

Answers to Questions about Substantial Damage in the Post-Disaster Environment



ASFPM Annual National Conference
May 21, 2019



FEMA

Building Science Branch

Agenda

- Community's Responsibilities in Determining Substantial Damage
- Actions to Take in Advance of a Damaging Event
- Actions to Take Immediately After a Damaging Event

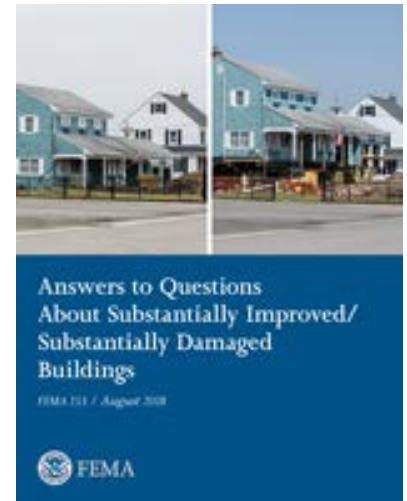
FEMA 213

Question(s)



FEMA 213 / FEMA P-758

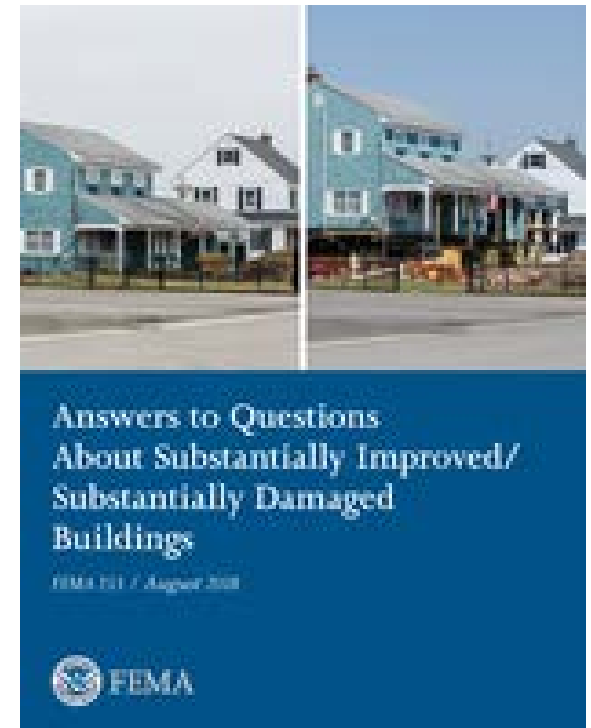
- FEMA 213 *Answers to Questions About Substantially Improved / Substantially Damaged Buildings* (2018)
- Guide for Local Officials for Enforcement of SI/SD
- Short answers to questions/concerns about SI/SD
- Text boxes within FEMA 213 refer to the more in-depth guidance in FEMA P-758, *Substantial Improvement / Substantial Damage Desk Reference*



FEMA 213

Four Sections:

- Section 1: Introduction – NFIP and Publication Purpose
- Section 2: Definitions, Regulations and General Questions
- Section 3: How to Determine Substantial Improvement / Substantial Damage
- Section 4: Post-Disaster Permitting



Community's Responsibility

Community's Responsibility

- *Substantial damage*, as defined in 44 CFR § 59.1, 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 percent of the market value of the structure before the damage occurred.”
- Damage of any origin:
 - Includes natural or man-made damage from fire, wind storm, lightning strike, falling tree, tornado, earthquake, flood, deterioration over time, and other causes

**Substantial
Damage**

Question No. 5

Community's Responsibility

SD applies to:

- Existing structures
 - Structures already present when initial FIRM was issued by FEMA
- New construction
 - FIRM revised and BFE increases and/or flood zone designation changes
 - Community's floodplain management regulations change

SD Applicability
Question No. 7

Community's Responsibility

- Require permits
- Administer SD
 - Determine cost of work to bring structure back to pre-damage condition
 - Determine pre-damage market value
 - Make SD determination
 - Require SD structures be brought into compliance with floodplain management (and building code) requirements for new construction based on flood zone

**Steps to
Administer SD**
Question No. 3

Community's Responsibility

Bringing a Substantially Damaged structures into compliance, based on flood zone, includes:

- Lowest floor elevations
- Types of foundations
- Enclosures – openings or breakaway walls
- Use of enclosure limited to parking, building access and storage
- Utilities and building service equipment
- Flood damage-resistant materials

**What to Do When
Its SD**

Question Nos. 4 & 6

Actions to Take In Advance of a Damaging Event



Actions to Take In Advance of a Damaging Event

- Know your community's risk
 - Know your Community's Special Flood Hazard Area (SFHA)
 - Know how many structures are in the SFHA
 - Know how many structures have the lowest floor below the base flood elevation
 - Know the location of those structures where SD may be focused

Actions to Take In Advance of a Damaging Event

- Know your Community's floodplain management regulations and building code
- Know the steps to make a Substantial Damage determination
 - Decide in advance what method(s) will be used – especially determining market value
- Know the requirements to bring a Substantially Damaged structure into compliance
- Establish procedures to handle property owner appeals

**How to Determine
SD**

Section 3

Actions to Take In Advance of a Damaging Event

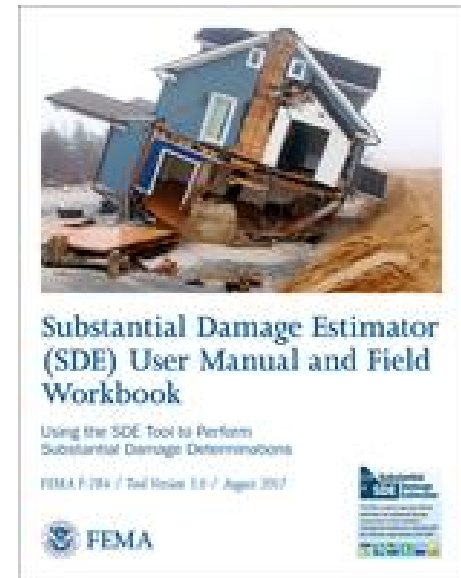
- Know post-event permit procedures
- Know how you will communicate with local officials, citizens and property owners
- Know your community's resources
 - How many residents have homeowners and flood insurance policies?
 - How does a community assist a homeowner to obtain ICC?
 - What grants might become available to property owners?

**Post-Disaster
Permitting
Section 4**

Actions to Take In Advance of a Damaging Event

FEMA *Substantial Damage Estimator* (SDE)

- Software to develop reasonable estimates of structure value and cost to repair structures
- Can be used for damage of any cause
- Can be used on a tablet to make quick assessments in the field
- Download and practice using
- Pre-load data sources



SDE

Question No. 29

Actions to Take In Advance of a Damaging Event

- Plan ahead to handle the workload
 - Available Community staff?
 - Available assistance from FEMA, State and other organizations?
 - How can assistance be funded?

**Handling the
Workload**

Question No. 28

Actions to Take In Advance of a Damaging Event

Emergency Management Assistance Compact (EMAC)

- National interstate mutual aid agreement that enables states to share resources during times of disaster
- Administered by the National Emergency Management Association (NEMA)
- Complement to the federal disaster response system

<https://www.emacweb.org/>

Actions to Take In Advance of a Damaging Event

Disaster Recovery Reform Act (DRRA) of 2018

- Signed October 15, 2018
- Amends Sections 402 & 406 of the Stafford Act

Actions to Take In Advance of a Damaging Event

DRRA Sec. 1206: *Eligibility for Code Implementation and Enforcement*

- Amended Stafford Act Sec. 402 & 406
- Authorizes FEMA to provide assistance to state and local governments for building code and floodplain management ordinance administration and enforcement.
- Adds post-disaster surge staffing assistance for code officials

<https://www.fema.gov/disaster-recovery-reform-act-2018>

Actions to Take In Advance of a Damaging Event

STAFFORD ACT > TITLE IV > § 402

Sec. 402. General Federal Assistance (42 U.S.C. 5170a)

In any major disaster, the President may -

- (5) provide assistance to State and local governments for building code and floodplain management ordinance administration and enforcement, including inspections for substantial damage compliance; and

Sec. 406. Repair, Restoration, and Replacement of Damaged Facilities (42 U.S.C. 5172)

(a) CONTRIBUTIONS -

(1) IN GENERAL - The President may make contributions -

- (C) base and overtime wages for the employees and extra hires of a State, local government, or person described in paragraph (1) that perform eligible work, plus fringe benefits on such wages to the extent that such benefits were being paid before the major disaster; and
- (D) base and overtime wages for extra hires to facilitate the implementation and enforcement of adopted building codes for a period of not more than 180 days after the major disaster is declared.

Actions to Take Immediately After a Damaging Event



Actions to Take Immediately After a Damaging Event

- Assess Damage / Windshield review
 - Obtain broad characterization of number and extent of damage
- Identify areas of significant damage
 - Use readily available data to estimate repair costs
 - Insurance claims
 - Use market values using pre-event identified method
 - Be consistent

Assessing Damage
Question No. 27

Actions to Take Immediately After a Damaging Event

- Use estimates to screen those areas likely to have incurred SD
- Focus attention on those structures for which damage/market value ration is around 50%

**Identify Areas to
Focus SD
Determinations On
Question No. 27**

Actions to Take Immediately After a Damaging Event

- Brief elected officials, community staff, citizens and property owners:
 - Explain permit requirements
 - Explain SD and how SD determinations are made
 - Explain what it means to bring a SD structure into compliance
 - Availability of ICC coverage assistance
 - Grants available
 - Share materials developed to communicate with elected officials, citizens and property owners

Communication

Question Nos. 31, 34,
35 & 36

Actions to Take Immediately After a Damaging Event

- Require Permits
 - Spike/surge in permit activity
 - Structure owners:
 - Are anxious to initiate repairs and may start repairs within a day or two after the disaster
 - Are unaware of the permitting requirements, especially the SD requirements
 - May disregard the requirement for permits
 - Pressure may come from officials and owners to start repairs
- Permit requirements cannot be waived
- Variances cannot be issued

Permits

Question Nos. 26, 30,
32 & 33

Actions to Take Immediately After a Damaging Event

- Repairs made without the required permits may:
 - Require repairs to be removed and enforcement actions
 - Make it difficult to determine between new construction and what was in-place prior to the disaster
- Failure to enforce Substantial Damage requirements
 - Violation of floodplain management requirements
 - Result in higher NFIP flood insurance premiums
 - Flood insurance may be denied if structure owners fail to comply with Community's enforcement efforts

Questions?



Flood/Wind Building Science Helpline:
FEMA-BuildingScienceHelp@fema.dhs.gov
866.927.2104
<http://www.FEMA.gov/Rebuild/BuildingScience>