THE NEW "FAÇADE ORDINANCE" AND ASSET MANAGEMENT

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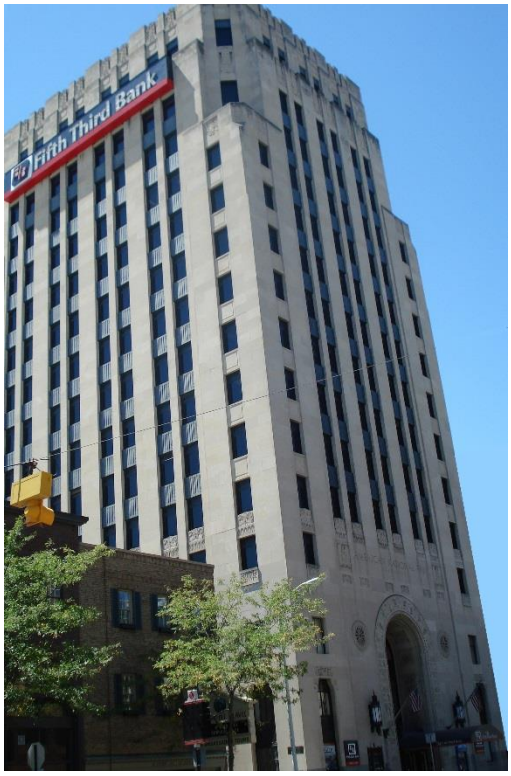


Cleveland joins nine other major cities across the nation in enacting a municipal ordinance requiring property owners to have their building facades periodically inspected. The Cleveland Façade Ordinance requires that buildings five stories or 75 feet tall be inspected every five years, at a minimum. The ordinance serves as a public safety law and is intended to identify and correct potentially hazardous façade conditions, much like having your elevator periodically inspected and maintained for safety. Indeed, the various façade ordinances across the country became law as a reaction to a major façade event, such as masonry elements or windows falling from a building.

The façade ordinance requires a "general inspection" from the ground or other readily accessible vantages, and only triggers a "detailed inspection" if "any areas (are) found to be deficient during the general inspection" [Section 3143.02 (a)(1)]. However, deteriorated, deficient or distressed conditions are not always discoverable from a general inspection from afar. The purpose of the ordinance is to provide some basic measure of public safety, similar to traffic laws. But to maximize the value and service life of a building and minimize liability risk, some defensive driving, or an Asset Management Program for the façade, is needed.

An Asset Management Program for building facades should consist of the following:

1. Initial Comprehensive Evaluation (General and Detailed Inspection)
2. Repair Program Development
3. Long Term Capital Plan
4. Repair and Maintenance Program Update Process

A building is an investment; it's important to manage the building asset, in terms of maintaining and maximizing its value throughout the service life of the structure by managing and maintaining costs and risks related to the asset. In buildings, the costs are typically related to repair and maintenance of the components that make up the structure; in this case the building facade.

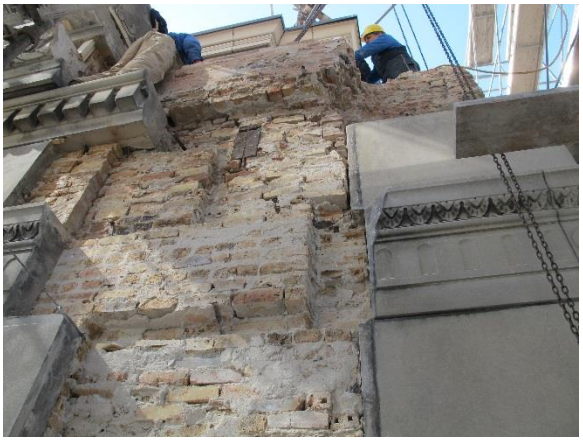
The term "building enclosure" refers not only to the building facade, or the outer skin of the building, but to the entire building enclosure, including connections, supports, insulation, and air/vapor barriers. All components work together as a system to protect the building interior from the environment. Consequently, judging the condition of a building only by the appearance of its "face" may not reveal the whole story on the condition of the enclosure system.

Many building owners and managers have challenging problems relating to their building enclosures, such as water and air leakage, corrosion deterioration and material deterioration. Facade system failures can be serious. There is great risk of deterioration causing small or large sections of a building facade to fall, creating both a significant safety hazard and a liability risk. It's important to manage your building asset and not delay repairs.

Deferred maintenance and repairs may lead to:

- Liability Costs/Risks – Deterioration of building facades can result in decreased safety and increased liability risk for Owners. Liabilities include: fall hazards, damage to structural components, damage to interior finishes or furnishes, increased energy loss, condensation, and biological growth.
- Increased Repair Costs – Facade repairs are costly. The lack of completing minor repairs and maintenance may lead to more extensive and costly future repairs for the exterior wall components (including both exposed wall components and concealed elements such as anchorages), the building structure and/or interior finishes.
- Decreased Customer Satisfaction – Deterioration and distress within the exterior walls, as well as within the interior finishes, is unsightly. Water leaks and interior repairs are an inconvenience to users.

How does an Owner or Manager manage their building asset? The first step is identifying the problem followed by a repair and maintenance program to ultimately increase the life of the structure.



Displacement of limestone veneer due to corroded anchorages required its careful removal and reinstallation.

Symptoms of Building Distress – Building facades can experience distress or deterioration due to age, environment, deficient materials/systems, design flaws, or poor construction. The distress or deterioration can come in many forms, including water infiltration, air leakage, cracking, displacement, deteriorating materials, corroding veneer anchorages, efflorescence, and staining/discoloration. Whether the façade is historic or contemporary, masonry construction or curtain wall, a condition assessment will identify current or potential problems and help the owner with capital program planning.

Poor anchorage leads to 400-lb. granite facade panel breaking loose from high-rise building.

Initial Comprehensive Evaluation – For a particular building, it is important to complete a thorough initial evaluation to understand the existing condition, as well as the history of the façade including the type and extent of deterioration and/or distress. The history is important to understand how the structure was constructed, note any deficiencies in the original design or construction, and review previously performed repairs and maintenance.

The evaluation typically consists of a visual review of the exterior walls for signs of deterioration, distress, or deficiencies within the structural, façade, and waterproofing components. The evaluation may also include excavations to reveal concealed conditions or materials testing to determine the properties and condition of the existing wall components.

Repair Program Development – Based upon the recommended repairs, repair options, and the available budget, a repair program is developed. After the onset of water infiltration, repair costs increase exponentially over time due to increased deterioration and potential distress of the wall components, the building structure and/or interior finishes. The goal is to perform repairs to correct current deficiencies or deterioration at a low cost to prevent future, more expensive major repairs.

Long Term Capital Plan – A façade repair program should address the deterioration currently found in a structure. In addition, a 10 year look ahead of anticipated maintenance and repairs, including such things as replacement of sealants/expansion joints, and repair, replacement, periodic cleaning and sealing, painting, of facade elements is important for long-term safety and sustainability. This may also include improvements or modifications to original failed, archaic, or inadequate façade elements or systems that have been less than or are no longer effective, such as wall connection, waterproofing, flashing, or drainage systems. Aesthetic improvements may also be beneficial in maintaining or increasing the value of the property.

Repair and Maintenance Program Update Process – After having completed the initial evaluation and developed (or started to implement) the Repair and Maintenance Program, it is important to update the Programs on a regular basis to identify additional deterioration or repair needs and to adjust the plans accordingly. The frequency of re-evaluating and updating the Repair and Maintenance Program will vary depending upon the progress of the program, age of the structure, rate of ongoing deterioration, and other factors. On average, an updated review is recommended about every five years.