

# LEED PROJECT PROFILE



## Soldiers Memorial Military Museum St. Louis, MO

**88%** reuse of existing building materials

**94%** construction waste diverted from

**23%** energy cost savings projected

### LEED® Facts

**Soldiers Memorial Military Museum  
St. Louis, MO**

LEED for 2009, Version: NC  
Certification awarded February 8, 2019

**Gold 60\***

Sustainable Sites 19/26

Water Efficiency 4/10

Energy & Atmosphere 11/35

Materials & Resources 10/14

Indoor Environmental Quality 10/14

Innovation & Design 3/6

Regional Priority Credits 3/4

*\*Out of a possible 110 points*

The information provided is based on that stated in the LEED® project certification submittals. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.

## Soldiers Memorial Military Museum

## Preserving the Past for a Sustainable Future

Historic Renovation &amp; Materials Reuse lead the way to LEED Gold

## PROJECT BACKGROUND

Soldiers Memorial Military Museum is a state-of-the-art museum facility honoring local military service members, veterans, and their families. The Missouri Historical Society assumed operation of the Soldiers Memorial in November, 2015. Thanks to the work of Mackey Mitchell Architects, much of the original architectural and historic integrity of the memorial remains. The updated museum honors the beautiful, classical-style building and seamlessly incorporates contemporary museum design.

## STRATEGIES AND RESULTS

The renovation touched all parts of the Soldiers Memorial building. Inside, clean and preserved metals line the windows and doorways and restored plasterwork decorates the ceilings. To minimize the artifacts' sunlight exposure without discarding the original windows, our team installed interior storm windows. The storm windows also help insulate the building, ensuring an ideal environment for the artifacts. Where possible, original, clean and rewired art deco light fixtures remain. The mahogany-lined elevator, with its ornate metal doors, is now consistent with code. The several hundred missing tiles from the Gold Star Mothers mosaic on the loggia's ceiling have been matched and replaced. The building's lower level, which previously wasn't open to the public, offers more than double the amount of exhibit space. Further renovations included the addition of a museum quality HVAC system – a first for Soldiers Memorial – as well as new electrical wiring, a fire-suppression system, and a state-of-the-art security system.

In order to meet LEED requirements, the team at BSI Constructors used environmentally friendly construction materials, such as cork flooring. Original materials were reused wherever possible, including the granite steps, marble walls, and the bathroom Vitrolite panels. All light fixtures now operate with LED lights. Additionally, the renovation team intentionally separated and recycled waste. The north side of the building now has a charging station for electric vehicles. The addition of a Five Branches Fountains and a reflecting pool revitalized the Court of Honor.

After the team installed exposed aggregated pavement, they rebuilt the stone planter on the east side of the Court of Honor using the original stone. The Court of Honor is an outdoor space for reflection and encourages visitors to spend as much time outside of the museum as they would inside. To better integrate Soldiers Memorial with the Court of Honor, Chestnut Street includes a single vehicular lane and a protected bike lane. Outside the building, a designated grassy programming space is outfitted with lighting and a sound system.

## ABOUT MISSOURI HISTORICAL SOCIETY

The Missouri Historical Society operates Soldiers Memorial Military Museum. The City of St. Louis owns the building. As operators of Soldiers Memorial Military Museum, the Missouri History Museum and the Library & Research Center, the Missouri Historical Society assumes responsibility for its role in environmental stewardship. It seeks to minimize consumption of energy and materials, treat waste responsibly, and make sustainable practices an integral part of all operations so as to reduce the organization's environmental footprint.

"We are so pleased to have maintained the architectural and historic integrity of Soldiers Memorial while also creating a sustainable and energy efficient 21st-century museum for the public to enjoy for generations to come. We can't preserve the past without securing our present. The Missouri Historical Society looks forward to continuing our sustainability efforts in the years to come."

Karen Goering,  
*Managing Director of Administration & Operations, Missouri Historical Society*



**Owner:** City of St. Louis

**Project & Building Manager:** Missouri Historical Society

**Architect & Interior Designer:** Mackey Mitchell Architects

**Contractor:** BSI Constructors

**Developer:** Green Street Real Estate Ventures, LLC

**Sustainability Consultant, LEED AP:** Missouri Historical Society

**Landscape Architect:** [dtls] Landscape Studio

**Civil Engineer:** Civil Designs Inc.

**Mechanical, Electric, Plumbing Engineer:** KAI Design & Build

**Lighting Designer:** Randy Burkett

**Structural Engineer:** David Mason Associates

**Commissioning Agent:** BRiC Partnership, LLC

**Project Size:** 38,665 square feet

**Photographs Courtesy of:** Missouri Historical Society

## About USGBC-Missouri Gateway Chapter

USGBC-MGC is a community of members, advocates, and practitioners that gives voice to our commitment to improve human health, support economies, and protect the environment through green buildings. The Chapter serves the community by educating and advocating for green building principles and practices, and believes that everyone deserves access to green and healthy spaces.



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CHAPTER