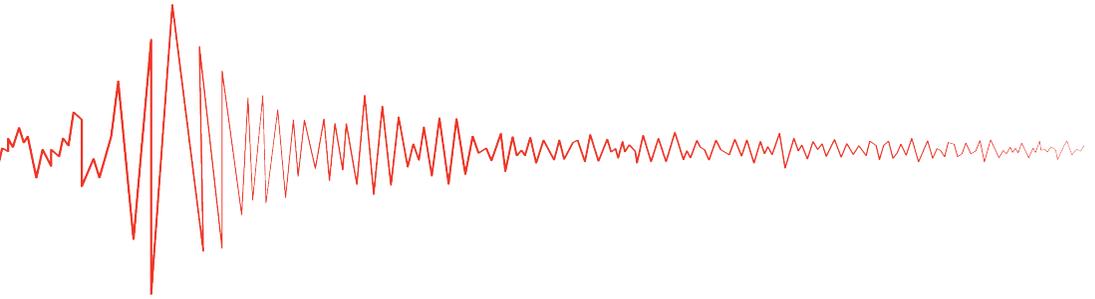


DriftReady™ Stairs

The backbone of safety



Making Buildings Better

Over the past fifty 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 we can create fresh solutions for a more intelligent built environment. Our values lead the way.

Creativity

Creative thinking is at the heart of everything we do. We look beyond “the way it’s always been done” to find new possibilities and opportunities.

Collaboration

From start to finish, for problems big and small, we're your partner in bringing your vision to life.

Integrity

There's an easy way and a right way to do things. For us, the right way is the only 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 has 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.



Photo credit: AC Martin

INTRODUCING

DriftReady™ Stairs

Construction Specialties' latest innovation follows our long tradition of asking questions and listening to customers. We heard a common theme: During building movement caused by a seismic event, stairs tend to transfer force back into the building, and stair connections often fail. The building's occupants cannot exit and first responders cannot enter. It's literally a life-or-death situation.

Enter DriftReady Stairs.

In trying to solve this problem, we thought of the human backbone — it provides strong support, but it also flexes with the movement of the body. We designed DriftReady Stairs in the same vein. They flex yet remain stable and intact during a seismic event, allowing for safe egress and ingress and helping to reduce repair costs and recovery time.

Another thing we heard: Stairs have long been a structural engineer's pain point. Our patent-pending DriftReady Stairs are engineered to withstand interstory drift beyond the industry standard of 2.5%, providing peace of mind for architects, engineers, building owners, municipalities, and first responders.

We did the heavy lifting so you don't have to. Now, when it comes to stairs, specify DriftReady Stairs for the ultimate peace of mind.



Ensure safe egress and ingress
during and after an earthquake.



Protect the connections
of the stair system from failure.



Reduce the transfer
of damaging force back into the structure itself.

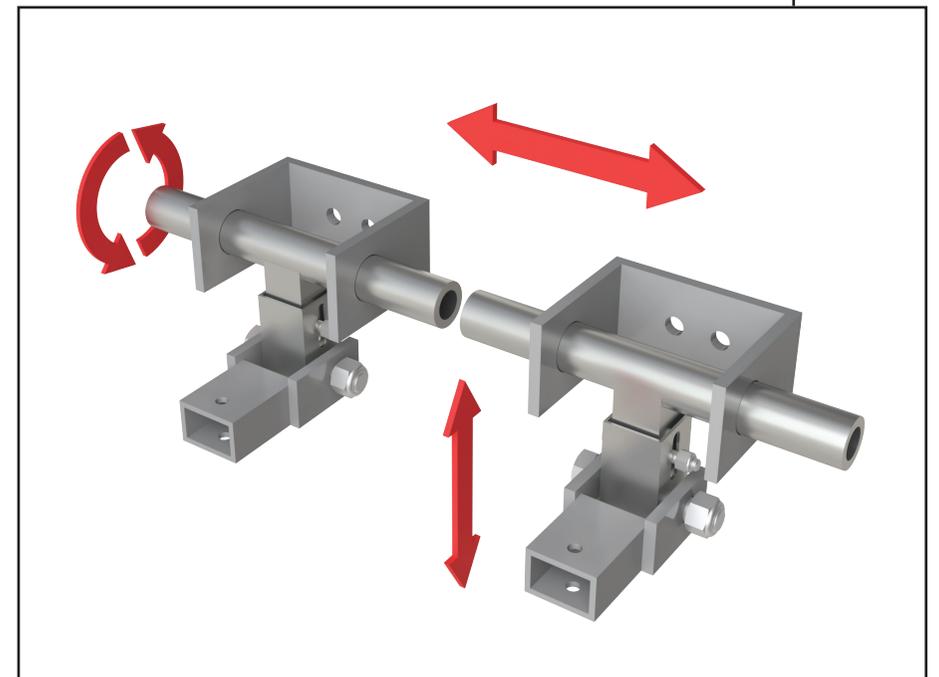
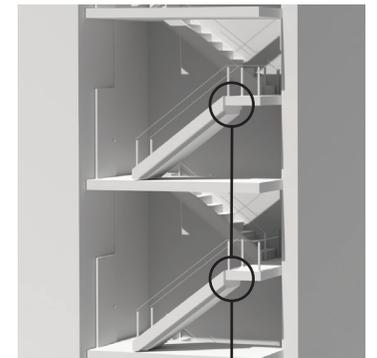
Design Responsibility for Division 05 – Metal Stairs

DriftReady Stairs are engineered and integrated per your project specifications to accommodate the needed interstory drift.

Early Collaboration

When brought in early in the planning process, Construction Specialties can answer the tough questions and help you see why investing in a seismically accommodating stair system is the smart choice.

Don't accept a cookie-cutter alternative when a solution for resilient stairs is available. Our team of experts is standing by to educate, illustrate, and collaborate and will see your project through to completion. Partner with us for a fully engineered stair solution.



An Integrated Stair Solution

Stairs can negatively impact the engineering of a building during a seismic event. In creating DriftReady Stairs, we researched, tested, and packaged a stair solution like no other — stairs that accommodate seismic movement and interstory drift.

Protected

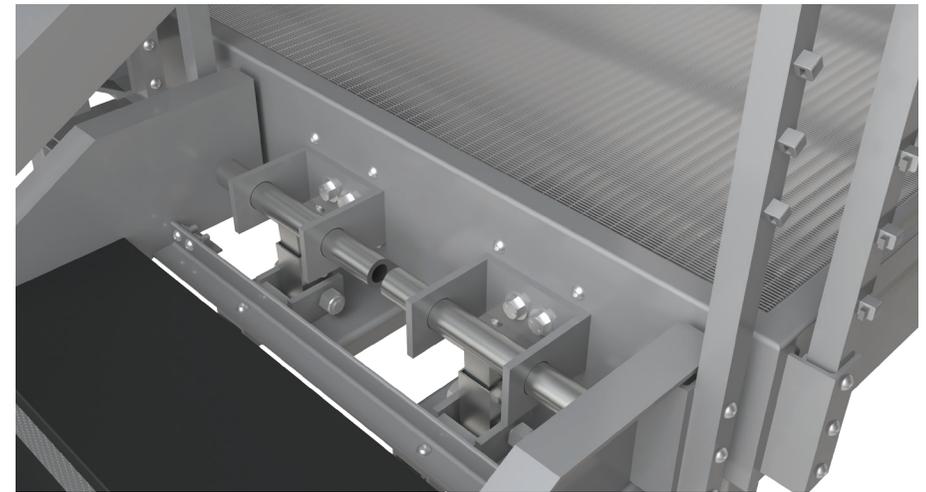
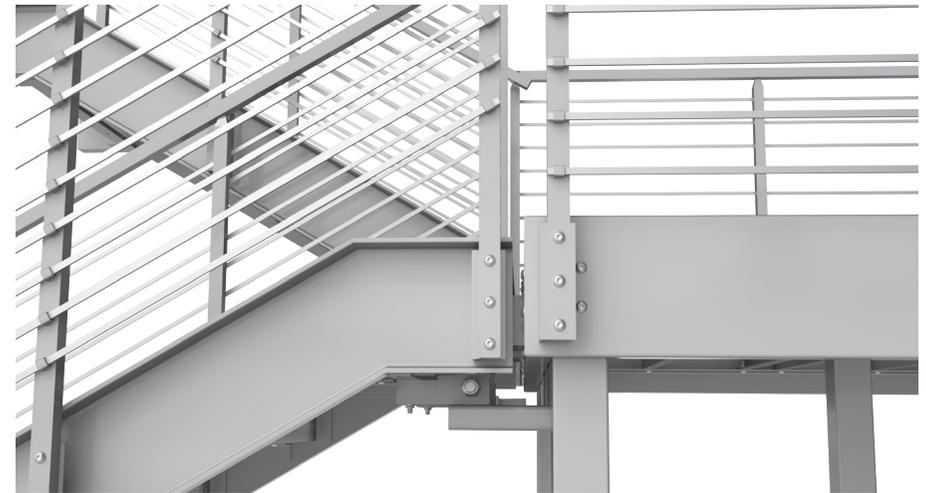
Continuous vertical load path, as well as guard and handrail load paths, are maintained through all phases of movement.

Tested

Full-scale shake table testing showed our engineered stairs solution comprehensively ties building components together while allowing them to move independently, preventing damaged connection and compromised egress.

Built for Your Project

For Division 05 – Metal Stairs, we have engineered, tested, and documented a safe stair system for egress and ingress. Don't leave the stairs to the "manufacturer's specification." Specify DriftReady Stairs for an integrated stair solution for your project needs.



A New Standard in Resilient Stairs

Construction Specialties' acquisition of Platform Manufacturing Group, a steel-stair manufacturer, puts our company's tech behind an industry-respected metal fabrication brand.

Leave the stairs to us. Our systematic approach paves the way to a new standard that will have you quickly and easily specifying DriftReady Stairs with peace of mind.

For Architects

Architects play a crucial role in limiting the effects of seismic events by incorporating smart resilient design. While the basic focus of building codes is life safety, by specifying DriftReady Stairs, you will address safety as well as offer a solution that reduces repair costs and recovery times — conditions that concern your clients most.

Architects can help paint the picture of preparedness by working with us at the very beginning of a project. For more than fifty years, we have partnered with you to provide solutions that meet or exceed seismic requirements for expansion joint covers. Now, we can do the same for stairs.

- DriftReady Stairs are engineered to meet your building design and seismic requirements.
- Architects ensure elements like accessibility (egress and ingress strategy) are considered and accounted for. DriftReady Stairs are designed to give you greater peace of mind.
- You can now confidently specify a safe and resilient stairs solution for your clients that mitigates building repair cost and recovery time after a seismic event.
- DriftReady Stairs maintain the vertical load path at all times, giving day-to-day use occupants the perception that they are on a rigidly connected stair.



For Engineers

Construction Specialties studied dozens of stair systems that were compromised during seismic events. Tests revealed that strengthening connections was not the answer — the stair system needed to move with the building, not play anchor.

Best practices and industry standards say stairs should accommodate an interstory drift of 2.5% during a seismic event. According to a UCSD study* of a five-story test, commonly accepted connections of stairs failed at drift levels of .75% and 1.41%. We conducted two full-scale shake table tests in the Earthquake Engineering Laboratory at the University of Nevada, Reno, to develop solutions that go beyond 2.5% interstory drift. DriftReady Stairs proved to be a seismically resilient solution able to accommodate interstory drift of 4.0% and beyond.

- Our DriftReady Stairs technology prevents stairs from locking up in rotation or transverse movements.
- DriftReady Stairs move independently of the structure, minimizing damage to connections and ultimately preserving the structural integrity of the building.
- CS provides the necessary support, documentation, and modeling to ensure DriftReady Stairs are approved on your project.

**Earthquake Engineering & Structural Dynamics*, "Dynamic characteristics and seismic behavior of prefabricated steel stairs in a full-scale five-story building shake table test program," 2015.



ENGINEERS

For Owners + Facility Managers

As owners and facility managers, you are faced with having to strike a responsible balance between safety requirements and budgetary restrictions in your buildings. Sadly, thousands of deaths are recorded every year as a result of earthquakes, not to mention the extensive loss of property, infrastructure, and livelihoods.

Fixing buildings after an earthquake costs four times more than building them better in the first place.* Look to your architectural design teams and engineers for seismically resilient options — like DriftReady Stairs — that help you make sound decisions in regard to building safety, repair cost, and recovery time.

DriftReady Stairs may also garner recognition from the United States Resiliency Council (USRC) and the Resilience-based Earthquake Design Initiative (REDi). These organizations evaluate products and technologies working together to make a building resilient in the face of natural disasters. Higher ratings equal better loan interest and insurance rates, and may expedite permitting.**

- DriftReady Stairs provide safe egress for occupants.
- Emergency responders require safe ingress both during and after a seismic event. DriftReady Stairs allow access for them, as well as key building inspectors and engineers, where other stair solutions may be compromised.
- DriftReady Stairs decrease post-event repair costs and reduce building recovery time, putting everyone back in business more quickly and efficiently.

**The New York Times*, "Buildings Can Be Designed to Withstand Earthquakes. Why Doesn't the U.S. Build More of Them?" June 19, 2019.

** US Resiliency Council, "The Value of Building Rating Systems" [Fact sheet], 2017.



For Municipalities

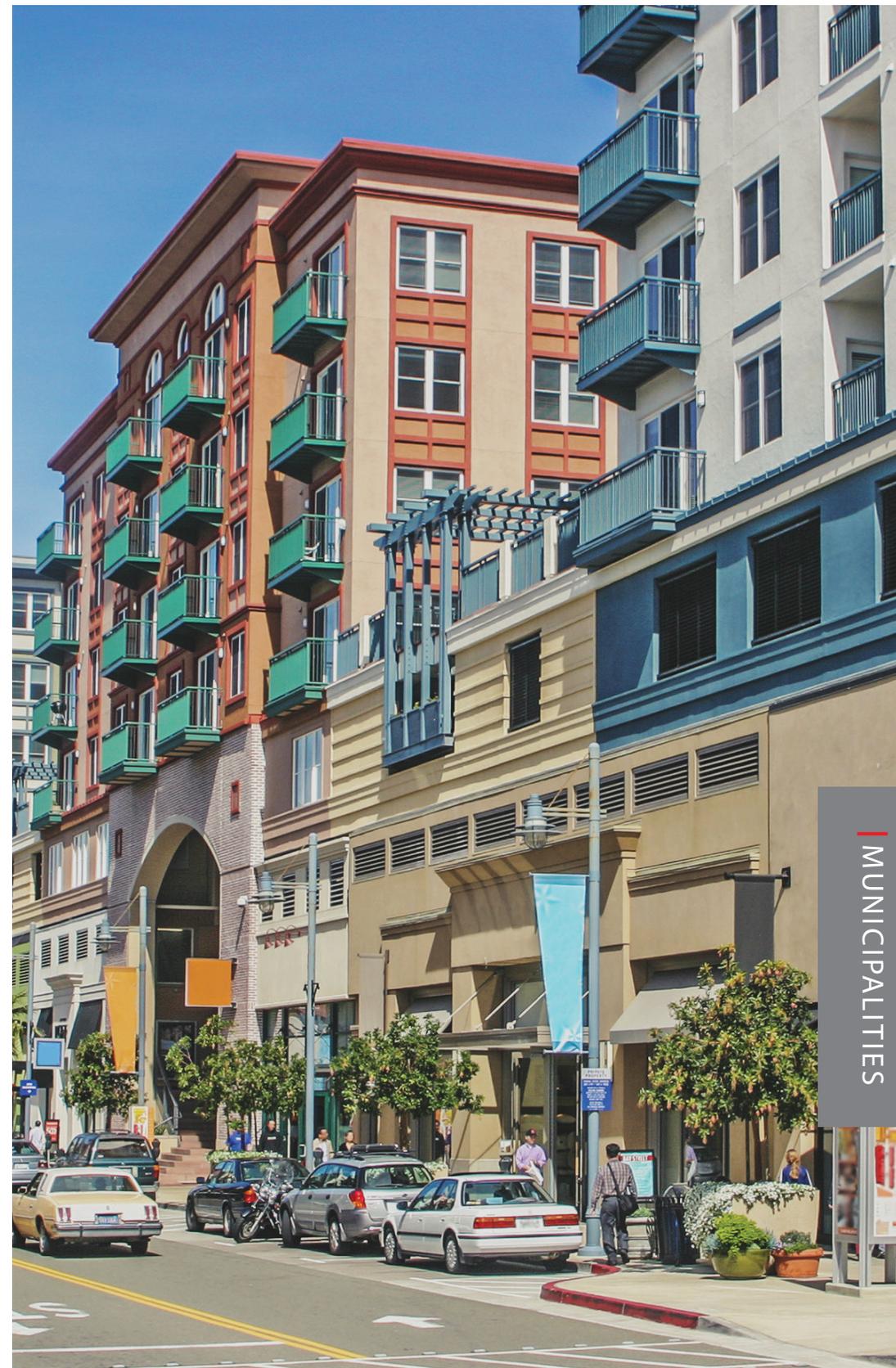
Natural disasters are sudden and dangerously powerful, making them a serious threat to communities. When an earthquake hits, it has the potential to destroy lives and cripple infrastructure in an instant.

Some of the biggest blind spots in preparation arise because you simply assume you're ready for a natural disaster. In other cases, you don't plan enough, because changes seem so costly while the event seems unlikely. DriftReady Stairs are a smart solution to help your community be prepared for natural disaster.

Resilient systems are designed to get municipalities back to business faster. As a non-structural element in a building's makeup, DriftReady Stairs may result in a higher resiliency rating from the USRC or REDI rating systems. Higher ratings could mean tax breaks, better interest rates, and stronger insurance programs.*

- Advancement of performance-based design sets the standard for future builds. The DriftReady Stair system is a resilient method for delivering stairs.
- Life safety is paramount for public buildings. DriftReady Stairs can be part of your community evacuation plan as they provide critical paths for safe egress and ingress.
- City planners can count on DriftReady Stairs to help reduce the cost of repairs to the building and the time it takes to rebuild and recover.

*US Resiliency Council, "The Value of Building Rating Systems" [Fact sheet], 2017



For First Responders

Earthquake-resistant buildings enable safety professionals to perform life-saving duties during and after a seismic event. Stairs are the lifeline. Developed alongside industry experts and structural engineers, DriftReady Stairs are the latest innovation in seismic resilience.

If stair connections yield or break during a seismic event, no one knows when they could disconnect or collapse. Compromised stairs mean compromised emergency plans. DriftReady Stairs ensure that while occupants are egressing, first responders and building inspectors can safely ingress.

- DriftReady Stairs are stable at rest, yet flexible when a building moves. This flexibility keeps stair connections free from damage.
- DriftReady Stairs have been tested, providing peace of mind during a shelter-in-place scenario when first responders and other professional building experts need to safely enter a building.
- DriftReady Stairs are the best available technology for stairs, setting the condition for saving and sustaining human life.



Solution Integration, Simplified

Construction Specialties can help ensure and deliver successful integration of your project.

PROJECT SCHEDULE

CS PARTNERSHIP APPROACH

PROJECT
CONCEPTION

ASSESS

Our product experts work with each stakeholder to understand needs, wants, and limitations to ensure the solution(s) can achieve the project requirements. Early on, stakeholders will understand the financial feasibility, code compliance, solution benefits, and ease of integration through the project timeline.



Early Involvement

CS helps eliminate redundant or deferred scopes of work.

PROJECT
DELIVERY

DESIGN

ADVISE

In partnership with stakeholders, we provide all the necessary documentation, engineering, and modeling needed to progress through compliance and approvals, helping to move the project from Design Documents to complete Construction Documents. We also offer full coordination with necessary trades, installation training and support, and attendance at pre-construction meetings, as needed, to answer questions.

CONSTRUCTION
DOCUMENTS

BIDDING/
NEGOTIATION



Maintain Project Schedule

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

CONSTRUCTION

IMPLEMENT

Our team sees it all through to completion, coordinating fabrication, finish, and delivery schedules to meet the project timeline, and offering support and training for install crews.



Engineering & Training

CS delivers engineering scope of work and trains subcontractors with system installation.

FACILITY
MANAGEMENT

SUSTAIN

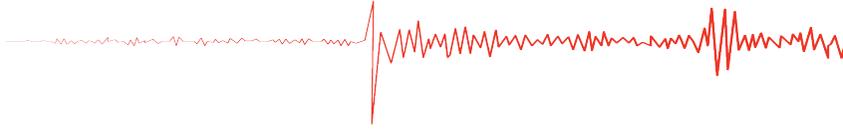
Before the project turns over to the owner, we provide the facilities management team with the closeout information.



Easy Maintenance

CS educates owner about the system to prepare building safety plans.





Construction Specialties®

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