

Photovoltaic Power Systems

The US *National Electrical Code* and The Codes and Standards Process

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"THAT'S OK....I CAN HOOK IT UP MYSELF!"



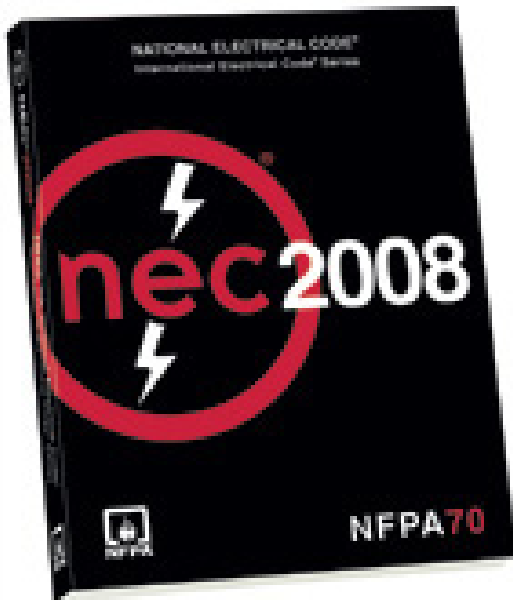


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What About The *NEC*?



- First developed and published in 1897 by only 23 people
- Predominant installation standard for all electrical installations in the U.S.
- Adopted in whole or part by all 50 states
- Updated every three years by thousands of dedicated volunteers
 - Other safety related standards are correlated with the updated versions
- Most comprehensive electrical code in the World



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The *NEC* Chapters

THE GENERAL CHAPTERS OF THE <i>NEC</i>	
Chapter 1: General	“Definitions”, “General Requirements”
Chapter 2: Wiring and Protection	Identification of conductors, circuits, overcurrent protection, grounding and bonding
Chapter 3: Wiring Methods/ Materials	Numerous wiring methods in detail, ampacity tables
Chapter 4: Equipment for General Use	Flexible cables, switches, switchboards and panel boards, generators, transformers, storage batteries



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The *NEC* Chapters

THE SPECIALTY CHAPTERS OF THE <i>NEC</i>	
Chapter 5: Special Occupancies	Health care facility, mobile home, theater, agricultural building, and many other types of occupancies. Hazardous locations are also covered.
Chapter 6: Special Equipment	PV systems , fuel cells, integrated power systems, outdoor lighting, and fire pumps
Chapter 7: Special Conditions	Low-voltage systems, power-limited circuits, interconnected power systems, standby power systems and instrumentation cables



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The *NEC* Chapters

THE SPECIALTY SECTIONS OF THE <i>NEC</i>	
Chapter 8: Communications Systems	Requirements that may apply to PV systems when they are used to power these types of systems
Chapter 9: Tables	Tables for conductor properties that are used in the design of all systems
Appendices A - F	Product safety standards, application information for ampacity calculations, conduit fill tables, examples, types of construction, cross references



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