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Richland County Department of Building Codes & Inspections
- Special Edition – Flood Recovery Information

GUIDELINES FOR PERMITS ASSOCIATED WITH THE REPAIR OF FLOOD DAMAGED HOMES AND BUILDINGS

The Department of Building Codes and Inspections urges you to use extreme caution when re-entering any residence that has been submerged or water damaged during flooding. See our guidelines for Safety Precautions For Residents Returning To Flood Homes.

A building permit is required prior to making repairs to flood damaged homes and buildings.

While building permits are not required for ordinary maintenance and repairs . . . the repair of a flood damaged home or building is far from 'ordinary'.

While there are no permits required to do the "clean-up" associated with the project (the removal of drywall and damaged carpet, doors, etc.), a building permit is required prior to installation of the drywall and prior to repair of any electrical, plumbing, or mechanical (HVAC) system damage.

How does a building permit benefit the Homeowner?

In a word: **SAFETY**. A building permit and the inspections that accompany a permit protect you, your family and guests, and future owners. It protects your neighbor. It protects your contractor. It protects the County. Evidence of permits and inspections may be required in an insurance claim or property sale. All of this adds up to a protection of your property's value.

Who can obtain Building Permits?

A property owner who presently occupies or intends to occupy a single-family residence or a South Carolina approved licensed contractor may obtain a building permit to construct or repair a residence. A property owner or tenant of a commercial property can obtain a building permit to construct or repair a building for up to $5,000, over that amount will require a licensed general contractor.

Below are some guidelines to help understand the process for permitting repairs for flood damaged buildings or structures.

- You or your contractor will need to come to the Department of Inspections, 1st Floor of the County Building, 2020 Hampton St (parking in the rear of Lady St.) to apply for the building permit. Permit Division 803-576-2140
- At the time of application you must have the name of the property owner, proper street address and/or the tax map and parcel number to insure proper identification of the property.
- When you arrive at the Department of Inspections you will see a Permit Technician.
- The Permit Technician will enter the permit application information in the computer.
- Some applications may require approvals from other departments such as the Flood Plain Coordinator (for assistance with floodplain and storm water issues and to ensure compliance with FEMA requirements). When this occurs the Permit Technician will act as your counselor, providing you with information and person that will aid you in obtaining these approvals.
- The permit specialist will also include a checklist of the inspections you are required to have made during construction. The inspection division will field check for compliance with Building, Electrical, Plumbing, Energy Code and Gas/Mechanical Codes. When you are complete the work, the inspectors will give you a final inspection for the work you have done and had inspected.

The repair and inspection sequence for flood damaged properties:

- Now that you have your building permit, the next step is to secure the services of a licensed electrical contractor and a licensed HVAC contractor to inspect electrical and/or HVAC equipment which may have been submerged in flood waters. Note, All Sub-Contractors shall pull permits when working directly for the homeowner.
- Do not install drywall or cover the electrical or HVAC systems until the following has been completed:
- The licensed electrical and HVAC contractors will obtain electrical and/or HVAC permits associated with the repair and/ or replacement of any submerged electrical, HVAC systems or any part thereof. The licensed contractors will complete their work and call the department for inspections and approvals.
- Insulation must then be installed in the exterior walls and floors to meet the requirements of the adopted energy codes. Walls must be insulated with R-13 and Floors must be insulated with R-19 and Ceilings R-30.
- Before hanging the drywall, you will call the Department's Building Inspection Division (803*576-2140) and request a "framing inspection". Upon receiving our approval of the framing inspection, you are then free to hang the drywall and complete the remainder of the repairs.

Special warning regarding homeowner repair permits:

When a licensed contractor obtains a building permit, the contractor is totally responsible for the construction (including the work performed by subcontractors) to meet all codes. If the construction fails to comply with all codes, their permit bond can be used to repair the code violation.

When an owner obtains his or her own building permit, he or she becomes totally responsible for the code compliance of the construction project including subcontractors and not the contractor – even if a contractor is hired and the construction do not comply with all codes.

If you have hired the services of a contractor, have the contractor obtain the building permit.

GUIDELINES FOR REPAIR OF ELECTRICAL SYSTEMS EXPOSED TO FLOOD WATER

If your electrical system, or parts of your electrical system not rated for wet locations, have been flooded and your electricity has been cut off, to have power restored/reconnected you must:

- Have a licensed electrical contractor come inspect your electrical system.
- If the electrical contractor finds your system is ok to re-energize, he will call for a service release permit, this will trigger us to send an inspector to meet the contractor at your residence/building. If the system passes inspection, we will notify the power company to reconnect the power.
- If the main service is acceptable but a part of the distribution system is not acceptable (such as a circuit feeding lights or outlets), we will allow the electrical contractor to disconnect the unacceptable portion of the system and we will send a release to the Power Co. to reconnect the electrical service to the residence. The contractor or homeowner is responsible for contacting the power company to schedule the service.
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- The electrical contractor shall then obtain an electrical permit to repair the unacceptable part of the system.
- When repairs are completed the contractor will call for an inspection. If the remaining portion of the system passes inspection, then it may be connected to the energized part of the system by the contractor.

2. All parts of an electrical system (including all electrical devices, outlet, switches, equipment and some wiring) not rated for wet locations, which have been submerged in flood waters will have to be replaced by a licensed electrical contractor. Repair or reconditioning of electrical equipment should only be attempted when in direct consultation with and following instructions from the equipment manufacturer.

3. For more information on reenergizing flood damaged electrical systems see the guidebook "Evaluating Water Damaged Electrical Equipment" provided by the National Electrical Manufacturers Association (NEMA). www.**nema**.org

Electrical Information 803-576-2165 Randy, 576-2156 Keith.

GUIDELINES FOR WATER HEATERS EXPOSED TO FLOOD WATERS

The Department of Inspections urges you to use extreme caution when restarting any Water Heating Equipment that has been submerged or water damaged during flooding. Prior to re-starting any equipment you should have a licensed Plumbing or Mechanical contractor inspect the equipment. The replacement of a residential water heater does require a permit. It would also require a permit if you were to change the fuel type (example: going from electric to gas or from gas to electric).

Whether a water heater uses gas, or electricity, if it was exposed to flood water. The unit should be replaced.

- A new water heater is a relatively small investment, and replacing it is fairly easy to do. If the water heater was more than five years old, the chances are good that a new unit will be more efficient, which will save the homeowner money.
- In a gas unit, valves and controls can corrode and cause it to malfunction. In an electric unit, the thermostat and controls can corrode and cause malfunction.
- In both types, the insulation surrounding the unit will likely be contaminated and will be nearly impossible to disinfect. In addition, the insulation takes a great deal of time to dry and can lead to corrosion of the tank from the outside. Even if water heater components have been cleaned and the unit seems to operate properly, parts may corrode in the future and create a very hazardous condition.
- Both gas and electric water heaters have a pressure relief valve that can corrode and stick after being exposed to flood water. This is a very hazardous condition. Homeowners should be sure, therefore, to replace this valve as well.

Plumbing and or Mechanical Information 803-576-2165 Randy, 576-2156 Kieth

GUIDELINES FOR RE-STARTING WATER DAMAGED HEATING AND COOLING EQUIPMENT

The Department of Inspections urges you to use extreme caution when restarting any Heating or Cooling Equipment that has been submerged or water damaged during flooding. Prior to re-starting any equipment you should have a licensed Mechanical contractor inspect the equipment and clean or repair as necessary prior to putting back in use.

Below are some guidelines to help determine if replacement is the better choice than repair.

The Air Conditioning, Heating, and Refrigeration Institute (AHRI) have compiled a list of heating and cooling equipment for homeowners to consider replacing if flood damaged:

Gas Furnaces and Boilers: If there is any question whether flood water has reached a gas furnace or boiler, it should be checked by a qualified SC licensed contractor. This equipment has gas valves and controls that are especially vulnerable to water damage from flood damage that might not be visible. Corrosion begins inside the valves and controls, and damage may not be apparent, even if the outside of the device is clean and dry. At a minimum, this damage can result in reliability problems.

Electric Furnaces: An electric furnace consists of electrically heated coils, a fan to provide air circulation across the coils, and controls that include safety relays. As with a gas furnace, an electric furnace is susceptible to corrosion and damage from flood water, creating potential reliability problems or safety hazards. If there is any question whether flood water has reached an electric furnace, homeowners should have it checked by a SC licensed contractor.

Propane Heating: Use extreme caution where there is the potential for propane leaks and have propane equipment checked, re-paired and/or replaced by a contractor as quickly as possible after a flood. In every case, contractors must replace all valves and controls that have been in contact with flood water. The gas pressure regulator on a propane system should also be checked. This regulator contains a small vent hole to sense outside pressure. For effective gas pressure regulation, this hole must always remain unobstructed. During a flood, debris can easily plug the hole, causing dangerous malfunction or corrosion.

Radiant Floor Heat: With this type of heating system, electrically heated cables or tubing circulating a fluid are embedded underneath or within the flooring material. The cables warm the floor, which in turn warms the room by radiant heat. If the floor becomes wet from a flood, it can weaken and perhaps crack and may need replacement. Both electrical cables and tubing can be damaged due to a wet floor. Therefore, a qualified professional should be consulted to determine whether the system can continue to be used.

Heat Pumps and Air Conditioning Systems: Split air conditioning and heat pump systems have power and control wiring between the indoor and outdoor parts of the system, and piping through which refrigerant flows through the system. If flood water has repositioned either the indoor or outdoor units of a split system even by a small amount, there is a potential for refrigerant leaks. The system will then require major repair or full replacement. If the refrigerant system remains intact after the flood, the entire system should be cleaned, dried and disinfected. Homeowners should have a SC licensed mechanical contractor check the indoor and outdoor units' electrical and refrigeration connections, including all control circuits. The decision to repair or replace should be made after consultation with a qualified professional on a case by case basis.

Ductwork: If a house under storm repair contains a central forced air system, attention should also be paid to the ductwork. A contractor will not try to salvage duct insulation that has been in contact with flood water, but will replace it because it is impossible to decontaminate. The contractor also will clean, dry and disinfect the ductwork itself. A thorough job will require disassembling the duct-work, but the silver lining is that such repairs will allow the contractor to seal joints in the ductwork and improve insulation to reduce heat and cooling loss.

The Air Conditioning, Heating, & Refrigeration Institute (AHRI) is the trade association which represents manufacturers of air conditioning, heating and commercial refrigeration equipment. For more information visit the following website http://www.ahrinet.org

Mechanical Information 803-576-2165 Randy, 576-2156 Keith

Mold:

- Be aware that mold might be present if your house was flooded.
- Wet items such as furniture and rugs should be taken outside to dry out.
- Remove all drywall that has been submerged.
- Use fans and dehumidifiers to remove excess moisture from your home. Fans should be placed at a window or door to blow the air outwards rather than inwards, so not to spread the mold.
- To remove or prevent mold growth from hard surfaces use commercial products, soap and water, or a bleach solution of 1 cup of bleach in 1 gallon of water.

For assistance and access to helpful resources call the Ombudsman office 803-929-6000

To apply for Federal Disaster Assistance call FEMA at 1-800-621-3362 or hearing impaired 1-800-462-7585.

Important Codes Department Telephone Numbers:

Permit Division — 576-2140

Zoning Review—576-2180

Plans Review — 576-2156 or 2159

Inspection Division — 576-2165 and Property Maintenance Division — 576-2148

Ombudsman's Office ---803-929-6000