

What are my qualifications for advising on, and installation of, fire protective equipment?

I was an instructor in Fire Fighting, Rescue & First Aid in the Civil Defense (in Denmark). Subsequently, I have been a participant in hazard analysis teams on much larger systems, than what applies to residential housing.

Finally, I have followed up on both codes, and installation instructions from the equipment manufacturers (yes, I actually DO read manuals).

There is a fee for the initial visit to inventory & test existing smoke/CO detectors and fire extinguishers. Provided that my quote for updating the equipment is accepted, you get \$25 credit towards the total.

- Within 25 min drive from Maplewood \$50
- Within 1 hour drive from Maplewood \$100

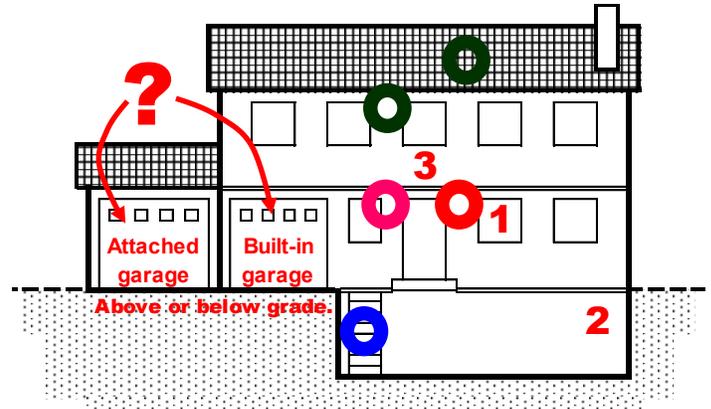
## Fire Extinguisher

**1. Codes** call for one 4 lb fire extinguisher (UL rated **2A:10B:C**) to be installed within 10 few feet of the kitchen, and near an exit. A Kidde Pro 210 model satisfies the code.

- **It must be visible.** Inside a cabinet or in the basement stairwell is not acceptable.
- Standard fire extinguishers are NOT suitable for cooking oil fires. In kitchens, a separate extinguisher for this condition is recommended (**NOTE: selecting this option, does not negate need for the PRO 210.**)

**2.** While not required by the code, I strongly recommend having a second extinguisher near the clothes dryer (fires in dryer vent lines are common). *If you wish, I can also clean the dryer vent line during my second visit (I can quote this after the initial visit, if you let me know that you are interested).*

**3.** In my house, we have one smaller fire extinguisher at the bedroom level. If you have an internal or attached garage, it is advisable to install a fire extinguisher in that location as well



## Smoke Detectors & CO Detectors

- If the house currently has **hardwired** detectors with battery back-up, the system must be serviced, and updated as needed, **by a licensed electrician.**
- For battery powered systems, detectors with sealed internal 10 year battery are required. The minimum\*\* requirements are:

- One\*\* smoke detector on each floor.
- One\*\* CO detector on floors with bedrooms.

\*\* **Size and/or layout of the house may increase the required number of units.**

One CO detector is recommended, but not mandatory, on each floor with a source of combustion (furnace, generator, car in garage, etc.)

**Combination** smoke/CO detectors are more economical than separate detectors.

- 1 One smoke detector (CO *combo* recommended) is installed in basement stairwell, *not too close to the furnace.*
- 2 One smoke detector (CO *combo* recommended) is installed in or near the kitchen, *not too close to the stove.*

- 2 Special kitchen model, with an alarm silencer is available (to eliminate nuisance alarms). If chosen, you still need the regular detector without alarm silencer.

- 3 One smoke/CO detector installed central to the bedrooms. If bedrooms are along a corridor, two (or more) detectors may be required.

- 4 If there is finished space (or bedrooms) in the attic, an additional smoke/CO detector is required there.



? The code does not call for a detector in the garage, whether internal or attached, since car engine combustion would be a source of multiple premature alarms. However, since the garage is a common source of CO accidents, I strongly recommend that a combination detector be installed close to there (*please share this form with property buyer*).

**Other options:** Hallway model with night light, Kitchen model with alarm silencer, etc. **Note:** *Not all power & feature combinations are available. Some options are only available in hard wired systems.*

The following cost estimates are for a typical 3-4 bedroom house, based on the prevailing detector prices in August, 2020. Costs may vary, depending upon availability of detectors in cost saving 2 or 3-packs, and occasional price promotions:

**Note:** *If you have painters coming in, tell them to take down the detectors and put them back up after the paint is dry.*

**Optional Smoke/CO detector upgrades:**

The most basic detectors provide audible alarms only. Thus, if the alarm goes off in the middle of the night, you need to remember which **sequence of BEEPS** represent what alarm condition.

- Model with **Voice Alarm** is available. It announces which alarm condition has been detected. ***This is the model I strongly recommend.***
- Model with **WiFi communication** is available.

Many of the older detectors were larger than the current models. Thus, it might be necessary to paint 'bald spots' after the old detectors have been replaced.

Provided that the paint is available in the house, add \$35 for touch-up painting as needed.

If one unit detects an alarm condition, the alarm is announced through all detectors in the network. The announcement includes the location of the alarm condition ('Fire in the Basement').

*While this option does increase the cost of the security installation somewhat, **it is a nice selling feature for the house.***

August, 2020

	<b>Audible</b>	<b>Voice</b>	<b>WiFi</b>
<b>Inventory/Evaluation visit</b>			
Within 20 min drive from Maplewood	\$50		
Within 40 min drive from Maplewood	\$75		
Within 1 hour drive from Maplewood	\$100		
1 x Kidde PRO 210 Fire Extinguisher	\$54	\$54	\$54
3 x Kidde 10 year sealed battery combination smoke/CO detector	\$126	\$180	\$252
Inst. 4 components ( <i>WiFi incl. programming</i> )	\$80	\$80	\$120
Less 1st visit credit	-\$25	-\$25	-\$25
<b>Project total base cost:</b>	<b>\$285-\$335</b>	<b>\$339-\$389</b>	<b>\$451-\$501</b>
Additional smoke/CO detectors, each:	\$42	\$60	\$84
Installation of additional detectors, each:	\$18	\$18	\$33
2nd Kidde PRO 210 fire extinguisher for laundry room		\$72	} <i>Including installation</i>
One 10-B:C fire extinguisher for kitchen		\$42	

Clothes dryer vent line cleaning takes from less than 1/2 hr to possibly 3+ hrs, depending upon design and condition of the vent line (time to be estimated during the first visit). Cleaning is billed at \$40/hr, *when ordered together with fire protection package.*