

Grounding and Bonding According to the 2011 NEC

Online

Question	Title	Time (minutes)
	<i>Grounding and Bonding Basics</i>	
1	250.4 General Requirements for Grounding and Bonding.	4
2	250.4(A)(1) Grounded Systems. Electrical System Grounding.	4
3	250.4(A)(2) Grounded Systems. Grounding of Electrical Equipment.	4
4	250.4(A)(3)&(4) Bonding of Electrical Equipment. Bonding of Electrically Conductive Materials and Other Equipment.	4
5	250.24(A)(5) Effective Ground-Fault Path.	4
	<i>Grounding & Bonding At Services</i>	
6	250.20(B) Alternating-Current Systems to Be Grounded.	4
7	250.24 (A) Grounding Service-Supplied Alternating-Current Systems. System Grounding Connections.	4
8	250.24 Grounding Service-Supplied Alternating-Current Systems.	4
9	250.24(A)(2) Grounding Service-Supplied Alternating-Current Systems. Outdoor Transformer.	4
10	250.24(A)(4) Grounding Service-Supplied Alternating-Current Systems. Main Bonding Jumper as Wire or Busbar.	4
11	250.24(A)(5) Grounding Service-Supplied Alternating-Current Systems. Load-Side Grounding Connections.	4
12	250.24(B) Main Bonding Jumper.	4
13	250.24(C) Grounded Conductor Brought to Service Equipment.	4
14	250.24(C)(1) Routing and Sizing.	4
15	250.24(C)(2) Parallel Conductors.	4
16	250.24(D) Grounding Electrode Conductor.	4
17	250.28 Main Bonding Jumper and System Bonding Jumper.	4
18	250.28(D) Size.	4
19	250.28(D)(2) Main Bonding Jumper for Service with More Than One Enclosure.	4
20	250.50 Grounding Electrode System.	4
21	250.68(C)(1) Metallic Water Pipe and Structural Metal.	4
22	250.52(A)(2) Metal Frame of Building or Structure.	4
23	250.52(A)(3) Concrete-Encased Electrode.	4
24	250.52(A)(4)–(8) Ground Ring; Rod and Pipe Electrodes; Plate Electrodes; Other Local Metal Underground Systems or Structures.	4
25	250.53 Grounding Electrode Installation.	4
26	250.53(A)(2) Ex. Rod, Pipe, and Plate Electrodes. Supplemental Electrode Required.	4
27	250.64 Grounding Electrode Conductor Installation.	4
28	250.64(D)(1) Service with Multiple Disconnecting Means Enclosures. Grounding Electrode Conductor Taps.	4
29	250.64(D)(2) Service with Multiple Disconnecting Means Enclosures.	4
30	250.64(D)(3) Service with Multiple Disconnecting Means Enclosures. Common Location.	4

31	Table 250.66 Size of Alternating-Current Grounding Electrode Conductor.	4
32	250.92(A)&(B) Bonding of Services. Method of Bonding at the Service.	4
33	250.94 Bonding for Other Systems	4
<i>Grounding and Bonding at Transformers</i>		
34	250.28(D)(3) Separately Derived System with More Than One Enclosure.	5
35	250.30 Grounding Separately Derived Alternating-Current Systems.	5
36	250.30(A)(1) System Bonding Jumper.	5
37	250.30(A)(1) Ex. 2. System Bonding Jumper.	5
38	250.30(A)(5) Grounding Electrode Conductor, Single Separately Derived System.	5
39	250.30(A)(6) Grounding Electrode Conductor, Multiple Separately Derived Systems.	5
40	250.30(A)(8) Bonding.	5
41	250.30(A)(3) Grounded Conductor.	5
<i>Grounding and Bonding at Generators</i>		
42	250.34(A) Portable and Vehicle-Mounted Generators. Portable Generators.	5
43	250.34(B) Portable and Vehicle-Mounted Generators. Vehicle-Mounted Generators.	5
44	250.35 Permanently Installed Generators.	5
45	250.35(A) Separately Derived System.	5
46	250.35(B) Nonseparately Derived System.	5
47	250.35(B) Nonseparately Derived System.	5
48	250.32(B)(1) Buildings or Structures Supplied by a Feeder(s) or Branch Circuits(s).	5
<i>Exercises: Grounding and Bonding at the Service</i>		
49	250.64(D)(3) Service with Multiple Disconnecting Means Enclosures. Common Location.	5
50	250.64(D)(3) Service with Multiple Disconnecting Means Enclosures. Common Location.	5
51	250.28(D)(2) Main Bonding Jumper for Service with More Than One Enclosure.	5
52	250.64(D)(2) Service with Multiple Disconnecting Means Enclosures. Individual Grounding Electrode Conductors.	5
53	250.64(D)(1) Service with Multiple Disconnecting Means Enclosures. Grounding Electrode Conductor Taps.	5
<i>Exercises: Grounding and Bonding Separately Derived Systems.</i>		
54	250.30(A)(1) Grounding Separately Derived Alternating-Current Systems. System Bonding Jumper.	5
55	250.30(A)(2) Grounding Separately Derived Alternating-Current Systems. Supply Side Bonding Jumper Size.	5
Total Time (in minutes):		242
Time Requirement (in minutes):		200