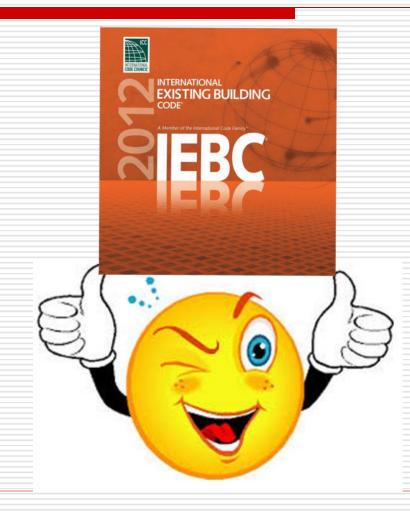


WHICH CODE DO I USE NOW?



2015 NC EXISTING BUILDING CODE



History

- In NC Building Code Council approved an Ad-Hoc August 22, 2011
- Ad-Hoc Committee Started work October 26, 2011
- INC Building Code Council approved the "2015 NC Existing Building Code" December 11, 2013.
- **Effective Date is March 1, 2015**

Ad-Hoc Committee

- **Committee Make-up:**
- 2 Engineer Members
- 2 Architect Members
- 1 Energy/Green Member
- **1 Fire Department Member**
- 5 Original Rehab Code Pilot Cities Members

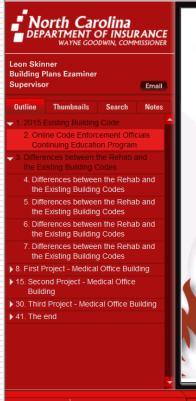
Ad-Hoc Committee

- **Committee Work:**
- **Code Adoption March 1, 2015**
- Training Courses:
 - 4 2 hour courses approve for CEU's
 - Taught 1028 Students
- **NCEBC Website page @ DOI Link**
- □ NCEBC Commentary
- **Free On-line CEU @ DOI Link**

On-Line CEU Training

Existing Buildings Plan Review CS3064 - One(1) Credit Hour Fire or Building

ATTACHMENTS EXIT



Online Code Enforcement Officials Continuing Education Program

- Instructions
 - Please make sure your speakers are on and the volume is turned up.
 - To advance through the presentation you can choose to use the Play/Pause and Forward/Back buttons or you can use your left and right arrow keys on your keyboard. The left arrow will return to the previous slide and the right arrow will advance to the next slide.
 - You must view the current slide completely before you can advance to the next one.
 - For further information on the presentation interface, click on 'HELP' located in the upper right-hand corner.



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Code Education Resources



On-Line Code

http://www.ecodes.biz/ecodes_support/Free_Resources/2012NorthCarolina/12 NorthCarolina_main.html

INTE	RNATIONAL CODE C	OUNCIL	People Helping People Build a Safer World™		
HOME STO	RE MEMBERSHIP CODES, STANDARDS Home > Free Resources	& GUIDELINES EDUCATION	CERTIFICATION & TESTING		
Quick Links	Free Resources		C SHARE		
FREE RESOURCES ECODES MY ICC	2015 North Carolina Existing Building Code				
	Welcome to the The 2015 North Carolina Existing Building Code [®] website. You will be able to view the new The 2015 North CarolinaExisting Building Code [®] in an Adobe [®] Reader [®] format. <i>The files found on this site are in a read only format and are not available for printing.</i> This site is designed as an Adobe [®] Reader [®] file format. You will need to have Adobe [®] Reader [®] 10.0 or higher installed to be able to read these files. If you do not have Adobe [®] Reader [®] 10.0 or higher you can download it for free at www.adobe.com. Use your arrow buttons or scroll bar to move between code sections and pages in the document. For assistance on technical issues with this web site please e-mail: <u>support@iccsafe.org.</u>				
	the 2012 International Existing Building Code, Fifth				
	Image: Section 2 and the section 2	2015 North Carolina Exi	sting Building Code		

On-Line Commentary

http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Codes_ -_Current_and_Past&user=State_Building_Codes



On-Line Resources

http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Enforcement_-_Design_Tools&user=Code_Enforcement_Resources



2015 NC Existing Building Code

-Code Format -Scope of Work -Three Options **For Designers** -Chapter 34



Code Format



CHAPTER 7 ALTERATIONS—LEVEL 1

(Former Rehab Code designation - Renovation)

SECTION 701 GENERAL

701.1 Scope.

Level 1 *alterations* as described in Section 503 shall comply with the requirements of this chapter. Level 1 *alterations* to *historic buildings* shall comply with this chapter, except as modified in Chapter 12.

701.2 Conformance.

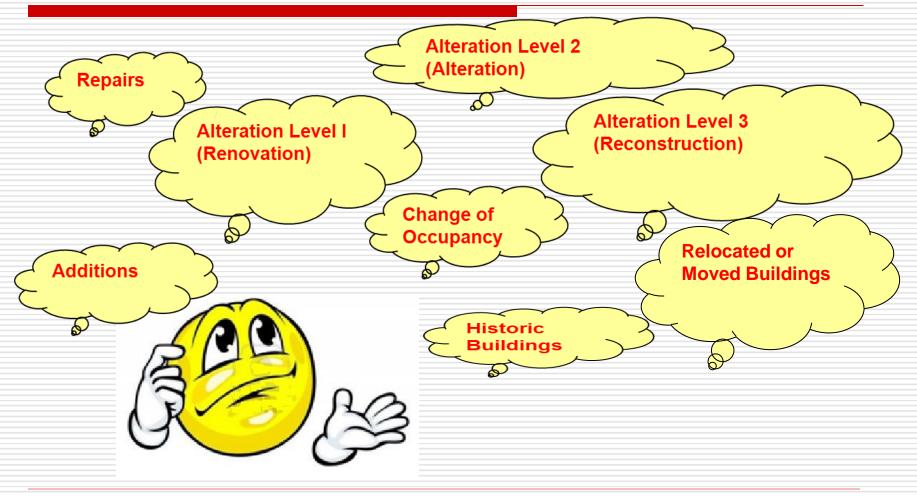
An *existing building* or portion thereof shall not be altered such that the building becomes less safe than its existing condition.

Exception: Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the *International Building Code*.

[B] 701.3 Flood hazard areas.

In *flood hazard areas, alterations* that constitute *substantial improvement* shall require that the building comply with Section 1612 of the *International Building Code*.

Scope of Work



Option #1

Work for alteration, repair, change of occupancy, addition or relocation of all existing buildings shall be done in accordance with the Prescriptive Compliance Method given in Chapter 4. It should be noted that this same method is provided in Chapter 34 of the International building Code.



Option #2

Work for alteration, repair, change of occupancy, addition or relocation of all existing buildings shall be done in accordance with the Work Area Compliance Method given in Chapter 5 through 13.



Option #3



Work for alteration, repair, change of occupancy, addition or relocation of all existing buildings shall be done in accordance with the Performance Compliance Method given in Chapter 14. It should be noted that this option is also provided in Chapter 34 of the International Building Code. **Chapter 34**

3411 Dealing with Accessibility was added to 2015 NC Existing Building Code

Chapter 14 Performance Compliance Methods. This chapter, a duplicate of IBC Section 3412, Compliance Alternatives, allows for existing buildings to be evaluated so as to show that alterations, while not meeting new construction requirements, will improve the current existing situation. Provisions are based on a numerical scoring system involving 19 various safety parameters and the degree of code compliance for each issue.

2015 NC Existing Building Code

Chapters	Subjects
1-2	Administrative Requirements and Definitions
3	Compliance Methods
4	Prescriptive Compliance Method for Existing Buildings
5-13	Work Area Compliance Method for Existing Buildings
14	Performance Compliance Method for Existing Buildings
15	Construction Safeguards
16	Referenced Standards
Appendix A	Guidelines for Seismic Retrofit of Existing Buildings
Appendix B	Supplementary Accessibility Requirements for Existing Buildings
Appendix C	Guidelines for Wind Retrofit of Existing Buildings
Resource A	Information on Fire Resistance of Archaic Materials and Assemblies

Chapter 1 Scope & Administration



Chapter 1 Scope and Administration. This chapter contains provisions for the application, enforcement and administration of subsequent requirements of the code. In addition to establishing the scope of the code, Chapter 1 identifies which buildings and structures come under its purview. Chapter 1 is largely concerned with maintaining "due process of law" in enforcing the regulations contained in the body of the code. Only through careful observation of the administrative provisions can the code official reasonably expect to demonstrate that "equal protection under the law" has been provided.

Chapter 2 Definitions



Chapter 2 Definitions. All defined terms in the code are provided in Chapter 2. While a defined term may only be used in one chapter or another, the meaning provided in Chapter 2 is applicable throughout the code.

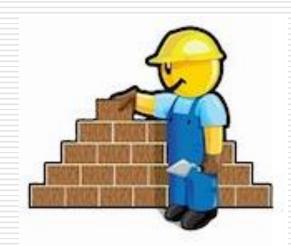
Where understanding of a term's definition is especially key to or necessary for understanding of a particular code provision, the term is shown in italics wherever it appears in the code. This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Chapter 3 Compliance Methods

Chapter 3 Compliance Methods. This chapter explains the three compliance options available in the code. In addition, this chapter also lays out the methods to be used for seismic design and evaluation throughout the IEBC. Finally this chapter clarifies that provisions in other I-codes related to repairs, alterations, additions, relocation and changes in occupancy must also be addressed unless they conflict with the IEBC. In that case the IEBC takes precedence.



Chapter 4 Additions



Chapter 4 Prescriptive Compliance Method. This chapter provides one of the three main options of compliance available in the IEBC for buildings and structures undergoing repair, alteration, addition or change in occupancy. This chapter duplicates the provisions that are predominantly in Chapter 34 of the IBC, Sections 3403 through 3411.

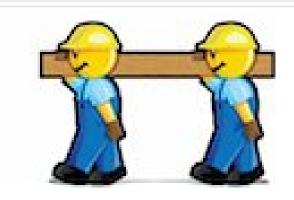
Chapter 5 Classification of Work

Chapter 5 Classification of Work. This chapter provides an overview of the Work Area Method available as an option for rehabilitation of a building. The chapter defines the different classifications of alterations and provides general requirements for repairs, alterations, change of occupancy, additions, historic buildings and relocated buildings. Detailed requirements for all of these are given in subsequent Chapters 6 through 13.



Chapter 6 Repairs

Chapter 6 Repairs. Chapter 6 governs the repair of existing buildings. The provisions define conditions under which repairs may be made using materials and methods like those of the original construction or the extent to which repairs must comply with requirements for new buildings.



Chapter 7 Alterations – Level 1

Chapter 7 Alterations—Level 1. This chapter provides the technical requirements for those existing buildings that undergo Level 1 alterations as described in Section 403, which includes replacement or covering of existing materials, elements, equipment or fixtures using new materials for the same purpose. This chapter, similar to other chapters of this code, covers all building-related subjects, such as structural, mechanical, plumbing, electrical and accessibility as well as the fire and life safety issues when the alterations are classified as Level 1. The purpose of this chapter is to provide detailed requirements and provisions to identify the required improvements in the existing building elements, building spaces and building structural system. This chapter is distinguished from Chapters 8 and 9 by only involving replacement of building components with new components. In contrast, Level 2 alterations involve more space reconfiguration and Level 3 alterations involve more extensive space reconfiguration, exceeding 50 percent of the building area.

Chapter 8 Alterations – Level 2

Chapter 8 Alterations—Level 2. Like Chapter 7, the purpose of this chapter is to provide detailed requirements and provisions to identify the required improvements in the existing building elements, building spaces and building structural system when a building is being altered. This chapter is distinguished from Chapters 7 and 9 by involving space reconfiguration that could be up to and including 50 percent of the area of the building. In contrast, Level 1 alterations (Chapter 7) do not involve space reconfiguration and Level 3 alterations (Chapter 9) involve extensive space reconfiguration that exceeds 50 percent of the building area. Depending on the nature of alteration work, its location within the building and whether it encompasses one or more tenants, improvements and upgrades could be required for the open floor penetrations, sprinkler system or the installation of additional means of egress such as stairs or fire escapes.

Chapter 9 Alterations – Level 3

Chapter 9 Alterations—Level 3. This chapter provides the technical requirements for those existing buildings that undergo Level 3 alterations. The purpose of this chapter is to provide detailed requirements and provisions to identify the required improvements in the existing building elements, building spaces and building structural system. This chapter is distinguished from Chapters 7 and 8 by involving alterations that cover 50 percent of the aggregate area of the building. In contrast, Level 1 alterations do not involve space reconfiguration and Level 2 alterations involve extensive space reconfiguration that does not exceed 50 percent of the building area. Depending on the nature of alteration work, its location within the building and whether it encompasses one or more tenants, improvements and upgrades could be required for the open floor penetrations, sprinkler system or the installation of additional means of egress such as stairs or fire escapes. At times and under certain situations, this chapter also intends to improve the safety of certain building features beyond the work area and in other parts of the building where no alteration work might be taking place.

Chapter 9 Alterations – Level 3

2015 NC Existing Building Code

Energy Code Allocation Form for Alteration Level 3 – Unconditioned to Conditioned Space

Project Name		Permit #			
Project Address					
2015 NC Existing Bldg. Code Ch. 9 – Alteration Level 3 – Section 908 - Unconditioned to Conditioned Space					
This is to identify that (check all that apply below)					
	This building is undergoing an Alteration – Level 3 (Reconstruction).				
	The work area is changing from unconditioned to conditioned space and costs more than \$10,000.				
	Provide an itemized list of components complying with Chapter 11 of the NC Residential Code or the NC Energy Conservation Code in addition to the requirements for the alteration as required by Section 908.1.				
	Item:	Cost: \$			
	Item:	Cost: \$			
	Item:	Cost: \$			

28

Chapter 10 Change of Occupancy

Chapter 10 Change of Occupancy. The purpose of this chapter is to provide regulations for the circumstances when an existing building is subject to a change in occupancy or a change in occupancy classification. A change of occupancy is not to be confused with a change of occupancy classification. The International Building Code (IBC) defines different occupancy classifications in Chapter 3, and special occupancy requirements in Chapter 4. Within specific occupancy classifications there can be many different types of actual activities that can take place. For instance, a Group A-3 occupancy classification deals with a wide variation of different types of activities, including bowling alleys and courtrooms, indoor tennis courts and dance halls. When a facility changes use from, for example, a bowling alley to a dance hall, the occupancy classification remains A-3, but the different uses could lead to drastically different code requirements. Therefore, this chapter deals with the special circumstances that are associated with a change in the use of a building within the same occupancy classification as well as a change of occupancy classification.

Chapter 11 Additions

Chapter 11 Additions. Chapter 11 provides the requirements for additions, which correlate to the code requirements for new construction. There are, however, some exceptions that are specifically stated within this chapter. An "Addition" is defined in Chapter 2 as "an extension or increase in the floor area, number of stories or height of a building or structure." Chapter 11 contains the minimum requirements for an addition that is not separated from the existing building by a fire wall.



Chapter 11 Additions

1102.3 Fire protection systems.

Existing fire areas increased by the *addition* shall comply with Chapter 9 of the *International Building Code*.

Exception: This requirement shall not apply to increases to the allowable fire area of five percent or less.

Commentary: The 5% increase in fire area is permitted to allow for a small addition to the existing building without being penalized for exceeding the fire area and not having sprinklers. Some examples would be a stairway, elevator or drive thru addition. In most occupancies where the fire area is limited to 12,000 sq. ft., the addition allowed would be 600 sq. ft. or less.

Chapter 12 Historic Buildings

Chapter 12 Historic Buildings. This chapter provides some exceptions from code requirements when the building in question has historic value. The most important criterion for application of this chapter is that the building must be essentially accredited as being of historic significance by a state or local authority after careful review of the historical value of the building. Most, if not all, states have such authorities, as do many local jurisdictions. The agencies with such authority can be located at the state or local government level or through the local chapter of the American Institute of Architects (AIA). Other considerations include the structural condition of the building (i.e., is the building structurally sound), its proposed use, its impact on life safety and how the intent of the code, if not the letter, will be achieved.

Chapter 13 Relocated or Moved Buildings

Chapter 13 Relocated or Moved Buildings. Chapter 13 is applicable to any building that is

moved or relocated.



Chapter 14 Performance Compliance Methods

Chapter 14 Performance Compliance Methods. This chapter, a duplicate of IBC Section 3412, Compliance Alternatives, allows for existing buildings to be evaluated so as to show that alterations, while not meeting new construction requirements, will improve the current existing situation. Provisions are based on a numerical scoring system involving 19 various safety parameters and the degree of code compliance for each issue.



Chapter 15 Construction Safeguards

Chapter 15 Construction Safeguards. The building construction process involves a number of known and unanticipated hazards. Chapter 15 establishes <u>specific regulations in order to</u> minimize the risk to the public and adjacent property. Some construction failures have resulted during the initial stages of grading, excavation and demolition. During these early stages, poorly designed and installed sheeting and shoring have resulted in ditch and embankment cave-ins. Also, inadequate underpinning of adjoining existing structures or careless removal of existing structures has produced construction failures.



Appendix A

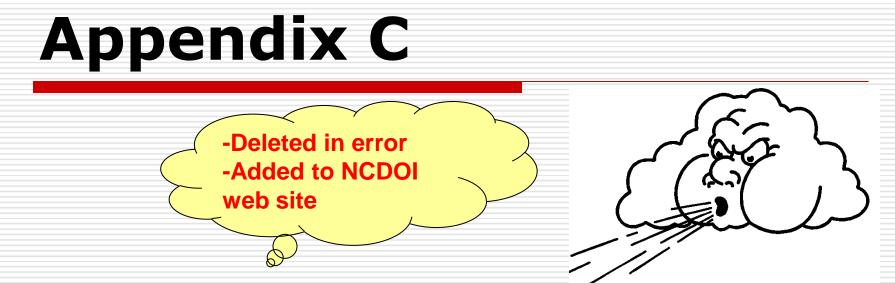


Appendix A Guidelines for the Seismic Retrofit of Existing Buildings. Appendix A provides guidelines for upgrading the seismic resistance capacity of different types of existing buildings. It is organized into separate chapters which deal with buildings of different types, including unreinforced masonry buildings, reinforced concrete and reinforced masonry wall buildings, and light-frame wood buildings.

Appendix B

Appendix B Supplementary Accessibility Requirements for Existing Buildings and Facilities. Chapter 11 of the International Building Code (IBC) contains provisions that set forth requirements for accessibility to buildings and their associated sites and facilities for people with physical disabilities. Sections 410, 605, 705, 906, 1006, 1012.1.4, 1012.8, 1105, 1204.1, 1205.15, 1401.2.5 and 1508 in the code address accessibility provisions and alternatives permitted in existing buildings. Appendix B was added to address accessibility in construction for items that are not typically enforceable through the traditional building code enforcement process.





Appendix C Guidelines For Wind Retrofit Of Existing Buildings. This Appendix is intended to provide guidance for retrofitting existing structures to strengthen their resistance to wind forces. This appendix is similar in scope to Appendix A which addresses seismic retrofits for existing buildings except that the subject matter is related to wind retrofits. These retrofits are voluntary measures that serve to better protect the public and reduce damage from high wind events for existing buildings.

Resource A Fire Ratings

Resource A Guidelines on Fire Ratings of Archaic Materials and Assemblies. In the process of repair and alteration of existing buildings, based on the nature and the extent of the work, the IEBC might require certain upgrades in the fire-resistance rating of building elements, at which time it becomes critical for the designers and the code officials to be able to determine the fire-resistance rating of the existing building elements as part of the overall evaluation for the assessment of the need for improvements. This resource document provides a guideline for such an evaluation for fire-resistance rating of archaic materials that is not typically found in the modern model building codes.



