

October 2015

# GUIDELINES FOR THE REPAIR OF FLOOD-DAMAGED *MANUFACTURED HOMES*



## **What is a manufactured home?**

A manufactured home (formerly known as a mobile home) is built to the Manufactured Home Construction and Safety Standards (HUD Code) and displays a red certification label on the exterior of each transportable section. Manufactured homes are built in the controlled environment of a manufacturing facility and are transported in one or more sections on a permanent chassis.

## **The Authority Having Jurisdiction over the Manufacture, Sales and Installation of Manufactured (Mobile) Homes:**

In South Carolina, the authority having jurisdiction over the manufacture, sale and installation of mobile homes (and the licensing of installers) is the South Carolina Department of Labor Licensing and the Building Codes Council.

Additionally, the State of South Carolina requires that manufactured homes only be installed by licensed installers.

Permitting and Inspections are performed by local and county jurisdictions such as Richland County Building Codes and Inspections Department, (803) 576-2140.

## **FLOOD REPAIR INFORMATION FOR THE OWNERS OF MANUFACTURED (MOBILE) HOMES:**

Several hundred manufactured homes may be damaged due to the unprecedented rain event experienced in our area.

### **A building permit is required.**

In Richland County, a building permit is required prior to making repairs to flood damaged homes and buildings.

While building permits are generally 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 "tear-out" and "clean-up" associated with the project (the removal of drywall and damaged carpet, doors, etc.), a building permit is required before installation of insulation and drywall – and before the repair and/or replacement of any electrical or mechanical (HVAC) system.



### **Who can obtain a Building Permit to repair a manufactured home?**

A property owner who presently occupies or intends to occupy a single-family residence or a licensed contractor may obtain a building permit to construct or repair a residence.

### **Who can obtain an Electrical Permit or a Mechanical (HVAC) permit?**

Electrical repair permits and Mechanical (HVAC) permits for the flood-damage repairs to the electrical and mechanical systems will only be issued to contractors who are properly licensed by the State of South Carolina – and have a business license to do work in Richland County.

### **Which Codes?**

Although mobile homes are built to comply with the HUD Code, in Richland County, the following codes apply to building construction for single-family residences and to electrical and mechanical (HVAC) systems.

- 2012 International Residential Code (IRC)
- 2011 National Electrical Code (NEC)

- 2012 International Mechanical Code (IMC)
- 2012 International Fuel Gas Code (IFGC)

We understand that the unique construction characteristics of mobile homes will require that we be reasonable in the application of our adopted codes and allow the manufactured units to be repaired consistent with the standards imposed by the HUD Code as the unit was originally constructed. There will be, however, a few things that we will not allow. Example: We will not allow the use of aluminum wiring in the branch circuit wiring. Such is not allowed by our electrical code, except for the main service feeder and the HVAC feeder.

Another example: Interconnected, hard wired smoke detectors, with battery backups, will be required in accordance with the 2012 International Residential Code. The 2012 IRC requires a smoke detector inside each sleeping room and outside each sleeping area. They are required to be interconnected in such manner that activation of one smoke detection unit will activate them all.

**Below are some guidelines to help understand the process for permitting repairs for flood damaged mobile homes.**

- You or your contractor will need to come to the Richland County Building Codes and Inspections Department located on the 1<sup>st</sup> floor of the Administration Building at 2020 Hampton Street, Columbia, SC. Our phone is (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. In the case of a mobile home located in a mobile home park, we will need the “pad” number describing the specific location of the unit within the mobile home park.
- When you arrive at the Building Department you will be assisted as soon as possible by a member of the Permitting Staff.
- The Permitting Technician will assist you in obtaining your permit.
- Some applications may require approvals from other departments such as the Flood Plain Coordinator (for assistance with flood plain and storm water issues and to ensure compliance with FEMA requirements).

**The repair and inspection sequence for flood damaged properties is as follows:**

- 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.
- Do not install drywall, wall panels, etc. 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 reconditioning or the replacement of any submerged electrical or HVAC system or any part thereof. The licensed contractors will complete their work and call Codes for the required inspections and approvals of the work.
- Insulation must then be installed in the exterior walls and floors to meet the requirements of the adopted energy codes. For mobile homes, the minimum insulation standards will be those imposed by the original design and construction of the unit under the HUD Code, but more if the

depth of the framing members will allow it.

- After installation of the subfloor, but before hanging the drywall, you will call the Building Department (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.
- Upon completion, you will again call the Building Department and request a “Final” inspection. We will inspect the final inspection and give approval for it then to be relocated to a different location.



### **Calling for Codes Inspections:**

For your convenience (and ours) the Department of Codes & Building Safety has installed an interactive voice response (IVR) telephone service for your use in requesting codes inspections. Call (803) 576-2189 and follow the commands to request the inspection.

### **GUIDELINES FOR REPAIR OF ELECTRICAL SYSTEMS EXPOSED TO FLOOD WATER**

- Have a licensed electrical contractor come inspect your electrical system.
- The electrical contractor shall then obtain an electrical permit to repair any unacceptable portions of the system and to repair or replace electrical equipment.
- 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.

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.

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](http://www.nema.org)

## **GUIDELINES FOR WATER HEATERS EXPOSED TO FLOOD WATERS**

The Richland County Building Codes and Inspections Department 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.

### **Whether a water heater uses gas, or electricity, if it was exposed to flood water, the unit must 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.

The Air Conditioning, Heating, and 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>

## **GUIDELINES FOR RE-STARTING WATER DAMAGED HEATING AND COOLING EQUIPMENT**

The Richland County Building Codes and Inspections Department 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 system, repair and recondition or replace the equipment as necessary prior to putting the system back in use.

**NOTICE: The repair and reconditioning of HVAC equipment should only be attempted when in direct consultation with and following instructions from the equipment manufacturer.**

### **Guidelines to help determine if replacement is the better choice than repair can be found at**

<http://www.ahrinet.org> The Air Conditioning, Heating, and Refrigeration Institute (AHRI) has compiled a list of things for homeowners and business owners to consider when contemplating the repair vs. the replacement of flood-damaged, heating and cooling equipment.

The Air Conditioning, Heating, and 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>

### **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 or 2 cups of bleach in 1 gallon of water.