

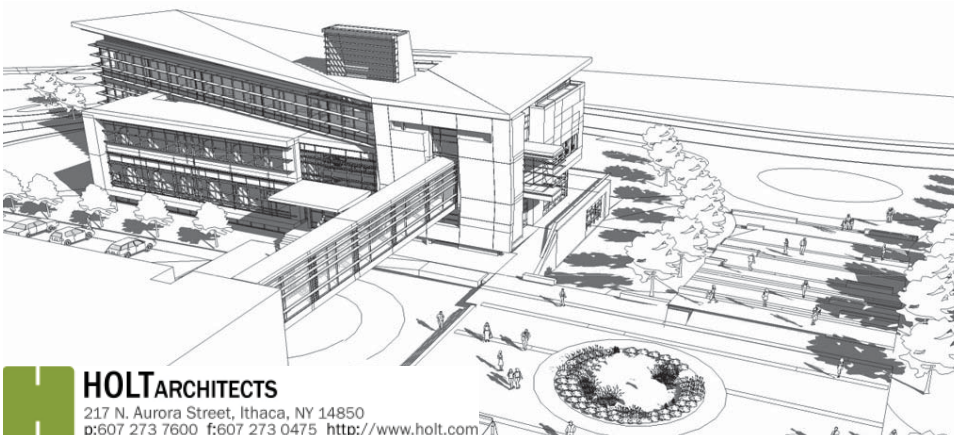


Ithaca College Gateway Building

Designed using sustainable practices to obtain LEED PLATINUM Certification, this 58,000 sf building, scheduled for occupancy the Winter of 2008, will house the offices of admission, enrollment planning, graduate studies, human resources, and senior administration (President, Provost etc.).

Innovative design and engineering process

- **Building modeling** evaluated the energy efficiencies and life-cycle cost benefits of envelope systems (i.e. walls, glazing and roof), building orientation, and solar shading.
- **Energy modeling** tested the energy efficiencies and life-cycle cost benefits of multiple mechanical system alternatives as they would perform on this specific site, in this climate, within this building envelope, informing the design and resulting in a building with 34%, or **\$35,000, annual energy savings** when compared to standard code requirements.
- **CFD smoke and wind modeling** proactively investigated the effects of a fire in the atrium and other public spaces, informing the design of the **smoke evacuation system**.
- The relatively narrow depth of the building, and the strategic use of interior and exterior glazing provides **natural light** deep into the core spaces and affords all occupied spaces **views of the exterior**.
- **NYSERDA construction incentives** of over \$280,000 help offset the cost of **sustainable building features**



What makes this building

GREEN

- Extensive use of **day lighting** in all occupied spaces
- Sensors regulate lighting and mechanical ventilation levels based on occupancy and available natural light to conserve electricity.
- **Natural convection ventilation** pre-cools the atrium at the start of each day by drawing cooler night air across a shade garden on the north side of the building and relieving it out the light monitor 4 stories above
- High efficiency envelope reduces air permeability and minimized heat loss
- Ground source **geothermal** system uses the Earth's relatively consistent temperature to provide heating and cooling for the building through thirty six 500-foot-deep bore holes.
- Over 50% of the building energy comes from **renewable sources**
- A variety of shading devices protect the glass curtain wall from direct summer sun
- Nearly 6,500 SF of **vegetated roof** area replaces land taken by the building, reducing airborne pollutants, and cooling and adding oxygen to the air
- **Rainwater** from the roof is collected into a 12,000 gallon tank below the garden, **servicing over 66% of the building's yearly water needs**
- Low-E coated glass that lets in visible light without heat-producing infrared radiation
- Use of **porous pavement** and **native vegetation** in the landscape reduce the impact on the local storm water management system
- Sustainable, low-toxicity materials and products, many sourced locally
- **Recycled** materials, including more than 90% of the steel

