

# LEED for Homes Project Snapshot

**VERTEX ARCHITECTS, LLC**  
**PELUSO RESIDENCE**  
**BLOOMINGDALE, IL**  
**LEED SILVER**

**29%** Expected Energy Savings  
 Based on HERS Score

**75%** Construction Waste  
 Diverted from Landfill



Photo Courtesy of: Nathan Kirkman

## STRATEGIES AND RESULTS

The Peluso Residence was designed and built as an efficient and modern home, and was the first single-family house in Illinois to achieve LEED certification. The home is strategically oriented on the site & supported by exposed steel columns, complementing the exterior glass and stained cedar cladding. Given the large glazing area for natural daylighting and a modern design, efficient windows are critical to the home's energy performance.

The construction cost of the home was \$115.00 per square foot - less than half the average of a new-construction home cost - proving a well-designed Green home can be affordable.

## EXEMPLARY PERFORMANCE

The construction project achieved near zero-waste by reducing materials; the structural polished concrete floor is the floor finish, and the exposed steel / metal deck comprise the finished ceiling.

The house uses 20% less natural gas than the average home by using in-floor radiant heating from two tankless water heaters. Both spray cell foam and recycled newspaper insulation were used, as well as an indoor atmosphere quality monitoring system.

A 1,700-gallon underground storage tank collects rooftop water for use in watering the yard and washing the cars.

## LEED™ Facts

**Peluso Residence**



**LEED for Homes**  
 Certification Awarded May 2008

**Silver 70\***

**Innovation in Design 4/11**

**Location & Linkages 7/10**

**Sustainable Sites 13/22**

**Water Efficiency 6/15**

**Energy & Atmosphere 19/38**

**Materials & Resources 8/16**

**Indoor Environmental Quality 11/21**

**Awareness & Education 2/3**

\*Out of 136 possible points

## PROJECT BASICS

Project Type	Single Family
Conditioned Space	3,200 sq ft
Bedrooms	4
Bathrooms	1+1/2
Lot Type	Previously Developed
Construction Type	New Construction

## KEYS TO SUCCESS

HVAC Type	Radiant floor heating
Insulation	Spray foam / rigid board
Window U Value	0.32 - Pella Impervia
Plumbing fixtures	Low-flow fixtures
6'-0" module allows all in-fill framing to be 18" o.c.	
1,700 gallon rain water harvesting system.	
Energy Star appliances and lighting throughout.	

## THE LEED FOR HOMES DIFFERENCE

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

## About the Project Team

Vertex Architects, LLC is led by the husband and wife team of Alphonso and Michelle Peluso, who designed and constructed this home as their personal residence.

Builder: Vertex Architects, LLC  
 Architect: Vertex Architects, LLC

LEED for Homes Provider:  
 Alliance for Environmental Sustainability (AES)  
[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 submittal. 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.