





# Repair | Reconstruction

GETTING TO-AND SOLVING-THE ROOT CAUSE.

Whether it's the age of the building, poor maintenance or faulty construction, the reasons for failure are not always obvious, especially by the time a failure manifests itself. With our persistent and comprehensive approach to building projects, Marx|Okubo is dedicated to discovering—and solving—the underlying issues.

- **Owner's Representation**
- Property Condition Assessment
- Project Management
- Constructability Reviews
- Repair | Reconstruction

- Facility Condition Assessment
- Construction Loan Monitoring
- Accessibility
- Building Enclosure
- Fire | Life Safety

- Mechanical | Electrical | Plumbing
- Resiliency
- Structural Engineering
- Sustainability
- ASAP® Automated Structure Alert Program



Key repair | reconstruction services include:

- > Detailed condition assessments
- > Investigative and destructive testing
- Preparation of corrective drawings and specifications – monitoring of repair process during construction
- Discussions with property maintenance and engineering staff
- Research for viable and costeffective solutions
- Preparation of contracts and bid documents









We consult to limit your exposure now, giving you greater confidence in your decisions for the future.

Marx|Okubo fully comprehends how buildings are constructed and how failure occurs in different building systems. By persistently investigating the underlying causes of failure and researching materials and corrective construction methods, we help clients get to the root cause, complex issues and domino effects involved in approaching repair and reconstruction.

Once we have defined the cause, we methodically evaluate the extent of the damage to get comprehensive data, do invasive testing and develop a repair plan, and prepare accurate repair drawings for the specific areas.

Our integrated teams of experienced AEC professionals also manage the bid process, prepare contractual bid manuals and consult on preventive fixes such as accessibility upgrades, structural retrofits, waterproofing projects and other capital efforts.

With Marx|Okubo involved, the approach to repair and reconstruction is based on our in-depth technical knowledge of different building types and thorough research/investigation. As a result, our preparation of corrective drawings and specifications is simply at a higher standard—as it's focused, detailed and uniquely thorough. And with a higher level of corrective drawings, we can reduce/eliminate any chance of the problem manifesting further in any way.

# **Project Examples**

#### 1170 Market Street

Client: Haig G. Mardikian Enterprises Location: San Francisco, California

During the design of this structural wall repair, temporary scaffold support and replacement stucco facade system, Marx|Okubo overcame a number of challenges. Working with difficult access points due to the adjacent property's historic status and weak load-carrying capacity, we designed a repair protocol for corroded, proprietary, high-strength steel pencil-rod studs with rigid cast-in-place cavity insulation. In addition, our team performed empirical design and proof-testing of the stucco facade system's lateral support attachment. Our services allowed this building to continue operations with minimal disruption to tenants and building users.

## The Exchange at Brier Creek

Client: GrayCo LLC

Location: Raleigh, North Carolina

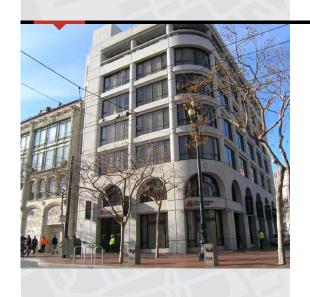
Marx|Okubo worked on this exterior wall system repair of a 274-unit, four-story, four-building residential project built in 2007/2008 that entailed replacement of exterior sheathing, trim and windows, wall structure and flashing replacement, complete building and roof replacement. Our team performed architectural and construction administration services including forensic investigation and analysis, architectural repair documentation, bidding management and construction administration. Serving roles as owner's representative and repair design architect, we monitored the construction process that successfully removed and replaced siding, brick and trim from 80,000 SF of exterior wall area and roof replacement. In addition, we oversaw OAC meetings, scheduling and quality control for the successful project.

### One Panorama Center

Client: Prudential Real Estate Investors

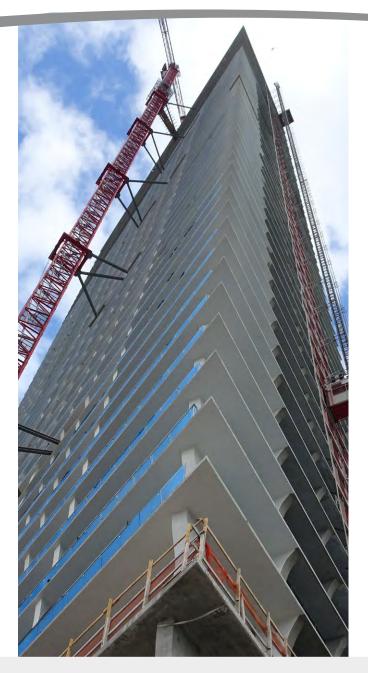
Location: Irving, Texas

Marx|Okubo led a repair design and reconstruction effort on this recently constructed garage that had begun showing signs of unusual and excessive slab heaving and unevenness. Our investigation efforts led to an effective solution that involved slab demolition, base material remediation and doweled reconstruction, tying the new elements into the existing structure. Our efficient work provided for a quick solution that restored the usability of this critical property resource. In addition, our involvement allowed the owner and managers to settle disputes and proceed confidently with property operations knowing that issues had been addressed.









Marx|Okubo is a national AEC consulting firm that works with real estate owners, investors and lenders—at every point of the property lifecycle—to **evaluate** their building projects, **solve** complex challenges and **implement** tailored solutions.

We help clients understand their projects' complexities, so they can make more informed decisions and, ultimately, mitigate their risk.

Denver • Seattle • San Francisco • Pasadena • Orange County • Dallas • Atlanta • New York satellite: Portland • San Diego • Houston • Chicago • Boston • Washington, D.C. • Miami



