



**2017 NEC
and Future Concerns**

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How Does the NEC Change?

- 3 year Cycle
- Year 1: Notification of Entering Cycle, proposals may now be submitted.
- Year 2: Proposals reviewed and discussed by appropriate panel. Late Jan 2018. Review and recommendations collected and voted on via mail by all panels.
- Comment period: Allows authors and others to comment on panel recommendations (Sep 2018)
- Report on Comments (Nov 18)
- Year 3: Voting on Comments (Final Panel votes Mar 19)
- Board Motions Made - May 19
- Association Meeting for Vote - Jun 19
- Document Issued for Jan 2020 publication.
- PROCESS STARTS ALL OVER.

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NEC Article 551

- **Receptacles 551.71**
100% 20 amp GFI, 70% 30 amp, 20% 50 amp (40% 50 amp in 2017)
- **RV Site Supply 551.77**
Locate 5 to 7 feet from drivers side, Minimum receptacle height of 24"
- **Power Supply 551.44**
RV shall have only "1" power supply cord
- **Distribution System 551.72**
RV Site power must be served with single phase service
- **Feeder Circuit Capacity 551.72(D)**
Neutral conductors shall have the same ampacity as the ungrounded conductors
- **Load Calculations 551.73**
Presently 50@12,000va; 30@3600va; 20@ 2400va. (12,000va in 2017)

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Demand Factor Table 551.73

Table 551.73 Demand Factors for Site Feeders and Service-Entrance Conductors for Park Sites

Number of Recreational Vehicle Sites	Demand Factor (%)
1	100
2	90
3	80
4	75
5	65
6	60
7-9	55
10-12	50
13-15	48
16-18	47
19-21	45
22-24	43
25-35	42
36 plus	41

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Typical Load Calculation

2017 Revision

- Using Table 551.73
- Assuming (17) 50 Amp sites
- $17 \times \frac{12,000\text{va}}{240\text{v}} = 800 \text{ amps}$
(100%)
- $800 \text{ amps} \times .47 \text{ demand factor}$
 $= \underline{400 \text{ Amps}}$

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NEC Changes

- **Grounding 551.75 & 250.32(A):**
Change language to 'Grounding electrodes shall not be required, but are allowed' Cost (est.) \$80-100 per site
- **Load Calculations 551.73 :**
Increased 50 amp rating from 9600va to 12,000va.
- **100 Amp RV Services:**
No changes for 2017, possibly 2020?

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NEC Changes

- **GFCI Receptacles 551.71):** No longer required to be Weather or Tamper Resistant (changes 2008 Code)
- **Distribution System 551.72 :**
RV Circuits are not Continuous Loads, so no wire restrictions
- **Dodged Bullets:**
 - 5 % Voltage Drop is NOT Code but a design
 - Prevented overcurrent protection addition. Think Main Circuit Breaker on pedestal. ~ \$80 per site

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NEC Mid Cycle Dumpster Fire

(Definition: a chaotic or disastrously mishandled situation.)

- **GFCI Requirement from 210.8B**
All Single Phase receptacles rated 150v to ground or less, 50a or less... installed in the following locations shall have GFCI protection for personnel:
Bathrooms
Kitchens
Rooftops
Outdoors...

This was entered into a general article and not coordinated with the Code Making Panel for RV's and RV parks. We are working with NFPA now to stop implementation.

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Questions & Comments:

Thank you for attending!!!

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