

'62 Center for Theatre & Dance



Architect: William Rawn Associates Architects, Inc., Boston, MA

Date completed: 2005

Project Cost: \$53,300,000

Function: Theatre and dance performances, offices, classrooms, computer lab

Energy use in 2006: 1,219,964 kWh

Square Footage: 126,000 ft.² total; includes 106,000 ft.² new construction, and 20,000 ft.² renovated (the Adams Memorial Theatre)

Energy use per square foot: 9.68 kWh/ft.²

CTD History & Design

The new '62 Center for Theatre and Dance proudly displays its glass curtain walls, a jutting crown of Douglas fir, a swirling skin of tawny limestone, and regular red brick sections that mimic the nearby Greylock Quad. The complex includes a glazed dance studio on the second floor of the north façade, the CenterStage, a concrete and steel arena that serves as a free-form black box theater, the 550 seat Main Stage clad in ash, offices for the theater and dance departments, a new scene shop for set construction, two large lobbies, several classrooms, a directing studio, a new costume shop, a computer lab, numerous technical spaces, storage areas, dressing rooms, and two freight elevators that connect the multi level facility. The CTD removes barriers between audience, actors, and crew workers by intermingling their paths and refusing to hide “back of house” functions.

Architect William Rawn connected the CTD to the pre-existing Adams Memorial Theatre, and gave the AMT a new façade, gutted and reconstructed its electrical, heating, insulation, seating, and handicap access systems, bringing the building up to code, and reduced capacity to 220 seats. He also removed the Downstage, formerly on the west side of the AMT (about 4,900 sq. ft.). The result is a massive complex of about 126,000 sq. ft., including three theatres and two other performance spaces (dance and directing studios).

CTD Energy Use

The building's energy use per square foot is moderate compared to other buildings on campus, but the size of the complex results in high usage. It includes efficiency measures such as a radiant heating system in the slate floor, mainly fluorescent lighting, and a computerized heating and cooling system with CO₂ sensors and variable speed drives. This HVAC system can be constantly adjusted and programmed to meet the schedules of occupants, keeping the spaces comfortable with appropriate levels of fresh and conditioned air, which are monitored closely as the high-powered theatrical lighting and large audiences build up both CO₂ and heat in the building.

In warm months, the chiller plant in the nearby Greylock parking garage (also designed by William Rawn) brings cold water to the CTD's HVAC system, while in cold months, the water is chilled underground in uninsulated pipes, a “free cooling” mode utilizing geothermal cooling. Steam produced at the College's central steam plant heats water via two heat exchangers, and this hot water flows through building radiators producing a quiet, efficient heating system. Sky lighting and waterless urinals help reduce electrical and water consumption.

Sources:

Catalano, Cosmo: Theatre Department Production Manager.

Clark, Don: Facilities, Utilities Program Manager.

Robbins-Zust, Maia: Theatre Department Technical Director.

Senecal, Roberta: Facilities, Assistant to the Associate Vice President.

Wilmot, Randy: William Rawn & Associates, CTD Project Architect.

http://www.williams.edu/admin/facilities/propertybook/const_proj.php; 2006.

<http://www.williams.edu/go/62center/facts.php>; 2006.

Photo: '62 CTD: Jared Powell, '06.