

## Information for Architects & Engineers

This guide is to clarify the procedures and requirements for New York State-licensed professionals (Registered Architects and Professional Engineers) performing Hurricane Sandy-related repair and reconstruction work. Please note, this guide does not contain all applicable requirements for repair and reconstruction work.

### Work That Does Not Require a Permit

Permits do not need to be obtained from the Department for certain types of work (BC 28-105.4), including removing and replacing non-fire-rated wallboards and insulation in the same locations and minor deck or porch repairs such as replacing less than 25 percent of a railing or decking. For more information, see [1 RCNY 101-14](#).

**Code Compliance.** Permit exempt work still must comply with the NYC Construction Codes as well as all other applicable laws, codes and rules, and permits may still be required by other agencies, i.e. the Landmarks Preservation Commission, Department of City Planning or the New York State Department of Environmental Conservation.

**Costs.** In special flood hazard areas, the cost of any permit exempt work must still be calculated into the substantial damage/substantial improvement calculations in the Flood Zones section below.

### Waiver of Permit and Emergency Work Fees

In the aftermath of Hurricane Sandy, Mayor Bloomberg signed an executive order waiving certain fees for repair work to buildings damaged by Hurricane Sandy. Buildings tagged with red placards in need of demolition, alterations or reconstruction will have all their repair work fees waived and all other buildings damaged by the storm will have their fees for electrical and plumbing repair work waived. Additionally, expedited filing is available for certain types of emergency and restoration work. Please visit the Department's website at [www.nyc.gov/buildings](http://www.nyc.gov/buildings) for more information.

### Zoning

Many buildings damaged by Hurricane Sandy were constructed prior to today's zoning regulations and were deemed lawfully "noncomplying" before Hurricane Sandy in accordance with Article V, Chapter IV of the Zoning Resolution. Under this provision, reconstruction of "noncomplying" buildings is allowed under certain circumstances, even when 100% of the structure has been destroyed. For more information, see ZR 54-00.

In order to utilize this provision and reconstruct "noncomplying" buildings, permits must be issued by the Department within two years of the storm and work must be carried on diligently thereafter.

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In cases where reconstruction is allowed but TPPN 1/02 requires the application to be filed as a new building application, the applicant should file as a new building in most cases and indicate in the notes section of Schedule A that the new building is being reconstructed in accordance with ZR 54-00.

### Flood Zones

**Location Identification.** Applicants must state in all applications whether the proposed work is located in a special flood hazard area (BC 28-104.9.2 aka Local Law 21 of 2009). This usually must be indicated in question 20 in the PW1 form. If applicants are not required to answer this question, then they must include a statement in the construction documents. In either case, the applicant must include a copy of the [FEMA Flood Insurance Rate Map \(“FIRM”\)](#), identify the location of the property on the map and identify whether the building is located in an A-zone or V-zone on the map.

*Note: The City’s Evacuation “Zone A” boundaries do not coordinate with FEMA’s “A-zone.”*

**Substantially Damaged/Substantial Improvements.** Any building classified as substantially damaged or as a substantial improvement must be elevated/reconstructed to fully comply with the flood zone regulations for new buildings in Appendix G of the 2008 Building Code. For residential buildings, this includes elevating the habitable spaces and filling in the basement or cellar.

*Note: Even if the building is allowed to be repaired or reconstructed under the 1938 or 1968 building codes, all aspects of the work must comply with all the provisions in Appendix G (per BC 28-104.9.4 aka Local Law 21 of 2009).*

Every alteration application in a special flood hazard area that is not classified as substantially damaged or as a substantial improvement, and has an estimated cost of over \$40,000, must include calculations of buildings’ market value and relevant documentation. For more information, see [1 RCNY 3606-01](#), [FEMA’s Substantial Improvement/Substantial Damage Desk Reference](#) and/or FEMA’s [Substantial Damage Estimator Tool](#).

These buildings must provide two estimated cost calculations in their applications:

- 1) Substantial Damage: The applicant must compare the construction costs to restore the building to its pre-Hurricane Sandy condition, even if the owner does not intend to do so, **to** the market value of the building prior to Hurricane Sandy (calculated per 1 RCNY 3606-01).
  - If the cost to restore the building equals or exceeds 50 percent of the market value of the building, then the building **MUST** comply with the a flood zone

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regulations for new buildings in Appendix G, even if the owner does not want to restore the building to its prior condition.

- 2) Substantial Improvement: The applicant must compare the cumulative construction cost of the alteration work, regardless of the time necessary to complete the work, and all other alterations and repairs during this timeframe, **to** the market value of the building prior to Hurricane Sandy (calculated per 1 RCNY 3606-01).
  - If the cumulative construction costs equal or exceed 50 percent of the market value of the building, then the building **MUST** comply with the flood zone regulations for new buildings in Appendix G, even if the owner does not want to elevate the building.

**Increased Compliance Cost Coverage.** FEMA and/or insurance companies may require owners to produce a certification from the City stating the building was substantially damaged by Hurricane Sandy. This typically allows the insurer to provide an additional payout to help cover costs to elevate, relocate and/or demolish the building. For more information, see FEMA's [Increased Cost of Compliance Coverage](#). In order to obtain such a statement from the Department, the applicant must submit signed and sealed calculations in accordance with 1 RCNY 3606-01 certifying there was substantial damage to the building to the Department. After the Department has reviewed the calculations, the Department Borough Commissioner will provide a letter stating that the building was substantially damaged.

**Other Than Substantially Damaged/Substantial Improvement.** Buildings not classified as substantially damaged or as a substantial improvement, are not required to elevate/reconstruct the entire building in accordance with the flood zone regulations for new buildings in Appendix G. However, the Department strongly recommends that licensed design professional counsel their clients to comply with these regulations as well as relocate essential equipment and electrical panels above flood levels wherever possible.

Even though buildings not classified as substantially damaged or a substantial improvement do not have to comply with the flood zone regulations for new buildings, there are still some code requirements that alteration and repair work to storm-damaged buildings must comply with. All alterations and repair work must comply with Appendix G of the 2008 Building Code even if the building is allowed to be repaired or reconstructed under the 1938 or 1968 building codes (BC 28-104.9.4 aka Local Law 21 of 2009). For example:

- Appendix G, Section 102.9, Item 9: Allows equipment or finishes of the same types in the same locations to be replaced, but does not allow for an increase in

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the degree of noncompliance with Appendix G. In this case, the licensed design professional is urged to counsel the owner to improve the flood-resistance of the building even if not required.

**Voluntary Freeboard.** The Department strongly encourages applicants to design buildings to a higher standard than required. Besides decreasing the risk of damage in future storms, owners will also have significant savings on flood insurance premiums for each foot of freeboard (elevation height above the required Base Flood Elevation, or “BFE”).

*Note: It is anticipated that FEMA will be issuing advisory maps with new, increased Base Flood Elevation (BFE) in the coming weeks and final new Flood Insurance Rate Maps FIRMS with higher BFEs in the next year.*

### Tidal/Freshwater Wetlands & Coastal Erosion Hazard Areas

Many buildings damaged by Hurricane Sandy are in areas regulated by the New York State Department of Environmental Conservation (DEC) because they are located in or in close proximity to tidal wetlands, freshwater wetlands and/or coastal erosion hazard areas. Applicants repairing or reconstructing buildings in these areas must follow the [Operational Buildings Bulletin 2009-012](#), which outlines DEC’s permit requirements and jurisdictional determinations that must be obtained before the Department can approve any application. DEC has issued a [general permit](#) to exempt certain activities from DEC permit requirements because of Hurricane Sandy. However, these are typically limited to minor/temporary measures to stabilize structures until repairs can be made.

### City-Owned Waterfront Property/Maritime Commerce

In accordance with the NYC Charter section 643(7), most applications for buildings on City-owned waterfront land or buildings used for maritime commerce are under the jurisdiction of the Department of Small Business Services (SBS). Such applications should be filed with SBS.

### Fire Code

Many of the buildings damaged by Hurricane Sandy will need to have sprinkler systems installed when repaired or reconstruction (FC 503.8). For more information, see the [Fire Department’s FAQs](#).

Where sufficient water supply for a sprinkler system is not available from the City’s water supply, the National Fire Protection Association standard (NFPA 13, 13R or 13D) allows an as-of-right allowance for an on-site water tank to supply the needed water supply.