

HAILEY ORDINANCE NO. ____

AN ORDINANCE OF THE CITY OF HAILEY, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, AMENDING THE CITY OF HAILEY MUNICIPAL CODE, CHAPTER 15.08, BUILDING CODE ORDINANCE, BY ADOPTING THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE, ALONG WITH AMENDMENTS THERETO RELATIVE TO LOCAL CONDITIONS; BY AMENDING CHAPTER 15.08, BUILDING CODE ORDINANCE, BY ADOPTING A NEW SECTION 15.08.012, BUILD BETTER PROGRAM, TO INCREASE ENERGY CONSERVATION AND SUSTAINABLE BUILDING PRACTICES; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Idaho Code Sections 39-4109 and 39-4116 require the City of Hailey to adopt the 2009 International Energy Conservation Code (“2009 IECC”), excluding certain provisions and appendices;

WHEREAS, Idaho Code Section 30-4116 allows the City of Hailey to amend the 2009 IECC to reflect local conditions, provided the amendments provide an equivalent level of protection;

WHEREAS, Idaho Code Section 39-4109 allows the adoption of the 2009 IECC effective January 1, 2011;

WHEREAS, the adoption of the 2009 IECC and the Build Better Program will conserve energy, water and other natural resources and preserve the health of our environment through requirements related to design, construction, operations, recycling, and thereby promotes the public health, safety, and welfare;

WHEREAS, buildings use the most energy of any sector in the US - more than the transportation sector - therefore; it makes sense to curtail impact where they are greatest;

WHEREAS, Hailey’s climate requires significant amounts of energy to heat during the winter months, which translates to higher energy costs and provides an opportunity to substantially increase efficiencies and savings;

WHEREAS, the average life span of a building is 75 years and during this time the status of energy prices and availability could change, especially considering the potential impacts of climate change and future policies aimed at curtailing emissions associated with climate change; and

WHEREAS, the City Council finds that enactment of this ordinance is required to ensure the enforcement of Section 15.08.010 of this ordinance by January 1, 2011 and the remaining Sections of this ordinance by January 1, 2012, following a one (1) year voluntary period beginning on January 1, 2011.

NOW, THEREFORE BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF HAILEY, IDAHO, AS FOLLOWS:

Section 1. Section 15.08.010 of the Hailey Municipal Code is amended by the deletion of the stricken language and addition of the underlined language, as follows:

15.08.010 Adoption of Codes. Pursuant to Idaho Code Section 39-4116(1), the following Codes published by the International Code Council are hereby adopted by reference:

- A. 2006 International Building Code (“2006 IBC”), including all rules promulgated by the Idaho Building Code Board to provide equivalency with the provisions of the Americans with Disabilities Act accessibility guidelines and the Federal Fair Housing Act accessibility guidelines; and including Appendix E: Supplemental Accessibility Requirements;
- B. 2006 International Residential Code (“2006 IRC”), parts I-IV and IX including Appendix F: Radon Control Methods;
- C. 2006~~9~~ International Energy Conservation Code (“2006~~9~~ IECC”);
- D. 1997 Uniform Code for the Abatement of Dangerous Buildings;
- E. 1997 Uniform Building Code (“97 UBC”) Volume 3, Material, Testing and Installation Standards; and
- F. 1997 Uniform Building Code, Volume 1, Table 1-A, Building Permit Fees.

Section 2. Section 15.08.012, of the Hailey Municipal Code, Build Better Program, is created by the addition of the following language:

A. Applicability: This Section 15.08.012 is a supplement to the other adopted International Codes and is not intended to be used as independent construction regulations or to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances. All commercial and residential New Construction, Additions, Repairs and Alterations shall comply with the standards of Section 15.08.012, unless otherwise stated herein.

1. Referenced Codes and Standards. It is the expressed intent of this section to require higher minimum standards relating to Building performance than the corresponding minimum standards set by the referenced codes and standards, and in such cases, the higher minimum standards of this section shall take precedence.

2. Other Laws and Codes. The provisions of this chapter shall not be deemed to nullify any provisions of local, state or federal laws and codes.

3. Residential New Construction Exemptions. U.S. Green Building Council’s Leadership in Energy and Environmental Design for Homes certification level or National Association of Home Builder’s Green Building Program bronze level project are exempt from the Build Better Program requirements. Either exemption must verify that the project is 10% more energy efficient than the 2009 IECC, using a HERS Index. The exemptions listed above must show intent to meet the requirements at the Building Permit review stage through plans and

an initial HERS score based on the proposed design. Prior to receiving a certificate of occupancy, copies of all program documentation and a final HERS score shall be submitted to the Building Department.

4. Commercial New Construction Exemptions. U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction minimum certification level projects are exempt from the Build Better Program requirements, provided the applicant verifies that the project meets the minimum energy efficiency requirements for Commercial Buildings, as identified in Section 15.08.012.C.2.a of the Hailey Municipal Code. The applicant must identify the intent to meet U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction certification level, at a minimum, at the Building Permit review stage with an indication on the plans and with a written narrative what Leadership in Energy and Environmental Design points will be achieved. Prior to receiving a certificate of occupancy, copies of all program documentation shall be submitted to the Building Department.

5. Exemptions for Commercial and Residential Alterations and Additions. In Addition to the exemptions listed in Section 101.4 of the 2009 IECC, the following projects are exempt from Section 15.08.012:

- a. Window frame and glass replacements of the same size and location.
- b. Bathroom remodel projects limited to the replacement of fixtures and cabinets.
- c. Kitchen remodel projects limited to the replacement of cabinets, counter tops, plumbing fixtures, and appliances.
- d. Electrical work associated with permits issued only for electrical work
- e. Plumbing associated with permits issued only for plumbing.
- f. Replacement of HVAC appliances associated with permits issued only for appliance replacement.
- g. Reroofs.
- h. Additions less than 500 square feet of Conditioned Floor Area.
- i. New construction or Additions of any size that do not include any Conditioned Floor Area.
- j. Alterations that do not affect the integrity of the Building envelope.
- k. Alterations that do not require a Building Permit.
- l. Tenant and ADA improvements required by the Building Department.
- m. Structures listed on the National Historic Register.

6. In-lieu fees. The city may accept voluntary cash contributions, in lieu of meeting the additional energy efficiency increase percentage beyond the minimum requirements set forth by the 2009 IECC, Section 15.08.012.C and in lieu of meeting the points requirement set forth by Section 15.08.012.E.

- a. The contribution amount shall be \$400 for every percentage point beyond the minimum energy efficiency requirement specified by Section 15.08.012, (C) and \$100 for every 0.5 points that are required, but not satisfied.

b. Collected in lieu fees shall be used for energy, water and waste conservation projects that have a public benefit, as identified and approved by the Council.

B. Definitions. For the purpose of this Section 15.18.012, the following capitalized words and phrases shall apply as defined herein, in addition to definitions found in Chapter 2 of the 2009 IECC.

“Program Administrators” shall mean city staff from the Building and Planning Departments who administer Section 15.08.012 of the Hailey Municipal Code, the Build Better Program.

“Certified HERS Rater” shall mean a Home Energy Rating System provider who has current and valid certification under Residential Energy Services Network (RESNET) and who adheres to the RESNET defined standards of practice and code of ethics.

“Compact fluorescent light bulb” or “CFL” shall mean a fluorescent light bulb that has been compressed into the size of a standard-issue incandescent light bulb, known for its long life span and superior energy efficiency when compared to incandescent lights.

“COMcheck Energy Analysis” shall mean a software used to verify commercial code compliance and above code requirements with the 2009 IECC.

“EnergyPlus” shall mean software used to evaluate and analyze building energy performance.

“ENERGY STAR Advanced Lighting Package” or “(ALP)” shall mean an ENERGY STAR Certified Home that includes a comprehensive set of ENERGY STAR qualified light fixtures that at a minimum consist of 60% ENERGY STAR qualified hard-wired fixtures and 100% ENERGY STAR qualified ceiling fans where installed.

“ENERGY STAR Builder” shall mean a builder who has completed ENERGY STAR’s Partnership Agreement, has selected a Home Energy Rater, and who is listed on the ENERGY STAR website as an ENERGY STAR partner.

“ENERGY STAR Indoor airPLUS” or “IAP” shall mean an ENERGY STAR Certified Home that includes a number of construction practices and technologies to decrease the risk of poor indoor air quality, including careful selection and installation of moisture control systems, heating, cooling, and ventilation (HVAC) equipment, combustion venting systems, and building materials. that are tested and verified by an independent party.

“ENERGY STAR Northwest Program” shall mean an independently tested and verified home energy certification program that ensures homes are built 15% more energy efficient compared to current code building homes.

“EQuest” shall mean a software used to evaluate and analyze building energy performance.

“Forest Stewardship Council Certified” or “FSC Certified” shall mean a label that verifies a chain of custody certification that wood that has been grown in a manner that meets the FSC’s sustainable forestry practices and standards.

“Home Energy Rating System Audit” or “HERS Audit” shall mean a comprehensive visual and technical energy analysis of a home using Residential Energy Services Network’s (RESNET) protocol and a REM/Rate™ Energy Analysis and includes a prioritized list of suggested improvements and their associated energy and financial savings. At a minimum, the audit evaluates the following, to determining the rating of the home: blower door test, duct blaster test (if applicable), an inventory of the lighting, appliances, insulation, solar orientation, and heating and cooling equipment.

“Home Energy Rating System Index” or “HERS Index” shall mean a scoring system established by the Residential Energy Services Network (RESNET) in which a home built to the specifications of the HERS Reference Home scores a HERS Index of 100, while a net zero energy home scores a HERS Index of 0. The lower a home's HERS Index, the more energy efficient it is in comparison to the HERS Reference Home.

“Light Emitting Diode” or “LED” shall mean an electronic device that emits light when an electrical current is passed through it, known for its long life span and superior energy efficiency when compared to incandescent lights.

“Leadership in Energy and Environmental Design Accredited Professional” or “LEED AP” shall mean a person who has successfully passed a test on the LEED process, points, and documentation requirements, in accordance with the US Green Building Council’s specifications

“Minimum Efficiency Reporting Value” or “MERV” shall mean a rating method used for comparing the efficiency of an air filter; the higher the MERV rating, the better the filter is at removing particles from the air.

“National Association of Home Builder’s Green Building Program” shall mean a program based on the International Code Council 700-2008 National Green Building Standard™ and is a 3rd party tested and verified green building program.

“Natural Air Changes Per Hour” or “NACH” shall mean the natural movement of the total volume of air in a given space that is exchanged over a period of one hour, measured using a blower door test at 50 Pascal.

“New Construction” shall mean any building with less than 50% of its exterior walls and foundation remaining or that is being built on a vacant building envelope, where no previously built structure exists at the time of building.

“REM/Rate™ Energy Analysis” shall mean a residential code compliance and rating software developed specifically for the needs of HERS raters, that calculates heating, cooling, hot water, lighting, and appliance energy loads, consumption and costs for new and existing single and multi-family homes.

“REScheck Energy Analysis” shall mean a software used to verify residential code compliance and above code requirements with the IECC.

“Residential Energy Services Network” or “RESNET” shall mean an industry not-for-profit membership corporation that is the national standards making body for building energy efficiency rating systems.

“Structural Insulated Panels” shall mean a high performance building panels used in floors, walls, and roofs for residential and light commercial buildings. The panels are typically made by sandwiching a core of rigid foam plastic insulation between two structural skins of oriented strand board (OSB).

“U.S. Green Building Council’s Leadership in Energy and Environmental Design for Homes” or “LEED for Homes” shall mean a consensus-developed, third party-verified, voluntary rating system which promotes the design and construction of high-performance green homes.

“U.S. Green Building Council’s Leadership in Energy and Environmental Design for New Construction” or “LEED for New Construction” shall mean a rating system designed to guide and distinguish high-performance commercial and institutional projects, including office buildings, high-rise residential buildings, government buildings, recreational facilities, manufacturing plants and laboratories.

“Verification of Accountability by Responsible Party” shall mean a form furnished by the Program Administrators for the use of verifying, by the Building owner, contractor, or other responsible party, that points have been met in accordance with the requirements of Section 15.08.012.E, Points Menu.

“WaterSense Program” shall mean a water conservation program with oversight by the U.S. Environmental Protection Agency that requires all toilets, urinals, faucets, showerheads, and other products labeled under the program to undergo independent 3rd party testing to ensure that water conservation is at least 20% greater than conventional items in the respective category.

“Whole House Fan” shall mean a type of fan installed in a building's ceiling, designed to pull hot air out of the building and increase building cooling.

“Zoned Hydronic Radiant Heating” shall mean a heating system using a boiler to heat water and a pump to circulate hot water through radiant floor panels, wall radiators, or baseboard convectors. The pipes, embedded in the floor, carry heated water that conduct warmth to the surface where it broadcasts energy to separated radiant heat zones, which are controlled a thermostat and served by a manifold which distributes the flow of warm water to the individual circuits of tubing within each zone.

C. Energy Efficiency: All commercial and residential New Construction and Additions shall comply with the 2009 IECC, and shall increase energy efficiency 10% beyond the 2009 IECC requirements.

1. Residential Energy Efficiency. Energy Efficiency shall be 10% greater than the 2009 IECC requirements for New Construction, Additions, and Alterations with Conditioned Space, 500 square feet or greater.

a. New Construction. Energy efficiency shall be verified by a RESNET Certified HERS Rater using a REM/RATE™ Energy Analysis and IECC Section 405 criteria. Applicants shall submit an initial HERS Index score based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, a final HERS Index score shall be submitted to the Building Department, verifying that both project is 10% more energy efficient compared to the 2009 IECC.

i) New residential construction certified under the current ENERGY STAR Northwest Program is exempt from Section 15.08.012.C.1, providing the Building plans and the constructed building are certified ENERGY STAR Northwest.

b. Additions. A RESNET Certified HERS Rater shall conduct a Certified HERS Audit of the entire Building associated with the Addition, unless a previous Certified HERS Audit has been conducted and submitted to the Building Department within the last 5 years. The energy efficiency of the Addition itself shall be verified by a REScheck Energy Analysis. Applicants shall submit a REScheck Energy Analysis based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the REScheck Energy Analysis will be verified by the Building Department during routine inspections. The REScheck Energy Analysis shall project a 10% more energy efficient design compared to the 2009 IECC.

c. Alterations. All Alterations that require a Building Permit and affect the Building envelope are required to conduct a Certified HERS Audit by a RESNET Certified HERS Rater of the entire Building associated with the Alteration, unless a previous Certified HERS Audit has been conducted and submitted to the Building Department within the last 5 years. A REScheck Energy Analysis shall be submitted to the Building Department

verifying that the Alteration exceeds the energy efficiency requirements of the 2009 IECC by 10% or by calculating the energy efficiency rating of a specific component that affects energy efficiency associated with the alteration. For example: the 2009 IECC requires a U-factor of 0.3 for a new window installation. A new window that is 10% more efficient would have a U-factor of 0.27 or better.

i) Any window installation is not required to conduct a Certified HERS Audit.

2. Commercial Energy Efficiency.

a. New Construction. Buildings less than 10,000 square feet of Conditioned Space shall verify energy efficiency using a COMcheck Energy Analysis and Buildings 10,000 square feet or larger shall verify energy efficiency using an energy model.

i) Buildings under 10,000 square feet of Conditioned Space. Applicants shall submit a COMcheck Energy Analysis based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the COMcheck Energy Analysis will be verified by the Building Department during routine inspections. The COMcheck Energy Analysis shall project a 10% more energy efficient design compared to the 2009 IECC.

ii) Buildings 10,000 square feet of Conditioned Space or larger shall be energy modeled by a licensed engineer using Building Department Approved energy modeling software. Approved software includes, but is not limited to, the most recently published version of the following: eQuest, Trace, Carrier HAP, and EnergyPlus. The model shall verify that amount of energy used is 10% more energy efficient compared to the 2009 IECC and shall be submitted to the Building Department with the Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the energy model will be verified by the Building Department during routine inspections.

b. Additions. An energy audit shall be conducted by an Idaho licensed engineer on the entire Building associated with the Addition, unless an energy audit by an Idaho licensed engineer has been conducted and submitted to the Building Department within the last 5 years. Energy efficiency shall be verified by a COMcheck Energy Analysis. Applicants shall submit a COMcheck Energy Analysis based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the COMcheck Energy Analysis will be verified by the Building Department during routine inspections. The COMcheck Energy Analysis shall project a 10% more energy efficient design compared to the 2009 IECC.

c. Alterations. An energy audit shall be conducted by an Idaho licensed engineer on the entire Building associated with the Addition, unless an energy audit by an Idaho licensed engineer has been conducted and submitted to the Building Department within the last 5 years. A COMcheck Energy Analysis shall be submitted to the Building Department verifying that the Alteration exceeds the energy efficiency requirements of the 2009 IECC by 10% or by calculating the energy efficiency rating of a specific component that affects energy efficiency associated with the alteration. For example: the 2009 IECC requires a U-factor of 0.3 for a new window installation. A new window that is 10% more efficient shall have a U-factor of 0.27 or better.

i) Any window installation is not required to conduct an Audit.

D. Water, Indoor Air, Construction Waste, Durability and Assurance (WICDA). The provisions of WICDA apply to new residential and commercial construction.

1. Water Conservation. All faucets, showerheads, and toilets installed in a Building for domestic use and restroom facilities, shall use 20% less water than standard fixtures or be labeled by the WaterSense Program, which use at least 20% less water than standard fixtures. Water Sense labels or equivalent documentation shall be submitted to the Building Department or provided during final inspection for verification.

2. Indoor Air. 2009 International Mechanical Code shall be met to ensure proper ventilation.

3. Construction Waste. In Addition to waste receptacles, bins for cardboard and clean wood waste shall be provided and sorted accordingly on-site during construction and will be verified by the Program Administrators during regularly scheduled inspections.

4. Durability and Assurance. Details and specifications shall be submitted in the drawings, details, or in packet form with the Building Permit in order to promote durability, and high performance of the Building enclosure and its components and systems through appropriate design, materials, selection, and construction practices.

a. Under the following categories, the Program Administrators shall specify what items shall be applicable and provide a list of these items with the Building Permit:

- i) Foundations
- ii) Walls
- iii) Roofs
- iv) Air infiltration
- v) Heat loss

b. Before the issuance of a certificate of occupancy, applicants shall sign a declaration that states all items are installed to manufacture's specifications and plan details.

E. Points Menu. Unless a qualifying exemption applies, the following construction activities: exterior snow melt systems, residential New Construction, and residential Additions of 500 square feet of Conditioned Space or greater, shall obtain points from Sections (4) through (11) herein, in an amount determined by the applicable points equation in (a), (b), or (c), below. 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 calculating points.

1. Calculation of Points. Points are accumulated based on the total square feet of Conditioned Space and the number of bedrooms included in the Addition or New Construction project or the square footage of an exterior snow melt system. Points shall be rounded down to the nearest 0.5 (example: a points equation resulting in 2.7 points shall be rounded down to 2.5 points and a points equation resulting in 3.4 points shall be rounded down to 3.0 points)

a. Points equation for New Construction. (Square footage of Conditioned Space)/(number of bedrooms) x 0.01 = required points.

i) Points shall be applied to the construction of the new residential Building.

b. Points equation for Additions. (Square footage of Conditioned Space of Addition) / (Number of bedrooms included in Addition + 1) x 0.01 = required points.

i) Points shall be applied to the Addition, existing structure, or a combination of both.

c. Points equation for exterior snow melt systems. (Square footage of exterior snow melt)/100 = required points.

i) Points shall be applied to the new or existing structure, or a combination of both, if applicable, and shall only be obtained from Section 15.08.012.E.5, Energy Efficiency.

2. Restrictions. When points are required for more than one construction activity, the same item cannot count as a point(s) for satisfying multiple point requirements under more than one construction activity.

3. Verification. Before final inspection, a Verification of Accountability by Responsible Party form shall be submitted, along with supporting documentation such as copies of receipts and invoices, material packaging, and photos, unless an alternative method of verification is specified herein.

4. Waste Management.

a. Reuse Existing Building: Up to 5 points.

Points	Percent of Exterior Walls saved (external sheathing and framing)
3	50%
5	75%

b. New Construction Waste Recycling: Up to 3 points.

i) Application: points will be awarded according to the

following table:

Points	Percentage Waste	Percentage Diverted
1	75%	25%
2	50%	50%
3	25%	75%

5. Energy Efficiency.

a. Insulation: Up to 7 points.

i) Wall Insulation: 2 points.

(1) Application: R-24 minimum wall cavity

insulation.

(2) Verification: checked during plan review by

the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

ii) Basement or Foundation Insulation: 1 to 5 points.

(1) Application: Insulation must be installed on

the full height of a basement or foundation wall.

(2) Verification: checked during plan review by

the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

Points	R-Value and insulated concrete forms
1	15, or
2	20, or
3	25, and
2	Use of insulated concrete forms on the foundation (stem wall and footing)

b. Windows: Up to 3 points.

i) Application: new windows or replacement windows installed as part of an Addition are awarded points as follows:

Points	Maximum U-factor*
1	0.3
2	0.28
3	0.26

*U-factor, as established by the National Fenestration Rating Council (NFRC).

ii) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions. The inspector must be able to clearly identify the U-factor and Solar Heat Gain Coefficient (SHGC) ratings and window type by the National Fenestration Rating Council's stamp or the manufacturer's label. Applicant must show the number of windows to be upgraded on Building plans.

c. Air Sealing of an Existing Building: Up to 4 points.

i) These points shall not be applied to New Construction activity. Points will be awarded when a HERS rating is applied to the existing structure before and after construction showing the following blower door results:

Points	Natural Air Changes Per Hour at 50 Pascal
1	4
2	3
3	2
4	1

d. Heating, Ventilation, and Air Conditioning (HVAC) Systems.

i) HVAC Commissioning: 1 point for each commissioning that applies; up to 3 points.

(1) Application: 1) test for duct leakage at a 6% target to floor area ratio at 50 Pascal, 2) test and adjust firing rate to within recommended manufacturer specifications and suitable to occupant conditions, and 3) test and adjust refrigerant charge to manufacturer specifications.

ii) Heat Pumps.

Points	Type of source pump installed
8	Water
6	Ground
4	Air

iii) Sealed combustion or power vent assisted Water Heating System: 2 Points.

(1) Verification: New Constructions - checked during plan review by the Program Administrators and verified by the Certified HERS Rater. Additions - checked during plan review and verified by the Program Administrators.

iv) ENERGY STAR boiler, furnace, or hot water heater: 2 points each.

e. Zoned, Hydronic Radiant Heating: 2 points.

i) Application: use a Zoned Hydronic Radiant Heating system that circulates hot water through radiant floor panels, wall radiators, or baseboard convectors located in different areas or zones of the house.

ii) Verification: checked during plan review. Inspected in field.

f. Passive Cooling: 2 to 5 points.

i) Application: Any combination of natural cooling techniques can be used to reduce overheating in homes. Use awnings and window overhangs primarily on south-facing glass to provide a balance between summer cooling and winter heating through solar gain. Points will be awarded for passive cooling systems using any two or more of these techniques (one point per option):

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

(2) Low emissivity films on glass on east- and west-facing windows.

(3) Radiant barriers installed in the attic space.

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

(5) South window overhang sized to effectively shade the window (from June to September).

ii) Verification.

(1) New Constructions: checked during plan review by the Program Administrators and verified by the Certified HERS Rater.

(2) Additions: checked during plan review and verified by the Program Administrators. Indicate the passive cooling design features on the Building Permit plan, for option number 5 above; submit a calculation that demonstrates overhangs have been designed in accordance with the equation below for all south-facing glass. The formula below will result in window overhangs that shade 100 percent of south-facing window glazing on June 21 (summer solstice).

(3) Applicants should use this formula as a guide for sizing all south-facing overhangs:

$D = H/F$ where:

D = Distance of overhang

H = Height from bottom of glass to overhang

F = 3.38 (F is a value corresponding to the noon sun altitude angle on June 21st)

g. Whole House Fan: 2 points.

i) Application: Install a Whole House Fan with an

insulated cover that creates an airtight seal between attic and living space when the fan is off. For maximum effectiveness, the fan should be mounted in a hallway ceiling on the top floor of the house, and should be sized to produce four to five air changes per hour within the home.

ii) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

h. Water Heating: Up to 2 points.

i) Application: Point-of-use water heating uses a mini-water heater at remote fixtures to reduce the energy and water use associated with long piping runs. They are sized to supply hot water to a single fixture such as a sink. Gas-fired models must have a minimum energy factor of 0.82 to achieve this credit.

Points	Type of water heater
2	Tankless
2	Point of Use
2	Indirect fired

ii) Verification.

(1) New Constructions. Checked during plan review by the Program Administrators and verified by the Certified HERS Rater.

(2) Additions. Checked during plan review and verified by the Program Administrators.

i. Lighting and Appliances.

i) ENERGY STAR qualified CFLs or LEDs: 5 points.

(1) Application: Lighting shall be installed in accordance with the lighting table below.

(2) Any exterior lighting fixture must comply with city of Hailey Outdoor Lighting Ordinance requirements.

Area	Rooms	Required percentage of installed ENERGY STAR qualified CFL or LEDs
High-Use Rooms	Kitchen, dining room, living room, family room bathroom(s), hall(s)/stairway(s)	50 percent of total number of fixtures
Medium/Low-Use Rooms	Bedroom(s), den, office, basement, laundry room, garage, closet(s), and all other rooms	25 percent of total number of fixtures
Outdoor	Outdoor lighting affixed to the structure or free-standing pole(s) except for landscape and solar lighting	50 percent of total number of fixtures including all flood lighting

(3) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

ii) Efficient Light Controls: Up to 2 points.

(1) Efficient lighting controls include occupancy sensors, dimming controls, and automatic daylight dimming controls. Points will be awarded for efficient light controls according to the following:

Points	Number of control devices
1	4
2	6

(2) Verification: New Construction shall be checked during plan review by the Program Administrators and verified by the Certified HERS Rater and Additions shall be checked during plan review and verified by the Program Administrators.

j. Energy Efficient Appliances: Up to 6 points.

(1) Application: points will be awarded for ENERGY STAR appliances according to the following:

Points	Type of ENERGY STAR rated appliance
2	Refrigerator
2	Clothes washer
1	Freezer, not part of refrigerator appliance
1	Dishwasher

(2) Verification: New Construction will be verified by

the Certified HERS Rater and Additions will be verified by the Program Administrators. Appliance ENERGY STAR labels must remain on the equipment for inspection by a Certified HERS Rater or Building Inspector.

6. Solar.

a. Passive Solar Heating Design: Up to 12 points.

i) Application: points will be awarded in accordance with the following table, by designing with passive solar heating elements of south-facing glazing, appropriate thermal mass, and Building overhangs:

Points	Percent verifying calculations of the Solar Heat Gain Coefficient
6	40-49%
8	50-59%
10	60-69%
12	More than 70%

ii) Verification: inspected during plan review. Submit modeling documentation with the designer or architect's signature verifying calculations of the Solar Heat Gain Coefficient.

b. Solar Thermal Domestic Hot Water System: 8 points.

i) Application: A solar water heating system shall include south-facing rooftop or ground-mounted collectors, a heat exchanger to transfer the solar heat to the domestic water, and an insulated storage tank to store the heated water. The system shall be sized to provide at least 50 percent of the domestic hot water load. Sufficient unshaded south-facing roof area for collectors and space in a mechanical equipment room must be provided for the additional hot water storage tank.

ii) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

c. Pre-Plumb for Solar Thermal System Retrofit and include area required for future tanks and pumps: 2 points.

i) Application: install minimum 1/2" (5/8" OD) copper pipes, minimum 1" wall thickness high temperature 250°F rated insulation, and THN shielded 4 conductor sensor wiring between the attic and the water heater location. To accommodate "active" systems, provisions shall be made for a solar storage tank footprint, with pressure relief drain line, and an electrical outlet for a pump. An 8 ft. by 8 ft. section of south-facing roof suitable for future installation of solar panels shall be provided.

ii) Verification: checked during plan review by the Program Administrators and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

d. Active Solar Electric System: Up to 12 Points.

ii) Application: design and install a solar PV system to meet some of the electrical load of the Building.

Points	size of kilowatt (kW) system
6	2
8	3
10	4
12	5 or larger

i) Verification: the applicant must submit documentation by a qualified engineer or equivalent of the solar installation company of the electrical production calculations using industry-accepted formulas. Installation verified by the Certified HERS Rater.

e. Pre-Wire, or Chase Way, or Conduit, and Provide Area for Future Solar Electric, Photovoltaic (PV) System Retrofit: 2 points.

i) Application: Prewire, chase way, or conduit from the attic to a location near the electric service entrance/circuit breaker panel, allowing space for installation of PV modules on south-facing roofs, and ensuring that roof trusses are adequate to accommodate any added roof loads. maintain a 200 square foot or larger section of unshaded south roof area clear of vent pipes and other obstructions to allow for the installation of modules. Install 3/4-inch or larger EMT (electrical metal tubing) or FMC (flexible metal conduit) to accommodate wires run from the attic to a junction box near the main panel and meter. Provide the owner with a roof plan with the preferred location for PV modules and the conduit location clearly marked, and provide structural information on what added loads the roof can accommodate.

ii) Verification: checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

7. Material Efficient Framing and Structure

a. Advanced Framing Techniques: 2 to 10 points.

i) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

ii) 24-inch On-Center Framing: 2 points.

iii) Resource Efficient Insulated Headers: 2 points.

(1) Application: points are awarded for incorporating a minimum R-10 insulation in the header section.

iv) Trusses with energy heel: 2 points.

v) HVAC Ducts Within Conditioned Spaces: 2 points.

vi) Minimum 24-inch Roof Overhangs: 2 points.

(1) Application: design at least a 12-inch overhang with gutters around the Building's entire roof. Install gutter and downspout system to divert water five feet away from foundation and, from there, into the overall on-site drainage area or install crushed stone or other material below roof drip line to minimize splash on siding in high snow areas. All overhangs must meet Building code and zoning restrictions.

b. Structural Insulated Panels (SIPs) in Conditioned Spaces or an Alternatives to Wood Framing Approved by the Program Administrators: Up to 8 points.

i) Application: incorporating SIP construction requires that stamped plans be submitted from a designer.

Points	Percent of structure
5	At least 50% of Exterior Walls
8	At least 50% of Exterior Walls and roof

ii) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

c. Other Alternatives to Wood Framing: Up to 8 points.

i) Application: exterior walls must be constructed with alternative materials. Alternative Building methods that demonstrate energy- and resource-efficient construction with less embodied energy are awarded points according to the following:

Points	Percent of structure
5	At least 50% of Exterior Walls
8	At least 50% of Exterior Walls and roof

ii) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

8. Sustainable Products.

a. Forest Stewardship Council (FSC) Certified: Up to 6 points.

Points	Number of board feet (BF) of FSC lumber per square feet (SF) of floor area
2	2 BF per SF of floor area (2BF/SF)
4	3 BF per SF of floor area (3 BF/SF)
6	50% or more of dimensional lumber in total BF is FSC, excluding engineered wood products

b. Environmentally Preferred, Low Emission, and Local Materials: Up to 10 points from Chart A.

i) Application: For each assembly, all product specification type requirements shall be met in order to receive the points available. Environmentally preferred and low emission qualifying products have more than one of these attributes: recycled content, reclaimed, bio-based, agricultural residue, rapidly renewable, and low or no volatile organic compounds (VOCs) emissions. A “recycled content” product must contain a minimum of 25 percent 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. Except as otherwise noted in Chart A, 90 percent of the component, by weight or volume, must meet the specification shown. Locally sourced materials are products that are manufactured within 500 miles of the city are considered local.

Chart A: Environmentally Preferable Products/Locally Sourced Materials

Assembly	Component	Product Specification Types			Points Available
		EPP Specifications	Emission Specifications	Local	
Exterior Wall	Framing	Forest Stewardship Council (FSC) Certified		X	1
Exterior Wall	Framing	Finger-jointed studs (vertical use only for structural components)		X	1
Exterior	Siding or	Recycled		X	1

Wall	masonry	content or Forest Stewardship Council (FSC) Certified			
Floor	Flooring	90% of home	NO carpet in home		1
Floor	Framing	Forest Stewardship Council (FSC) Certified		X	1
Foundation	Cement	Fly ash or slag as replacement for, not Addition to, cement content (min. 20%)		X	1
Interior Wall	Framing	Forest Stewardship Council (FSC) Certified		X	1
Interior Wall	Framing	Finger-Jointed, (vertical use only for structural components)		X	1
Interior Walls AND ceilings	Gypsum board	Recycled content		X	1
Interior Walls AND millwork	Paint		Comply with Green Seal Standard GS-11, Paints, First Edition, May 20, 1993 (0.5 points) 48 hour pre-occupancy flush (0.5 points)		0.5
Interior	Wood		VOC		0.5

Walls AND millwork	finishes		concentrations of 150 gpl or less		
Landscape	Decking or patio material	Recycled content or Forest Stewardship Council (FSC) Certified		X	1
Other	Cabinets	Recovered, recycled content, or Forest Stewardship Council (FSC) Certified	Wood and/or agrifiber products with no added urea-formaldehyde resins	X	1.5
Other	Counters	Recycled content	Wood and/or agrifiber products with no added urea-formaldehyde resins		1
Other	Doors (not incl. garage)	Recycled content or Forest Stewardship Council (FSC) Certified	Wood and/or agrifiber products with no added urea-formaldehyde resins	X	1.5
Other	Trim	Recovered, recycled content, or Forest Stewardship Council (FSC) Certified	Wood and/or agrifiber products with no added urea-formaldehyde resins	X	1.5
Other	Adhesives and sealants		VOC concentrations of 70 gpl or less		0.5
Other	Windows	Recycled content or Forest Stewardship		X	1

		Council (FSC) Certified			
Roof	Framing	Forest Stewardship Council (FSC) Certified		X	1
Roof	Roofing	Recycled content or vegetated (min. 200 sf)		X	1
Roof AND floor AND wall	Insulation	Recycled content (min 20%)		X	1
Roof, floor, wall (2 of 3)	Sheathing	Recycled content or Forest Stewardship Council (FSC) Certified		X	1

9. Indoor Air Quality

a. ENERGY STAR's Indoor airPLUS (IAP) Requirements: 5 points.

i) Application: only New Construction that obtains ENERGY STAR is eligible for this label. For this point option, all of the requirements of ENERGY STAR IAP must be met.

ii) Verification: An ENERGY STAR Home Performance Specialist must perform a visual inspection of installed measure(s) and relevant documents/test results, to affirm compliance or submit an IAP certificate prior to final inspection.

b. Mechanical Ventilation: Up to 5 points.

ii) Application: Energy Recovery Ventilators must be integrated into the HVAC system. points are awarded for providing mechanical ventilation according to the following table:

Points	Type of fan and location
1	Kitchen exhaust fan (minimum 100 cfm)
1	Bath exhaust fan with timer or Humidistat controls (minimum 50 cfm)
1	Ventilation integrated into the HVAC system
2	Energy Recovery Ventilation System

ii) Verification: checked during mechanical inspection. The state mechanical inspector shall complete a Verification of Accountability by Responsible Party form, which shall be submitted, before the final inspection.

c. High-Efficiency HVAC Filter.

i) Filters with MERV ratings of 6 to 10: 1 point.

(1) Application: any MERV with a rating from 6 to 10.

Filters with a MERV rating of higher than 10 may be used only if the HVAC fan system is specifically designed for it.

d. Attached Garage Exhaust Fan: 1 point.

i) Application: install an exhaust fan on the opposite wall from the door to the house. It shall be wired to an electric garage door to run after the door has been opened or closed or put on a timer.

10. Homeowner Information - Operations and Maintenance Binder: 3 points.

a. The builder shall provide a binder to be left in the dwelling for future occupants that includes the following three items:

i) The points checklist

ii) HERS Index score certificate

iii) The equipment manufacturers' installation manuals, except for manuals required to be affixed to the equipment, for all installed equipment, fixtures, and appliances

b. Verification: Submitted to the Program Administrators for review and inspected during final inspection.

11. Design Process and Innovation.

a. Green Building Consultants: 1 point.

i) Application: use services provided by a consultant(s) certified through, Green Advantage, LEED AP, Certified Sustainable Building Advisor, or similar certification Approved by the Program Administrators during the design and construction process.

ii) Verification: A green building consultant must sign the Verification of Accountability by Responsible Party form and provide proof of certification or accreditation during Building plans submittal.

b. ENERGY STAR Builder: 1 point

i) Application: Applies to New Construction Only. The general contractor must be an ENERGY STAR Builder.

ii) Verification: The builder must sign the Verification of Accountability by Responsible Party form and the builder's name must be listed on ENERGY STAR's web site.

c. Innovation Points: 3 points.

i) Application: minimize the environmental impact of the house by incorporating green design and construction measures that have tangible and demonstrable benefits beyond those outlined in the points program. Suggested innovations include: exceptional performance (e.g., zero energy, carbon neutral); innovative design strategies; or emerging technologies, materials, or construction practices. The applicant MUST prepare a written submittal that includes:

(1) The intent of the innovation measure(s)

(2) The proposed requirement for compliance

(3) The proposed documentation to demonstrate compliance

(4) A description and an estimate of the benefit/impact provided by the proposed measure

ii) The above information must document how such an approach will minimize the impacts of the Building in a tangible and demonstrable way beyond the methods outlined in the Build Better Point Menu. The product, design, or technology must

comply with existing city codes and standards.

iii) Verification: Applicant must provide the above documentation in writing and any other supporting documentation, such as an evaluation report or specifications to quantify performance. This information is submitted with Building Permit plans and will be awarded during city staff's evaluation and determination of measures proposed.

Section 3. Section 15.08.020 (E) and (P) of the Hailey Municipal Code is amended by the deletion of the stricken language and addition of the underlined language, as follows:

15.08.020 Amendment of codes. Pursuant to Idaho Code Section 39-4116(3), the following codes adopted pursuant to Section 15.08.010 herein or provisions thereof are added to, amended, altered and/or modified as follows:

E. Fees, Deposits and Refunds: For buildings, structures and other improvements requiring a building or other permit under this chapter, fees, deposits and refunds shall be paid to the city of Hailey as specified herein.

1. Building Permit Fee. Fees shall be charged utilizing Table 1-A of the 97 UBC, published by the International Conference of Building Officials (ICBO). Building valuation shall be factored at one hundred twenty dollars (\$120.00) per square foot. For new construction or substantial remodels, an application fee of \$500 shall be made at the time the building permit application is submitted to the city. Said fee shall be credited to the total amount of the building permit fee, but shall be forfeited if the building permit is not obtained by the applicant within 180 days of permit approval. Except as otherwise provided for herein, the remainder of the building permit fee and the deposit for final inspection shall be collected when the building permit is issued. At the election of the applicant, payment of the remainder of the building permit fee for an Energy Star certified single family residence or a Building built to the Build Better Program during the introductory period, which shall expire January 1, 2012, may be deferred to the date of the issuance of a certificate of occupancy. For the purpose of Section 15.08.020(E), an Energy Star certified single family residence shall mean a single family residence certified as an Energy Star project in accordance with the Northwest Energy Star Program, as amended. The Building built Build Better Program shall mean a Building that meets the specifications outlined in Section 15.08.012.

2. Plan Review Fee: Building Department review will be 65% of the building permit fee. Except as otherwise provided for herein, the plan review fee shall be collected when the building permit is issued. At the election of the applicant, payment of the plan review fee for an Energy Star certified single family residence or a Building built to the Build Better Program specifications may be deferred to the date of the issuance of a certificate of occupancy.

3. Fire Review Fee: Fire Department review for commercial or multi-family projects shall be 35% of the building plan review fee. Except as otherwise provided for herein, the fire review fee shall be collected when the building permit is issued. At the election of the applicant, payment of the fire review fee of an Energy Star certified single family residence or a Building built to the Build Better Program specifications may be deferred to the date of the issuance of a certificate of occupancy.

P. 2009 IECC shall be amended as follows:

1. 2009 IECC Chapter 4, Residential Energy Efficiency.

a. Section 401.2 Compliance. Projects shall comply with Sections 401, 402.4, and 403.1, 403.2.2, 403.2.3, and 403.3 through 403.9 (referred to as mandatory provisions), and Section 405 (performance)

b. Sections 402.1 through 402.3, 403.2.1 and 404.1, shall be deleted.

c. Section 402.4.2 Air Sealing and Insulation. Building envelope air tightness and insulation installation shall be demonstrated to comply by Section 402.4.2.1, Testing Option.

d. Section 402.4.2.2, Visual Inspection Option, shall be deleted.

e. Section 405, Simulated Performance Alternative (Performance).

This section shall be met using Residential Energy Services Network's (RESNET) Home Energy Rating System (HERS) by developing a simulated model of the proposed design and comparing it to the 2009 IECC standard reference design using a REM/RATE™ ENERGY ANALYSIS.

2. 2009 IECC Chapter 5, Commercial Energy Efficiency.

a. Section 501.2, Application. The Commercial Building project shall comply with the requirements of Section 506, provided Sections 502.4, 503.2, 504, 505.1, 505.2, 505.3, 505.4, 505.6, and 505.7 are each satisfied.

b. Sections 502.1 through 502.3, 503.3, 503.4, and 505.5 shall be deleted.

c. Section 506, Total Building Performance. Buildings less than 10,000 square feet shall comply with Section 506 using a COMcheck Energy Analysis. Buildings 10,000 square feet or more shall comply with Section 506 using Building Department Approved energy modeling software, including but not limited to the most recent published version of the following: eQuest, Trace, Carrier HAP, or EnergyPlus.

3. Climate Zone: Figure ~~902.1(13)~~ 303.1(9) in the 2006⁹ IECC represents that the city of Hailey is in climate zone 16, the most extreme climate zone in Idaho. Said figure ~~902.1(13)~~ 303.1(9) shall supersede the climate zone for the city of Hailey referenced in the 2006 IRC Table N 1101.2 for all construction.

Section 4. Section 15.08.030 of the Hailey Municipal Code is amended by the addition of the underlined language, as follows:

15.08.030 Additional requirements. The following regulations shall apply in addition to those contained in the adopted codes and standards.

A. Manufactured Homes: The city of Hailey adopts by reference the "Idaho Manufactured Home Installation Standard" as published by the state of Idaho, September, 1999, compiled jointly by the Manufactured Housing Industry, as may be modified and adopted by the state of Idaho. Said "Standard" shall be known as the "Manufactured Housing Code."

B. Special Natural Hazards: Understanding that certain natural hazards exist in the jurisdiction including, but not limited to avalanche areas, earthquake, floodplain, snow loads, wildfires and soil qualities, site specific surveys and related engineering may be required as deemed appropriate by the authority of the jurisdiction.

C. Plumbing and Electrical Inspections Prerequisite: The framing inspection by the city of Hailey Building department shall not be conducted until the applicant has obtained a rough plumbing and electrical inspection from the Idaho State Plumbing and Electrical Inspectors. The

final inspection shall not be conducted until the applicant has obtained a final plumbing and electrical inspection.

D. Salvaged Building Materials: The use of salvaged Building materials may be Approved by the Building Official upon receipt of a complete list of those materials accompanied with written approval of such materials by an Idaho Licensed Structural Engineer. Said materials shall be capable of meeting design criteria for the proposed project.

E. Insulation of Stem Walls: In reference to residential construction, perimeter stem wall insulation practices shall be considered as equal and equivalent insulation criteria when considering thermal Building envelope efficiencies using energy code thermal design parameters.

F. Increased energy efficiency and sustainable Building practices: An increase in energy efficiency by 10% above the 2009 IECC and other sustainable Building practices and materials shall be followed, as specified by Section 15.08.012, Build Better Program, provided the activity is not listed as an exception in Section 101.4.3 of the 2009 IECC or an exemption in Section 15.08.012. A. 3. 4., or 5.

Section 5. If any section, paragraph, sentence or provision hereof or the application thereof to any particular circumstances shall ever be held invalid or unenforceable, such holding shall not affect the remainder hereof, which shall continue in full force and effect and applicable to all circumstances to which it may validly apply.

Section 6. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

Section 7. The adoption of Section 15.08.010, Adoption of Codes, shall be in full force and effect on January 1, 2011, and the adoption of Section 15.08.012, Build Better Program, Section 15.08.020, Amendment of Codes, and Section 15.08.030, Additional Requirements, shall be in full force and effect of January 1, 2012, following passage and approval and posting in at least five (5) public places in the City of Hailey.

ADOPTED BY THE HAILEY CITY COUNCIL AND APPROVED BY THE MAYOR
this _____ day of _____, 2010.

Richard L. Davis
Mayor, City of Hailey

ATTEST: _____
Mary Cone, City Clerk (Seal)