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

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
On-Site Performance Tests
Custom Durability Planning Checklist
Third-Party Verified Documentation

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

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