

# MICHAEL P. GARDNER

## *lighting/electrical*

Owning Entity  
Design Firms  
General Contractor

Withheld at Owner's request.

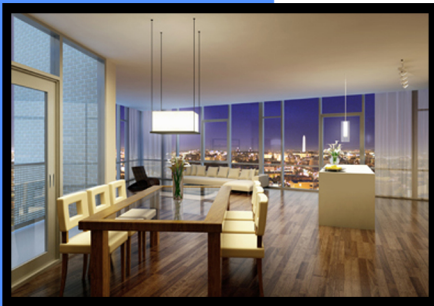
Architecture

This 280,000 square foot mixed-use project contains retail spaces on the ground floor and luxurious apartment units on the floors above. The apartments consist of studios, 1-bedroom, and 2-bedroom options. The unique footprint utilizes exterior curtain walls to strengthen surrounding views. Other exterior walls include are finished with brick or stone.



This project also includes sustainable features such as a green roof, which is meant to reduce the cooling load in the summer time and decrease heat loss in the winter. The green roof also improves the aesthetic appeal when viewed from surrounding buildings.

This thesis project can be viewed at <http://www.engr.psu.edu/ae/thesis/portfolios/2009/mpg5001/>



The lighting systems vary by space throughout the building. In apartment units, incandescent sources are mostly utilized to provide warm, comfortable tones to the room. In the residential lobby and other larger, common areas, fluorescent sources are used to save energy. The electrical system steps the incoming voltage down to 208Y/120 and operates three elevators.

Lighting/Electrical



The building's foundation consists of a concrete slab resting on caissons. In some areas, the thickness of the slab is 52 inches. The mechanical system includes two cooling towers and plumbing provides domestic hot and cold water for 28 apartment units as high as 9 stories above grade.

Structural/M & P

*a mixed-use project in the*  
**EASTERN UNITED STATES**