BOMA KC BEST PRACTICES
FAÇADE MAINTENANCE INSPECTIONS

The built environment continues to evolve and our architectural and engineering achievement is a tremendous source of pride and accomplishment. Each new building reflects an expression of “place”, operating efficiency, economic sustainability, and functional lifecycle…. all subject to geographic location, facility use, and a wide array of economic and environmental circumstances.

Dynamic construction technology provides an impetus to utilize finite land resources as cost effectively as possible, creating a strong motivation to concentrate mixed use economic activity nodes within higher density development models that maximize public infrastructure efficiencies.

While we now possess the ability to build ever taller cost effective mid and high-rise structures on relatively small plots of land, we are also creating long-term ownership responsibilities to properly maintain all building systems and components. At the same time new construction is occurring, our aging building stock with many years of remaining functionality and residual value, also requires routine preventive maintenance for all building systems and components.

Of all the building systems and components, those that are consistently exposed to the exterior elements (wind, rain, ice, snow loads, and temperature extremes) present the greatest challenge when we strive to maintain our properties to acceptable levels. While critical exterior mechanical and electrical equipment are generally provided accessible servicing options, expansive building facades pose special challenges.

Protecting the “public” from building façade defects dates back to Hammurabi’s Code of Laws (circa 1700 B.C.), from which the concept of “an eye for an eye” reparations is derived. In essence the owner of a failed building structure was held responsible and penalized proportionately for injuries or death suffered as the result of construction defects. Fast forward to the late 20th Century…. The first U.S. building facade maintenance ordinance to be enacted outside active seismic zones is relatively new. The first municipal building facade monitoring ordinance of its kind was originally enacted in Chicago in 1976, but was subsequently repealed due to a publishing omission, and wasn’t reinstated in Chicago until 1996.

Today, U.S. cities with some form of building facade monitoring ordinance include Boston, Chicago, Cincinnati, Cleveland, Columbus, Detroit, Milwaukee, New York, Philadelphia, Pittsburg, San Francisco, and St. Louis. Most all of these provisions were enacted in direct response to serious pedestrian injury, or even death. While failure to provide timely inspection reports “certified” by a “qualified” A&E professional may result in a significant fine, strict enforcement is difficult due to the sheer number of commercial buildings relative to compliance staffing capacity of the respective policing jurisdiction.

The International Property Maintenance Code, where adopted, generally acknowledges the owner’s responsibility to maintain the building facade in a safe manner, but doesn’t prescribe specific means and methods. Meanwhile, facade safety inspection standards are outlined in
“ASTM E2270- Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions”, which sets out basic visual and physical inspection criteria.

As a practical matter, municipal prescriptive certified facade inspection regimes typically require substantial user fee funding in some form in order to ensure a reasonable level of compliance. Unfortunately, the resulting added building operating expenses incurred in these jurisdictions don’t always translate to actual risk mitigation for the public at large when it comes to private building professionals, who are specially qualified to perform and certify periodic facade inspections.

In terms of additional municipalities that may consider legislating facade maintenance, many metropolitan areas, yet to experience serious injury or loss of life resulting from building facade defects, are reluctant to take on additional responsibilities that will stretch their compliance staff capacity, as well as potentially increase the city’s liability exposure.

Responsible building owners, public and private, fully understand that regularly scheduled facade inspection and responsive maintenance is a vital aspect of long-term asset preservation, as well as public safety. As there is no “one size fits all” application here, BOMA KC suggests that all area building owners take stock of their respective holdings and develop a “best practice” systematic building facade inspection and maintenance standard operating procedure.

The degree of existing building facade assessment depends on a number of structural and environmental conditions, including but not limited to facade composition, quality, age, building height, seasonal weather extremes, and exposure to public safety concerns.

In the absence of a KCMO building facade monitoring statutory requirement for regular facade inspection reports, building owners should develop a plan for systematic facade inspection that reasonably assesses existing facade conditions for their respective properties.

All things considered, and notwithstanding frequent routine cursory visual inspection, all building facade sides should be regularly visually inspected in detail by a qualified building professional beginning ten years following initial construction completion, and then consistently on a five-year schedule thereafter.

In order to facilitate a valid facade inspection, qualified inspectors must possess formally accredited and credentialed training, as well as specialized experience in the field of building facade composition and maintenance.

Depending on the height of multi-story structures, periodic certified inspections will necessarily utilize all manner of advanced digital photographic technology, facilitated where necessary by neighboring line of sight rooftops and other vantage points, ground level scaffolding, mechanical lifts, rooftop drop staging, and drone technology as appropriate. Recognizing that photo images alone may be insufficient to adequately assess facade conditions that require attention, more thorough “hands on” diagnostic methods may need to be employed.
Routine window cleaning and exterior weatherization projects present additional opportunities to observe facade defects that may require timely attention.

In any event, when a potential building facade deficiency may be discovered, there is no substitute for a contemporaneous record of the finding, and then a formal procedure to ensure there is proper follow-up action taken.

To summarize, building facades require continuous intentional vigilance, whether exhibiting symptoms of normal aging, adverse environmental conditions, or if they suffer from unintended design defects. The number one overriding concern must be for public safety, as well as to prevent avoidable property damage to the best of an owner’s ability. In order to mitigate the risk of personal injury or property damage building owners and managers need to assume the responsibility to ensure building facades are receiving adequate preventive maintenance attention. With this understanding, a dedicated annual operating budget allocation will be required to facilitate an effective systematic inspection and reporting schedule.

Responsible owners have the opportunity to lead a best practice systematic inspection initiative that has the potential to effectively detect and prevent future building facade failures that would otherwise result in serious injury or death, as well as significant property damage. This BOMA KC initiative is designed to encourage all building owners to recognize an increased awareness of their respective aging building facades, along with the ever-growing requirement over time to perform routine detailed inspections and to take timely remedial action as may be deemed necessary. Adoption of this practice may someday avert a costly municipal enforcement imposition that focuses on existing dangerous building facades at the expense of responsible operators. There may also be a future added cost benefit once building insurers observe a new industry initiated and supported risk mitigation best practice provision.

With an emphasis on public safety, as well as asset preservation, BOMA KC recommends that all building owners and managers adopt these general building facade monitoring and preventive maintenance policy provisions.

Due to infinite building facade permutations and the potential for adverse conditions, the forgoing statement of “best practice” is by no means intended to be definitively prescriptive. Instead, it is BOMA KC’s objective to remind everyone involved that the integrity of our building systems relies solely on the owner’s commitment to preventative detection and appropriate response.