



Substantial Improvement and Substantial Damage: Dealing With It During Non- Disaster Times

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Village of Lisle



What Is Substantial Damage?



What is Substantial Damage?

- 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. Work on structures that are determined to be substantially damaged is considered to be substantial improvement, **regardless of the actual repair work performed.**



What Is Substantial Improvement?

- Any 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. **This term includes structures that have incurred “substantial damage”, regardless of the actual repair work performed.**



Purpose of SI/SD



- Protect the property owner's investment and safety, and,
- over time, to reduce the total number of buildings that are exposed to flood damage, thus reducing the burden on taxpayers through payment of disaster assistance.



Why 50%?

- Compromise between two extremes:
 - Prohibit all investment in existing structures that don't meet NFIP requirements.
 - Allow improvements of all kinds to structures in floodplain that are at risk of flood damage; no end to repeated flood damages.



Community Responsibilities

- Determine whether proposed improvements are “substantial improvements”
- Determine whether work necessary to restore a damaged building to its pre-damaged condition constitutes repair of “substantial damage”



Community Responsibilities

- Verify cost of work
- Determine market value
- Make SI/SD determination
- Require owner to obtain permit
- Recordkeeping



Determining Costs of Work

- **Costs to Include:**
 - Materials and labor
 - Site preparation
 - Demo and debris disposal
 - Costs to comply with code requirements
 - Costs to elevate structure
 - Contractor's overhead and profit
 - Sales taxes on materials
 - Structural elements, exterior and interior finishes
 - Built in appliances, cabinets, bookcases, furniture
- **Costs to Exclude:**
 - Plans and specs
 - Permit fees
 - Land survey costs
 - Carpeting over finished flooring
 - Outside improvements (landscaping, irrigation, sidewalks, driveways, pools, detached accessory structures)
 - Costs to correct EXISTING violations of health, safety, sanitary codes
 - Plug-in appliances such as washers, dryers, stoves, refrigerators

All Cost Estimates Must Be Created Equally!

- **Materials:** Fair Market Value! Even if they came from Uncle Bobby or were garbage-picked!
- **Labor:** Use prevailing wage rates even if owner paid less, or owner did the work himself, or by volunteer labor
- **Contractor's overhead and profit:** Add it in even if owner did the work himself or by volunteer labor
- **Include ALL work** being done, even if you wouldn't normally require a permit for it.



Sources of Cost Estimates

- Professional Contractor (trust but verify!)
- Professional Estimator
- Architect
- Property Owner (usually for small do-it-yourself projects)—receipts, manhours
- Your plan reviewer/ R.S. Means data
- Marshall Swift (marshallswift.com); ask your assessor if he/she has it, and borrow it
- SDE software

Handouts for Permit Applicants

- SI/SD cost estimates can be hard for people to understand
- We created handouts for permit applicants:
 - General information
 - Small project cost estimates
 - Professional Contractor cost estimates
 - Architect cost estimates
 - Samples of various types of estimates

Determining Market Value



- Tax Assessor
- Property Appraisals
- Architect, using R.S. Means or other source of costs

Use Your Assessor

- Assessors have web sites with property information
- Look for value of buildings alone (without the land)

Property Details Page 1 of 1

Lisle Township Property Information

[Back to search results](#) | [Try another search](#)

Location Information
Parcel Number: 08-10-**0000**
Address: **0000 BURLINGTON AVENUE**
City: LISLE

Physical Characteristics
Year Built: 1959

1st Floor: 1,150
2nd Floor: 0
3rd Floor: 0
1/2 Story: 0
Gross Living Area: 1,150

Half Baths: 0
Full Baths: 1

Basement Area: 0
Basement Area Finished: 0

Garage Area: 0

Lot Area (SF): 8,105*
*Lot Area (SF) is derived from the DuPage County GIS and may not reflect the actual lot area.

Assessment Information

Year	Land	Improve	Total	Type
2010	27,470	30,000	57,470	Y

[Where do your tax dollars go? \(DuPage County Clerk Web Site\)](#)

Sales Information

Month	Year	Sale Price	Doc. Number
6	2010	\$203,000	02686

[New! View the recent sales in your neighborhood with photographs and a great interactive map!](#)
**If you have problems viewing the map, please make sure you allow pop ups from this site*

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<http://www.lisletownshipassessor.com/ad/lisle/assessor/db/PropertyDetail.aspx> 2/3/2011



What if there's no assessed value?

- Some buildings aren't assessed separately. Types of buildings:
 - Apartment and condo association “common” structures—laundry buildings, clubhouses, pool locker rooms, individual apt buildings
 - College buildings
- You also won't be able to get a professional appraisal
- Owner must get architect to establish value

Making SI/SD Determinations

Cost of Improvement or Cost to Repair
to Pre-Damage Condition \geq 50%

Market Value of Building

What if the work exceeds 50%?

- Then, in order to do the proposed work, the property owner must bring the structure into full compliance with current NFIP standards and your floodplain requirements



Cumulative Substantial Improvement

- NFIP requires that you look at each improvement separately.
- Cumulative SI is a higher regulatory standard that you can adopt in your community.
- CRS communities can earn up to 110 points for cumulative SI
- ICC coverage is available to your property owners ONLY if you adopt the cumulative requirement



Cumulative SI: Parameters

- Clearly define your community's rules for cumulative SI. Do it BEFORE you have a permit applicant standing before your elected officials!
 - What is the start date of period?
 - When structure was built?
 - Date your floodplain ordinance was passed?
 - Certain number of years (past five? Ten?)
 - What market value will you use? At start of period, or just before current improvement?

Recordkeeping for NFIP

- Use a form to record status of the property in the floodplain
- Record market value of property and date established
- As each permit is issued: clearly document the SI/SD determination made at time permit issued (can use the form)
- Notify property owner if permit value exceeds 50% (or is close)



Recordkeeping for Cumulative SI

- Do everything on previous slide, plus:
 - Start a “Substantial Improvement” file
 - Use a form to record status of each property in the floodplain
 - Record market value of property and date established
 - Keep a record of all permits issued, and cumulative value of permits
 - Notify property owners of status at key points
 - If status is close to 50%, send letter to owner and record that letter against the property (for notice to future buyers)

Substantial Improvement

Property Record

PIN: 08-10- [redacted]

Property Address: [redacted] Burlington Ave

Buildings on Property: SFR

Value of buildings 29,400⁰⁰

Date: 2/07

Source: Lisle Township

Lisle Twp Assessor value of improvements: $\$ 29,400^{00} \times 312 = \$ 44,100^{00}$

Improvements

Building Permit #	Date	Work Done	Value of Work	Value to Date
[redacted] 0044	2/21/07	Upgrade Elec, Plumbing, mechanical	36,774.76	36,774.76

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Public Education

- Newsletter article about SI/SD, sent to all addresses in community
- We use copies of that article to send to floodplain residents periodically, or to send with requests for SI/SD cost estimates to permit applicants



- Newsletter Article
- Explain how SI/SD affects their property

Improvements to homes in the floodplain

If your home is in the floodplain, improvements can be made, but they must comply with the Village of Lisle code and the DuPage County Stormwater and Flood Plain Ordinance. However, floodplain property owners should understand the concept of "cumulative substantial improvements" before making major additions.

If the lowest floor, including basement, is lower than two feet above the base flood elevation, then the value of improvements generally must not exceed 50% of the market value of the structure before the start of the improvement.

When the value of improvements reaches 50% of fair market value of the building, then the entire building must be elevated.

In Lisle, this 50% figure is calculated by taking the Lisle Township Assessor's building value for the property (not the assessed value of the property as a whole, which includes the land). Multiply by 3 to bring it to market value; then divide by 2 to find 50% of the value.

Note that this value of improvements is cumulative. The value of past projects will be included in the current calculation. When the total of improvements reaches the 50% level, then the entire building must meet the requirements of the stormwater codes. This generally requires elevating the structure, so that the lowest floor is two feet above the base flood elevation.

Some, but not all, of the improvements that are included in this calculation are: roofing, siding, window or door replacement, additions, attached decks or patios; interior finishes such as flooring, walls, kitchen remodeling, cabinets, built-in appliances, security systems, furnace/AC replacement, lighting, ceiling fans, plumbing, and electrical work. The cost of labor is included in the calculation, even if the property owner does the work or if volunteers perform the work.

An example: Mr. Smith owns a house in the floodplain, built in 1965 (before the Flood Insurance Rate Map date in Lisle, 9/17/1980). The first floor elevation of the house is 2.5 feet below the base flood elevation for the property, and it has a basement. The current total valuation of the property, according to the Lisle Township Assessor's records, is \$36,200, this consists of \$15,000 for the land and \$21,000 for the building.

Mr. Smith wants to extensively remodel his kitchen, put in a patio door, and build a side deck. He also plans to replace windows, install new siding, and put a new roof on the house. He plans to spend \$15,000 on work done by contractors, and another \$5,000 on materials for the kitchen and deck project, which he intends to build himself.

What is the 50% level for this property? $(\$21,000 \times 3) / 2 = \$31,500$

What is the value of Mr. Smith's current project? It's not \$15,000 plus \$5,000, because the value of Mr. Smith's labor has to be included. When that is added in, the project value is \$30,000. This project is under the 50% ceiling.

For more information on flood damage prevention...

The following is a list of useful and interesting information on flood issues:

General Information:

- ✓ www.LouisianaFloods.org (Much of the information contained in this web site is applicable to Illinois. It is generally well written and easy to read.)
- ✓ <http://dnr.state.il.us/waterman/index.htm> (Illinois Dept. of Natural Resources, Office of Water Resources; from this page, at the bottom click on Quick Guide to Flood Plain Management)

Property protection measures.

- ✓ www.fema.gov/mit and www.fema.gov/nfp (Federal

Emergency Management Agency's web site)
- ✓ www.redcross.org/services/disaster/prepare/ready/flood.pdf (American Red Cross information)

Three years later, Mr. Smith needs to replace his aging furnace. The cost of the replacement is \$2,000. But, added to his earlier project, the total is now \$32,000, which is greater than \$31,500. So, in order to replace his furnace, Mr. Smith now must bring the entire structure into compliance with the stormwater codes, which means removing the basement and raising the structure and his new deck by 4.5 feet, so it will be two feet above the base flood elevation. Thus, his very necessary furnace replacement project triggered a much more extensive, and expensive, project.

Why are these regulations in place? They allow the owner of an older building that is not above the base flood elevation to make a certain limited amount of improvements. However, the structure is still subject to flooding damages. At the 50% point, the entire building must be brought into compliance with floodplain regulations. If we know a property is in the floodplain, and the level to which water will rise, it makes sense to protect buildings from future damage. Why spend money on improvements when we know they will eventually be damaged and have to be rebuilt?

Flood Insurance:

- ✓ www.fema.gov/nfp (The National Flood Insurance Program offers many publications through this site. A particularly good resource here is Answers to Questions About the National Flood Insurance Program at www.fema.gov/nfp/qanda.html)

Essential Tools



- IAFSM Desk Reference, Section 16
- FEMA Publications
 - Book: SI/SD Desk Reference
 - Software: Substantial Damage Estimator





ILLINOIS FLOODPLAIN MANAGEMENT

DESK REFERENCE

Illinois Association for Floodplain and Stormwater Management



2006



Where to get it:

IAFSM web site,
illinoisfloods.org

Section 16



Substantial Improvement/ Substantial Damage Desk Reference

FEMA P-758 / May 2010

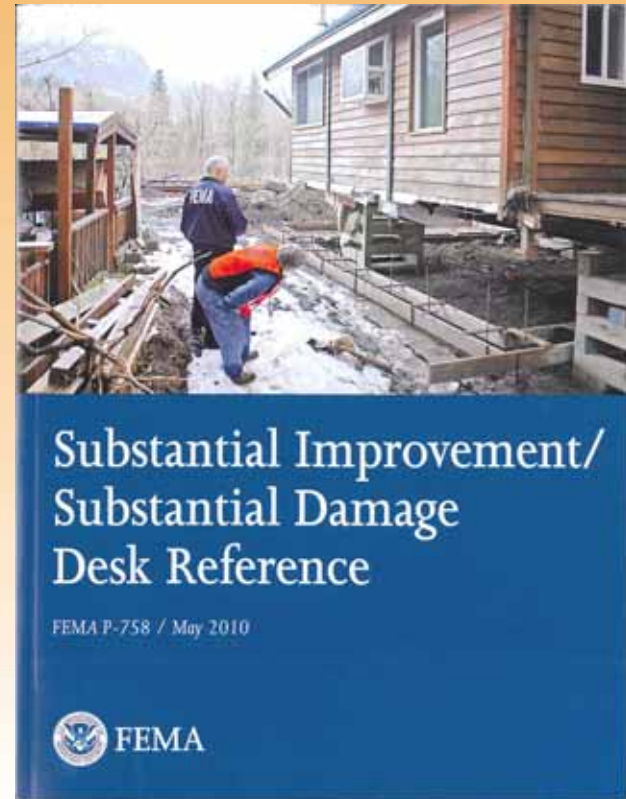


FEMA



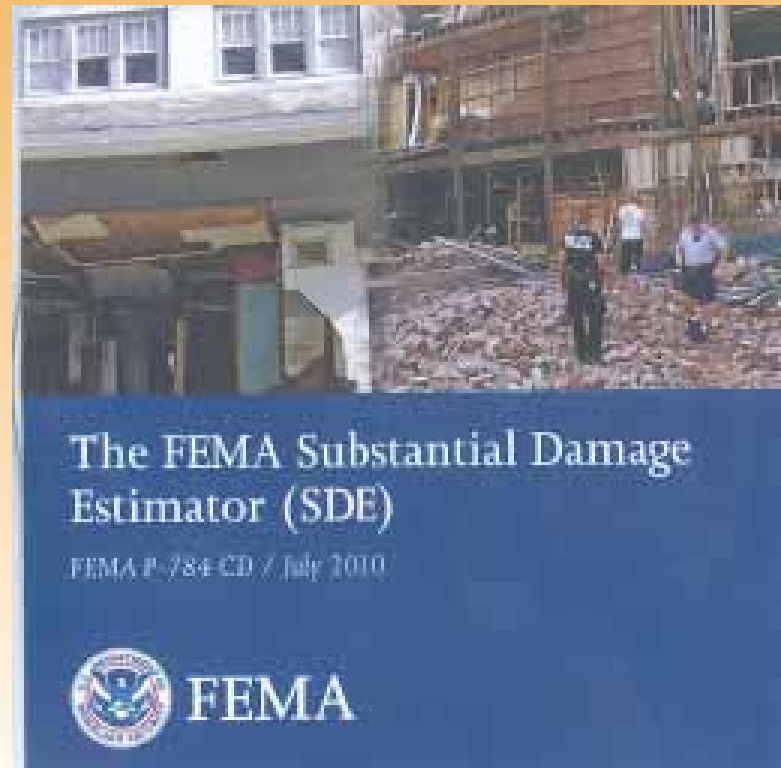
Where to Get It

- www.fema.gov
- Search for P-758
- Available to download or order on CD (pdf) or printed manual



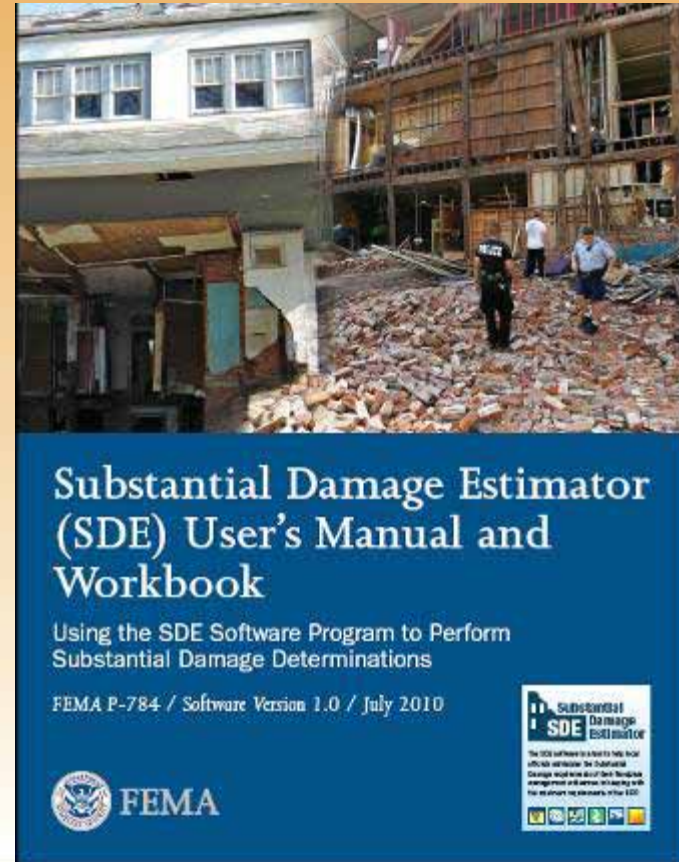
Substantial Damage Estimator

- Software on CD
- Also includes video, “SDE and Your Community”
- Also includes user’s manual in pdf file



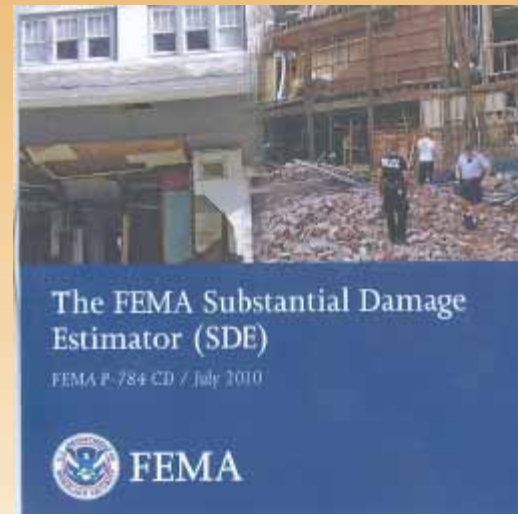
Substantial Damage Estimator

- Manual
 - CD (pdf)
 - Printed
 - Download



Where to Get Them

- www.fema.gov
- Search for P-784
- Available: CD with software, manual, and video, AND printed manual



Questions?



- Contact Information:
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Lisle

THE ARBORETUM VILLAGE