

ORDINANCE NO. 1913

**AN ORDINANCE OF THE CITY OF GOLDEN ENACTING
CHAPTER 18.24 OF THE GOLDEN MUNICIPAL CODE
PERTAINING TO A RESIDENTIAL SUSTAINABILITY MENU**

WHEREAS, Title 18 of the Golden Municipal Code was enacted to address the use of land, buildings, and sites within the City; and

WHEREAS, the Golden City Council has in the past enacted standards for achieving sustainability goals, including a sustainability menu that applies to commercial and multifamily land development; and

WHEREAS, City Council wishes to enact a specific chapter within Title 18 related to a green building standard for lower density residential development within the community.

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GOLDEN, COLORADO:

Section 1. Chapter 18.24, Residential Sustainability Menu, as attached hereto, and incorporated herein by this reference is hereby enacted.

Section 2. If any article, section, paragraph, sentence, clause or phrase of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance and each part or parts hereof irrespective of the fact that any one part or parts be declared unconstitutional or invalid.

Section 3. All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portion hereof are hereby repealed to the extent of such inconsistency or conflict.

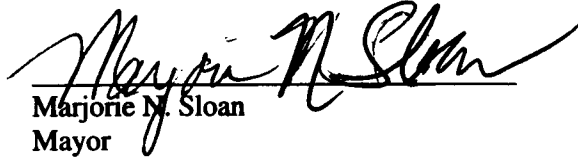
Section 4. The repeal or modification of any provision of the Municipal Code of the City of Golden by this ordinance shall not release, extinguish, alter, modify or change in whole or in part any penalty, forfeiture or liability, either civil or criminal, which shall have been incurred under such provision. Each provision shall be treated and held as still remaining in force for the purpose of sustaining any and all proper actions, suits, proceedings and prosecutions for enforcement of the penalty, forfeiture or liability, as well as for the purpose of sustaining any judgment, decree or order which can or may be rendered, entered or made in such actions, suits, proceedings or prosecutions.

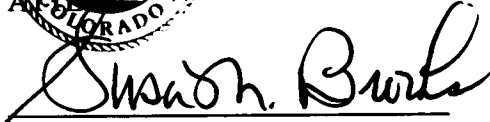
Section 5. This ordinance is deemed necessary for the protection of health, welfare and safety of the community.

Introduced, read, passed and ordered published this 26th day of January, 2012.

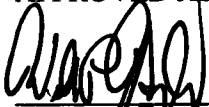
Passed and adopted upon second reading and ordered published this 9th day of February, 2012.




Marjorie N. Sloan
Mayor


Susan M. Brooks, MMC
City Clerk

APPROVED AS TO FORM:



David S. Williamson
City Attorney

I, Susan M. Brooks, City Clerk of the City of Golden, Colorado, do hereby certify that the foregoing ordinance was introduced on first reading and read at a regular business meeting of the City Council of said city, held on the 26th day of January, 2012, and was published as a proposed ordinance in the Golden Transcript, legal newspaper, as the law directs seven days or more prior to its passage. A public hearing was held on the 9th day of February, 2012, and the said proposed ordinance was read on second reading. The ordinance was passed by the City Council and ordered published in the aforesaid newspaper, as the law directs on the 9th day of February, 2012.

Witness my hand and official seal of the City of Golden, Colorado, this 10th day of February, 2012.



ATTEST:


Susan M. Brooks, MMC, City Clerk of
the City of Golden, Colorado

Chapter 18.24

RESIDENTIAL SUSTAINABILITY STANDARDS

Sections:

18.24.010	Purpose.
18.24.020	Applicability.
18.24.030	Residential Sustainability Menu

18.24.010 Purpose and Intent.

The Residential Sustainability Standards Chapter of this Title is enacted for the purpose of assuring that new construction of, and significant additions to, one household dwellings and two household dwelling structures contribute to the achievement of community goals as detailed in the City Comprehensive Plan. The regulations contained in this Chapter are intended to contribute to efforts to increase energy efficiency in habitable structures; encourage use of renewable energy; decrease the quantity and increase the quality of storm-water run-off; reuse and recycle materials; and preserve existing structures.

18.24.020 Applicability

(1) No building permit shall be issued for construction of a new one or two household structure ("New Construction"), and no such construction shall be performed unless such construction achieves the minimum points required by Section 18.24.030 below.

(2) No building permit shall be issued for construction of an addition with new habitable space equal to or greater than 25% of the existing habitable square footage of a one or two household structure ("Addition"), and no such construction shall be performed unless such conditions on the property, which may include the Addition, demonstrate achievement of the minimum points required by Section 18.24.030 below. For purposes of this chapter, habitable space shall consist of heated square footage within a dwelling unit. Existing square footage that is either remodeled (updated kitchen e.g.) or finished (basement e.g.) is exempt.

18.24.030 Appeals

Appeals associated with this chapter shall be submitted according to the procedures outlined in Chapter 18.12: Appeals and Variances Under Title 18.

18.24.040 Residential Sustainability Menu

Applicants for Additions must achieve a minimum of 15 points from the below menu, and applicants for New Construction must achieve 25 points total from the below menu. If the Energy Star option is selected, the remaining 10 points must come from categories other than the energy conservation category. All applicants must achieve at least one point from three out of four menu categories. Applicants will also receive point credits for menu items installed within the previous ten years, provided that such improvements are in place on the day of the application and that such improvements have not been used as a basis for points on prior applications.

Menu Item	Points	Documentation Required
Water – Indoor & Outdoor		
Plant xeric landscaping. 1 point per 20% of lot area, exclusive of paving or built areas, shall be landscaped with xeric materials.	1-5	Show landscape areas and materials list on site plan.
A high-efficiency irrigation system - Drip or sub-surface system	3	Show irrigation system details on site plan.
A high-efficiency irrigation system - Rain sensor system	1	Show irrigation system details on site plan.
Porous surfaces: For driveway, sidewalk, or patio areas. Porous asphalt or cement, grass pavers. 3 points per category, maximum 10.	3-10	Show material type on site plan.
Install toilets or faucets certified by EPA Water Sense or dual flush toilets. 2 points per category.	2-4	Proof of purchase.
Reduce Heat Islands – locate trees to provide shade for paved areas. 1 point per minimum 2 ½” caliper tree listed on Golden Recommended Tree List.	1-5	Show tree count and location on site plan.
Reduce Heat Islands – install heat reflective roof materials. Metal, high albedo (light colored) or minimum 29 SRI (Solar Reflective Index) roofing materials qualify.	4	List roofing materials and SRI rating on site plan.
Energy Conservation		
Achieve Energy Star certification for New Homes	15	Submit qualifying HERS rating with building permit application. Submit Energy Star certificate prior to issuance of certificate of occupancy.
Credit for existing home energy efficiency performance. 5 points to achieve minimum 85 HERS rating for existing structure. For every 10 point reduction thereafter, 1 point each.	5-10	Submit qualifying HERS report with building permit application.
Install efficient hot water system (e.g. tankless) or recirculating line. 1 point per system/household unit.	1-2	Provide product brochure and show on site plan drawings.
Install efficient heating system. Install furnace meeting 95% AFUE	5	Provide product brochure and show on site plan drawings.

	(Annual Fuel Utilization Efficiency) or greater.		
	Install efficient cooling system such as evaporative cooler or whole house fan.	2	Provide product brochure and show on site plan drawings.
	Install heat-based geothermal system.	10	Provide product brochure and show on site plan drawings.
	Enhanced Insulation. Exceeds R-value requirements of IECC by 5%. Points allowed for separate systems: walls, ceiling, & slab insulation. 1 point for each 5% increase, maximum 5.	1-5	Verification through RESCheck model as required by permit process.
	Efficient Windows. Windows that meet no more than 80% of the code maximum u-value allowable.	3	Provide product brochure and list on site plan drawings.
	Insulate ducts, seal ducts, or insulate pipes. Minimum R-6 for ducts, R-3 for pipes, minimum 25 linear feet. 1 point each, max 3.	1-3	Show on site plan drawings.
	Renewable Energy System. Install any renewable energy system allowed by zoning code. (e.g. solar photovoltaic, solar thermal, geothermal heat pump.)	7	Show on site plan drawings.
Materials & Resources			
	Efficient framing techniques. (e.g. structurally insulated panels, greater than 16" on center spacing of stud, ceiling joist, use single top plates on non load-bearing walls.) 1 point per category.	1-4	Verified through submitted building plan drawings.
	Products certified as recycled content, reclaimed, regional, or rapidly renewable. 1 pt per category or per 5% of materials valuation, maximum 10 points.	1-10	Documentation showing totals of receipts versus total material valuation as reported in approved building permit.
	Documented diversion rate of construction waste for recycling. 1 pt per 5% diverted to recycle center, maximum 10 points.	1-5	Show % diverted out of total in terms of volume (cubic yards) or pounds. Document with photos and/or receipts from receiving entity.
Innovation Points			
	The Director may reward applicants for sustainable design elements not covered by this menu. Consideration will be given for scale, historic preservation, degree of difficulty, efficiency or innovation, and points will be awarded at the discretion of the Commission.	Varies	Documentation requirement shall be tailored to proposed plan.

Definitions

- a) **Energy Star:** a voluntary labeling program to identify and promote energy-efficient products, new homes, commercial and industrial buildings, and design projects for commercial buildings.
- b) **HERS Rating:** the Home Energy Rating System is a scoring system used to determine the energy efficiency of a home.
- c) **IECC:** the International Energy Conservation Code is a building construction code that regulates the energy efficiency of structures.
- d) **RESCheck:** a software program that simplifies compliance with the IECC by automating the calculations required for reporting.
- e) **SRI:** the Solar Reflectance Index is a measurement of the ability of a surface, such as pavement or a rooftop, to reflect solar energy and reduce heat gain.
- f) **U Value:** the measurement of the rate of heat loss indicated in terms of the U-factor (U-value) of a window assembly. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating properties.