Smoke Alarms in Existing One-and-Two-Family Dwellings and Townhouses

Code:  2012 Residential Code  
Section: R314.4  
Date: July 2, 2012

Question:  
As amended, the NC Residential Code, Section R314.4, Exception 2 states in part;  
“Interconnection and hard-wiring of smoke alarms in existing areas shall not be required where  
the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing  
the structure.” If the structure is exposed in one end of a dwelling will this require the alarms in  
the other end to be interconnected and hard wired if the wall or ceiling finishes are not removed  
in those locations?

Answer:  
No. If the wall or ceiling finishes are not removed and the structure exposed in the area of the  
required alarms, the alarms in those areas may be battery powered. Section R314.1 requires the  
devices to be UL 217 listed and labeled which will require it to emit a recurring signal when  
batteries are low and need to be replaced.

The intent of the code is that interconnectivity and hardwiring be provided in existing structures  
when it does not require destruction of finishes to accomplish it other than the required hole  
under the device in the ceiling or wall membrane for the wires to pass through. It is also the  
expectation of the code that associated wiring is concealed.

Keywords:  
Smoke detector, battery operated