

Winthrop health center to be 'green'

Trustees learn of environmentally friendly concept

By Karen Bair
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Imagine a 130,000-square-foot building that has no odor and is smart enough to turn lights on and off by itself based on the amount of light in a room.

When Winthrop University's Lois Rhame West Center is completed, it will do just that. The health, physical education and wellness center will be a "green" building, meaning it will be one of the first buildings in York County to meet federal standards in energy and environmental design leadership.

Paint, carpet and other finishes will be composed of non-volatile organic compounds. Recovered hot

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air from air conditioning will be used to heat the pool. Its white roof will reflect heat. Everyone in the building will have a window view. Outdoor lights will not contribute to light pollution.

"Eventually, this will catch on everywhere," said Walter Hardin, Winthrop's associate vice president for facilities management. "University's are leading the way, but it will start with higher education."

The trend started about four years ago, but it is just catching on. Some colleges and universities in South Carolina already have green buildings. Hardin recalls the first time he toured one at Furman University in Greenville.

"We walked into that building, and it had no smell," he said. "Buildings today are sealed up and the air is recirculated. Everybody has a sinus headache. Glues, paints, carpets, laminates give off gases."

\$21.4 million project

Winthrop will buy its materials from companies that make materials that don't emit gases. The projected cost is \$21.4 million, more perhaps than to construct a building that is not green, but the difference will more than be compensated in energy cost savings, Hardin said.

So far, eight companies have taken an interest in building Rhames,

Health center from 1A

Winthrop President Anthony Di-Giorgio told the board of trustees at a meeting Friday. The bids will be opened Dec. 7. If they meet budgeted costs, work would begin in January. University officials hope the center will be up and running in the spring of 2006.

Buildings that are certified green must meet up to 69 criteria. Winthrop is shooting for a gold or silver rating. Platinum is the highest level of green.

Rhames cannot qualify as platinum because it does not meet some of the criteria. For example, the university is not within a quarter-of-a-mile of mass transit, and it doesn't have a recharging station for electric cars.

Ideally, green buildings are constructed with as little natural site disturbance as possible, but because numerous underground lines were located under the site and the property was 10 feet lower in one corner than in another, the Winthrop site had to be leveled.

Green buildings also have little impervious material, like concrete, that cause flooding because water cannot sink into the ground.

Another criteria is recycling materials when a building is torn down.

"What has happened in con-

struction is that they haul away construction debris and bury it at a landfill," Hardin said. Those who subscribe to green building recycle steel, gypsum, wood and other materials from demolished buildings. Winthrop salvaged roof slate and limestone balusters when Breazeale Hall was torn down.

Lights outside Rhames will have shades that reflect light down rather than up to prevent light pollution. Light pollution is caused by light reflecting off of particles in the air.

"You know when you were a kid and you could look up at the stars?" Hardin asked. "Now we have so much light reflecting off of pollution that you can't see through it to the stars."

Rhames will have bicycle racks and showers to promote bicycle commuting. Its materials will originate within 30 miles of the campus to eliminate trucking.

"We're lucky we're in the brick capitol of the world," Hardin said.

Part of the purpose of a green building is energy savings and environmental protection.

"Part of it is mindset and ergonomics," Hardin added. "People are happier when they are in a room with natural light and they don't have to complain about the smell or the temperature."

Karen Bair • 329-4080
kbair@heraldonline.com

Going 'green'

"Green" building standards are by rated by LEED, Leadership in Energy and Environmental Design. LEED is under the umbrella of the U.S. Green Building Council, which was established by the federal Environmental Protection Agency.

Here are some of the criteria a green building should meet:

- Energy-efficient pumps and motors.
- Outdoor lights that do not contribute to light pollution.
- Construction compounds, such as paint, carpet and other finishes, that do not emit gases.
- Daylight to augment interior light.
- An energy-efficient roof system.
- Window views for all occupants.
- Bicycle racks and showers to encourage bicycle commuting.
- A heat-recovery system to heat the pool.
- Indigenous materials from within a 30-mile radius.
- Energy-efficient lights with occupancy sensors.
- Energy management software for lights, heat and air that cuts itself on and off.