



DOVETAIL PARTNERS, INC

Eco-Affordable Housing Program

Project Summary



Aitkin FSC Home



Affordable Green Homes for Rural Communities

Dovetail's Eco-Affordable Housing Program is aimed at meeting local housing needs while incorporating green building practices. Dovetail collaborates with communities that have identified a need for affordable housing and an interest in green building and sustainable design. But it is *not just about the house*. The primary objectives of the program are to create environmental awareness, demonstrate the use of housing as an economic development tool for rural communities, and facilitate the process of obtaining and constructing eco-affordable housing so that it may be replicated easily.

Green Goals

Economic Development and Local Services. Many rural communities have housing needs as well as economic development needs. This program aims to connect communities and their local goods via the construction process, and establish new avenues of income (or strengthen current ones). Dovetail's projects focus on the local community in order to realize this goal. Not only is this a good choice environmentally with the reduced transportation impacts, but it also encourages and strengthens the linkages needed to enable future projects to also utilize local resources and services.

Energy Efficiency. Dovetail's projects incorporate design elements that help improve energy efficiency and also utilize an integrated design approach modeled after programs already in operation by local utilities and Energy Star. These design strategies are identified and incorporated in the pre-development phase of the project to minimize costs.

Project at a Glance

Location: Aitkin, Minnesota

Project Type: New Construction, Single-Family Home

Ownership/Rental: Ownership

Size:

1,300 sq. ft.

3 bedroom/2 bathroom

1/2 acre lot

Affordability: meets community's expectations for affordability

Project Completion Date: February 2007

Project Team:

Developer: Dovetail Partners, Inc

General Contractor: Talor Building Systems

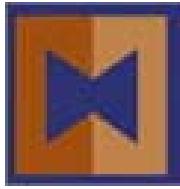
Partner: Aitkin County Economic Development

Selling Price: \$169,900.00

Standards Referenced: LEED-H Pilot, Energy Star Homes

Key Green Features:

- FSC Certified wood
- Local materials and vendors
- In-floor radiant heating system
- Passive solar techniques
- Energy Star Appliances
- Prefab wall, ceiling, and floor panels
- Minimized site impact



DOVETAIL PARTNERS, INC

Eco-Affordable Housing Program

Project Summary



Aitkin FSC Home Green Features

Buying Local, Buying Aitkin

In 1997, nearly 223,000 acres in Aitkin County became FSC certified, among the first in the nation. In 2003, local businesses joined together for the purpose of selling their FSC certified products to a larger market. The Aitkin FSC Home demonstrates the use of FSC-certified lumber, focusing on local forest products and participating local vendors, in an effort to stimulate economic development and also minimize environmental impact. Five different local wood product suppliers were utilized, and local contractors were employed for its construction.



¹For more information, go to <http://www.fsc.org/>

²For more information, go to <http://www.usgbc.org/>

FSC & Sustainable Wood

The Aitkin FSC Home demonstrates the use of FSC¹ (Forest Stewardship Council)-certified wood, which is harvested from a sustainably-managed forest. All finishing materials come from within 80 miles of the house and all (except the black ash flooring) are FSC-certified. FSC-certified wood is currently preferred by the USGBC's LEED rating system².

Site Design/Landscape Planning

During construction of the Aitkin FSC Home, as many existing trees as possible were retained on the site. The trees provide shade in the summer, block wind in the winter, minimize environmental impact, and preserve habitat for wildlife.

Energy Efficiency

A highly-efficient in-floor hydronic radiant heating system was installed in the home. In-floor radiant heating is more efficient than forced air systems and can provide energy savings of 10 to 30%. Some additional advantages of this very quiet system include evenly-distributed heat, and the option to change power sources in the future, if desired. Off-peak electricity is currently installed to heat the water for this in-floor system, but the homeowner has the option of changing this energy source in the future, including the possibility of using solar energy.

Project Contacts

Alison Lindburg, Program Director,
Dovetail Partners, (612) 333-0430,
alison@dovetailinc.org

Ross Wagner, Aitkin County
Economic Development, (218) 927-
7305, rwagner@co.aitkin.mn.us

Eric Hovland, Hovland Lumber,
(320) 679-2800, ahovland@nsatel.net

Greg Nolan, Snowy Pines
Reforestation, (320) 594-6317,
snowpine@rea-alp.com

Neil Stecker, Custom Creations,
(218) 426-4067, neile@sytekcom.com

Robert Krause, Headwaters
Forestry Co-op, (320) 732-3664

Talor Building Systems,
www.talorbuildingsystems.com

Other energy efficient techniques employed include installing efficient windows and ceiling fans throughout the house, and choosing EnergyStar appliances. The home is also designed using passive solar heating and cooling techniques and cross-ventilation.

Resource Conservation

To minimize construction waste with the project, locally manufactured prefabricated engineered panels were used for the walls, ceiling, and floors. All waste materials were sorted and taken to the local recycling and waste disposal company.

To minimize water consumption, water-efficient appliances and fixtures were installed in the home.

Special Thanks to our funders, Surdna Foundation, Weyerhaeuser Family Foundation, Rockefeller Brothers Fund, McKnight Foundation, Blandin Foundation.