

Protecting important cultural properties

THK's seismic isolation devices



Shoudou Kozaki

Chief Priest
Tenshukunzan Ganjojuin

Testimonial Construction incorporating seismic isolation

Ensuring the safety of important cultural property—Unkei's Buddhist sculptures—even in a major earthquake

At this Buddhist temple, Ganjojuin, located in the city of Izunokuni in Shizuoka Prefecture, we have five images of Buddha that are authentic works of Unkei. Unkei was a master sculptor of Buddhist images in the Kamakura period (1185-1333). These works were created when he was about 35 years old and still in his prime. The statues, which include a seated image of Amida, have all been designated by the government of Japan as important cultural properties, so the question of how to keep them safe in the event of a major earthquake was naturally a matter of great concern. There was already a mechanism to keep them from falling over—the statues have tenons that hold them to their pedestals—but this didn't seem adequate, so we joined forces with our temple patrons to find a more effective way to protect the statues and put our minds at ease. In light of their great value as works of art, we considered the idea of putting the statues in the storehouse for safekeeping, but we can't burn incense or even light a candle in the storehouse. Then, through a design firm, we found out about THK's seismic isolation system. I saw a video explaining how seismic isolation works. Just then a housing expo was being held in Shizuoka, and I had a chance to visit THK's seismic isolation simulating vehicle. I realized that seismic isolation was the best way to protect the statues, so we decided to have the temple hall and the dais reinforced with earthquake-resistant steel bars and plates and then install seismic isolation devices under the statues. The project was still underway when the Suruga Bay earthquake struck, and the seismic isolation devices had not yet been installed, but luckily the tremors were less intense in this area and didn't cause any damage. The seismic isolation devices have now been installed, and I feel relieved.

In their own words A local employee

It was a bit difficult at first, because neither the chief priest, the temple patrons, nor even the design firm knew much about seismic isolation, which THK knows a lot about, of course. To help them understand what seismic isolation devices do, we gave them a ride on THK's seismic isolation simulating vehicle. They experienced a simulation of the 2004 Chuetsu earthquake, and they were all amazed at how strong the tremors were and how tremendously effective seismic isolation is. In this type of seismic isolation project, when it's not just material objects but images of Buddha, a god, that are being protected, it's essential to closely respect the client's wishes. Seismic isolation devices are very good products, and we're undertaking this effort with the understanding that we have a mission to help protect these Buddhist statues as works of art that are important to the whole country.

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