

# LEED for Homes Project Snapshot

**RWH DESIGN**  
**ROSS STREET HOUSE**  
**MADISON, WI**  
**LEED PLATINUM**

**58%** Expected Energy Savings  
 Based on HERS Score

**30%** Expected Water Savings  
 Based on WE Credit Score



Photo Courtesy of: Zane Williams, www.zanewilliamsphotography.com

## STRATEGIES AND RESULTS

The Ross Street House is Wisconsin's first LEED Platinum single-family home, designed as a dream home for the owners who both actively led the design and build. Careful attention to the home's scale helps it blend into neighboring 1960's homes. The site design promotes natural rainwater permeability, and the landscape plan relies on natural rainfall and includes rainwater collection for vegetable garden irrigation. The homeowners feel "the LEED for Homes program offered a structure to help us through the process." Additionally, the third-party performance testing during construction resulted in finding and fixing problems before drywall was installed and it was too late.

## EXEMPLARY PERFORMANCE

The home exhibits passive solar and daylighting design elements. The southern face features a fixed exterior sun louver designed to allow the sun to penetrate deep into the home during winter while shading the windows in summer.

To reduce air leakage, the envelope consisted of wood framing with spray foam applied to a 2" thickness in walls and 6" in the ceiling. Additional high-density batts were added as well, contributing to an energy-efficient shell. In post-occupancy testing, the home performs even better than predicted, with an effective HERS rating of 23 vs. the initial HERS rating of 42.

## PROJECT BASICS

Project Type	Single Family
Conditioned Space	2,550 sq ft
Bedrooms	3
Bathrooms	2+1/2
Lot Type	Infill
Construction Type	New Construction

## KEYS TO SUCCESS

Window U Value	0.30 U-value
Air Filtration	0.8 ach
Lighting	80% is CFL or LED
On Site Renewables	Provide 60% of electric
Wide doorways, pre-wired elevator shaft f	
ERV system draws air from both bathrooms	
Duct blaster and sealing done on all HVAC ducts.	

## 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

Learn more about the home via the web site: [www.RossStreetHouse.com](http://www.RossStreetHouse.com)

Architect: Carol Richard, AIA, LEED AP  
 Richard Wittschiede Hand  
 Mechanical Engineer: Fred Berg  
 General Contractor: Yahara Builders  
 Landscape Architect: L. J. Geer Design

LEED for Homes Provider:  
 Alliance for Environmental  
 Sustainability (AES)  
[www.leadforhomesillinois.org](http://www.leadforhomesillinois.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.

## LEED™ Facts

Ross Street House



LEED for Homes  
 Certification Awarded July 2009

**Platinum 102\***

Innovation in Design 6/11

Location & Linkages 9/10

Sustainable Sites 19/22

Water Efficiency 12/15

Energy & Atmosphere 29.5/38

Materials & Resources 7.5/16

Indoor Environmental Quality 17/21

Awareness & Education 2/3

\*Out of 136 possible points