

New Arc-Fault Breakers to Be Required in 2009

Posted on: Sunday, 13 July 2008, 06:00 CDT

By Tim Feran, The Columbus Dispatch, Ohio

Jul. 13--A building requirement aimed at making new homes in Ohio safer from the threat of electrical fires will go into effect a year after originally intended.

The new rules, part of the 2008 National Electrical Code, require a special circuit breaker -- called an arc-fault circuit interrupter or AFCI -- on circuits for bedrooms, living rooms, sunrooms and other areas where families gather or sleep.

The current code requires the interrupter only on bedroom circuits. Although the code was adopted by the Ohio Board of Building Standards and was set to go into effect Jan. 1, 2008, the Ohio Home Builders Association asked Gov. Ted Strickland to temporarily rescind the use of the code for one-, two-, and three-family dwellings.

The interrupter can provide more protection than a standard circuit breaker by detecting an "arc fault," which can occur when damaged wiring or overheated or worn electrical cords come in contact with vibrating metal or damaged electrical appliances.

The high heat from arc faults -- sometimes exceeding 10,000 degrees -- can ignite surrounding material such as wood framing or insulation. An AFCI will trip -- or shut down -- a circuit when it detects a problem, preventing a fire from starting.

The builders association worried that the new breakers could add a significant amount to the cost of a home and would make little difference in improving safety. Electrical inspectors, electrical manufacturers and fire-prevention advocates argued that arc-fault circuit interrupters aren't as costly as builders fear and are needed for safety.

Strickland signed the delaying order March 31, which meant that the code reverted back to the 2005 version until the end of June. The governor also directed that a committee of officials from both sides of the debate work out a recommendation for what to do next.

"There was nobody there with a chip on their shoulder or a personal agenda. That's what was important," said Charles J. Ruma, president of Virginia Homes and chairman of the committee. "It was nice the governor gave us a chance to do it.

"It's a tough deal when you're talking about codes. We try to make sure what's going on is reasonable in terms of cost. On the other side of the coin, we are working to adequately protect the public."

While the new code was never conclusively proved to be able to save lives, "The cost wasn't prohibitive," Ruma said. So the committee voted to move forward with the code, effective Jan. 1, 2009.

"It was an educational process for everybody," said Tim McClintock, secretary-treasurer of the Ohio chapter of the International Association of Electrical Inspectors, who served on the committee. The meetings "gave us an opportunity to educate the building community on what the advantages are."

When the national code is updated again by the National Fire Protection Association in 2011, McClintock said, "My goal would be to start the education process immediately after the (association) adopts it rather than waiting."

During the past decade, faulty electrical wiring has been one of the leading causes of fire deaths in the nation, claiming 350 lives a year, according to the Consumer Product Safety Commission. More than 40,000 fires a year are caused by problems with home wiring, the commission reported, resulting in more than \$650 million worth of damage.

tferan@dispatch.com

An AFCI will "trip" -- or shut down -- a circuit when it detects a problem, preventing a fire from starting.

Copyright (c) 2008, The Columbus Dispatch, Ohio

Source: The Columbus Dispatch, Ohio