



National Flood Insurance Program Administered by FEMA

Substantial Improvement and Substantial Damage

Definition Of Substantial Improvement...

Any reconstruction, rehabilitation, addition, or other improvements of a structure, the cost of which **equals or exceeds 50%** of the market value of the structure before the "start of construction" of the improvement.

...Definition of Substantial Improvement

This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed.

Definition of Substantial Damage...

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition...



...Definition of Substantial Damage

...would equal or exceed 50% of the market value of the structure before the damage occurred.

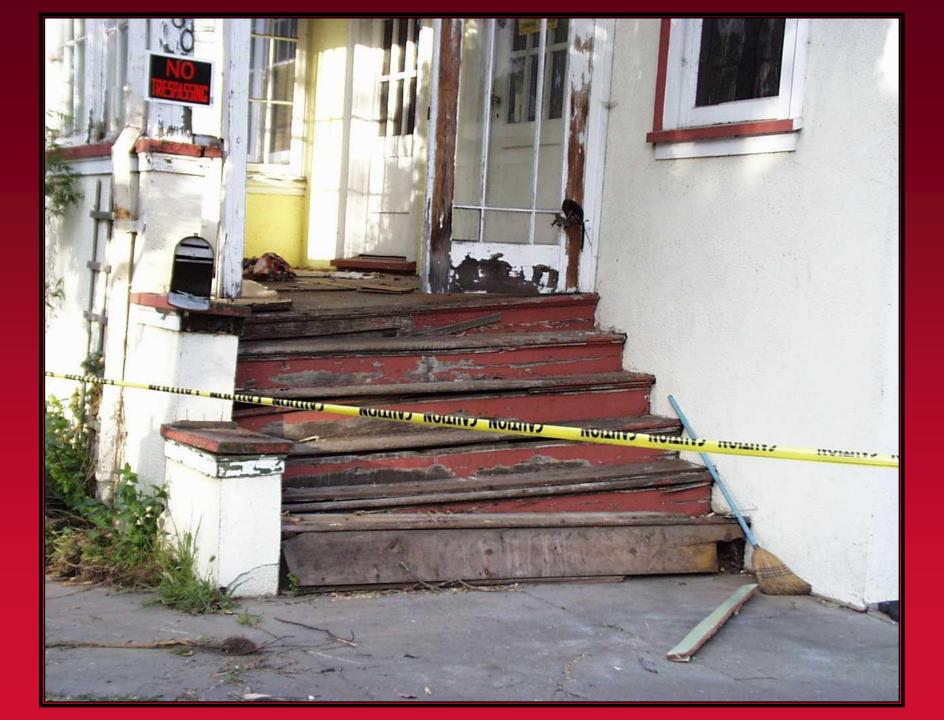






Substantial Improvement or Damage Does Not Include...

Any project for improvement of a structure to correct **existing violations** of state or local health, sanitary, or safety codes which have been **pre-identified** by the local code enforcement official and which are the minimum necessary to assure safe living conditions or...



...Substantial Improvement or Damage Does Not Include



Any alteration of an "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Requirements for Substantial Improvement...

Substantially improved structures are considered **NEW CONSTRUCTION** and must meet all of the minimum building standards of the NFIP.

...Requirements for Substantial Improvement

Must elevate (or floodproof) and meet other applicable program requirements!

Note: Only non-residential structures may be dry-floodproofed in lieu of elevation.

If the Structure is Substantially Damaged

- It automatically becomes a substantial improvement & must be elevated (or "dry" floodproofed) to or above the BFE
- It must meet other applicable program requirements

Other Program Requirements

Foundation Openings

Flood Resistant Materials Below the BFE

Utilities Elevated or Protected

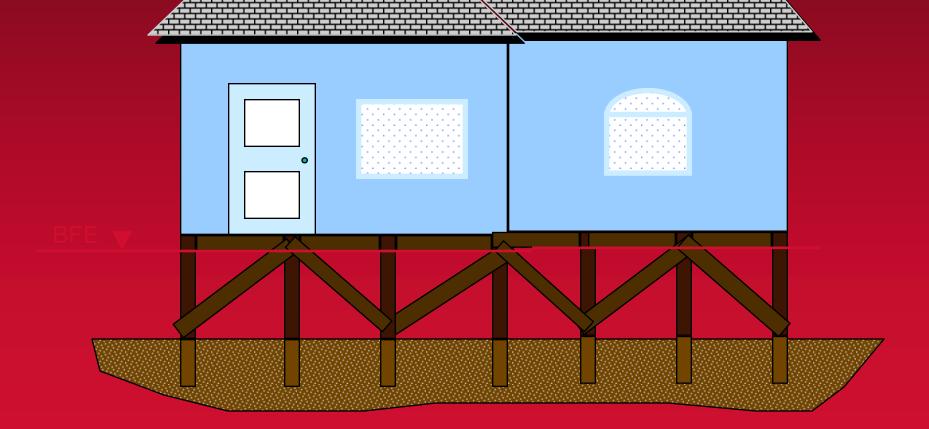
Foundation is Anchored

A Note About Additions to Post-FIRM Structures

Whether substantially improved or not, all lateral additions to Post-FIRM structures located in the SFHA MUST BE ELEVATED OR **FLOODPROOFED TO OR ABOVE THE BASE FLOOD ELEVATION!**

Lateral Addition to Post-FIRM Residential Structure

Existing Post-FIRM Residential Structure



COMMUNITY RESPONSIBILITY

MUST ASSURE:



 Accuracy of improvement cost or actual repair/ damage value

Consistent market value estimates

Improvement Cost Excludable Items...

- Existing and pre-identified violations of state or local health, sanitary or safety codes
- Specifications
- Surveys
- Building Permits



...Improvement Cost Excludable Items

- Septic Systems
- Wells/Water Supplies
- Landscaping
- Other items separate from or incidental to the improvement

Estimation Methods...

"Improvement Cost and/or "Damage Value" can be determined in many ways:

Itemized estimates from licensed contractors or professional estimators

Damage estimates from NFIP claims data

... Estimation Methods

- Local officials with knowledge of local costs can make "qualified estimates"
- Marshall and Swift
- Standard Building Code Mean Construction Cost Data
- Building Inspection Departments

... Estimation Methods

Emergency Management Agencies

Tax Assessment

Damage assessment field surveys

Other State or Local Agencies

Determining "Market Value"...

Acceptable Methods for determining "Market Value" include:

 Independent appraisals by a professional appraiser

 Detailed estimates of the structure's actual Cash-Value



... Determining "Market Value"

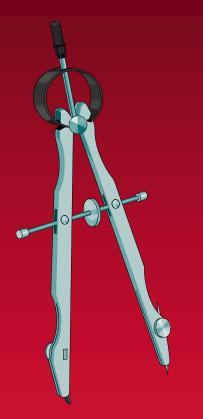
Adjusted property appraisals used for tax assessment

Value of structure from NFIP claims data

Qualified estimates from tax assessor's or building department's staff Replacement Cost vs. Market Value

- Replacement Cost <u>does not equal</u> Market Value
- Replacement cost may be used to estimate market value only if depreciated

Precision



As the ratio approaches 50%, greater precision is necessary on the part of the community permit official.

A Note About Appraisals

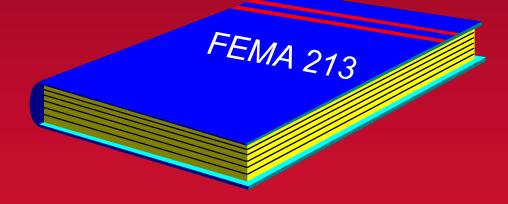
- Many individuals planning extensive improvements are required to obtain a certified appraisal for a construction loan
- Consider asking the applicant to obtain the appraisal "up-front" so you can make your substantial improvement evaluation before issuing the permit

Recommendations

- Adopt a conservative method for determining market value and APPLY IT CONSISTENTLY
- If the applicant objects to your market value estimate, then give them the option of providing a certified appraisal
- Always review appraisals for "reasonableness"

FEMA Technical Reference

"Answers to Questions About Substantially Damaged Buildings", FEMA-213, May 1991



FEMA Technical Reference

"Guidance on Estimating Substantial Damage; Using the NFIP Residential Substantial Damage Estimator", FEMA-311, December 1998