

May is building safety month!

The president has once again declared the month of May building safety month. The purpose behind this declaration is to bring awareness to the importance of building safety. Our method of ensuring safe structures is through the development and enforcement of codes. The codes have developed and evolved over a period of many years and are constantly being amended to ensure a balance between occupant safety, cost and firefighter safety.

Back before we had codes, standards and manufactures installation instructions we just built things and if they failed we re-engineered them and tried again. Just like the story of the Big Bad Wolf. The three little pigs started with straw and the wolf blew their house blew down so they moved to sticks and their house blew down again. Finally they went to brick and stayed safe and warm when the Big Bad Wolf huffed and puffed.

While we are not afraid of the Big Bad Wolf here in Connecticut we have other natural occurrences that impact our environment and pose a risk to our safety as we shelter in structures. Some of those things include wind, rain and flooding, tornadoes, lightning and heavy snow fall. As a result of those natural hazards we construct structures in a manner that will resist the forces of the wind, the snow loads that can accumulate, employ flood resistant techniques along the shore line and in flood prone areas, grounding of electrical systems and resilient construction that ties each part of the structure down to the ground through fasteners from the roof all the way down to the foundation.

There are also hazards that are inherent to the built environment that we inhabit as well as human behaviors that create risk. For example stairs can pose a risk if someone were to fall down them and if our behavior includes putting items on the stairs that we will carry up on our next trip up it creates a trip hazard. Our response to that is to have codes that govern the step height and depth, require graspable hand rails and guards at certain heights and lighting that can be activated from the top or bottom of the stairs. Some of the other things that are inherent in building design and construction today are smoke and CO detection, placement and size of windows for light, ventilation and firefighter access for rescue, safety glass in areas of risk like stairways and doors, hot water being controlled from the left side of a faucet and fire separations between dwellings and attached garages.

Buildings and their systems are not the only things governed by building codes. There are also things like swimming pools, cellular towers, underground and aboveground storage tanks and many other things. In fact there is so much that is covered by the codes that instead of listing what is covered they cite what is exempt from being subject to building codes. To focus on one of those things let's talk about pools for a minute. Pools of course pose risks that include but are not limited to young children and animals falling into the water, electrical hazards and slip

and fall injuries. As a result the building codes require many safety devices on pools and the enclosures. Some examples include a minimum 4' high barrier around the pool that is not easily climbed. There are bonding and grounding requirements to reduce the risk of injuries due to electricity and the installation of pool alarms is required.

Let's talk about foundations for a minute. You have probably heard about the crumbling foundation conditions that exist in some homes in north eastern CT and our neighbors just to the north in MA. Here is what we know so far, it affects homes that that were constructed between 1980 and 2003. It only affects homes whose foundations were poured with concrete from the Mottes concrete plant in Stafford, CT. Although the issue exists here in Bolton the scope seems to be fairly limited because we have concrete plants much closer in proximity that were used to supply the concrete. Here is something we don't know, we don't know where the concrete came from for the homes in Bolton. Currently there is a house bill which will require that information be submitted to building departments prior to the issuance of a CO for new homes but it is not something that has ever been required or collected.

This condition begins and progresses slowly and to date I have not seen a structure where this condition posed an imminent risk to the home or occupants. A couple of cracks in a foundation is not an indication that this condition is present. Concrete often cracks at stress points like the corner of a window. Those cracks generally run top to bottom of the wall. If you look at your foundation and you have many cracks that run in both directions, even if they are only hairline cracks it could be an indicator that the condition may exist in your home. The best way I have found to describe it is that it looks like a hard boiled egg that was dropped and rolled on the countertop to peel it. We have found that sometimes the condition will affect only a portion of the foundation and not the whole thing. Should you inspect your foundation and feel that you may have an issue we encourage you to contact us here at the Bolton Land Use Office. We may be reached during Town Hall Business hours at 860-649-8066 X 6103.

As I conclude this article it is my hope that the reader understands codes, permits and inspections all exist to ensure that buildings and structures are built to meet certain safety criteria. Those criteria are created and evolve to meet the changing conditions of the climate, human behaviors and the evolution of methods and materials used in construction. Our goal here in the Bolton Land Use office is to educate individuals on the codes as they change and become more complex and to provide the highest level of customer service we can provide to serve the citizens of our community and ensure that the constructed environment meets the requirements of the code.

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