



Electrical Service Load Calculation  
(Optional Method)

[Note: Water Heater, Furnace and Range are Natural Gas.  
There is no pool equip.]

General Lighting: 2,052 sq. ft. = 6,156 VA  
@ 3W / sq. ft.

(9) Small appliance branch circuits = 13,500 VA  
@ 1500 VA each

Laundry circuit = 1,500 VA

Electric Dryer = 5,000 VA

Dishwasher = 1,200 VA

Garbage Disposal = 800 VA

Wall Mount Oven (40 A) = 9,600 VA

Microwave = 1,500 VA

Sub-total = 39,256 VA

Demand Factor -  
First 10,000 @ 100% = 10,000 VA  
Bal. of 29,256 @ 40% = 11,702 VA

Sub-total = 22,702VA

Air Conditioner (40 A) @ 100% = 9,600 VA

TOTAL = 32,302 VA

Calculated Amp Load: 32,302 / 240 = 135 Amps

ELECTRICAL PLAN NOTES:

- 1) Provide carbon monoxide alarms per R315.
- 2) Provide smoke detectors in every sleeping room and hallways leading to. All new construction smoke detectors must be interconnected with a power source from the building wiring, and shall be equipped with battery backup. R314, R314.2.1
- 3) High-efficacy lamps are to be used in at least 75% of all new lighting fixtures. N1104.1
- 4) Circuits serving habitable living spaces shall be protected with combination-type arc-fault circuit breakers. E3902.16
- 5) GFCI protection is required in bathrooms, kitchens, garages/carports, exterior receptacles and within 6' of a sink. E3902
- 6) Tamper resistant receptacles required per E4002.14
- 7) Light fixtures installed in clothes closets shall be installed per E4003.12.
- 8) Ceiling fan boxes must be approved type for such use. E404.5
- 9) All 20 Amp circuits to be 12 AWG
- 10) All 15 Amp circuits to be 14 AWG

Full Cut-off Lighting Calculations:

Exception to 104.2.1: In Lighting Areas E3, E3a and E2, when the total outdoor lighting installation is full cut-off lighting installed under canopies, roof overhangs or eaves, Lumen Calculation shall not be required.

Provide Manufacturer cut-sheets for all FCO fixtures.

SINGLE LINE DIAGRAM / PANEL SCHEDULE

NO SCALE

CITY OF TUCSON SIGNED PLANS MUST BE  
KEPT ON JOB AT ALL TIMES  
Planning & Development Services Dept.  
ALL BUILDING TO COMPLY WITH 2018 IRC  
& 2018 UPC

Project Description:

Enclose Breezeway Project  
6012 E. Hampton St.  
Tucson, AZ 85712

Builder:

W & K Townsend  
Owner / Builders  
6012 E. Hampton St.  
Tucson, AZ 85712

Label  
rev. 0  
Date  
9/23/2019  
Description  
Pre-Release Working Copy

Sheet Title:

Electrical Details

SHEET:

E-2  
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