



Town of Kitty Hawk Planning & Inspections Department

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RESIDENTIAL CONSTRUCTION – AE, X ZONES

Floodplain Development Regulation Summary

The purpose of regulating development in the Special Flood Hazard Areas (SFHA), also known as flood zones, is to prevent the loss of life and property, and minimize the disruption of commerce and services during and after flood events. As a visualization aide, Special Flood Hazard Areas can be viewed online as a Map Layer on the Dare County GIS Website at maps.darecountync.gov or at the NC FRIS website, fris.nc.gov.

These regulations are found in the Flood Damage Prevention Ordinance (FDPO), Chapter 14 of the Kitty Hawk Town Code (library.municode.com/nc/kitty_hawk/codes/code_of_ordinances). Property owners in Kitty Hawk are eligible to purchase federally subsidized insurance through the National Flood Insurance Program (NFIP).

Floodplain Development Permit

A Floodplain Development Permit is required for any development proposed within the Town of Kitty Hawk (In addition to the A and V zones, Kitty Hawk's FDPO also regulates the X zones). If a Coastal Area Management Act (CAMA) Permit is required, a copy of the CAMA permit must be submitted with the Building Permit Application. The Flood Development Permit will be issued in conjunction with a Building Permit. Applicants must sign and return the Floodplain Development Permit, acknowledging that all requirements of the FDPO shall be met, in order to receive a building permit.

Certifications

Elevation Certificates (EC): Two different Elevation Certificates will need to be produced by a surveyor and submitted to the Floodplain Administrator.

- Under Construction EC – To be submitted prior to scheduling rough-in inspection.
- Finished Construction EC – To be submitted prior to scheduling pre-final inspection.
- In Shaded X and X zones, the Under Construction EC can be waived if a current survey of the parcel is submitted that demonstrates the natural grade of the structure footprint is above the RFPE of eight feet NAVD.

Engineered Opening Certification: When Engineered openings (Flood vents such as Smart Vents) are proposed for enclosed spaces, the ICC-ES Evaluation Report must be incorporated into the Finished Construction EC.

Non-conversion Agreement: The agreement states that the owner (or subsequent owners) will not convert or alter enclosed spaces below Regulatory Flood Protection Elevation (RFPE) that have been constructed and approved. A copy of the recorded agreement must be submitted prior to the issuance of a Certificate of Occupancy. The non-conversion agreement is required for all new

construction and substantial improvements which feature an enclosed area below RFPE and with walls greater than four feet in height.

Building Standards

These standards are typical when building a home within an AE or X Flood Zone, but additional standards may apply based on your specific plan and scope of work:

Elevation

- The Regulatory Flood Protection Elevation (RFPE):
- In the AE Flood Zone, RFPE is the Base Flood Elevation plus three feet of freeboard or an elevation of eight feet NAVD, whichever is greater, measured to the **bottom** of the lowest floor (bottom of floor joists, bottom of slab, etc.)
 - In the Shaded X and X zones, RFPE is eight feet NAVD or the natural grade elevation if the natural grade is greater than eight feet NAVD, measured to the **bottom** of the lowest floor (bottom of floor joists, bottom of slab, etc.)
- All livable space must be at or above RFPE.
- Construction below RFPE shall utilize flood-resistant materials.
- All new electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall be located at or above the RFPE.
 - These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, water heaters, and electric outlets/switches.

Enclosed Spaces

- Enclosed spaces below the RFPE must not be designed for human habitation but shall only be used for vehicle parking, building access, and/or limited storage of maintenance equipment.
- Enclosed spaces below the RFPE shall include flood openings according to these standards:
 - A minimum of 2 flood openings on different sides is required for each enclosed space.
 - The total net area required for flood openings is equal to one (1) square inch for each square foot of enclosed space. (A 12'x12' enclosed space requires 144 square inches of openings).
 - If Engineered Openings are used, the ICC-ES Evaluation Report must be incorporated into the Finished Construction EC.

Flood Insurance

- Since Kitty Hawk is an NFIP participating community, property owners are eligible for federally subsidized insurance.
- While property owners in a special flood hazard area with federally backed mortgages are required to have flood insurance, all property owners are encouraged to carry flood insurance. Low risk is not no risk.