

What Are The Different Flood Hazard Zone Designations Shown On A Flood Insurance Rate Map (FIRM) And What Do They Mean?

Zone AE

Zones AE are the flood insurance rate zones used for the 1-percent-annual-chance floodplains that are determined for the Flood Insurance Study (FIS) by detailed methods of analysis. In most instances, Base Flood Elevations (BFEs) derived from the detailed hydraulic analyses are shown at selected intervals in this zone. Mandatory flood insurance purchase requirements apply. AE zones are areas of inundation by the 1-percent-annual-chance flood, including areas with the 2-percent wave runup, elevation less than 3.0 feet above the ground and areas with wave heights less than 3.0 feet. These areas are subdivided into elevation zones with BFEs assigned.

Zone AO

AO zones are areas of sheet-flow shallow flooding where the potential runup is less than 3.0 feet above an overtopped barrier crest ($\Delta R < 3.0$ feet). The sheet flow in these areas will either flow into another flooding source (AE zone), result in ponding (AH zone) or deteriorate because of ground friction and energy losses and merge into the X zone. AO areas are designated with 1-, 2-, or 3-foot depths of flooding.

Zone VE

VE zones are coastal high hazard areas where wave action and/or high-velocity water can cause structural damage during the base flood. They are subdivided into elevation zones with BFEs assigned. VE zones are identified using one or more of the following criteria for the base flood conditions:

1. The **wave runup zone** occurs where the (eroded) ground profile is 3.0 feet or more below the 2-percent wave runup elevation
2. The **wave overtopping splash zone** is the area landward of the crest of an overtopped barrier, in cases where the potential 2-percent wave runup exceeds the barrier crest elevation by 3.0 feet or more ($\Delta R > 3.0$ feet).
3. The **breaking wave height zone** occurs where 3-foot or greater wave heights could occur (this is the area where the wave crest profile is 2.1 feet or more above the total stillwater level).
4. The **primary frontal dune zone**, as defined in 44 CFR Section 59.1 of the NFIP regulations.

Zone X (shaded)

Zones X (shaded) are areas of 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance (base flood) sheet flow flooding with average depths of less than 1 foot, areas of base flood stream flooding with a contributing drainage area of less than 1 square mile or areas protected from the base flood by levees. No BFEs or depths are shown in this zone and insurance purchase is not required

Zone X (unshaded)

Zones X (unshaded) are flood insurance rate zones used for areas outside the 0.2-percent-annual-chance floodplain. No BFEs or depths are shown in this zone, and insurance purchase is not required.