

Glass Labyrinth at The Nelson-Atkins Museum of Art

The Glass Labyrinth, a sculpture by legendary Kansas City artist Robert Morris, is now open to the public at the Nelson-Atkins Museum. Nearly one million pounds of one-inch-thick plate glass went into the sculpture, which was built to commemorate the 25th anniversary of the Donald J. Hall Sculpture Park.



A unique combination of high art meets glass engineering. The glass labyrinth expands the park's idea of creating an outdoor museum—a place for people of all ages to experience the relationship between art, architecture and nature.

JEI Structural Engineering provided the calculations and glazing system design. The clear glass labyrinth is heavier than it appears; the 62-foot by 62-foot by 62-foot, 7-foot-tall labyrinth weighs more than 400 tons.

Stewart Jeske, P.E. said it was challenging because the artist wanted clear glass without the distortion waves that you get in tempered glass. “We utilized annealed Starphire glass (low iron) for visibility with SentryGlas interlayer for strength.”

Another obstacle was the bronze cap. It was an experiment getting the bronze cap to act as a structural member with hidden joinery needed for artistic appeal. JEI had over site review of the bronze cap to assure its structural capacity, working closely with the fabricator, the artist, the glazing contractor, and the Nelson team.

A lockable glass door was considered for security purposes but ultimately omitted because of the difficulty in designing stability for wind and pedestrians in addition to difficulties for design of supports off of the brass rail and surrounding glass. Video surveillance was used, instead.

Jan Schall, the museum's curator of modern art, says “while most of her museum's outdoor pieces are hands-off, this one welcomes the viewer to walk right through. It's a completely new dimension for us that is experiential that way,” Schall said. “That lets you move in and through it. I think it will be a powerful experience for people and a moving and aesthetic experience.”

It's what one museum official is calling a visual “Tour de force.”

Steve Waterman, the museum's director of presentations, says, “Mr. Morris is a big deal and has been a big deal in the art world,” He's the Kansas City native who has spent his artistic life building similar labyrinths out of glass and chain link fences, like this one in Brazil. Waterman says this seven-foot-high labyrinth will challenge the participant as if they're in a hall of mirrors.



From Left to Right:
Ryan Kubr, John Issawi, Carrie Jeske, Robert Morris, Stewart Jeske, Matt Gorny, Andy Baumann, Matt Quinlivan.

In the late 1960s, Morris helped start the Process Art movement and began using industrial materials for sculptural works. He used aluminum, steel, felt, string, mirrors and dirt to create transient works of art like Continuous Project Altered Daily, 1969. His felt series is a stunning example of the beauty he found in these unexpected and unconventional media.

Morris, who has credited childhood visits to the Nelson-Atkins museum as a formative experience for his art, progressed naturally into the art of sculpture because of its interactive possibilities. His continued curiosity for the opportunities of viewer participation led to the creation of his Labyrinth series. Glass Labyrinth is the first permanent Robert Morris labyrinth installed in the U.S.

Fun facts about the exhibit include:

- A Maze of double-paned glass to life.
- 53 pieces of large glass panels.
- The largest panel weighs about 600lb.
- Utilizes annealed Starphire glass (low iron) for visibility with SentryGlas interlayer for strength
- All glass in the US is designed/engineered for probability of breakage - this is designed with a low probability of breakage less than 1/1000 under an extreme wind event.
- All of the glass pieces are tied together at the top with a continuous structural bronze cap which adds to the visually appealing design.

The Nelson-Atkins in Kansas City is recognized nationally and internationally as one of America's finest art museums. A bright orange ribbon surrounds the newly installed glass labyrinth for the Grand Opening. JEI Structural Engineering can be contacted at www.JEIstructural.com.

