



Montgomery County Building Regulations
Residential Code Enforcement Policy

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RESIDENTIAL SMOKE ALARMS IN EXISTING DWELLINGS
When they're Required, and How they're to be Wired

The 2004 Residential Code of Ohio, in Section R313.1.1 requires the addition of smoke alarms as follows:

When interior alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exceptions:

- 1. Smoke alarms in existing areas shall not be required to be interconnected and hard wired where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available which could provide access for hard wiring and interconnection with out the removal of interior finishes.*
- 2. Repairs to the exterior surfaces of dwellings are exempt from the requirements of this section.*
- 3. For the purpose of this section, a screened porch, deck or similar structure is not considered an interior alteration, repair, or addition.*

We will apply these requirements as follows:

- **Smoke alarms must be added if a Building Permit is issued.**
 - For example, a Building Permit is not required when replacing kitchen or bath cabinets, countertops or appliances, but if new soffits are being added over the cabinets, then a Building Permit is required.
 - Another example is if kitchen or bath remodeling involves removing or adding of any walls, doors, or windows, then a Building Permit is required, and therefore smoke alarms must be added as part of those projects.
- **Smoke alarms are not required if only an Electric, HVAC, or Plumbing Permit is required**, except when such permits are obtained for work that includes removing wall and ceiling finishes in all or most of a dwelling, then smoke alarms are required as part of those projects.
 - For example, if all of the plaster or drywall is being removed and the house is being rewired, interconnected, hardwired smoke alarms shall also be installed as part of that Electrical Permit.
- **Hard wiring is required when attics, basements, and crawlspaces are available and can provide access for such hardwiring and interconnection.** Any questions about whether such spaces are truly accessible need to be asked during the permit review process, not after the work has commenced.
- **Basement ceilings that are drywalled are not accessible. Ceilings that have acoustic lay-in tiles are.** If the lower floor is a slab on grade with drywall ceilings, it may be served by battery powered smoke alarms, whereas the upper floor might be interconnected via attic access.
- **Interconnection of smoke alarms is subject to the ability to do so without the removal of wall or ceiling finishes**, such as when attempting to interconnect from a crawlspace to an attic.
 - For example, lower floors might be interconnected amongst themselves, and upper floors likewise, but the two levels might not be interconnected.
- **Hardwired smoke alarms must meet the requirements of the NEC for arc-fault circuit interrupt protection.** Where smoke alarms are required to be on an arc-fault interrupt circuit, they may be connected to existing unswitched circuits as long as such circuits are upgraded so as to be protected by an arc-fault interrupt circuit breaker.
- **Rough electrical for hardwired smoke detectors must be installed at the time of any other rough electrical inspection.** Not having it in place will be cause for the inspection to fail, and will hold up any rough building inspections.
- **The owner or the owner's agent must acknowledge the above requirements before a permit will be issued.**