

# One- and Two-Family Private Residences

**New Building Applications** 



Photo: Dante Ramirez



Bill de Blasio Mayor Rick D. Chandler, P.E. Commissioner

nyc.gov/buildings Version 2 | 12.2015 One- and two-family residences are allowed in all residential and most commercial districts in New York City. They are constructed as detached, semi-detached and attached row houses and townhouses and may be filed individually or as part of a larger development.

# New York City Zoning Resolution

The Zoning Resolution's (ZR) regulations governing use and bulk vary according to zoning districts. These regulations also govern lot size, floor area, open space, density, yards, height, setbacks and parking.

#### New York City Fire Code

Depending upon a one- or two-family residence's design and the access it provides for firefighting operations, sprinklers and other Fire Department approval may be required.

## New York City Construction Codes

Site safety, structural standards, fire protection, exits, height and area limitations and accessibility are among the essential elements regulated by the NYC Building Code (BC). Some main building systems are further regulated by the NYC Mechanical Code (MC), NYC Plumbing Code (PC) and NYC Fuel Gas Code (FGC). In addition, the NYC Energy Conservation Code (NYCECC) mandates minimum required thermal ratings for building envelopes and minimum efficiency ratings for mechanical equipment and lighting.

#### **Notable Characteristics**

The majority of these structures use a wood or cold-formed steel (light gauge steel) framing system with various cladding materials and have pitched or gable roofs. Common accessory features include detached garages, decks, porches, swimming pools, yard fences and required plantings.

This publication is an overview of the requirements for this type of work. There may be additional, applicable Zoning Resolution, Construction Code, Multiple Dwelling Law or Energy Code requirements.

# FIRST STEPS

- Zoning district, site designations (special purpose districts, waterfront area or block, flood hazard area, fire district, landmark district, little 'e' DEP designated block, wetlands, 200' within MTA infrastructure)
- Lot diagram (dimensions of zoning and tax lot, building, yards, distance to corner street intersection, street names, street status as mapped or improved, zoning use group, building occupancy group, construction classification, number of stories, buildings on adjacent lots, distance to nearest fire hydrant, curb cut application numbers)
- Borough commissioner determinations, if applicable

# ADMINISTRATIVE

#### **Additional DOB Forms**

- PW1
- PD1 with topographic stamp required from borough president's office
- PW1-A (UG 1 or 2, R-3 occupancy)
- PW1-B
- TR1
- TR2 / TR3 (concrete forms as needed)
- TR4
- TR8
- ST1
- ZD1

#### **Technical Documents**

- Soil investigation BC <u>1802</u>
- Soil percolation test (if drywell installation required)
- Initial survey BC <u>107.3</u>
- Zoning exhibits, restrictive declarations, easements ZR12-10
- House connection (NYC Department of Environmental Protection) BC <u>107.11.1</u>, PC <u>106.6.1</u>

#### **Related Applications**

- Demolition application sign-off, if previous building existed
- · Curb cut application, if filed separately
- Builders pavement plan (BPP) application filed prior to approval AC <u>28-108</u>
- Construction fence application, if filed separately, prior to approval BC §3307.7 (BC §3301.9.1)
- Subdivision application ZR 12-10
- Other NB or Alt-1 applications on the same zoning lot, whether they are on the same tax lot or multiple tax lots

# **BIS Required Items**

- Check current Department memos and service notices.
- File all required work types.

# ZONING

#### Waterfront Area or Block (Where Applicable)

- City Planning Commission: certification required ZR 62-81
- Use restrictions ZR 62-20
- Bulk restrictions ZR 62-30
- Rear yard obstructions ZR 62-332
- Exemption from public access and visual corridors -ZR 62-51, 62-52
- Parking and Loading ZR 62-40

#### Lower-Density Growth Management Area – LDGMA (Where Applicable)

 ZR 12-10 definition applicable only in the Bronx (Community Board 10) and borough of Staten Island

#### **Special Districts**

Comply with applicable provisions

#### Private Street or Road (Where Applicable)

 Special regulations including, but not limited to, parking and bulk – per ZR 26-20 (and ZR 26-30 if in LDGMA)

#### **Use Regulations**

- Contextual district restrictions for R3A, R3X, R3-1, R4A, R4B, R4-1, R5A ZR 22-00
- Special requirements for design of the 2<sup>nd</sup> floor for 2-families in R3A, R3X, R3-1, R4A and R4-1 – ZR 22-43
- Accessory uses: home occupations ZR 12-10, Special Mixed Use Districts

#### Lot Area and Width

- Minimum lot area or width ZR 23-32 (attention to special regulations for LDGMA where applicable)
- Special provisions for existing small lot ZR 23-33, ZR 12-10 (Zoning Lot definition)
- Check for vacant labeled lots, smaller than minimum size adjacent to a house with sub-par yards or with a garage (survey, BIS, Sanborn map)
- Legally existing small lots might prohibit 2 families ZR 23-25

#### **Bulk Regulations**

- Floor area and open space ZR 23-141
- Density, number of dwelling units and minimum size ZR 23-20
- Yards and courts ZR 23-40, 23-84, 23-85
- Distance between buildings for zoning lots with multiple buildings ZR 23-70
- Distance between legally required window and walls or lot lines ZR 23-86
- Height and setback, base plane, rear and side setbacks ZR 23-60
- Permitted obstructions in open space ZR 23-12; in required yards ZR 23-44; in height and setback – ZR 23-62; and in courts – ZR 23-87
- Balconies ZR 23-13

#### **Parking Regulations (Required and Permitted)**

- Location, area and number of parking spaces ZR 25-00
- Location and size of curb cuts ZR 25-631
- Prohibition of curb cuts and parking waiver for no access ZR 25-63

## **Plantings**

- Street trees required in all conditions ZR 23-04, ZR 26-41
- Sidewalk planting strips required in R1 through R5 ZR 23-04, 26-42
- Front yard planting in R1 through R5 ZR 23-451

# MULTIPLE DWELLING LAW

• N/A

# NYC HOUSING AND MAINTENANCE CODE

#### **Definitions**

- Family HMC §27-2004.4
- Private Dwelling HMC §27-2004.6

#### Water Closets

- Location HMC §27-2063, 2069
- Size HMC §27-2064
- Ventilation HMC §27-2065

# FIRE CODE

#### Fire Department Vehicle Access (FC Chapter 5, FAQ Clarifications)

- Main front entrance is located within 30 linear feet of public street, otherwise FDNYfire apparatus access road to be provided – FC §502.1, §503.2.3.3, §503.2.4
- Public street is more than 34' wide curb to curb, otherwise with full sprinklers in the building – FC §503.3.2 and 503.2.10
- Dead-end public street is within 150 linear feet without an FDNY turnaround, otherwise fully sprinkler the building – FC §503.2.9 and 503.3.1

# **BUILDING CODE**

#### **"Big" Alterations**

 Work that increases existing floor surface area of a prior code building by more than 110% to comply with 2014 Construction Codes – AC §28-101.4.5

# Frontage Space

- 8% of building perimeter adjoins street or frontage space BC §501.3.1 and 502.1
- Frontage space at a minimum of size 30' x 30' accessed by 20' wide driveway BC §502.1

# Flood Hazard Area (BC Appendix G)

- Applicant certification of A-Zone / V-Zone / Floodway Encroachment
- Lowest Floor Elevation progress inspection checked on TR1
- Flood Zone Compliance special inspection checked on TR1
- Raising and moving of a Building special inspection checked on TR1
- Elevation certificate utilizing FEMA Form 086-0-33
- Construction requirements of A-Zone / V-Zone BC §G304.1.1, G304.2
- Automatic backwater valve BC <u>G501</u>, Item 7.3.3 and Item 7.3.4, PC <u>715</u>

# Egress (BC Chapter 10)

- Emergency escape and rescue openings BC §1029
- Minimum 20 inches for stairway width when inclined platform lift installed Exception 4, BC §1009.1

# Sprinkler (BC Chapter 9, NFPA 13/13R/13D Standards)

- Hydrant flow test letter from NYC Department of Environmental Protection BC §903.1.2(5)
- Location of incoming service, curb box valve, sprinkler alarm, floor control valves, inspector test tee – BC §903.1.2, 903.3.1
- Sizes for riser and branch piping BC §903.1.2, §903.3.1
- Backflow prevention for new sprinkler service BC §903.3.5
- 20 sprinkler head limit if off domestic service BC §903.3.5.1.1, §903.3.1
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Sprinkler head spacing – BC §903.1.2, §903.3.1

#### **Fire Protection**

- Height and area limitations BC <u>Table 503</u>
- Fire separation of separate occupancies and tenancies BC <u>Table 508.4</u>
- Construction classification BC <u>Table 601</u>, <u>602</u>
- Fire rated construction details BC <u>Chapter 7</u>
- Smoke alarms BC §<u>907.2.11.1</u>
- Carbon monoxide alarms BC §908.7

#### Safeguards During Construction (BC Chapter 33)

- Protection of adjoining and neighboring property and foundations BC §<u>3304</u>, §<u>3309</u>
- Protection of public right-of-way BC §3307
- Construction fence BC §<u>3307.7</u>, §<u>3301.9.1</u>
- Sheeting, shoring and bracing of excavations exceeding 5' 0" depth BC §3304.4.1
- Storage of combustible material and equipment BC §3303.4.6

#### **Structural and Foundation**

- Foundation depth BC §<u>107.7.1</u>, BC §<u>1805</u>
- Concrete masonry units BC §2103
- Wood framing BC §2304, §2308
- Lightweight steel framing BC §2210.7
- Structural details BC §<u>107.7</u>
- Underpinning details (as applicable) BC §3309.5

#### Accessibility

Type B units for R-3 structures with four or more dwelling units – BC §1107.6.3

#### **Interior Environment**

- Natural ventilation for habitable rooms and spaces BC §1203.4
- Lighting BC §<u>1205</u>

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- Habitable room and space minimum dimensions BC §<u>1208</u>
- Attics and crawlspaces BC §<u>1209</u>

#### **Special Inspections and Progress Inspections (NYC BC Chapter 17)**

- Structural wood frame inspection BC <u>110.3.3</u>
- Wood Installation of high-loads diaphragms– BC <u>1704.6.1</u>
- Wood Installation of metal plate connected trusses BC <u>1704.6.2</u>
- Wood Installation of prefabricated I-joists BC <u>1704.6.3</u>
- Cold-formed steel BC <u>1704.3.4</u>
- Concrete special inspection BC <u>1704.4</u>
- Concrete testing when not complying with Exception 2.3 BC <u>1704.4</u>

# Mechanical Ventilation and Exhaust (NYC Mechanical Code Chapter 5)

- Minimum mechanical ventilation rates MC <u>Table 403.3</u>
- Exhaust for clothes dryers, kitchens –MC §504, §505

# Plumbing and Storm Water Drainage (NYC Plumbing Code)

- Backflow preventer for new domestic water service PC §608
- Plumbing and gas riser diagrams PC §<u>106.5</u>
- HC approval from NYC Department of Environmental Protection PC §<u>106.6.1</u>, BC <u>107.11.1</u>
- Storm water detention / retention / disposal PC §106.6.2, BC 107.11.2

#### In-ground Pools and Above-ground pools

• Swimming pools, swimming pool enclosures and safety devices – BC §3109

# **ENERGY CODES**

- See Code Notes on Energy Code
  - Professional's Statement on PW1 Section 10
- Energy Analysis on plans (REScheck / Tabular Prescriptive Values)
- Supporting documentation (window/door schedules with U/SHGC values, exterior envelope details with R values, heating system sizing, efficiency ratings and controls)
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Progress inspections

# APPLICABLE BULLETINS, DIRECTIVES, PPNS, MEMOS, RCNY

- TPPN 4/03: decks, porches, terraces, breezeways
- <u>1-RCNY 23-01</u>: accessory greenhouses
- Buildings Bulletin 2011-010: bathroom containing three fixtures in the cellar of a one- or two-family dwelling

# OTHER AGENCY APPROVALS

- Board of Standards and Appeals: Approval required if located in the bed of a mapped street
- City Planning Commission: Certification required for waterfront area or block or in some cases for special zoning districts including natural areas (i.e. NA-2)
- NYS Department of Environmental Conservation: Approval if with adjacent wetlands AC <u>28-104.9.3</u>
- NYC Department of Environmental Protection:
  - Hydrant flow test letter required for new sprinkler installation BC §903.1.2(5)
  - Approval for house connection PC 106.6.1
  - Notice to Proceed required for lot with Little 'e' designation ZR11-15, ZR 93-051, ZR93-051
- Fire Department of New York: Modification (variance) if Fire Code provisions not met
- Landmarks Preservation Commission: Approval if in Landmark District <u>TPPN</u> <u>10/1988</u> <u>1RCNY §21-01(d)</u>
- Metropolitan Transportation Authority or Port Authority of New York and New Jersey: Approval required for excavation work within 200' of transit infrastructure – BC <u>3304.3.4</u>, <u>1 RCNY 21-01(b)(4)</u>
- NYC Department of Parks and Recreation: Approval and permit required for street tree planting prior to C of O sign-off; approval required for tree removal outside of lot.