



TOWN OF TAOS ORDINANCE 09-03

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF TAOS ADDING A NEW SECTION TO THE TAOS BUILDING CODE CREATING THE HIGH PERFORMANCE BUILDING PROGRAM.

WHEREAS, the Town Council finds that:

1. Buildings contribute a significant amount of carbon emissions into our environment due to fossil fuel energy use for both constructing and operating buildings; and
2. rising energy costs for fossil fuel energy represent an increasing financial burden on Taos residents; and
3. energy rating systems and high performance building standards are now in widespread use to improve energy-use efficiency and reduce energy costs; and
4. water shortages are predicted in both the short-term and long-term in southwest desert regions.

WHEREAS, the Town Council hereby determines that the creation of a High Performance Building Program will further the goals and policies of the Town's adopted Vision 2020 Master Plan in the following respects:

1. Establishes the Town of Taos as a leader in promoting energy efficient design, "green architecture", and planning for energy efficiency and water conservation; and
2. encourages the use of innovative building and construction systems and community design that has less impact on our environment and enhances the quality of life for the Town's residents; and
3. encourages developers and builders to create energy and resource efficient construction; and

4. provides affordable energy by increasing energy and water efficiency, reducing carbon emissions, improving the built environment and ensuring that housing protects the health, safety and welfare of its occupants; and
5. provides high performance building practices in all new residential and commercial construction within the Town limits to lessen the impact on our environment and enhance the quality of life for its residents.

WHEREAS, this Program will allow the Town of Taos to:

1. Measure and quantify increases in energy efficiency as part of the Town's endorsement of the U.S. Conference of Mayors' Climate Protection Agreement (Resolution 07-04); and
2. improve the ability of the Town of Taos and its citizens to augment water supplies during predicted short-term and long-term water shortages; and
3. improve the ability of the Town of Taos to reduce floodwater flows and retain water for consumptive uses; and
4. inform prospective homebuyers of the various financial incentives available for improving the energy efficiency of their homes.

WHEREAS, improving energy efficiency for the residents of Taos serves an important health and public welfare function of municipal government by helping to assure the continued availability of critical, life sustaining resources and sustaining the natural environment upon which citizens depend.

NOW THEREFORE, THE TOWN COUNCIL DOES HEREBY ADD A NEW SECTION 15.04.040 TO THE TAOS BUILDING CODE AND ENACTS THE FOLLOWING:

The High Performance Building Program hereby provides as follows:

SECTION 1. ENERGY EFFICIENCY MEASURES.

1.1 Intent and Purpose.

To improve the energy use efficiency of construction in the Town of Taos and to help reduce monthly energy costs for homebuyers and tenants.

1.2 Phase I: 90 Days after the enactment of this Ordinance through December 31, 2009.

A. Residential Construction.

1. As a condition of obtaining a building permit from the Town, any builder (including a homeowner builder) who is issued such a permit at any time between 90 days after the enactment of this Ordinance and December 31, 2009, for the construction of a single family or multi-family residential structure with square footage of 3,000 square feet or more of heated floor area must submit to the Town a HERS Certificate showing a projected HERS Rating of eighty-five (85) or better.

2. As a condition of obtaining a Certificate of Occupancy from the Town, any builder of a single family or multi-family residential structure with square footage of 3,000 square feet of heated floor area or more who is issued a building permit between 90 days after the enactment of this Ordinance and December 31, 2009 must submit to the Town a confirmed HERS Rating of eighty-five (85) or better.

B. Commercial Construction.

1. As a condition of obtaining a building permit from the Town, any builder who is issued such a permit at any time between 90 days after the enactment of this Ordinance and December 31, 2009, for the construction of any commercial structure with square footage of 6,000 square feet or more of heated floor area must submit to the Town a LEED checklist showing all of the credits that the applicant intends to achieve, which must include at least three (3) of the water conservation points in the LEED checklist and must indicate an expected LEED rating of "Certified" or better.

2. As a condition of obtaining a Certificate of Occupancy from the Town, any builder of commercial structure with square footage of 6,000 square feet of heated floor area or more is issued a building permit between 90 days after the enactment of this Ordinance and December 31, 2009 must present a certificate showing a confirmed LEED rating of "Certified" or better and showing completion of at least three (3) of the water conservation points in the LEED checklist.

1.3 Phase II. January 1, 2010 through December 31, 2010.

A. Residential Construction.

1. As a condition of obtaining a building permit from the Town, any builder who receives such a permit at any time during calendar year 2010 for the construction of a single family or multi-family residential structure of any size must submit to the Town a HERS Certificate showing a projected HERS Rating of eighty (80) or better.

2. As a condition of obtaining a Certificate of Occupancy from the Town, any builder of a single family or multi-family residential structure of any size who has applied for a building permit at any time during calendar year 2010 must submit to the Town a certificate showing a confirmed HERS Rating of eighty (80) or better.

B. Commercial Construction.

1. As a condition of obtaining a building permit from the Town, any builder who is issued such a permit at any time during Calendar Year 2010 for the construction of any commercial structure of any size must present a LEED checklist showing all of the credits that the applicant intends to achieve, which must include at least three (3) of the water conservation points in the LEED checklist and must indicate an expected LEED rating of “Certified” or better.

2. As a condition of obtaining a Certificate of Occupancy from the Town, any builder of any commercial structure of any size who is issued a building permit at any time in Calendar Year 2010 must present a certificate showing a confirmed LEED rating of “Certified” or better and showing completion of at least three (3) of the water conservation points in the LEED checklist.

1.4 Phase III. January 1, 2011 through December 31, 2011.

A. Residential Construction.

The requirements for residential construction in Phase III (building permit issued in calendar year 2011) are the same as the requirements for residential construction in Phase II (building permit issued in calendar year 2010) except that a HERS rating of seventy-five (75) or better must be projected and confirmed as conditions for obtaining a building permit and a Certificate of Occupancy, respectively.

B. Commercial Construction.

The requirements for commercial construction in Phase III are the same as the requirements for commercial construction in Phase II.

1.5 Phase IV. January 1, 2012 onward.

A. Residential Construction.

The requirements for residential construction in Phase IV (building permit applied for in Calendar Year 2012 or later) are the same as the requirements for residential construction in Phases II and III except that a HERS Rating of seventy (70) or better must be projected and confirmed as conditions for obtaining a building permit and a Certificate of Occupancy, respectively.

B. Commercial Construction.

The requirements for commercial construction in Phase IV are the same as the requirements for commercial construction in Phases II and III.

1.6 Live/Work Units.

Builders of live/work units shall comply with the foregoing requirements for residential structures if, after evaluation by a HERS Rater, the HERS Rater determines that the units can be

appropriately rated. Otherwise, builders of live/work units must, as a condition of obtaining a building permit, present a LEED checklist showing all of the credits that the applicant intends to achieve, which must indicate an expected LEED rating of “Certified” or better and must include at least three (3) of the water conservation points in the LEED checklist and, as a condition of obtaining a Certificate of Occupancy, must present a certificate showing a confirmed LEED rating of “Certified” or better and showing completion of at least three (3) of the water conservation points in the LEED checklist.

1.7 Garages.

Any garage in, attached to, or on the same lot as, a residential structure for which a builder applies for a building permit at any time after 90 days following the enactment of this Ordinance (if the building permit application includes the garage) shall be insulated with a minimum of R-19 for walls and R-38 for the ceiling.

1.8 Modular Homes.

Any modular home as to which a builder applies for a building permit at any time after 90 days following the enactment of this Ordinance shall have a Quality Assured label which is affixed by the manufacturer, and a blue Energy Star label which is verified by a 3rd party certifier. As a condition of obtaining a Certificate of Occupancy from the Town, the builder must present the Quality Assured Label and the Blue Energy Star Label.

1.9 Remodels.

Any remodel of, renovation of, or addition to a structure that increases its height and/or square footage of heated floor area by more than 50% of the structure shall be subject to the requirements of this section. For remodeling, renovation or additions for which a building permits is issued between 90 days after the effective date of this ordinance and December 31, 2009, if the new construction is to result in a residential structure of more than 3,000 square feet of heated floor area or a commercial structure of more than 6,000 square feet of heated floor area, then the requirements of Section 1 above apply.

1.10 Provisions.

A. The requirements of this section are subject to the exemptions set forth in Section 3 and the alternative compliance option set forth in Section 4.

B. In the event applicable State Codes or federal requirements are changed in such a way as to impose higher energy efficiency standards than those set forth in this section, then the new state or federal standards shall supersede those set forth in this section.

SECTION 2. WATER CONSERVATION MEASURES.

2.1 Intent and Purpose.

To improve water conservation and water use efficiency of construction in the Town of Taos.
To help reduce monthly water costs for homebuyers and tenants.

2.2. Water Conservation System Requirements.

The following requirements apply to residential structures of 3,000 square feet of heated floor area or more and commercial structures of 6,000 square feet of heated floor area or more for which a builder applies for a building permit at any time between 90 days after the enactment of this Ordinance and December 31, 2009 and to all residential and commercial structures for which a builder applies for a building permit at any time thereafter. Any such structure:

A. Must have a drip or underground irrigation system for any landscaping, except for xeriscape landscaping. When this system is an irrigation or reuse system, the system must comply with NMAC 20.7.3.805.

B. All toilets must be either dual flush or another technology that has the capacity to use less than or equal to 1.6 gallons per flush (gpf) of municipal or potable ground water.

2.3 Documentation.

Applicant must make water systems available for inspection, if required or if requested by the Town.

2.4 Provisions.

A. The requirements of this section are subject to the exemptions set forth in Section 3 and the alternative compliance option set forth in Section 4.

B. In the event applicable State Codes or federal requirements are changed in such a way as to impose higher energy efficiency standards than those set forth in this section, then the new state or federal standards shall supersede those set forth in this section.

SECTION 3. EXEMPTIONS.

The following projects are exempt from the requirements of Sections 1 and 2:

- A. Building permit applications for commercial projects that are defined as Storage Group S and Utility and Miscellaneous Group U under the most recent addition of the International Building Code as adopted by the Town of Taos.
- B. Building permit applications for zero carbon emission projects. Applicant must provide proof from an electrical/mechanical engineer that the project produces zero carbon emissions to qualify for this exemption.
- C. Any project or building that has been approved for a building permit and the building permit has been issued by the Town of Taos prior to the effective dates set forth in this ordinance.

- D. All State of New Mexico owned buildings.
- E. Manufactured homes.

SECTION 4. IN LIEU FEES.

4.1 Intent and Purpose.

To promote energy efficiency and water conservation and to provide a fund for low and moderate income citizens who own and occupy their residence to receive energy and water savings upgrades for their homes. The fund will be implemented and managed in conformity with the anti-donation clause of the New Mexico Constitution, Art. 9, Sec. 14, the Affordable Housing Act (NMSA 6-27-1 *et seq* 1978) and the Town of Taos Affordable Housing Ordinance (No. 05-03) and any provision of law or ordinance amending or replacing any of these.

4.2 In Lieu Fees - Alternative Method of Compliance.

The requirement of Section 1 and 2 of this ordinance can be alternatively met by payment of an in lieu fee as specified below.

A. For residential projects, the in lieu fee shall be as follows:

- a. from 0 to 999 square feet of heated floor area = \$1,333
- b. from 1,000 to 1,999 square feet of heated floor area = \$2,666
- c. from 2,000 to 2,999 square feet of heated floor area = \$5,332
- d. from 3,000 to 5,999 square feet of heated floor area = \$8,000
- e. from 6,000 to 8,999 square feet of heated floor area = \$16,000
- f. from 9,000 to 11,999 square feet of heated floor area = \$24,000
- g. from 12,000 to 14,999 square feet of heated floor area = \$32,000

For every additional 3,000 square feet or portion thereof of heated floor area above 15,000, the fee shall be an additional \$8,000.

B. For commercial projects, the in lieu fee shall be as follows:

- a. from 0 to 999 square feet of heated floor area = \$666
- b. from 1,000 to 1,999 of heated floor area = \$1,333
- c. from 2,000 to 2,999 of heated floor area = \$2,666
- d. from 3,000 to 5,999 square feet of heated floor area = \$4,000
- a. from 6,000 to 8,999 square feet of heated floor area = \$8,000
- b. from 9,000 to 11,999 square feet of heated floor area = \$16,000
- c. from 12,000 to 14,999 square feet of heated floor area = \$24,000
- d. from 15,000 to 17,999 square feet of heated floor area = \$32,000
- e. from 18,000 to 20,999 square feet of heated floor area = \$40,000
- f. from 21,000 to 23,999 square feet of heated floor area = \$48,000
- g. from 24,000 29,999 square feet of heated floor area = \$56,000

For every additional 6,000 square feet or portion thereof of heated floor area above 30,000, the fee shall be an additional \$8,000.

C. In lieu fee shall be paid as follows: 25% of fee must be paid to receive building permit, remainder of fee paid to receive Certificate of Occupancy.

4.3 **Fund.**

All in lieu fees paid to the Town under this section shall be deposited into a separate “high performance building in lieu fund” in a suitable financial institution. No monies from the in lieu fund may be expended except to improve water conservation and/or energy efficiency in existing and future low and moderate income residential units, to reduce building permit or other fees for the construction of low or moderate income residential units, or to provide counseling, assistance and educational materials for low and moderate income persons in conformity with the Affordable Housing Act and Town of Taos Affordable Housing Ordinance procedures and under guidelines to be adopted by future ordinance(s).

SECTION 5. TOWN-OWNED BUILDINGS.

The Town of Taos shall meet or exceed the requirements stipulated in Sections 2 and 3 in all new construction and remodels.

SECTION 6. DEFINITIONS.

The following definitions supplement definitions in the Town of Taos Land Use Development Code and Town of Taos Building Code.

A. Carbon Emissions – Also carbon dioxide emissions. Carbon dioxide (CO₂) is a greenhouse gas that has been accumulating at accelerated rates in Earth’s atmosphere and oceans during the past 150 years. Carbon dioxide emissions result primarily from the combustion of petroleum, coal, and natural gas. Data from the U.S. Energy Information Administration illustrates that buildings in the USA are responsible for almost half (48%) of all energy consumption and greenhouse gases emissions annually.

B. Drip or Underground Irrigation System – Also known as trickle irrigation or micro irrigation. An irrigation method which minimizes the use of water and fertilizer by allowing water to drip slowly to the roots of plants, either onto the soil surface or directly onto the root zone, through a network of valves, pipes, tubing, and emitters.

C. Fossil Fuel Energy – Energy produced by burning hydrocarbons including primarily coal, oil and natural gas.

D. Graywater – Untreated household wastewater that has not come in contact with toilet waste and that includes wastewater from bathtubs, showers, washbasins, clothes washing machines and laundry tubs, but does not include wastewater from kitchen sinks, dishwashers or laundry water

from the washing of material soiled with human excreta, such as diapers. Reference: Uniform Plumbing Code & NMAC.

E. Graywater System – A type of individual household water treatment or disposal system that requires the owner or builder to secure an installation permit from the local county Health Department prior to construction. Systems range from simple, low-cost piping installations to highly complex and costly installations that treat graywater prior to disposal using settling tanks, sand filters and other features to remove pollutants and pathogens. (See Illustration A).

F. Green Architecture – The practice of increasing the efficiency with which buildings use resources — energy, water and materials — while reducing building impacts on human health and our environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal.

G. Heated Floor Area – The total horizontal areas of all floors of all structures on a lot, measured from the exterior faces of exterior walls that are heated and therefore used as living space. Heated floor area excludes any area not suitable for day-to-day human occupancy, such as vents, shafts, balconies, porches, stairwells, garages and storage space. Reference: Town of Taos Land Use Development Code (LUDC).

H. HERS (Home Energy Rating System) – A systematic energy audit that provides a standard measurement of a home's energy efficiency called the HERS Index. Homeowners and professionals who want to upgrade a home's energy efficiency can use the HERS Rating to evaluate and pinpoint specific, cost-effective improvements. For existing homes, homeowners can receive a report listing cost-effective options for improving the home's energy rating. A HERS Rating allows a homebuyer to easily compare the energy performance of the homes being considered. There are two types of ratings:

- Projected ratings – HERS Ratings performed prior to the construction of a new building or prior to implementation of energy-efficiency improvements to an existing building.
- Confirmed ratings – HERS Rating performed on an actual building with data gathered from an on-site inspection of the physical building, not just data from plans or construction documents.

Confirmed HERS Ratings involve an on-site inspection of a home by a residential energy efficiency professional, a home energy rater. Home energy raters are trained and certified by a Residential Energy Services Network (RESNET) accredited home energy rater training provider. The home energy rater reviews the home to identify its energy characteristics, such as insulation levels, window efficiency, wall-to-window ratios, the heating and cooling system efficiency, the solar orientation of the home, and the water heating system. Performance testing, such as a blower door test for air leakage and duct leakage, is usually part of the rating. The data gathered by the home energy rater is entered into a RESNET accredited computer program and translated into rating score. The home receives a score between 1 and 100, depending on its relative efficiency. An estimate of the home's energy costs is also provided in the report.

I. HERS Certificate – The document an applicant must submit to receive a Building Permit and a Certificate of Occupancy.

J. LEED (Leadership in Energy and Environmental Design) – A third-party certification program and the nationally accepted benchmark for the design, construction and operation of buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

K. LEED Checklist – A checklist published by the US Green Building Council that provides the most current requirements to achieve LEED Certification.

L. Live/Work - a mixed use structure consisting of a commercial and residential uses. The commercial function may be anywhere in the structure. It is intended to be occupied by a business operator who lives in the same structure that contains the commercial use.

M. Manufactured homes - Homes built entirely in the factory under a federal building code administered by the U.S. Department of Housing and Urban Development (HUD). The Federal Manufactured Home Construction and Safety Standards (commonly known as the HUD Code) went into effect June 15, 1976. Manufactured homes may be single- or multi-section and are transported to the site and installed. On-site additions, such as garages, decks and porches, often add to the attractiveness of manufactured homes and must be built to local, state or regional building codes.

N. Modular Homes - Factory-built homes that are built to the state, local or regional code where the home will be located. Modules are transported to the site and installed.

O. Residential Construction – All single- and multi-family, detached units, casitas, town homes, condominiums, and live/work projects.

P. Rainwater Collection System – Piping, containers and diversion systems used to collect runoff from rainfall and snowmelt from surfaces such as roofs, patios, and parking lots. The system typically provides water for on-site use such as irrigation and toilet flushing. (See Illustration B).

Q. RESNET(Residential Energy Services Network) – The Residential Energy Services Network's (RESNET) manages HERS Raters by monitoring and posting certification of HERS Raters and providing updates on HERS Rater software.

R. U.S. Conference of Mayor's Climate Protection Agreement – an agreement where supporting mayors in USA cities pledge to reduce carbon dioxide emissions by 7 percent below 1990 levels by 2012. As of 2008, this agreement is the only climate protection agreement of its kind among elected officials in the USA.

S. Xeriscape – Refers to landscapes or to landscaping practices that do not require supplemental irrigation water.

T. Zero Carbon Emission – Zero carbon emission means that the amount of energy provided by on-site renewable energy sources is equal to the amount of energy used by the building for operation. It does not include the emissions generated in the construction of the building and the energy required to manufacture and supply a product, material or service to the building site.

SECTION 7. SEVERABILITY; GOVERNING LAW.

If any section, paragraph, sentence, clause, word or phase of this ordinance is for any reason held to be invalid or unenforceable by any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this ordinance. The Council hereby declares that it would have passed this ordinance and every part thereof irrespective of any provision being declared unconstitutional or otherwise invalid.

This ordinance shall be interpreted and applied in accordance with the laws of New Mexico.

ORDAINED THIS 24th DAY OF FEBRUARY, 2009 BY THE FOLLOWING VOTE:

Councilmember Rudy C. Abeyta	<u>yes</u>
Councilmember A. Eugene Sanchez	<u>yes</u>
Councilmember Amy J. Quintana	<u>yes</u>
Councilmember Michael A. Silva	<u>yes</u>

TOWN OF TAOS



Darren M. Cordova, Mayor

ATTEST:



Renee Lucero, Town Clerk

APPROVED AS TO FORM:



Allen Ferguson, Jr., Town Attorney