



NEEMgreen Means **TOUGH** **GREEN** Standards

Quality Criteria

Energy Efficiency – Minimum ENERGY STAR requirements.

Material Efficient Framing – Building design to minimize material cuts and waste for wall, floor, and roof system structural components; utilize panelized walls, pre-cut framing packages, and engineered wood products.

Water Efficiency – Low flow shower heads, (1.75 gal/min.), 1.6 gal. and dual flush toilets.

Envelope Leakage – Verify Test envelope leakage to less than 5.0 air changes per home at a pressure differential of 50 Pascal between house interior and exterior.

Windows – U=0.33 VALUE windows or better.

Whole Building Mechanical Ventilation – Design and install mechanical systems to provide fresh air to indoor environment through exhaust, supply or balanced ventilation.

Kitchen Ventilation – Provide mechanical kitchen ventilation with exhaust fan(s) that provide at least 50 cfm (intermittent use) or 20 cfm (continuous use) with venting to outdoors.

Bathroom Ventilation – Provide mechanical ventilation for all baths with tub or shower with an exhaust fan(s) that provides at least 50 cfm (intermittent use) or 20 cfm (continuous use) with venting to outdoors.

Clothes Dryer – Exhaust clothes dryer directly to outdoors.

Duct Leakage – Seal all duct joints with mastic and/or UL 181 listed tape; test each floor to the following standards: net or total duct leakage not to exceed .06 cfm/50 times the square foot served by system or 75 cfm/50, whichever is greater.

Air Barrier and Insulation Integrity – Complete NEEM checklist for each home.

Combustion Safety – Fossil fuel furnaces or water heaters installed in conditioned spaces must be sealed combustion, direct vented or power vented units.

Appliances – All appliances in home are ENERGY STAR qualified.

Duct Testing – All ducts tested – maximum leakage to less than 0.06 cfm/50 times the square footage served by system or 75 cfm/50, whichever is greater.

Materials – Plywood materials to not emit formaldehyde in excess of 0.2 ppm as measured by air chamber test method; particleboard materials to not emit formaldehyde in excess of 0.3 ppm as measured by air chamber test method.

Low VOC Interior Coatings – Paints, coatings, and primers applied to interior walls and ceilings to have VOC levels not to exceed 50 g/L (flats) or 150 g/L (non-flats).

Low VOC Adhesives – Adhesives will comply to following maximum limits for VOCs: carpet pad adhesives – 50 g/L (excluding water); indoor carpet adhesives – 50 g/L (excluding water); Wood flooring adhesives - 100 g/L (excluding water); Subflooring adhesives - 50 g/L (excluding water); multi-purpose construction adhesives - 70 g/L (excluding water).

Project Documentation – Construction plans and specifications meet or exceed energy Uo rating and green features.

Envelope Durability – Appropriate exterior vapor retarder/barrier and Fiber cement exterior siding.

In-Plant Waste Management – All but 4% or fewer materials recycled.

Site Requirements

Heat Pump Space Conditioning Design – Right-size heat pump space conditioning system and duct system.

On-Site Features – Reserve top soil and utilize permeable materials.

On-Site Construction Waste Management – Plan required that documents diversion pathways for major waste stream components including cardboard, lumber, land-clearing debris, and drywall and include minimized packaging from suppliers.



More than Green

“Energy Efficient” GREEN!

Golden West Homes is a recognized leader in Green building, Green housing, and Green living. Our homes are designed to provide homeowners with comfortable, durable, environmentally friendly dwellings that are cost-effective to own and operate. These resource-efficient homes are crafted to exceed most building codes and provide homeowners with years of healthy, quality living, while protecting the precious Northwest environment.

But now, we're not just building green, we're building “certified” green. Golden West Homes are certified “green” by the State of Oregon Department of Energy under its new NEEMgreen building program. This program is designed to promote green construction so homeowners benefit from increased comfort, health and durability. To qualify for this stringent program, Golden West must build your home to comply with the state's rigorous Green Criteria and Energy Performance threshold.

What's this mean to you? A Golden West home that is built to the following guidelines:

- **Resource Efficiency** – Advanced framing techniques and home designs that effectively optimize the use of building materials.
- **Energy Efficiency** – We build a better building envelope and incorporate more energy efficient mechanical systems, appliances, and lighting into a home, yielding long-term utility bill savings and increased comfort for the homeowner.
- **Water Efficiency/Conservation** – Our homes are constructed so that your indoor and outdoor water use can be significantly reduced.
- **Occupancy Comfort and Indoor Environmental Quality** – Our effective management of moisture, ventilation, and other issues in our construction process create a more comfortable and healthier indoor living environment.

Making your home a greener place is a commitment -
we at Golden West make to you, your family, your community and the world.