High Performance System Features

- Insulated precast foundation wall system
- Urethane wall panel system (SIP) with integral PVC studs
- Open web joists
- Pressurized plenum for HVAC distribution
- Vertical service chase
- Stacked wet service areas
- Low VOC paint
- Low-E glazed windows
- Compact fluorescent lighting
- Surface raceway for power, voice and data
- PEX homerun domestic water system

The design process included a comprehensive computer simulation of energy performance as well as post-occupancy evaluation to determine performance efficiency of products and systems.



HVAC SYSTEM



HOMERUN WATER SYSTEM







SECOND FLOOR PLAN

THIRD FLOOR PLAN





Susquehanna, PA • 1996

Prototype house implementing integrated system technologies. The house was a joint effort with the Susquehanna Consortium, a partnership sponsored by Armstrong World Industries, involving industry and Carnegie Mellon University. The Consortium's goal is the improvement of the housing industry and its construction processes by optimizing affordability and quality, energy performance, resource utilization and construction process.

Susquehanna Project

Carnegie Mellon School of Architecture