

THE CONSTRUCTION SPECIFIER – JUNE 2005**FORM + FUNCTION: KEEPING A BUILDING'S COOL**

Vacant for 20 years, the Stewart's Building in Baltimore, Maryland, has been transformed into a multi-purpose complex using district chilled water as a cooling system. The building now contains 23,225.8 m² (250,000 sf) of office space, with a conference center and classrooms for the University of Maryland Medical System, plus 2787 m² (30,000 sf) of retail space on the ground floor.

Remote redundant central chiller plants produce and store ice during off-peak hours, reducing both the cost of electricity used to produce cooling and the peak load on the electrical utility during the heat of the day. The building uses a plate-and-frame heat exchanger, providing 363 to 1415.5 t (440 to 1600 tons) of cooling without significant mechanical changes.

The Stewart's Building is the first project in the state to comply with the Secretary of the Interior's Standards for Rehabilitation, while simultaneously earning a silver rating from the U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED) program.

Once a department store, the Stewart's Building has been a fixture in Baltimore, Maryland, for many years. Renovations have made it a silver-rated Leadership in Energy and Environmental Design (LEED) building.

