



# Medical Office Building

Malvern, PA

## Building Systems

### The Team

#### Architect

Ewing Cole Cherry Brott  
100 North 6th Street  
Philadelphia, PA 19106  
<http://www.ewingcole.com/>

#### Site Engineer

Engineering Design Consultants  
211 Willowbrook Lane  
West Chester, PA 19382

#### Contractor

Torcon, Inc.  
214 East Grove Street  
West Field, NJ 07091

### The Project

#### Site

East Whiteland Township — 111 acres  
Tredyffrin Township — 5 acres

#### Building Info

235,000 sq. ft.  
6 Stories — 4 stories above grade

#### Architecture

Pre-cast Concrete Panel & Brick Veneer  
Façade  
Open planned interiors surrounded by  
traditional office space along the  
walls  
4 story semi-circular atrium on the rear  
wall connects to a semi circular  
patio, patterned brick link the floor  
of the atrium with the patio

#### Costs

\$37 million in total Project costs  
\$7 million parking garage  
\$1.35 million AE fee

#### Structural

##### Frame

Cast-in-place concrete  
columns and girders

##### Floor

Cast-in-place concrete slab

##### Roof

Cast-in-place concrete slab  
Steel truss over Atrium



#### Mechanical

##### Generation

8 central water heat pumps  
- Four 50 ton  
- Three 70 ton  
- One 90 ton  
Chiller dedicated to auditorium

##### Heating Delivery

311 heat pumps provide a  
thermal buffer along the  
exterior wall  
30 ceiling hung heat pumps

##### Cooling Delivery

VAV box in every office with  
local and network controls

#### Electrical

##### Feeder

2 35kV lines in main-tie-main  
radial configuration

##### Distribution

2 1500kVA Transformers  
Dual UPS on transformers  
4 3-Day Generators

#### Special

##### Fire Protection

Wet Type Sprinkler System  
Water Curtain in atrium  
Simplex 4100 Control Panel

##### Security

Closed Circuit Television

