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HEADLINE; NEW SMOKE ALARM LAWS

Q; I read in the paper recently about some changes in the law covering smoke detectors. I went to the local hardware store and found the vast array of detectors confusing. What are the new laws and what are the differences in smoke detectors?

A: The new regulations that our reader saw in the newspaper come into effect on March 1st of 2006. They are long overdue actually, a recent Fire Department Inspection Blitz in Ottawa found that out of 8000 homes they surveyed, over 3000 did not have working smoke detectors. The Ontario Fire Marshall commented when this was announced some weeks ago that 50% of fatal preventable home fires did not have smoke detectors. The new law covers family homes, semi-detached and townhouses. It will not matter if you live in the residence or rent it, you will be responsible. The new regulations call for considerable fines if your home does not have detectors or they are not operational. Homeowners can be fined up to 235.00 per incident. Landlords can be fined up to 25,000.00 and if you are a tenant and you disable the smoke detector in any manner, you will also be fined 235.00.

There must be an operational smoke detector on every level of the home and outside all sleeping areas. If you are a landlord, you are responsible for complying with the new regulations. The new laws also require smoke detectors to be replaced every ten years.

Our reader is correct, there is a large selection of smoke detectors in the marketplace. There are two different technologies and three styles of smoke detectors on the market today. There are also heat detectors available, I will comment on those later. The basic design is called Ionization. This is where the detector uses a minute particle of a radioactive material to ionize the air within the sensing chamber. If smoke enters the chamber, usually the plastic cover of the unit, this smoke causes a reduction of the ionization process and triggers the alarm. The other process is called photoelectric. They use a process similar to the photocell switch that operates the safety return in your garage door. When the smoke enters the detector it causes the light beam to scatter and this trips the alarm. Both units have pros and cons. The Ionization only detectors are very inexpensive, some under \$10.00. A good photocell unit can run over \$20.00. The difference is if a fire smoulders in your chesterfield, a good photocell unit will pick this up quicker than an Ionization detector. However if there is flame and smoke, the Ionization unit will usually react first. The third option is a combined unit and these are my personal recommendation. Combination detectors are not cheap when compared to the other two, but remember you are buying both designs in one package. There are a number of makers of these combination units, however recent testing by Consumers Reports in the USA gave full marks to the First Alert Dual Sensor Model. They are priced in the \$50.00-70.00 range.

One question I get asked a lot during an inspection is "why buy battery detectors when my home has an electrical one?" My answer is simple, what if the power goes out. If your home was built in the 80's a hard-wired detector became standard, but only on the main level. Hard wired means the detector's power is supplied by the electrical system in your home. In the 90's they were required to be hardwired on every level and a year ago last November Carbon Monoxide Detectors also became law. I mentioned earlier about heat detectors. While these are not currently required in private residences I often suggest that they be installed in kitchens, especially if there are children in the home. If there is fire on the stove, these detectors will detect a temperature in excess of 135 F. and sound the alarm. This is called a fixed temperature detector. There are also rate-of-rise heat detectors available where you can set them to a timed alarm factor depending upon the heat range. This may be handy in a workshop or a home business where a high heat source is present, like a pottery kiln for example.

My personal suggestions for an average home is purchasing the combination units and follow the

manufacturers installation recommendations for installation. Do not install a smoke detector on the wall unless there is no reasonable method to install on the ceiling. Common areas and hallways are the best spots, followed by the landing areas to the bedrooms. Give some thought to a fixed temperature detector in the kitchen. I am also a fan of carbon monoxide detectors and here I would have a minimum of two. Install one in the basement near your furnace and a second one in the hallway going to the sleeping quarters. Again follow the manufacturers directions for installation. Make a habit of replacing the batteries. I do mine on New Years Day every year. If your detector begins to emit a short beeping sound it generally means the battery is low, it could also mean there is malfunction too. Replace the battery and if the beeping happens again, replace the unit. It is unfortunate that laws must be enacted for something that should be common sense; in a fire you will not likely get a second chance.

Last week I asked what is a Parapet Wall? the answer was B) the portion of a wall that extends above the roofline. This week our query asks, "What is a frog?" is it A) a machine used to cleanout clogged drains B) the hollow in the face of brick C) a type of formed metal flashing used around a dormer. The answer in next week's column.

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