Phoenix, AZ - December 4-16, 2000

Panel: 2

Log # 2367 2-64 - (210-8(b)(3)): Reject SUBMITTER: Monte R. Ewing State of Wisconsin

PANEL ACTION: Reject

PANEL STATEMENT:

The panel reaffirms its action and statement on Proposal 2-81. There is no supporting data which would justify the GFCI requirement for commercial garages in Section 210-8(b). Commercial garages are defined only in Article 511.

Log # 445

2-65 - (210-11(b)): Reject SUBMITTER: Dan Leaf Palmdale, CA

PANEL ACTION: Reject

PANEL STATEMENT:

The present code rule expresses the intent of the panel. When the load is computed on a VA per square foot basis, the wiring system must be sized to serve that computed load.

Log # 811 2-67 - (210-12): Reject SUBMITTER: Bernard A. Schwartz

Schwartz Fire Specialists

PANEL ACTION: Reject

PANEL STATEMENT:

The requirement in Section 210-12 expresses the intent of the panel, which is that the entire branch-circuit be provided with AFCI protection.

Also, see panel action and statement on Comment 2-78.

Log # 1326

2-68 - (210-12): Reject

SUBMITTER: William King Jr.

U.S. Consumer Product Safety Commission

PANEL ACTION: Reject

PANEL STATEMENT:

The panel is not expanding the scope of AFCI installations at this time, pending the receipt of performance data.

Phoenix, AZ - December 4-16, 2000

Panel: 2

Log # 1660		
2-68a - (210-12): Reject		
SUBMITTER: Melvin K. Sanders	,	
TECo., Inc.		
PANEL ACTION: Reject		
PANEL STATEMENT:		
This is not prohibited by the present text in the code.		
Log # 1673		
2-69 - (210-12): Reject		
SUBMITTER: Timothy Costigan	,	
Lansing, MI		
PANEL ACTION: Reject		
PANEL STATEMENT:		
See panel actions and statements on Comments 2-72 and 2-73.		
Log # 1724		
2-70 - (210-12): Reject		
SUBMITTER: Don Ganiere	,	
Ottawa, IL		

PANEL ACTION: Reject

PANEL STATEMENT:

The information available to the panel during the 1999 Code Cycle shows a number of fires that are attributed to branch-circuit wiring. The present code rule expresses the panel's intent that the specified branch-circuits have AFCI protection.

Log # 1797 2-71 - (210-12): Accept in Part SUBMITTER: Robert J. Clarey

Cutler-Hammer, Inc.

PANEL ACTION: Accept in Part

In the wording of the comment, the panel accepts the deletion of the word "receptacle" and the deletion of the sentence stating: "This requirement shall become effective January 1, 2002".

,

The panel rejects the remainder of the Comment.

PANEL STATEMENT:

The panel reaffirms its prior position and statement on Proposal 2-103. The panel is awaiting experience data for review on this subject.

Phoenix, AZ - December 4-16, 2000

Panel: 2

Log # 1882

2-72 - (210-12): Reject

SUBMITTER: Ronald G. Nickson

National Multi Housing Council & Schwartz Fire Specialists

PANEL ACTION: Reject

PANEL STATEMENT:

a. The panel reviewed both written data and data provided verbally via presentations during the 1999 NEC Code Cycle and arrived at the conclusion that there were past fires that could have been addressed and prevented by AFCI.

b. The panel has no ability to improve the "training" of fire investigators. However, the more detailed information from other sources as well as detailed investigations by the Consumer Product Safety Commission support the need for the device.

c. The code requirement is for an AFCI that provides protection for the entire branch circuit. UL 1699 has established those parameters. During the development of UL 1699, it was established that there are two basic forms of arcing, point-contact and carbonized-path arcing. The testing protocols developed address these arcing occurences.

d. New installations age and are modified in fashions that introduce the hazards addressed by AFCI. Adding the protection at installation, will help reduce the fires caused by aging and modification.

e. The cost figures stated by the submitter are inaccurate. Devices are available for significantly less than quoted. This is substantiated by comments from the observers and presenters at the ROP meeting of Code-Making Panel 2.

f. The requirement is not restrictive. The code language states that the branch circuit must be provided with AFCI protection. This would include the entire branch circuit.

g. The panel disagrees with the submitter's anecdotal analysis of the technology. The standard sets forth very explicit and significant requirements for an AFCI. The panel does not agree with the submitter's statements about GFCIs and notes that GFCIs can be attributed with saving countless numbers of lives.

Log # 2071

2-73 - (210-12): Reject

SUBMITTER: Lawrence Brown

National Association of Home Builders (NAHB)

PANEL ACTION: Reject

PANEL STATEMENT:

The panel does not agree with the submitter's cost analysis estimates and notes that this is not supported by the comments made during the 2002 NEC ROP meeting by both presenters and observers.

Also, see panel action and statement on Comment 2-72.

Log # 2129

2-74 - (210-12): Reject

SUBMITTER: Lawrence Brown

National Association of Home Builders (NAHB)

PANEL ACTION: Reject

PANEL STATEMENT:

The submitter indicates that installing lighting on the same circuit as the receptacles in a bedroom presents a hazard. The panel notes that this practice is not presently prohibited in dwellings and that loss of lighting can occur because of overload, short circuits, or ground-faults. AFCI should be treated no differently.

Phoenix, AZ - December 4-16, 2000

Panel: 2

Log # 1875 2-74a - (210-12, Exception): Reject SUBMITTER: David G. Foreman The Foreman's Inc. PANEL ACTION: Reject PANEL STATEMENT: See panel statement on Comment 2-77 (log571).

Log # 14

2-75 - (210-12(a)): Accept

SUBMITTER: Technical Correlating Committee National Electrical Code

PANEL ACTION: Accept

The panel accepts the action of the Technical Correlating Committee. The panel concludes that the definition should remain in Section 210-12.

PANEL STATEMENT:

Given the importance of the definition to the primary requirement in Section 210-12, the panel recommends to the Technical Correlating Committee that the definition remain in Section 210-12(a).

Log # 721

2-76 - (210-12(a) and (b)): Reject

SUBMITTER: W. Creighton Schwan

Hayward, CA

PANEL ACTION: Reject

PANEL STATEMENT:

The panel reiterates that the branch-circuits must be protected with an arc-fault circuit-interrupter. See panel action and statement on Comment 2-74 relative to the inclusion of lighting outlets.

In addition, the submitter's substantiation does not support his recommendation.

The panel notes that the UL Standard does require some tests for all types of AFCIs on cord sets and power supply cords.

Log # 571

2-77 - (210-12(b)): Reject

SUBMITTER: Robert A. McCullough

Ocean County Construction Insp. Dept., NJ

PANEL ACTION: Reject

PANEL STATEMENT:

The panel reaffirms the requirement for AFCI protection in dwelling unit bedrooms, including smoke detector outlets. There has been no data submitted substantiating why smoke detectors should be deleted from the AFCI requirement.

Phoenix, AZ - December 4-16, 2000

Panel: 2

Log # 1658

2-78 - (210-12(b)): Accept in Principle

SUBMITTER: Jack Wells

Pass & Seymour/Legrand

PANEL ACTION: Accept in Principle

Revise Section 210.12(B), as shown in the Proposal, to read as follows:

(B) Dwelling Unit Bedrooms. All branch circuits that supply 125-volt, single-phase, 15- and 20-ampere outlets installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter listed to provide protection of the entire branch circuit.

PANEL STATEMENT:

The panel has revised the requirement from the ROP to make it clear that the AFCI must be "listed" to protect the entire branch circuit. The submitter's recommended wording to indicate specific types of AFCIs is not accepted and is not necessary, since the objective of the the NEC requirement is to indicate that the branch circuit be provided with AFCI protection.

Log # 1883

2-79 - (210-12(b)): Accept in Principle
SUBMITTER: Howard S. Leopold Cooper Wiring Devices
PANEL ACTION: Accept in Principle
PANEL STATEMENT: See panel action and statement on Comment 2-78.
Log # 2116
2-80 - (210-12(b)): Accept
SUBMITTER: George Gregory Square D Company
PANEL ACTION: Accept
PANEL ACTION: Accept
PANEL STATEMENT: See panel action and statement on Comment 2-78.

Log # 2117

2-81 - (210-12(b)): Accept SUBMITTER: George Gregory

Square D Company

PANEL ACTION: Accept

Phoenix, AZ - December 4-16, 2000

Panel: 2

Log # 2118		
2-82 - (210-12(b)): Accept in Principle		
SUBMITTER: George Gregory	,	
Square D Company		
PANEL ACTION: Accept in Principle		
PANEL STATEMENT:		
See panel action and statement on Comment 2-78.		
Log # 2102		
2-83 - (210-19(a)): Reject		
SUBMITTER: Truman C. Surbrook	,	
Michigan State University		

PANEL ACTION: Reject

PANEL STATEMENT:

The present code text reflects the intent of the requirement. The minimum conductor size that can be used based on continuous loads at 125 percent and noncontinuous loads at 100 percent is established by this section. Other calculations for the number of conductors in a raceway or ambient adjustment may be required by Section 310-15 and those adjustments can take advantage of the higher temperature values of the conductor's insulation.

,

,

Log # 2138

2-84 - (210-19(a)): Accept in Principle

SUBMITTER: Joseph P. Roche

Celanese Acetate

PANEL ACTION: Accept in Principle

Create a new 210.19(A) titled: "Branch Circuits Not More Than 600 Volts." Move Section 210-19(a), (b), (c), and (d) to become Section 210.19(A) (1), (2), (3), and (4), respectively.

PANEL STATEMENT:

The panel action meets the intent of the submitter and provides further clarity.

Log # 2344

2-85 - (210-19(a)): SUBMITTER: Joseph P. Roche Celanese Acetate

PANEL ACTION: PLEASE DEACTIVATE - THIS IS A DUPLICATE OF COMMENT 2-84 - LOG 2138.