Damaged and deteriorated building facades are a serious public safety concern. When facade elements fail, there is a chance the component could fall — putting people and property at risk. As a result, many cities, including Boston, Chicago, and New York, have adopted facade ordinances.

The City of San Francisco also recognizes this potential hazard and wants to reduce damage during earthquakes. In April 2016, the City added Chapter 16E as a local amendment to the California Building Code outlining the City’s requirements for inspecting and maintaining existing building facades. While the ordinance’s purpose is to help ensure buildings are maintained and continue to meet approved design and construction requirements, it does not require upgrades to meet modern structural and seismic standards.

Facade deterioration can also damage the appearance and structure of buildings playing significant roles in San Francisco’s the culture and history. To address this, the facade inspection and maintenance ordinance will be accompanied by Administrative Bulletin (AB) 110, issued by the Department of Building Inspection. AB 110 details the application of the ordinance, including inspection and maintenance procedures to protect historic building elements.

**ORDINANCE REQUIREMENTS**

The ordinance has the following requirements:

- **Basis:** The ordinance is based on ASTM E2270 – Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions, as revised and interpreted by AB 110.
- **Scope:** All buildings equal to or more than five stories high and fronting publicly accessible areas (wood-framed buildings and buildings less than 30 yrs old are exceptions) must be inspected for unsafe conditions, movement, significant deterioration, and watertightness. Buildings with comprehensive facade inspection and maintenance completed in the ten years before the due date may apply for a waiver.
- **Frequency:** Buildings (defined above) must be inspected once every 10 yrs or within 60 days of a facade failure. The first inspections are due between 2021 and 2027, depending on the building’s initial construction date.
- **Inspector:** The inspector must be a California-licensed architect or engineer retained by the property owner. For buildings considered historic resources, the qualified professional must have expertise inspecting and maintaining these types of buildings.
- **Report:** The inspector must prepare a written inspection report documenting the exterior walls’ condition and submit the report to the Department of Building Inspection.
- **Fees:** The City will charge their standard hourly rates for report review, evaluation, and processing to administer the ordinance.
CONDUCTING INSPECTIONS

A facade inspection may include the following activities:

• Reviewing available plans and specifications for to gain general understanding and help focus survey to problem areas
• Determining if the building is a historic resource, as listed by the Planning Department
• Using binoculars to scan walls for large-scale problems
• Conducting hands-on inspections of representative areas on each face of the facade, which may require swing stage or industrial rope access
• sounding materials to evaluate internal cohesion and attachment
• Surveying interior areas for signs of water damage and interviewing maintenance personnel about leakage history
• Making observations at exploratory openings, if necessary
• Preparing and submitting a report to the Department of Building Inspection

DEVELOPING A PROTECTION AND MAINTENANCE PLAN

If the inspector identifies unsafe conditions, the owner must submit a stabilization or protection plan to the Department of Building Inspection within 72 hrs. The inspector can help the owner determine necessary stabilization measures and prioritize repairs to fit with financial plans. Owners must undertake repairs within an established time frame based on condition and facade repairs addressing ordinary maintenance need to be submitted through the normal permitting process. The process to develop and execute repairs often includes the following services performed by the designer of record:

• Developing plans for additional observations or exploratory openings as required to understand construction details and conditions
• Producing construction drawings and specifications clearly communicating repairs work for bidding, permitting, and construction
• Assisting the owner during bidding
• Working with contractors to develop budgets, schedules, and phasing plans
• Interfacing with the City for permitting
• Observing as-built construction for comparison with the design intent

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Carolyn Searls, P.E. (CA and 6 others), LEED AP BD+C has thirty years of experience investigating and designing building enclosure repairs on historic and contemporary structures throughout the United States. Carolyn has been recognized through speaking engagements, project commissions, and written papers as an expert in preserving masonry and concrete on historic buildings, in addition to her work in cladding and waterproofing systems on contemporary buildings. Carolyn is head of SGH’s Building Technology Division in San Francisco. Contact Carolyn at clsearls@sgh.com for more information on building facade inspection, maintenance, or preservation.