

Project Spotlight

St. Louis Gate-Way Arch: Over The Underground Museum

Owner: City Arch River Foundation General contractor: McCarthy general contractors
Installer: Vee-Jay Contracting



Background Information

The city of St. Louis is undergoing a grand transformation, largely funded by the City Arch River Foundation, which since 2009 has been revitalizing the grounds that surround the city's famous gateway arch. One of the largest parts of this expansive project is the renovation of the underground visitor center and museum, which tells the history of this unique city.

Project Details

The construction of this underground museum was unique in a variety of ways, including but not limited to its rooftop, which was designed as a turf landscape—a walkable green space for visitors. The unique elements of this building required the team from Vee-Jay Contracting to choose some of the most durable and high-performing construction materials on the market. One of the most important aspects of this construction was choosing the insulation to be used under the roof deck—the insulation for this type of roof would not only need to have superior insulating properties but would also need to be extremely lightweight. With these distinctive considerations, Vee-Jay Contracting chose to use Aerix Industries Mearlcrete™ lightweight insulating concrete.

Vee-Jay's three-person installation crew mixed the Mearlcrete pre-formed foam with cement-water slurry on the jobsite to produce a lightweight concrete with superior resistance to thermal drift and thermal bridging. The 1,700 cubic yards of concrete was then pumped onto the rooftop at a thickness between two and six inches, covering a total of 90,000 square feet. The entire installation was completed in 12 short days.

Aerix Added Value

The use of Aerix's Mearlcrete not only provided the long-term insulation performance needed for this one-of-a-kind project, but also offered significant cost and labor savings with a quick-and-easy installation. Because of its environmentally friendly formulation, Mearlcrete also contributes toward LEED® credit requirements, protecting the environment as well as the city's many tourists who will soon be walking the museum hallways and soaking in the rooftop rays.

