

# The Green Guide

By: Gaspar Cabrera

## Green Project Highlight: Jesse Owens Field House, Chicago PBC Project

This field house project is pursuing the LEED for New Construction Energy and Atmosphere: Optimize Energy Performance credit and we are optimistic it will receive the full 10 points available for the credit. The energy model done by IBC Engineering for the proposed design has demonstrated an overall energy savings of 60.2% that translates into cost savings of 44.7% per year over a baseline design.



The design includes:

- A constant volume air handling unit to serve the gymnasium area
- A variable volume air handling unit/system with VAV reheat and heat recovery serving the clubrooms, fitness area, lobby, reception area, pantry and corridors
- Geothermal water-to-water heat pump system for the AHU hot and chilled water
- Radiant flooring in the clubrooms, fitness area, showers and toilet rooms
- Hydronic cabinet heaters serving the support areas, mechanical penthouse and vestibules
- Building automation system and lighting controls to control the HVAC and lighting equipment

The variable volume air handlers with reheat were selected to serve multiple spaces with varying space temperature and occupancy requirements. Heat is being recovered from the bathroom area, locker rooms and janitor's closet exhaust to assist in the conditioning of the air supplied to the air handling unit, decreasing the temperature differential and therefore lowering the energy required to condition the supply air.

The geothermal loop and water-to-water heat pump has replaced the boiler and chiller systems which lowers the electrical and natural gas supply required for operation. A 500 Mwh boiler has been designed into the system as a back-up.

Radiant flooring has been incorporated to pre-treat the building envelope and discourage energy loss through the concrete slab.

And finally, the hydronic cabinet heaters were located in areas that did not require specific outside air requirements and could be removed from the areas being serviced by the air handling equipment. It is also piped to utilize the geothermal system.

## Green Product Highlight: TempleInland GreenGlass Sheathing, Liner Board and Interior Board

All of these pieces and systems, when working together, following the correct sequence of operation and after being properly commissioned, tested and balanced should be able to provide the simulated energy savings. We'll find out when the project opens up later this summer.

GreenGlass is being marketed as the new "green" standard for fiberglass-faced gypsum products. Meeting the typical strength, mold, moisture and fire resistance standards that gypsum sheathing, liner board and interior boards are expected to meet, GreenGlass is the only product that can boast an ISO 14021 measured recycled content of at least 90%.

90% recycled content and manufacturing facilities that fall within the 500 mile radius for all Chicago area projects helps meet the requirements of the LEED for New Construction, Materials and Resources Credits 4.1/4.2 and 5.1/5.2.

Each of the GreenGlass boards can be used for all of their respective typical applications including under exterior veneers, elevator, mechanical/electrical shafts, stairwells, area separation walls, and wall, ceiling and dimensional accents. U.L. approved 2 hour or more fire ratings can be provided with the board, depending on the assembly.

For more information, visit the TempleInland website at:  
<http://www.templeinland.com/BuildingProducts/Gypsum/GreenGlass/>

## Office:

As one of the first steps to creating a "greener" office, all employees will be switched to paperless pay statements, unless they specifically request to "opt out" of this green initiative. I personally was not aware of this option, and in talking to Cathleen Jackson, it appears that one of the main roadblocks to employees setting up paperless pay statements is that we have to set it up ourselves. "Right now 55% of employees have gone through the steps necessary to set up paperless pay statements," says Cathleen. "I regularly hear from employees who say they simply haven't gotten around to it yet. We would be happy to make that change happen."

Beginning with the first paycheck in April, Cathleen will set up paperless pay statements for all employees, unless you notify her that you wish to continue receiving paper statements. She will set up new enrollees with the email notification option so you will receive an email when your statement is ready to view.

To access your pay statements on the Portal (<https://portal.adp.com>), simply go to the Money tab and click Pay Statements. First-time visitors to the Portal will need to register

Thanks for helping Cotter create a greener office! I'll report on more green office initiatives in future issues.

## Home:

to obtain your login and password to this secure site. If you need a copy of registration instructions, contact Jennifer Werneke.

This piece of valuable information comes from Jan Rogatz and many of you may have already received this in an earlier email from her this month...

The ChicagoLand Natural Gas Savings Program is encouraging eligible customers to replace, upgrade and invest in higher efficiency gas saving products by providing rebates through April 30, 2009 or until funds are depleted, whichever comes first. Eligible customers are those who receive gas service from Peoples Gas or North Shore Gas. Products eligible for rebate include ceiling and wall insulation, clothes washers, water heaters, furnaces and boilers. Rebates up to \$750 are available and while water heater, furnace and boiler installation must be done by a professional, installation of insulation and clothes washers can be done by the home owner and still be eligible for the rebate.

Here's a link to the program's home page where you will find more information on eligible equipment and program applications:

[http://www.conservationrebates.com/programs/chi/CHI\\_Index.aspx](http://www.conservationrebates.com/programs/chi/CHI_Index.aspx)

THAT'S IT FOR THIS ISSUE!

