

# LEED for Homes Project Snapshot

Habitat for Humanity of Kent County

1831 Willard

Grand Rapids, Michigan

LEED PLATINUM

**46%** Expected Energy Savings  
Based on HERS Score

**70%** Expected Water Savings  
Based on WE Credit Score



Photo Courtesy of: Daniel Zander

## STRATEGIES AND RESULTS

The approach for this house was rebuilding it into a LEED certified home that goes beyond most Habitat homes. The house has achieved Energy Star V. 3 certification and Indoor airPlus certification, requiring higher standards for the ventilation and HVAC. The biggest hurdle for this house was installing a 95% efficient furnace coupled with an ERV mechanical ventilation system and flexible ducts in order to reduce energy costs and improve air quality throughout the 2-story house. The kitchen is outfitted with low VOC cabinets and a 100 CFM range hood which vents directly outside.

## EXEMPLARY PERFORMANCE

The home appliances available in this house are Energy Star certified to accompany the Energy Star V3 certification on the house. Contains a direct vented water heater and furnace to vent fumes directly outside and improve indoor air quality and efficiency. Outfitted with low formaldehyde pressed wood materials in flooring and cabinets, as well low VOC paints and finishes on the cabinets and walls. Use of more efficient and environmentally friendly NuWool insulation in the floors and walls. Plumbing is outfitted using PEX piping as more flexible and reliable alternative to PVC or copper piping.

## LEED™ Facts

1831 Willard



LEED for Homes  
Certification Awarded September 12th

Gold **85\***

Innovation in Design 8/11

Location & Linkages 10/10

Sustainable Sites 9/22

Water Efficiency 5/15

Energy & Atmosphere 25/38

Materials & Resources 8/16

Indoor Environmental Quality 19/21

Awareness & Education 1/3

\*Out of 136 possible points

## PROJECT BASICS

Project Type	Single Family
Conditioned Space	2,160 sq ft
Bedrooms	5
Bathrooms	1
Lot Type	Previously Developed
Construction Type	Gut Rehab

## KEYS TO SUCCESS

Window U Value	.3
Air Filtration	MERV 10
Wall Insulation	R5
HVAC Efficiency	95.5
Indoor airPLUS Certification	
Energy Star V. 3	

## 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

Ferris State Energy Center  
-HERS and Energy Star V. 3 rater

Tom Williams  
A1 Mechanical of MI, LLC  
-Credentialed HVAC Installer

## 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.