

## Inspections

By Ronald L. Geren, AIA, CSI, CCS, CCCA, SCIP

Inspections: what some contractors may consider a necessary part of the job, others may consider a bane to their profession. In either case, inspections are an important aspect of building regulation. Unlike plan reviews, which ensure compliance with the code prior to construction, inspections ensure compliance with the code during construction. In the last issue of the *Code Corner*, I discussed the ways in which the contractor is responsible for complying with the code, and inspections are a continuation of that discussion, since they are probably the most common interface between the contractor and code compliance.

### The Authority for Inspection

To start, it is important to understand where the authority for inspections lies. In Section 104 of the 2003 *International Building Code* (IBC), the duties of the building official are defined, and they include the duty to “make all of the required inspections.” Now, the building official will not perform each inspection personally, and the code recognizes that, so the code has added provisions that give the building official the authority to accept reports from “approved agencies or individuals.” Approved agencies and individuals include the inspectors employed by the building department, or those provided by a private firm hired by the building department. You can expect the latter instance to occur if either the building department is so small that they do not have the necessary funds to keep inspectors on the payroll, or the workload has exceeded the building department’s capacity to provide the required inspections with the staff available.

Another important item to understand is the building official’s access to the project site. In IBC Section 104.6, it states that the building official is authorized to enter the project to enforce the requirements of the code. If permission is denied, then the building official has the right to rely on local law enforcement to gain entry, but only after a warrant is obtained from a court having jurisdiction. Enforcing the right of entry is seldom used since most owners and contractors are cooperative when it comes to building inspections.

### Required Inspections

Specific inspections required by the code are described in IBC Section 109. Per this section, and as applicable to the specific project, the following inspections are mandatory:

- **Footing and Foundations:** Conducted when footing excavations are complete and reinforcing steel is in place.
- **Concrete Slab and Under-Floor Construction:** Conducted when all reinforcing steel, conduit, piping accessories, and other items are in place but before concrete is placed.
- **Lowest Floor Elevation:** Submittal of flood hazard documentation as set forth in Section 1612.5.
- **Frame Inspection:** Conducted when framing, including fire-blocking, bracing and sheathing, is complete. All rough-ins for electrical, plumbing, and other concealed systems must be installed and approved.
- **Lath and Gypsum Board:** Conducted after interior and exterior lathing and gypsum board is in place, but before plastering or gypsum board joints and fasteners are taped and finished.

- **Fire-Resistant Penetrations:** Conducted before joints and penetrations in fire-rated assemblies are concealed.
- **Energy Efficiency:** Ensures compliance with the *International Energy Conservation Code* as referenced in Chapter 13 of the IBC. This includes building insulation R and U values, fenestration U value, and HVAC and water heating efficiency to list a few items.
- **Final Inspection:** Conducted when all work required by the permit is completed.

As previously stated, the inspections listed are mandatory if applicable to the project (i.e., there is no reason to have a footing and foundations inspection if the project is a tenant improvement). However, these are not the only inspections that a building department will conduct. Section 109.3.8 specifies that inspections of any construction work are authorized by the building official “to ascertain compliance with the provisions of this code and other laws that are enforced by the department of building safety.” For example, the proposed amendments to the IBC for the City of Phoenix include swimming pool inspections, and the City of Scottsdale adds masonry grout and bond beam inspection, just to name a few.

### Special Inspections

The building official, or his designee, may not be the only person inspecting the jobsite for code compliance. The building code also requires what are termed “special inspections” in Chapter 17. Special inspections are inspections performed by individuals who have expertise in the area of the inspection. For the most part, they are structurally related, including welding, high-strength bolting, and precast erection. However, some are not, such as sprayed fire-resistant materials and exterior insulation and finish systems (EIFS). Additionally, jurisdictions may require other types of special inspections beyond those required in the code.

Typically, when submitting a set of documents to a jurisdiction for plan review, you need to include applicable forms or certificates that identify the owner’s special inspectors for the required special inspections. It is not important to know what special inspections are necessary when submitting plans for a plan review. In most cases, the reviewers will identify what special inspections are necessary, and may even attach the required forms to your return submittal.

In response to governmental members of the International Code Council, the International Accreditation Service has developed an IBC Special Inspection Agency Accreditation Program. The program is based on the requirements of IBC Chapter 17 and applicable portions of ISO/IEC 17020, *General Criteria for the Operation of Various Types of Bodies Performing Inspection*. The program, established in late 2004, requires special inspection agencies to develop and operate under a quality assurance system that is documented in a manual. The accreditation also requires the agency to go through a field assessment to determine if it is competent to perform specific inspections or types of inspections.

### Inspection Liability

I’m sure many of you out there have had at least one bad experience regarding building inspections. There are personal stories, newspaper articles, and television news reports about buildings “passing inspection” that have been discovered later to have had multiple violations of the building code. Some reports have indicated that inspectors spend only minutes on the jobsite, which is commonly referred to as a “windshield inspection”; staying only long enough to sign the inspection card. As with most news, the negative travels faster and gets more attention than the positive, so it is difficult to accurately establish

how prevalent below-standard inspections are across the nation. Although the general examples I have included here were not taken from cases in Arizona, it does not mean that they have not occurred here.

Even if only a fraction of these negative experiences are true, it is nonetheless hard to place the blame on the building inspector or the responsible building department. Building department budgets rarely increase (if at all) at a rate comparable to the increase in construction activity. Thus, more inspections are required per inspector. To compensate, building departments must either have their inspectors spend less time on each project site, conduct inspections to fit their own schedules (something that builders and developers would surely protest), or hire an outside inspection firm on a temporary basis if budget permits.

Although understandable, it would not be in a jurisdiction's interest to perform substandard inspections, regardless of its budget and schedules. The reason: public entities, such as building departments and inspectors, in some states do not have immunity from acts of gross negligence. In a 1963 case (*Stone v. Arizona Highway Commission*), the Arizona Supreme Court abolished the principle of governmental immunity in the state, finding it unjust and outdated. This immunity is commonly referred to as "Public Duty Doctrine." The Arizona Revised Statutes (Section 12-820.01) specifically identifies when the State or a public entity, such as a county or city, has absolute immunity. This immunity is generally limited to discretionary decisions regarding governmental policy development and resource spending. As in most cases regarding law, including building codes, if it isn't explicitly prohibited, then it is permitted. In other words, since building inspectors aren't included in the immunity, then they are subject to lawsuits regarding negligence.

There are two Arizona court cases (among others), analogous to our building inspection scenario, that have been tried resulting in decisions favoring plaintiffs suing public entities. The first, which is cited by many public duty doctrine cases nationally, is *Ryan v. State* (1982). Ryan sued the State after being shot by an inmate who escaped due to alleged negligence by State employees. A more recent case is *Booth v. State of Arizona* (2004). Booth sued the State after being injured when his vehicle struck an elk on I-40, stating that the Department of Transportation did not take effective measures to prevent elk from crossing the highway, even though preventative measures were taken elsewhere in the State at similar elk hazard locations. Although there are no known cases where building inspectors have been sued, it can easily be assumed that similar cases involving building inspections would have similar decisions, provided negligence on the part of the inspector or building department can be proved.

### Working as a Team

As previously mentioned, inspections are an important part of enforcing code compliance in the field. As a contractor, if you agree and accept that fact, then you have taken the first step in developing a positive working relationship with your building inspector. To take it to the next level is to consider the building inspector a member of the construction team, along with subcontractors, the owner, the architect, and engineers. To keep that team together, here are some suggestions for working with your building (and special) inspector:

- Give the inspector plenty of advance notice when requesting an inspection. Most, if not all, building departments and special inspection agencies have established a minimum notification period. Keep that in mind when preparing your 2- or 3-week "look ahead" schedule.
- If you have scheduled an inspection, but will not be ready for whatever reason, please let the inspector know (before the inspector is on site) and reschedule the inspection. Cancellation of an inspection should follow the jurisdiction's or inspection agency's procedures.

- Be familiar with the code. It will prevent surprises during an inspection if you catch any problems first. Also, inspectors may sometimes take the most restrictive interpretation of the code, and you might be able to convince the inspector that the item is in compliance.
- Be cooperative with the inspector. Cooperation is a two-way street, but you do not want to be the reason for its failure. Do not be confrontational in explaining yourself, but, if necessary, ask the inspector where in the code the requirement is stated (the inspector can only enforce what is in the code). You may be correct in your position on an item, but how you relay that to the inspector may be the difference between a delay of only a few hours and a delay of up to several days.

As long as there are codes regulating building construction, there will be inspectors. Nevertheless, building construction continues to increase and the demand on building department services grows along with it. In April 2004, the International Code Council conducted a survey of building safety officials in 15 of the nation's largest metropolitan areas, of which Phoenix was included. The concerns most often mentioned were the "increase[d] work load, shortage of resources and insufficient budget to perform work." In a statement following the survey, ICC CEO James Lee Witt said, "The increased demand for services offered by building departments and insufficient budgets can affect the long-term safety of a community. If buildings aren't built to code, or there aren't ample resources to conduct building inspections, public safety is at risk."

Although budgeting for building department resources is not a responsibility of the contractor in the field, having an understanding of the issues affecting building departments is important. How the public interacts with inspectors has a direct impact on building department resources. Working cooperatively can only help both the building department and the contractor. Another concern mentioned by all 15 of the surveyed building officials was their perception regarding public opinion of their work. The building officials felt that a building department's existence is necessary and beneficial to the community; however, they recognize that their enforcement duties are met with resistance from consumers and industry professionals to some degree. Through a more interactive and cooperative relationship with the building department and its inspectors, we can help change that perception for the better.

*To comment on this article, suggest other topics, or submit a question regarding codes, contact the author at [ron@specsandcodes.com](mailto:ron@specsandcodes.com).*

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