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## Indiana fire panel considers changing building code

### State considers reinstating rule that some builders say is too costly but advocates say could decrease blazes

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More than two dozen states boast a fire safety requirement that experts think cuts the total of electrical fires in half and possibly saves lives. In 2005, Indiana became the only state to ever drop the requirement.

Now the governing body that sets Indiana's electrical code is set to take up the issue again, and some homebuilding interests are poised to fight it, arguing that the extra \$300 to \$400 on a \$150,000 home is too steep, especially during a recession.

Whether the state will join 27 others and federal safety officials in endorsing arc-fault circuit interrupters -- called AFCIs -- will be discussed today by a board that includes six members of the building industry, as well as two state officials, two fire officials and a mechanical engineering professor.

The determining factor: cost vs. benefit. Some say \$300 is a small price to pay, considering the average home fire does more than \$41,000 in damage; others argue that the benefit is dubious and the costs of such requirements add up fast.

The Indiana Fire Prevention and Building Safety Commission could decide by June.

"We don't want to cause economic hardship unless it is shown to prove to save lives and property," said Chairman David P. Hannum, Terre Haute. "We don't want to do something just to save money, and we don't want to do everything suggested for safety; you've got to weigh the two."

At the time the commission decided to yank them from the state's electrical code, the AFCI circuit breakers were encountering problems as the technology inside them evolved. Commission member Mike Christoffersen, president of a Fort Wayne architectural firm, said those issues have been resolved.

Yet Lynn Madden, a code specialist for the Indiana Builders Association, argued in an April industry newsletter that AFCIs remain unproven, more apt to trip for little or no reason, and had a shorter lifespan than traditional circuit breakers. She wrote that those shortfalls showed AFCIs weren't worth the cost.

Local builders have voiced mixed opinions.

"The cost is insignificant when compared to the cost of the total home," said Paul Estridge, president of the Carmel-based custom and production homebuilding firm that bears his name. "If it can make a home safer, adding \$300 to the cost of a \$150,000 home isn't a problem."

**DO YOU HAVE THEM?**

Arc-fault circuit interrupters can prevent half of all electrical fires, safety experts say. Some Indiana builders have resisted installing the AFCI breakers, citing cost.

**\$300-\$400:** Estimated cost of installing AFCI devices in a \$150,000 home.

**\$41,000+:** Estimated damage caused by average U.S. home fire.

Electronics inside the arc-fault circuit interrupter recognize arcing faults and cut power to help prevent home fires.

**POSSIBLE CAUSES OF ARC FAULTS**

- Wire  
Nail
- Furniture leg  
Cord
- Wire  
Frayed connection

>> When you hammer a nail through a wall into interior wiring, an arc can form and ignite building materials.

>> Extension cords that become crimped by furniture and other heavy items can cause wires to fray and electricity to arc.

>> As interior wiring ages in walls, connections can loosen or become frayed and create arcs.

Sources: Indiana Fire Prevention and Building Safety Commission records, Electrical Safety Foundation International

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- MICHAEL CAMPBELL / The Star

But Arbor Homes' Don Chesney said the additional costs can add up for a large production builder.

"Absolutely it's an issue," he said. "You have a \$100 bump here, a \$200 bump there, it adds up. It might not be much on a single house, but when you add up all the bumps across the board, it adds up pretty quickly."

The push to reverse Indiana's 2005 decision is being led by a Virginia nonprofit, Electrical Safety Foundation International, which represents electrical equipment makers and other parts of the electricity industry.

Foundation President Brett Brenner said some quality questions arose when AFCIs were first made, but he blamed improper installation by electricians. He thinks builders want to discredit AFCIs because they are 10 times the cost of traditional circuit breakers.

AFCIs shut down power that jumps -- or arcs -- from its intended path. A home's electrical wiring or any electric cord that's old, faulty or pierced by a nail or screw can cause an arc and spark a fire. Arcing causes more than 30,000 U.S. home fires a year, resulting in \$750 million in damage, according to the foundation.

Also today, a second public hearing by the state commission will consider requiring tamper-resistant outlets. Their internal shutters readily accept electrical plugs but can prevent children from shocking themselves. More than 2,400 U.S. children are injured each year after sticking metal objects such as keys or paper clips into the sockets, according to the electrical foundation. Again, cost will be the determining factor.

"Builders put in expensive cabinets and countertops, but they're reluctant to put in these safety features. It's baffling," said Don Iverson, a spokesman for the National Electrical Manufacturers Association. "People can't touch and feel safety like they can a granite countertop. People don't see arc-fault breakers protecting their home, so maybe they can't associate the cost with the benefits."

## Additional Facts

### WHAT'S NEXT

The Indiana Fire Prevention and Building Safety Commission will hold public hearings at 9 and 11 a.m. today in Conference Center Room B of the Indiana Government Center South, 402 W. Washington St.

### CONTACT THE COMMISSION

Contact the Indiana Fire Prevention and Building Safety Commission at (317) 233-5341 or [msnyder@dhs.in.gov](mailto:msnyder@dhs.in.gov).

### MEMBERS

On the Indiana Fire Prevention and Building Safety Commission:

- » David P. Hannum, chairman, Garmong Associates, Terre Haute.
- » Jay Gore, Purdue University.
- » James Ridley, Fort Wayne Fire Department.
- » Ted Ogle, Manufactured Housing, Columbus.
- » Diana M.H. Brenner, Brenner Design, Indianapolis.
- » Michael L. Christoffersen, Architectural Designs, Fort Wayne.
- » John Hawkins, Kovert Hawkins Architects, Jeffersonville.
- » Burke Jones, Fair Play Fire Company (volunteer fire department), Madison.
- » Howard W. Cundiff, state health commissioner's designee, Indianapolis.
- » Kevin D. Goeden, Indiana commissioner of labor's designee, Indianapolis.
- » Mike Corey, Thyssen Krupp Elevator Corp., Indianapolis.