

Greenheck Project Profile

SBC Center Community Arena

San Antonio, TX

- **Architectural & Engineering Firm:**

Ellerbe Becket, Inc.
Kansas City, MO

- **Architectural Firms:**

Kell Munoz Architects
San Antonio, TX
(Construction Documents/Coordination)

Lake/Flato Architects
San Antonio, TX
(Exterior Design)

- **General Contractor:**

Hunt Construction, Dallas, TX

- **Greenheck Representative:**

Mechanical Reps, Inc.
San Antonio, TX



Grand Opening for the home of the San Antonio Spurs was held in November, 2002.



The Ventilation Challenge

- **Design louver system that accommodates building deflection**

- **Satisfy high windload requirements for louvers**

- **Complete and deliver units in phases**

The engineering, design and construction of the SBC Center, home of the NBA San Antonio Spurs, the AHL Rampage, the WNBA Silver

Stars and the San Antonio Stock Show and Rodeo, is nearly as interesting as the events that take place there.

The impressive complex provides 750,000 square feet of space and 18,000 seats. More than 1,000 tons of steel were used to build the massive structure.

When filled to capacity, the building actually moves and the floor deflects. To

accommodate this movement as well as high windloads, Greenheck had to come up with an innovative louver design. In addition, because certain areas of the building were completed before others, Greenheck also needed to manufacture and deliver its products in phases that matched the contractor's installation schedule.

Greenheck's Solution

- **Engineered louvers with moveable joints.**

With guidance from Greenheck's local representative, Mechanical

Reps, Inc., the project engineers and architects ultimately chose Greenheck as the architectural louver provider. The decision was

based primarily on Greenheck's custom engineering capabilities. Charlie Garcia of Kell Munoz Architects, an architectural

Greenheck's Solution

firm on the project, says Greenheck was able to design a new type of louver system that adjusted to the building's beam and floor deflections. While other louver manufacturers might caulk the joints in an application like this, Greenheck designed a unique system that allowed the louvers to better handle the building's movement and withstand wear and tear.

The Greenheck louvers installed in the SBC Center actually move within the jambs. Also referred to as a "starter system," the design allows for one inch floor deflection, or movement, as well as exterior installation.

The system, standard in the window industry, but unique in louver applications, incorporates a window-type drive-on component on the jamb. A jamb starter is at both sides of the louver, and a jamb drive-on holds the louver in place.

To complete the system, Greenheck's integrated design team chose louver model ESK-602, a stationary louver with "K" style blades. This louver is often used in architectural applications because it matches well with open air requirements. Model ESK-602 can withstand a windload of 40 PSF while the standard windload is 25 PSF.



Greenheck supplied the ESK-602 louvers in numerous shapes (see photos). Greenheck also supplied numerous fan models for this project including centrifugal (model SWB), in-line (BSQ), sidewall propeller (SB) and bathroom fan (SP) models. All louver and fan products were delivered on time and as needed to accommodate the contractor's installation schedule.

The Results

- **Hunt Construction received the 2002 Texas Construction Best of 2002 Award – Award of Excellence for Public/Private Projects over \$50 million for the construction of the SBC Center.**

Because of the multiple firms involved and the demanding installation schedules, superior project coordination was a necessity – and ultimately a reality.

"We were very impressed with Greenheck," says Garcia. "The drawings always looked great, they were very

thorough, and we received excellent customer service."

J.R. Lennerth, a construction manager with Hunt Construction during the project, concurs. "There was excellent two-way communication from submittals, issues and problems to scheduling shipments. Greenheck

engineers went out of their way to ensure that this difficult project and challenging specification went smoothly."

