

Question of the Month: What building codes do I use for construction and where should I start in each book?

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As Wessling Architect's code officer, I enjoy the challenge of facing new obstacles and looking for creative solutions while adhering to the building code. Occasionally a co-worker will appear before me with a building code in hand and say, "I've been looking in the code about this item and I've come to this conclusion." "Have you looked here? Did you think about this?" I respond. Becoming familiar with building codes can be daunting.

The recommended steps to get started are:

- * Ask project specific questions.
- * Know what code book to use.
- * Understand the code language.

People often look for answers in the wrong places. There are two basic project paths: existing building and new construction. The existing building code was created to set reasonable parameters for building owners, however, there is a tendency to use the new construction code for all projects. While it may seem appropriate to be current with the latest, greatest building codes, in reality this practice is the more expensive approach. For instance, if the new building code is applied to historic renovation projects, stair enclosure walls are required to have a one-hour fire-resistive rating. Conversely, the existing building code does not require a fire rating, only tight fitting doors. Retaining existing walls eliminates the need for expensive additional materials and labor, resulting in substantial cost savings.

Once you have determined the correct code path, start at the beginning. The International Codes all have the same first two chapters. Chapter 1 is Scope and Administration and Chapter 2 is Definitions. Most projects' needs are addressed within the first chapter and you will see key words start to appear. Understanding and applying code terminology correctly can reduce construction cost. Consider our recent design of a one-story office building with a mezzanine. The main entrance opens to the ground level and the mezzanine, creating the appearance of an atrium. During construction, the sprinkler subcontractor notified us that the "atrium" space had neither the proper 18" draft curtains nor a deluge sprinkler system at interior glass walls. After referencing Chapter 2 Definitions we assured both subcontractor and owner that a mezzanine is not considered a floor or a story. The need for 18" draft curtains and deluge sprinkler systems was eliminated. Also, had the space been considered an atrium, a smoke evacuation system would have been required. In this particular case, understanding the definitions in Chapter 2 avoided extra cost in three areas.

The next time you need to open a building code book, ask yourself, "Is this an existing structure or new construction?" Begin your code review with the first two chapters and you will be off to a good start!

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