International Residential Code (IRC) Smoke Alarm and Carbon Monoxide Requirements

IRC Requirements (2018) SMOKE ALARMS

IRC R314
All smoke alarms shall be listed in accordance with UL217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

New Houses
Alarms are required and must be connected to the main electrical system with battery backup.

Existing Houses (IRC R314.2.2) Where alterations, repairs or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

Exception: Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck. Installation, alteration or repairs of plumbing or mechanical systems.

Required Locations (IRC R314.3)
- Each sleeping room and outside each sleeping area in the immediate vicinity of the bedrooms
- Every floor level including basements, but not including crawl space and uninhabitable attics.
- In split level floor plans, at the upper level, provided there is not intervening door between adjacent levels and the lower level is less than a full story below the upper level.

IRC REQUIREMENTS (2018) CARBON MONOXIDE ALARMS

IRC R315
For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.