History of Building Codes

By Gregory J McFann Building Official City of Alameda

Have you ever wondered about the origin of building codes? If you are like most people, this question has never crossed your mind. In fact you would probably be hard pressed to name any building code provisions. Yet the effects of building codes are all around us. Codes regulate many aspects of every building we live, work, shop and play in. Building codes regulate everything from stair size to the number of plugs you need in your kitchen. I know what you're thinking. Building codes are just more government regulation intruding into my life. In fact, the development of today's codes dates back almost 4000 years. In that time, the focus has always been on making buildings safe and sanitary for their occupants. The enactment of and revisions to codes are a direct result of failures from existing building techniques, often the trigger has been a disaster that forces changes.

The earliest building codes can be traced back to The Code of Hammurabi circa 1760 BC. The Code of Hammurabi consisted of 282 laws written in cuneiform on an eight-foot tall stone slab. The stone was displayed in the public square for all to see. Laws number 229 through 233 dealt with building construction. Unlike today's codes, the Code of Hammurabi dealt more with the consequences of building failure rather than how to safely construct a building. For instance, Law #229 stated "If a builder builds a house for someone, and does not construct it properly, and the house which he built falls and kills its owner then the builder shall be put to death." One would have to imagine, with such dire consequences, builders had to put a lot of care into their work.

Various historic texts include building code requirements. Many of them outlined punishments for faulty construction. The Bible contained a code requirement that reads much more like a modern building code. In Deuteronomy Chapter 22 verse 8, a safety feature is required based on past experience. A builder is required "If thou shouldest build a new house, then shalt thou make a parapet to thy house; so thou shalt not bring blood-guiltiness upon thy house, if one should in any wise fall from it."

Modern building codes shifted from outlining the punishment for poor construction to mandating requirements that would make building safe and sanitary.. One early example of this is found in the London Building Act of 1844. Chief amongst the requirements, of this set of codes, was the improvement of drainage, securing of sufficient width of streets to ensure adequate ventilation, regulating explosive works and regulation of "deleterious" works. Each of these requirements came out of a need to improve life safety and was a result of seeing what didn't work fixing it. The Act of 1844 also created the first building inspectors when it required "the appointment of officers to superintend the Act".

The growth of American cities fueled by the tremendous influx of immigrants led to the creation of huge apartment buildings called tenements. Tenement living conditions in the mid 1800's were barely tolerable. As a result, in 1867, the City of New York enacted the First Tenement Housing Act, which required fire escapes and a window for every room.

The requirements of the Second Tenement Housing Act, enacted in 1879, included the installation of toilets inside the building, and that windows face a source of fresh air and light, not an interior hallway. A third tenement-housing act had to be passed in 1901 to address failures of the first two acts.

The first public building code in California was the 1909 State Tenement Housing Act. Similar to New York, California saw the need to regulate housing construction to assure safe and sanitary occupancy. Among the initial requirements of the California Act were minimum ceiling heights, room sizes and the requirement for heat. In 1927, the Pacific Coast Building Officials published the first Uniform Building Code. This code not only addressed housing habitability issues, it also regulated the construction of all buildings. Included in some of the initial requirements of the 1927 Uniform Building Code were building setbacks, minimum exiting and minimum safe structural requirements.

The Long Beach Earthquake of 1933 devastated a number of public school buildings. As a result the State of California passed the Field Act requiring that public school construction be the responsibility of the State Architect.

Today's building codes are built on the experience of the past. Each new earthquake, fire, tornado, hurricane or other natural disaster results in improved codes for building construction. While the complexity of the codes has increased greatly since the Code of Hammurabi in 1760 BC what was true then is true today. The intent of the building codes is to provide better and safer buildings for all of us to occupy.

Obtaining a permit is the law, and it is also a good idea. Planning & Building staff are ready to assist you as you navigate through the review process. We are located in Room 190 on the first floor of City Hall, located at 2263 Santa Clara Avenue. We can be reached by phone at 510-747-6850.