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# Geothermal powers old mill

## Senior housing is formally open

By Paula J. Owen CORRESPONDENT

FITCHBURG— Entrepreneur Robert D. Ansin is leading the region in making the transition from the Industrial Revolution, to the “environmental revolution.”

Yesterday, Mr. Ansin formally opened Anwelt Heritage Apartments, which includes a geothermal exchange system.

Local and state officials, the project’s investors, engineers, architects and lawyers, members of Mr. Ansin’s family and some of the tenants who will be moving into the apartments next week attended the event. They got a glimpse of the first eco-friendly, affordable senior housing in New England. The building will be heated and cooled with a geothermal exchange system, rather than fossil fuels.

“This is how cities can re-invent themselves,” Mr. Ansin, CEO of MassInnovation LLC, said to the gathering. “And it happens one city at a time.”

The building was once the Anwelt shoe factory, owned and operated by Mr. Ansin’s father and grandfather, which was one of Fitchburg’s top employers from the 1920s to the 1960s.

When it was handed over to him by his family 10 years ago, Mr. Ansin decided to re-use and recycle whatever materials he could in the historic, late-1800s building, rather than demolish it. He said dismantling the building piece-by-piece was not only the environmentally ethical thing to do — it also made good economic sense. He called the project a “10-year laboratory for sustainable development.”

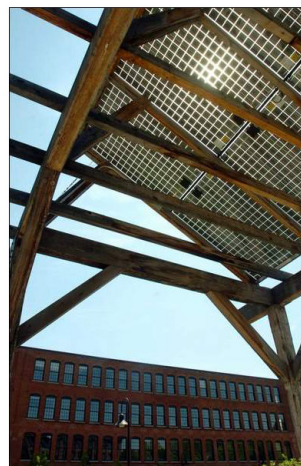
Funded in part through the U.S. Department of Agriculture and Department of Energy, the building sports one of the largest solar roofs in New England.

David H. Tuttle, director for the USDA’s rural development program, said the USDA is not just a “meat stamper,” but also aids in spurring community growth and economic development.

Mr. Tuttle said \$500,000 was put toward the project by the USDA and called it and other projects tax dollars spent to “take us off the stronghold oil has on us.” The Anwelt was one among a number



The Anwelt Heritage Apartments is the first affordable senior housing complex in New England to be heated and cooled with a geothermal exchange system. (T&G Staff Photos/RICK CINCLAIR)



The sun streams through a solar panel mounted on a trellis made of recycled timbers.

of projects receiving \$674 million in funding for rural development, he said, calling it a “very competitive” project that came out ahead of hundreds of other ideas.

Mayor Lisa A. Wong said the opening of Anwelt Heritage Apartments was a huge turning point for the city and an inspiration.

“We have vision, but we need the tools,” she said of Fitchburg. “And we need people to connect them.”

Mr. Ansin, she said, was able to do that.

The building’s geothermal exchange system creates about 60 homes worth of power through its 26 geothermal wells that go about one-third of a mile into the ground, Mr. Ansin said. The system uses the natural, constant temperatures of the earth to heat and cool the 86 apartments in the building, he said, and it helps that Fitchburg is sitting on a large piece of granite.

To Olivia J. Tate, 71, and her mother, Bertie J. Shamrell, 87, that will mean a 50 percent reduction in their fuel bill each month.

“The size and everything is perfect,” Mrs. Tate said. “I think they built it for us.”

She said she read about the apartments in the paper while looking for a new place for her and her mother. The women live in Townsend and Mrs. Tate said it is extremely difficult to make it to medical appointments and get around to other errands.

“I need the MART van for doctor appointments,” she said. “I don’t have the full range of motion in my arms, and I can’t drive a lot. It is better to be here where things are more convenient for us.”

Before going inside for a tour of the apartments with the group, the women introduced themselves to Mr. Ansin and told him how excited they were to move in May 28. Mr. Ansin asked the women to help with the design for the community center in the building.

After the official “vine cutting,” the equivalent of a ribbon cutting with eco-friendly buildings, the group went inside to check out the apartments.

Most of the work converting the old materials from the mill into re-usable materials was completed by Stanley T. Smith, maintenance supervisor, and John M. Duval, assistant property manager, who both worked in maintenance for Mr. Ansin’s father, Ronald Ansin, when the shoe factory was operating.

The men restored everything possible from the mill for use in the design, Mr. Duval said. All of the woodwork in the building was redone by the men.

“None of the wood was rejected,” Mr. Duval said. “It’s all being used. Mr. Ansin’s feelings on it were, ‘the more rustic, the better.’ ”

The heavy, southern yellow pine beams that once supported the mill floor were removed and re-used as ceiling beams and made into planks, he said, for the baseboard and trim.



MassInnovation CEO Robert D. Ansin

"To find that much timber that size today, the cost would be prohibitive and it may not be available," Mr. Duval said.

The apartments bring together the modern and the old, and incorporate the original brick walls, high ceilings and archways of the old mill into the design, he said. Some of the original marble windowsills from the 1880s were also restored, he said.

"These are not cookie-cutter apartments," he said. "There is uniqueness to all of them."

On the outside of the building, in the courtyard, the beams were again recycled, into six natural wood trellises, each supporting eight solar panels.

Even slabs of the granite flooring were made into two large water walls in the courtyard.

Mr. Ansin said he believes more developers do not incorporate geothermal exchange systems into their buildings because it is an immature industry. Getting the right team together to work on it takes resourcefulness and a little more time, he said.

"Companies that are really successful can do for geothermal exchange what Bill Gates did for DOS," Mr. Ansin said. "You'll know what it costs, but you don't really need to know all the details. Geothermal exchange does not have a user-friendly window yet."