

Increasing Solar Access for All

Bend Area Habitat for Humanity

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The Burdens of Home Energy Cost

- Home energy costs have increased faster than incomes for low-income households.
- Utility bills often impose a financial hardship on low-income families.
- Disparities exist between those who benefit from the causes of climate change and those who bear the costs of climate change.

Benefits of Increasing Energy Efficiency in low-income homes

- The Department of Energy reports Energy Star qualified homes deliver \$200-\$400 in annual savings compared to conventional homes.
- Non-"green" benefits include greater comfort, convenience, health, safety and noise reduction.
- Investment in increasing energy efficiency in low-income homes generates significant economic activity in the construction industry.



Bend Area Habitat for Humanity LEED Home Project





3rd Party Green Building Certifications

Origon DOE High Performance Home Certification Northwest Energy Star Certification Earth Advantage Gold Certification LEEO Platinum Certification in Process

Building Technologies

Insulated concrete slab (R-15) with radiant floor heating 2x6-24" O.C. Wall Framing with insulated headern Exterior rigid fearm insulation: R-24 exterior walls 12" raised heel trusses, 24" O.C. w/ R-49 blown-in insulation

Water Conservation

Dual flush toilets (s. 1.2gpf)
Low flow flotures (1.5 gpm)
Low water and maintenance landscape - Xeriscaping
Permeable Driveway

Energy Efficiency & Renewable Energy

Very Low Energy Performance Score (EPS) 82% Eff Tankless Water Heater: Salar Thermal Preheat System 2.7 kW Grid Tied PhotoVoltaic Array 100% Compact Fluorescent Lighting EnergyStar Appliances

Indoor Air Quality

300% hard surface flooring (sealed concrete slab)
Filtered Fresh air ventilation - Elimination of ducted heating system
Low VOC points & sealers
No Urea Formaldehyde added in cabinets and insulation

Resource Conservation

Engineered Lumber Higher recycled material content Advanced framing techniques to decrease overall lumber usage

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Funding for Habitat Solar Projects

- Sunlight Solar
- Oregon Department of Energy High Performance Home certification
- Low Income Solar Assistance Program Energy Trust of Oregon
- Home Depot Partners In Sustainable Building Habitat for Humanity International
- Business Energy Tax Credit Pass Through (BETC)

Questions?

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