GLEN A. WEED LIBRARY

COASTAL UNIVERSITY | Wilmington, North Carolina

ARCHITECTURE

Glen Library is an innovative, technologically advanced, and LEED Silver Certified building. Equipped with an Automated Storage and Retrieval System (ASRS), book storage space for 2 million volumes reduces the building footprint by 40%.

CONSTRUCTION

Size: 253,000 sf, Height: Five Stories Completion: September 2012 Total Building Cost: \$93.75 million Project Delivery: CM at Risk





Owner: Cannot be disclosed for confidentiality purposes

Design Architect: Snøhetta

Architect of Record: Clark Nexsen

Civil Engineer: Colejenest & Stone, PA

Structural Engineer: Stewart

Engineering and ARUP

MEP Engineer: Affiliated Engineers, Inc

AV + IT + Acoustics: The Sextant Group

Automated Retrieval Systems: H K Systems

Construction Manager: Skanska, USA





STRUCTURAL

The steel superstructure meets gravity and lateral loads.

Composite steel beams spaced 10' on center span between steel girders to support 7" LW concrete slab on 3" steel decking.

Foundations are shallow strip and spread footings with reinforced concrete.

MECHANICAL

Steam and chilled water are delivered from the campus utility plant. Active chilled beams and radiant panels meet heating and cooling loads. Fan coil units condition equipment rooms. Four air handling units provide ventilation throughout the building and recirculation in the ASRS.

LIGHTING + ELECTRICAL

Power enters at 277/480V and is distributed to each floor at 120/208V. A diesel generator provides emergency backup power. Fluorescent T8 lamps are integrated with lighting controls. LEDs are used in the ASRS and presentation spaces.



Taylor V. Guelich https://tvg5165.wixsite.com/aethesis Mechanical | Advisor: Dr. Freihaut

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