

4431 A 00018 . Subpanel Load Calculations (VA)

id	amp rating	rooms_on_circuit	devices_on_circuit	circuit_load (VA := watts)	notes
1	15	garage	1-water heater and 1 recirculation pump	53	24vdc water heater control module and recirculation pump 0.44A
2	20	kitchen	1 duplex	980	appliance circuit := freezer (1.5A) and always on water pot (6.67A) = 8.17A
3	20	papas bedroom	8 led lights and 3 duplex and 1 wall heater	1121	7 led lights (1.34A) and very rarely used wall heater (8A) = 9.34A
4	20	kitchen	1 garbage disposal and 1 refrigerator and 3 led lights	477	appliance circuit := always on refrigerator (2.9A) and intermittent insinkerator (60watt = 0.5A) and 3 led kitchen lights (0.575A) = 3.98A
5	20	green bedroom	2 duplex		west and south wall duplexes
6	20	mamas bedroom	3 led lights and 3 duplex and 1 wall heater	991	1 GFCI bathroom duplex and 2 led bathroom lights (0.26A) and very rarely used 8A wall heater = 8.26A
7	20	lower bathroom and laundry	3 duplex and 4 led lights and 1 exhaust fan	60.8	2 duplex and 1 led light (0.1A) and 1 mbr led light (0.19A) and 2 bathroom led lights (0.22A) and 1 bathroom duplex
8	20	kitchen	4 duplex	2028	appliance circuit := intermittent microwave (10A) and intermittent toaster (6.9A) = 16.9A
9	20	familyroom	3 duplex and 1 cable modem and 1 TV and 2 led lights 1250lm each	334	2 family room duplex and 1 green bedroom duplex and lights are 0.14A each and TV uses 1A when running and 4.2mA when standby (always on and listening) and always on cable modem uses 1.5A = 2.8A
10	20	familyroom	9 duplex and 1 led light	23	8 family room duplex and 1 duplex and 1 LED light (0.192A) in green bedroom
11	20	familyroom	5 led lights	115	1 lower landing light and 4 led lights = 0.96A
12	20	garage	1 garage door opener and 5 master bedroom duplex and 2 garage duplex and 2 led lights	154	5 mbr duplex and 1duplex in dining room and two 27 watt led lights (0.45A) and garage door opener (0.83A) = 1.28A
13	20	dining room	4 duplex (only)		4 duplex in NE corner (only)
14	20	garage	3 duplex and 5 led lights	106	1 front yard duplex and 1 backyard duplex and 1 ring floodlight video security camera above driveway and patio = 0.44A presently but will be adding two more soon = 0.88A
15	15	garage	furnace duplex (only)	1200	24v igniter + 10A blower motor (googled)
16	30	laundry	240v @22.3A dryer (only)	5352	22.3A * 240v = 5,352VA (watts)