boiler.

When the scope of the work of an addition to a dwelling or a remodel of a dwelling requires replacement of a boiler, the boiler shall be replaced with a direct vent unit that has a minimum 85 percent AFUE.

(i) Construction Waste Recycling.

An applicant for a building permit for a new dwelling or an addition to a dwelling shall demonstrate that a minimum of 50 percent of construction waste is recycled. Waste diversion calculations and tracking spreadsheet form must be provided at project completion which shows that the minimum recycling requirements have been met. No person shall fail to complete the diversion calculations and tracking spreadsheet or recycle construction waste as required by this section.

(j) Demolition Management.

An applicant proposing to demolish the dwelling, as that term is defined in Section 10-7.5-7, "Definitions," B.R.C. 1981, shall demonstrate through a deconstruction plan that at least 65 percent of material by weight from deconstruction of the existing structure, including concrete and asphalt, will be diverted from the landfill. Verification of deconstruction plan compliance must be provided prior to final inspection. No person shall fail to follow or otherwise implement an approved deconstruction plan.

§ 10-7.5-4 Resource Conservation – Green Points.

(a) Schedule for Green Points.

Residential building permit applicants are required to earn green points according to the schedule in Table 2. An applicant proposing to increase the floor area of the existing building pursuant to Subsection 10-7.5-3(b), "Thresholds for Application of New Construction Standards to Entire Building as the Result of an Addition," B.R.C. 1981, shall be required to earn the amount of green points required for the new construction of a new dwelling of the same size as the existing dwelling with such addition.

TABLE 2 - Green Points Req

Project Description Square Footage Thresholds Green Point Requirements ,

New construction of single unit dwellings 1,501-3,000

20

New construction of single unit dwellings 3,001-5,000

40

New construction of single unit dwellings 5,001 and up 60

Additions to a dwelling	500-1,000	15
Additions to a dwelling	1,001-2,000	20
Additions to a dwelling	2,001-3,000	30
Additions to a dwelling	3,001 and up	45
Interior remodels of a dwelling	500-1,000	10
Interior remodels of a dwelling	1,001-2,000	15
Interior remodels of a dwelling	2,001-3,000	20
Interior remodels of a dwelling	3,001 and up	30
Multi-unit Dwellings: final tenant finish of a unit in a multi-unit dwelling	1,001-2,000	10
Multi-unit Dwellings: final tenant finish of a unit in a multi-unit dwelling	2,001-3,000	20
Multi-unit Dwellings: final tenant finish of a unit in a multi-unit dwelling	3,001 and up	30

(b) Site Development.

(1) Landscaping.

(A) Organic Soil Amendments: 2 points.

(B) Xeriscape Landscaping: 1-4 points.

(i) Reduce turf areas to a minimum: 1 point.

(ii) All planting beds mulched with wood chips at least 3" deep: 1 point.

(iii) Appropriate use of xeric (low-water-demand) plants grouped by water needs: 1 point.

(iv) Zoned Irrigation System: 1 point.

(2) Shading of Hardscapes.

(A) Preserve Existing Mature Trees on Site: Up to 5 Points (1 Point per tree)

(B) Plant Shade Trees: Up to 5 Points (1 Point per tree)

(3) Surface Water Management - Permeable Sites: 1-4 Points. Points are awarded according to the following:

Percentage of Site that is Permeable	Points
> or equal to 50%	1
> or equal to 75%	2
> or equal to 90%	3
100%	4

(4) High-Efficiency Automatic Irrigation: Up to 2 points. Points are awarded according to the following:

(A) 75% Efficiency Rating: 1 point

(B) 95% Efficiency Rating: 2 points

(c) Building Rehabilitation:

Up to 10 points. Points are awarded according to the following:

(1) Complete and appropriate rehabilitation and/or retrofitting of windows and doors: up to 3 Points. .5 point for each window.

(2) Storm System: up to 2 points. Installation of appropriate interior or exterior storm systems. .5 point for each window.

(3) The property is a contributing building within a historic district or designated as an individual landmark pursuant to Chapter 9-11, "Historic Preservation," B.R.C. 1981: 5 points.

(d) Waste Management.

(1) Reuse Existing Building: Up to 5 points. Incorporate portions of existing structures in remodel and addition projects according to the following:

(A) Save 50% of exterior walls (external sheathing and framing): 3 points

(B) Save 75% of exterior walls (external sheathing and framing): 5 points

(2) Remodels, Additions, and Demolition: Up to 3 points. Green points will be awarded on waste diversion on existing buildings (additions, remodels, or complete demolitions)

classified as an "entire structure" on a demolition permit) beyond the mandatory waste diversion requirements. Points will be awarded for additional diversion according to the following:

(A) 75% deconstruction material diverted from landfills: 2 points

(B) 85% deconstruction material diverted from landfills: 3 points

(3) New Construction Waste Recycling: Up to 3 points. Green points will be awarded on waste diversion beyond the mandatory waste diversion requirements. Points will be awarded according to the following:

(A) 75% waste material diverted from landfills: 2 points

(B) 85% waste material diverted from landfills: 3 points

(e) Energy Efficiency.

(1) Insulation. Points will be awarded according to the following:

(A) Minimum R-19 cavity plus R-5 sheathing wall insulation: 2 points.

(B) Minimum R-49 ceiling: 2 points.

(C) Exterior minimum R-10 insulation installed for the full height of a basement or foundation wall: 2 Points

(D) Insulated Pre-cast Concrete Foundation: 2 points

(E) Insulated Concrete Forms: 2 points

(2) Windows: Up to 10 points. New windows or replacement windows installed as part of a remodel or an addition. Points will be awarded as follows:

(A) National Fenestration Rating Council (NFRC): Up to 5 points. Rated Window with Maximum U Value of 0.34 or lower: .5 point for each window, up to 5 points.

(B) NFRC Rated Window with Maximum Solar Heat Gain Coefficient (SHGC) of 0.55: .5 point for each window, up to 5 points. Exception: South facing glass.

(3) Air Sealing of an Existing Building. Points will be awarded when a HERS rating is applied to the existing structure preconstruction, then a post rating after construction showing:

(A) Ten percent net increase in initial HERS rating*: 2 points

(B) No net increase in initial HERS rating*: 3 points

(C) Decrease in initial HERS rating*: 5 points

*Because of the variability of existing construction, projecting the final HERS rating can be difficult and planning for contingencies if the planned HERS rating is not achieved should be done.

(4) Heating, Ventilation and Air Conditioning (HVAC) Systems. Points will be awarded according to the following:

(A) HVAC Commissioning: 3 points. Testing for duct leakage, firing rate, and refrigerant charge.

(B) Ground Source Heat Pump: Up to 10 points. Points will be awarded according to the following:

(i) 30-39% calculations from a heating/cooling load bin analysis: 4 points

(ii) 40-49% calculations from a heating/cooling load bin analysis: 6 points

(iii) 50-59% calculations from a heating/cooling load bin analysis: 8 points

(iv) 60-69% calculations from a heating/cooling load bin analysis: 10 points

(C) Direct Vent Combination Space/Water Heating System: 2 points

(D) Zoned, Hydronic Radiant Heating: 2 points

(E) Passive Cooling: 2-5 points (one point per item). Points will be awarded for passive cooling systems using any two or more of the techniques described below:

(i) Exterior vertical shading devices for east and west facing glass.

(ii) Reflective films or glass on east and west facing windows.

(iii) Radiant, heat-reflective barriers installed in the attic space.

(iv) Landscaping that shades east and west-facing glazing during the cooling season (June to September).

(v) South window overhang sized to effectively shade the window during the cooling season (June to September)

(F) Whole House Fan: 2 points

(G) Evaporative Cooling: 3 points

(5) Water Heater.

(A) Tank-less Water Heater: 2 points

(B) Point-of-Use Water Heater: 2 points

(6) Lighting, Appliances, and Electricity.

(A) ENERGY STAR Advanced Lighting Package (ALP): 5 Points. The ALP shall meet the following minimum specifications.

High-Use Rooms Kitchen, Dining Room, Living Room, Family Room, Bathroom(s),
Hall(s)/Stairways 50% of Total Number of Fixtures

Medium/Low-Use Rooms Bedroom, Den, Office, Basement, Laundry Room, Garage,
Closet(s) and all other rooms 25% of Total Number of Fixtures

Outdoor Outdoor Lighting Affixed to the structure or Free-Standing Pole(s), Except for
landscape and solar lighting 50% of Total Number of Fixtures including all flood lighting

(B) Efficient Light Controls: Up to 2 points. Efficient lighting controls include occupancy sensors, dimming controls, and automatic daylight dimming controls.

(i) 4 control devices: 1 point

(ii) 6 control devices: 2 points

(C) Energy-Efficient Appliances: Up to 6 Points. Points are awarded according to the following:

(i) ENERGY STAR rated refrigerator: 2 points

(ii) ENERGY STAR rated clothes washer: 2 points

(iii) ENERGY STAR rated freezer: 1 point

(iv) ENERGY STAR rated dishwasher: 1 point

(f) Solar.

(1) Passive Solar Heating Design: 6-12 points. Design with passive solar heating elements of south facing glazing, appropriate thermal mass and building overhangs.

(A) 40-49% verifying calculations of the solar heat gain fraction: 6 points

(B) 50-59% verifying calculations of the solar heat gain fraction: 8 points

(C) 60-69% verifying calculations of the solar heat gain fraction: 10 points

(D) >70% verifying calculations of the solar heat gain fraction: 12 points

(2) Solar Thermal Domestic Hot Water System: 8 points. Systems must be sized to provide at least 50% of the domestic hot water load.

(3) Solar Thermal Space Heating or Pool/Spa System: 3 points. Systems must be designed to offset a minimum of 15% of the annual space heating or pool or spa load.

(4) Pre-Plumb for Solar Thermal System Retrofit: 2 points.

(5) Active Solar Electric System: 6-12 points. Design and install an active solar (photovoltaic) system to meet the electrical load of the building according to the following schedule:

(A) 30-39% solar electricity or equivalent to 2 KW system: 6 Points

(B) 40-49% solar electricity or equivalent to a 3 KW system: 8 Points

(C) 50-59% solar electricity or equivalent to a 4 KW system: 10 Points

(D) >60% solar electricity or equivalent larger than 5 KW system: 12 Points

(6) Pre-Wire for Future Solar Electric Installation Retrofit: 2 points.

(g) Water Efficiency.

High Efficiency Fixtures: 2-6 Points. Points will be awarded for installation of high efficiency (low flow) fixtures follows:

(1) 25% of all fixtures: 2 points

(2) 50% of all fixtures: 4 points

(3) 75% of all fixtures: 6 points

(h) Material Efficient Framing and Structure.

(1) Advanced Framing Techniques: Up to 10 points. Points will be awarded as follows:

(A) 24" On-Center Framing: 2 points

(B) Insulated Headers: 2 points

(C) Energy Efficient Roof Trusses: 2 points

(D) HVAC Ducts Within Conditioned Spaces: 2 points

(E) Minimum 12-inch Roof Overhangs: 2 points

(2) Structural Insulated Panels (SIPs): Up to 8 points. Points will be awarded as follows:

(A) At least 50% of exterior walls: 5 points

(B) At least 50% of exterior walls and roof: 8 points

(3) Structural Alternatives to Wood: Up to 8 points. Points will be awarded as follows:

(A) At least 50% of exterior walls: 5 points

(B) At least 50% of exterior walls and roof: 8 points

(i) Sustainable Products.

(1) FSC-Certified Tropical Woods or No Tropical Wood: Up to 6 Points. Points will be awarded as follows:

(A) 2 BF of FSC lumber per SQ/FT of floor area (2 BF/SQ. FT.): 2 points

(B) 3 BF of FSC lumber per SQ/FT of floor area (3 BF/SQ. FT.): 4 points

(C) 50% or more of dimensional lumber in total BF is FSC, excluding engineered wood products: 6 points

(2) Environmentally Preferred Materials: Up to 10 Points. Points will be awarded environmentally preferred materials as follows:

(A) Recycled content: 2 points

(B) Reclaimed: 2 points

(C) Bio-based: 2 points

(D) Agricultural residue: 2 points

(E) Low or no Volatile Organic Compounds (VOCs) emissions: 2 points

(3) Locally Sourced Materials: Products that are environmentally preferable and/or extracted, processed, and manufactured within 500 miles of the city are considered local. A maximum of 1.5 points can be earned for any single component listed in the Environmentally Preferable Products Chart regardless of the amount by which a minimum performance threshold is exceeded. A "recycled content" product must contain a minimum of 25% post-consumer recycled content except as noted otherwise above. Post industrial (pre-consumer) recycled content is counted at half the rate of post-consumer content. Points will be awarded as shown on the Environmentally Preferable Products Chart below:

(j) Indoor Air Quality.

(1) ENERGY STAR's Indoor Air Quality Package Requirements: 10 points

(2) Mechanical Ventilation: Up to 5 Points. Points will be awarded as follows:

(A) Installation of a kitchen exhaust fan: 1 point

(B) Bath exhaust fans with timer or humidistat controls: 1 point

(C) Ventilation integrated in the HVAC system: 1 point

(D) Incorporating Heat Recovery Ventilation: 2 points

(3) High Efficiency HVAC Filter: 1 point

(4) Radon Mitigation: Up to 2 Points. Points will be awarded as follows:

(A) Passive System: 1 point

(B) Active System: 2 points

(5) Attached Garage Exhaust Fan: 1 point

(k) Homeowner Information.

Operations and Maintenance Binder: 1 Point. The builder shall provide a binder to be left in the dwelling for future occupants that includes the four of the following items:

(1) The Green Points checklist

(2) Home Energy Audit or HERS certificate

(3) The equipment manufacturer's installation manuals, except for manuals required to be affixed to the equipment

(4) Copies of operations and maintenance instructions for equipment installed in the home

(m) Design Process and Innovation.

(1) Green Building Consultants: 2 points

(2) ENERGY STAR Builder: 1 point

(3) Innovation Points: Up to 10 Points. Points are awarded for products, designs or technologies which minimize the environmental impact of the house in a tangible and demonstrable way beyond the methods outlined in the Green Points Program.

§ 10-7.5-5 Alteration or Modification.

(a) Alteration and Modification.

The city manager may make reasonable alterations or modifications in the award of green points or the requirements of this chapter if the manager finds that the strict application of the green points and mandatory green standards:

(1) creates practical difficulties in the construction of a residential unit; or

(2) causes undue waste; or

(3) the proposed alteration or modification is equivalent to existing mandatory green building requirements or green points; or

(4) is necessary to remove barriers for the construction of housing that is affordable to households, as that term is used in Chapter 9-13, "Inclusionary Zoning," B.R.C. 1981; or

(5) Requires an alteration to an individual landmark or a contributing building in a historic district that would not be eligible for approval as part of a landmark alteration certificate; and

(6) when the purposes of this chapter are otherwise met through such alteration or modification.

(b) Appeal.

An applicant for an alteration or a modification that has been denied by the city manager may appeal the determination by filing an appeal within fourteen days after the denial. Within 60 days after the appeal is filed, unless a different time is mutually agreed upon by the applicant and the city manager, the Board of Zoning Adjustment and Building Appeals will consider the appeal pursuant to the hearing requirements of Chapter 1-3, "Quasi-Judicial Hearings," B.R.C. 1981.

§ 10-7.5-6 Regulations.

The city manager may make reasonable interpretive and administrative regulations to aid in applying this subsection under the procedures of chapter 1-4, "Rulemaking," B.R.C. 1981. The city manager is authorized to adopt rules related to the award of green points that provide for equivalent benefits as for similar green point awards in this chapter. The purpose of this grant of rulemaking authority is to allow the city manager to consider green point awards for technology and products that were not contemplated at the time of the adoption of this chapter that will provide benefits that are consistent with the purposes of this chapter.

§ 10-7.5-7 Definitions.

(a) The following terms used in this chapter have the following meaning unless the context clearly indicates otherwise:

"Addition" An extension or increase in floor area of a building or structure of 500 sq. ft. or greater.

"Demolition" or "demolish" means an act or process which removes one or more of the following. The shaded area illustrates the maximum amount that may be removed without constituting demolition.

(1) 50 percent or more of the roof area as measured in plan view (see diagram):

(2) 50 percent or more of the exterior walls of a building as measured contiguously around the "building coverage" as defined in this section (see diagram). A wall shall meet the following minimum standards to be considered a retained exterior wall:

(A) The wall shall retain studs or other structural elements, the exterior wall finish and the fully framed and sheathed roof above that portion of the remaining building to which such wall is attached.

(B) The wall shall not be covered or otherwise concealed by a wall that is proposed to be placed in front of the retained wall; and

(C) Each part of the retained exterior walls shall be connected contiguously and without interruption to every other part of the retained exterior walls.

"FSC" means the Forest Stewardship Council. FSC certified lumber products are accredited and abides by criteria that ensure responsible management of the world's forests.

"Home Energy Rating System Index" or "HERS Index" means a rating system where an index of 100 represents the energy use of the "American Standard Building" and an index of zero indicates that the Proposed Building uses no net purchased energy (a Zero Energy Building).

"Remodel" means an interior reconfiguration or upgrade of an existing structure of 500 sq. ft. or greater and the work required to complete the reconfiguration or upgrade requires a building permit.

"Residential Energy Services Network" or "RESNET" means an organization that sets the standards of quality, and increases the opportunity for ownership of high performance buildings and ensures the success of the building energy performance certification industry.

(b) Words defined in section 1-2-1, "Definitions," and section 10-1-1, "Definitions," B.R.C. 1981, have the meanings there expressed if not differently defined by this chapter.