

## Chapter 5

### 2011 - 2023 Summary of Significant Changes to the National Electrical Code

Since Chapter Five does not impact many installations in the State of Indiana, no fiscal impact statements have been included. The **yellow highlighted** text shows where some costs or savings are involved.

Article	Section	Summary of Changes
500 Hazardous Locations, all Classes & Divisions	500.8(E)(2)	Revised to require listed conduit or cable fittings with equipment having metric threaded entries and to provide requirements covering thread engagement for explosionproof equipment having metric threaded entries.
501 Class I	501.30(B)	<b>Revised to require installation of a wire-type equipment bonding jumper.</b>
502 Class II	502.6	Added new permission to use Zone 20 equipment in a Class II, Division 1 or 2 locations.
	502.10(B)(7)	Added new requirement permitting Reinforced Thermal Resin Conduit (RTRC-XW) and Polyvinyl Chloride Conduit (PVC) in industrial applications under specified conditions.
	502.30(B)	<b>Revised to require installation of a wire-type equipment bonding jumper.</b>
	502.100(A)(3)	Revised to prohibit installation of transformers and capacitors in Group E locations.
	502.115(B)	Revised to require dusttight enclosures or enclosures identified for Class II, Division 2 applications.
	502.130(B)(2)	Revised to require luminaires with dusttight enclosures or enclosures identified for Class II, Division 2 applications.
503 Class III	503.6	Added new permission to use Zone 20 equipment in Class III, Division 1 or 2 locations.
	503.10(A)(1)	Revised to permit additional wiring methods in a Class III, Division 1 location, and for consistency with the same requirement in Articles 501 and 502.
	503.10(A)(3)(4)	Added new requirement covering use of interlocking armor type MC Cable with overall jacket of polymeric material.
	503.30(B)	<b>Revised to require installation of a wire-type equipment bonding jumper.</b>
505 Zones 0, 1, & 2	505.8(G)	Revised to permit encapsulation as a protection technique in Zone 0 locations.
	505.25(B)	<b>Revised to require installation of a wire-type equipment bonding jumper.</b>
506 Zones 20, 21, & 22	506.9(F)	Revision to clarify requirement for sealing optical fiber cables with or without current-carrying conductors.
	506.25(B)	<b>Revised to require installation of a wire-type equipment bonding jumper.</b>
512 Cannabis Oil	512	Created new Article 512, Cannabis Oil Equipment and Cannabis Oil Systems Using Flammable Materials.

516 Spray Applications	516 Part V, 516.29 through 516.40	Relocation of hazardous (classified) area classification requirements for coating and dipping processes. <b>Part V requirements also apply to printing processes using flammable or combustible materials.</b> Requirements included on luminaires, wiring, and equipment not installed within the classified location(s) and control of static electric discharges.
517 Healthcare	517.17(C)	Revised requirement on selectivity between service and feeder ground-fault protective devices.
	517.18(A)	Revised to <b>prohibit use of multiwire branch circuits from supplying receptacles at patient bed locations.</b>
	517.19(A)	Revised to <b>prohibit use of multiwire branch circuits from supplying receptacles at patient bed locations.</b>
	517.19(E)	Revision to prohibit standard locknuts for bonding.
	517.30(C)(1)	Revised to <b>specify separate systems where multiple emergency system transfer switches are used to supply general care or critical care locations.</b>
	517.42	Revised to <b>include nursing homes and limited care facilities</b> in the title.
518 Assembly Occupancies	518.2(A)	Revised list of assembly occupancies to add casinos and gaming facilities.
545 Manufactured Bldgs.	545.1	Title has been revised to include relocatable structures under the scope of the article.
	545 New Part II	Includes requirements for relocatable structures and incorporates requirements previously located in Article 550 for mobile homes used as other than dwelling units.
547 Ag. Bldgs.	547.5(G)	<b>Revision to remove "general purpose" to provide GFCI protection for all receptacles.</b>
550 Mobile Homes	550.32(A)	Revised to replace "within 30 ft" with "within sight from the mobile home it serves." The effectively changes the 30 ft. dimension to 50 ft.
551 RVs & RV Parks	551.41(B)(4)	New requirement for at least one receptacle for rooftop decks that is accessible from inside the RV.
	551.43(C)	Revision to clarify that you <b>cannot protect a single 15-amp receptacle with a 20-amp overcurrent device.</b>
	551.71	Revised to <b>require that every recreational vehicle site equipped with a 50-ampere receptacle also be equipped with a 30-ampere, 125-volt receptacle conforming to Figure 551.46(C).</b>
	551.71(C)	<b>New subdivision for 50-ampere receptacle requirements. Revision to require a minimum of 20 percent for existing sites and 40 percent for new installations.</b>
555 Marinas, etc.		
	555.1	Revision adds floating buildings to scope of the article.
	555.4	Revision adds floating buildings under the scope of this requirement.

	555.14	Added section for the installations of equipotential planes and bonding of equipotential planes.
590 Temp Installations	590.4(D)(2)	Revised to require receptacles installed in a wet location to be provided with an extra duty hood in accordance with 406.9(B)(1), for all occupancies.
	590.8(B)	Revised text requiring current-limiting OCP where available fault current is greater than 10,000 amperes.