

SMOKE ALARM REQUIREMENTS IN MICHIGAN

Per the Michigan Residential Code

R314.3 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room;
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms;
3. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

R314.4 Interconnection. Where more than 1 smoke detector is required to be installed within an individual dwelling unit in accordance with R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of 1 alarm.

R314.2.2 Alterations, repairs and additions. When 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 equipped with smoke alarms located as required for new dwellings.

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

R314.6 Power Source. Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected.

Exceptions:

1. Smoke alarms shall be permitted to be battery operated when install in buildings without commercial power.
2. Interconnection and hard-wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the 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 without the removal of interior finishes.

There are different types of smoke alarms which require different distances from a cooking appliances. Consult the table below for type of alarm being used.

Ionization smoke alarms	Not less than 20 feet horizontally from a cooking appliance
Ionization w/alarm silencing	Not less than 10 feet horizontally from a cooking appliance
Photoelectric smoke alarms	Not less than 6 feet horizontally from a cooking appliance

Notice on Carbon Monoxide Alarms

Wired, interconnected Carbon Monoxide alarms are now required in new construction. Alarms may be combination alarms (CO/Smoke) and shall be installed in the vicinity of the bedrooms, in areas adjacent to an attached garage, and in areas adjacent to fuel burning appliances. ***NOTE: CO detectors should not be installed within 15 feet of a fuel burning heating or cooking appliances, such as gas stoves, furnaces, or fireplaces or in very humid places such as bathrooms.***

Smoke or CO/Smoke detectors shall be installed in accordance with the manufacturer's installation instructions.

Installations in Garages

The MRC does not require the installation of smoke/CO detectors in garages. Smoke detectors are not designed to work in constantly changing environmental conditions such as dust, humidity, insects, heat and cold. The installation of devices not designed specifically for installation in a garage can result in failure of the device and false activations. **Heat alarms**, on the other hand, are recommended if protection of an attached garage is desired.