

# LEED for Homes Project Snapshot

**Bay Lakes Builders**  
**Virge Temme Architecture**  
**Gills Rock, WI**  
**LEED PLATINUM**

**76%** Expected Energy Savings  
 Based on HERS Score

**95%** Construction Waste  
 Diverted from Landfill



Photo Courtesy of: Lois Preusser

## STRATEGIES AND RESULTS

The organic design of this single-family home was created to replicate the distant rolling hills, and integrates fully with nature in its orientation, materials, and landscaping. It was positioned and oriented for optimum passive solar heat gain, natural ventilation cooling, and photovoltaic performance. Its superinsulated envelope was modeled using Passive House software and Manual J, and is expected to yield 76% annual savings in heating and cooling. Final HERS score of 22.

## EXEMPLARY PERFORMANCE

Over 95% of construction materials used are of recycled content and/or are recyclable at end-of-use. LED and CFL lighting and Energy Star ceiling fans reduce energy consumption. Drought tolerant landscaping and Water-Sense plumbing fixtures reduce water use. Bamboo and stained concrete flooring, eco-friendly cabinets, and locally harvested natural stone provide a visually warm interior while reducing environmental impact. All achieved at \$ 172.00 per square foot competitive with similar new home constructed in the area.

## LEED™ Facts



**Platinum**

LEED for Homes  
 Certification Awarded November 2013

**Platinum 103.5\***

Innovation in Design 8 / 11

Location & Linkages 2 / 10

Sustainable Sites 16 / 22

Water Efficiency 5 / 15

Energy & Atmosphere 36.5 / 38

Materials & Resources 15 / 16

Indoor Environmental Quality 19 / 21

Awareness & Education 2 / 3

\*Out of 136 possible points

## PROJECT BASICS

Project Type	Single Family
Conditioned Space	2,277 sq ft
Bedrooms	4
Bathrooms	2
Lot Type	New
Construction Type	New Construction

## KEYS TO SUCCESS

HVAC Type	Air Source Heat Pump
Windows	Triple Pane Hi-Perf
Wall Insulation	Dense-Pack Cellulose
On Site Renewables	4kW PV Solar Array
Low VOC paints and adhesives	
Design incorporates Passive House features	
Third-party testing for supply air to each room.	

## THE LEED FOR HOMES DIFFERENCE

Construction Waste Management Plan	<input checked="" type="checkbox"/> YES!
On-Site Performance Tests	<input checked="" type="checkbox"/> YES!
Custom Durability Planning Checklist	<input checked="" type="checkbox"/> YES!
Third-Party Verified Documentation	<input checked="" type="checkbox"/> YES!

## About the Project Team

Project Team was headed by Virge Temme with two design charrettes to keep everyone in check with the LEED For Homes requirements and goals.

Architect: Virge Temme Architecture  
 Builder: Bay Lakes Builders

LEED for Homes Green Rater:  
 - Tom Krawczyk  
 TJH Energy Consulting

[www.alliancees.org](http://www.alliancees.org)

## LEED for Homes Provider

AES

## About LEED for Homes

LEED for Homes is a voluntary, third-party certification program developed by residential experts and experienced builders. LEED promotes the design and construction of high-performance green homes, and encourages the adoption of sustainable practices throughout the building industry.



[www.usgbc.org/homes](http://www.usgbc.org/homes)

The information provided is based on that stated in the LEED® project certification submittals. USGBC does not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.