## REQUIREMENTS for BUILDINGS in FLOOD ZONES

National Flood Insurance Program, Lake County, California

NOTE: BFE = Base Flood Elevation, in this case \_\_\_\_\_.

The lowest floor of the dwelling must be a minimum of 1'-0" above the BFE with all materials used below the BFE to be "flood resistant" (concrete or PTDF)

- UTILITIES: Electrical switch boxes, outlets, heaters, air conditioners, etc. should be elevated to be above the BFE, or be installed in flood resistant enclosures. Propane tanks are to be anchored to prevent floating.
- MANUFACTURED HOMES: To be on a permanent foundation such that the lowest floor of the manufactured home is elevated a minimum of 1'-0" above the BFE and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. All materials used below the BFE to be "flood resistant" (concrete or PTDF).
- GUIDANCE FOR NON-ENGINEERED OPENINGS IN FOUNDATIONS: Each of the following four (4) design criteria must be met for new and substantially improved A-zone buildings that have enclosed areas below the BFE with openings not designed by a registered professional engineer or architect.
- 1. There must be a minimum of two openings on different sides of each enclosed area. If a building has more than one (1) enclosed area, such as an attached garage, each area must have openings on exterior walls to allow floodwater to directly enter and leave.
- 2. The total area of all openings must be at least one (1) square inch for each one (1) square foot of enclosed area. Each enclosed area shall be calculated separately.
- 3. The bottom of each opening can be no more than one (1) foot above the exterior or interior grade, whichever is higher.
- 4. Any louvers, screens, or other opening covers must not block or impede the automatic flow of flood water into and out of the enclosed area.

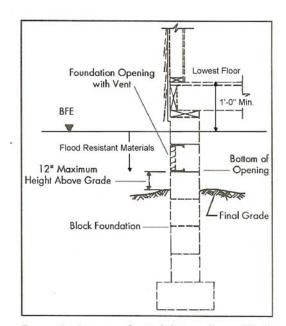


Figure 1. Opening for Solid Foundation Wall

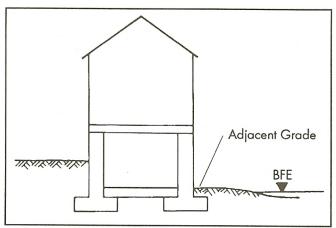


Figure 2. Compliant Grading for a Walkout
Basement

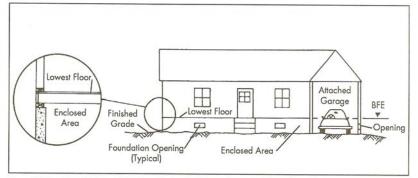


Figure 3. Compliant Residential Building Built on Solid Foundation Walls With Attached Garage