



## SUBSTANTIAL IMPROVEMENT AND SUBSTANTIAL DAMAGE DETERMINATION GUIDELINES

### A. SUBSTANTIAL IMPROVEMENT

**44 CFR 59.1. Definitions:** *“Substantial improvement” means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement.*

This section provides information on determining whether a building has been substantially improved and on what NFIP requirements apply.

#### Projects Affected

All building improvement projects that require a permit will be considered. These include:

- Building alteration as defined in the California Building Code,
- Building addition, and
- Repair and reconstruction projects (these are addressed in more detail in Section B on substantial damage).

#### The Formula

A project is a substantial improvement if:

$$\frac{\text{Cost of improvement project}}{\text{Market value of the building}} \geq 50 \text{ percent}$$

#### Project Cost

The cost of the project means all structural costs, including:

- All materials
- Labor
- Built-in appliances
- Overhead
- Profit
- Repairs made to damaged parts of the building worked on at the same time

Detailed cost estimates for the project can be obtained from a licensed contractor.

#### Market Value

The cost of the structure in question. It does not pertain to the land, landscaping or detached accessory structures on the property. Acceptable estimates of market value can be obtained from a professional appraiser, property values used for tax assessment purposes, or the value of buildings taken from NFIP claims data.

**Items to be included**

- All structural elements as follows:
  - Spread or continuous foundation, footing, and pilings,
  - Monolithic or other types of concrete slabs,
  - Bearing walls, tie beams and trusses,
  - Floors and ceilings,
  - Attached decks and porches,
  - Interior partitions walls,
  - Exterior wall finishes (brick, stucco, siding) including painting and moldings,
  - Windows and doors,
  - Re-shingling or retiling a roof,
  - Hardware,
  - All interior finishing elements:
    - Tiling, linoleum, stone, or carpet over subflooring,
    - Bathroom tiling and fixtures,
    - Wall finishes (drywall, painting, stucco, plaster, paneling, marble, etc.),
    - Kitchen, utility, and bathroom cabinets,
    - Built-in bookcases, cabinets, and furniture,
    - Hardware,
  - All utility and service equipment, including:
    - HVAC equipment,
    - Plumbing and electrical services,
    - Light fixtures and ceiling fans,
    - Security systems,
    - Built-in kitchen appliances,
    - Central vacuum systems,
    - Water filtration, conditioning, or recirculation systems,
  - Cost of demolish storm-damaged building components,
  - Labor and other costs associated with moving or altering undamaged building components to accommodate improvements or additions, and
  - Overhead and profits.

**Items to be excluded**

- Plans and specifications,
- Survey costs,
- Permit fees,
- Post-storm debris removal and clean up,
- Outside improvements, including:
  - Landscaping,
  - Sidewalks,
  - Fences,
  - Yard lights,
  - Swimming pools,
  - Screened pool enclosures,
  - Detached structures (including garages, sheds, and gazebos), and
  - Landscape irrigation systems.

## **B. SUBSTANTIAL DAMAGE**

**44 CFR 59.1. Definitions:** *“Substantial damage” means damage of an origin sustained by a structure whereby the cost of restoring the structure to its before damages condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.*

This section provides information on determining whether a building has been substantially damaged and on what NFIP requirements apply.

### **Projects Affected**

All buildings in a flood hazard area, regardless of whether the building was covered by floor insurance. These include damage caused by:

- Flood,
- Fire,
- Earthquake,
- Wind,
- Rain, and
- Other natural or human-induced hazard.

### **The Formula**

A project is a substantial damage if:

$$\frac{\text{Cost of repair}}{\text{Market value of the building}} \geq 50 \text{ percent}$$

### **Cost to repair**

The cost of repair means all structural costs, including:

- All materials
- Labor
- Built-in appliances
- Overhead
- Profit
- Repairs made to damaged parts of the building worked on at the same time

Detailed cost estimates for the repair can be obtained from a licensed contractor.

### **Market Value**

The cost of the structure in question. It does not pertain to the land, landscaping or detached accessory structures on the property. Acceptable estimates of market value can be obtained from a professional appraiser, property values used for tax assessment purposes, or the value of buildings taken from NFIP claims data and include items for market value determination in substantial improvement.