



BUILDING TYPE

**Performance  
Computing  
Center**

TOTAL SQUARE FOOTAGE

**47,116**  
sq ft

OCCUPANCY DATE

**December  
2011**

DESIGN ENERGY RATING

**98**

PERCENT ENERGY  
& CO<sub>2</sub> REDUCTION

**27**

EST. ENERGY USE INTENSITY

**8,586**  
kBtu/sf/yr

EST. TOTAL ANNUAL  
ENERGY USE

**152,970,130**  
kBtu/yr

ENERGY SAVINGS

**147,976,990**  
kBtu

CO<sub>2</sub> SAVINGS

**6,423**

Situated on **Princeton's** Forrestal campus, the **47,000-squarefoot** building is the new home to powerful research computers that are capable of generating models of galaxy formation, tracking the motion of a single molecule and simulating the seismic forces of an earthquake, among other highly technical tasks.

The new **High Performance Computing Center** at Princeton University was designed to provide power to the computers while using as little energy as possible. During winter, the air conditioning system can be switched off, and giant louvers can be opened to let in cold outside air. Other **sustainability** measures include cooling towers that enable the chillers to be turned off when the outside temperature is near freezing. A second backup generator, gas-powered, has a **co-generation** feature that harnesses waste heat as energy to chill the water. It runs on natural gas and has a **lower carbon footprint** than the electricity provided by the power utility.

**Gensler**



Estimated energy performance for this building will be eligible for ENERGY STAR after monitoring superior performance for one year.