

Smoke alarms: aging, testing and the law

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HOW DO THEY WORK?

Most smoke alarms operate by allowing the smoke to get between a light source and a light sensitive target. When the light gets dim, the alarm goes off. If a spider passes in front of the light, or spins his web in front of the light, he may just set off the alarm. Vacuum out your smoke alarms regularly.

TESTING

By the way, if you want to test a smoke alarm, pushing the "test" button only tests the electronic circuits, not the light detection system. It is best to first test it with the button, then test it with smoke from a stick of incense. When you want to turn it off, just blow the smoke out by waving a newspaper at it -- often the fastest technique. Some new alarms have "hush" buttons to turn off that false alarm.

HOW LONG DO THEY LAST

When you buy a new smoke alarm you will notice that it is only guaranteed for a certain number of years, 5, maybe 10 or 15. How long have yours been installed. We tend to forget about them, especially if they are wired into the house and do not require changing the battery. I am happy to discover in 2012 that some are now putting stickers on the side of the alarm telling you when they should be replaced -- like the "best before" date on food products. If your's don't have expiry dates in evidence right on the side I recommend that you use a permanent marker and write, not the purchase date, but the replacement date. If you don't know, put that date 10 years after you think they were installed. You may be surprised to discover that they already need changing.

NEW LAWS RELATED TO SMOKE ALARMS

There is a general North American move to require either hard wired alarms or ones with 10 year lithium batteries -- basically requiring that the battery lasts as long as the detector. That has led to the sealed battery units that cannot be replaced in an effort to force replacing the detector approximately every 10 years.

In the US, this is a state by state requirement being slowly implemented around 2020.

In Canada this falls under municipal jurisdiction so as of 2019 Regina, Winnipeg and Montreal have by-laws requiring 10 year batteries.

In Montreal the requirement was adopted on June 26, 2019 and delayed until January 2021 which has now passed. All buildings built before 1985 that do not have hard wired smoke detectors must have smoke detectors with 10 year batteries. All buildings built after 1985 must have hard wired smoke detectors, no batteries to change but the detector itself should be changed every 10 years. Longueuil also requires a 10 year lithium battery but it is not clear if sealed units are required or not in Longueuil. They tend to hide their by-laws so I am waiting for more information from Longueuil. That just points out that you do need to call your local municipality to find out what the rules are for your house.

Failure to be up to date with these by-laws could affect your household insurance policies.

Smoke alarms do save lives, but only if they work.

Keywords:

Batteries, Alarms, Circuits, Cleaning, Mystery, Smoke, Fire, Security, Safety

