The University Sciences Building  
Northeastern, USA  

General Building Information

| Size       | 209,000 SF |
| Function   | Classroom/Office/Laboratory |
| Height     | 142’ (max) 114’ (min) |
| Construction | August 2006 - December 2009 |
| Construction Cost | Withheld by Owner |
| Delivery Method | Construction Manager at Risk |

Architecture

- Two building System
  - Building 1 – Offices and laboratories
  - Building 2 - Classrooms, Offices, Collaborative Spaces
- Central Idea - Atriums and Open Interactive Spaces
- Unevenly spaced windows with aluminum trim and zinc paneling façade
- Complex floor plans producing interesting cantilevers

Project Team

| Owner      | Not Released |
| Architect  | Mack Scogin Merrill and Elam |
| Structural | ARUP |
| MEP        | ARUP |
| Civil      | Civil and Environmental Consultants |

Structure

Foundation:
- Drilled Caissons, strip and column footings

Superstructure:
- Lower floors: Formed Concrete columns, beams, and slabs
- Upper Floors: Steel columns and composite floor system
- Lateral System: Concrete shear walls and steel brace frames

Construction

- Foundation of building two was sequenced with construction of building one level 3.
- Complex floor framing and connections delayed fabricators and erectors, delaying overall schedule.

 MEP Systems

Mechanical:
- 11 Air Handling Units ranging from 4,800 - 40,700 CFM
  - 5 AHU’s match exhaust unit with energy recovery wheel
- Multiple zones supplied by VAV boxes with terminal reheat
- Chilled water and steam supplied by the campus utility plant
- 3 atrium smoke exhaust fans

Electrical/Lighting:
- 4.16 kW main switchboard
- Main power is 480Y/277V 3 phase, 4 wire
- 900kW diesel emergency generator
- Lighting consists of fluorescent, metal halide, and decorative LED’s

http://www.engr.psu.edu/ae/thesis/portfolios/2012/CJD5135/index.html