

**(The following version is the Proposed Rule. The Final Rule is not published yet and will be posted when it becomes available.)**

# Indiana Electrical Code



**2009 Edition  
Title 675 IAC17-1.8**

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**TITLE 675 FIRE PREVENTION AND BUILDING SAFETY COMMISSION**

**Proposed Rule**  
LSA Document #09-140

DIGEST

Adds [675 IAC 17-1.8](#), which adopts by reference and amends the 2008 National Electrical Code as the Indiana Electrical Code, 2009 Edition. Repeals [675 IAC 17-1.7](#). Effective 30 days after filing with the Publisher.

[675 IAC 17-1.7](#); [675 IAC 17-1.8](#)

SECTION 1. [675 IAC 17-1.8](#) IS ADDED TO READ AS FOLLOWS:

**Rule 1.8. Indiana Electrical Code, 2009 Edition**

**[675 IAC 17-1.8-1](#) Adoption by reference**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 1. That certain document, being titled as National Electrical Code, 2008 Edition, first printing, published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts 02169-7471, is hereby incorporated by reference and made a part of the rule, except those portions as are amended and adopted in sections 3 through 30 of this rule.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-1](#))*

**[675 IAC 17-1.8-2](#) Title; availability**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 2. (a) This rule shall be known as the Indiana Electrical Code, 2009 Edition, and shall be published, except for incorporated documents, by the department of homeland security, legal and code services, for general distribution and use under the title. Whenever the term "this code" is used within this rule, including incorporated documents, it shall mean the 2009 Indiana Electrical Code.

(b) This rule, with the incorporated National Electrical Code, 2008 Edition, is available for review and reference at the Department of Homeland Security, 402 West Washington Street, Room W246, Indianapolis, Indiana 46204.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-2](#))*

**[675 IAC 17-1.8-3](#) Section 90.2; scope**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 3. Section 90.2 is amended to read as follows: (A) Covered. This code covers: Installations of electrical conductors and equipment within or on Class 1 and Class 2 structures, including industrialized building systems, and other premises wiring covered by rules of the Commission in this title.

Class 1 and Class 2 structures covered by the Indiana Residential Code shall be made to comply with the provisions of this code, or the electrical provisions of the Indiana Residential Code ([675 IAC 14](#)).

**(B) Not covered. This code does not cover:**

- (1) Installations in ships, watercraft, railway rolling stock, aircraft, automotive vehicles, and buildings or structures that are not Class 1 or Class 2 structures.**
- (2) Installations in underground mines.**
- (3) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.**
- (4) Installations of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.**
- (5) Installations, including associated lighting under the exclusive control of electric utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors on private property by established rights such as easements.**
- (6) Installations of electrical wiring, equipment, and devices, factory installed in manufactured homes under the authority of the U.S. Department of Housing and Urban Development (HUD).**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-3](#))*

**[675 IAC 17-1.8-4](#) Section 90.4; enforcement**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 4. Section 90.4 is amended to read as follows: Requirements covering enforcement, granting of variances, and approval of alternate methods or materials are covered in Indiana statutes and [675 IAC 12](#), the General Administrative Rules of the commission.**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-4](#))*

**[675 IAC 17-1.8-5](#) Section 90.6; formal interpretations**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 5. Section 90.6 is deleted in its entirety without substitution.**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-5](#))*

**[675 IAC 17-1.8-6](#) Section 90.8; wiring planning**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 6. Section 90.8 is deleted in its entirety without substitution.**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-6](#))*

**[675 IAC 17-1.8-7](#) Section 90.9; units of measurement**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 7. Delete the text of Section 90.9 and substitute the following: For the purpose of this code, the measurement system is the English (U.S. customary or inch-pound) system. Compliance with the numbers shown in the inch-pound system shall constitute compliance with this code.**

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-7](#))

**[675 IAC 17-1.8-8](#) Article 100; definitions**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 10-19-2](#); [IC 22-12](#); [IC 22-13-2-7](#); [IC 22-13-2-11](#); [IC 22-14](#); [IC 22-15-2-7](#); [IC 36-7-2-9](#); [IC 36-8-17-8](#)

Sec. 8. (a) In Part I of Article 100, delete the text of the definition of APPROVED and substitute to read as follows: APPROVED. Acceptance by the AUTHORITY HAVING JURISDICTION by one of the following methods:

- (1) investigation or tests conducted by recognized authorities; or
- (2) investigation or tests conducted by technical or scientific organizations; or
- (3) accepted principles.

The investigation, tests, or principles shall establish that the materials, equipments, and types of construction are safe for their intended purpose.

(b) In Part I of Article 100, delete the text of the definition of AUTHORITY HAVING JURISDICTION and substitute to read as follows: AUTHORITY HAVING JURISDICTION. The division of fire and building safety authorized under [IC 22-15-2-7](#) and [IC 10-19-2](#); the local building official authorized under [IC 36-7-2-9](#) and local ordinance; the local fire department authorized under [IC 36-8-17-8](#).

(c) In Part I of Article 100, in the definition of DWELLING UNIT, after "sleeping", insert "eating".

(d) In Part I of Article 100, delete the definition of LABELED and substitute to read as follows: LABELED. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

(e) In Part I of Article 100, delete the definition of LISTED and substitute to read as follows: LISTED. Equipment or materials included in a list published by an organization engaged in product evaluation that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(f) In Part I of Article 100, delete the text of the definition of SPECIAL PERMISSION and substitute to read as follows: SPECIAL PERMISSION. A variance granted by the commission under [IC 22-13-2-11](#) or a variance granted by a political subdivision and approved by the commission under [IC 22-13-2-7](#)(b).

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-8](#))

**[675 IAC 17-1.8-9](#) Section 210.8(B); other than dwelling units**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 9. Delete Section 210.8(B)(5) without substitution.

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-9](#))

**[675 IAC 17-1.8-10](#) Section 210.12(B); dwelling units**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 10. Delete Section 210.12(B) without substitution.**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-10](#))*

**[675 IAC 17-1.8-11](#) Section 225.30(B); special occupancies**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 11. In Section 225.30(B), special occupancies, delete "By special permission" and insert "When approved".**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-11](#))*

**[675 IAC 17-1.8-12](#) Section 230.2; number of services**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 12. (a) In the second sentence of Section 230.2, after "location", insert "as close as practical".**

**(b) In Section 230.2(B), special occupancies, delete "By special permission" and insert "When approved".**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-12](#))*

**[675 IAC 17-1.8-13](#) Section 250.104(B); other metal piping**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 13. (a) Change the next to last sentence of Section 250.104(B) to read as follows: The equipment grounding conductor for the circuit that is likely to energize the piping shall be permitted to serve as the bonding means if connected using a fixed wiring method.**

**(b) Add a new sentence at the end of Section 250.104(B) to read as follows: All metal gas piping upstream from the equipment shutoff valve(s) shall be electrically continuous.**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-13](#))*

**[675 IAC 17-1.8-14](#) Section 300.3; conductors**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 14. Add Section 300.3(D), entitled "Separation from corrugated stainless steel tubing", and add text to read as follows: All wiring methods shall be isolated from corrugated stainless steel tubing by a space separation of at least 2 inches except where the bonding connection is made.**

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-14](#))*

**[675 IAC 17-1.8-15](#) Table 314.16(A); metal boxes**

**Authority:** [IC 22-13-2-2](#); [IC 22-13-2-13](#)

**Affected:** [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 15.** In the line for 4 × 1 1/4 inch round/octagonal boxes and in the column for 8AWG conductor, delete "5" and insert "4".

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-15](#))*

**[675 IAC 17-1.8-16](#)** Section 334.10; uses permitted

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 16. (a)** Delete the text of (2) in Section 334.10 and substitute: (2) In any building or structure not exceeding three stories (see Section 362.10 for the definition of STORY).

(a) For exposed work except as prohibited in Section 334.12.

(b) Concealed within walls, floors, and ceilings except as prohibited in Section 334.12.

(b) Delete the text of (3) in Section 334.10 and substitute: (3) In any building or structure exceeding three stories (see Section 362.10 for the definition of STORY), Type NM, Type NMC, and Type NMS cables shall be concealed within walls, floors, and ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating identified in listings of fire-rated assemblies. The 15-minute-finish-rated thermal barrier shall be permitted to be used for combustible walls, floors, and ceilings, except as prohibited in Section 334.12.

Exception: Where the building is provided with an approved automatic sprinkler system throughout, Type NM, Type NMC, and Type NMS cables are permitted to be used within walls, floors, ceilings, exposed or concealed, in buildings exceeding three stories.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-16](#))*

**[675 IAC 17-1.8-17](#)** Section 334.12; uses not permitted

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 17.** In Section 334.12(A):

(1) delete the exception to Item (1) without substitution; and

(2) delete Item (2) without substitution.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-17](#))*

**[675 IAC 17-1.8-18](#)** Section 362.10; uses permitted

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 18. (a)** Delete the first two (2) sentences of text in Section 362.10 and substitute to read as follows: For the purpose of this section, a story is that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a usable or unused under-floor space is more than 6 feet above grade for more than 50 percent of the total perimeter or is more than 12 feet above grade at any point, such usable or unused under-floor space shall be considered as a story.

(b) In Item (1) under Section 362.10, delete "floors above grade" and substitute "stories".

(c) In Item (2) under Section 362.10, delete "floors above grade" and substitute "stories".

(d) In Section 362.10, delete the exception to items (2) and (5) and add a statement to items (2) and (5) to read as follows: Where the building is provided with an approved automatic sprinkler system throughout, ENT is permitted to be used within walls, floors, and ceilings, exposed or concealed, in buildings exceeding three stories.

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-18](#))

[675 IAC 17-1.8-19](#) Section 362.12; uses not permitted

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 19. In Item (7) under Section 362.12, uses not permitted, add 362.10(2) to the listed sections.

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-19](#))

[675 IAC 17-1.8-20](#) Section 406.8; receptacles in damp or wet locations

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 20. In Section 406.8(B)(1), delete the last sentence without substitution.

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-20](#))

[675 IAC 17-1.8-21](#) Section 406.11; tamper-resistant receptacles in dwelling units

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 21. Delete Section 406.11 without substitution.

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-21](#))

[675 IAC 17-1.8-22](#) Section 422.52; electric drinking fountains

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 22. Delete Section 422.52 without substitution.

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-22](#))

[675 IAC 17-1.8-23](#) Section 430.111(B)(3); oil switch

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

Sec. 23. In the first sentence of Section 430.111(B)(3), delete "by special permission" and substitute "when approved".

(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-23](#))

[675 IAC 17-1.8-24](#) Section 525.5; overhead conductor clearances

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 24.** In the first sentence of Section 525.5(B)(1), delete "4.5 m (15 ft)" and insert "10 ft".

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-24](#))*

[675 IAC 17-1.8-25](#) Section 547.1; scope

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 25.** Change Section 547.1 to read as follows: The provisions of this article shall apply to the following agricultural buildings or that part of a building or adjacent areas of similar or like nature as specified in 547.1(A) and (B) below, unless the building is not a Class 1 structure. Agricultural buildings that are not Class 1 structures may be regulated by local ordinance.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-25](#))*

[675 IAC 17-1.8-26](#) Section 550.4; general requirements

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 26.** Add a second sentence to Section 550.4(B) to read as follows: Modular homes, constructed under [675 IAC 15](#), Industrialized Building Systems, shall comply with the provisions of Article 545 of this code.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-26](#))*

[675 IAC 17-1.8-27](#) Section 600.1; scope

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 27.** Delete the first sentence of Section 600.1 and substitute to read as follows: This article covers the installation of conductors and equipment for electric signs and outline lighting as defined in Article 100 of this code that are within or connected to Class 1 or Class 2 buildings or structures.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-27](#))*

[675 IAC 17-1.8-28](#) Section 680.26(B)(1); conductive pool shells

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 28. (a)** After the first sentence of 680.26(B)(1)(a), insert a new sentence to read as follows: Reinforcing steel shall not extend into soil beyond the concrete envelope.

**(b)** After 680.26(B)(1)(b), insert an exception to read as follows: Exception to (b): The equipotential bonding grid shall not be required to be installed under the bottom or vertically along the walls of vinyl lined polymer wall, fiberglass composite, or other pools constructed of nonconductive materials.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-28](#))*

**[675 IAC 17-1.8-29](#) Section 680.26(B)(2); perimeter surfaces**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 29.** In the first sentence of 680.26(B)(2), delete the text following "concrete" and insert to read as follows: ", asphalt, flagstone, brick, tile, concrete pavers, and other paving materials considered to be conductive."

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-29](#))*

**[675 IAC 17-1.8-30](#) Section 680.26(B)(2)(b); alternate means**

Authority: [IC 22-13-2-2](#); [IC 22-13-2-13](#)

Affected: [IC 22-12](#); [IC 22-13](#); [IC 22-14](#); [IC 22-15](#); [IC 36-7](#)

**Sec. 30. (a)** Delete the text of 680.26(B)(2)(b) and substitute to read as follows: Alternate means. Where structural reinforcing steel is not available or is encapsulated in a nonconductive compound, a copper grid shall be installed within concrete or under other surfaces in accordance with 680.26(B)(1)(b).

**(b)** After 680.26(B)(2)(b), insert an exception to read as follows: Exception to (b): The equipotential bonding grid shall not be required to be installed under pool decks of nonconductive materials.

*(Fire Prevention and Building Safety Commission; [675 IAC 17-1.8-30](#))*

SECTION 2. [675 IAC 17-1.7](#) IS REPEALED.

[Notice of Public Hearing](#)

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An [html](#) version of this document.