

What Types of Improvements?

The purpose of the Substantial Improvement requirements is to protect the property owner's investment and safety, and, over time, to reduce the total number of buildings that are exposed to flood damage, thus reducing the burden on taxpayers through the payment of disaster assistance. The Substantial Improvement requirements are triggered when the local official determines that the cost of repairing or improving a building in an special flood hazard area equals or exceeds 50 percent of the building's market value (excluding land value).

DEFINITION

2.1.38 Substantial improvement - any combination of repairs, reconstruction, alteration, or improvements to a structure taking place during the life of a structure, in which the cumulative cost equals or exceeds fifty percent (50%) of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "substantial damage", regardless of the actual repair work performed. The market value of the structure should be (1) the appraised value of the structure using the cost to approach value prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any improvement project required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

Got Questions? - Heed help?

www.NewHavenCT.gov/gov/depts/city_plan/flood.htm

Floodplain Administrator (203) 946-6378

A mere 6 inches of fast-moving flood water can knock over an adult. It takes just 12 inches of rushing water to carry away a small car, while 2 feet of rushing water can carry away most vehicles.

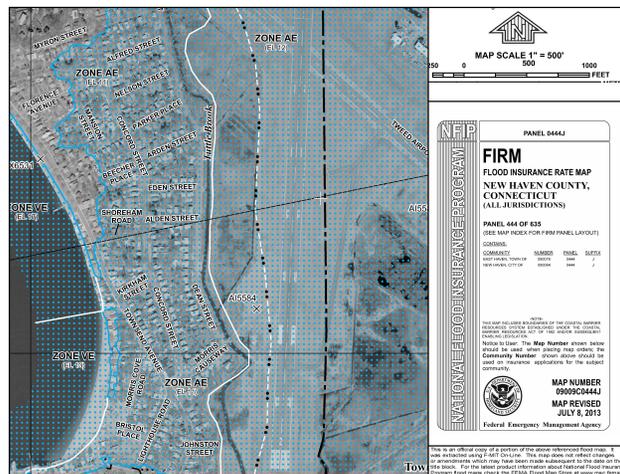
It is NEVER safe to drive or walk into flood waters.



Flood Zone Maps

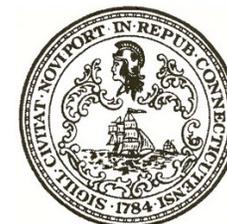
In New Haven, 1,901 acres of land are located within the 100-year flood boundary known as the Special Flood Hazard Area (SFHA). Morris Cove has particular problems with flooding because of its proximity to Morris Creek and the coast. Properties adjacent to the West River, Mill River, and Quinnipiac River and properties around New Haven Harbor are also at risk for flooding. All properties within any portion of the SFHA are regulated by the city's flood damage protection ordinance.

The City Plan Department has a copy of the Flood Insurance Rate Maps (FIRMs). However, you can also determine a structure's flood zone by entering the address at the FEMA Map Service Center: <https://msc.fema.gov/portal>. The site allows you to create a printable FIRMS Map as shown below.



- If your property is in a **Special Flood Hazard Area (SFHA)**, there is at least a one in four chance of flooding during a 30-year mortgage.
- Flood insurance is mandatory for federally backed mortgages on buildings located in a SFHA. There is a 30-day waiting period before coverage goes into effect, so don't delay.
- Nearly **20 percent** of flood insurance claims come from areas that are not in a Special Flood Hazard Area (SFHA). Take advantage of a preferred risk policy.
- A shallow flood that is only a few inches deep in your house could cause thousands of dollars in damage. Find out how much a flood could cost.

SUBSTANTIAL IMPROVEMENT AND SUBSTANTIAL DAMAGE



What is it?
What's Included?
What's Excluded?
Why is it Necessary?
What is the 50% Rule?

The City of New Haven participates in the National Flood Insurance Program (NFIP), managed by the Federal Emergency Management Agency (FEMA).



Structures built before the NFIP was available (1974 and earlier) were grand-fathered into the program as they stood back then. However, when renovating, if the value of improvements equals or exceeds 50% of the building's market value, certain changes are required to limit future flood damage.

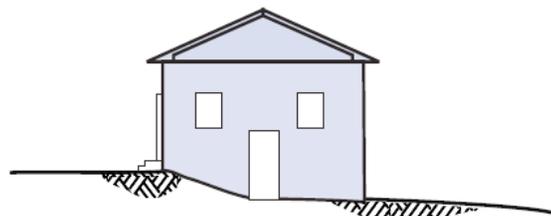
FEMA sets guidelines for what costs the City must consider when determining the value of improvements and what costs are exempt. You'll find a list of both inside this brochure.

Planning to Improve Your Floodplain Building?

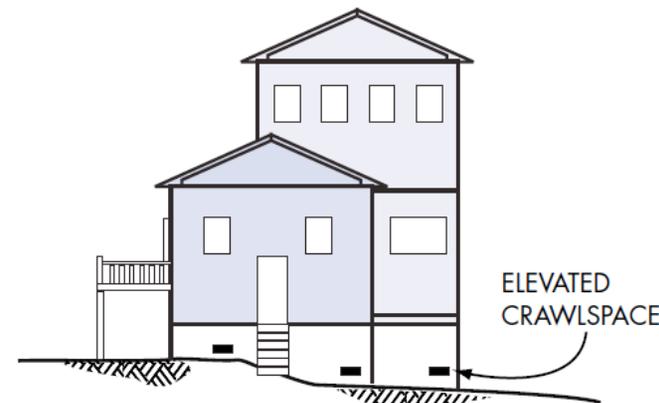
Included Costs:

Costs of improvement and repair are those directly associated with the building. The following list is not exhaustive, but characterizes the types of costs that must be included:

Materials and labor, including the estimated value of donated or discounted materials and owner or volunteer labor. Must include sales taxes on materials
Demolition and site preparation related to the improvement or repair (e.g., foundation excavation or filling in basements)
Labor and other costs associated with demolishing, moving, or altering building components to accommodate improvements, additions, and making repairs
Costs associated with complying with any other regulations or code requirement that is triggered by the work, including costs to comply with the requirements of the Americans with Disabilities Act (ADA)
Costs associated with elevating a structure when the proposed elevation is lower than the FEMA determined flood level known as the Base Flood Elevation (*BFE)
Construction management and supervision, including Contractor's overhead and profit
Structural elements and exterior finishes, including Foundations
Monolithic or other types of concrete slabs
Bearing walls, tie beams, trusses, joists, beams, sub-flooring, framing, ceilings, and non-bearing walls
Exterior finishes (e.g., brick, stucco, siding, painting, and trim) and all insulation
Windows, exterior doors and all hardware
Roofing, gutters, and downspouts
Attached decks and porches
Interior finish elements, including: Floor finishes (e.g., hardwood, ceramic, vinyl, linoleum, stone, and wall-to-wall carpet over sub-flooring)
Bathroom tiling and fixtures
Wall finishes (e.g., drywall, paint, stucco, plaster, paneling, and marble)
Built-in cabinets, bookcases, and furniture (e.g., kitchen, utility, entertainment, storage, and bathroom)
Interior doors and interior finish carpentry
HVAC, plumbing, electrical labor, fixtures, and equipment
Built-in appliances, including central vacuum systems



Before Improvements



After Improvements

Self or Volunteer Labor:

Where non-reimbursed (volunteer) labor is involved, the value of the labor **MUST** be estimated based on applicable minimum hourly wage scales for the type of construction work to be completed.

The value placed on materials should be equal to the actual or estimated labor charge for repairs of all damages sustained by the structure.

The Building Official, based on his professional judgment and knowledge of local and regional wage scales can provide additional guidance to determine reasonable labor rates for professional trades (i.e. electricians, plumbers, block masons, framing, HVAC, etc.)

Excluded Costs:

Clean-up and trash removal, Dirt & mud removal.
Costs to temporarily stabilize a building so that is safe to enter to evaluate and identify required repairs
Costs to obtain or prepare plans, surveys and specifications
Docks, seawalls, driveways
Permit fees and inspection fees
Carpeting and re-carpeting installed over finished flooring such as wood or tiling
Outside improvements, including: landscaping, irrigation, sidewalks, driveways, fences, yard lights, swimming pools, pool enclosures, and detached accessory structures (e.g., garages, sheds, and gazebos)
Costs required for the minimum necessary work to correct existing violations of health, safety, and sanitary codes
Plug-in appliances such as refrigerators washing machines, dryers, and stoves

Donated or Discounted Materials:

Where materials or servicing equipment are donated or discounted below normal market values, the value should be adjusted to an amount equivalent to that estimated through normal market transaction.

DEFINITION

2.1.37 Substantial damage - damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred. "Substantial damage" also means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

Disaster Loans:

Disaster recovery loans may be available to homeowners and business following a formal disaster declaration by the President. For more information, contact FEMA (fema.gov) or the U.S. Small Business Administration (sba.gov).

FYI: Many hurricane victims are injured or killed **AFTER** the storm. Have all electrical systems in damaged structures inspected by a licensed electrician to prevent electrocution.

