CAPITOL DOME
RESTORATION PROJECT
Preservation

The Dome Restoration Project

The U.S. Capitol Dome Restoration Project is being conducted in phases to restore the exterior and interior of the Dome. Having last undergone major repair in 1959–1960, the cast-iron Dome is suffering from the effects of weather and age, which include corrosion and cracking.

The first phase of the project, completed in September 2012, included the restoration of stone and cast iron at the base of the Dome, also known as the “Dome Skirt.” The second phase focuses on the exterior of the Dome.

Work includes restoring the historic cast-iron elements, weatherproofing the exterior, replacing broken windows, and removing hazardous materials. Scaffolding is required during this project, and a donut-shaped safety-netting system will be suspended inside the Rotunda.

Future planned stages include the Dome interior, the space between the inner and outer Domes, and the Rotunda. The project plan calls for completion before the 2017 presidential inauguration.

Types of Damage to Be Repaired

This rusted floral element and cracked column are typical of the condition of deteriorating parts of the Dome, which is plagued by more than 1,000 cracks and deficiencies. Individual elements like these will be removed and repaired during the Dome restoration.

Types of Work to Be Done

Workman in Paint Removal Gear, 2012 The process of removing old lead-based paint by blasting it with abrasive media requires protective equipment. This is how the paint was recently removed from the entire Dome Skirt, and it is expected that this process will be used in the upcoming Dome Restoration Project.

Protecting the Cast Iron, 2012 After old paint is removed, the cast-iron surfaces will be protected with new coatings and seams will be sealed to prevent water intrusion.

Repair by Brazing, 2012 Brazing, a type of soldering, was used to repair this cracked corner of the Dome Skirt and will be used during the upcoming Dome Restoration Project.
Design and Construction

The Cast-Iron Dome  In the 1850s, while adding the Capitol’s north and south extensions, architect Thomas Ustick Walter saw that the old Dome was too small for the enlarged building. It was also a fire hazard, and it leaked. In 1855 Congress authorized construction of his new design.

Walter’s design was influenced by domed European cathedrals. The use of cast iron made the Dome lighter and less costly than it would have been in stone.

Bulfinch’s Dome was removed in 1856. Ironwork for the new Dome was hoisted with a huge derrick; steam engines on the roof of the Capitol supplied power. Construction continued during the Civil War and was completed in 1865.

The First Design, 1792  In 1792, following a competition for a design for the Capitol, the prize went to Dr. William Thornton. His neoclassical building included a domed center section based on the Pantheon, an ancient Roman temple.

The First Dome, 1825–1856  In the 1820s President James Monroe directed architect Charles Bulfinch to make the copper-covered wood-and-masonry Dome higher than first planned.

Construction of the Dome

Supervising Engineer Captain Montgomery C. Meigs ordered that construction of the extensions and Dome be extensively documented with the new technique of photography.
The Statue of Freedom

The bronze Statue of Freedom is the crowning feature of the Capitol Dome. Designed and sculpted by Thomas Crawford in Rome, the classical female figure holds a sheathed sword, the shield of the United States, and a wreath. Her feathered helmet references the costume of Native Americans.

The statue was cast by Clark Mills in Washington, D.C., and on December 2, 1863, its assembly was completed on the cast-iron pedestal atop the Dome.

In 1993, the Statue of Freedom and its pedestal underwent restoration; since then, they have been regularly maintained. A full repainting of the pedestal is planned as part of the Dome Restoration Project.

Inspiration

The Dome as National Symbol

President George Washington wanted the new nation’s capital city to express aspiration, grandeur, and permanence. He knew that domed buildings would convey those values.

Today, the Capitol Dome is known around the world. It has inspired the domes on many of the nation’s state capitols. It has served as an iconic backdrop in film, television, and millions of visitors’ photographs. In scenes of joy and sorrow, ceremony and everyday life, it conveys the sense of a uniquely American place.

Independence Day Fireworks, 2002

The nation’s Independence Day celebration at the Capitol and on the National Mall ends with fireworks that light up the Dome and the Washington Monument.

While restoration work is performed on the interior areas of the Dome, a large donut-shaped safety net will be suspended above the Rotunda. Similar to the one used in 1999, during an earlier stage of the Dome Restoration, the netting will be assembled on the Rotunda floor and hoisted into place.

“Inauguration of President Lincoln in Front of the Capitol at Washington,” 1861

Lincoln’s first inauguration was also the first held beneath the cast-iron Dome under construction.

COVER IMAGE: “Section Through Dome of U.S. Capitol” by Thomas U. Walter, 1859
LOCATION & HOURS

The Capitol Visitor Center, the public entrance to the U.S. Capitol, is located below the East Plaza of the Capitol between Constitution and Independence Avenues.

Hours: The Capitol Visitor Center is open to the public from 8:30 a.m. to 4:30 p.m., Monday through Saturday. It is closed on Thanksgiving Day, Christmas Day, New Year’s Day, and Inauguration Day.

Official Business: Visitors with official business appointments may enter the Capitol Visitor Center as early as 7:15 a.m.

Accessibility: Listening devices with audio description of the U.S. Capitol tour orientation film and Exhibition Hall are available at the Information Desks. Visitors may request wheelchairs at the North Coat Check located on the Upper Level or from Capitol Visitor Center staff. All restrooms are accessible.

International Visitors: Visitors may request listening devices for foreign-language versions of the U.S. Capitol tour orientation film and the Exhibition Hall audio tour at the Information Desks.

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Your feedback is important to us. Share your experience at www.visitthecapitol.gov/comments.
or text “Capitol” to 313131 Message and data rates may apply.

For more information about the Capitol Dome Restoration Project please visit www.aoc.gov/dome or @uscapitol.

Photographs and architectural drawings from the records of the Architect of the Capitol.