

Flood, Sweat, and Tears: Substantial Improvement and Substantial Damage under the NFIP

The National Flood Insurance Program (NFIP) underwrites flood insurance coverage only in communities that adopt and enforce floodplain regulations that meet or exceed NFIP criteria. Among these criteria are “substantial improvement” and “substantial damage” requirements. Substantial improvement is defined as any reconstruction, rehabilitation, addition, or other improvement of a structure whose cost equals or exceeds 50 percent of the structure’s market value before the improvement occurred. Substantial damage is damage of any origin sustained by a structure whose cost to restore would equal or exceed 50 percent of its market value before the damage occurred. Enforcing these requirements can be tricky for local officials who are responsible for issuing or denying permits in compliance with their flood hazard regulations.

According to the Federal Emergency Management Agency (FEMA) community status book report, 228 Vermont cities and towns participate in the NFIP. These communities should all have in effect flood hazard regulations that ensure new buildings will be protected from the flood levels shown on their Flood Insurance Rate Maps (FIRMs) and that new development will not make the flood hazard worse.

But what happens when a property owner wants to make an improvement, such as an addition, to a building built in a flood prone area before the community’s floodplain regulations and FIRMs were established? What if a so-called “pre-FIRM” building is damaged by a fire, flood, or other cause? The basic rule is this: If the cost of improvements or damage repair exceeds 50 percent of the market value of the building, it must be brought up to current floodplain management standards. In other words, a structure that is substantially damaged or otherwise substantially improved must be elevated (or flood-proofed if it is a non-residential structure) to or above the base flood elevation (BFE) and meet other requirements for new construction in the local zoning bylaw or stand-alone flood hazard ordinance. In lieu of elevating the structure, it can be physically moved out of the flood-prone area identified on the FIRM.

Pre-FIRM and Post-FIRM buildings

Buildings that were already present at the time a community adopted a flood hazard ordinance and a FIRM are referred to as “pre-FIRM.” The flood insurance premiums for pre-FIRM buildings are subsidized by the NFIP. Owners of these policies do not pay “actuarial” rates, i.e., rates based on the true risk the building is exposed to.

Substantial improvement and substantial damage usually only apply to pre-FIRM buildings because in most cases post-FIRM buildings will be properly elevated or otherwise compliant with the regulations for new construction. However, if a FIRM map change results in a higher BFE or change in FIRM flood zone, substantial improvements or substantial damage will require that affected buildings be elevated (or flood-proofed for non-residential structures) to protect them from the new, higher regulatory BFE.

Additions to a post-FIRM building must be elevated at least as high as the BFE in effect when the building was built. If a new, higher BFE has been adopted since the building was built, additions that are substantial improvements must be elevated to the new BFE.

Cost of the Project

The formula for determining substantial improvement and substantial damage is based on the cost of the project and the value of the building. These two numbers must be reviewed in detail.

The cost of a project includes all structural costs including material, labor, built-in appliances, overhead and profit. The formulas apply to the cost *to* repair or improve, not the cost *of* repairs or improvements. For example, the owner may not opt to pay for all the items needed by doing some of the work, obtaining materials and/or labor for free, or deciding not to do some of the repairs. Substantial damage and substantial improvement are determined regardless of the actual cost to the owner. It is figured based on the true cost of bringing the building back to its pre-damage condition or the new improved value using qualified labor and materials obtained at market prices.

Costs related to plans and specifications, surveying, permit fees, emergency repairs for health and safety reasons and repairs outside the building – such as driveways, fencing, and landscaping – are not counted toward the cost of improvement or repairs. FEMA has several resources to help local officials determine substantial damage. They can be found in the FEMA library online at www.fema.gov/library.

Market value

We usually count on market value to be the price a willing buyer and seller agree upon. However, when determining substantial improvement and substantial damage, market value pertains only to the structure in question; the value of the land on which the structure lies is not considered. Any value resulting from the location of the property is attributed to the value of the land, not the building. The adage that the three fundamentals of real estate are location, location, location does not apply here.

Acceptable estimates of market value can be obtained from various sources, such as an independent, professional appraisal; replacement cost minus depreciation; adjusted tax assessments; and local building department staff. More than one source should be used, and they should be compared for accuracy.

Exceptions

There are two possible exemptions to the substantial improvement and substantial damage requirements. Under specific circumstances, improvements to correct code violations do not have to be included in the cost of an improvement or repair project. Additionally, historic structures may be exempted from NFIP elevation or flood-proofing requirements as long as the exemption is included in the community's definition of substantial improvement. The community can also opt to grant the exemption through a variance procedure. Communities should still encourage protection measures to reduce the flood damage potential to historic buildings, such as locating the mechanical and electrical equipment above the BFE and elevating the lowest floor of an addition with the change in floor elevation disguised externally.

Flood Insurance Rates

As noted above, the flood insurance premiums for buildings that were already present at the time a community adopted a flood hazard ordinance and a FIRM do not reflect the actual risk the buildings are exposed to. However, whether a building is pre-FIRM or post-FIRM, with flood insurance, owners of flood-prone properties pay more of their share toward flood relief. If a structure is substantially damaged or otherwise substantially improved, it becomes a post-FIRM building and is actuarially rated based on its risk of flooding. The rate is established based on the

elevation of the building's lowest floor in relation to the BFE. Post-FIRM rates and premiums are significantly higher than pre-FIRM rates and premiums. In situations where substantially damaged or substantially improved buildings have their lowest floor below the base flood elevation, the annual premium could increase to thousands of dollars – up to amounts as high as \$25 for \$100 of insurance coverage!

Increased Cost of Compliance

In 1997, the NFIP began offering additional coverage to all holders of structural flood insurance. This coverage is called Increased Cost of Compliance, or ICC. In addition to covering the repairs to the flooded building, ICC will pay up to \$30,000 to help cover the cost of meeting the ordinance's requirement to elevate. Claims must be accompanied by a substantial damage determination by the floodplain ordinance administrator. An ICC claim can be paid on a building that has been flooded repetitively as long as there have been two or more claims averaging 25 percent or more of the building's value within a ten-year period. In order to trigger ICC for repetitively damaged buildings, the community must include in its ordinance a definition of repetitive loss and incorporate the term in its definition of substantial damage.

Cumulative Improvement

A common problem when determining substantial improvement occurs when a builder trying to avoid the requirement applies for a permit for only part of the job, and then later applies for another permit to finish the work. If both applications are together worth more than 50 percent of the building, FEMA requires that the entire improvement be counted as one, and the combined project should be considered a substantial improvement subject to the rules. Some communities require that improvements be calculated cumulatively over several years – for example, over a period of five years, ten years, or the life of the structure. When the cost of the improvements totals 50 percent of the market value, the building must be brought into compliance as if it were new construction.

According to Paul Belaski, Windsor's Zoning Administrator, enforcing cumulative improvement calculated over several years can be especially difficult for towns that do not require permits for interior renovations. Most often, the local zoning administrator has no reason to know about a kitchen or bathroom renovation, or a downstairs den conversion into a multimedia family room with a bar. Drawing the line between improvements and maintenance can be a difficult task, to say the least. For example, would new paint or wallpaper, replacing a linoleum floor with slate tile, window and door replacements (the list goes on) be considered cumulative improvements or regular maintenance? Belaski says that making these decisions requires a balance between personal privacy and enforcement, with education as the nexus.

Administration/Local Government's Role

It is easy to see why the substantial improvement and substantial damage requirements can be difficult to administer and pose an ongoing challenge to town floodplain ordinance administrators. People who own existing buildings that are being substantially improved or repaired will be required to make a major investment in order to bring them into compliance with the law. ICC availability and the threat of increased flood insurance premiums can help convince reluctant property owners to elevate above the BFE.

FEMA monitors communities enrolled in the NFIP to ensure that they have adopted an ordinance that meets or exceeds the minimum NFIP floodplain management criteria and verifies that they are effectively enforcing their ordinance. Ultimately, however, it is the responsibility of the

town's floodplain ordinance administrator to enforce the local flood hazard regulations. Included in this responsibly is the duty of making substantial improvement and substantial damage determinations and assuring that the market value estimates are reasonably accurate and cost estimates reasonably reflect the actual costs of improvement or fully repairing the damage. This can be made simpler by stipulating that permit applicants supply the information necessary to make those decisions, such as appraisals and construction cost estimates, and by developing an appeals process for disagreements.

If communities do not adequately enforce their floodplain management regulations by allowing improper improvements within the flood-prone areas identified on their FIRMs, they can be placed on probation and potentially suspended from the flood insurance program. All policyholders in a sanctioned community pay a surcharge fee in addition to their regular annual premiums until the town acts to correct the deficiencies and returns to good standing with the NFIP. Should the town fail to be reinstated, policies are cancelled, leaving at-risk floodplain residents and businesses without flood insurance. Substantial improvement and substantial damage requirements, however difficult they may seem, offer a one-time opportunity for the local regulatory program to reduce future damage to buildings that existed in flood-prone areas before the community's flood hazard regulations and FIRMs were established.

If you have any questions, please contact Milly Archer, CFM, Water Quality Coordinator, VLCT Municipal Assistance Center at marcher@vlct.org or 800-649-3759 or the Vermont Agency of Natural Resources at ANR.Floodplains@state.vt.us or 802-241-3759.

Milly Archer
VLCT Water Quality Coordinator

Sidebar:

Milly Archer was recently awarded a Certified Floodplain Manager (CFM) designation by the Association of State Floodplain Managers (ASFPM).

The primary goal of the ASFPM Certified Floodplain Manager Program is to help reduce the nation's flood losses and protect and enhance the natural resources and functions of its floodplains by improving the knowledge and abilities of floodplain managers in the United States.

Congratulations, Milly!

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