NYC GREEN CODES
LEGISLATION AT A GLANCE

GCTF Proposal
Study Adaptive Strategies to Flooding

Implemented
Building Resiliency Task Force; Special Initiative for Rebuilding and Resiliency; NYC Department of City Planning zoning review process.

Summary
Following Superstorm Sandy, the Mayor and City Council asked Urban Green Council to convene a Building Resiliency Task Force to consider code and industry practice changes for new and existing buildings that would make them stronger and better able to withstand floods, as well as non-flood emergencies. The Task Force’s proposals included changes to the building code, as well as recommendations for best practices in construction and upgrading that would improve how buildings fare in flood conditions. The complete report of the BRTF is available at http://www.urbangreencouncil.org/BuildingResiliency.

The Special Initiative for Rebuilding and Resiliency, a post-Sandy project by the Mayor’s Office of Long Term Planning and Sustainability, also generated recommendations targeted to improving the resiliency of individual buildings in floods. The complete SiRR report is available at http://www.nyc.gov/html/sirr/html/report/report.shtml.

Finally, the Department of City Planning has put forward a proposed amendment to the Zoning Resolution that would encourage flood-resilient construction in flood zones. The DCP’s proposed text amendment is available at http://www.nyc.gov/html/dcp/html/flood_resiliency/index.shtml.

Recommendations

From the BRTF:

- Recommend anchoring framing to foundations and strengthening foundations and basements in existing homes
- Launch a competition to design a streetscape of attractive raised homes that fit the character and aesthetic of existing neighborhoods
- Recommend the relocation of building equipment above the flood level and follow best practices when floodproofing
- Require fire protection equipment to be raised in new construction and enhance standards for hospitals
- Allow building owners to raise telecommunications rooms and to store more fuel above the flood line
- Consider allowing zoning relief for buildings elevating to the 500-year floodplain
- Allow underground sidewalk attachments for temporary flood barriers
- Allow evacuated nonresidential buildings to maintain a single entrance/exit for emergency personnel so that flood barriers can be installed
• Mandate the use of storage batteries that supply a minimum of 8 hours of backup power to serve buildings’ fire and life safety communications systems
• Require new large critical facilities to have backup phone and data connections, and consider backup wireless fire communication systems in all other large buildings in flood zones
• Safeguard toxic materials stored in flood zones
• Require valves on building sewer lines to prevent sewage from entering the building
• Require wind- and salt-tolerant trees in waterfront areas accessible to the public, along with regular tree pruning
• Clarify construction requirements in flood zones
• Require some existing healthcare facilities to install external electrical hookups for temporary generators and boilers; recommend as best practice for other buildings, including hookups for heating and cooling
• Encourage NYC to work with industry experts to develop emergency preparedness information and instructions

From the SIRR:
• Update the New York City Building Code to reference the new FIRM elevations and to require freeboard of 1 to 2 feet above these elevations
• Install backflow preventers for sewer connections
• Seal points of entry further from floodwaters
• Safeguard toxic materials in flood zones
• Reduce restrictions on the length of cables that carry telecommunications service, allowing these cables to reach elevations above the DFE
• Revise existing provisions that restrict options for elevating critical equipment, such as limits on the size of fuel tanks located above grade
• Launch a competition to encourage development of new, cost-effective housing types to replace vulnerable stock
• Encourage existing buildings in the 100-year floodplain to adopt flood resiliency measures through an incentive program and targeted requirements
• Launch a sales tax abatement program for flood resiliency in industrial buildings
• Launch a competition to increase flood resiliency in building systems
• Clarify regulations relating to the retrofit of landmarked structures in the 100-year floodplain

From DCP:
Flood Resilience Zoning Text Amendment:
• Encourages dry-floodproofing in commercial corridors of lower-density districts
• Allows additional flexibility for the reconstruction of single- and two-family residences
• Broadens the applicability of streetscape standards
• Allows additional flexibility for mechanical systems in low density districts
• Applies relaxed parking location rules to more types of elevated single- and two-family residences
• Allows for measuring building height with respect to the latest FEMA flood elevations
• Accommodates building access from grade
• Encourages locating mechanical systems above flood levels
• Accommodates off-street parking above grade
• Accommodates flood zone restrictions on ground floor use