

2022 New York City Mechanical Code

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DEDICATION

The publication of the 2022 *New York City Construction Codes* is the culmination of many thousands of hours, invested by 500+ committee members over six years, to review, discuss, and to finally reach consensus on an updated set of construction provisions, tailored specifically to the unique urban environment of our city, at this point in our history. New York City, the Department of Buildings, and the Code Development and Technical Affairs team are indebted to all the individuals who came together and gave voluntarily of their time and experience to design a set of codes which will help create a safer city environment for our residents, workers, and visitors.

Special mention and credit must be given to two extraordinary civil servants who guided, managed, and cajoled all of us who worked on code revision. Helen M. Gitelson, Executive Director of Code Development and Marinetta D. Paone, Director of Code Development, who are both now enjoying well-earned retirement after their Herculean labors.

The Department of Buildings dedicates these codes to the memory of: Chief Ronald M. Spadafora, FDNY, Chair of the Fire Protection Committee; FDNY Supervising Fire Inspector Mark Remolino, fire alarm expert and member of the Fire Protection Committee; and Professor Fletcher H. (Bud) Griffis, construction engineering, leadership, and risk management expert, and member of the Construction & Demolition Safety Committee. Their contributions to construction code revision will continue to protect New Yorkers for years to come.

The Code Development and Technical Affairs Team
New York City Department of Buildings
280 Broadway, 7th Floor
New York, NY 10007

NEW YORK CITY CONSTRUCTION CODES PREFACE

Background

The 2022 *New York City Construction Codes* are patterned after the family of model construction codes (I-Codes) published by the International Code Council (ICC) and modified to meet the particular needs of New York City's dense urban environment.

New York City has a long history of solving problems associated with urban construction through regulatory measures. In 1625, the Dutch West India Company established rules for the types and locations of houses that could be built in the colony of New Amsterdam. Twenty-two years later, Peter Stuyvesant, Director-General of New Netherland, appointed the city's first building inspectors. This early attempt at meeting public safety and sanitation needs would evolve into one of the most comprehensive building codes in the United States.

Preventing fire spread was the primary focus of regulations issued during the late 18th and early 19th century. Requirements for exterior walls, windows, roofs, and chimneys were prescribed. The rapid growth of the city during the second half of the 19th century, coupled with ever taller buildings, presented new challenges and tragedies. In response, building regulations began to address an array of issues — egress, excavations, foundations, plumbing, strength of materials, electrical wiring, elevators, and the protection of the public from construction work. Ultimately, these regulations coalesced into the first citywide building code – the Building Code of 1899.

A Department of Buildings was first established in Manhattan in 1860 and reconstituted in 1862. A citywide Department of Buildings was created in 1936.

Major revisions to the Building Code were enacted in 1916, 1938, and 1968 as each generation adapted to an ever more complicated world. The 1916 and 1938 revisions were geared toward meeting the needs of new skyscrapers and multiple dwellings. The 1968 revisions were designed to incorporate new technologies and building practices, including performance criteria for building construction.

After the collapse of the World Trade Center in 2001, the City undertook a multiyear effort to modernize the city's building code by basing the code on the 2003 edition of the I-Codes and leveraging the expertise of more than 400 industry stakeholders, organized into 20 committees coordinated by the Department of Buildings. This process ensured New York City's codes benefited from both the recommendations made at a national level by the ICC as well as the expertise of local New York City practitioners. This work culminated in the passage of Local Laws 99 of 2005 and 33 of 2007, which jointly came to be known as the 2008 *New York City Construction Codes*.

The legislation that established the 2008 Construction Codes also created a mandatory revision cycle; a system designed to prevent code standards from becoming obsolete for want of timely revision.

Between 2011 and 2013, the Department of Buildings engaged more than 350 industry stakeholders, organized into 11 committees, to update the city's codes by basing them on the 2009 editions of the I-Codes. This effort culminated in the passage of Local Laws 41 of 2012 and 141 of 2013, which became known as the 2014 *New York City Construction Codes*.

In 2017, the Department of Buildings again engaged more than 500 industry stakeholders, organized into 14 committees, to update the city's codes by basing them on the 2015 I-Codes. Despite hardships generated by the Covid-19 global pandemic, the committees continued to work diligently, meeting virtually with professionalism and good humor, pushing the effort across the finish line. The committee's actions culminated in the passage of Local Laws 14 of 2020 and 126 of 2021, known as the 2022 *New York City Construction Codes*.

Structure and Applicability of the New Codes

Title 28 of the *New York City Administrative Code* contains five general administrative chapters that will govern all of the 2022 *New York City Construction Codes*, covering administration, enforcement, maintenance obligations, licensing, and miscellaneous provisions, including outdoor signs. These provisions were written by and for New York City and thus are not based on any I-Code. Following these five chapters are four additional chapters containing the Plumbing, Building, Mechanical, and Fuel Gas Codes. Each of the individual codes, in turn, contains a Chapter 1 with additional administrative provisions applicable to the specific matters covered by the particular code. The Plumbing, Building, Mechanical and Fuel Gas Codes reflect modifications to the I-Codes.

Alterations of existing buildings, at the option of the owner, are permitted to comply with the 1968 building code, with significant exceptions that the Department determined are sufficiently important to public safety to be implemented immediately regardless of the choice of underlying code.

PREFACE

Provisions of Title 28 that apply to all codes should be cited as “28-section number.” The technical codes may be cited separately; provisions of each should be cited as “PC section number,” “BC section number,” “MC section number,” and “FGC section number.” Section 28-101.3 governs the interpretation of the various codes, sections, and subsections of the law by providing:

§28-101.3 Codes. Any reference in this title to “this code” or “the code” shall be deemed to be a reference to this title and all of the codes comprising the *New York City Construction Codes* unless the context or subject matter requires otherwise. Whenever a section or subsection of this code is cited or referred to, subordinate consecutively numbered sections and subsections of the cited provision are deemed to be included in such reference unless the context or subject matter requires otherwise.

While the Department expects to promulgate new rules necessary to implement the 2022 revisions to the codes, Section 28-103.2. provides that existing rules will remain in effect:

§28-103.20 Rules. Rules promulgated by the department in accordance with the law in effect when such rules were promulgated shall remain in effect for the matters covered to the extent that such rules are not inconsistent with this code unless, until and to the extent that such rules are amended or repealed by the department.

Existing Buildings

While the ICC family of codes includes an *International Existing Building Code*, the Department determined to continue to allow compliance with the 1968 code until a NYC specific Existing Building Code is developed. At the owner’s option, existing buildings may be governed by either the new codes or the technical requirements of the 1968 building code. The latter option is subject to several important exceptions pursuant to sections 28-101.4.3 and 28-101.4.5. Some exceptions direct users to special provisions for prior code buildings located in Sections BC 901, BC 1101, BC 1601 and BC 3001 of the *New York City Building Code* and Sections FGC 102.4 of the *New York City Fuel Gas Code*, MC 102.4 of the *New York City Mechanical Code* and PC 102.4 of the *New York City Plumbing Code*.

The city has not enacted a new residential code. The ICC’s *International Residential Code* covers one- and two-family dwellings three stories or less, whereas its building code covers all other new buildings. After reviewing the work product of the technical committees that developed the text, the Department concluded that the city could effectively address one- and two-family dwellings in the body of the 2022 *New York City Building Code* itself. Accordingly, the 2022 *New York City Building Code* covers new construction of all building types.

Codes Maintenance

At the national level, the I-Codes are kept current through the review of proposed changes submitted to the ICC by code enforcement officials, industry representatives, design professionals and other interested parties. Proposed changes are considered through an open code development process in which all interested and affected parties may participate.

The Department is mandated by the Administrative Code to review the latest edition of the I-Codes and to suggest modifications for use within New York City. This cycle will help ensure that New York City maintains an updated set of construction codes far into the future.

Marginal and Other Markings

Solid vertical lines in the margins within the body of the codes indicate a substantive change from the 2014 version of the *New York City Construction Codes*.

An “NYC” in the margins within the body of the codes indicates a substantive change from the 2015 version of the I-Codes.

There are no marginal markings in Chapter 15 due to its substantial revision.

A double dagger (‡) within the body of the codes indicates text that is corrected from the enacted legislation for purposes of clarity. Substantive corrections will appear in future code revisions.

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TITLE 28 OF THE NEW YORK CITY ADMINISTRATIVE CODE INCLUDING THE NEW YORK CITY CONSTRUCTION CODES

28-100	Administration
28-200	Enforcement
28-300	Maintenance of Buildings
28-400	Licensing and Registration of Businesses, Trades and Occupations Engaged in Building Work
28-500	Miscellaneous Provisions
28-600	NYC Plumbing Code
28-700	NYC Building Code
28-800	NYC Mechanical Code (included in this volume)
28-900	NYC Fuel Gas Code
28-1000	NYC Energy Conservation Code

TITLE 28 NEW YORK CITY CONSTRUCTION CODES

CHAPTER 8 THE NEW YORK CITY MECHANICAL CODE

ARTICLE 801 ENACTMENT AND UPDATE OF THE NEW YORK CITY MECHANICAL CODE

§28-901.1 Update. No later than the third year after the effective date of this section and every third year thereafter, the commissioner shall submit to the city council proposed amendments that he or she determines should be made to this code to bring it up to date with the latest edition of the International Mechanical Code or otherwise modify the provisions thereof. In addition, prior to the submission of such proposal to the city council, such proposal shall be submitted to an advisory committee established by the commissioner pursuant to this title for review and comment.

§28-901.2 Enactment of the New York city mechanical code. The New York city mechanical code based on the 2003 edition of the International Mechanical Code published by the International Code Council, with changes that reflect the unique character of the city and amendments that bring it up to date with the 2015^z edition of such International Mechanical Code, is hereby adopted to read as follows:

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