NewenHouse will provide super insulated, sustainable kit homes for people who want to live lightly on the earth.

NewenHouses are designed to be **80 to 90% more energy efficient** than the average home. The prototype in Viroqua, WI, is aiming for both **Passive House** and **LEED Platinum** certification.

### Design Features

- Three sizes to choose from: 600 sf (1 br), 800 sf (2 br), & 1000 sf (3 br, 2 ba), all at least 50% smaller than an average new American home
- Cozy, contemporary interior
- Designed for entertaining and hosting overnight guests
- Large southern windows for day-lighting and solar gain
- Direct or borrowed light in all rooms
- Built-in benches and storage
- No furnace necessary (peak heat demand is only ~1500 W, the equivalent of a hairdryer)
- Designed to reduce interior electromagnetic fields
- Solar hot water and photovoltaic (PV) system ready
- Semi-attached three-season porch and storage area with sleeping loft and root cellar
- 1000 gallon rainwater harvesting system
- Edible landscaping plan, plus green roof option for entry porch

### Construction Details

- 16 inch-thick double wall system filled with dense pack cellulose (recycled newspaper)
- Insulation R-values of 57 under slab and around walls and 100 in the attic
- Heat Recovery Ventilation (HRV) system with 92% heat recovery
- Triple-pane windows with insulated fiberglass frames
- FSC certified wood roof trusses and kitchen cabinets
- Shiplap cedar siding
- Standing seam metal roof with hidden fasteners
- 0.8 gpf and dual-flush toilets, plus low-flow faucets
- Ultra-safe paints and natural oil finishes
- Regional and natural materials sourced when possible
- Designed to incorporate optional salvaged materials
- Designed for deconstruction

### What Does the NewenHouse Kit Include?

- The Design, Construction Documents, and a detailed Subcontractor Specification Sheet
- Sustainable Building Materials -- that make the NewenHouse unique (Windows, Doors, HRV, Cabinets, Wood Flooring/Trim/Shelving, Tile, 0.8 gallon/flush Toilets, Building Tape, Paint and Finishes, and more)
- Consultation during building process (working with you or your contractor)
- Edible Landscape Plan and Comprehensive Green Living Guide
- Membership to NewenHouse On Line Community
NewenHouse Prototype

NewenHouse Prototype
The NewenHouse Prototype was completed in Fall 2011 in Viroqua WI. You can learn about the home and building process by visiting Sonya’s Natural Home Magazine blog (see madisonenvironmental.com for link), or please attend a NewenHouse OpenHouse, held at the prototype on the fourth Friday of every month from 4 to 6 pm (RSVPs appreciated – please call Sonya to confirm at (608) 220-8029).

Prototype Details

- Two floors with three bedrooms and two bathrooms
- Interior dimensions: 968 sf (22' x 22')
- Exterior dimensions: 1250 sf (25' x 25')
- Porch/storage dimensions: 289 sf (17' x 17')
- Estimated total annual electric demand (heating, equipment, appliances, plug loads, and hot water for three occupants): ~6119 kWh/yr

Prototype Aims for Passive House and LEED for Homes Platinum

- Certified Passive Houses aim to conserve energy first through a high performance envelope rather than through technologies (i.e. solar panels). To qualify for Passive House certification, a house must meet strict requirements: airtight building shell with 0.6 or fewer air changes per hour, annual heat requirement less than 4.75 kBtu/sf/yr, and primary energy use less than 38.1 kBtu/sf/yr (passivehouse.us).
- Platinum is the highest level in LEED for Homes, an internationally recognized third-party verification system that covers a broader range of green building elements (usgbc.org/LEED).