



PROJECT PROFILE

Chemeketa Community College

Cladding Investigation, Litigation Support, and Recladding Study | Woodburn, OR



CLIENT

Chemeketa Community College

BACKGROUND

Chemeketa Community College boasts an enrollment over 60,000 across six campuses in Oregon. The Woodburn campus buildings are steel-framed stucco structures.

Chemeketa Community College enlarged their Woodburn campus with the addition of a two-story building. The new structure was clad with concrete masonry units (CMU) on the ground floor and stucco on the second floor. Within a few years of completion, the stucco cladding developed extensive cracking, much more severe than would normally be expected of stucco. WJE was asked, on behalf of the college, to investigate the cause of the cracking, provide litigation support, and develop recladding options for the building.



SOLUTION

WJE architects conducted an investigation of the stucco condition and installation and researched documents describing the installation of the cladding. The architects concluded that the contractor did not follow several installation industry standards, which caused the severe cracking of the stucco. As part of the litigation support services, the architects installed instruments at the exterior of the building to measure the amount of ground vibration from trains that passed by the college. WJE was able to show that the cracking was not the result of vibrations from the trains.

WJE also prepared a recladding study for the stucco-clad building, which included three recladding options. Aesthetics, constructability, structural modifications, availability of materials, sustainability, cost, maintenance, and construction schedule were considered in the study.

Stucco, brick masonry, and terra cotta rainscreen were selected as the most appropriate systems to explore as recladding options. Also included was a Repair and Overcoat option to provide an economical alternative to the selected options. WJE provided architectural renderings of each option as well as opinions of the viability of each system.