



# 1st FLOOR ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

**LOAD CALCULATIONS**  
**COOLING GREATER THAN HEATING**

GENERAL LIGHTING & RECEPTILES  
 3 WATTS PER SQUARE FOOT OF LIVING  
 S.F. LIVING = 7411 x 3  
 = 22233

**APPLIANCE CIRCUITS**

RANGE	8500
OVEN	NONE
MICRO / HOOD	1500
WATER HEATERS	13500
REFRIGERATOR	1200
WASHER	1500
DRYER	5000
DISHWASHER	1500
DISPOSAL	600
SMALL APPLIANCE CIRCUITS (3)	4500
BATH FANS (100 WATTS / EACH)	300
<b>GEN LIGHT'S &amp; RECEPT. - APP. CIR.</b>	<b>40,483</b>
<b>SUBTRACT 100% OF FIRST 10,000</b>	<b>-10,000</b>
<b>A =</b>	<b>30,483</b>

**HVAC CIRCUITS**

A/C I. HANDLER & COMP.	40,000
A/C I. AUXILIARY HEAT STRIP	40,000
<b>B =</b>	<b>80,000</b>

**CIRCUIT CALCULATIONS**

FIRST 10,000 WATT @ 100%	=10,000
40% OF "A" = (40 X 30,483)	=12,193
+ 100% OF "B" = (1.0 X 80,000)	=80,000
<b>TOTAL WATTAGE</b>	<b>110,193</b>
WATTS DIVIDED BY 240V = AMPS	
<b>CALCULATED SERVICE AMPS</b>	<b>= 459</b>

- NOTES:**  
 UNLESS OTHERWISE NOTED
- ELECTRICAL OUTLET HEIGHTS AS MEASURED FROM FINISHED FLOOR TO CENTERED LINE OF THE BOX TO BE: 12" AFF (GENERAL)
  - ALL TRIM PLATES & DEVICES TO BE GANGED, WHERE POSSIBLE.
  - ELECTRICAL SWITCHES TO BE AT 42" CENTERLINE ABOVE FINISHED FLOOR.
  - ELECTRICAL PLAN IS INTENDED FOR BID PURPOSES ONLY. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, LATEST EDITION, BY A LICENSED ELECTRICAL CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THE INSTALLATION & SIZING OF ALL ELECTRICAL WIRING & ACCESSORIES.
  - SMOKE DETECTORS SHALL BE IN ACCORDANCE WITH FLORIDA BUILDING CODE, SECTION 905.2
  - PROVIDE ARCS (ARC FAULT INTERRUPTERS) IN ALL DWELLING UNIT BEDROOMS PER NFPA 70A-2
  - KEEP ALL SMOKE DETECTORS MINIMUM OF 36" FROM BATHROOM DOORS
  - IN NEW CONSTRUCTION, SMOKE DETECTORS SHALL BE HARDWIRED INTO AN A/C ELECTRICAL POWER SOURCE AND SHALL BE EQUIPPED WITH A MONITORED BATTERY BACKUP.
  - BATHROOM EXHAUST FANS MUST VENT TO THE EXTERIOR OF THE BUILDING. ATTIC SPACE AND SOFFITS ARE NOT ACCEPTABLE.
  - ALL DOORS AND WINDOWS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL SHALL BE EQUIPPED WITH AN EXIT ALARM COMPLYING WITH UL 2017 THAT HAS A MINIMUM SOUND PRESSURE RATING OF 85 DBA AT 30 FEET, AND EITHER HARDWIRED OR OF THE PLUG-IN TYPE. THE EXIT ALARM SHALL PRODUCE A CONTINUOUS AUDIBLE WARNING WHEN THE DOOR OR WINDOW ARE OPENED.

- ELECTRICAL LEGEND**
- |                                    |                                 |
|------------------------------------|---------------------------------|
| ⚡ SINGLE POLE SWITCH               | 🚒 SMOKE DETECTOR                |
| ⚡⚡ DOUBLE POLE SWITCH              | ☀ FLOOD LIGHT                   |
| ⚡⚡⚡ THREE-WAY SWITCH               | 💡 FLUORESCENT LIGHTING          |
| ⚡⚡⚡⚡ FOUR-WAY SWITCH               | 📡 TRACK LIGHTING                |
| ⚡⚡⚡⚡⚡ DIMMER SWITCH                | 🌀 CEILING FAN                   |
| ⬆️ CEILING FIXTURE                 | 🔔 DOOR BELL CHIMES              |
| 📡 SCOUNCE ( WALL MOUNTED ) FIXTURE | 🔔 DOOR BELL                     |
| 🔌 110 VOLT DUPLEX OUTLET           | 🔌 DISPOSAL                      |
| 🔌 110 VOLT SPLIT SWITCHED OUTLET   | 🔌 DISCONNECT SWITCH             |
| 🔌 GROUND FAULT INTERRUPT           | 🔌 T.V. CABLE OUTLET             |
| 🔌 WP WATER PROOF / GROUND FAULT    | 📡 TELEPHONE CABLE OUTLET        |
| 🔌 220 VOLT OUTLET                  | 📡 RECESSED LIGHTING             |
| 🔌 SPECIAL SERVICES OUTLET          | 🔌 WATER PROOF RECESSED LIGHTING |
| 📡 T.V. CABLE OUTLET                | 🔌 BATH FAN                      |
| 📡 TELEPHONE CABLE OUTLET           | 🔌 BATH FAN W/ LIGHT             |
| 📡 RECESSED LIGHTING                |                                 |
| 🔌 WATER PROOF RECESSED LIGHTING    |                                 |
| 🔌 BATH FAN                         |                                 |
| 🔌 BATH FAN W/ LIGHT                |                                 |

