

Student Union Building I

Brett Robinson

Construction Management

General Building Data

Location: Fairfax, Virginia

Occupancy Type: Group B (Offices, Classrooms), A-3

(Meeting Rooms larger than 750ft2),

A-2 (Restaurant, Dining)

Construction Type: IIA

Size: 65,382 GSF

Number of Stories: Four Stories

Dates of Construction: Start: June 2009

Finish: July 2010 (Estimated)

Cost Information: \$17.5 million

Project Delivery Method: Design Build

Project Team

Architect: Grimm + Parker Architects

WTW Architects

Design Builder: Hess Construction

+ Engineering Services

Civil Engineer: ADTEK

Structural Engineer: ReStl Designers

Electrical Engineer: Hurd and Obenchain

Mechanical Engineer: Shapiro and Duncan

Fire Protection and

Security Consultant: Protection Engineering

Architecture

- Brick veneer field color to complement the brick of the existing building and accent color to complement the exposed horizontal concrete bands of the existing building
- Storefront window system with aluminum cladding at column
- Aluminum coping and extended soffit
- Stair tower next to Main Entry
- Aluminum coping and canopy over new Main Entry at George Mason Blvd, formally Aquia Creek Lane.

- Low walls and landscaping at entry steps and ramp



Structural System

Foundation: -Geopier Piles System w/ 3,500 psi Concrete Footings

at Steel Columns

-3,500 psi Concrete Spread Footing at Exterior Wall

Framing: -Structural Steel Building

-Masonry Shear Walls - reinforced w/ #5@ 8" O.C. and 8

GA horizontal Bed Joint at every course

Facade: -1/2" gypsum wall board w/ 7/8" resilient hat

channel, followed by 6" CMU and 2" R18 Spray applied insulation. Hot dipped galvanized steel

masonry ties secure brick veneer to CMU

Roof: -1.5" 20 gauge Type B steel deck w/ fully adhered

fiberglass-reinforced PVC Energy Star sheet roofing, 3"

insulation supported on K-Series steel joists

MEP Systems

- Two AHU (1st Floor & 4th Floor) 30,000 CFM, 460 Volts, 3 Phase
- Six Types of VAV Boxes (Max CFM ranging from 400 to 1200 CFM)
- Two 700 Nominal CFM Fan Coil Units 120 Volt, Single Phase
- Two Base Mouinted 300 GPM Hot Water Pumps 480 Volts, 3 Phase
- Total Load for Existing and New Student Union Buildings 1,384.5 KVA, includes:
 - Existing Building Highest Demad Load 528 KVA
 - New Motor Load 421.8 KVA
 - New Receptacle Load 235.5 KVA
 - New Lighting Load 89.8 KVA



