

SATURDAY GREEN BUILDING TOUR

Begin and end at the Bozeman Public Library
January 23, 2010

Residential Tours: Wiseman Home (9:30am – 10:15am) and Pepper Residence (10:30am –11:15am)

Presenters: Michael Wiseman, Josh Blomquist, & Casey Dudley

Course Description:

This educational session is part of the Montana Chapter of the US Green Building Council's Annual Meeting. Participants will be lead through a tour of two different residential projects. Both homes will be co-presented by either the owner/design team and energy auditor or builder and energy auditor.

The Wiseman home is an owner occupied certified building under the USGBC's LEED for Homes rating system as well as the EPA's North West Energy Star for Homes program. With design and construction applications defining this project as "green", participants will learn about how the LEED for Homes program as well as the North West Energy Star program influenced this project.

The Pepper residence has no certifications however is recognized as a "green" home. Participants will learn what makes this house green and how the design and construction process was affected by the owner's intentions for having a healthy, efficient, environmentally conscious home.

Learning objectives:

- a. Educate on the USGBC's LEED for Homes Program
- b. Educate on the EPA's North West Energy Star for Homes program
- c. Educate on the pro's and con's of using third party rating systems
- d. Educate on specific applications that define a home as "green" or "sustainable" including: site selection, heating and cooling systems, indoor air quality, environmental stewardship, material selection, envelop performance, water management, and maintenance awareness.

Morrison Maierle Inc. Office Building, 11:30am -12:15pm

Presenter: Brian Solan, Morrison Maierle

Course Description:

In 2007, Montana's oldest and largest engineering firm was ready for a new home in Bozeman, Montana. Morrison-Maierle, Inc. has been in business in Bozeman, Montana for over 40 years, employs some 90 people locally and was occupying three separate buildings. The three buildings were in-efficient from a work-flow standpoint as well as an energy consumption standpoint. The primary goal of the new office building was to consolidate all the employees under one roof and provide an efficient and healthy workplace. The decision was made to lead by example and follow the USGBC's LEED program for the new building. ThinkOne Architects and Morrison-Maierle's engineers designed the building to a LEED Gold standard and what resulted was a 43,000 square foot high performance building that provides a healthy environment for the employees. The two primary goals within the LEED framework were Indoor Environmental Quality and Energy Performance of the building. The focus of the presentation will be around the Indoor Environmental Quality and Energy Performance characteristics of the building.

Learning Objectives:

- a. Incorporation of LEED principles.
- b. Green building strategies - Envelope enhancements, HVAC, ventilation, and potable water systems.
- c. Creating a comfortable and healthy working environment with individual temperature controls, daylighting and views, green roof patio and workout facilities.

Bozeman Public Library, 12:30pm – 1:15pm

Presenters: Mark Headley, StudioForma

Course Description:

The Bozeman Public Library is serves as a connection point between two of Bozeman's greatest assets – its historic Main Street district and Lindley Park. The project was designed as an environmentally sensitive building that was awarded with a LEED Silver Certification and a design award from the Montana AIA.

Sustainable strategies include natural daylighting, night-flushing, low-water-use plumbing fixtures, computer-controlled window coverings, materials with recycled content and a 30kW photovoltaic system on the roof.

The course will consist of a ten-minute presentation on how to design a photovoltaic system, a ten-minute presentation on the Lighting Design Lab and what it offers to Architects in Montana, ten minutes for questions and answers with the Architect and a fifteen-minute tour of the facility.

Learning Objectives:

- a. How to design and size a photovoltaic system for your project.
- b. Understanding all of the resources offered to Montana Architects by the Lighting Design Lab in Seattle and Bozeman.
- c. Learning what a night flushing system is and how it functions.