

Walking Distance

Local photographer's home balances historic character with innovative LEED standards

BY ANIKA HANISCH PHOTOGRAPHY BY ERIK PETERSEN

WAS A STROKE OF LUCK TO FIND AN empty lot so close to downtown. Anne Sherwood and her husband Otto Pohl wanted their new home to be within walking distance of Main Street in Bozeman, and they were interested in the concept of "urban infill" — referring to new construction that increases urban density rather than encouraging more common sprawl.

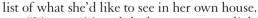
They had many other innovative ideas, both to accommodate a modern lifestyle and to enhance the long-term energy efficiency of the house. They also wanted the home to fit well in the historic neighborhood, to give it a farmhouse feel with contemporary details. And equally important, it needed to be a comfortable, livable space that worked well for them, their house guests, and their baby on the way.

They began researching efficient design and materials while balancing those technical issues with defining a visual style and the function of the home. It certainly took more time on the front end, but their efforts paid off. Anne laughs and says she doesn't recommend taking on building a new house while pregnant, but she's quick to add that they have no regrets about the house itself.

Anne, a photojournalist who's covered natural disasters and humanitarian crises around the globe, had also photographed countless stories closer to home. While working as a photojournalist in the Northwest, she took note of home spaces she saw as she traveled and began a mental



The afternoon sun fills the kitchen with natural light.



"I just envisioned the house as a very light, open, airy space — this feeling of summer year round," Sherwood said. With help from architect Richard Charlesworth, she certainly achieved that feel.

Charlesworth, who collaborated with Peter Andrews of Intrinsik Architecture, Inc., was especially happy to work on Anne and Otto's house

— their property is actually across the street from his own home. "It honestly looks better with a house there," he said. Charlesworth noted that the home, which really could pass for a renovated farmhouse, completes the streetscape nicely.

He recently stopped by to say hi to Anne and see how she's settled into her space. The two reminisced about the design and building process as they walked through each room. "It's cozy but it's bright," Anne said, standing in the main living area and looking toward the kitchen. A wall of windows to the south frames the adjacent dining area, while more light pours in

The house built on South Black just five years ago was designed to fit in with the older homes in the neighborhood.

through transoms and tall windows in the kitchen.

It is, on the surface, simply beautiful livable space with the "farmhouse meets beach house" feel that Anne was hoping for.

The first clue to the home's incredible energy efficiency is in the windowsills. The walls, built of 12-inch thick structural insulated panels (SIPs), result in deep windowsills. Anne takes advantage of the wide windowsills, often using them to showcase small artifacts.

The SIPs are made of wood panels sandwiching a foam core. Pairing this construction with radiant floor heat and very high standards for insulation in the floor, the attic, and all joints, resulted in a very airtight structure. In the end, that translates into energy efficiency.

Anne and Otto's builder, Mark Prince, president of Prince Contracting, Inc, was impressed by the SIP construction. He has noticed more people asking to build with this technology, "but few go with the 12-inch walls." Prince explained how the house also incorporated additional insulation. Many new homes in the region have only the minimum required insulation rating of R-38 in the attic. The 2-inch foam and blown-in insulation in Anne and Otto's attic is rated at R-60. Otto also requested 6-inch foam under the basement slab instead of standard 2-inch. "They went the extra mile to make sure everything was

12 | at home October 4, 2011

Walking Distance

tight," Prince said.
In the lower level, Otto

pointed out the behind-the-scenes components that contributed to the house earning a Leadership in Energy and Environmental Design (LEED) Gold Certification.

There's a 275-gallon tank in the utility room for the solar hot water system. A heat recovery ventilator (HRV) provides controlled ventilation — rather than relying on ventilation to come in through inherent cracks in walls and windows. Otto had an 80-foot air tube installed under ground in the backyard. Sunk 6 feet into the ground and surfacing at the far end of the yard, the air tube heats (or cools) incoming air by passing it through the constant 50-degree soil. "There are few in the U.S.; but they're widespread in Europe," Otto said. "It takes the strain off the HRV. On really cold days it can preheat the air by as much as 50 degrees." In the summer it has the reverse effect.

Anne put it in plain terms, "We tripled our space and halved our heating bill." The couple describe how friends who thought they were a little crazy during the building process, don't think they're so crazy now.

Purely motivated by efficient design, they had not been striving for LEED certification at the outset. But Otto realized as construction began, that their plans probably would qualify. Even the fact that the home was in town, within walking distance of many services, shops, and parks gave them more LEED points. Otto and Anne also took steps to minimize construction waste, recycling all cardboard and using a drywall recycling service.

From the start. the decisions may have been complex. but the driving philosophy was simple. "When you build. those decisions affect the energy consumption of the house for its lifetime. That feels like a big responsibility," Otto said. They wanted a house that fit the historic character of the neighborhood, but would also feel like a sound, efficient, and comfortable structure

50 years from now. True to that best of both worlds objective, the house not only earned the LEED certification, it also received a 2010 Excellent Residential New Construction Award from the Bozeman Historic Preservation Advisory Board.

From foundation up, the house glows with planning and design elements that are both practical and



A wall of windows adds plenty of light to the dining room

beautiful.

Charlesworth sited the structure to the far north of the lot, maximizing the amount of southern light. He placed all bathrooms, the stairwell, and utility rooms on the north side of the building — which minimized windows and associated heat loss on that side. Then he incorporated *continued on page 14*







14 | at home October 4, 2011



A white palette brightens the master bedroom.

Walking Distance continued from page 12

egress windows and an expansive light well for the finished lower level, resulting in a sunken garden and full daylight for the lower level rooms.

Basement windows look straight out at plantings of salvia, echinacea, blue oat grass, Russian sage, and aspens. A cotoneaster hedge will eventually become a privacy wall along the upper rim of the garden.

The light well is something Charlesworth developed when building and remodeling in historic districts. "The houses were all raised 30 inches above ground to begin with," he explained. If you put in a light well, you capture both light and lower level livable space.

"The house was designed around light," Charlesworth explained. Anne acknowledged this and recalled the design process, "You have this gift of knowing how light will play in a structure that doesn't exist yet."

The pop-out wall of windows that channels light into the lower level is a structure that travels up the south side of the house all the way to the partial second story. Throughout, Anne chose a very light pastel color scheme for the walls, utilizing faint but crisp blues, celery green, and a light sand color — many of the pigments are just slight variations of white. But Anne, with her photographer's eye, had a strong hunch it would work.

On the main level, she made another daring choice. The floor is dark-stained oak. She and Otto were admittedly nervous about it at first. So was their builder. "I know that Anne has such good taste, I had to put my faith in her." Prince said. "I love it now."

Anne described her rationale, "The walls would be so light, I knew we would need the dark floors to anchor them."

SOUTHWEST MONTANA BUILDING INDUSTRY ASSOCIATION

PROJECT OF THE MONTH <--- SWMBIA FIX-IT DAY AT EAGLE MOUNT **

Eagle Mount Bozeman • 6901 Goldenstein Lane, Bozeman, MT (406) 586-1781 • www.eaglemount.org

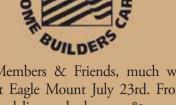












It was a hot day, but with dedicated Members & Friends, much was accomplished at SWMBIA Fix-It Day at Eagle Mount July 23rd. From pouring a new concrete apron, extensive remodeling on bathrooms & aquatic facility, building a new fence around the climbing wall, demolition (concrete removal is HARD WORK) painting, repairing...the list goes on and on.

We are proud as punch of the below members that took the time to do these much needed "chores" for our local Eagle Mount Program. A special thank you to *Kenyon Noble Lumber & Hardware* for their many thousands in donated supplies, materials and labor. We also thank *Tarantino's Pizza* for their generous donation of THE WORLD'S BEST Pizza for lunch. Thank you!

At 4pm we finished up working and enjoyed a wonderful Family Picnic. Eagle Mount offered up their fabulous swim center and youngsters and kids at heart also enjoyed some pony time with a couple of the cutest equine friends. At the end of the day—it was really nice to know that hard work benefits such a worthwhile local organization. *Home Builder Share—Home Builders Care*.

It worked. The understated palette became a backdrop for art and artifacts from the couple's travels and from friendships closer to home. Oil paintings from the Ukraine and Italy, Turkish and German rugs, antiques passed down from grandparents and great-grandparents, a Tina DeWeese wire horse, and paintings from dear friends. The eye is also drawn to little splashes of color: the orange and green throw pillows on the window seats and couch, the sunflowers on the farm table, the brightly colored bowls and vases on the shelves in the kitchen.

The home is beautiful, efficient, and welldesigned to fit into the neighborhood. And also very comfortable.

Anne's young son Everett, now a year and a half, played in the backvard. Charlesworth stood nearby. He looked at the boy and then up at the house and mused, "It's a big house, but it doesn't look like it."

"It doesn't live like it either," Anne said. The family spends most of their time on the main level and upper floor, but it's nice to use the extra space when they need it. "I love the two-story living. Our bedroom is a retreat; it feels like a tree house." She shared that the home works well for a young family. There are rooms meant for spending time together and others where one can find quiet space to work. There is guest space both upstairs and downstairs so both families can come to visit and have their own rooms. They've already had almost a dozen people stay with them at once.

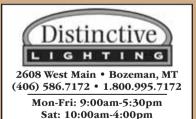
It's clear that both Anne and Otto are delighted with their new home. Charlesworth smiled. "You live in it well; you live in it comfortably."

Anika Hanisch is a freelance writer, co-author, and memoir-writing teacher in Bozeman. She can be reached at info@anikahanisch.com.

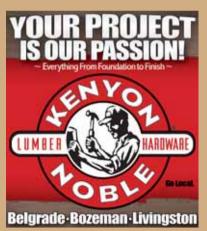


South facing windows add extra light to the baby's room.

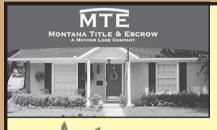
SOUTHWEST MONTANA BUILDING INDUSTRY ASSOCIATION SWMBIA FIx-It Day at Eagle Mount!











The Choice is Yours, Demand the Best!

- Full Service Title and Escrow Services
- Builder Services Division Single lots to Entire Community
- Development Planning
- National Closing Solutions Closing offered across the US
- Premier Reverse Closing Services
- Exchange Professionals National 1031 Exchange Services



Darryl Seymour Vice President/Marketing Director

Bozeman Office 1925 N. 22nd Ave., #102 Office: 406.587.7702

Cell: 406.580.0785

dseymour@montanatitlecompany.com www.montanatitlecompany.com

SWMBIA Fix-It Day at **Eagle Mount Heroes:**

Darryl Seymour (Montana Title & Escrow) & family Mike Thompson (Kenyon Noble Lumber & Hardware)

Crystal Warden (Distinctive Lighting) Bill Fiedler (Distinctive Lighting) **Rob Evans** (Constructive Solutions)

Titan Rentals, Inc. for the use of a fence pounder

David Graham (Graham Enterprises) Ron Heuber (Harvey's Plumbing & Heating)

Allan Hathaway (Biggerstaff Construction)

Linda Revenaugh (SWMBIA)

Gil Silva (American Land Title Company) Nathan & Cherie Albrecht (Pro Builders)

Kim Bergo (First Interstate Bank) Andy & Nicolas Hansard (Hansard Design)

Amber Guth (Speedy Print)

Ed Adamson (Bozeman Building Traditions)

Bob Harvey (Harvey's Plumbing & Heating)

Scott Miller (Kenyon Noble Lumber & Hardware) Shawn Holms (Bozeman Brick, Block & Tile)

Chris Alstrin (Rocky Mountain Bank)

Mat Marx (H&E Equipment Rental)

Anders & Jake Lewendal (Anders Lewendal Const.) **Don Kirby** (Kirby Electric)

Mr. and Mrs. Johnson for their drywall work Mountain West Title

All Eagle Mount Volunteers & Staff