

## Facts

### Description:

225,000 gsf, nine floor residence hall

### Project Owner:

University of Maryland

### Architect:

WDG Architecture

### Completion Date:

2012

### Objective:

Meet on-campus housing demand with a dormitory that aligns to overall sustainability goals, and ensure optimum performance of complex utility plant

## Results

LEED Gold rating, exceeding the original goal of Silver

## OAKLAND HALL DORMITORY



Oakland Hall was conceived by the University Of Maryland capitol project division to help meet a campus housing shortage. University of Maryland has committed to building all new construction to LEED® Silver standards at minimum as part of its campus-wide sustainability program. The 220 unit apartment style construction project houses a satellite plant in the lower level of the residence hall that provides hot and chilled water to Oakland Hall as well as chilled water to three additional surrounding campus buildings. The stated project goals included a focus on high quality commissioning of the Oakland Hall systems, as well as the complex satellite utility plant design and operational sequences.

## Paladino Approach

Paladino provided sustainable design consulting to the entire project team, including owner, construction manager, architect and mechanical engineer, throughout the design, construction and occupancy phases of the project.

Paladino also provided Fundamental and Enhanced Commissioning of HVAC systems and controls; lighting and lighting controls; plumbing and service water heating systems; energy measurement and verification (M&V) systems; and site water and energy model management and QC. As a subset of MEP-related design guidance and owner consulting, Paladino led the owner and the design and construction team through the development and implementation of an energy M&V system and plan to meet LEED requirements. This was both to earn the associated LEED credit, but more importantly, to support the university's utility cost allocation and billing system for campus buildings.

## About Paladino

Paladino is an industry-leading green building consulting firm providing sustainability expertise over a wide range of building and business issues. We work with high aspiration organizations of all sizes to develop advanced green building strategies for both new and existing construction.

A pioneer of the green building movement and one of the original creators of the LEED green building rating system, Paladino's esteemed clients include ConAgra Foods, Starbucks, PNC Financial Services, Microsoft, Verizon Wireless, Corporate Office Properties Trust and many more. At Paladino, we help our clients create business value by optimizing human, environmental and financial performance. Our customized technical approaches center on the unique concept of abundance as a driving force for organizational transformation. To learn more, visit [www.paladinoandco.com](http://www.paladinoandco.com).



*Paladino's abundance framework  
(people, planet, prosperity)*

## Results

The project was awarded LEED NCv2.2 GOLD in 2012, exceeding the developer and owner's expectations. The project, as designed and commissioned, is estimated to perform 23% below ASHRAE 90.1-2004 levels and use 38% less water than a comparable building using standard design practices.

Paladino successfully supported the owner in the late addition of a LEED education display, which interfaces with the building automation and energy measurement and verification system to demonstrate the sustainable design elements and show comparative energy performance to building occupants and visitors.

Commissioning highlights included the successful operation of the complex pumping and sequencing between the electric to steam chiller turbine according to the manufacturer's strict start up sequence and timings. The entirety of the residence unit fan coil testing was accomplished using the central building automation system as a data mining and collection tool.

## Paladino Role

- Green building consultant
- Commissioning authority