



# EDENWALD NEW TOWER

## BALTIMORE, MD

### General Information

Owner: General German Aged People's Home of Baltimore

Owner Representative: Matthews Development Company

Architect: SFCS, Inc.

General Contractor: Whiting-Turner

Structural Consultant: Rathgeber/Goss Associates

Estimated Cost: \$52 million

Size: 253,000 sq. ft.

Project Delivery Method: GMP

### Architecture

12 Story Continuous Care Retirement Community Addition

Houses 60 independent apartment units and 32 assisted living units

Amenities include an indoor pool, fitness center, enclosed walking track, outdoor terrace and more

Building envelope consists of brick veneer, pre-cast concrete panels, and glass windows and curtain walls

### Structural

Frame composed of cast-in-place columns and beams with 9" post-tensioned concrete slabs

Foundation consists of spread and strip concrete footings supported by geopiers and are designed for 4-6000 psf

WWF reinforced, 5" slab on grade

Main roof utilizes 9-16" sloped, post-tensioned concrete slabs

Penthouse is supported with a steel frame and non-composite concrete roof on metal deck

Laterally supported by ordinary reinforced concrete shear walls

### Mechanical

(2) 100-ton rotary screw chillers

(2) 51.7 BHP boilers

9300 CFM air handling unit

580 GMP cooling tower

### Electrical

External utility transformer provides 480Y/277 power

450 kW 480/Y277 emergency transformer

(8) step down transformers to 208Y/120 power for apartment units

### Lighting

Living units and circulation through building mainly illuminated with fluorescent luminaires

**BRYAN HART**

**STRUCTURAL OPTION**

<http://www.engr.psu.edu/ae/thesis/portfolios/2008/bgh132/index.htm>

