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## R301.2.4

### Floodplain Construction

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** Buildings located in a flood hazard area must comply with the provisions for the most restrictive flood hazard area and may use ASCE 24 for design.

**2015 CODE: R301.2.4 Floodplain Construction.** Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1), and substantial improvement and restoration of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with Section R322. Buildings and structures that are located in more than one flood hazard area shall comply with the provisions associated with the most restrictive flood hazard area. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.

**R301.2.4.1 Alternative Provisions.** As an alternative to the requirements in Section ~~R322, R322.3~~ for buildings and structures located in whole or in part in coastal high hazard areas (V Zones) and Coastal A Zones, ~~if delineated~~, ASCE 24 is permitted subject to the limitations of this code and the limitations therein.

**CHANGE SIGNIFICANCE:** ASCE/SEI 24, *Flood Resistant Design and Construction*, provides an alternative design procedure for buildings and structures in flood hazard areas. There are many flood hazard areas where the builder, designer, or building official may deem it appropriate to use an engineered foundation, such as along riverine waterways and some coastal areas (inland of Zone V) where flood depths are significant and



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Houses in a floodplain

dwellings would need very tall foundations. Design may be needed in riverine floodplains where flood velocities are very fast as well. ASCE 24 provides assistance for design of these foundations.

Another situation where use of ASCE 24 is appropriate is with dwellings in flood hazard areas on alluvial fans. The IRC does not contain specific provisions for alluvial fans. Specifying ASCE 24 as an alternative allows its use where prescriptive provisions of the IRC do not account for known flood risks.

Design of buildings located in two flood hazard areas is clarified. Where a building is affected by more than one flood hazard, the structure must comply with the more restrictive provisions that take into account flood loads and conditions of the area. For example, a dwelling that straddles a line that separates Zone A from Zone V must comply with the requirements for Zone V. Section R301.2.4 applies to existing dwellings as well as new dwellings. The flood provisions apply to substantial improvement and substantial damage of existing dwellings.