Mount St. Mary's University

Student Housing Project

16300 Old Emittsburg Road
Emmitsburg, MD 21747

Project Overview:

Function: Student housing / Dormatory
Size: 60,000 SF / 3 Stories / 180 Beds
Estimated Cost: $10,800,000 Total / $3,400,000 MEP
Dates of Construction: 2007 Completion Date
Delivery Method: GMP

Arcitecture:

Designed to create the appearance of a village
Comprised primarily of 4-bedroom suites, each with a shared bathroom and living area
Small lounge area provided on each floor
Designed to achieve LEED Certification

Project Team:

Owner: Mount St. Mary's University
Architect: Ayers / Saint / Gross Architects
Construnction Manager: Gilbane
Civil Engineer: Harris, Smariga, & Assoc., Inc.
Structural Engineer: Keast & Hood Co.
MEP Engineer: Burdette, Koehler, Murphy, & Assoc., Inc.

Electrical System:

Stepped down to 208Y/120V, 3 phase, 4 wire outside the building
(1) 1600v switchboard feeding the building
Various 120V fluorescent wall washers, ceiling-mounted pendants, and other conventional downlighting
Emergency lighting on battery backup

Mechanical System:

VAV system utilizing energy recovery and electric heat
12MBH to 30MBH geothermal heat pumps in each individual suite
(3) 1050CFM energy recovery units
(1) 750CFM, 600MBH domestic water heater

Structural System:

1' spread footings and 5" concrete slab on 6" crushed stone
1 1/2" fibermesh concrete over 3/4" tounge and groove flooring
Floors supported by wooden bearing stud walls and wooden I-joists
Gabled roof made up of 2x6 wooden rafters

MOUNT ST. MARY'S UNIVERSITY

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Mechanical Option
Architectural Engineering
http://www.engr.psu.edu/thesis/eportfolio/current/portfolios/ers164/