



Roaring Brook Consultants Inc.

ENGINEERING A BETTER FUTURE

Fall 2009

Building Codes and the Insurance Adjuster Part II of II

This is continued from our Spring Newsletter 2009. If you would like copies, let us know.

Suggested Approach to Adjusting for Building Code Coverage

What is the applicable building code? For a building code to be a mandatory regulation, it must have been properly adopted. Therefore, the first step is to check the record of adoption. In general, the town or city clerk of the jurisdiction is the keeper of this record. Get the official record, which often is available online. Do not trust to simply asking the building inspector or a code official what building code he or she is using.

The reason to inquire further is simple. The political bodies that adopt building codes often do not adopt a code in its entirety or without changes. Political bodies discuss and change standard building codes and often adopt standard building codes *with changes and/or exceptions*. A real example: the City of Manchester, NH adopted the IBC with over 50 pages of changes. It modified some sections of the code and deleted some sections of the code. However, the code official might still say that he or she follows the IBC.

In short, before agreeing to pay for anything mandated by a building code, be certain what the code is and that the item is mandated.

Is the structure a building or is it covered under the building code? The IBC defines a structure as anything that is built and claims jurisdiction over all structures. However, the IBC has few requirements for items that are not commonly considered buildings. This fact often causes problems for adjusters because the building code doesn't require anything specific or because building code coverage for repair or replacement of auxiliary or special purpose structures that are not buildings may not have been contemplated in the insurance contract.

Are the repair or replacement costs actually larger under the current building code? Building codes are constantly in a state of flux. Do not assume that newer codes are more stringent than older codes or that market economics do not influence the cost of repairs.

In today's commercial market, it is not uncommon for a new, better quality item to be less costly than an old-style

item of lesser quality because the new item can be mass-produced and is in currently available stock. Likewise, research may lead to new ways of designing or better understanding of how to construct where the previous lack of knowledge may have led to providing safety simply by making the item bigger or heavier. Cold-formed steel framing that is today becoming extremely common is an example of this type of item. In some markets, cold-formed steel framing that is mandated for certain uses may be less expensive than the wood framing that was previously in use.

Issues Specific to Repair or Partial Replacement

Building codes change over time. However, changes in building codes do not necessarily require that an existing building be changed. As a general matter, society has decided it is wasteful to make changes to existing buildings for little additional benefit in terms of public safety. Also, some buildings that are considered as historically or aesthetically important may be treated specially under building codes.

A common problem faced by insurance adjusters is deciding if the building code requires replacement of a partially damage building or if the code allows the building to be repaired. As an extension of this problem, if the building can be repaired, does the building code allow repair as the building was or must the repair be done in conformance with the currently enforceable building code? In addition, must undamaged portions of the building be changed to meet the requirements of the current building code?

Because repair of existing structures is so common, most building codes have specific provisions devoted to this subject. For example, the IBC deals with this subject in Chapter 34.

Often building codes determine whether a building must be brought into compliance with currently applicable codes based on the amount or type of work that is contemplated. Requirements may be triggered by a specific amount of cost or a percentage of value such as assessed value, appraised value or market value. Often the "value" being sought is difficult to define or requires

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someone with specific expertise to compute it. Chapter 34 of the IBC treats some types of repair differently from others. For example, repair of structural elements of a building is treated differently than repairs to other elements of a building. Therefore, it is not wise to agree to pay for any code coverage related items without making a specific analysis of the building code.

It should be obvious from the foregoing that building codes are complex structures of rules. Also, there are existing buildings of many ages and types that an insurance adjuster will encounter in practice. These facts make it impossible for a building code to clearly cover every situation that will arise in practice.

To handle this problem, building codes generally contain sections that allow considerable discretion to the person or persons who enforce the code. If repair requirements for the situation that you encounter in practice are not very clearly defined by the applicable building code, consultation with the appropriate code official may be the best course of action. In most cases, the interpretation of the code that is most likely to prevail is that of the official whose job it is to interpret and enforce the building code.

It is usually unwise to assume that the interpretation of the building code made by the property owner or members of the property owner's team is correct without doing or commissioning some code analysis. Correct determination of code mandated requirements requires determining the applicable code and may require inquiry. Such inquiries should be directed to the official who is charged with enforcement of the building code and not to other officials who may not be familiar with the applicable codes and whose determinations are likely to be unenforceable.

Some Cautions and Closing Thoughts

The ideas presented in this paper concern technical and practical matters encountered in dealing with building codes. They also touch on legal concepts, interpretation of insurance contracts, and legally adopted regulations. There is no intent in this paper to offer legal advice. If you need legal advice, consult an attorney. Building codes and insurance contracts are complex and often capable of a variety of interpretations.

Looking at a property loss in an organized way, step by step, and involving a team of specialists may be the best way to proceed. When the amount of money under review is large, the temptation to make a strained interpretation of the building code may also be large. Clear analysis, listening, and reasoned inquiry will provide the best way to arrive at an appropriate answer that will withstand scrutiny.

NEW Crane Inspection Standards

As a number of high profile crane related accidents in 2008 helped to point out, better crane inspection standards have long been a strong need in the industry. This year the International Standards Organization (ISO) has come out with new standards on crane inspections. These new standards aim to reduce the risk of accident both to those people involved in a lifting operation and to those people in the vicinity, as well as to prevent damage to property. *ISO 23814:2009, Cranes – Competency requirements for crane inspectors*, specifies the competency required of persons who carry out periodic, exceptional, alteration, and thorough inspections of cranes. It excludes the day-to-day inspections and checks performed by crane operators and maintenance personnel.

The standard addresses the following issues:

- Independence, impartiality and integrity
- Technical knowledge and experience
- Techniques for crane inspections
- Training of crane inspectors

The objective of the new standards is to achieve a uniformly high competency of crane inspectors worldwide. In some countries, there may be additional regulatory requirements that must also be taken into account.

Two other ISO standards are also in effect that will help ensure that cranes are operated safely. They are as follows: *ISO 9927-1:2009, Cranes – Inspections – Part 1: General*, and *ISO 9927-3:2005, Cranes – Inspections – Part 3: Tower cranes*.

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Engineered Wood Course to Be Taught at NHAA Annual Meeting

Keith T. Kallberg, P.E., SECB, will be instructing a credited course, "Engineered Wood – Trying to Improve on Nature", at the New Hampshire Adjuster's Association (NHAA) annual Fall claims conference. The NHAA helps insurance claims professionals connect with each other through educational and promotional events. The conference this year will be held November 5th and 6th at the Mount Washington Resort in Breton Woods, New Hampshire.

Terra Solutions, LLC

Scott P. Kumph attended the Walmart Community "Business to Business Expo" that was held in Philadelphia, PA in September. The "B2B Expo" provides opportunities for smaller companies to develop networking relationships with Walmart buyers and executives. Terra Solutions continues to explore new sales channels for distributing our line of all-natural odor control products and equipment.

Land Development Project Planning

There are numerous local, State and Federal agencies that may become involved with project approval. Each agency has its own set of rules and agendas. A partial list of agencies from which approvals may be needed includes:

- the Local Planning Board
- the Local Conservation Commission
- the Local Road Agent
- the Local Technical Review Committee
- the State Highway Department
- the State Department of Environmental Protection
- the State Wetlands Board
- the Army Corps of Engineers

The name of an agency may vary, depending on your location.

Planning ahead is key to getting through the system as quickly as possible. At the local level, you can expect responses to your submittals in 30 to 60 days, though the

response may be to redesign and re-submit. The State review of a project could take 6 to 12 months or more. Some reviews can be conducted in parallel, but there is always the chance that one agency will want changes that result in resubmittals to other agencies. There is no crystal ball, so expect some bumps in the road. Except in rare situations, you, the developer, are trying to persuade the Town, State, or Army Corps to let you do something that it doesn't necessarily want done. The design needs to meet the regulations and it is up to you to convince each agency that you have fulfilled its requirements.

Most land development projects, whether subdivisions or commercial developments, will need the following:

- Boundary Survey
- Wetlands Map and Vernal Pool Investigation
- Soils Map
- Topographic Map

If the parcel boundaries are poorly marked, we would suggest performing the boundary survey first. The best time of year for efficient performance of this work, especially on wooded parcels, is the Fall or the Spring, when there are no leaves on the trees to block the surveyor's sight lines.

When the parcel boundaries are reasonably clear, the property should be investigated by a wetland specialist and a soils scientist to be sure the soils on the parcel can support the desired development. A vernal pool study would be done in conjunction with the wetland investigation. The window for the vernal pool study is in the Spring. It is nearly impossible to complete this study at any other time of the year, and missing this window could delay your project for a year. The wetlands and soil mapping need to be done when the ground is visible, that is, when there is no snow cover.

Next would come the topographic survey. The surface elevations are measured and the wetland flags, vernal pool flags, and soil observation pits are located. If an aerial topographic survey is needed, it has to be done in either the Fall or the Spring, without leaves on the trees or snow on the ground.

The scheduling of needed studies and surveys is critical to land development projects. Consider contacting a professional before starting your next project.

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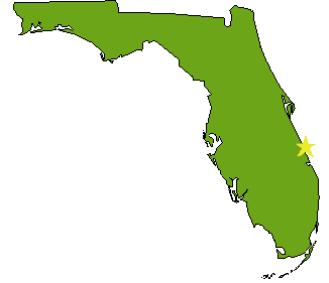
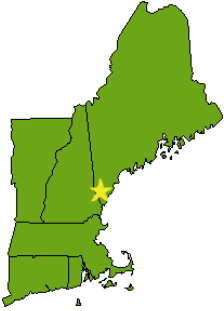
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