

Flood Zones within Putnam County

Moderate to Low Risk Areas

Zones X, X-500

Areas outside of the 1% annual chance floodplain. No Base Flood Elevations or Flood depths are shown within this zone. Flood insurance purchase is not required in these zones.

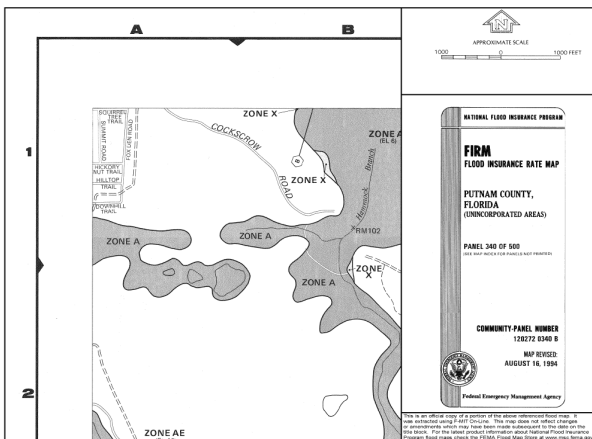
High Risk Areas

Zone A

Areas with a 1% annual chance of flooding. The base flood elevation is not specified by FEMA and must be determined in accordance with accepted engineering practice and provided by the permit applicant. As an alternative to determining the base flood elevation, a permit holder may construct habitable spaces, utilities, and equipment elevated to a minimum of 2 feet above the highest adjacent grade.

Zone AE

Areas with a 1% annual chance of flooding. Base flood elevations are established by FEMA within these zones and are shown on maps provided by FEMA called Flood Insurance Rate Maps (FIRMs).



EXAMPLE OF FLOOD INSURANCE RATE MAP (FIRM)

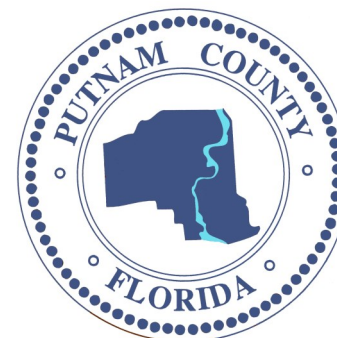
U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program		ELEVATION CERTIFICATE		OMB No. 1060-0068 Expires February 29, 2009	
Important: Read the instructions on pages 1-5.					
SECTION A - PROPERTY INFORMATION				For Insurance Company Use:	
A1. Building Owner's Name				Policy Number	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.				Company NAIC Number	
City State ZIP Code					
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)					
A5. Latitude/Longitude: Lat _____ Long _____				Horizontal Datum <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.					
A7. Building Diagram Number					
A8. For a building with a crawl space or enclosure(s), provide:				A9. For a building with an attached garage, provide:	
a) Square footage of crawl space or enclosure(s) _____ sq ft				a) Square footage of attached garage _____ sq ft	
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade _____ sq in				b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____ sq in	
c) Total net area of flood openings in A8.b _____ sq in				c) Total net area of flood openings in A9.b _____ sq in	
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. FIRM Community Name & Community Number		B2. County Name		B3. State	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AD, use base flood depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in item B9. <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
B11. Indicate elevation datum used for BFE in item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					
SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)					
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings? <input type="checkbox"/> Building Under Construction? <input type="checkbox"/> Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.					
C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), V1-V30, V (with BFE), AR, AR/AE, AR/A1-A30, AR/AH, AR/AD. Complete items C2 a-g below according to the building diagram specified in item A7. Vertical Datum _____					
Conversations/Comments _____					
Check the measurement used:					
a) Top of bottom floor (including basement, crawl space, or enclosure floor) _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
b) Top of the next higher floor _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
c) Bottom of the lowest horizontal structural member (V Zones only) _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
d) Attached garage (top of slab) _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment in Comments) _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
f) Lowest adjacent (finished) grade (LAG) _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
g) Highest adjacent (finished) grade (HAG) _____ feet				<input type="checkbox"/> meters (Puerto Rico only)	
SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION					
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.					
<input type="checkbox"/> Check here if comments are provided on back of form.					
Certifier's Name _____		License Number _____		PLACE SEAL HERE	
Title _____		Company Name _____			
Address _____		City _____ State _____ ZIP Code _____			
Signature _____		Date _____ Telephone _____			
FEMA Form 81-31, February 2006 See reverse side for continuation. Replaces all previous editions.					

This is an example of FEMA FORM 81-31 used by a licensed surveyor to officially document the elevation of a building, structure, or equipment in relation to mean sea level and expressed as the Base Flood Elevation (BFE).

Elevation certificates are required to be submitted to the building department during construction and at the completion of construction and final grading.

Putnam County
Planning & Development Services

Areas of Special Flood Hazard



Land Development Code

Article 6
Resource Protection Standard

[http://www.putnam-fl.com/uploads/uploads/land_development_code/Article_06_\(20130924a_amended\).pdf](http://www.putnam-fl.com/uploads/uploads/land_development_code/Article_06_(20130924a_amended).pdf)

Putnam County
Planning & Development Services

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RESIDENTIAL CONSTRUCTION WITHIN A SPECIAL FLOOD HAZARD AREA

Where construction occurs in a special flood hazard area, the applicant must document the intended construction practice in accordance with the Florida Building Codes. Buildings and structures are required to be constructed to safely support all loads, including flood loads and must be designed in accordance with specific design criteria. These criteria are typically documented directly on the face of plans and specifications as the basis for design.

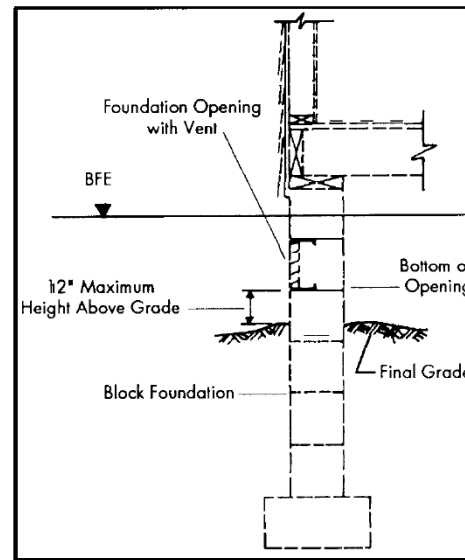
When building within a special flood hazard area, construction documents must include an engineered design in accordance with code requirements. These engineered documents must address the following design considerations:

- Elevation of the structure relative to the design flood elevation (DFE)
- Foundations and geotechnical factors
- Damage to the structure up to and during the design flood
- Obstructions or enclosures below DFE
- Structural connections
- Use of flood-damage-resistant materials
- Flood proofing
- Utilities
- Means of egress
- Adverse impacts to other structures and property

Plans should clearly indicate the special flood hazard designation, the anticipated flood depth, foundation design resisting flood forces resulting from hydrodynamic, hydrostatic, soil inundation from water, scour, floodplain displacement, and upheaval. As an alternative, the placement of engineered fill addressing floodplain displacement, water inundation could be used as a form of flood proofing by removing the foundation from the flood hazard.

Additionally, the foundation may be designed as an open or vented foundation utilizing a raised wood/concrete floor. The finished floor elevations for all habitable spaces are required to equal or exceed the base flood elevation. Vented foundations and enclosed spaces below the base flood elevation used for parking, access, or storage must be designed with flood vents in accordance with the FBCR and FEMA Technical Bulletin 1.

If you are considering building within an area of special flood hazard and have additional concerns contact the Building & Zoning Division at (386) 329-0316



Non-Engineered Foundation Openings

1. There must be a minimum of two openings on opposing sides of each enclosed area.
2. The total area of openings must be at least 1 square inch for each 1 square foot of enclosed area.
3. The bottom of each opening can be no more than 1 foot above the adjacent grade.
4. Any louvers, screens, or other opening covers must not block or impede the automatic flow of floodwaters into and out of the enclosed area.

		Foundation Flood Risk													
Flood Risk During the Base Flood	Fill	Foundation Construction Method													
		Stem Walls		Crawlspace		Slab-On-Grade		Basement							
		Above BFE	At BFE	Above BFE	At BFE	Above BFE	At BFE	Floor Level		Openings					
Increasing Level of Flood Risk	Above BFE	■													
	At BFE														
	Above BFE														
	At BFE														
	Below BFE														
	Above BFE														
	At BFE														
	Below BFE														
	Above BFE														
	At BFE														

Types of Foundations

Foundation construction method presents different risk to the structure and the floodplain. Foundations with adequate flood venting allow the flood waters to equalize the against the foundation thus preventing structural damage.

In addition, the building foundation design minimizes displacement of flood waters during a flood event and damage to adjacent properties.

