### GREEN BUSINESS QUARTERLY

FALL 2008
THE GREEN BUILDING ISSUE
THE U.S. GREEN BUILDING
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# GREENHUT CONSTRUCTION COMPANY

CONTRACTOR WORKS TO IMPROVE ENVIRONMENT WHILE EDUCATING OTHERS

#### GREENE CONSTRUCTION OF BIG SKY, INC.



MONTANA BUILDERS EDUCATING CLIENTS ON THE VIRTUES OF GOING GREEN

Above: A digital rendering of Greene Construction's first LEED project. climate.

BIG SKY IS A SMALL, RURAL COMMUNITY in the southwest corner of Montana that is gaining notoriety as a tourist destination, thanks to the Big Sky Ski Resort and other vacation spots in by Jamie Ludwig the region. Josh Greene, founder of Greene Construction of Big Sky, Inc., built his company in this picturesque locale from the ground up. Since incorporating in 1998, the family-owned Greene Construction Inc. has grown to a staff of eight. And by focusing on luxury second homes, the company has expanded into commercial development, running between two and four projects at a time, depending on the

Greene maintains that he has always tried to build soundly and environmentally in his ten years of home building. His 2007 LEED accreditation from the USGBC has made him one of only a handful of accredited green builders in his state, although that number is sure to rise. "Since I've been accredited, it seems like the whole green industrygoing green and building sustainable homes—has been on people's consciousness. The momentum is accelerating," Greene says.

But green building is still not the status quo. Although more green homes are being built in Montana, the day-

## (11'S NOT COSTING ANY MORE THAN TRADITIONAL BUILDING, AND WE'RE SAVING 40 PERCENT A YEAR IN ENERGY COSTS. THE PAYBACK

IS STAGGERING. 99 Josh Greene, Owner

Above: Will Bartsch, LEED AP and carpenter (left), and Christopher J. Heiny, LEED AP and foreman (right). to-day discourse surrounding green building has not increased as fast as it has in larger markets such as San Francisco, Chicago, and Seattle. As Greene sees it, one of the biggest challenges of championing green design in Montana is changing people's perceptions. "In Montana people think it costs more and that there's a liberal bent to it. There is a lot of enthusiasm, but it is an unknown, and people are fearful of what they don't know," Greene says.

Accordingly, Greene's main goal has become to show people that green building does not cost more than traditional building. "What I've discovered is that clients are more receptive when they think they are getting added-value, cheaper-to-operate, sustainable homes." But in the meantime, "Unless it is a priority for them, they don't want to spend a lot more to do environmentally sound construction, unless I can prove

a cost value or a health benefit. I think that's the biggest hurdle," he says. Greene hasn't been alone in his ecomindedness. In 2007, a group of 50 to 60 volunteers from across the state met to discuss the potential for forming a green building organization. A core group of eight began research to determine which group to align themselves with, finally settling on the USGBC.

They started their own chapter in Bozeman, MT. "We got provisional status from the national USGBC, elected about seven officers, mostly architects and engineers. There are a handful of builders. I'm encouraging my employees to go out and take the test," Greene says. He notes that so far clients have not sought him out specifically because he is green, but in the future he believes this will change as people begin to know his name and his work.

In the meantime, Greene Construction has recently broken ground on one of its most ambitious green building projects to date: the Lone Peak Health and Fitness Center in Meadow Village. "It's a small building—a two-story, 12,000foot mixed-use building with a physical therapy office, a gym, massage therapy, and commercial offices," Greene states. In order to attain the energy credits needed for LEED certification, the company has taken a number of ecofriendly steps. "We're super-selective about using radiant heating and radiant cooling. We're not using traditional air conditioners in the summer, and we've added energy-efficient water fixtures," Greene says. And the icing on the cake: "It's not costing any more [than traditional building] and we're saving 40 percent a year in energy costs. The payback is staggering. We're feeling

quite good about it." In all, the project is estimated to take nine months to complete. Initially, LEED certification was the goal, but with all of the improvements made, the project has reached silver classification.

The Lone Peak Health and Fitness Center is a prime example of how taking the time to educate clients on the reality of green building can yield incredible results. "The owners did not bring green building to the table. They did not care. I told them I would pay for any additional costs over and above what a traditional building would cost out of pocket, and they would pay me back if we stayed within budget. And that's how we convinced them."

#### A MESSAGE FROM REDLEAF CONSULTING, PLLC

Greene Construction of Big Sky, Inc. contracted Redleaf Consulting, PLLC to develop a whole-building energy model for Lone Peak Physical Therapy Building. The Lone Peak P.T. will be the first building to be LEED-certified in Big Sky, MT. During the design phase, the whole building energy model was used in studies to help choose the most efficient building shell components (insulation, windows, etc.) as well as the most efficient heating ventilation and air conditioning (HVAC) components. Upon completion of the design phase, the wholebuilding energy model was submitted to USGBC for LEED points under the "Optimize Energy Performance" category.

Redleaf Consulting, PLLC is a full-service engineering firm located in Bozeman, MT. Philip Kedrowski, the principal of Redleaf Consulting, is a LEED accredited professional and a licensed professional engineer. Please feel free to give Philip a call if you'd like to talk about making your project green.

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