Water Damaged Electrical Requirements

This policy provides information on how to evaluate electrical equipment that has been exposed to water through flooding, fire fighting activities, hurricanes, busted water lines, etc. Electrical wiring and equipment exposed to water can be extremely dangerous if reenergized without replacement or reconditioning. Initially it may not be apparent but the integrity of the electrical system and its components have been severely impaired, jeopardizing the safe electrical wiring system due to contaminations and sediment lodged in the equipment along with the corrosive action that will develop.

These requirements apply to any electrical wiring and equipment which has been submerged in flood water for any length of time and/or sustained any other water or storm damage. Please contact a licensed electrical contractor to assist you with the following:

1. An electrical permit is required for all repairs and replacements of electrical wiring and equipment.

2. Before an electrical service panel may be re-energized it must be cleaned and dried throughout, by a qualified individual, and all circuit breakers and/or other damaged components replaced.

3. The busbars must show no evidence of corrosion or oxidation and the connected load must be in an electrically safe condition.

4. The following electrical wiring and equipment must be replaced if they have been submerged in water for any length of time:

   Any cable or wire not listed for wet locations which has been submerged at either end thus allowing water to enter its body, electronically controlled and solid state contactors and starters, components containing semi-conductors and transistors, overload relays, adjustable speed drives, molded case circuit breakers, switches and receptacle outlet devices, fuses, (Manual and magnetic motor controllers and motor controlled centers may be reconditioned by trained personnel).

   Exception: The cable or wire may not need to be replaced if a report is submitted to the Electrical Code Administrator of Mecklenburg County with the results of a high voltage test of the wiring (such as a megohmeter test) which indicates that the insulation has not failed. This test must be performed by a Mecklenburg County approved Meg Test Engineer.

For questions you may contact the Residential Technical Answer Center (RTAC), of Mecklenburg County at 980-314-2633