



CASE STUDY
AISD PERFORMING ARTS CENTER

GREEN BUILDING RATING:
★ ★ ★ ★ ★

“The AISD Performing Arts Center is the district’s highest AEGB rated building to date. The PAC was designed with solar panels, sustainable building materials, water-saving fixtures, efficient lighting and state-of-the-art technology to enhance the urban school experience, benefit the community for years to come, and serve our most precious resource: our students.”

— Darien Clary, Austin ISD Sustainability Manager





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TOP FEATURES:

- » 31.6% modeled energy savings through efficient HVAC, building envelope, lighting systems and 60.5 kW solar array
- » 65% potable indoor water savings with efficient plumbing fixtures and use of reclaimed water
- » 83% of project construction waste, totaling 835 tons, diverted from the landfill
- » 34% recycled content building materials with 51% Texas-sourced and over 90% FSC certified wood
- » Optimized acoustics provide control for a range of performances

PROJECT DESCRIPTION:

The Austin Independent School District Performing Arts Center (PAC) is home to the district’s band, orchestra, theater, dance and visual arts performances. The 68,363 sq.ft. facility includes a 1,200 seat theater, dance studio, recording studio, multi-purpose room and administrative offices. A 250-seat black box theater provides flexible performance space for smaller events and training. The building is also available to rent for public events. The project achieved both an Austin Energy Green Building 5-Star rating and a LEED Gold certification.

ENVIRONMENTAL FEATURES:

The PAC is located in the LEED ND Gold certified Mueller neighborhood, a 700-acre public/private joint development that transformed the former municipal airport into a sustainable community. The remediated brownfield with thousands of yards of recycled concrete runways is now a dense, walkable site with generous green spaces. Mueller is also home to the largest concentration of affordable housing and features transportation options like bike paths and public transit. The building’s adjacent garage provides shared structured parking and is equipped with electric vehicle charging stations. The PAC is walking distance to restaurants, a grocery store and other services.

The building’s outdoor irrigation and indoor toilet/urinal flushing utilizes the City of Austin’s reclaimed water system, resulting in over 900,000 gallons of potable water savings annually.

Selection of high efficiency chillers and fans, LED lighting, and a high performance envelope resulted in an estimated 31.6% energy savings. A district-wide renewable energy bond funded a 60.5kW solar array which is expected to produce nearly 80,000 kWh of clean, renewable electricity per year.

The team conducted daylight analyses to maximize the physical and psychological benefits of natural light. Translucent glazing is used overhead in the main lobby to diffuse light and avoid glare. Over 90% of regularly occupied spaces, outside of the theater, benefit from daylight access.

Extensive wood paneling, sourced from sustainably-managed forests, optimizes the acoustics within the theater. The theaters are sound isolated and acoustic curtains allow greater acoustic control for the anticipated range of performances.

PROJECT PROFILE

- Zip Code** » 78703
- Neighborhood** » Mueller
- Building Area** » 68,363 sq.ft.
- Rating Date** » April 2014
- Owner** » Austin Independent School District
- Architect** » Pfluger Architects in association with Miro Rivera Architects
- General Contractor** » American Constructors
- MEP / Structural Engineer** » Jose I. Guerra
- Civil Engineer** » I.T. Gonzalez Engineers
- Landscape Architect** » Coleman and Associates
- Commissioning** » ACR Engineering
- Acoustics** » BAi
- Sustainability Consultant** » Studio D Consulting + Design
- Theater Consultant** » Schuler Shook
- Roof Consultant** » Austech
- Technology Consultant** » BAi
- Parking Garage Structural Engineers** » DCI
- Parking Garage Engineers** » Graelic

Austin Energy Green Building cultivates innovation in building and transportation for the enrichment of the community’s environmental, economic and human well-being.

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