

Over the last year, the Department of City Planning met with you and other community members from across the floodplain to discuss strategies to make buildings resilient to flooding. We heard many of you express an interest in learning more about flood resilience more broadly. This newsletter addresses some of the most common questions.

In New York City, there are 71,500 buildings that are at risk of damage from the 1% annual chance storm. With sea level rise, this number is likely to increase. Incorporating flood resilient design into your building can reduce potential damages from flooding, and can also lower flood insurance premiums. When meeting with New Yorkers in coastal neighborhoods, some of you asked us:

How can I make my home more resilient?

Property owners can reduce their risks by retrofitting or rebuilding to full flood resilient construction standards, or can take partial, short term measures to address safety concerns. (We will cover partial mitigation measures in an upcoming newsletter.)

Flood resilient construction standards are required when you are building a new structure, your building is substantially damaged, or you make a substantial improvement to your existing building in the flood zone.

Elevating the first occupied floor above the Design Flood Elevation (DFE) is referred to as **wet floodproofing**. This allows flood waters to move

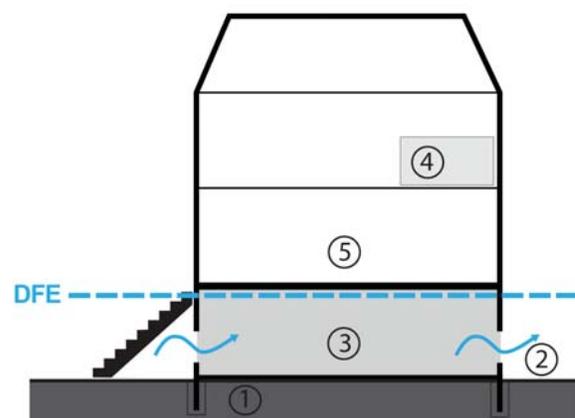
Looking for more specific examples?

Check out *Retrofitting Buildings for Flood Risk*, a report from City Planning, for a step-by-step approach to retrofitting 10 different building types that are common in NYC's floodplain.

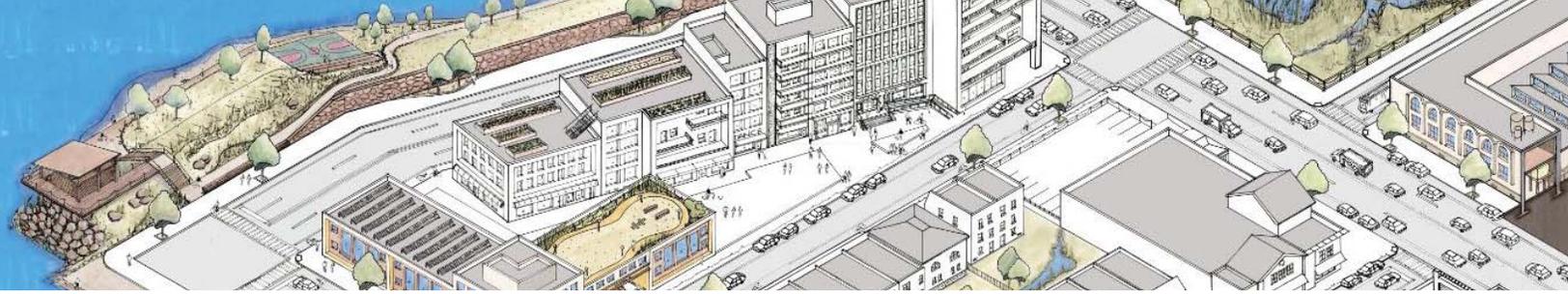
in and out of a building with minimal damage, with uses below the Design Flood Elevation (DFE) limited to parking, minor storage, and/or access.

For existing buildings that cannot be physically elevated, the building can be retrofitted by using flood-resistant materials below the DFE and installing engineered openings, also known as flood vents. Building or retrofitting your home so that the first occupied floor is above the DFE is the best way to prevent flood damage and to reduce your flood insurance premium.

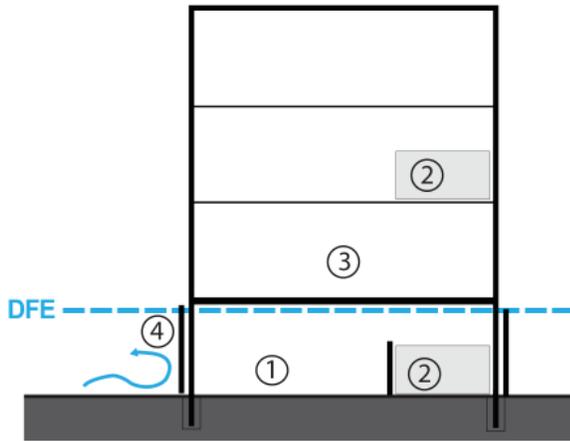
Wet Floodproofing



1. Site is filled to lowest adjacent grade
2. Flood vents allow for water to flow in/out freely
3. Use below DFE is restricted to parking, storage, and/or access
4. Mechanical systems are elevated above DFE
5. Living spaces are elevated above DFE



Dry Floodproofing



1. Spaces below DFE need to be dry floodproofed to seal the building's exterior walls to flood waters
2. Mechanical systems can be raised above, or dry floodproofed below DFE
3. Living spaces are elevated above DFE
4. Removable barriers in front of operable doors and windows can prevent water from entering

Mixed-use and non-residential buildings also have the option of **dry floodproofing**, which is a technique that seals a building's exterior walls to flood waters, and uses removable barriers at all openings below the DFE. When non-residential buildings are dry floodproofed, insurance premiums can be reduced.

Some homeowners have faced challenges to wet floodproofing their homes, beyond just the cost of making the investment, due to the loss of sub-grade space, such as a basement or cellar. Some homeowners are interested in replacing this lost sub-grade space by adding another story to their building, but may face zoning restrictions to doing so. City Planning is working to address this issue through an update to Flood Resilience Zoning. If you have tried to elevate your home or make it more resilient, but have experienced zoning or other regulatory barriers to doing so, we hope you'll share your story with us.

Why DCP developed this newsletter

Over the last year, the NYC Department of City Planning met with community members from across the floodplain to discuss strategies to make buildings resilient to flooding. At these meetings, we heard valuable input that will help shape our climate resiliency initiatives, and we are planning to release a draft proposal to update the Flood Resilience Zoning Text later this year.

We also heard many of you express an interest in learning more about flood resilience more broadly. So we've put together this newsletter to begin addressing some of the most common questions. In the coming months, you can expect to learn from this newsletter about the importance of flood insurance, the City's plans for coastal resiliency, and how zoning can promote flood-resistant building design.

We hope you'll stay engaged by sharing this newsletter with friends and colleagues, and e-mailing us ideas for future topics at: ResilientNeighborhoods@planning.nyc.gov

Did you know?

In Queens Community District 10 (Howard Beach), over 4,000 buildings in the floodplain have basements, which are highly vulnerable to flooding. Get #floodplainfacts for your neighborhood on our Community Portal at communityprofiles.planning.nyc.gov.