

**CS**™ Expansion Joint Covers

SEISMIC SHOWCASE

No company can come close to our experience and expertise handling complex seismic projects.

The following pages highlight a small sampling of projects that show how we have solved complex movement challenges.



DE YOUNG MUSEUM | SAN FRANCISCO, CA



**Architects:** Fong & Chan Architects | Herzog & de Meuron  
**Engineer:** Rutherford & Chekene  
**Products:** XLS Exterior Wall Covers,  
 MACC Multi-Axial Corridor Systems

The project team utilized advanced strategies to design this fine arts museum located five miles from the San Andreas Fault. The MACC systems allow the corridors on the base isolated building to move up to 42" in any direction during a seismic event. The 60" wide custom covers are filled with the same unique, copper cladding as the rest of the building, which provides a seamless appearance to the façade.

CALIFORNIA MEMORIAL STADIUM | BERKELEY, CA

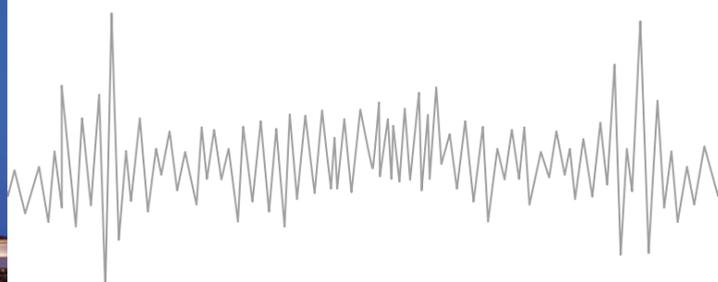
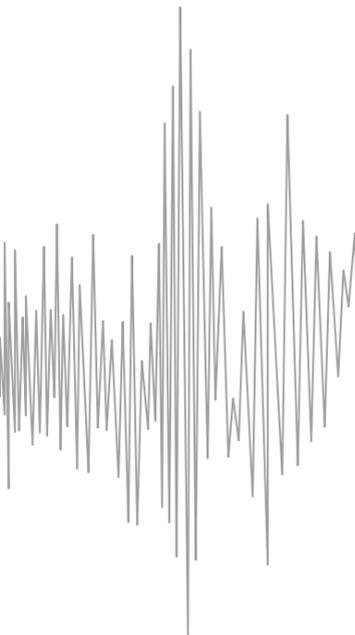


**Architects:** HNTB | STUDIOS Architecture  
**Engineer:** Forell/Elsesser Engineers  
**Products:** Customized Seismic Stair System

Located directly over the Hayward Fault, this stadium was the first facility to require 12" expansion, compression and lateral movement. In less than 21 months C/S designed, tested, and fabricated the custom joint cover assemblies for six seismic joint openings around the stadium bowl. These custom stair risers and treads help reduce seismic risk and ensure life safety in a major seismic event.



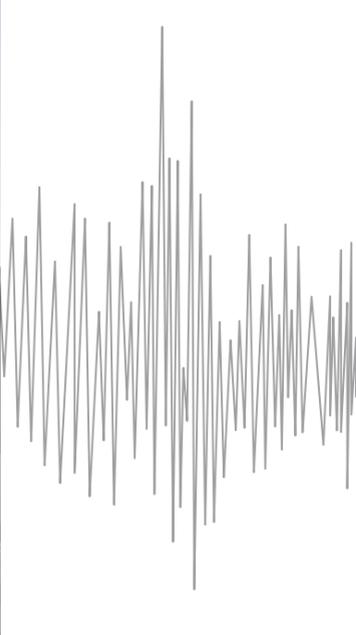
PASADENA CITY HALL | PASADENA, CA



**Architect:** Bakewell & Brown  
**Engineer:** Forell/Elsesser Engineers  
**Products:** SSRW Seismic Moat Covers

The seismic upgrade to this distinct public building called for 33" of movement in all directions. C/S provided a custom SSRW system filled with stone pavers around the building's perimeter. The building is LEED® Certified at the Gold level.

HOAG HOSPITAL | NEWPORT BEACH, CA



**Architect:** Taylor & Associates Architects  
**Engineer:** TTG  
**Products:** MACC Multi-Axial Corridor System, MARC Roof Covers, SSRW Seismic Floor Covers

When an addition was proposed for Hoag Hospital, the architectural challenge was to connect the base isolated tower to the fixed-base tower and to allow the required 30" of movement. C/S' solution was a seismic system that provided the required movement while ensuring full corridor access and maintaining the fire rating.

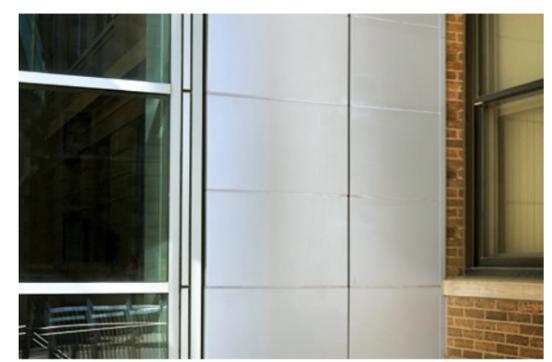
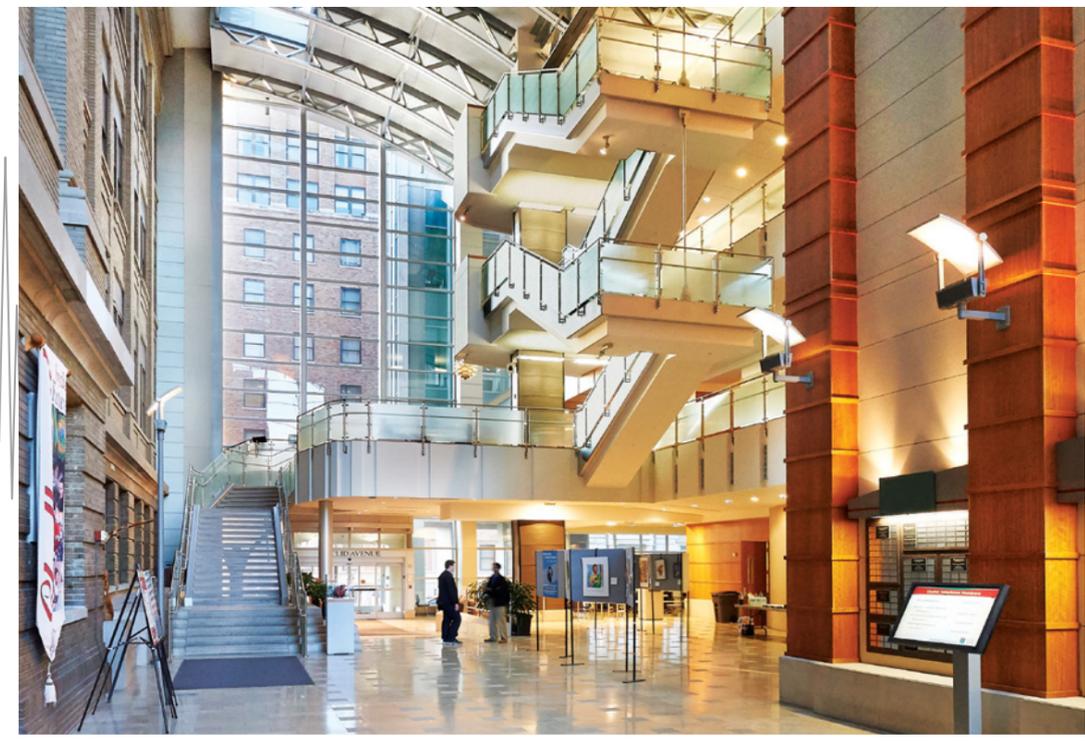
MINETA SAN JOSÉ INTERNATIONAL AIRPORT | SAN JOSE, CA



**Architect:** Gensler  
**Engineer:** Magnusson Klemencic Associates  
**Products:** XLS Exterior Wall Covers,  
LAF Wall and Ceiling Covers

Aesthetics were just as important as performance in the design of this airport. C/S was called upon to incorporate unobtrusive expansion joint covers that did not impact the inside or outside of the design. C/S' solution was a custom 25" XLS system that fit seamlessly within the 34" wide CENTRIA metal panels.





**Architect & Engineer:** HOK  
**Products:** LAF Interior Wall Covers, XLS Exterior Wall Covers, MARC Roof Covers

Because structural movement could not be determined on this older building, FEMA required an unprecedented 26.6" movement for roof and wall joint covers. C/S developed a custom design and confirmed its efficacy by rigorously testing the solution on their in-house cycle table. C/S also provided a MARC roof cover that can withstand wind gusts of 90 PSF without component failure.

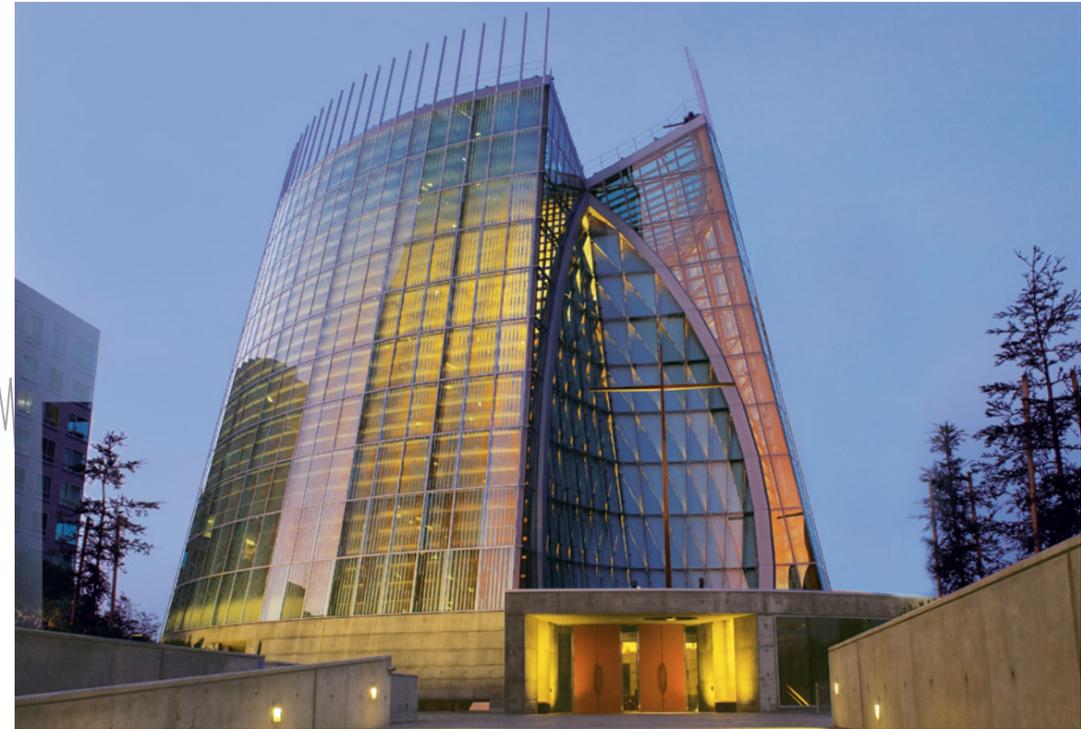
UTAH STATE CAPITOL | SALT LAKE CITY, UT



**Architects:** Parsons | Jacobsen  
**Engineer:** Forell/Elsesser Engineers  
**Products:** MACC Multi-Axial Corridor Systems,  
SSRW Seismic Moat Covers

To provide a seismic upgrade to this landmark building, the architect specified C/S gyrometric cabs (MACC) and SSRW seismic moat covers to work in conjunction with the base isolators to provide egress during seismic activity.

CATHEDRAL OF CHRIST THE LIGHT | OAKLAND, CA



**Architect & Engineer:** Skidmore, Owings & Merrill (SOM)  
**Products:** XLS Exterior Wall Covers,  
SSRW Seismic Moat Covers

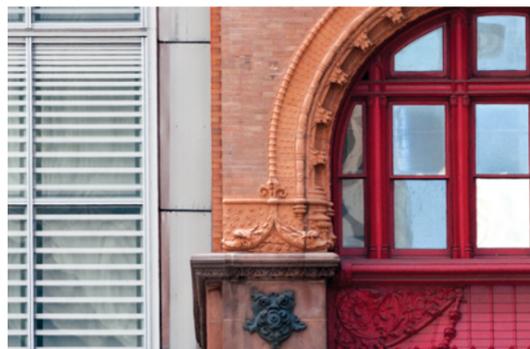
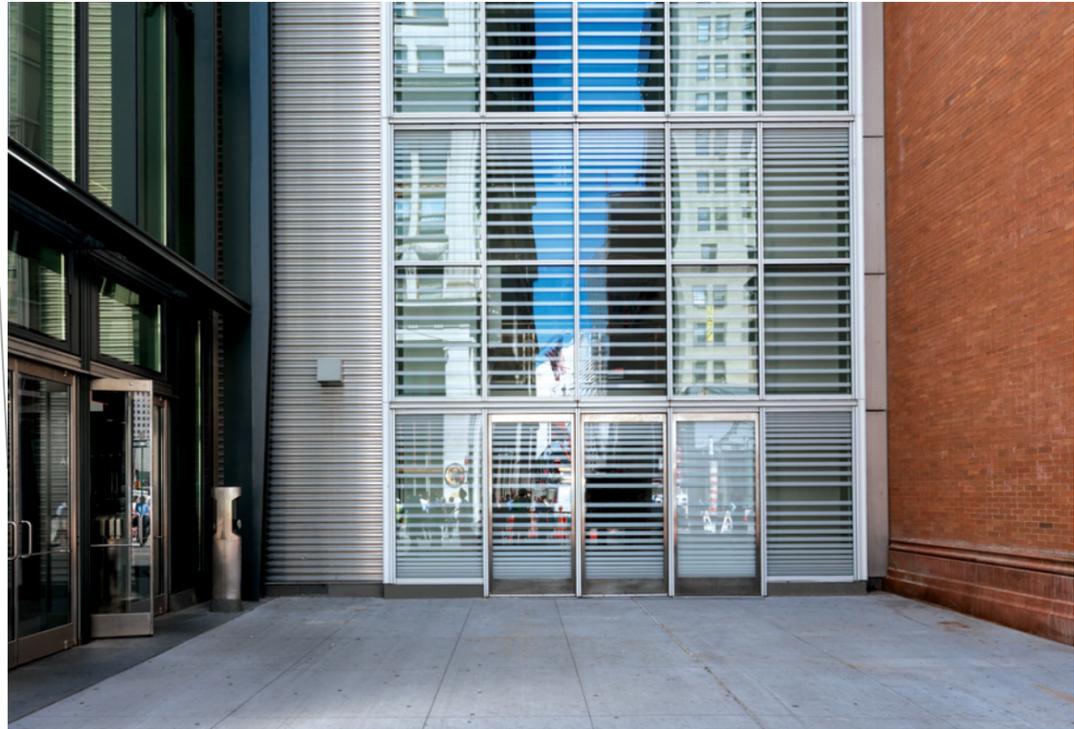
This building is located three miles from the Hayward Fault and 16 miles from the San Andreas Fault, in Seismic Zone 4. The building is 12 stories high, needing to survive a 1,000 year earthquake similar to the great San Francisco earthquake of 1906. C/S' XLS Series and SSR Series expansion joint covers, hidden by inseting the surrounding finish materials, were utilized in this unique moat design. Both models are able to span the 33" moat while accommodating the movement and aesthetic requirements for this landmark cathedral.



**Architects:** HDR | Corgan  
**Engineers:** AG&E Structural Engenuity | Datum Engineers  
**Products:** XLS Exterior Wall Covers

C/S was challenged with seamlessly integrating a custom expansion joint cover solution into the glass curtain wall façade of this new Dallas hospital. The specifications required that the system withstand daily wind, water penetration and thermal movement, while maintaining the integrity of the building's exterior. C/S' system successfully passed all full-scale testing to meet the design requirements.

FULTON CENTER | NEW YORK CITY, NY



**Architect:** Grimshaw  
**Engineer:** Arup  
**Products:** SFW Wall Covers, SJP Floor Covers,  
SRJW Roof Covers, XLS Exterior Wall Covers

Located next to the historical landmark Corbin Building, this transportation hub required lateral movement of the 18" joint openings. C/S' multifaceted design team developed unique joint covers and used XLS on the façade of the structure to incorporate a stainless steel infill panel.



Only we can prove our solutions will work for your specific project requirements.



**Movement**

Our solutions go through a rigorous series of in-house cycle testing so you don't have to worry about failures after installation.



**Fire**

Fire tested, peace of mind. When it comes to fire testing, our solutions must pass a series of cycle tests prior to surviving the inferno.



**Wind**

Wind can be a devastating opponent in certain locations. We can prove that our solutions can withstand the strongest winds at our in-house wind tunnel.



**Wear and Tear**

Let's face the facts, floor covers take some serious abuse. Our solutions are subjected to the necessary rolling load tests to ensure performance even in the heaviest traffic areas.

ADOBE SYSTEMS INCORPORATED | LEHI, UT



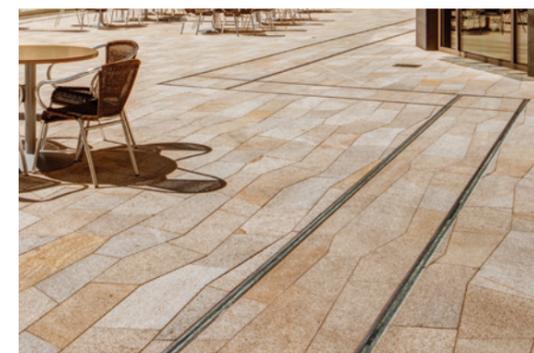
**Architect:** WRNS Studio  
**Engineers:** Dunn Associates | Holmes Culley  
**Products:** XLS Exterior Wall Covers

This sweeping building is located on 38 acres and spans 90 feet across the highway, splitting the building in half and creating unique design requirements. C/S proposed a glass-filled XLS solution, which met all of the movement and design specifications without interfering with the exterior's beautiful glass façade.





CITY CREEK CENTER | SALT LAKE CITY, UT



**Architects:** ZGF Architects | Callison | Hobbs+Black Architects | FFKR Architects | SWA Group  
**Engineer:** Magnusson Klemencic Associates  
**Products:** SF Factory Miters, SF Wall Covers, SSR Floor Covers

City Creek Center covers two city blocks in downtown Salt Lake City and includes retail shopping, residential and office buildings, as well as parking garages. Because of its location on the Warm Springs Fault, the design focused on constructing a site that could withstand a 7.0 magnitude earthquake. C/S' solutions were selected because the products could be integrated into the design without disrupting the site's functionality.

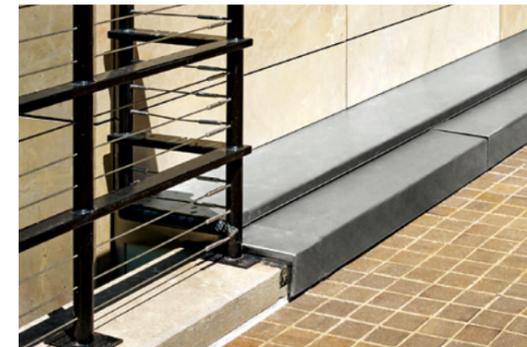
CATHEDRAL OF OUR LADY OF THE ANGELS | LOS ANGELES, CA



**Architects:** Jose Rafael Moneo | Leo A Daly  
**Engineer:** Nabih Youssef & Associates  
**Products:** SSRW Seismic Moat Covers,  
XLS Exterior Wall Covers

This 11-story cathedral was constructed to withstand an 8.4 magnitude earthquake. The entire building sits on base isolators, allowing it to move 24" in all directions. The moat surrounding the building is concealed by C/S' SSRW moat covers, which are filled with materials that match adjacent finishes.

TEMPLE UNIVERSITY SCIENCE EDUCATION AND RESEARCH CENTER | PHILADELPHIA, PA

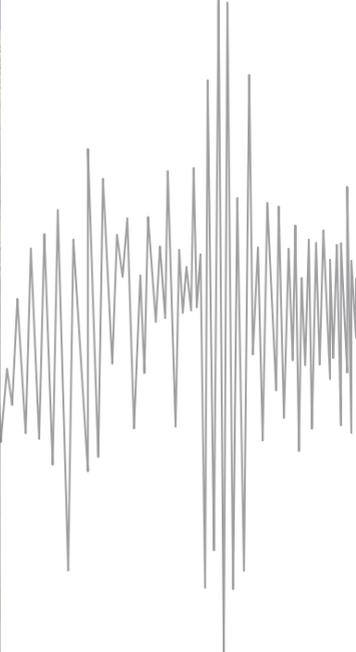
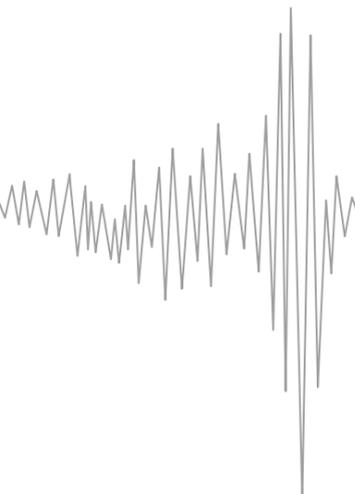


**Architects:** Architectural Resources Cambridge |  
USA Architects  
**Engineer:** Brinjac Engineering  
**Products:** SC Exterior Wall Covers, AFW Exterior Wall Covers,  
SRJW Roof Covers

This distinctive project required careful consideration of the location of the cover. The low wall would be potentially subject to pedestrian traffic, vandalism and skateboards—all of which could damage the cover plates. C/S' solution was to provide a heavy-duty stainless steel roof cover.



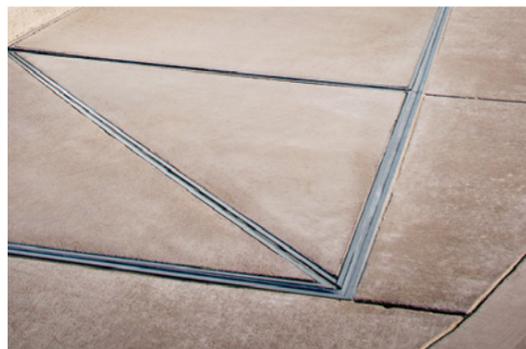
SAN FRANCISCO INTERNATIONAL AIRPORT | SAN FRANCISCO, CA



**Architect & Engineer:** Skidmore, Owings & Merrill (SOM)  
**Products:** SSR Seismic Floor Covers, XLS Interior & Exterior Wall Covers

At the time of construction, this five-story terminal was the world's largest base isolated building. It was critical that the seismic joint covers accommodate four-way movement up to 36" with minimal impact on the design. C/S helped design and detail each of the floor, wall, ceiling and exterior covers. The covers were tested to prove each design would function properly during an earthquake.

LA EMERGENCY OPERATIONS COMMAND CENTER | LOS ANGELES, CA



**Architect:** HOK

**Engineer:** EUR Consulting & Development

**Products:** MARC Roof Covers, SSRW Seismic Moat Covers, XYP Floor Covers

It was necessary to surround Los Angeles' most earthquake-proof building with C/S' seismic moat covers to allow the building to withstand a maximum credible earthquake, free of gaps and openings. The SSRW seismic moat covers, MARC roof covers and XYP floor covers were designed to allow for 27" of movement. C/S worked closely with the architect early on in the design of the expansion joint covers to eliminate problems that may have occurred later in the project phase.





CORPORATE HEADQUARTERS | PLEASANT GROVE, UT

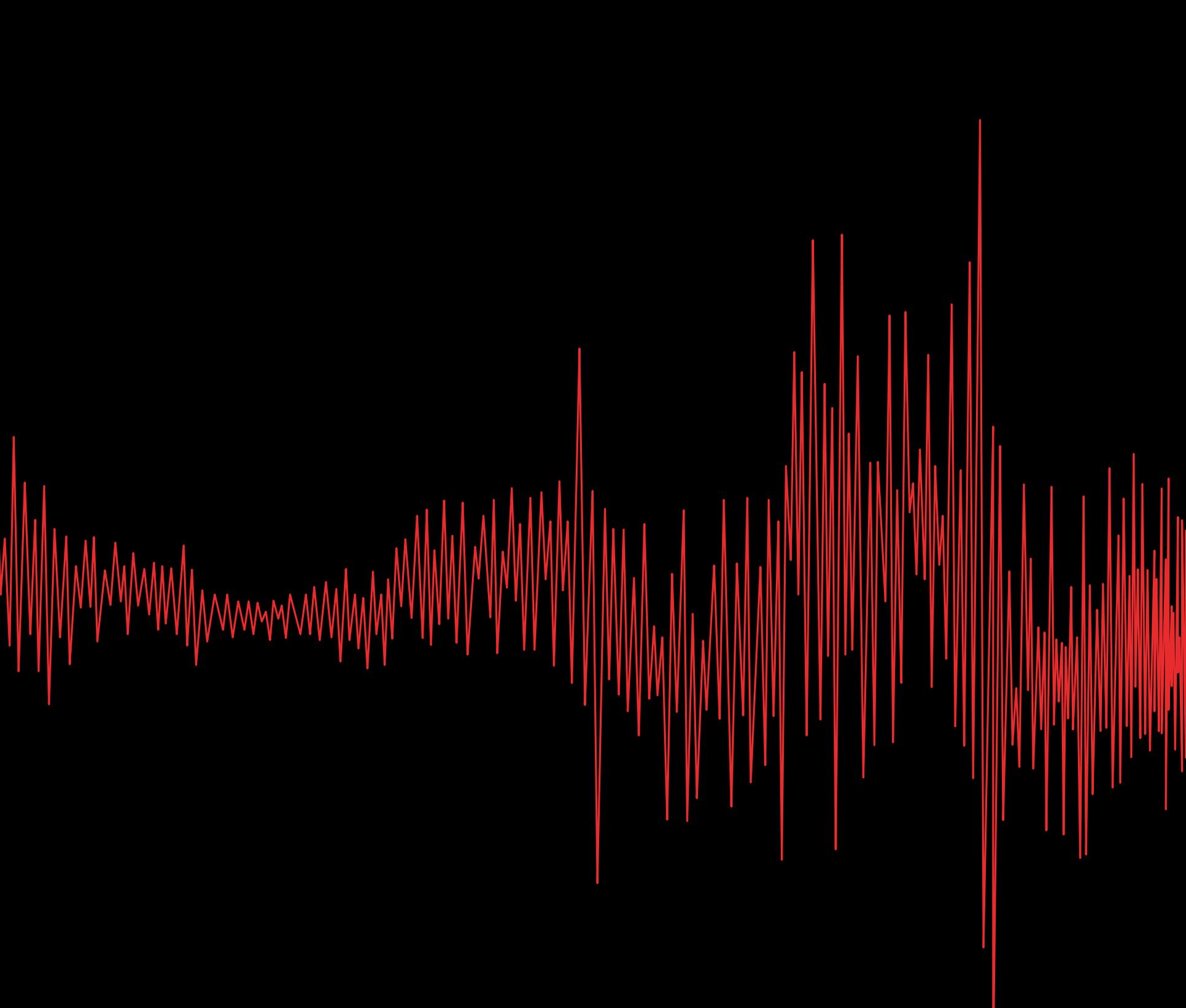


**Architect:** VCBO Architecture  
**Engineer:** AWA Engineering  
**Products:** XLS Exterior Wall Covers, LAF Wall Covers,  
OFX Fire Barrier

This 383,000 sq. foot campus is home to 1,400 corporate employees. In order to meet the movement requirements of the project without compromising aesthetics, C/S provided an elegant and sustainable glass-filled XLS solution.

Here are a few more projects we are honored to have worked on. We partnered with firms to solve complicated movement problems.

PROJECT	LOCATION
AL MAFRAQ HOSPITAL	ABU DHABI, UNITED ARAB EMIRATES
APPLE CAMPUS HEADQUARTERS*	CUPERTINO, CALIFORNIA
CITYCENTER	LAS VEGAS, NEVADA
CLÍNICA UNIVERSIDAD DE LOS ANDES*	SANTIAGO, CHILE
GLOBALFOUNDRIES	MALTA, NEW YORK
GOLDEN NUGGET HOTEL & CASINO	LAKE CHARLES, LOUISIANA
JOHN WAYNE AIRPORT, ORANGE COUNTY	SANTA ANA, CALIFORNIA
KAISER PERMANENTE OAKLAND MEDICAL CENTER*‡	OAKLAND, CALIFORNIA
KAISER PERMANENTE SANTA ROSA MEDICAL CENTER*‡	SANTA ROSA, CALIFORNIA
KAUFFMAN CENTER FOR THE PERFORMING ARTS	KANSAS CITY, MISSOURI
LOS ANGELES INTERNATIONAL AIRPORT	LOS ANGELES, CALIFORNIA
MEDICAL CENTER OF LOUISIANA AT NEW ORLEANS	NEW ORLEANS, LOUISIANA
METLIFE STADIUM	EAST RUTHERFORD, NEW JERSEY
NASCAR HALL OF FAME	CHARLOTTE, NORTH CAROLINA
NEW YORK POLICE ACADEMY	QUEENS, NEW YORK
RIVER CITY HOTEL & CASINO	ST. LOUIS, MISSOURI
ROYAL ADELAIDE HOSPITAL	ADELAIDE, AUSTRALIA
SAN FRANCISCO GENERAL HOSPITAL*‡	SAN FRANCISCO, CALIFORNIA
STANFORD UNIVERSITY MEDICAL CENTER*‡	STANFORD, CALIFORNIA
TORRE BBVA BANCOMER	MEXICO CITY, MEXICO



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