

**Proposed Ontario Fire Code Amendments:
Mandating sealed, long-life (10-year) battery-operated smoke alarms**

Background Document for February 8, 2018 Stakeholder Consultation

Between 2008 and 2017, there were 608 fatalities resulting from fatal residential fires. An alarming 59 of those deaths occurred in residences where a smoke alarm was discovered in the building but had either a 'dead battery' or was 'missing a battery'. Many of these tragic deaths could have been prevented if occupants had adequate warning of the fire, i.e. a working smoke alarm.

Currently, the Ontario Fire Code (OFC) requires a smoke alarm on every level of a dwelling and the device is required to be either hardwired or battery-operated where permitted. Whereas a hardwired smoke alarm is powered electrically, a battery-operated smoke alarm can only function if there is a working battery. The concern of a 'dead battery' or 'missing a battery' can be addressed by imposing sealed (non-removable and non-replaceable) long-life battery requirements for battery-operated smoke alarms. Sealing a battery prevents it from being removed for any reason, whether accidental or intentional. A long-life (10-year) battery can provide power until the end-of-life of the smoke alarm which typically is 10-years.

Although the National Fire Code has yet to adopt sealed, long-life battery requirements for battery-operated smoke alarms, an increasing number of states and territories throughout the United States and Australia have moved in this direction.

It is being proposed that the Ontario Fire Code (OFC) be amended to require sealed long-life smoke alarms where battery-operated smoke alarms are permitted to be used. The new requirement would only apply where smoke alarms are being replaced under Subsection 6.3.3. after having reached end of life, or where new smoke alarms are being installed under either Section 2.13 or Part 9. Existing battery operated smoke alarms would continue to remain in use until they need to be replaced. This approach is intended to minimize the impact on building owners, smoke alarm manufacturers and retailers.

As the Ontario Building Code (OBC) permits battery operated smoke alarms under limited circumstances, parallel changes will also need to be made to the OBC. Coordination will be required to ensure that changes to both the OBC and OFC will come into effect simultaneously.

Regulation of sealed long-life battery operated smoke alarms is meant to reduce the number of fatalities in residential fires in the long-term. While the full effect of the regulation may not be fully realised for at least 10 years following the date it comes into force, there will be incremental benefits due to older smoke alarms already in place needing replacement. Any lives saved as a result of these changes will be considered a success.