

FEMA REGION VII GUIDANCE

DETERMINATION OF THE COST OF REPAIR OR RECONSTRUCTION TO DAMAGED BUILDINGS

Cost of Repair

The *cost of repair* used in determining repair cost to market value ratios shall be equal to the combined value of materials and labor used or necessary in repairing all damages sustained by a building, but in no case, shall be less than the value of materials and labor necessary to restore the building to its pre-damaged condition.

1) Materials

The value of materials shall be equal or equivalent to the actual or estimated cost of all materials to be used or considered necessary in repairing all damages sustained by a building, and shall be no less than that required to restore the building to its pre-damaged condition. Where materials or servicing equipment are donated or discounted below normal market values, the value should be adjusted to an amount which would be equivalent to that estimated chargeable through normal market transaction.

2) Labor

The value of labor shall be equal or equivalent to the actual or estimated labor charge for repair of all damages to the structure. Where non-reimbursed labor is involved (self or donated labor), the labor of value for the non-reimbursed portions shall be computed based on applicable minimum-hour wage scales.

Cost Determinations

Ultimately, it is the permit official's responsibility to assure that the cost of repair estimates provided or obtained, reasonably reflect the value of damages (or actual cost of repairs and improvements, if greater than the value of damages) sustained. As a general rule, the closer the level of damage approaches 50% of the market value of the structure, the greater the care needs to be in determining "cost of repair." The following sources of repair cost information will generally provide satisfactory estimates of repair costs:

- 1) National Flood Insurance Proof-of-Loss Statement or adjustor's worksheets
- 2) Contractor's repair estimates (Itemized estimates only)
- 3) Building Department's cost of repair estimates

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These three sources of repair cost information will generally be based on itemized costs for replacement of damage materials and equipment, or based on square foot or segregated costs methods for computing replacement cost which are used by building cost information services (such as Marshall and Swift, National Construction, Dow Building, and Boeckh).

In some cases, a building owner may submit cost of repair estimates to a Building Department for purposes of obtaining a Building Permit. Such estimates should not be acceptable unless they provide supporting documentation consisting of or using cost estimating methods described above, or unless it is obvious in the judgement of the building official that the cost of repair of damage is clearly less than 50% of the market value of the structure.

Items to be considered under cost of repair shall include, but not be limited to, value or cost of materials and labor required to replace or repair damages; sales taxes on materials, building equipment and fixtures including heating equipment, water heaters, air conditioning equipment, and utility meters; site preparation related to building repair; and contractor's overhead and profit.

Items which can be excluded from cost of repair include plans, specifications, surveys, building permits, and other repair costs which are separate from or incidental to repair of the damage building.

Determination of Market Value

Market value, also called fair market value, is typically defined as the amount an owner would be willing, but not obliged to accept, and a buyer would be willing, but not compelled to pay. It is an estimate of what is a fair, economic, just and equitable value under normal local market conditions. Generally market value is established by consideration of prior sales of the property or comparable properties (market comparison approach), replacement cost less depreciation (cost approach to value), or capitalization of income (income approach).

For purposes of determining a structure's market value for application of the substantial-improvement rule, the cost approach to value method should generally be employed. Under this approach, market value is estimated as the cost of constructing a similar building at today's cost (i.e., replacement cost), minus the loss of value for depreciation due to physical deterioration and functional obsolescence factors.

In some communities, the market comparison approach may have been used in determining the valuation of taxable property for assessment purposes. Some communities, as a matter of convenience, may prefer to use this information rather than requiring an additional appraisal or cost analysis. In these instances, the portion of the appraised value attributable to the value of the land should be excluded. In those cases where the appraisal separates the value of land and improvements, the value due to building improvement, need only be considered.

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Where no separation of values is made, a determination of the effects of yard improvements, landscaping, lot size and location on the value of the property will be necessary. In those cases where the terms and conditions of a property sale have a significant effect on the appraised value of a property, an adjustment to offset that effect must also be made.

As a general rule, the cost approach to value method (replacement cost less depreciation) should be used for determining substantial-improvement market value. It is the only method which produces a value for the physical replacement of a building which can be directly compared to the value of individual components of the building which need replacement or repair. In addition, this approach is used in adjusting flood insurance claims, and is compatible with approaches used in many building codes in determining application of code requirements for repair or alterations to existing construction.

Value Determinations

It is the responsibility of the community's permit official to assure that proper market value determinations are used in determining application of the substantial-improvement requirement. Any of the following sources should provide satisfactory estimates of market value for substantial-improvement purposes:

- 1) Actual Cash Value of the building from National Flood Insurance Proof-of-Loss Statement or adjustor's worksheets;
- 2) Property Appraisal used for tax assessment purposes (minus land value);
- 3) Building Department (or Tax Assessor's office) estimate of replacement cost minus depreciation using standard cost approach to value method prescribed by building-cost information services;
- 4) Independent estimates by a licensed appraiser.

Similar to the determination of the cost of repairs, as the ratio of repair costs to market value approaches 50%, greater levels of accuracy in establishing the market value of the structure are required.

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This Regional Guidance is provided for informational purposes only.
Individual community regulations may supersede this guidance.

For further information contact:

! Your local Community Floodplain Manager

OR



! Federal Emergency Management Agency (FEMA)

REGION VII - MITIGATION DIVISION

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