

# The 50% FEMA Rule

- Why was it created?
- How does it impact builders?

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# Introduction of Topics:

- The role of FEMA
- Flood Zones and the CCCL
- Flood map and CCCL map examples
- Base Flood Elevation (BFE) and Freeboard
- Community Rating System (CRS)
- 50% FEMA Rule
- Substantial Development Definition with examples
- How GCs and all subtrades should handle rehab/repair/renovation projects in coastal areas
- Different Municipalities – different rules
- Exceptions to the rule
- Important Links

# The Role of FEMA

Federal Emergency Management Agency (FEMA) does not only serve the public during and after disasters with response, recovery and financial aid, but is also the official source for flood hazard information in support of the National Flood Insurance Program (NFIP).

# Flood Zones in our coastal areas:

## Zone A and Zone AE 1 - 30

Mandatory flood insurance purchase requirements and floodplain management standards apply in both A and AE zones. AE zones contain detailed base flood elevation (BFE) information.

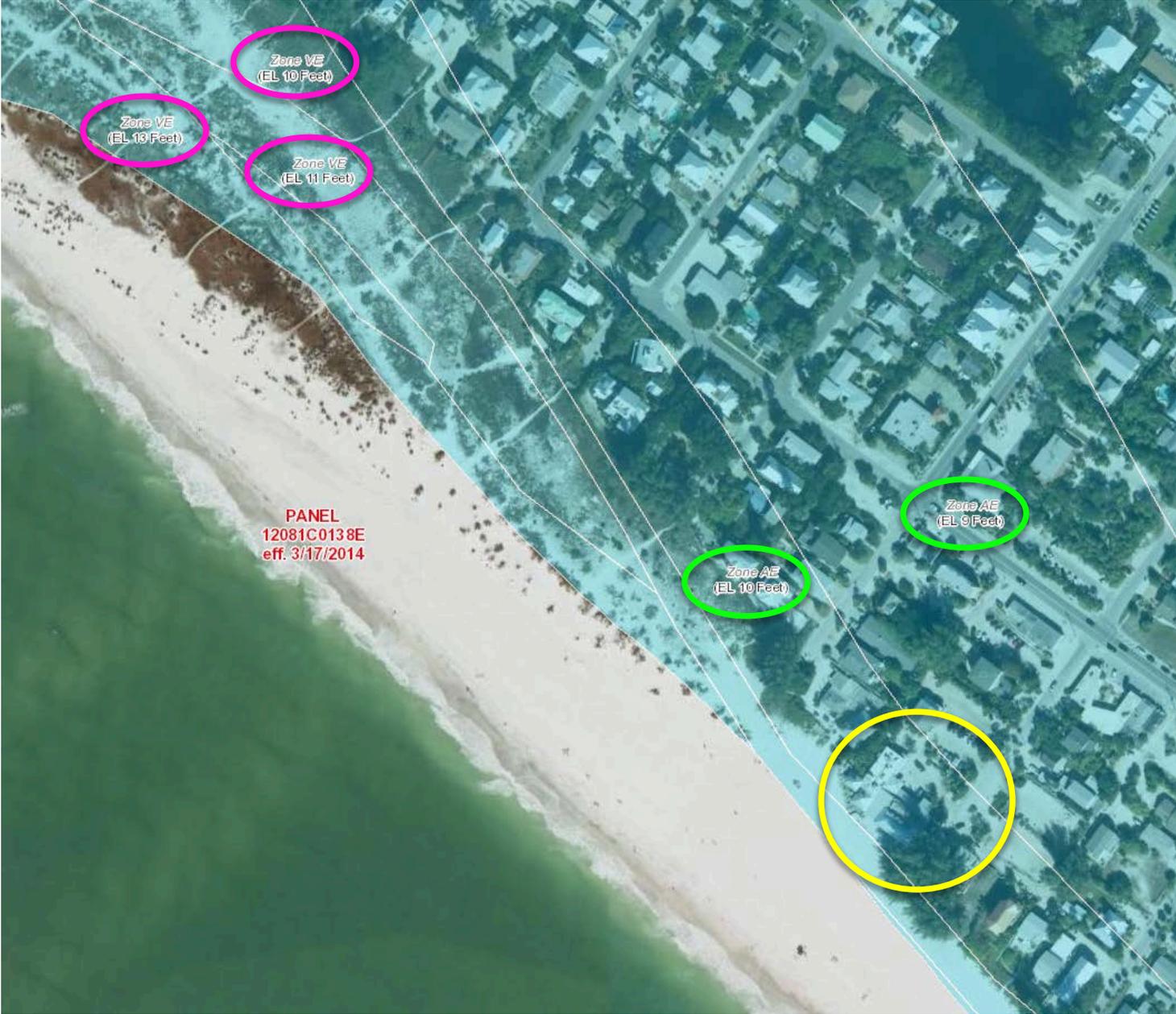
## Zone V and Zone VE 1 - 30

Also in this zone mandatory flood insurance purchase requirements and floodplain management standards apply. VE zones contain detailed base flood elevation (BFE) information. V and VE zones deal with additional hazards due to storm-induced velocity wave action. New construction will require pile foundation.

How to find the flood zone for the property you are working on:

<https://msc.fema.gov/portal/home>

# Example of a Flood Map



# Coastal Construction Control Line (CCCL)

If a property is located seaward of the CCCL, contractors will run into even more restrictions than the 50% FEMA rule. I am including the CCCL map as a piece of information and how to find the information online:

<https://ca.dep.state.fl.us/mapdirect/?focus=beaches>

# Example of a CCCL Map



# Base Flood Elevations (BFE) and their Influence on Flood Insurance Premiums

BFE defined: the computed elevation to which floodwater is anticipated to rise during the base flood.

Base Flood Elevations (BFEs) are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles.

The BFE is the regulatory requirement for the elevation or flood-proofing of structures.

The relationship between the BFE and a structure's elevation determines the flood insurance premium.

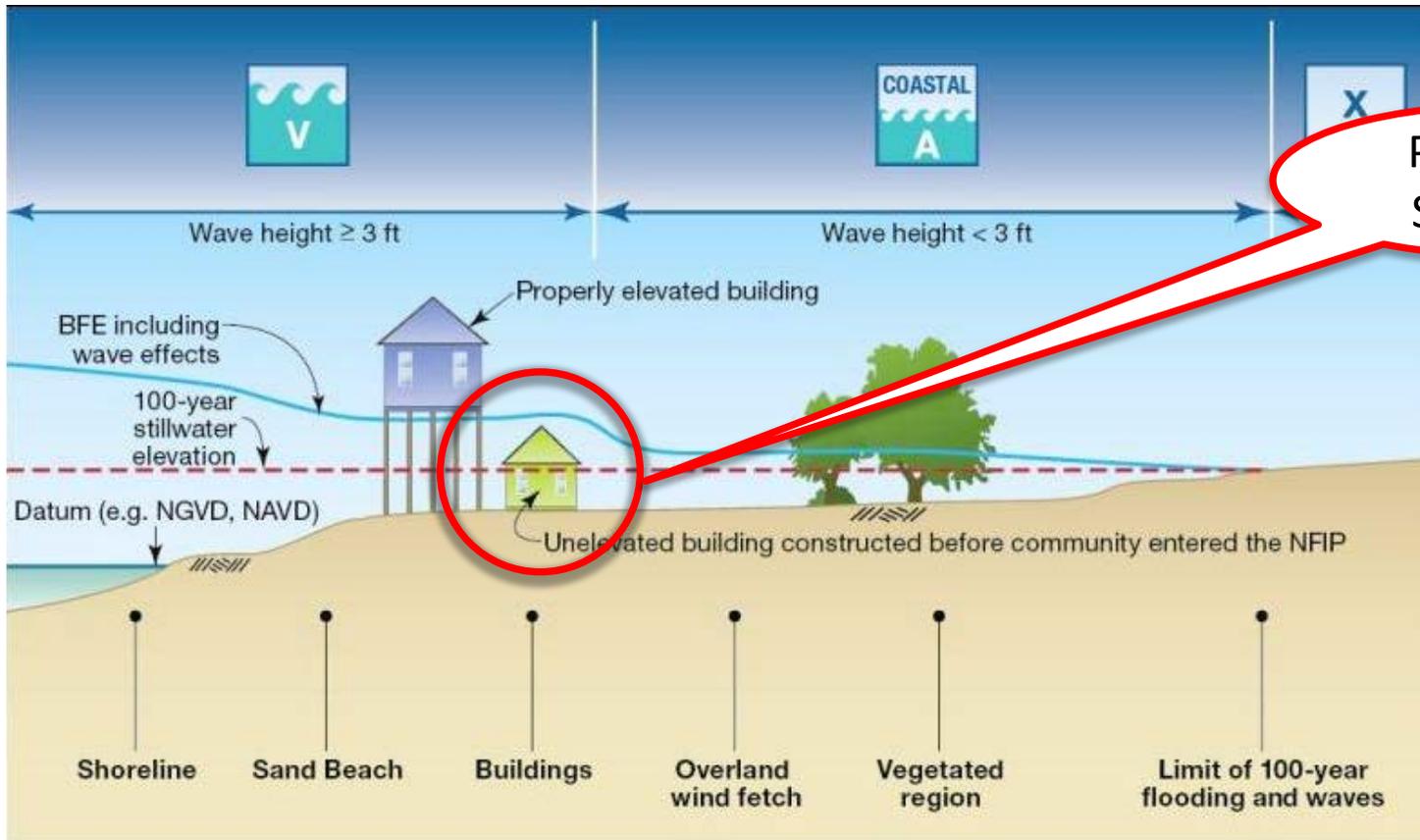
# Insurance Premium with different BFEs

Photo taken from [www.silive.com](http://www.silive.com)



# Flood Zones Visualized:

Photo taken from [www.brunebuilt.com](http://www.brunebuilt.com)



# Elevation Requirements and Freeboard

All new construction in flood zones needs to be elevated to comply with current FBC requirements. In addition to the FBC, municipalities with their local ordinances might require additional elevation. A great example is the Town of Longboat Key:

## A-zone:

New residential construction elevated **one foot above B.F.E.**

New non-residential, flood-proofed **one foot above B.F.E**

## V-Zone:

New residential and non-residential construction elevated **three feet above B.F.E.** or elevation required by Florida Department of Environmental Protection (F.D.E.P.), whichever is higher.

## Coastal Construction Control Line:

All flood zones on the seaward side of the Coastal Construction Control Line (C.C.C.L) will be required to be elevated **three feet above B.F.E.** or elevation required by F.D.E.P., whichever is higher.

# Community Rating System (CRS)

The Community Rating System (CRS) is the connective tissue between municipalities and the flood insurance premiums. The CRS is a “voluntary” incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements.

As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS:

- ❑ Reduce flood damage to insurable property
- ❑ Strengthen and support the insurance aspects of the NFIP
- ❑ Encourage a comprehensive approach to floodplain management.

## Why we have to deal with the 50% FEMA rule:

Based on these reasons, municipalities are more than motivated to comply with the 50% FEMA rule. If communities do not comply, the insurance risk rating for NFIP could increase and the flood insurance premiums for all residents within the municipality would increase.

To stay in compliance all structures in flood zones, which undergo repair, rehab, renovation, etc. must comply with the 50% FEMA rule and might have to get an appraisal before applying for a building permit.

## RECAP:

So here you have your reason why we need to comply with the 50% FEMA rule.

Let's recap:

New construction is not impacted by the 50% FEMA rule, because new construction needs to comply with the FBC which incorporates all basic elevation requirements (with added freeboard by municipalities).

The 50% FEMA rule must be taken into consideration for all existing buildings which are not elevated to the current BFE.

## 50% FEMA Rule – Possible Affected Projects:

- Remodeling
- Rehabilitation
- Building additions (attached)
- Repair and replacement
- Reconstruction (partial) after fire, wind, water damage

# 50% FEMA Rule

If the cost of improvements or the cost to repair the damage exceeds 50% of the depreciated market value of the structure, it must be brought up to current floodplain management standards.

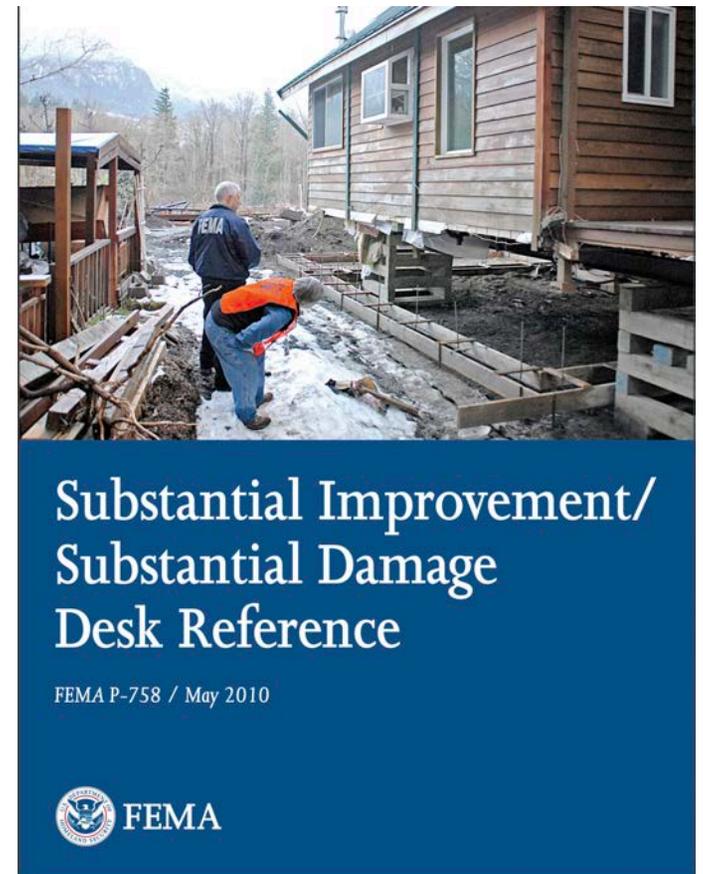
Applicable Literature:

Substantial Improvement/Substantial Damage

Desk Reference

FEMA Publication P-758

[https://www.fema.gov/sites/default/files/2020-07/fema\\_nfip\\_substantial-improvement-substantial-damage-desk-reference.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_nfip_substantial-improvement-substantial-damage-desk-reference.pdf)



# Let's take a look at the terminology:

## Substantial Improvement:

The improvement surpasses 50% of the depreciated value of the structure and will have to be brought up to FEMA standards (elevated)

## Substantial Damage:

The repair/rehab surpasses 50% of the depreciated value of the structure (before the damage occurred) and will have to be brought up to FEMA standards (elevated)

## Depreciated Value of the Structure:

The reconstruction value of the property “as built” minus the proper depreciation.

# Formula for 50% FEMA Rule

$$\frac{\text{Cost of Improvement Project}}{\text{Depreciated Value of the Structure}} \Rightarrow 50\%$$

The outcome of the calculation should be below 50% to go ahead with the improvement and/or renovation project.

# A project is a Substantial Improvement if:

Example:

Cost of Project: \$100,000

Depreciated Market Value of the Structure: \$180,000

$$\frac{\$100,000}{\$180,000} = 56\%$$

The cost of the project exceeds 50% of the building's value, therefore, it is a substantial improvement, which must meet floodplain regulations. The project needs to be adjusted to meet the 50% rule or the property will need to be brought up to code, which could mean elevation of the property or flood proofing to meet FEMA standards.

## A project is feasible if:

Example:

Cost of Project: \$90,000

Depreciated Market Value of the Structure: \$200,000

$$\frac{\$90,000}{\$200,000} = 45\%$$

The cost of the project is below 50% of the building's value, therefore, the project can go ahead with a proper permit and under the assumption the Florida Building Code is met. (Further rules and regulations specific to the municipalities apply).

## Steps for successful construction projects in coastal zones:

The correct steps in applying for a building permit in coastal areas is a follows:

- Know the rules in the municipality you intend to take on a building project
- Inform your client about the possibility the 50% FEMA rule might impact his/her project
- If the rule applies, hire an appraiser to prepare a 50% FEMA rule appraisal to evaluate the depreciated market value of the property
- Ask the appraiser for his/her experience in FEMA valuation (or you waste your client's money)
- After the outcome of the appraisal, apply the formula as shown above
- Determine if the property meets the 50% FEMA rule
- If yes, go ahead and apply for a permit
- If no, there are two ways to go:
  - Adjust the project cost
  - Decide to bring the property up to code

## Different Municipalities – Different Interpretations of the 50% FEMA Rule:

Most municipalities incorporate FEMA rules and guidelines differently into their local ordinances and we see a variety of rules, here are some examples:

The 50% FEMA rule can be applied once a year, always based on a 50% FEMA Rule appraisal.

The 50% calculation starts over every 2, 3, or 5 years. Several projects can be accomplished during the term, but they cannot surpass the accumulated value of 50%.

The 50% calculation starts over every 10 years, with the percentage used in year 1 falling out of the calculation in year 11, etc.

## Are there Exceptions to the 50% FEMA Rule:

Because municipalities interpret FEMA rules and guidelines differently, we see a variety of rules. Therefore, it is important to be familiar with the local ordinances, here are some examples:

Some building departments do not require an appraisal for all work under e.g. 35% threshold.

Some municipalities do not allow certain forms of appraisal reports. For example, Manatee County only allowed the assessed value plus 20%, until we filed a complaint with the state flood plain administrator. Using the assessed value is incredibly disadvantageous for the property owner and of course the builder.

Certain cities mistakenly insist on a market value appraisal instead of a replacement cost minus depreciation (ACV) appraisal. They unnecessarily complicate the process by requiring this type of appraisal. “Added benefit”: The building departments usually do not have a qualified review appraiser who could actually understand and properly interpret these market value appraisals.

Cost exclusions to correct existing health, safety and sanitary code violations can be improved without using any of the 50% FEMA allowance. These violations need to be in writing with the proper notice procedure.

The list goes on and on, but these examples demonstrate, how important it is to familiarize yourself with the ordinances of the municipality your next project will take place.

## Some Questions I hear a lot:

Q: Do all Real Estate Branches have to comply with the 50% FEMA rule?

A: YES, there is no difference, all properties need to comply, regardless if residential SFR, residential MFR, commercial or industrial.

Q: What happens if a government building undergoes improvement and/or rehab?

A: If they play by the rules, and the local ordinances require it, they will have to abide by the 50% FEMA rule and maybe even get an appraisal.

Q: How about buildings on the historical register?

A: These buildings are usually exempt from the 50% FEMA rule.

Q: What happens if a property owner started gutting the building, or the building is damaged?

A: Most all municipalities allow for a retrospective appraisal, especially in case of a wind/fire/flood casualty.

Q: The fire department usually requests retrofitting of sprinklers in MFR rehabs. Do I have to include the cost in the FEMA allowance?

A: I have seen that a lot of municipalities are lenient when it comes to compliance with updated life safety.

# All important links on one page:

FEMA flood maps: <https://msc.fema.gov/portal/home>

CCCL maps: <https://ca.dep.state.fl.us/mapdirect/?focus=beaches>

FEMA SI/SD P-758: [https://www.fema.gov/sites/default/files/2020-07/fema\\_nfip\\_substantial-improvement-substantial-damage-desk-reference.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_nfip_substantial-improvement-substantial-damage-desk-reference.pdf)

Coastal Construction Manual FEMA P-55 Volume I: [https://www.fema.gov/sites/default/files/2020-08/fema55\\_volI\\_combined.pdf](https://www.fema.gov/sites/default/files/2020-08/fema55_volI_combined.pdf)

Coastal Construction Manual FEMA P-55 Volume II: [https://www.fema.gov/sites/default/files/2020-08/fema55\\_volII\\_combined\\_rev.pdf](https://www.fema.gov/sites/default/files/2020-08/fema55_volII_combined_rev.pdf)

Q&A for SI/SD Properties FEMA P-213: [https://www.fema.gov/sites/default/files/2020-07/fema\\_p213\\_08232018.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_p213_08232018.pdf)

Flood Damage-Resistant Materials Requirements: [https://www.fema.gov/sites/default/files/2020-07/fema\\_tb\\_2\\_flood\\_damage-resistant\\_materials\\_requirements.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_tb_2_flood_damage-resistant_materials_requirements.pdf)

Home Builder's Guide to Coastal Construction FEMA P-499: [https://www.fema.gov/sites/default/files/2020-08/fema499\\_2010\\_edition.pdf](https://www.fema.gov/sites/default/files/2020-08/fema499_2010_edition.pdf)

Recommended Residential Construction for Coastal Areas FEMA P-550: [https://www.fema.gov/sites/default/files/2020-08/fema\\_p550\\_rev3.pdf](https://www.fema.gov/sites/default/files/2020-08/fema_p550_rev3.pdf)

The 50% FEMA Rule Appraisal – a very detailed explanation: <https://eadn-wc04-1243588.nxedge.io/cdn/wp-content/uploads/2019/06/The-Appraisal-Journal-The-50-FEMA-Rule-Appraisal-Patricia-Staebler-SRA.pdf>

# Q & A

Ask away!

# Thank you!

Thank you for your attention!

Call anytime with questions or visit my website for more  
FEMA information.

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