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**2020 EXISTING
BUILDING CODE
of NEW YORK STATE**



**Building Standards
and Codes**



2020 Existing Building Code of New York State

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PREFACE

Introduction

The *Existing Building Code of New York State* (EBCNYS) establishes minimum requirements for existing buildings using prescriptive and performance-related provisions. It is founded on broad-based principles intended to encourage the use and reuse of existing buildings while requiring reasonable upgrades and improvements. This 2020 edition was developed as a derivative work of the 2015 edition of the *International Existing Building Code*® (IEBC®) published by the International Code Council® (ICC®).

Intention

This code is founded on principles intended to encourage the use and reuse of existing buildings that adequately protect public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

Letter Designations in Front of Section Numbers

The bracketed letter designations for the party responsible for portions of this code are as follows:

ICC Code Development Committees

- [A] = Administrative Code Development Committee;
- [BE] = IBC—Means of Egress Code Development Committee;
- [BG] = IBC—General Code Development Committee;
- [BS] = IBC—Structural Code Development Committee;
- [E] = International Commercial Energy Conservation Code Development Committee or International Residential Energy Conservation Code Development Committee;
- [F] = International Fire Code Development Committee;
- [FG] = International Fuel Gas Code Development Committee;
- [M] = International Mechanical Code Development Committee; and
- [P] = International Plumbing Code Development Committee.

New York State Code Development

- [NY] = New York Department of State

Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2015 edition. Deletion indicators in the form of an arrow (➡) are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.

A single asterisk [*] placed in the margin indicates that text or a table has been relocated within the code. A double asterisk [**] placed in the margin indicates that the text or table immediately following it has been relocated there from elsewhere in the code. The following table indicates such relocations in the 2020 edition of the *Existing Building Code of New York State*:

2020 LOCATION	2015 LOCATION
302.2	401.3
305	410
904.1.4	804.2.4
1201.5	1202.2
1206.1	1202.3

Chapter Reorganization

The 2020 edition of the EBCNYS had several chapters moved based on the need for more effective and consistent application of the provisions. The following table shows the chapter numbering changes:

Chapter, 2020	Chapter, 2015	Title
4	6	Repairs
5	4	Prescriptive Method
6	5	Classification of Work
13	4	Performance Method
14	13	Relocated or Moved Buildings

Italicized Terms

Selected words and terms defined in Chapter 2, Definitions, are italicized where they appear in code text and the Chapter 2 definition applies. Where such words and terms are not italicized, common-use definitions apply. The words and terms selected have code-specific definitions that the user should read carefully to facilitate better understanding of the code.

EFFECTIVE USE OF THE EXISTING BUILDING CODE OF NEW YORK STATE

The Existing Building Code of New York State intended to provide requirements for the repair and alternative approaches for alterations and additions to existing buildings. A large number of existing buildings and structures do not comply with the current building code requirements for new construction. Although many of these buildings are potentially salvageable, rehabilitation is often cost prohibitive because compliance with all the requirements for new construction could require extensive changes that go well beyond the value of the building or the original scope of the alteration. At the same time, it is necessary to regulate construction in existing buildings that undergo additional alterations, extensive repairs or change of occupancy. Such activity represents an opportunity to ensure that new construction complies with the current building codes and that existing conditions are maintained, at a minimum, to their current level of compliance or are improved or required to meet basic safety levels. To accomplish this objective, and to make the alteration process easier, this code allows for options for controlled departure from full compliance with the Uniform Code dealing with new construction, while maintaining basic levels for fire prevention, structural and life safety features of the rehabilitated building.

This code provides three main options for a designer in dealing with alterations of existing buildings. These are laid out in Section 301 of this code:

OPTION 1: Work for alteration, change of occupancy or addition of all existing buildings shall be done in accordance with the Prescriptive Compliance Method given in Chapter 4.

OPTION 2: Work for alteration, change of occupancy or addition of all existing buildings shall be done in accordance with the Work Area Compliance Method given in Chapters 6 through 12.

OPTION 3: Work for alteration, change of occupancy or addition of all existing buildings shall be done in accordance with the Performance Compliance Method given in Chapter 13.

Under limited circumstances, a building alteration can be made to comply with the laws under which the building was originally built, as long as there has been no substantial structural damage and there will be limited structural alteration.

Note that all repairs must comply with Chapter 4 and relocated buildings are addressed by Chapter 14.

Arrangement and Format of the 2020 EBCNYS

Before applying the requirements of the EBCNYS, it is beneficial to understand its arrangement and format. The EBCNYS, like other codes published by ICC, is arranged and organized to follow logical steps that generally occur during a plan review or inspection. The EBCNYS is divided as follows:

Chapters	Subjects
1–2	Administrative Requirements and Definitions
3	Provisions for all Compliance Methods
4	Repairs
5	Prescriptive Compliance Method for Existing Buildings
6–12	Work Area Compliance Method for Existing Buildings
13	Performance Compliance Method for Existing Buildings
14	Relocated 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
Appendix D	Diaper Changing Stations
Resource A	Guidelines on Fire Ratings of Archaic Materials and Assemblies

The following is a chapter-by-chapter synopsis of the scope and intent of the provisions of the *Existing Building Code of New York State*:

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 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.

Guidance regarding tense, gender and plurality of defined terms as well as guidance regarding terms not defined in this code is also provided.

Chapter 3 Provisions for All 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 EBCNYS. Finally this chapter clarifies that provisions in the other parts of the *Uniform Code* related to repair, alterations, additions, relocation and changes in occupancy must also be addressed unless they conflict with the EBCNYS. In that case, the EBCNYS takes precedence.

Chapter 4 Repairs. Chapter 4 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.

This chapter, like Chapter 14 related to relocated or moved buildings, is independent from the three methods presented by this code.

Chapter 5 Prescriptive Compliance Method. This chapter provides one of the three main options of compliance available in the EBCNYS for buildings and structures undergoing alteration, addition or change of occupancy.

Chapter 6 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 alterations, change of occupancy, additions and historic buildings. Detailed requirements for all of these are given in subsequent Chapters 7 through 9.

Chapter 7 Alterations—Level 1. This chapter provides the technical requirements for those existing buildings that undergo Level 1 alterations as described in Section 503, 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. 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. 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 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 of occupancy or a change of occupancy classification. A change of occupancy is not to be confused with a change of occupancy classification. The *Building Code of New York State* (BCNYS) 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 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.

There are also requirements for storm shelters when additions are being made to Group E occupancies.

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. 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 Performance Compliance Methods. This chapter 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 14 Relocated or Moved Buildings. Chapter 14 is applicable to any building that is moved or relocated. This chapter, like the chapter on repairs, is independent from the three methods presented in this code.

Chapter 15 Construction Safeguards. The building construction process involves a number of known and unanticipated hazards. Chapter 15 establishes specific regulations in order to 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.

There are also several fire safety and means of egress issues addressed by this chapter.

Chapter 16 Referenced Standards. The code contains numerous references to standards that are used to regulate materials and methods of construction. Chapter 16 contains a comprehensive list of all standards that are referenced in the code, including the appendices. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the building official, contractor, designer and owner.

Chapter 16 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based upon the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda; and the section or section of the code that reference the standard.

Appendices. Appendices are provided in the EBCNYS to offer supplemental criteria to the provisions in the main chapters of the code. Appendices provide additional information for administration of the Department of Building Safety as well as standards not typically administered by all building departments. Appendices have the same force and effect as the first 16 chapters of the EBCNYS only when explicitly adopted.

Appendix A Guidelines for 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 Supplementary Accessibility Requirements for Existing Buildings and Facilities. Chapter 11 of the *Building Code of New York State* (BCNYS) contains provisions that set forth requirements for accessibility to buildings and their associated sites and facilities for people with physical disabilities. Section 305 addresses 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.

The purpose of the Appendix is to provide prescriptive alternatives for addressing retrofit of buildings in high-wind areas. Currently there are two chapters which deal with the retrofit of gable ends and the fastening of roof decks, Appendix Chapters C1 and C2, respectively.

Appendix D Diaper Changing Stations. In 2018, the New York State Legislature passed regulations requiring certain occupancies to install and maintain baby diaper changing stations that would be available to both men and women. This appendix establishes the standards for the installation of diaper changing stations in all newly constructed buildings that have one or more areas classified as Group A occupancies or Group M occupancies and in all existing buildings that have one

or more areas classified as Group A occupancies or Group M occupancies and undergo a substantial renovation.

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 EBCNYS might require certain upgrades in the fire-resistance rating of building elements, at which time it becomes critical for the designers and the building 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.

TABLE OF CONTENTS

CHAPTER 1 SCOPE AND ADMINISTRATION 1	CHAPTER 5 PRESCRIPTIVE COMPLIANCE METHOD 21
Section	Section
101 Title, Scope and Purpose 1	501 General 21
102 Applicability 2	502 Additions 21
103 Administration and Enforcement 3	503 Alterations 22
104 Materials, Equipment and Methods of Construction 4	504 Fire Escapes 24
105 Building Permits, Construction Inspections, Stop Work Orders, Certificates of Occupancy, and Operating Permits 4	505 Windows and Emergency Escape Openings 25
106 Submittal Documents 6	506 Change of Occupancy 26
107 Service Utilities 7	507 Historic Buildings 27
108 Inspection of Solid Fuel-burning Heating Appliances, Chimneys and Flues 7	
CHAPTER 2 DEFINITIONS 9	CHAPTER 6 CLASSIFICATION OF WORK 29
Section	Section
201 General 9	601 General 29
202 General Definitions 9	602 Alteration—Level 1 29
	603 Alteration—Level 2 29
	604 Alteration—Level 3 29
	605 Change of Occupancy 29
	606 Additions 29
	607 Historic Buildings 29
	608 Relocated Buildings 29
CHAPTER 3 PROVISIONS FOR ALL COMPLIANCE METHODS 13	
Section	
301 Administration 13	CHAPTER 7 ALTERATIONS—LEVEL 1 31
302 General Provisions 13	Section
303 Structural Design Loads and Evaluation and Design Procedures 13	701 General 31
304 In-Situ Load Tests 14	702 Building Elements and Materials 31
305 Accessibility for Existing Buildings 14	703 Fire Protection 32
306 Energy Storage Systems 17	704 Means of Egress 32
	705 Reroofing 32
	706 Structural 33
	707 Energy Conservation 33
	708 Plumbing 33
CHAPTER 4 REPAIRS 19	CHAPTER 8 ALTERATIONS—LEVEL 2 35
Section	Section
401 General 19	801 General 35
402 Building Elements and Materials 19	802 Building Elements and Materials 35
403 Fire Protection 19	803 Fire Protection 37
404 Means of Egress 19	804 Carbon Monoxide Detection 39
405 Structural 19	805 Means of Egress 39
406 Electrical 20	806 Structural 44
407 Mechanical 20	
408 Plumbing 20	

TABLE OF CONTENTS

807 Electrical 45
808 Mechanical 45
809 Plumbing 45
810 Energy Conservation 46

CHAPTER 9 ALTERATIONS—LEVEL 3 47

Section
901 General 47
902 Special Use and Occupancy 47
903 Building Elements and Materials 47
904 Fire Protection 47
905 Means of Egress 48
906 Structural 48
907 Energy Conservation 49

CHAPTER 10 CHANGE OF OCCUPANCY 51

Section
1001 General 51
1002 Special Use and Occupancy 51
1003 Building Elements and Materials 51
1004 Fire Protection 51
1005 Means of Egress 51
1006 Structural 51
1007 Electrical 52
1008 Mechanical 52
1009 Plumbing 52
1010 Other Requirements 53
1011 Change of Occupancy Classification 53

CHAPTER 11 ADDITIONS 57

Section
1101 General 57
1102 Heights and Areas 57
1103 Structural 57
1104 Smoke Alarms in Occupancy
Groups R and I-1 58
1105 Carbon Monoxide Detection 58
1106 Storm Shelters 58
1107 Energy Conservation 58

CHAPTER 12 HISTORIC BUILDINGS 59

Section
1201 General 59
1202 Repairs 59
1203 Fire Safety 59

1204 Change of Occupancy 60
1205 Structural 61
1206 Relocated Buildings 61

CHAPTER 13 PERFORMANCE COMPLIANCE METHODS 63

Section
1301 General 63

CHAPTER 14 RELOCATED OR MOVED BUILDINGS 75

Section
1401 General 75
1402 Requirements 75

CHAPTER 15 CONSTRUCTION SAFEGUARDS 77

Section
1501 General 77
1502 Protection of Adjoining Property 78
1503 Temporary Use of Streets,
Alleys and Public Property 78
1504 Fire Extinguishers 79
1505 Means of Egress 79
1506 Standpipes 79
1507 Automatic Sprinkler System 79
1508 Accessibility 79
1509 Water Supply for Fire Protection 79

CHAPTER 16 REFERENCED STANDARDS 81

APPENDIX A GUIDELINES FOR THE SEISMIC RETROFIT OF EXISTING BUILDINGS 85

CHAPTER A1 SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL BUILDINGS 85

Section
A101 Purpose 85
A102 Scope 85
A103 Definitions 85
A104 Symbols and Notations 86
A105 General Requirements 86

A106 Materials Requirements 87
 A107 Quality Control 89
 A108 Design Strengths 89
 A109 Analysis and Design Procedure 90
 A110 General Procedure 90
 A111 Special Procedure 90
 A112 Analysis and Design 92
 A113 Detailed Building System
 Design Requirements 93
 A114 Walls of Unburned Clay,
 Adobe or Stone Masonry 94

**CHAPTER A2 EARTHQUAKE HAZARD
 REDUCTION IN EXISTING
 REINFORCED CONCRETE AND
 REINFORCED MASONRY WALL
 BUILDINGS WITH FLEXIBLE
 DIAPHRAGMS 101**

Section
 A201 Purpose 101
 A202 Scope 101
 A203 Definitions 101
 A204 Symbols and Notations 101
 A205 General Requirements 101
 A206 Analysis and Design 102
 A207 Materials of Construction 103

**CHAPTER A3 PRESCRIPTIVE PROVISIONS
 FOR SEISMIC STRENGTHENING
 OF CRIPPLE WALLS AND
 SILL PLATE ANCHORAGE
 OF LIGHT, WOOD-FRAME
 RESIDENTIAL BUILDINGS 105**

Section
 A301 General 105
 A302 Definitions 105
 A303 Structural Weaknesses 106
 A304 Strengthening Requirements 106

**CHAPTER A4 EARTHQUAKE RISK
 REDUCTION IN WOOD-FRAME
 RESIDENTIAL BUILDINGS
 WITH SOFT, WEAK OR
 OPEN FRONT WALLS 123**

Section
 A401 General 123
 A402 Definitions 123
 A403 Analysis and Design 123

A404 Prescriptive Measures for Weak Story 125
 A405 Materials of Construction 125
 A406 Information Required to be on the Plans 126
 A407 Quality Control 126

CHAPTER A5 REFERENCED STANDARDS 127

**APPENDIX B SUPPLEMENTARY
 ACCESSIBILITY REQUIREMENTS
 FOR EXISTING BUILDINGS
 AND FACILITIES 129**

Section
 B101 Qualified Historical Buildings and Facilities 129
 B102 Fixed Transportation Facilities and Stations 129
 B103 Dwelling Units and Sleeping Units 130
 B104 Referenced Standards 130

**APPENDIX C GUIDELINES FOR THE
 WIND RETROFIT OF
 EXISTING BUILDINGS 131**

**CHAPTER C1 GABLE END RETROFIT
 FOR HIGH-WIND AREAS 131**

Section
 C101 General 131
 C102 Definitions 131
 C103 Materials of Construction 131
 C104 Retrofitting Gable End Walls
 to Enhance Wind Resistance 133

**CHAPTER C2 ROOF DECK FASTENING
 FOR HIGH-WIND AREAS 153**

Section
 C201 General 153
 C202 Roof Deck Attachment for Wood Roofs 153
 C203 Referenced Standards 153

**APPENDIX D DIAPER CHANGING
 STATIONS 155**

D101 Introduction 155
 D102 Purpose 155
 D103 Definitions 155
 D104 General Requirements 156
 D105 Accessibility, Construction and Installation
 Requirements 157
 D16 Signage 157
 D107 Maintenance 157
 D108 Historic Buildings 157

TABLE OF CONTENTS

**RESOURCE A GUIDELINES ON FIRE
RATINGS OF ARCHAIC
MATERIALS AND
ASSEMBLIES 159**

Section

1 Fire-related Performance of Archaic
Materials and Assemblies. 160

2 Building Evaluation 161

3 Final Evaluation and Design Solution 164

4 Summary 171

Appendix 173

Resource A Table of Contents 173

Bibliography. 292

INDEX 299