

ELECTRICAL SPECIFICATIONS

1. ALL ELECTRICAL WORKS SHALL COMPLY WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE WITH THE RULES AND REGULATION OF THE OF THE NATIONAL AND LOCAL AUTHORITIES CONCERN IN THE ENFORCEMENT OF THE ELECTRICAL LAWS AND REGULATIONS OF THE UTILITY COMPANIES CONCERN.

2. SERVICE ENTRANCE VOLTAGE TO THE BUILDING SHALL BE 240VOLTS, 60 HERTZ, THREE PHASE.

3. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOACTION OF CONCRETE TERMINAL POLE FOR CONNECTION TO THE POWER SUPPLY AND TELEPHONE.

4. ALL INSTALLATION CONCEALED FROM VIEW WIRING SHALL BE INCASE OF POLYVINYL CHLORIDE (PVC) SCHEDULE 40 EXCEPT POWER AND TELEPHONE SERVICE WHICH SHALL BE RIGID STEEL CONDUIT (RSC) OR OTHER WISE NOTED.

5. PULL BOXES OF APPROPRIATE SIZE SHALL BE PROVIDED, EVEN IF NOT INDICATED IN THE DRAWING TO ACCOMMODATE THE NUMBER OF SPLICES OF WIRE.

6. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED TYPE APPROPRIATE FOR BOTH LOCATION AND INTENDED USE.

7. ELECTRICAL INSTALLATION SHALL BE UNDER DIRECT SUPERVISION OF A DULY REGISTERED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.

8.NO REVISION IN THE DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNER AND THE OWNER, ANY SUCH REVISIONS DONE WITHOUT APPROVAL SHALL BE CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASE THE WHOLE.

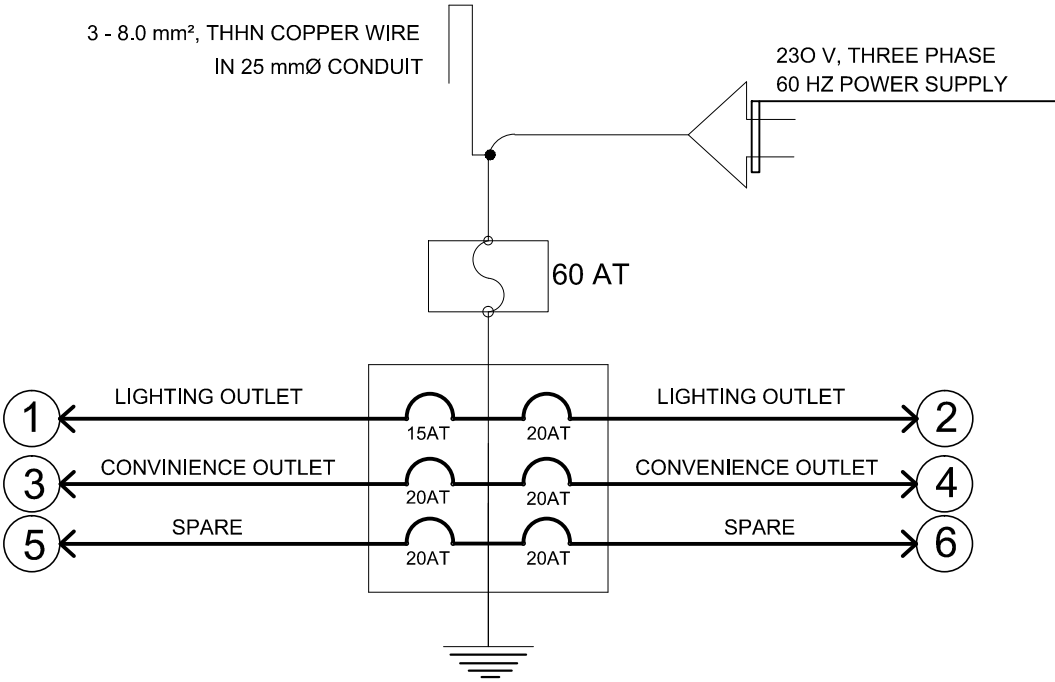
9. MOUNTING SHALL BE AS FOLLOWS:

- LIGHTING SWICHES SHALL BE 1.40 METERS ABOVE FINISH FLOOR LINE.
- CONVENIENCE OUTLETS SHALL BE 0.30 METERS ABOVE FINISH FLOOR LINE.
- TABLE OUTLETS SHALL BE 0.15 METERS ABOVE COUNTER ON THE CENTER.
- CABINET PANELBOARD SHALL BE 1.40 METER ABOVEFLOOR FINISH UNLESS OTHERWISE DIRECTED.

ELECTRICAL LEGENDS

| SYMBOLS | DESCRIPTION                |
|---------|----------------------------|
|         | CONVENIENCE OUTLET, DUPLEX |
|         | PANEL BOARD                |
|         | SINGLE GANG SWITCH         |
|         | DOUBLE GANG SWITCH         |
|         | THREE WAY SWITCH           |
|         | 13 WATTS LED BULB          |

PANELBOARD DIAGRAM



Panelboard 1 - Schedule of Loads

| CKT NO. | QTY | LOAD DESCRIPTION   | VOLTS | TOTAL VA | AMP/CKT | CURRENT/PHASE |       |       | CKT PROTECTION |    | SIZE OF WIRE |       | CONDUIT SIZE |    |
|---------|-----|--------------------|-------|----------|---------|---------------|-------|-------|----------------|----|--------------|-------|--------------|----|
|         |     |                    |       |          |         | AB            | BC    | CA    | AT             | AF | TYPE         | mm    | TYPE         | mm |
| 1       | 7   | Lighting Outlet    | 230   | 350      | 1.52    | 1.52          |       |       | 15             | 50 | THHN         | 3-2.0 | PVC          | 20 |
| 2       | 4   | Lighting Outlet    | 230   | 200      | 0.87    | 0.87          |       |       | 15             | 50 | THHN         | 3-2.0 | PVC          | 20 |
| 3       | 4   | Convenience Outlet | 230   | 1440     | 6.26    |               |       | 6.26  | 20             | 50 | THHN         | 3-2.0 | PVC          | 20 |
| 4       | 4   | Convenience Outlet | 230   | 1440     | 6.26    |               | 6.26  |       | 20             | 50 | THHN         | 3-3.5 | PVC          | 20 |
| 5       |     | Spare (1 hp ACU)   | 230   |          | 9.00    | 9.00          |       |       | 30             | 50 | THHN         | 3-5.5 | PVC          | 20 |
| 6       |     | Spare (1 hp ACU)   | 230   |          | 9.00    |               |       | 9.00  | 30             | 50 | THHN         | 3-5.5 | PVC          | 20 |
| 7       |     | Spare (1 hp ACU)   | 230   |          | 9.00    |               | 9.00  |       | 30             | 50 | THHN         | 3-5.5 | PVC          | 20 |
| 8       |     | Spare              | 230   |          | 6.00    | 6.00          |       |       | 30             | 50 | THHN         | 3-5.5 | PVC          | 20 |
|         |     |                    |       |          |         | 17.39         | 15.26 | 15.26 |                |    |              |       |              |    |

Line Current = (1.73) x 17.39 A  
= 30.09 A

For Feeder Conductor = 1.25 x 30.09 A = 37.61 A

Use 2 - 8.0mm² THHN-2 cu.wire in 32mm.dia. PVC/RSC Pipe with 1-3.5mm² grounding wire

For Feeder Protection

Use 50AT,100AF, Single Phase 230V, MCCB Bolt on Type  
Panelboard should be NEMA 1 Enclosure (Gauge #16) with front dead platecover with grounding busbar  
All Breakers should be MCCB Bolt on Type, Thermal Magnetic, Industrial Type breaker (for all breakers)

Note: Spare Breaker have provision of PVC from Panelboard to ceiling for future installation fo electrical lines