

May 20, 2012

**Tour of Creative Arts Building for the Haywood Community College Board of Trustees**

I received the following notice:

**Haywood Community College board of Trustees meeting, May 16 2012 at 4 pm.**

Attached is the Agenda for the Board meeting. I sent this out last week but found out that we were having e-mail difficulties and some of my e-mails did not go out. Also, The Board will be touring the Creative Arts Building from 1-2pm that day. They will meet in the Board room.

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This tour was open to the public, and since I had an interest in the FLS solar thermal stuff, I took the opportunity and my camera. I was hoping personnel from FLS would be present to explain the solar thermal stuff.

I arrived at the Board Room about 12:50pm. It was dark. I thought I was in the wrong place. I walked in, and there were three (3) women there, each tapping intently at their laptops. I recognized Rose Johnson, outgoing president of HCC. She offered the comment: "we take turning lights off around here seriously". How could anyone argue with that? I simply turned around and walked outside where I could see.

The following are a series of pictures I took, with some limited commentary.



Construction Entrance. Solar panels are visible on the roof.



Blow-up of previous photo showing panels on the roofs.



Lower entrance. Far off in the distance is a rust colored 15,000 gallon water storage tank for the solar thermal system.



Zoom photo from the lower entrance of the water storage tank. Looks like sleeve construction.



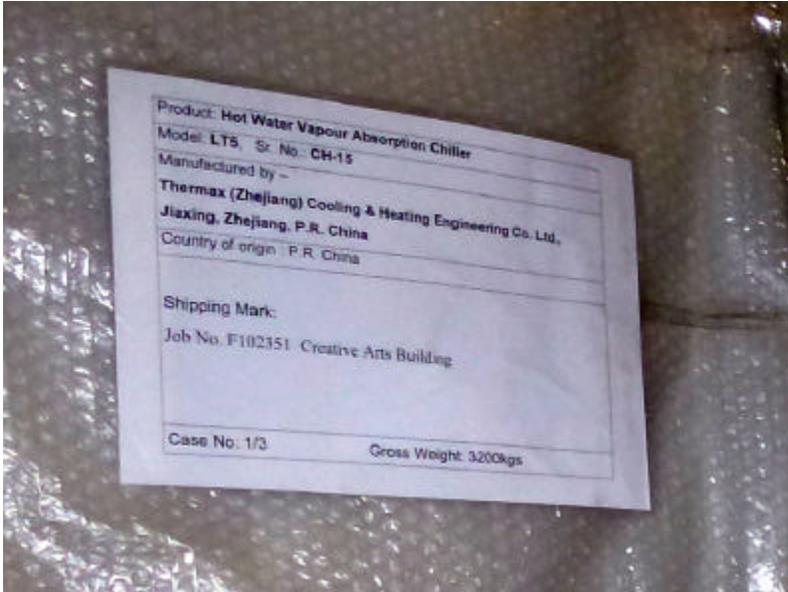
This is the absorption chiller. I was unimpressed with the size. The only other comparison I could make was the installation at the Fletcher Industrial Park, where I viewed the largest Adsorption Chiller in the world, at that time.

Unfortunately, no one from FLS was present to explain anything. Either they were not invited, or they didn't bother to show up. Of course, no one on the tour could explain a thing.

It was difficult to determine what equipment was part of the solar thermal stuff, and what was the back-up equipment.



Side view of the absorption chiller.



The label on the chiller says:  
Hot Water Vapour Absorption Chiller  
Model LT5, Sr. No. CH-15  
Manufactured by Thermax (Zhejiang) Cooling and Heating Engineering Co. Ltd.  
Jiaxing, Zhejiang, P.R. China  
Country of Origin: P.R. China



Lots of pipes, pumps, valves, pressure gauges, etc. A little more complex than a standard A/C unit.



Close up photo of 15,000 gallon water tank. It does not appear to be insulated at this time.



One of the many, many, many control boxes for the flow of heated/cooled water through Pex piping encased in solid concrete in the floors.



Close up of one of the many, many, many water control boxes.



Typical view of what will be above the dropped ceilings. A general observation was that due to the design, layout, and peculiarity of the buildings, the interconnection of all this stuff was, to me, unreasonably complicated and expensive. If the building were constructed like a regular building, it would appear to me construction costs and labor would be considerably less. You would not believe some of the interconnecting routing of pipes and stuff simply to accommodate the building layout.

I must say that the room was well lit due to the placement of the large windows. Rose Johnson won't have to spend any time here turning off light switches.



One story up from the lower level, looking at the top of the water storage tank.



I'm not sure what these evaporator units are, but I am guessing they are for the back up system.

The building looks to be well constructed. I did not see anything that did not appear to be anything but quality work. Should be a nice building when finished. Hope the solar thermal stuff works.

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