**What is a Silver State Certified Sustainable Home?**

A Silver State certified home is designed and built to be environmentally sustainable. It is a green home that uses less energy, water and natural resources, creates less waste and is healthier for the people living inside compared to a standard home. A Silver State certified home provides greater durability and lower maintenance costs. It is energy efficient and much more. It is also a high performing home in these other key areas: water use, materials and resource use, indoor air quality and site development. Homes are built to last decades and the operation and maintenance costs of a Silver State certified home will cost less than the standard home for its lifetime.

**Key Features**

* Voluntary Option
* Comprehensive and Credible
* Rigorous Yet Attainable
* Benefits Developers, Tenants / Occupants, Community
* Designed for Affordable Housing Developers in Nevada

Silver State certified homes are independently verified by third party inspectors to meet strict guidelines for energy efficiency set by the Nevada Housing Division. These homes save money on utility bills, provide a more comfortable living environment with better indoor air quality, and help protect the environment.

**Energy Efficiency**

The cheapest and least polluting kilowatt or therm is the one you don’t use. The first thing to look for in a green home is energy efficiency. According to the U.S. Environmental Agency, a typical home in the U.S. produces more pollution than a car produces in a year. Energy efficiency features reduce greenhouse gas emissions for decades while at the same time reducing the cost of living comfortably in a home.

Natural gas used in homes is a fossil fuel. Most of the electricity used in homes comes from the burning of fossil fuels at power plants. These contribute to climate change, smog, and acid rain. So, the less energy used, the less greenhouse gases and other air pollution generated.

By building an energy efficient home reduced energy demand and usage is guaranteed. The home also stays comfortable with less energy use because special care is taken to ensure a good building envelope. These steps reduce utility expenses for the life of the home while keeping the occupants comfortable.

Mandatory features in Silver State certified homes include:

* **Efficient Walls and Windows –** Comprehensive air sealing, high levels of wall, floor and attic insulation that is verified to be properly installed, plus high-performance windows.
* **Efficient Air Ducts –** Insulated and sealed ducts give rooms get enough air to have consistent, comfortable temperatures throughout the house
* **Efficient HVAC Equipment** – Right-sized and high efficiency space heating, cooling, water heating and ventilation fans
* **Efficient Lighting and Appliances-** ENERGY STAR dishwashers, refrigerators, lighting and ceiling fans reduce energy use and cooling loads in the summer.
* **Renewable Energy Ready –** When renewable energy is not installed in project construction, design and build the project so that it will readily accommodate the installation of solar photovoltaic panels.

**Indoor Air Quality**

Silver State certified homes provide mechanical ventilation, exclude natural draft combustion appliances, and reduce moisture and chemical exposure. These features help protect certified homes and their residents from mold, combustion gases, and other pollutants. The careful selection of building materials that do not release harmful gases into the building reduces pollutants that can harm occupants.

**Water Efficiency**

Silver State certified homes use plumbing fixtures that are 20% more water efficient than other products and appliances that use 30% less water than standard models. Outdoor water use in landscapes is also greatly reduced in a typical Silver State certified home.

**Resource Efficiency**

In order to minimize the environmental impact of the building materials used and reduce the waste generated by construction, Silver State certified homes provides a number of practices and materials for greater resource efficiency. Options in this category include reducing and recycling construction waste, using materials with recycled content, using more durable building components and certified sustainably produced materials.

**Site Development**

Proximity to stores and services and walkability reduces greenhouse gas emissions from driving for basic services and makes the site more convenient for tenants. By including extra amenities in site development, the quality of life for the community is improved. Enhanced community amenities are some of the options in this category.

**Construction Types**

Silver State certified is provided for the following construction types:

Single-family Homes (including townhomes)

Low-rise Multifamily (1-3 story buildings)
Mid-rise Multifamily (4 -5 story buildings)

**SILVER STATE HOME CERTIFICATION PROCESS
Plan Review**

Prior to construction the architectural plans including mechanical, electric and plumbing plans, are reviewed and analyzed. The review verifies that all pre-requisites are included and met in the plans. The reviewer works with the design team to address and correct any

**Energy Modeling**

Specialized energy modeling software is used to verify the project will meet energy performance targets. The energy modeling is done on each unique dwelling type based on type, size and location in a project. It includes the worst case orientation in a building for energy use.

**Independent, 3rd Party Field Verification and Quality Assurance During Construction and Post Construction**

Silver Star homes undergo significantly more comprehensive inspections, and testing than homes built to code. An extensive and detailed verification process includes pre-dryall inspections of comprehensive air sealing and quality insulation installation to RESNET Grade I. The process includes blower door testing to measure whole-house air leakage and duct testing to measure air duct leakage.

Inspections and verification are performed by a certified HERS Rater, an independent professional trained and certified by RESNET. The rating process is a non-invasive physical examination of building systems, structures, materials and components to assess energy and water efficiency, indoor air quality, resource efficiency of materials and construction methods, and construction quality.

**Certification**

After the final site inspection and review of supporting documentation to verify that all requirements and targets have been met, a written certification is issued which includes all relevant information, level of certification, property address, builder/developer name, certifier name and date of certification.