
SUBSTANTIAL IMPROVEMENT

General Discussion

The following discussion addresses several of the issues surrounding the NFIP regulations concerning substantial improvement and substantial damage. The attached *Notice to Property Owners*, adapted from a Dare County form, should be used by local governments for both non-disaster related structural improvements and in post-disaster damage situations.

Substantial Damage: Pre-FIRM buildings must be elevated if damaged by any cause for which repair costs are 50% or more of the value of the building. The damage can be incurred from **any** cause, including: flooding; fire; earthquake; wind; rain; or, man. The substantial damage rule applies to all buildings in a flood hazard area, regardless of whether the building has flood insurance. The costs to repair the structure must be calculated for full repair to before-damage condition, even if the owner elects to do less. The total costs to repair include both structural and finish materials, and labor.

Substantial Improvement: When a pre-FIRM building is proposed to be remodeled, renovated, rehabilitated, added to, or in any way improved, the proposed modifications must be evaluated for "substantial improvement". If the total costs of improvement are 50% or more of the building value, the building must be elevated. "Total costs" means all structural costs, as well as all finish materials, built-in appliances, hardware, profit, and overhead.

Building Value: Building value = market value of the structure only. Land and exterior improvements are excluded, e.g., swimming pool, pool enclosure, landscaping, paving. Market value = assessed value or properly depreciated appraised building value. The assessed value may be adjusted upward to reflect the market more accurately. Replacement cost can only be used if properly depreciated. Certified appraisals must be based on the comparable sales method. The land value must be deducted and it must be equal to or greater than that established by the County Assessor. The building value must be fairly depreciated to reflect the age of the building and the deterioration of building components.

Costs to Be Included: The construction costs to be calculated for both substantial damage and improvement include both structural and finish labor and materials. This includes lighting fixtures, built-in appliances, interior moldings, paneling, tiling, wall-to-wall carpet over subflooring, built-in cabinets, etc. The cost to demolish undamaged building components must be established and included. Overhead and profit are also included, although the cost of permits may be excluded. Many of these costs are not normally calculated for purposes of a building permit, nor are they regulated as part of the building code, but they must be calculated for compliance with the 50% rule.

When Maps Are Revised: Substantial damage and substantial improvement can affect post-FIRM buildings, too. If the FIRMs are revised, and the flood elevations increase, many post-FIRM buildings may be affected. The 50% rule then applies to them if they decide to make improvements or they incur damage. All additions to a post-FIRM structure must be elevated to or above the current BFE, whether they are "substantial" or not.

Cumulative Costs: Substantial damage and substantial improvement are subject to "cumulative" clauses in many community ordinances. FEMA generally requires that all separate permits for the same structure within a 1-2 year period are a single improvement and/or repair. This period runs from the date of final inspection or Certificate of Occupancy, not from the date the building permit was issued. Some communities require 5, 10, 50 years, or the life of the structure.

Notice to Property Owners

Rebuilding or Remodeling a Structure in a Special Flood Hazard Area

If your home or business has sustained damage or if you are making improvements to the structure and/or interior of the building, please be advised that _____ (Community) has adopted a Flood Damage Prevention Ordinance that may affect how you rebuild or make improvements to a structure in the Special Flood Hazard Area (SFHA). The ordinance was adopted on _____ (date of adoption) in order to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions. This document addresses the "substantial improvement" clauses in the ordinance and can save property owners time, aggravation, and money.

If a structure is substantially damaged, or remodeling is planned that will substantially improve the structure, it must be brought into compliance with _____ (Ordinance # and title), including elevation of the structure to or above the 100-year flood elevation. "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. The cost of repairs must include all costs necessary to fully repair the structure to its before-damage condition.

"Substantial improvement" includes any repair, reconstruction, rehabilitation, addition, or other improvement 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. Please refer to the ordinance for special exemptions that may apply to buildings with previously cited health or safety violations, and historic structures.

_____ (Community and Department) has the responsibility of determining substantial damage and substantial improvement and has implemented procedures to do so in accordance with the guidelines established by the National Flood Insurance Program:

1. Estimate the market value by using the tax assessment value of the structure, excluding land. If you disagree with this estimate, you may hire a state licensed appraiser and submit a comparable property appraisal;
2. You must obtain and submit to permitting officials a detailed and complete cost estimate for reconstruction or repair of all planned improvements or all damages sustained by your home, prepared and signed by a licensed general contractor. The contractor must sign the document as an affidavit that the cost estimate includes all damages and/or improvements to your home, not just structural alterations;
3. If your home is determined to have substantial damage or to be a substantial improvement, you must obtain and submit an Elevation Certificate to permitting officials to determine if the lowest floor elevation is in compliance with the ordinance. Garages and carports, if used strictly for limited storage, parking, or access to the building are not considered a structures lowest floor;
4. If the lowest floor of a substantially damaged structure is below the required lowest floor elevation in the ordinance, the building must be elevated to or above the requisite elevation. All electrical and mechanical equipment (heating, cooling, hot water heaters, etc.), bathrooms, and laundry rooms facilities must be elevated to or above the required lowest floor elevation. If the lowest floor, electrical and mechanical equipment, laundry and bathrooms are already above the requisite lowest floor elevation, and the structure is otherwise compliant with the ordinance, the repairs or alterations may be permitted without further modifications. Repairs or alterations which would make the building nonconforming are prohibited;
5. Building plans must be submitted which show how the building is to be elevated. If located in a V-Zone, Coastal High Hazard Area, these plans must be prepared and certified by a registered professional engineer or architect. Certified plans and a completed V-Zone Certificate are required prior to issuance of a building permit;
6. The ordinance requires that gas and liquid storage tanks be anchored to prevent flotation during conditions of flooding. Tanks which were separated from the structure during the flooding event must be anchored upon replacement.
7. The ordinance also regulates accessory structures, which must be anchored. Any electrical equipment in these buildings must be elevated to or above the requisite lowest floor elevation.

**APPLICATION FOR DETERMINATION OF
Substantial Improvement
Substantial Damage**

Permit No. _____ Tax Map _____ Block _____ Parcel _____ Lot _____

Property Address: _____ Subdivision Name: _____

FIRM Panel #: _____ Flood Zone: _____ BFE: _____

- MSL
- NGVD
- NAVD

Pre-Damage Elevation: _____ Date Damage Sustained: _____

	Property Owner	Co-Owner
Name	_____	_____
Mailing Address	_____ _____ _____	_____
Phone Number	_____	_____

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- I am attaching an appraisal report of my property, or _____ Initials
 - I am not submitting an appraisal report of my property and
I accept Estimated Market Value from tax assessment. _____ Initials

 - I accept the attached estimated cost of construction as a fair
cost of repair/improvement for my home. _____ Initials

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- The following documents are attached:
- Detailed Construction Cost Estimate, signed by a General Contractor
 - Contractor's Affidavit, signed, dated, and certified
 - Copy of Contractor's License
 - Owners Affidavit, signed, dated, and certified
 - FEMA Elevation Certificate
 - Floor plan drawing (if available)
 - Photos before and after damage event (if available)

Signatures

Owner: _____ Date: _____

Co-Owner: _____ Date: _____

OWNER AFFIDAVIT

Permit No. _____ Tax Map _____ Block _____ Parcel _____ Lot _____

Property Address: _____ Subdivision Name: _____

Contractor Name: _____ License Number: _____

Owner Name: _____ Phone Number: _____

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(check one or both, as applicable)

I hereby attest to the fact that the repairs/reconstruction and/or remodeling list submitted for review by my contractor are all the damages sustained by this structure and that all other additions and improvements, or repairs proposed on the subject property are included in this estimate. **No other contractor has made any repairs, reconstruction, additions, or remodeling not included on the attached list.**

I hereby attest to the fact that the repairs, additions, rehabilitations, reconstructions and/or remodeling list submitted for review by my contractor are all of the improvements that will be done to the existing structure and that all other additions, improvements, or repairs on the subject property are included in this estimate. **No other contractor has made any repairs, reconstruction, additions, or remodeling not included on the attached list.**

I understand that I am subject to enforcement actions and/or fines if inspection of the property reveals that I have made repairs **not included on the attached list of repairs/modifications to my home** or that I have included non-conforming or illegal structures/additions to the existing structure without having presented any plans for such additions. I understand that any permit issued by this jurisdiction pursuant to this affidavit does not authorize the reconstruction, repair, or maintenance of any illegal additions, fences, sheds, or nonconforming uses of structures on the subject property.

State of North Carolina, County of _____

Before me this day personally appeared _____ and _____ each of whom, being duly sworn, deposes and says that he has read, understands and agrees to comply with all the aforementioned conditions.

Signature of Owner

Signature of Co-Owner

Sworn to and subscribed before me this _____ day of _____ A.D. 20____.

(Seal)

Notary Public, State of North Carolina

My Commission expires:

CONTRACTOR AFFIDAVIT

Permit No. _____ Tax Map _____ Block _____ Parcel _____ Lot _____

Property Address: _____ Subdivision Name: _____

Contractor Name: _____ License Number: _____

Owner Name: _____ Phone Number: _____

I hereby attest to the fact that I, or an employee of my company, personally inspected the above mentioned property and produced the attached list of itemized repairs, additions, rehabilitations, reconstructions and/or remodeling list which are hereby submitted for review:

(check one or both, as applicable)

- These damages are all the damages sustained by this structure, and all other additions and improvements or repairs proposed on the subject property are included in this estimate.
- These improvements are all of the improvements that will be done to the existing structure, and all other additions, improvements, or repairs on the subject property are included in this estimate.

I understand that I am subject to enforcement actions and/or fines if inspection of the property reveals that I have made repairs **not included on the attached list of repairs/modifications to this structure** or that I have included non-conforming or illegal structures/additions to the existing structure without having presented any plans for such additions. I understand that any permit issued by this jurisdiction pursuant to this affidavit does not authorize the reconstruction, repair, or maintenance of any illegal additions, fences, sheds, or non-conforming uses of structures on the subject property.

Total Labor and Materials:	\$
Overhead and Profit:	\$
Total Cost:	\$

State of North Carolina, County of _____

Before me this day personally appeared _____ who, being duly sworn deposes and says that he has read, understands and agrees to comply with all the aforementioned conditions.

Signature of Contractor: _____

Sworn to and subscribed before me this _____ day of _____ A.D. 20____.

(Seal)

Notary Public State of North Carolina

My Commission expires: _____

ESTIMATED COST OF RECONSTRUCTION

Permit No. _____ Tax Map _____ Block _____ Parcel _____ Lot _____

Property Address: _____ Subdivision Name: _____

ITEMS	COST		TOTAL COST
	LABOR	MATERIALS	
Concrete, Form, etc.			
Carpentry Material (rough)			
Carpentry Labor (rough)			
Roofing			
Insulation and Weather Strip			
Exterior Finish (Stucco)			
Doors, Windows, and Shutters			
Lumber Finish			
Carpenter Labor, Finish			
Hardware, Rough			
Hardware, Finish			
Cabinets, built-in			
Floor Covering (tile, rug)			
Plumbing			
Shower/Tub/Toilet			
Electrical			
Light Fixtures			
Built-in Appliances			
HVAC			
Paint			
Overhead and Profit			
TOTAL			

Note: Full market value must be applied for all donated labor and materials.

Contractor Name: _____ License Number: _____
 Address: _____ Phone Number: _____
 Signature: _____ Date: _____

SUBSTANTIAL DAMAGE SUBSTANTIAL IMPROVEMENT

Items to be Included

All structural elements, including:

Spread or continuous foundation footings 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 (e.g., brick, stucco, or siding)
 including painting and decorative moldings
Windows and doors
Reshingling or retiling a roof
Hardware

All interior finishing elements, including:

Tiling, linoleum, stone, or carpet over subflooring
Bathroom tiling and fixtures
Wall finishes (e.g., drywall, painting, stucco, plaster,
 paneling, marble, or other decorative finishes)
Kitchen, utility, and bathroom cabinets
Built-in bookcases, cabinets, and furniture
Hardware

All utility and service equipment, including:

HVAC equipment
Repair or reconstruction of plumbing and electrical
 services
Light fixtures and ceiling fans
Security systems
Built-in kitchen appliances
Central vacuum systems
Water filtration, conditioning, or recirculation systems

Also:

Labor and other costs associated with moving or altering
 undamaged building components to
 accommodate improvements or additions
Overhead and profits

Items to be Excluded

Plans and specifications

Survey costs

Permit fees

**Cost to demolish storm-damaged
building components**

Outside improvements, including:

Landscaping
Sidewalks
Fences
Yard lights
Swimming pools
Screened pool enclosures
Sheds
Gazebos
Detached structures (including garages)
Landscape irrigation systems