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

**Code:** 2018 Residential Code  
**Section:** R314.4  
**Date:** April 10, 2019

**Question:**
The NC Residential Code, Section R314.4, Exception states in part; “Interconnection of smoke alarms shall not be required where 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 are not required to be interconnected or hardwired to the house wiring. Section R314.1.1 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