

Protecting important cultural properties

THK's seismic isolation devices

Construction incorporating seismic isolation: Example

Protecting the Heijo Palace Imperial Audience Hall in Nara for future generations

Nara Heijokyo became Japan's first large-scale capital city when the capital was relocated there from Fujiwarakyo in the year 710. The Heijo Palace ruins, which include the remains of the Imperial Audience Hall, are now a public park. As part of a project overseen by the national government, restoration of the main gate, the Suza-kumon, was completed in 1998. Restoration of the main section of the Imperial Audience Hall was completed in 2010, exactly 1,300 years after the capital was established. An ongoing commemorative event marking the 1,300th anniversary of the founding of Nara Hei-jokyo is being held at the Heijo Palace ruins and elsewhere, in an effort to enable future generations to appreciate the site as a place where history can be absorbed through firsthand experience. THK's seismic isolation devices are being used in the reconstruction of the Imperial Audience Hall. The provisions called for in the original reconstruction plan would not have satisfied contemporary safety requirements, so it was decided to incorporate seismic isolation devices in the execution of the plan to minimize the effects of earthquake tremors. Seismic isolation devices made up of linear slides, laminated rubber pads, and Viscous Dampers are being in-serted into the bed plate that forms the foundation of the structure. With seismic isolation devices interposed between the reconstruct-ed building and the ground, only minimal structural reinforcement of the building itself is needed, allowing engineers to stay close to the original reconstruction plan.

