

# Calculating Fill in Flood Zone

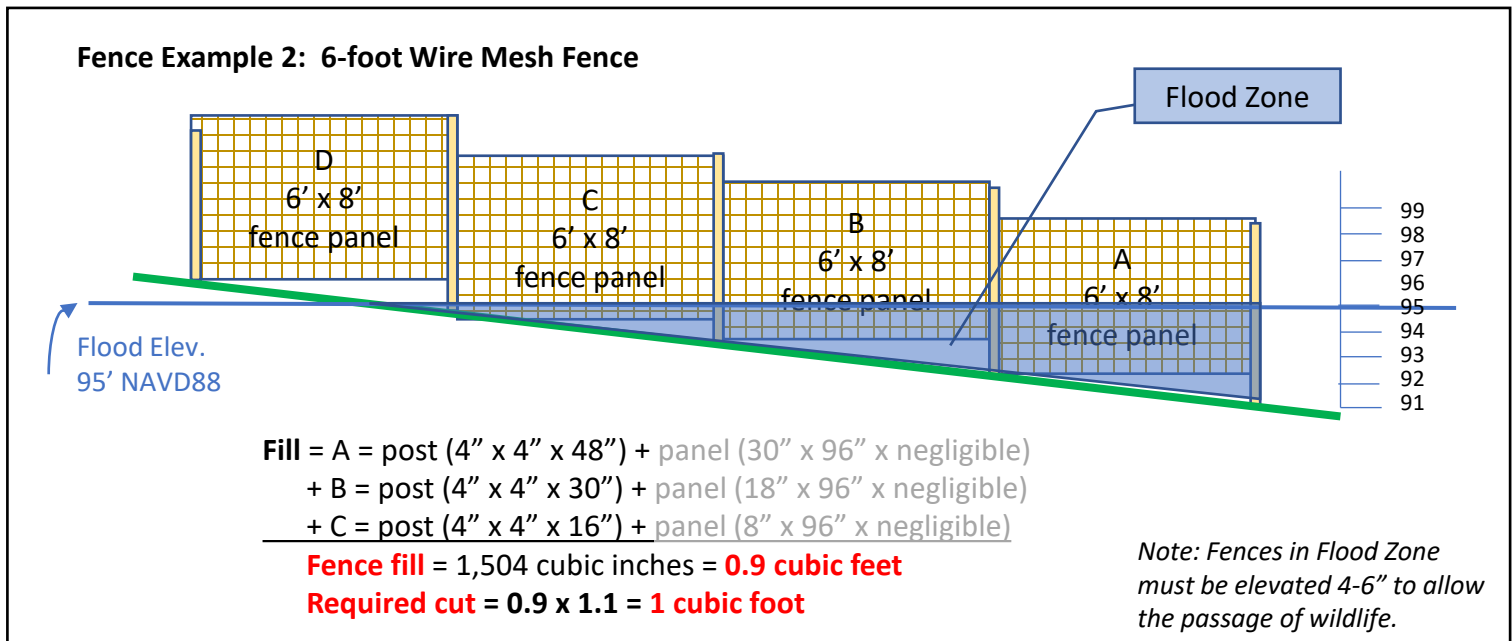
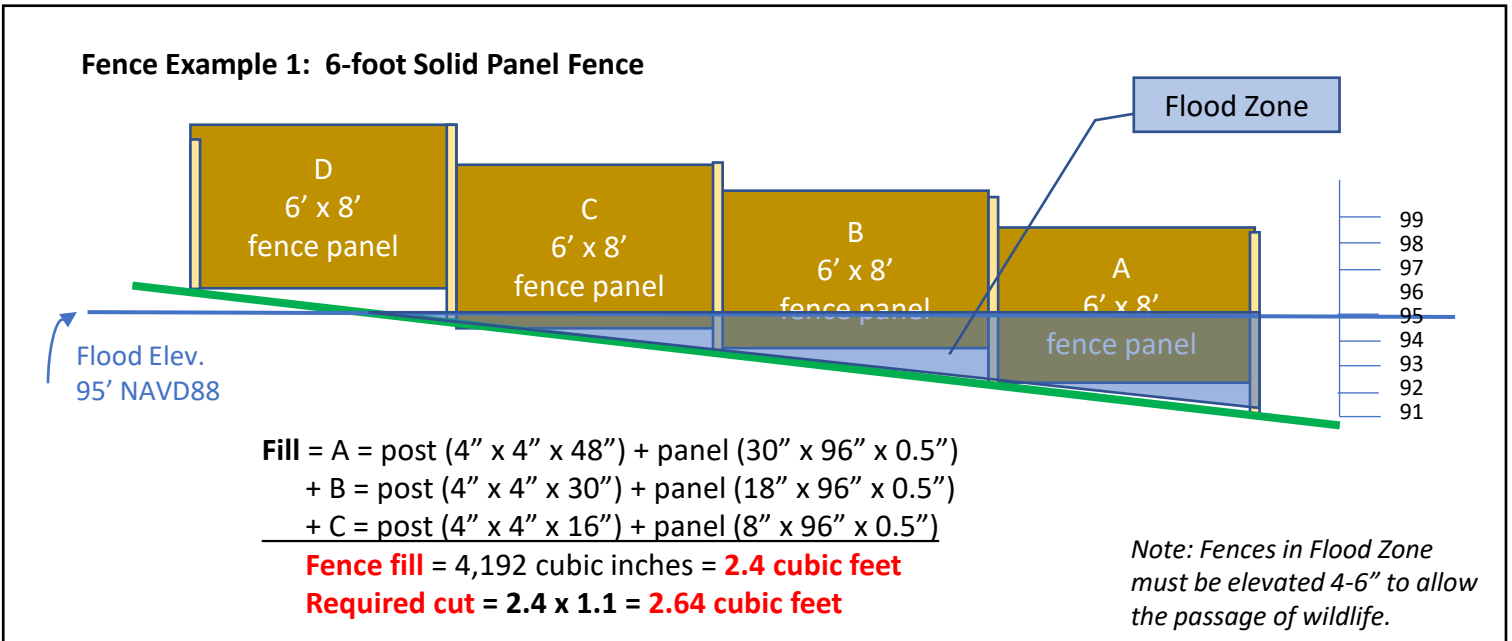
“Fill” at each foot of elevation in Flood Zone must be (over)compensated for with “cuts” of 110% at each foot of elevation.

Fill = The volume (length x width x height) of any lasting material brought into the flood plain (i.e., the area below the flood elevation). For example, fill might include:

- Dirt, loam, stone, etc. associated with grading,
- Lumber or stone associated with new buildings, decks, stairs, patios, fences, etc., or
- The volume used up by a structure or its foundation.

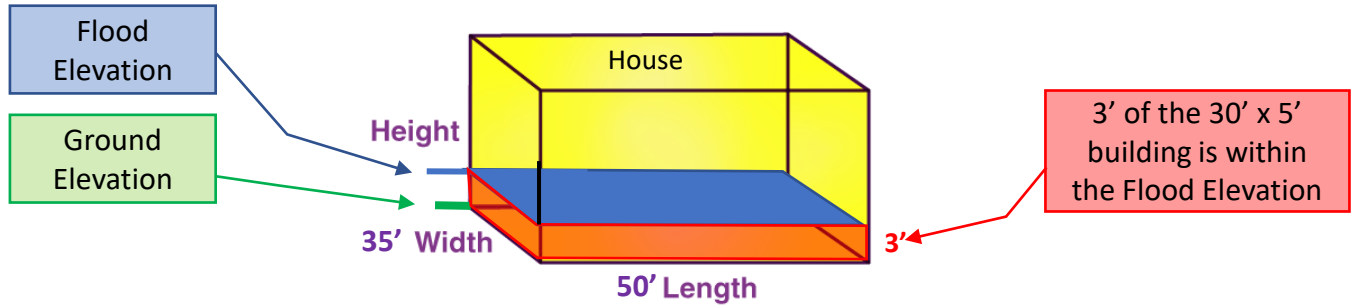
Cut = The volume (length x width x height) of any lasting material removed from the flood plain (the area below the flood elevation). For example, cuts might include:

- Removed loam and soil (excavation or grading), or
- Removed structures, stains, fences, patios, etc.



## Calculating Fill in Flood Zone (continued)

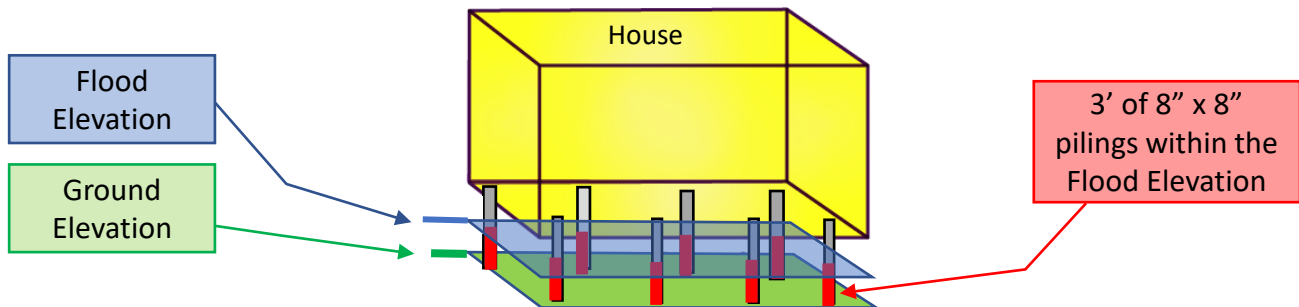
### House Example 1: Solid Foundation



$$\text{Foundation Fill} = L \times W \times H = (3' \times 35' \times 50') = \mathbf{5,250 \text{ cubic feet}}$$

$$\text{Required cut} = 5,250 \times 1.1 = \mathbf{5,775 \text{ cubic feet}}$$

### House Example 2: Piling Foundation, Elevated House



$$\text{Piling Fill} = L \times W \times H \text{ pilings} = (3' \times .67' \times .67') \times 8 = \mathbf{11 \text{ cubic feet}}$$

$$\text{Required cut} = 11 \times 1.1 = \mathbf{12.1 \text{ cubic feet}}$$