

EGGERT'S GREEN REMODEL

THE SITUATION

Tom and Joan Eggert's house was busting at the seams. Built in 1960, the ranch could no longer hold them, their four children, two dogs and function with only one bathroom. The Eggerts were concerned with remodeling in a way that protected their indoor environment and supported sustainable business practices. Joan suffered from chemical-induced migraines, and Tom was an Environmental Policy specialist at the Wisconsin Department of Natural Resources and a lecturer on sustainable development and corporate environmental responsibility at the University of Wisconsin School of Business.

GREEN MATERIALS & SYSTEMS

Fly Ash In Concrete

Slows drying of concrete to make stronger.
Reduces environmental impact of coal production.

Forest Stewardship Council Wood (FSC)

Supports sustainable industries and increases local demand.

In-Floor Radiant Heat

Efficient heat distribution.
Energy-efficient boiler warms water for heating of space and domestic hot water.

Energy Efficient Exterior

Light-colored shingles reflect sun's light and reduce heat island effect.
Fiber cement siding insulates and is composed of recycled scrap wood.

Insulation And Air Sealing

Insulation in walls and roof improves energy efficiency.
Air sealing reduces energy loss.

Indoor Air Quality Techniques

Thoroughly drying home prevents mold growth.
Preventing air movement thru materials that contain VOCs and using formaldehyde free insulation reduces chemical exposure.

GREEN DESIGN

Two-Story Box Design

Reduces home's energy needs.
Reduces home's footprint and need of materials.
Simple design reduces construction costs.

Well-Placed, Energy Efficient Windows

Windows facing south and west maximize light and heat gain in winter. Limiting north facing windows reduces energy loss.
Well-positioned windows provide for natural air flow and cross-ventilation.

Overhangs

Shade windows in the summer and reduce heat gain.
Protect furnishings from the sun's UV rays.



THE SOLUTION

The Eggerts incorporated a two story addition onto their home, with a family room on the first floor and a master bedroom and bath suite on the second. The addition created an extra bedroom and a library while relieving the stress on their single bathroom. When the dust had finally settled, the Eggerts were pleasantly surprised when they learned their project had received the highest number of points for a Green Built Home remodel ever recorded - a whopping 149, far surpassing the minimum requirement of 60 points.