

Raise or Floodproof HVAC Equipment

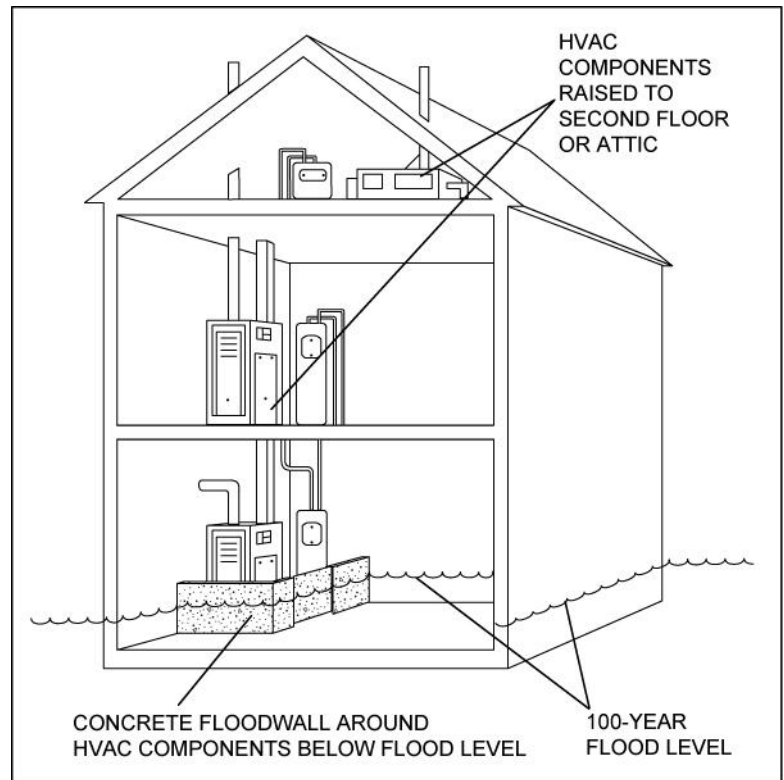


FEMA

PROTECTING YOUR PROPERTY FROM FLOODING

Heating, ventilation, and cooling (HVAC) equipment, such as a furnace or hot water heater, can be damaged extensively if it is inundated by flood waters. The amount of damage will depend partly on the depth of flooding and the amount of time the equipment remains under water. Often, the damage is so great that the only solution is replacement.

In floodprone structures, a good way to protect HVAC equipment is to move it from the basement or lower level of the structure to an upper floor or even to the attic. This can involve plumbing and electrical changes throughout the structure. A less desirable method is to leave the equipment where it is and build a concrete or masonry block floodwall around it. The floodwalls must be adequately designed and constructed so that they are strong enough and high enough to provide the necessary level of protection. Both of these methods require the skills of a professional contractor.



BENEFITS OF UTILIZING THIS MITIGATION STRATEGY

- Helps to prevent damage to a structure's HVAC equipment

TIPS

Keep these points in mind when you have your HVAC equipment raised or floodproofed:

- ✓ Changes to the plumbing, electrical system, and ventilating ductwork in your property must be done by a licensed contractor, who will ensure that the work is done correctly and according to all applicable codes. This is important for your safety.
- ✓ If you are having your existing furnace or hot water heater repaired or replaced, consider having it relocated at the same time. It will probably be less expensive to combine these projects than to carry them out separately.
- ✓ Similarly, if you have decided to raise your HVAC equipment, consider upgrading to a more energy-efficient unit at the same time. Upgrading can not only save you money on your heating and cooling bills but may also make you eligible for a rebate from your utility companies.

- ✓ If you decide to protect your HVAC equipment with a floodwall, remember that you will need enough space in the enclosed area for system repairs and routine maintenance. Also, depending on its height, the wall may have to be equipped with an opening that provides access to the enclosed area. Any opening will have to be equipped with a gate that can be closed to prevent flood waters from entering.

ESTIMATED COST

Having your furnace and hot water heater moved to a higher floor or to the attic will cost about \$1,500. The cost of a floodwall will depend partly on its height and length. A 3-foot-high wall with a perimeter length of 35 feet would cost approximately \$2,500.

OTHER SOURCES OF INFORMATION

FEMA 348, *Protecting Building Utilities from Flood Damage*, Chapter 3, November 1999,
<http://www.fema.gov/library/viewRecord.do?id=1750>.

FEMA 499, *Home Builder's Guide to Coastal Construction*, Technical Fact Sheet No. 29, August 2005,
<http://www.fema.gov/library/viewRecord.do?id=1570>.

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