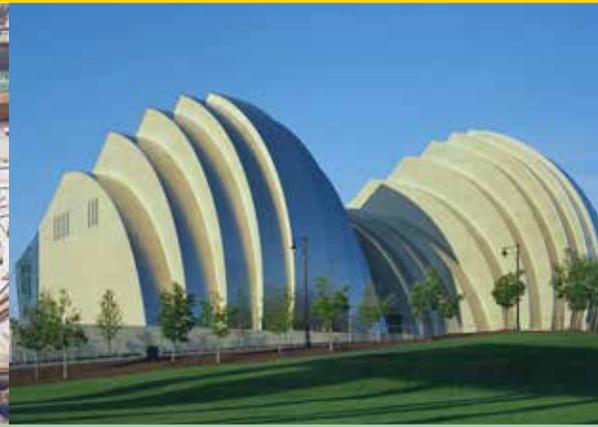


Kauffman Performing Arts Center

Kansas City, MO



In September 2011, the Kauffman Center for the Performing Arts opened. This architectural icon has changed the Kansas City Skyline and will be the home of the Kansas City Symphony, the Lyric Opera of Kansas City, and the Kansas City Ballet. The Center covers 13 acres and includes landscaped grounds over a 1,000 space underground parking garage.

The building holds an 1800-seat proscenium-style theater for general theatrical performances, ballet, and opera as well as a 1600-seat concert hall that features vineyard-style seating on all four sides of the stage. The two venues are joined by the Grand Lobby with an expansive view open to the South. The lobby will be used by patrons on performance nights and will also be available for special events held at the Kauffman Center.

The internationally recognized design team included Moshe Safdie & Associates, Theatre Projects Consultants, and Nagata Acoustics. Their design incorporated the very latest in architectural innovation and technology to create virtually perfect acoustics and optimal sightlines in both performance halls. Groundbreaking for the Kauffman Center took place on October 6, 2006.

The design for the Kauffman Center, encourages the enrichment of the lives of people in the community through extraordinary performing-arts experiences. To emphasize that mission, architects created a dramatic sloped-roof design that uses innovative techniques to produce the final shape in precast reinforced concrete, glass and stainless steel.

From the crest, the roof descends in a curve following a geometric design of light cables, metal and glass toward the south. The roof intersects with an outwardly inclined and curved glass wall, which contains the foyer. The curved, segmented northern walls are sheathed in silvery stainless steel and punctuated by acid-etched, limestone-colored precast reinforced concrete perpendicular walls.

The tensile forces of the suspended glass foyer roof are counteracted by a series of cables securing the structure to anchors at the entrance terrace. The anchors are attached to 24- by 36-inch beams that form a wall separated from the building by a 12-inch-thick concrete driveway slab reinforced with epoxy-coated reinforcing bar. The roadway acts as a brace for the grade-beam system, to ensure the building remains secured.

Use of epoxy-coated reinforcing bar alleviated concerns that long-term effects of traffic loads would erode the surface, allowing moisture and salt to penetrate and cause corrosion. Approximately 872 tons of epoxy-coated bar were used in the project.

Team

Owner:

Kauffman Center for the Performing Arts

Architect:

Moshe Safdie & Associates,
Somerville, Massachusetts

Associate Architect:

BNIM Architects, Kansas City, Missouri

Engineer:

Structural Engineering Associates Inc.,
Kansas City, Missouri

General Contractor:

J.E. Dunn Construction Co.,
Kansas City, Missouri

Design Criteria:

- Design two performance spaces with excellent acoustics.
- Ensure the unique structural tension that creates the sloping roof is secured and will be durable throughout the center's service life.
- Create a 1,000-car parking structure adjacent to the center.

Epoxy-coated Reinforcing Steel: 872 tons

Photography:

J.E. Dunn Construction Co.
Tim Hursley Photography



Epoxy-Coated Reinforcing Steel

COST-EFFECTIVE CORROSION PROTECTION

A Better Product Using More Than 40 Years of Improved Manufacturing and Coating Technologies.