Project: California Memorial Stadium

Location: Berkeley, CA

Architect: HNTB & STUDIOS Architecture **Products:** Custom Stair Risers and Treads

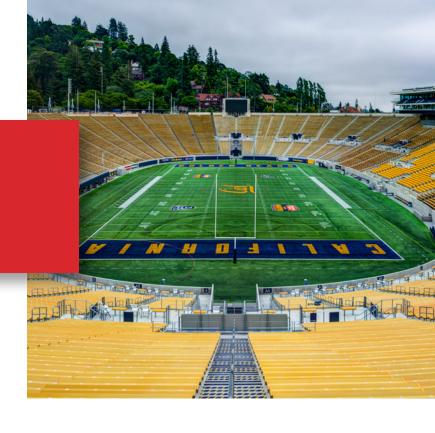


Unveiled in 1923, California Memorial Stadium at the University of California Berkeley was built as a memorial to California's fallen heroes of World War I. Its neoclassical shape gives spectators panoramic views of the San Francisco Bay, the Berkeley Hills or Strawberry Canyon, depending upon their seat selection. The owners wanted to preserve the beautiful facade of the stadium, which was a key consideration during the redesign and reconstruction phases. Because the stadium was built over the active Hayward Fault, accommodations had to be made for potential seismic movement.

Design Goals

The primary goal was to reduce risk and ensure life safety in case of a major seismic event, so CS not only had to design an exclusive system, but also prove that these covers could handle the required movement. The expansion joint cover team began working with HNTB's designers to propose preliminary custom joint system concepts as none of the standard products, even with modifications, would meet the project requirements.

Continued on the other side...



At a Glance:

Located over the Hayward
Fault, California Memorial
Stadium was transformed
with custom, individual stair
treads and risers to meet
seismic standards and protect
stadium occupants in the
event of seismic activity.



The team provided a full-scale mock-up to illustrate the functionality of the new design, which was tested in our rigorous full-cycle testing machine before any material was supplied. The team also worked closely with general contractor, Webcor, to incorporate design features that permitted fi¬eld adjustment to this highly complex system.

Results

In less than 21 months, CS designed, tested and fabricated a custom joint cover assembly for the stadium bowl, as well as the other joint cover systems used throughout the arena. The custom stair risers and treads protect football fans and the structure itself in case of a seismic event. The project required a series of angled joint covers that could accommodate 12 inches of expansion, compression and lateral movement all while maintaining the safety of the stadium's occupants. These covers were first of their kind to get 12 inches of movement in multiple directions. The complexity of the horizontal treads and vertical risers in the stadium bowl seating required each individual cover to adapt to in field variations of the precast seating sections, so every cover had to be uniquely designed to fit its individual tread and riser. The project was also under a strict schedule to ensure that the stadium was ready for the start of the football season.



