



Fort Dodge Green Home

Fort Dodge, IA

Location: Fort Dodge, IA

Design: RDG Planning and Design

Type of Construction: New

Construction Cost: \$227,000

Square Footage: 1,800

Cost per Square Foot: \$126

Project Contact: Bill McAnally

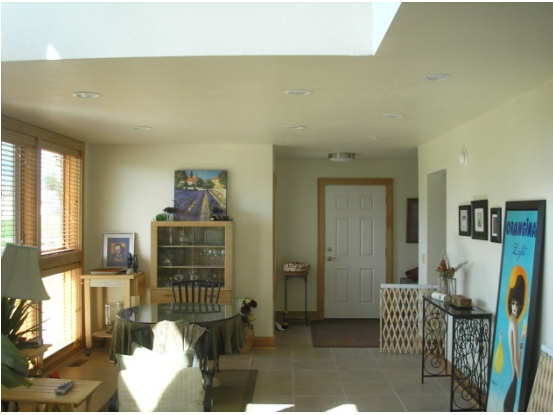
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Project Description: In March 2004 Iowa's State Energy Office applied for a grant from the U.S. Department of Energy's Building America program in order to fund a project to investigate and develop affordable, energy efficient technologies. The proposal was to use these technologies and a "whole building" approach to build a demonstration home that would perform 40-70% better than homes meeting the regular Iowa building code. The Iowa Department of Natural Resources teamed up with RDG Planning and Design and students and professors of the design engineering program at Iowa State University to design and build this home, which is projected to be 60% more energy efficient than normal homes. The home was constructed from excavation to finish, including energy efficiency steps, by Iowa Central Community College carpentry students.

Sustainable Features:

- Drainage plane, rain screen, and commercial grade waterproofing
- Foundation and surface drainage
- Geothermal heating, cooling, and dedicated hot water
- Energy-recovery ventilation



- High-performance windows and doors
- Frost-protected shallow foundation
- Proper sill plate system
- Insulated concrete forms foundation and structural insulated panels
- Open cell foam insulation
- Polished concrete flooring
- Optimum value engineered framing
- Certified wood for framing
- Steel roofing and fiber cement siding
- TyVek stucco

