Living on a Barrier Island – A Virtual Workshop for Real Estate Professionals

NFIP Overview

Developing in Compliance w/ the NFIP

March 2, 2022
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NC Emergency Management, Risk Management

North Carolina Emergency Management
• Identifies & maps flood hazard areas
• Provides a framework for floodplain management regulations
• Makes flood insurance available in Communities that participate in the NFIP
NFIP Goals

• Reduce loss of life & property
• Reduce rising disaster relief costs
• Increase importance of hazard mitigation (flood resistant construction, guide future development, & prohibit development in floodplains that would increase flood levels)
• Restore & protect natural resources & functions of floodplains
• Decrease taxpayer-funded disaster costs
• Make Federally backed insurance coverage available to property owners
Community Participation in the NFIP

A **VOLUNTARY** program based on a mutual agreement between the Federal government and the local community:

In exchange for adopting, implementing and enforcing a Floodplain Management Ordinance, Federally-backed flood insurance is made available to property owners throughout the community.
Role of NFIP Participating Community

- Review floodplain development permit applications and issue/deny floodplain development permits
- Inspect **ALL** development to ensure compliance with local ordinances
- Maintain floodplain development records
- Assist in preparation & revision of floodplain maps
- Help citizens obtain information on flood hazards, floodplain map data, flood insurance, & proper construction measures
Benefits of Participation

The availability of:

- Federal grants or loans for development in Special Flood Hazard Areas (SFHAs) under Federal programs
- Federal disaster assistance to repair insurable buildings located in SFHAs
- Federal mortgage insurance/loan guarantees in SFHAs
Development Standards and Mitigation Measures

Coastal Construction Manual
FEMA P-55 / Volume I / August 2011

North Carolina Emergency Management
Elevation Certificate Form

- Verify Regulatory Compliance
- Supporting documentation for map revision & amendment applications
- Provide better/recent data to insurance companies to see if a better rate is available

**NOTE:** Data collected on this form is for the construction & utility service to a single STRUCTURE only – not the lot or other improvements.

North Carolina Emergency Management
The Community’s EC Review

Community Officials **MUST review** Elevation Certificate’s (ECs) before accepting them to ensure:

- Completeness
- Reasonableness/Accuracy
- Compliance

NFIP requires the Finished Construction EC for all:

- New Construction
- Additions
- Substantial Improvements

of structures located in the Special Flood Hazard Area.
A property owner needs a copy of the elevation certificate for their structure.
Answer...

- The local permitting jurisdiction
- Surveyor

State NFIP staff do NOT have a database of ECs.
Protecting Existing Structures

Purchase Flood Insurance

Lower Your Flood Risk

- Elevate utilities (include duct work)
- Install flood openings
- Elevate building
- Flood proof (non-residential only)
- Relocate
Flood Openings

**Permanent Opening** in a Wall that Allows the Free Passage of Water in Both Directions, **AUTOMATICALLY**, without Human Intervention.

A Window, a Door, or a Garage Door is **NOT** Considered an Opening.

Vents **MAY** be located in a door or garage door.
Figure 1: Equalizing flood forces (hydrostatic loads) on exterior walls
Flood Openings

Small Low-cost storage Buildings

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Minimum Requirements for Foundation Openings

- Minimum of **two openings** on different sides of EACH enclosed area.
- The total net area of all openings must be at least **one (1) square inch for each square foot** of enclosed area.
- The bottom of all required openings shall be no higher than **one foot** above the adjacent grade at each opening.
- Openings may be equipped with screens, louvers, or other **“automatic”** coverings or devices, provided they permit the automatic flow of floodwaters in **both** directions.
Net area?
Is this flood opening code compliant?

Non-compliant
Within 1 foot of grade?

Non-compliant
This is complaint
This is complaint
Plexiglas cover. This is a violation!!
Spray foam insulation. This is a violation!!
Engineered Openings/Vents

Plastic – No Rust or Rot Crawlspace Flood Vent for Homes (New Construction & Replacement)

Easy Access • Modular Use • Can Be Painted

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Engineered Openings/Vents

Flood Vent (No Cover)
One-piece ventplate with easy to insert screen and fixed louver. Made of durable PVC/ABS plastic (no rust or rot) with a UV retardant treatment. PRIMA compliant. No cover to allow the automatic entry and exit of floodwaters. Quick and easy to install.

Crawl Space Door Systems
Inc.

Plastic Crawlspace Doors & Vents
Plastic Crawlspace Louvers/Screens
Plastic FEMA Flood Vents

Flood Openings (TB 1 – August 2008)

US LEVER, Patent No. US 5092412, was granted December 16, 2000 and owned by and licensed to Crawl Space Door Systems, Inc. as required by the Federal Emergency Management Agency’s National Flood Insurance Program Technical Bulletin TB 1 (August 2008) will allow an exterior wall by allowing for entry and exit of floodwater during floods up to 3 feet.

ICF Model 1540-520
16 1/4” R/D

Smart VENT
877-441-8368
www.smartvent.com

Detail Diagram Model 1540-520
Flood Vent Insulated

INSTALLATION LIMITATIONS AND INSTRUCTIONS

Each individual opening, and any关联s, curtains, or the screen, shall be sized to allow automatic entry and exit of floodwaters during floods. A flood vent must have a minimum of two different sides of an enclosed area. A structure that more than one enclosed area below the DFE, each area shall have openings that not be less than 3 in. in any direction in the plane of the wall. The bottom of each required opening shall not be more than 1/2 in. above the ground level, the difference between the exterior flood Vent shall not exceed 1/2 in. in the absence of relative rise of the tide and flood, assume a minimum rate of rise of the tide and fall of 5.8 ft.

Installation Instructions

Signature

Type of License

Licence Number

Department of Public Safety

DPS

3300 Shoee Drive, Virginia Beach, VA 23455
757-363-0005 • 1-800-230-5998 • www.crawlspacedoors.com
Flood Proofing
(Non-residential Only)
The lowest floor is measured at the top of the sub-floor, slab or grade for regulatory & flood insurance purposes.
Lowest Floor in ZONE V & VE

Bottom of the lowest horizontal structural member supporting the lowest floor

*If solid enclosure below BFE as in Diagram 6
Regulatory Flood Protection Elevation (RFPE)

- Base Flood Elevation PLUS Freeboard (BFE + Freeboard)
- Freeboard – the elevation required by a local jurisdiction above the base flood elevation
- Higher standard adopted by the local jurisdiction
  - Higher level of protection for structures
  - Community Rating System (CRS) Points = increased flood insurance discounts (in the SFHA and out)

Example: BFE of 9’ + 2’ local freeboard = RFPE of 11’
A-Zones: 1st finished floor elevation
V-Zones: Lowest Horizontal Structural Member
Figure 7. Recommended construction in Coastal A zones and V zones.
Figure 2. Bolivar Peninsula, TX, V-zone house constructed with the lowest floor (bottom of floor beam) at the BFE (dashed line). The estimated wave crest level during Ike (solid line) was 3 to 4' above the BFE at this location.
ELEVATED AIR CONDITIONER
ELEVATED ELECTRIC METERS

High Water Mark
Properly anchored propane tank
Question

If you need flood zone/risk information for a property, where do you personally go to find that information?
Online Resources

ReadyNC – http://readync.org
Flood.NC.gov – http://flood.nc.gov
FRIS – http://fris.nc.gov
FIMAN – http://fiman.nc.gov
FloodSmart - http://floodsmart.gov
FEMA – http://fema.gov
Insurance

One of the best things for homeowners, renters and business owners against any type of natural disaster is a good insurance policy. Be aware that homeowner’s insurance does not cover flood damage. You need a separate flood insurance policy. Homeowners, renters and business owners can buy flood insurance even if they reside in a high, low or moderate risk area. Policies are available for both residential and commercial buildings as long as the community joins in the National Flood Insurance Program.

For more North Carolina Insurance Information, call 800-546-5664 or 919-807-6750.

For information about the National Flood Insurance Program, call 888-379-9531.
Real Estate Agents

For Agents Who Sell Real-Estate in a Flood-Hazard Area

"Potential buyers want to know how to mitigate flood hazards on property within the flood plain."

Important Links:

- NC Flood Risk Information System
- FEMA Map Service Center
- North Carolina NFIP Updates
- Find Meetings & Training

Frequently Asked Questions

1. How do I determine if the structure is in the SFHA?
   Check the Flood Risk Information System Website: FRIS

2. Will an elevation certificate be required?
   A Post-FIRM structure should have an elevation certificate completed at the time of construction. An EC is required for rating the flood insurance policy.

3. Do Pre-FIRM structures require an elevation certificate?
Flood Risk Information System

Am I at risk of flooding?
- General Public
- Address, City, or ZIP
- OR select a county
  - County: Ashe, North Carolina

Benefits of Floodplain Mapping
Floods are among the most frequent and costly natural disasters in terms of human hardship and economic loss. North Carolina’s Digital Flood Insurance Rate Maps (DFIRM) enable business leaders and residents to more accurately predict flood hazards and prepare for flood risks. Go to flood.nc.gov for more information.
This is an official site of the National Flood Insurance Program.

The NFIP offers flood insurance to help you protect the life you’ve built and recover more quickly after a flood.

Get Coverage
Highlights of RISK Rating 2.0
RISK RATING 2.0

- Fundamental Change in Policy Rating
- Incorporate Multiple Characteristics
  - Distance to the coast, river, lake, or other flooding source
  - Types of flooding
  - Cost of rebuilding (fairer rates to owners of lower-value homes)
  - Structure characteristics (vents, Foundation type, etc)
- Fully Effective
  - April 1, 2022: All policies
RISK RATING 2.0

- **Data Sources**
  - FEMA (mapping data, policy and claim data)
  - Other Federal Government Agencies (USGS, NOAA, USACE)
  - Third party sources (Commercially-available structural and replacement cost data and catastrophe flood models)

- **Credits for mitigation actions**
  - Install flood openings
  - Elevation on posts, piles, or piers – available in all zones including X
  - Elevate utilities, machinery, and equipment above the lowest floor
RISK RATING 2.0

1. Sticking Around
   - HFIAA (2014) rate increases still in place
   - CRS Discounts
   - Submit-for-Rate
   - Elevation Certificates
   - Mandatory Purchase Requirement

2. Eliminating (more or less)
   - Pre-FIRM rates
   - Grandfathering rates
   - Preferred Risk Policy rates

3. Prior Claim History
   - Will be considered

https://www.fema.gov/flood-insurance-reform
Hurricane Dorian - 2019

Water Elevation on Ocracoke Island; 7.3 ' of storm surge
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North Carolina Emergency Management
Questions?

Thank You for having me!