Committed to Resilient Design

Building Resilience Together Through the USRC Industry Partner Committee
ABOUT US

Making Buildings Better

Over the past seventy years, Construction Specialties has taken on some of the industry’s toughest challenges — and emerged as an industry leader in making buildings better. As trailblazers and problem solvers, we’re proud to innovate resilient, safe, and progressive solutions to the issues of building movement that our customers face.

Our mission is to understand not only your needs but your ultimate vision so that we can create fresh solutions for a more intelligent built environment. Our values lead the way.

Construction Specialties believes in innovating for the greater good. We focus on the human and ecological impacts of building products, and our design principles embrace continuous improvement. Over the years, this curiosity and tenacity have made us a leading manufacturer of architectural products.

We’re proud of where we’ve been, but it’s the unknown that excites us today.

“Our goal is to be a resource and partner in solving your building challenges.”

Frank Probst
CEO of CS
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CS Partnership Approach

A partnership with CS results in high-level technical expertise and coordination, from pre-planning through regulatory approval, through the shop-drawing phase, fabrication, construction, and support, even after our warranty has expired.

**Assess**

Our product experts and licensed engineers work with your project team to understand needs, wants, and limitations to ensure our solution(s) can help your team achieve the desired level of resilience. We accomplish this by understanding the following:

- Resilience Goals
- Financial Feasibility
- Code Compliance Challenges
- End-use considerations such as loading, environment, and maintenance
- Integration Considerations

**Advise**

In partnership with your project team, we provide all the necessary documentation, engineering, and modeling needed to progress through regulatory agencies for compliance and approvals, helping to move the project from Design Documents to complete Construction Documents. Through these phases, we offer the following:

- Full design coordination with necessary trades
- Attendance at pre-construction meetings
- Regulatory agency coordination
- Product testing to ensure performance
- Product calculations based on site requirements

**EARLY INVOLVEMENT**

CS helps eliminate redundant or deferred scopes of work.

**MAINTAIN PROJECT SCHEDULE**

CS assists in timeline integration, mitigating risks associated with delays.
Implement

We don’t stop when construction starts, as some product suppliers might. We offer the following during construction:

• Coordinated fabrication
• Finish and delivery schedules to meet the project timeline
• Installation training
• Support during field changes
• Inspection support

Sustain

Before the project turns over to the owner, we provide the facilities management team with the closeout information.

EASY MAINTENANCE
CS educates the owner about the system to prepare building safety and maintenance plans.
Large Floor Joint Solutions

Our floor covers accommodate building movements such as everyday thermal movement, wind sway, settlement for new to existing structures, and seismic movement for earthquake-prone regions.

SSR/SSRW Floor Covers | 2”–24” Joints

Some of our most popular floor covers are the SSR and SSRW, designed for interior and exterior applications. Accommodating thermal and seismic movement, these covers can accept matching floor finishes helping to reduce sightlines for cover concealment.

Parking Covers | 6”–16” Joints

Our parking covers are great for parking garages, stadiums, and other open-air spaces. Our flexible seal covers prevent water entry, while our metal covers are noise-resistant and designed for seismic applications.

Moat Covers | Large/Complex Joints

Our moat covers have the same functionality as our SSR and SSRW covers but can be tailored to accommodate even more complex movement, loading, and finish challenges. Many of our moat covers are designed in conjunction with base-isolated buildings.

We have taken advantage of our experience to curate a proven set of solutions for all movement conditions. We recognize that every project has unique requirements, and we can design our solutions for the largest and most complex movement scenarios.
Large Wall + Ceiling Joint Solutions

CS has several interior and exterior wall and ceiling covers that accept surrounding finishes and accommodate complex movement. Our wall and ceiling covers integrate for a seamless transition at all points of a building.

**XLS/XLS-2G | 8”+ Joints**

These seismic covers are ideal for areas where high wind loads are expected or where high levels of movement and/or lateral shear movement are required. Infill (provided by others) can include various cladding systems such as metal, glass, and stone.

**LAF/LAF-2G | 4”–24” Joints**

This flush metal cover has a unique panel that allows for thermal expansion and can disengage during a seismic event without damaging surrounding walls. The factory-primed system can be painted in the field to match almost any wall or ceiling finish.

**SF + SC | 2”–24” Joints**

These gasketed, flush covers offer multi-directional movement in exterior applications where weather protection is critical. Our SC model features a serrated seal to allow for additional movement requirements.
Roof Joint Solutions

We offer a wide range of roof cover solutions in flexible seal and metal for complex joint movements. They can be seamlessly integrated with our exterior covers for a complete solution that includes details and factory-fabricated transitions. All roof covers can be painted to match surrounding substrates and have wall cover options to align for a consistent look. These covers have proven, long-lasting performance and are tested in accordance with ASTM E1399.

SRJ | 3”–16” Joints

This aluminum roof cover is available with factory-made transitions to ensure watertight results. This cover is ideal for applications where occasional access is expected.

LSSR | 8”–24” Joints

This alternative mid-range roof cover is designed to accommodate multi-directional movement, including lateral shear. With no exposed frame, this cover can sit down between parapets to provide a clean look that blends in with the surrounding roof.

MARC | 18”+ Joints

This multi-axis roof cover is capable of spanning large joint openings and can accommodate the movement of base-isolated structures. This system features a ladder frame assembly and can be customized to use where roof access is required.
Corridor + Rail Solutions

Corridor Solutions

Base isolated structures can create challenges when it comes to designing seismic joint covers. Our solution, the MACC System, is an integrated assembly where the floor, wall, and ceiling covers are connected to move in unison to provide multi-directional movement of up to 100% in four directions. Pre-construction design assistance can be provided for any MACC system specified on a project.

Seismic Railing

As an addition to our other offerings, we provide railing to accommodate similar movements. These rails are available in a multitude of options and finishes. Even during a movement cycle, the rails maintain code requirements to prevent fall risk. The system can be designed to meet virtually any joint size or project condition.
DriftReady™ Stairs

DriftReady stairs are a resilient solution to accommodate seismic movement and inter-story drift. Designed to reduce force transfer between stairs and the building frame, these stairs ensure occupants and first responders can enter and exit a building safely after building movement. This technology can also be applied to our traditional and modular stair systems.

MSS Modular Stair System®

Modular Stair Systems were developed to alleviate many of the issues surrounding multi-level stair erection. These stairs are self-supporting, eliminating the dangerous use of site ladders to move between levels. By fabricating and shipping complete modules, installation time is significantly shortened and allows the contractor to build a secure stair system earlier in the construction process.
The tallest building west of the Mississippi – Wilshire Grand Center is located in the heart of downtown LA; this 73-story structure stands 1,100 feet tall and includes a 900-room InterContinental hotel, five restaurants, and multi-floor, Class A office space. It also features an alluring glass skylight, which cascades like an elevated waterfall above the entrance.

CS expansion joint cover panels were custom fabricated, allowing them to be incorporated within the compound curve of the glass atrium. The panels not only helped compose the stunning visual on the building’s exteriors, but they also add resiliency within the infrastructure to withstand a potentially seismic event.

The CS design team works extensively with the curtainwall supplier to develop an elegant yet resilient solution. CS also worked with the installer to create a 3D survey to create an individualized panel layout and factory fabrication of the components to ensure a seamless watertight product.
CASE STUDY

A Transit Center Centered on Safety

Residing in downtown San Francisco, the Salesforce Transit Center is a new, state-of-the-art regional transit hub that combines 11 transportation systems. This open, multi-level building stretches 5.4-acres wide, accommodates more than 100,000 passengers each weekday, and features a rooftop public park, service for five bus systems, retail and restaurant space, administrative offices, and more.

The transit center is divided into three separate segments that behave independently during a seismic event. The structure needed a proper solution that could handle extensive movement capabilities for vertical and horizontal motions while maintaining a safe egress for its building and occupants.

CS’ SSR/SSRW were selected and designed to accommodate the multiple infill additions (glass, pavers & concrete) needed and were installed the entire way around each building level’s interior and exterior. We also provided large seismic wall covers that were filled with glass and panels. Additionally, CS’ Seismic Rail systems were incorporated throughout the structure’s exterior ledges to provide a safe and code-compliant egress path that keeps everything connected and prevents fall risk in the case of a possible earthquake.

PROJECT: The Salesforce Transit Center
ARCHITECT: Pelli Clarke Pelli Architects
CONTRACTOR: Webcor-Obayashi Joint Venture
PRODUCTS: SSR/SSRW, Seismic Handrails, XLS, SC
SERVICES: Design Assistance Engineering Calculations Fire Protection Coordination
CASE STUDY

Glides 30” in Every Direction

The Zuckerberg San Francisco General Hospital and Trauma Center, known as ‘The General,’ has been serving the city and Northern San Mateo counties for decades and is located along the San Andreas Fault Line. The hospital serves over 100,000 patients annually and is a complete medical training and research facility. The new nine-story acute care hospital connects to the existing hospital, making this a feat of construction, design, and creativity.

California’s building codes mandate that a hospital must remain operational in the event of an earthquake, so meeting these strict seismic standards was essential for Fong & Chan Architects. Collaboration with CS made it possible for “The General” to be able to glide 30 inches in every direction during a seismic event and is also now one of the largest base-isolated hospitals in the United States. CS’ Multi-Axial Corridor Cover (MACC) system seamlessly connects the new hospital tower to the existing structure. At the same time, the exterior moat covers visually unite the landscape and sidewalk with the structure.
About the USRC Industry Partner Committee

The USRC established the Industry Partner Committee (IPC) in 2020 to leverage the knowledge and expertise of its vendor, trade, material, and commercial members to improve understanding of the performance of structures during seismic and other natural hazard events. USRC Industry Partners have committed to providing technical information, support, and options for improving expected building performance which can thereby help to improve a structure’s resilience and USRC rating.