Circular no.**870(a)** Date: 09.12.15

Sub.: Standard Measurements/Guideline – Electrical - Revised

Recommended standard measurement and guidelines to be followed in all sites are as follows:

1. Height of switchboards/electrical points measured from FFL to bottom of the switch board or point is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Item Description | Height | Suggested size of switchboard |
|  | Switchboard | 4’ or 4’6” | 8/12 way |
|  | Bell switch | 4’ or 4’6” | 1 way |
|  | TV counter top | 3’ or 3’3” | 4/6way |
|  | Switchboard above kitchen platform | 3’6” | 4/6 way |
|  | Bathroom next to basin | 3’6” | 4 way |
|  | Geyser point (not at 7’) | 6’6” to 7’6” | 4 way |
|  | DB | 7’ to 7’6” | 6 way – 3 phase |
|  | Generator changeover | 4’ to 5’ | 4 way |
|  | Plug point for split AC | 7’ to 7’6” | 4 way |
|  | Plug point for window AC | 2’ | 4 way |
|  | Wall point /bracket light | 7’3” to 7’6” | - |
|  | Telephone/switchboard next to bedside table | 2’ | 4 or 6 way |
|  | Fridge point (must be behind fridge) | 4’ or 4’6” | 4 way |
|  | Wall point above bathroom mirror | 6’6” | - |
|  | Water filter (Acquaguard) | 5’6”to 6’ | 4 way |

2. Guidelines that could be followed for good electrical designs are:

1. DB should be near the main entrance. Generator changeover switch should be below the DB.
2. Provision for DB should be made on upper floors in case of bungalows.
3. Doorbell should be placed next to DB.
4. Each room should have atleast two wall/bracket lights (max. 3).
5. Drawing & dining should have couple of ceiling points.
6. A bracket light should be placed behind the bed in each bedroom. Control of the light behind the bed should be near the bedside table.
7. Avoid two way switches. (except in staircases in bungalows)
8. amps sockets should be provided on either side of the bed exactly above the centre of the bedside table.
9. Avoid two fans in any room.
10. Do not place any switchboards or bracket lights behind wardrobes or above lofts.
11. Socket near basin should be on wall perpendicular to the basin wherever possible and not behind the basin.
12. Bathrooms and balconies should have ceiling points.
13. Geyser point in the bathroom should be away from the shower.
14. All bedrooms and drawing rooms should have a TV and telephone point.
15. Split utility area for pot wash and washing machine. Provide a 5 amp socket near the washing machine.
16. Designate area for refrigerator and provide a 5 amp socket behind the refrigerator.
17. Avoid window ACs and instead provide split AC points along with a 2 1/2” dia PVC pipe through the wall for copper pipes.
18. Except for geezer and AC points which should be 15 amps sockets all other sockets should be 5 amps only.
19. Provide step regulator/dimmer for fans and control switch for sockets. Do not provide control switch for fans.
20. Sockets from kitchen should be away from stove and sink.
21. Optionally provide socket for water filter above sink.
22. Provide exhaust fan in kitchen and avoid exhaust fans in bathrooms. In case exhaust fans are to be provided in bathrooms, provide a 4” PVC pipe for the exhaust fan (Sirocco make exhaust fans can be used).
23. Provide socket with telephone point near the corner table in the drawing room.
24. Electrical points should be compared with furniture, bathroom and kitchen layouts. Preferably electrical plans should show the furniture, bathroom and kitchen layouts.
25. Condenser units of air conditioners should be at locations that can be reached for servicing.

3. These guidelines should be strictly followed for new projects.

4. For existing projects corrections can be made after keeping in mind the location of

 existing conduits in the RCC slabs.

Managing Director