PRINCE FREDERICK HALL

university of maryland

SARAH MILLER
lighting & electrical

BUILDING STATISTICS

function: University Housing
size: 185,522 GSF
number of stories: 7 floors + ground floor
construction dates: May 2012-August 2014
project cost: $66.8 million
delivery method: design-build

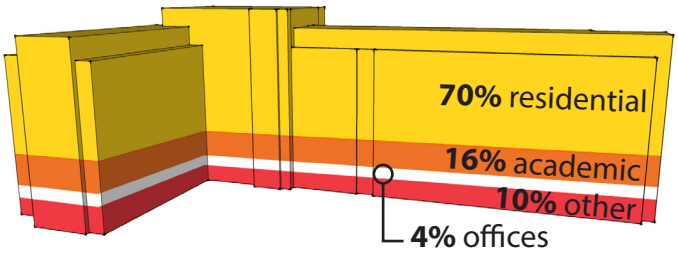
PROJECT TEAM

architect: WDG Architecture, PLLC
general contractor: Clark Construction
structural engineer: Cagley & Associates, Inc.
mep consulting: WFT Engineering, Inc.
civil engineer: Site Resources Inc.
landscape architect: Parker Rodriguez Inc.

ARCHITECTURE

Prince Frederick Hall is a new building located on the University of Maryland campus. The building programming provisions space for **academic rooms** on the ground and first floors of the building. Part of the first floor and all of the second through seventh floors are used for **dormitory rooms**. A combination of single, double occupant, and suites provide housing for a little over 450 students.

Red brick dominates the most surface area of the building and is is laid in a traditional running bond pattern. The first floor of the building is wrapped in a **limestone**-colored, special finish masonry unit. **Metal** is also used on the facade; it is used primarily to accent the curtain walls.



LIGHTING & ELECTRICAL

daylighting: Provided to spaces through numerous glazed openings. The lobby and social areas feature large, glass curtain walls. Classrooms are equiped with blackout shades.

lighting: Interior lighting is mostly fluorescent. Many troffers and recessed downlights are applied throughout the building. Exterior lighting is LED.

electrical: Power feeds into the building from the north side. Two 3000 kVA transformers, outside the building, provide 480/277V to the main electrical room. Power is transformed to 208Y-120V for all receptacles and lighting.

MECHANICAL

air distribution: Six air handling units and two roof top units circulate air throughout the building.

central systems: Prince Frederick Hall is connected to the campus' central steam distribution system.

academic spaces: Variable air volume (VAV) boxes are located throughout the ground and first floors. Separate heating and cooling coils provide extra control to individual spaces.

dormitory spaces: Each dormitory room is equipped with its own fan coil unit (FCU) that connects to the building's chilled water and hot water systems.

STRUCTURAL

foundation: Concrete columns carry the load of the building below grade to footings.

superstructure: The structure of the building is mostly steel-reinforced concrete. Typical 18x30 columns carry 8" concrete decks. Cantelievers on the 2nd floor are supported by post-tensioned concrete beams.

lateral system: Shear walls around stairwells and elevator cores resist lateral loads.

trellis: Located at the north and south entrances, this feature of the building is constructed mainly of hollow steel sections.