



## **BOMA NY – Special inspections: Changes implemented under the 2022 Construction Codes**

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Manhattan, NY BOMA New York's November Virtual Forum entitled "Special Inspections in NYC: Changes Implemented Under the 2022 Construction Codes," offered a highly informative, professional engineer's experienced insight into the latest special inspection requirements of the New York City Building Code.

The International Building Code, or "IBC" as it's known, is the model code for most states and municipal jurisdictions in the USA. It mandates special inspections as part of the construction permit process. With the goal of higher safety standards for the public and real estate property, the NYC Building Code was revised to align with the current IBC in order to include recent developments in technology and safety standards.

Presented by Young Suh, P.E., director and chief engineer at AMAA, formerly Alan Margolin & Associates, the forum briefed attendees on the highlights of the new codes. AMAA is an accredited Special Inspection Agency (SIA) with more than 40 years of experience. AMAA has performed special inspections for 10,000 projects.

Changes to the code include new protocols to determine how construction operations influence adjacent structures, the use of cross laminated timber as structural elements – limited to seven story building heights; improved techniques for open web steel joists and joist girders; and continuous inspections to observe the installation of rock and soil anchors.

New York's updated code also include seismic-related requirements for plumbing, mechanical systems and fuel, gas and electrical components, especially as they relate to hospitals and police stations.

Highlights include inspections of on-site storm water drainage and holding systems to prevent flooding; requirements for special inspectors to witness all tests of mechanical building systems, and test parameters for concrete and cold-formed steel strength tests. The new code also address inspections of seismic isolation systems and existing sprayed-on fire resistant materials.

Suh said, "Code is always the bare minimum of what you need to do. Maybe you should be more concerned. It's always okay to exceed code and go above and beyond." He stated that because special inspections are directly related to the permitting process, inspections should take place throughout the project construction timeline, from start to completion.

Suh especially noted the importance of how new construction can structurally affect the condition or occupancy of adjacent buildings. Specifically, he addressed the necessity of special inspections for the underpinning of buildings, the most common structural support of adjacent buildings in New York City. Typically, concrete inspections as well as structural stability inspections are also needed.

The latter, he said, “requires a minimum of three special inspections, including design document compliance, the sequence of operations, required monitoring of structure stability during demolition and construction, and keeping records of special inspections.”

In addition, he said, under the new code, compliance with a Tenant Protection Plan, or TPP, has become highly significant in terms of tenant emergency egress, construction noise, dust mitigation and fire safety. TPP special inspections should be performed weekly during construction, and can be an additional “financial hardship for owners,” but are nonetheless required.

Suh also cited the Grenfell Tower catastrophe in West London in 2017. “The building was re-clad with combustible material,” he said. “The whole exterior acted as a chimney.” Although a similar tragedy was unlikely to occur in New York City, Suh stated that new Combustible Exterior Wall Coverings inspection item has requirements to address the possibility.

In conclusion, Suh discussed costs and pricing for special inspections. He said that lump sum pricing arrangements are usually best for all parties. He said, “We operate on a lump sum basis – no matter how long the process and our fee usually remains the same,” unless there are change orders for increased scope or overtime requirements. He strongly advised that special inspectors should be on hand right from the kickoff meeting of any project. And, Suh stressed that owners should require copies of all inspection reports.