

## **Heisei-era Restoration**

### **Reversing Half a Century of Wear and Tear**

In the decades following the Shōwa-era Restoration in 1964, sun, wind, and rain took their toll on the castle. Since the brilliant white plaster façade needs to be replaced every 50 years, a full-scale restoration of the keep was carried out from 2009 to 2015. Though the keep was not dismantled as it had been during prior restoration projects, the Heisei-era Restoration was still a major undertaking. Over the course of more than five years, workers replaced roof tiles, patched walls, and reinforced the structure to protect it against earthquakes. Visitors were given access to the roofed scaffolding that covered the keep so they could watch the work in progress.

### **Timeline of the Heisei-era Restoration**

October 2009 -	Onsite survey of Bizen Bailey
December 2009 -	Temporary bridge at Kisai Gate completed
March 2010 -	Gantry for delivery of materials completed
March 2011 -	Roofed scaffolding completed. Viewing area opened to public. Surveying begins to obtain precise measurements of keep roof, exterior walls, and other features
November 2012 -	Replacement of roof tiles completed
November 2013 -	Plastering of walls and roof joints completed
January 2014 -	Structural reinforcement work completed. Viewing area is closed.
October 2014 -	Scaffolding dismantled and removed
December 2014 -	Delivery gantry removed
February 2015 -	Temporary bridge at Kisai Gate removed
March 2015 -	Project completed

### **Scaffolding**

Box-style truss construction for reduced weight  
Dimensions: 47 meters east to west; 45 meters north to south  
Height: 53 meters (equivalent to an 8-story building)  
Total floor area: roughly 8,300 square meters

### **Material Delivery**

Machinery and materials were brought into the Bizen Bailey on the delivery gantry  
Height of gantry: roughly 38 meters

Length of gantry: roughly 66 meters

#### Construction Work

Replacement of roof tiles and wall repairs

Area of roof tiles replaced: 2,060 square meters

Area of plaster recoated (including roof tile joints): 7,820 square meters

Structural reinforcement for improved seismic resistance

Duration: 5 years, 4 months (November 2009 to March 2015)