

LEED for Homes Project Snapshot

Herzog Homes
Metro Detroit Home
Ferndale, Michigan
LEED PLATINUM

34% Expected Energy Savings
 Based on HERS Score

63% Construction Waste
 Diverted from Landfill



Photo Courtesy of: Home Owner

STRATEGIES AND RESULTS

The purpose of this project was to revitalize an abandoned home in disrepair, and through environmentally-friendly construction practices, to transform it into an energy-efficient home. The design team followed LEED protocol for local labor and materials, using renewable or sustainable products in aiming for Gold LEED certification.

The result is a an efficient, practical, and affordable home that is no longer an eyesore in an established neighborhood. This home is the first of its kind in metro Detroit, setting an example for others to invest in Green Homes and to restore existing homes rather than build new.

EXEMPLARY PERFORMANCE

The house also has its own high-efficiency controlled irrigation system that evenly distributes water in the front and back yards. The backyard contains a 200 square foot vegetable garden, which includes fruit trees. The garden benefits from the irrigation system and passive water collection to yield produce four to six months out of the year. The indoor air quality is 10 times better than the average home due to the ERV and high efficiency furnace. The house is fully enclosed with open cell spray icynene insulation, allowing better insulation and lower air leakage. The interior contains almost no VOCs other than low-VOC drywall glue and paint.

PROJECT BASICS

Project Type	Single Family
Conditioned Space	2,027 sq ft
Bedrooms	3
Bathrooms	2
Lot Type	Infill
Construction Type	Gut Rehab

KEYS TO SUCCESS

Air Filtration	MERV 13
Insulation	R20
Window U Value	31
HVAC Efficiency	97%
3.5 Air Leakage Rate in ACH50	
Backyard Vegetable Garden	

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

Kris Herzog
 -Herzog Homes (Developer)

IDC Mechanical
 - HVAC Installer

Lee Purches- Green Rater (provided assistance in bringing the project together)

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

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.

LEED™ Facts

Metro Detroit Home



LEED for Homes
 Certification Awarded 4/24/2013

Platinum 93*

Innovation in Design 9/11

Location & Linkages 10/10

Sustainable Sites 10.5/22

Water Efficiency 10/15

Energy & Atmosphere 19.5/38

Materials & Resources 16/16

Indoor Environmental Quality 17/21

Awareness & Education 1/3

*Out of 136 possible points