One- and Two-Family Private Residences

New Building Applications

Photo: Dante Ramirez
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 1802
- Soil percolation test (if drywell installation required)
- Initial survey BC 107.3
- Zoning exhibits, restrictive declarations, easements ZR12-10
- House connection (NYC Department of Environmental Protection) BC 107.11.1, PC 106.6.1
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 28-108
• 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 2nd 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
- 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)
ONE- AND TWO-FAMILY PRIVATE RESIDENCES
New Building Applications

- 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 FDNY-fire 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 G501, Item 7.3.3 and Item 7.3.4, PC 715

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
ONE- AND TWO-FAMILY PRIVATE RESIDENCES
New Building Applications

- Sprinkler head spacing – BC §903.1.2, §903.3.1

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

**Safeguards During Construction (BC Chapter 33)**
- Protection of adjoining and neighboring property and foundations – BC §3304, §3309
- Protection of public right-of-way – BC §3307
- Construction fence – BC §3307.7, §3301.9.1
- 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 §107.7.1, BC §1805
- Concrete masonry units – BC §2103
- Wood framing – BC §2304, §2308
- Lightweight steel framing – BC §2210.7
- Structural details – BC §107.7
- 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 §1205
• Habitable room and space minimum dimensions – BC §1208
• Attics and crawlspace – BC §1209

Special Inspections and Progress Inspections (NYC BC Chapter 17)
• Structural wood frame inspection – BC 110.3.3
• Wood – Installation of high-loads diaphragms – BC 1704.6.1
• Wood – Installation of metal plate connected trusses – BC 1704.6.2
• Wood – Installation of prefabricated I-joists – BC 1704.6.3
• Cold-formed steel – BC 1704.3.4
• Concrete special inspection – BC 1704.4
• Concrete testing when not complying with Exception 2.3 – BC 1704.4

Mechanical Ventilation and Exhaust (NYC Mechanical Code Chapter 5)
• Minimum mechanical ventilation rates – MC Table 403.3
• 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 §106.5
• HC approval from NYC Department of Environmental Protection – PC §106.6.1, BC 107.11.1
• 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)
ONE- AND TWO-FAMILY PRIVATE RESIDENCES
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- Progress inspections

**APPLICABLE BULLETINS, DIRECTIVES, PPNS, MEMOS, RCNY**

- **TPPN 4/03**: decks, porches, terraces, breezeways
- **1-RCNY 23-01**: 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 **28-104.9.3**
- 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 **TPPN 10/1988 1RCNY §21-01(d)**
- Metropolitan Transportation Authority or Port Authority of New York and New Jersey: Approval required for excavation work within 200’ of transit infrastructure – BC **3304.3.4, 1 RCNY 21-01(b)(4)**
- 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.