

# ☛ 07hr\_CRule\_08-047\_SC-CUR\_pt01



Details:

(FORM UPDATED: 07/12/2010)

## WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

### 2007-08

(session year)

### Senate

(Assembly, Senate or Joint)

### Committee on ... Commerce, Utilities and Rail (SC-CUR)

#### COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**
- Record of Comm. Proceedings ... **RCP**

#### INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt**
- Clearinghouse Rules ... **CRule**
- Hearing Records ... bills and resolutions  
(**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)  
(**sb** = Senate Bill)                      (**sr** = Senate Resolution)                      (**sfr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**



P. O. Box 7970  
Madison, Wisconsin 53707  
(608) 266-1018  
TDD: Contact through relay

Jim Doyle, Governor  
Richard J. Leinenkugel, Secretary

November 5, 2008

The Honorable Jeffrey Plale, Chair  
Senate Committee on Commerce, Utilities  
and Rail  
Room 313 South, State Capitol  
Madison, Wisconsin 53702

The Honorable Steve Wieckert, Chair  
Assembly Committee on Housing  
Room 16 West, State Capitol  
Madison, Wisconsin 53702

Dear Senator Plale and Representative Wieckert:

The Department of Commerce is submitting a germane modification to Clearinghouse Rule Number 08-047 relating to the electrical construction. This modification is being submitted pursuant to section 227.19 (4) (b) 3. of the statutes.

In response to issues identified by Representative Steve Wieckert, chair of the Assembly Committee on Housing, the germane modification consists of three changes to the subchapter on changes, additions or omissions to the National Electrical Code (NEC). One change involves s. Comm 16.210 and provides a departmental exception that delays until January 1, 2010, the NEC requirements dealing with arc-fault circuit-interrupter protection. Another change is the addition of s. Comm 16.406 that deletes the requirement for tamper-resistant receptacles in dwelling units specified in NEC 406.11. X

In addition, the modification changes the effective date of the rules from January 1, 2009, to the first day of the month following publication in the Wisconsin Administrative Register. This change was made due to the time required to get the code changes printed prior to the effective date.

If you have any questions about this modification, please contact Zach Brandon at 266-2125.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard J. Leinenkugel".

Richard J. Leinenkugel  
Secretary

A handwritten mark or signature in black ink, consisting of a stylized, cursive letter 'M'.

# GERMANE MODIFICATION

**Comm 16.210 Branch circuits. (4) ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION.** (a) *Exception.* This is a department exception to the requirements in NEC 210.12.

Exception: The requirements regarding arc-fault circuit-interrupter protection shall take effect on January 1, 2010.

(b) *Dwelling units.* Substitute the following wording for NEC 210.12 (B) Exception No. 1: Where RMC, IMC, EMT or steel armored cable, Type AC or Type MC, meeting the requirements of 250.118 using metal outlet and junction boxes is installed for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a combination AFCI at the first outlet may be installed to provide protection for the remaining portion of the branch circuit.

**Comm 16.406 Tamper-Resistant Receptacles in Dwelling Units.** The requirement specified in NEC 406.11 is not included as part of this chapter.

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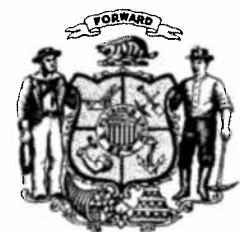
## EFFECTIVE DATE

Pursuant to s. 227.22 (2) (b), Stats., these rules shall take effect on the first day of the month following the publication in the Wisconsin Administrative Register.

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# WISCONSIN STATE LEGISLATURE



**Orlowski, Merith**

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**From:** Anthony Tadysak [atadysak@ci.west-allis.wi.us]  
**Sent:** Friday, November 14, 2008 8:45 AM  
**To:** Sen.Plale  
**Subject:** FW: Proposed changes to Comm 16 Electrical code.

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**From:** Anthony Tadysak  
**Sent:** Tuesday, November 11, 2008 2:21 PM  
**To:** 'dick.leinenkugel@wisconsin.gov'  
**Cc:** 'rep.wieckert@legis.state.wi.us'  
**Subject:** Proposed changes to Comm 16 Electrical code.

On November 5th 2008, a change in the comm 16 draft proposal was sent to the legislature. The modification delays until 1/1/10 the National Electrical Code requirements dealing with Arc-Fault protection, And deletes the NEC requirement for tamper-resistant receptacles in dwelling units..

**I strongly object to this revision.**

These code requirements are about life safety, period. Why are you fighting against safety???

Approximately 2,400 children receive emergency room treatment every year for injuries caused by inserting objects into electrical receptacles. This equates to about 7 children each day. Injuries range from electric shock to first-second-and third-degree burns. Some cases prove fatal. Tamper resistant receptacles have long been considered the most reliable means of child protection. Pediatric care locations have required tamper resistant receptacles for years.

In response to these statistics the National Electrical Code (NEC) has been revised to include a requirement for all residential receptacles, or outlets to be tamper resistant. The revision taking effect with the 2008 NEC. (NEC 406.11)

The National Electrical Manufactures Association estimates that tamper-resistant receptacles will add less than \$50.00 to the cost of a new home's electrical system. What price for life!!!

Safety and welfare should be the top priority for the Wisconsin Department of Commerce, not saving \$50.00.

The NEC establishes the minimum requirements for the safe electrical operation of a home. Why would you disregard a minimum National Electrical Code requirement? The Department of Commerce should be electrical safety advocates, and continue to promot the safety benifits included in the 2008 NEC, not throw minimum codes in the trash.

I ask that the revision is rescinded and the Comm. 16 presented to the legislature for adoption, is left intact.

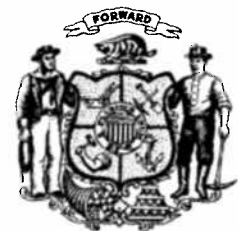
Thank-You

Anthony Tadysak  
President  
Southeastern Wisconsin Electrical Inspectors Association  
(414)-302-8405

For more information visit the following web sites: [www.childoutletsafety.org](http://www.childoutletsafety.org)  
[www.cpsc.gov/library/neiss.html](http://www.cpsc.gov/library/neiss.html)  
[www.iaei.org](http://www.iaei.org)



WISCONSIN STATE LEGISLATURE



## Orlowski, Merith

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**From:** Iverson, Don [Don.Iverson@Nema.org]  
**Sent:** Friday, November 14, 2008 2:02 PM  
**To:** Sen.Plale  
**Subject:** Wisconsin 2008 NEC Adoption

Dear Representative Plale,

My name is Don Iverson and I am with the Midwest Field Representative for the National Electrical Manufacturers Association (NEMA). I am writing you in regards to Wisconsin's adoption of the 2008 National Electric Code (NEC). NEMA is a trade association of choice for the electrical manufacturing industry. Founded in 1926 and headquartered near Washington, D.C., its approximately 450 member companies manufacture products used in the generation, transmission and distribution, control and end-use of electricity. It has come to my attention that the State of Wisconsin is adopting the 2008 NEC and it will delay until January 1, 2010 the requirement for arc-fault circuit interrupters (AFCIs) and will delete the requirement for tamper-resistant receptacles (TRRs).

I strongly urge you to reconsider these recommended amendments. The United States Fire Administration (USFA), each year home electrical problems cause approximately 70,000 fires, resulting in 485 deaths and \$838 million in property loss. The United States Consumer Product Safety Commission (CPSC) estimates that AFCIs would prevent 50% of these fires. And, according to the CPSC, each year approximately 2,400 children suffer severe shock and burns when they stick items into the slots of electrical receptacles. Based on the current statistics, the average home has about 75 receptacles resulting in an overall added cost of approximately \$50.

Again, I strongly urge you to please reconsider these proposed changes that will reduce fire and life safety for the citizens of Wisconsin.

If I can offer further information, please don't hesitate to contact me.

Sincerely,

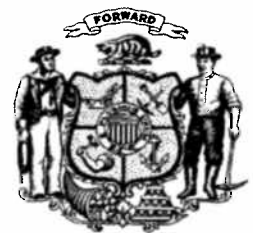
Don

Don Iverson  
NEMA  
Midwest Field Representative  
1102 S. Eifert Rd  
Mason, MI. 48854  
Blackberry (517) 648-0939  
Office (517) 628-2505  
don.iverson@nema.org

11/17/2008



# WISCONSIN STATE LEGISLATURE





**Orlowski, Merith**

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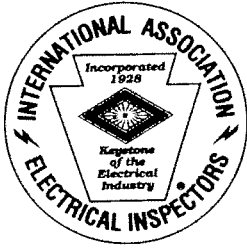
**From:** DickieP [dickiep@charter.net]  
**Sent:** Friday, November 14, 2008 3:12 PM  
**To:** Sen.Plale  
**Subject:** Tamper-Resistant Receptacles  
**Attachments:** WCIAEI Letter Tamper-Resistant Recept 1.doc

I would request that you please read the attached document. My understanding is that action on this matter has to take place no later than Tuesday November 18, 2008. If you have any questions, please contact me at home: 715.387.0913 or at work: 715.387.1344.

Thank you for your consideration,

Richard E Pokorny  
President  
Wisconsin Chapter International Association of Electrical Inspectors

11/17/2008



# WISCONSIN CHAPTER

## INTERNATIONAL ASSOCIATION OF ELECTRICAL INSPECTORS

114 Charleen Lane, Madison, WI 53714-2612

November 14, 2008

Representative Steve Wieckert  
Chair – Assembly Committee on Housing

Senator Jeffrey Plale  
Chair – Senate Committee on Commerce, Utilities & Rail

Dick Leinenkugel  
Secretary – Department of Commerce

RE: Tamper-Resistant Receptacles

It has come to our organization's attention that changes have been made to the proposed Chapter Comm 16 draft that lessens electrical safety. The Wisconsin Chapter of the International Electrical Inspectors Association (WCIAEI) supports the 2008 National Electrical Code's adoption of Section 406.11 that would require tamper-resistant receptacles in all new construction in dwelling units. This organization consists of approximately 1500 contractors, electricians and inspectors whose main purpose is to promote electrical safety. The issues at this point are just that, simply electrical safety.

There is a vast amount of national data that is supportive of the need to reduce the hazard of persons – especially children – from unknowingly inserting metal or other conductive objects into receptacle outlets. This type of "accident" is preventable by this requirement on newer installations or replacement of the existing devices in future remodeling work. The following is a quote from the Electrical Safety Foundation International:

"Approximately 2,400 children receive emergency room treatment every year for injuries caused by inserting objects into electrical receptacles, according to a 10-year report released by the U.S. Consumer Product Safety Commission (CPSC). This equates to about seven children each day. Even more alarming is that the report found that over 70% of these electrical incidents occur at home, with adult supervision typically present."

Please note that this data was brought forth by the CPSC. Their website states: "The U.S. Consumer Product Safety Commission is charged with protecting the public from unreasonable risks of serious injury or death from more than 15,000 types of consumer products under the agency's jurisdiction." This agency brought forth the need for this type of product, not manufacturers as may be the case in many instances of code changes.

The WCIAEI requests that the Wisconsin Legislature maintain the original Department of Commerce's proposed code draft, in that it did not propose to modify or delete this section of the NEC. At the very least we request a hearing be held so that the public may provide input on this sudden change in the proposed code rules. As a number of comments on this proposed product's use have been cost, perhaps a change to enact a delay in this code section's requirement to January 1, 2010 would help all parties on this issue. By then manufacturers will have "geared up" for the nation's adoption of this important code, and provide further reductions in costs to installers.

Sincerely,

Richard E Pokorny  
President  
Wisconsin Chapter International Association of Electrical Inspectors



# WISCONSIN STATE LEGISLATURE



# ESF<sub>1</sub>

Electrical Safety Foundation International

1300 N. 17<sup>th</sup> St. Suite 1752  
Rosslyn, VA 22209

## FACSIMILE

# PAGES (Including Cover Sheet) 3

**TRANSMIT:** Senator Jeffrey Plale (Chair)  
**COMPANY:** 608-266-7483  
**FAX:**

**FROM:** Electrical Safety Foundation International  
**FAX:**  
**PHONE:**

**Comment :**

...see attachment

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IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION  
PLEASE CALL Rodney Core @ 703.841.3229

# ESFI

Electrical Safety Foundation International

Mr. Brett Brenner, President  
Electrical Safety Foundation International  
1300 North 17<sup>th</sup> Street, 17<sup>th</sup> Floor  
Rosslyn, VA 22209  
November 14, 2008

Senator Jeffrey Plale, Chair  
Committee on Commerce, Utilities and Rail  
Wisconsin State Legislature

Dear Mr. Plale:

The Electrical Safety Foundation International (ESFI) was originally established in 1994 through the joint efforts of organizations such as the Consumer Product Safety Commission and Underwriters Laboratories. Our foundation is focused solely on reducing electrically-related deaths, injuries and property loss. As president of the foundation, I ask that you carefully consider the safety provisions which the 2008 edition of the National Electrical Code (NEC) offers and support the adoption of these provisions which will benefit homeowners in Wisconsin for decades to come.

One of the most important lifesaving provisions in the new Code relates to Arc Fault Circuit Interrupters (AFCIs). Combination AFCIs are advanced electronic circuit breakers that detect parallel and series arcing faults in a home's wiring. When an arcing fault is detected, these devices immediately cut the power to the circuit before a fire can start. Arcing faults are the primary source of ignition in an estimated 30,000 home fires each year in the United States. These fires annually kill and injure hundreds of people and cause more than \$750 million in direct property damage. Since the probability of electrical fires increases as homes age, states adopting the 2008 NEC are making important decisions now which will protect homes and families throughout the average home's lifespan. Additionally, the United States Fire Administration reports that the elderly, the very young, and the economically challenged are far more likely than the general population to perish in a home fire. As time will testify, adoption of the AFCI provisions in the 2008 NEC will help to protect these vulnerable populations.

The lifesaving capacity of combination AFCIs is widely recognized. Millions of hours of field testing have been undertaken by manufacturers to ensure the reliability and the performance of these devices. Additionally, this technology is endorsed by the United States Fire Administration, the National Fire Protection Association, the Consumer Product Safety Commission, and the National Association of State Fire Marshals, as well

The Electrical Safety Foundation International  
1300 North 17th Street, 17th Floor, Rosslyn, VA 22209  
[www.electrical-safety.org](http://www.electrical-safety.org)

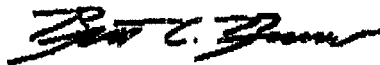
as other safety and fire fighting organizations across the country. The U.S. Department of Housing and Urban Development's Healthy Homes report lists the lack of AFCIs among the primary residential hazards associated with burns and fire-related injuries. With such overwhelming evidence to support the efficacy of AFCIs, a delay in adopting the 2008 National Electrical Code will result in fires and fatalities that could have otherwise been prevented.

The 2008 NEC also contains important provisions relating to tamper-resistant outlets. A Consumer Product Safety Commission (CPSC) report showed that in a ten year period more than 24,000 children had been treated in hospitals for burns and other injuries sustained from contact with electrical outlets. The vast majority of these incidences involved children under the age of six who should have been protected from this type of electrical danger. As most parents can attest, temporary "solutions" such as plastic caps can easily be removed by small children. The advantage of tamper-resistant outlets is that they provide automatic and continuous protection of children every time. Tamper-resistant receptacles look like any other electrical outlet except they have a built-in shutter system that prevents children from sticking objects into the slots, but allows plugs to be inserted and removed as usual. These outlets are so effective at preventing injuries that for over two decades hospitals have been required to use them.

The current debate over AFCIs and tamper-resistant receptacles in several states is very similar to one that took place in the 1970's over the initial introduction of Ground Fault Circuit Interrupters (GFCIs). However, just 25 years after the GFCI was introduced, the number of accidental consumer-appliance related electrocutions in the United States has been cut in half even though home energy consumption has dramatically increased. AFCIs and tamper-resistant receptacles will have an even better track record of saving lives and property if the 2008 NEC is adopted.

I strongly encourage you to support the adoption and implementation of the 2008 National Electric Code with all of its lifesaving provisions so that communities in Wisconsin can start benefiting now from the protection they offer.

Best regards,

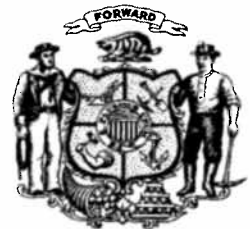


Brett Brenner  
President

The Electrical Safety Foundation International  
1300 North 17th Street, 17th Floor, Rosslyn, VA 22209  
[www.electrical-safety.org](http://www.electrical-safety.org)



# WISCONSIN STATE LEGISLATURE





*Powering Business Worldwide*

Eaton Corporation  
Industrial Control Division  
4201 North 27th Street  
Milwaukee, WI 53216

Senator Jeff Plale  
Room 313 South  
PO Box 7882  
Madison, WI 53707

Dear Senator Plale,

It is with great concern I am writing you regarding the germane modification to Comm 16. Per Comm 16.210, it has come to our attention that the State of Wisconsin intends to delay the adoption of Arc Fault Circuit Interrupter protection. Arc Fault Circuit Interrupters (AFCI) are fire safety devices that can reduce the incidence of electrical fire and are specified by the 2008 NEC. Delaying the implementation of 210.12(b) (expansion of AFCI to all dwelling areas) and eliminating 406.11 (tamper resistant receptacles in dwelling units) will greatly affect the safety of current and future citizens of Wisconsin.

The process followed for the development of the National Electric Code is comprehensive and includes input from various agencies including manufacturers, safety agencies, home builders and the public. Changes to the National Electric Code require substantiation by logical reasoning, research, data and statistics which support safeguarding of persons and property from hazards arising from the use of electricity. This is a multi-year process with ample opportunity for all interested parties to debate the merits of the recommendation. The latest revision went through no less than two years of review and was approved August 15, 2007.

AFCI's provides preventive protection as part of the building's mechanical systems. In the United States each year there are 67,800 residential electrical fires, causing 485 deaths, 2,300 injuries and \$868 million in property losses. Without these changes to the State building Code, the citizens of Wisconsin will not be afforded the protection that advanced technology provides to help save lives and property. By delaying the adoption of 210.12(b) to 2010, the 15,000 new homes anticipated to be built in Wisconsin in 2009 will not be protected from fires due to electrical arcing.

A study by the International Association of Electrical Inspectors (IAEI) concludes that the cost increase of a house built to the 2008 NEC would incur a cost increase of approximately \$350. This is a reasonable cost to incur to ensure the safety of the citizens of Wisconsin. This study was performed for the State of Ohio who has undergone the same vetting process that Wisconsin is experiencing currently. Ohio has reviewed the cost data and has subsequently approved the 2008 NEC for adoption.

We are encouraged by conversations that we have had with the Joseph Hertel, Program Manager at the Safety and Building Division of the Department of Commerce regarding the adoption of NEC 210.12. Mr. Hertel supports AFCI technology and its significant additional fire protection provided by the new code.

It should be noted that Eaton Corporation has nearly 500 employees in the state of Wisconsin that develop and manufacture safe and reliable electrical components, playing an integral part in the development of the Arc Fault Circuit Interrupter. Eaton





*Powering Business Worldwide*

Eaton Corporation  
Industrial Control Division  
4201 North 27th Street  
Milwaukee, WI 53216

Corporation's AFCI technology was designed in Eaton's Milwaukee Research and Technology Center and the electronics portion of the circuit interrupter is manufactured in Eaton's Watertown, Wisconsin manufacturing plant.

Adoption of 2008 NEC without amendment will allow, Wisconsin to join 49 other states that either mandate or recommend the use of AFCI technology. The proposed changes to the code will ensure that AFCI technology will be used in newly constructed residential homes in Wisconsin to prevent fires and save lives for generations to come. Should you require further information, we would be happy to answer any questions or host you at either of our Wisconsin facilities. You may also visit our web page [www.fireguard.info](http://www.fireguard.info) for additional information.

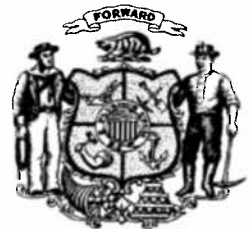
As a world leader in the sale of efficient and safe energy distribution products, we wanted to express our concern with the germane modification to Com 16. Thank you for your time and consideration of this important matter and your leadership for the citizens of the great State of Wisconsin.

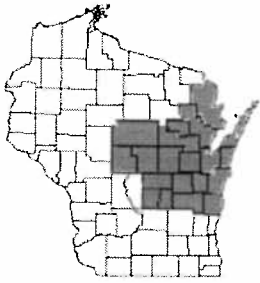
Sincerely,

Matt Lorenz  
Vice President and General Manger, Industrial Control Division  
(Office) 414-449-7309



# WISCONSIN STATE LEGISLATURE





## East Central Wisconsin Association of Electrical Inspectors

### **Ref: Comm 16 Electrical Code Germane Modifications (CR08-47)**

The purpose of this letter is to notify you of our association's disappointment of the November 5, 2008 Germane Modification of the Comm 16 Wisconsin Electrical Code. This modification would delay the implementation of Arc Fault Circuit Interrupter Protection (AFCI) of branch circuits and removes the implementation of tamper-resistant receptacles in dwelling units.

At our monthly meeting on November 14, 2008, after considerable dialogue, a proposal was made and seconded with a unanimous vote to draft and send a letter to those associated with the decision to modify the Comm 16 Electrical Code which was sent to legislature for committee review on August 22, 2008. Since our meeting the Germane Modification was once again modified on November 17, 2008 to include the installation of tamper-resistant receptacles in dwelling units to also become effective January 2010. Although this is an improvement, we do not believe that it satisfies the intent of Safety & Buildings staff and the Comm 16 committee.

The amount of data which is required to alter the National Electrical Code (NEC) is impressive and the review process is meticulous, so an argument could be made as to why Wisconsin would make changes at all. There is a process that exists in Wisconsin to make modifications to the NEC and that process is public and methodical which includes multiple meetings and a hearing in which involved parties may provide information to convince the experts of the necessity for change.

**AFCI's:** The National Fire Protection Association (NFPA) reports that from 2002-2005 the non-confined home structure fires with some type of electrical failure or malfunction as a factor contributing to ignition accounted for 17,610 fires, 173 civilian deaths, 524 civilian injuries, and \$525 million in direct property damage. FEMA reports that residential electrical building fires result in \$25,126 per fire compared to \$10,635 per non-electrical fire and 1.7 times higher death rates. These are the fires that

AFCI protection is designed to prevent. AFCI's have been part of the National Electrical Code since 1999 with an effective date of January 1, 2002. The technology has been improved and is now deemed to be appropriate by the Safety & Buildings staff to be implemented.

**Tamper-Resistant Receptacles:** The U.S. Consumer Product Safety Commission (CSPC) conducted a study from 1991-2001 which revealed that over 24,000 children under 10 years of age were treated in emergency rooms for incidents related to electrical receptacles. This translates into about 7 children per day. The Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) did an 8 year study from 1996-2003 from only 14 hospitals. They reported 465 children less than 9 years old were treated in emergency rooms for incidents related to electrical receptacles. The NEC has had a requirement for tamper-resistant receptacles to be installed in pediatric locations in health care facilities since 1981 and yet Comm 16 has not modified this requirement. This seems ironic since children in these areas should be under some level of supervision.

**Costs:** A regional cost comparison conducted by the "Ohio Chapter of the International Association of Electrical Inspectors", states that the average additional cost for the implementation of these two code changes amounts to only \$160 for a 900 sq. ft home, \$205 for a 1700 sq. ft. home and \$241 for a 2100 sq. ft. home. This appears to be a small price to pay for the additional protection afforded to the citizens of Wisconsin.

**Summary:** There has been a great deal of education and publicity for these items which should prevent any expectation for the further delay of the implementation of these important safety devices. Furthermore there has been no justification related to safety for delaying the implementation of these code changes.

Respectfully,

Kevin Benner  
President ECWAEI

Contact information can be found on our website: [ecwaei.org](http://ecwaei.org)