
DAVIDSON & ASSOCIATES

CONSTRUCTION ANALYSTS, INC.

George Mason University Conference Center Technical Construction Document Review



Construction of the Mason Inn and Conference Center at George Mason University was a design-build delivery involving the architectural firm of Gensler and Balfour Beatty as the general contractor. The 150 room hotel facility and 24,000 square foot conference center were designed to meet LEED certification standards. Davidson & Assoc. provided the design-build team with design phase services focusing on evaluating the exterior envelope and air barrier design, along with details for efficient construction sequencing. During construction Davidson & Assoc. provided quality control services for the installations of the waterproofing, air barrier, cladding and fenestration systems. The project, located in Fairfax, Virginia is USGBC LEED – Gold certified. Construction cost is estimated at \$53,600,000.

Challenge: Review the construction documents to identify air and water infiltration issues, vapor and thermal transmission through the exterior envelope.

Value Added: D&A's technical review of the construction documents included evaluation of the exterior envelope and air barrier design integration with the building's unique proprietary structural floor and wall system, which clarified the need to use a vapor permeable air barrier on the hotel tower. Through the use of hygrothermal (energy) analysis programs, D&A was able to coordinate the design-build team with the manufacturer of the proprietary structural system in resolving issues regarding vapor retarder location, simplifying the construction. D&A provided recommendations on detailing with respect to isolating the cavity wall construction from barrier wall (precast) construction while maintaining the continuity of the air barrier design.

Services performed: Quality Assurance Services / technical review of construction documents / quality control during construction phase.

Client: Balfour Beatty
Architect: Gensler Architects

Contractor: Balfour Beatty