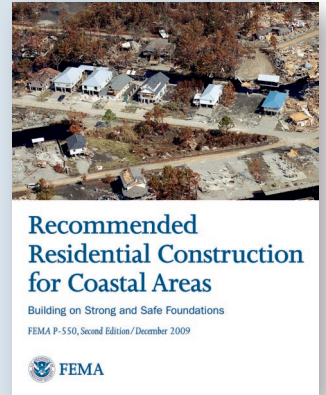




Key Topics:

- Types of hazards (*Chapter 1*)
 - High winds
 - Storm surge
 - Floods
- Foundation design criteria (*Ch. 2*)
- Foundation types in coastal areas (*Section 2.3*)
 - Piles
 - Piers
 - Perimeter walls
 - Slab-on-grade
- Recommended foundation types for coastal areas (see reverse side) (*Ch. 4*)
- Foundation design loads (*Ch. 3*)
 - Wind loads
 - Flood loads
 - Hydrostatic loads
 - Wave loads
 - Hydrodynamic loads
 - Debris impact loads
 - Erosion and localized scour
- Foundation selection, considerations and cost estimating (*Ch. 5*)



Open Foundations – Recommended Practices



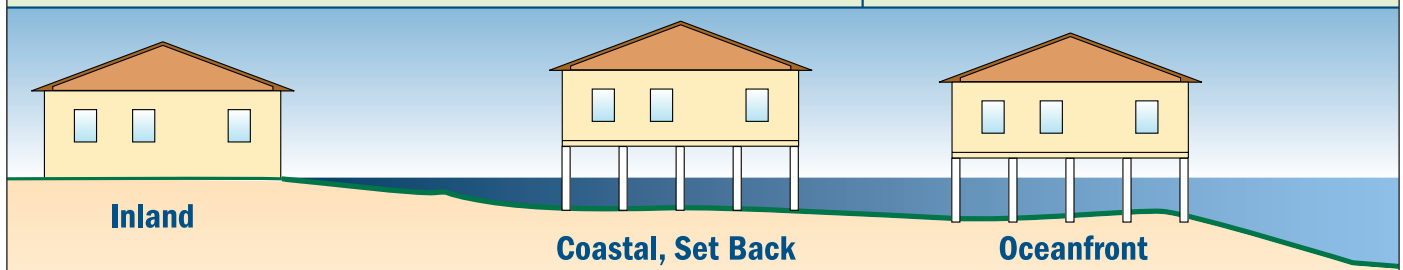
A Zones in Coastal Areas:

Subject to Breaking Waves and Erosion During the Base Flood
Lowest Horizontal Structural Member Above BFE (Freeboard)

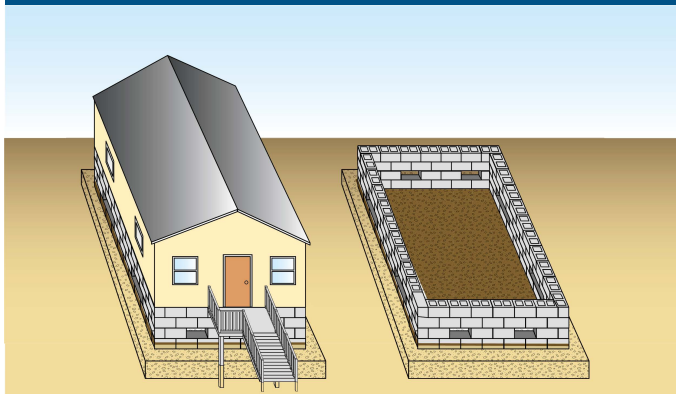


V Zones:

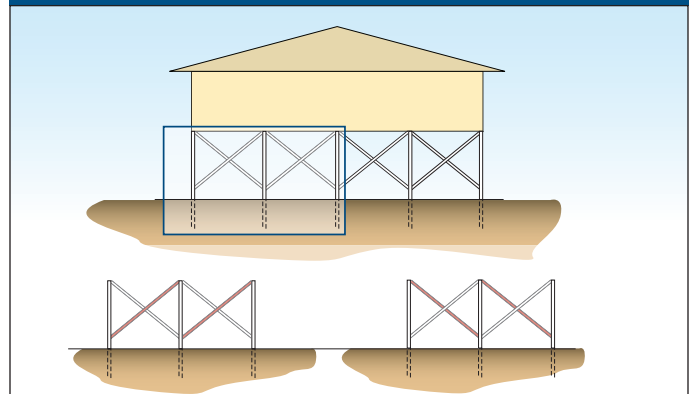
Bottom of Lowest Horizontal Structural
Member Above BFE (Freeboard)



Closed Foundations



Bracing



Description

FEMA P-550 provides a series of recommended foundation designs that will help create safer and stronger buildings in coastal areas. The designs are intended to help support rebuilding efforts after coastal areas have been damaged by floods, high winds, or other natural hazards.

Target Audience

Homebuilders, contractors, and engineering professionals.

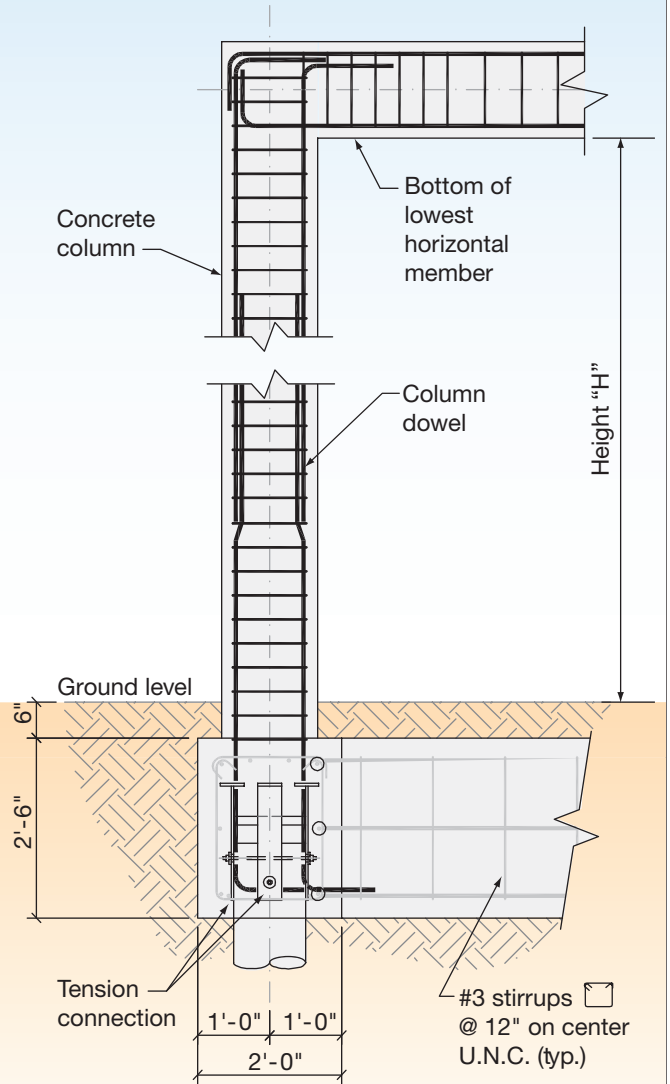
Insufficient Pile Embedment



Successful Pile Foundation



Example Foundation Type – Timber Pile with Concrete Grade and Elevated Beams and Concrete Columns



For more information, see the FEMA Building Science Frequently Asked Questions website at <http://www.fema.gov/frequently-asked-questions-building-science>.

If you have additional questions on FEMA Building Science Publications, contact the helpline at FEMA-Buildingsciencehelp@fema.dhs.gov or 866-927-2104.

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