

The Gateway at MICA Baltimore, MD



Project Team:

Owner: Maryland Institute College of Arts
GC: Whiting-Turner Contracting Company
Architect: RTKL Associates Inc.
Structural Engineer: RTKL Associates Inc.
MEP Engineer: RTKL Associates Inc.
Civil Engineer: KCW Engineering Tech., Inc.
Landscape Architect: Higgins Lazarus Inc.
Lighting Design: Ziger/Snead & FLUX Studio



Architecture:

- Plastic form with fritted glass & metal panel curtain wall
- Cylindrical shape with ring-like plan on levels 3-9
- Typical interior finish is gypsum board & exposed construction elements
- Level 3 open-air courtyard
- Double-heightened multi-purpose space on level 1

Structural System:

- Cast-in place, reinforced concrete slab, concrete beams, and columns
- Drilled caissons and structural columns in circular plan at 49' and 75' radii
- 1st level slab on grade, level 2 is 7" 1-way slab. Levels 3-9 are 8" 2-way slab
- 6" roof slab with modified bituminous roof assembly
- Structural W and HSS shaped steel in entrance, lobby, and café area

Project Information:

Size: 120,130 ft²

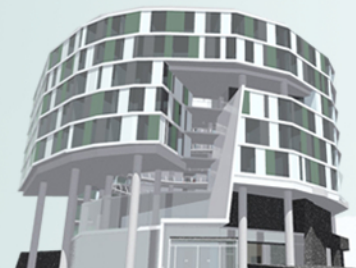
Delivery Method: Design-Bid-Build

Construction: September 2006 – June 2008

Stories: 9 stories, 10th level mechanical penthouse, 11th level elevator room

Function: Student residence with attached studio space and first level multi-purpose space

Occupancy: Student apartments, multi-purpose space, café, gallery space, conference rooms



Mechanical System:

- (3) 14,500 – 2,900 CFM, AHUs on 2nd level mechanical room
- VAV system with reheat coils in place for levels 1 & 2, CAV AHU for lobby
- 10th level 11,600 – 7,000 CFM, AHU for studio spaces on level 3-9
- Level 3-9 operable windows, water source 30.1 - 9.2 MBH, FCUs only
- (2) 200 ton air cooled screw chillers in 10th level penthouse
- (2) 1632 MBH natural gas fired boilers in 10th level penthouse

Electrical/Lighting System:

- 480/277V 3 phase, 4 wire service from transformer to be determined by BGE
- 120V and 277V luminaires with mostly fluorescent lamps
- 375KVA/ 300KW fuel fired emergency generator



Todd Newswanger

Mechanical Option

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/stn112>