



## **Requirements of Power Supply Facilities for Smart Meter Communication Equipment in Buildings**

**CLP POWER HONG KONG LIMITED**

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## **1. Introduction**

To meet the needs of smart meter communication equipment in buildings, Developer / Customer is required to supply, install and maintain necessary infrastructure provisions for the development to facilitate automatic meter reading and associated metering operations. The requirements should be read in conjunction with the “Guide to Supply and Metering Arrangement on Customer’s Internal Distribution System” issued by CLP Power Hong Kong Limited (CLP).

These requirements to be applicable to all new residential, industrial and commercial buildings or all large additional and alteration of existing electrical installation in the building, but not applicable for village houses or the premises are connected of electricity supply from CLP overhead line.

## **2. Implementation**

If the electrical schematic diagram is submitted to CLP during the grace period from 1 October 2018 to 30 September 2019. Developer / Customer can choose to adopt these requirements. For electrical schematic diagram submitted to CLP or large additional and alteration of existing electrical installation commence on or after 1 October 2019, these new requirements should be applied.

## **3. Requirements of Facilities**

### **3.1 Facilities Locations and Wooden Board Requirements**

A minimum 610mm(H) x 305mm(W) x 13mm(thick) wooden board, with front clearance of minimum 900mm, shall be provided for mounting CLP collector(s) in the meter room(s)/duct(s) of the lowest floor, highest floor and every 20 floors at each high-rise building.

For example, four CLP collectors shall be installed in the meter rooms/ducts at the lowest floor, 20<sup>th</sup> floor, 40<sup>th</sup> floor and main switch room for a 40-storey building. For building that is less than or equal to 20 floors, the aforementioned facilities should be provided in the meter rooms/ducts of the lowest, highest floor and main switch room. All meter rooms/ducts in same floor are also included.

In shopping centre or building with shopping centre, such facilities should be provided in all meter rooms/ducts where meter(s) for shop is/are installed.

The actual locations of the CLP collectors will be subject to building’s floor plan submitted by Developer/Customer and the communication signal strength measurement by CLP on site.

### 3.2 Power Supply for Collector

Beside of collector wooden board, a single phase fused connection unit for CLP collector shall be provided (fuse rated at 5A, unless otherwise specified). The circuit should be protected by a dedicated double poles MCCB of rating not less than 20A tapped off from un-metered distribution board in the same room/duct. Suitable neutral and earthing terminals should be provided in fused connection unit for CLP collector. The tapped off power supply location should be submitted to CLP Power for consent prior to the installation.

All electrical installations for collectors shall comply with Electricity Ordinance and other relevant Government regulations as well as CLP's Supply Rules.

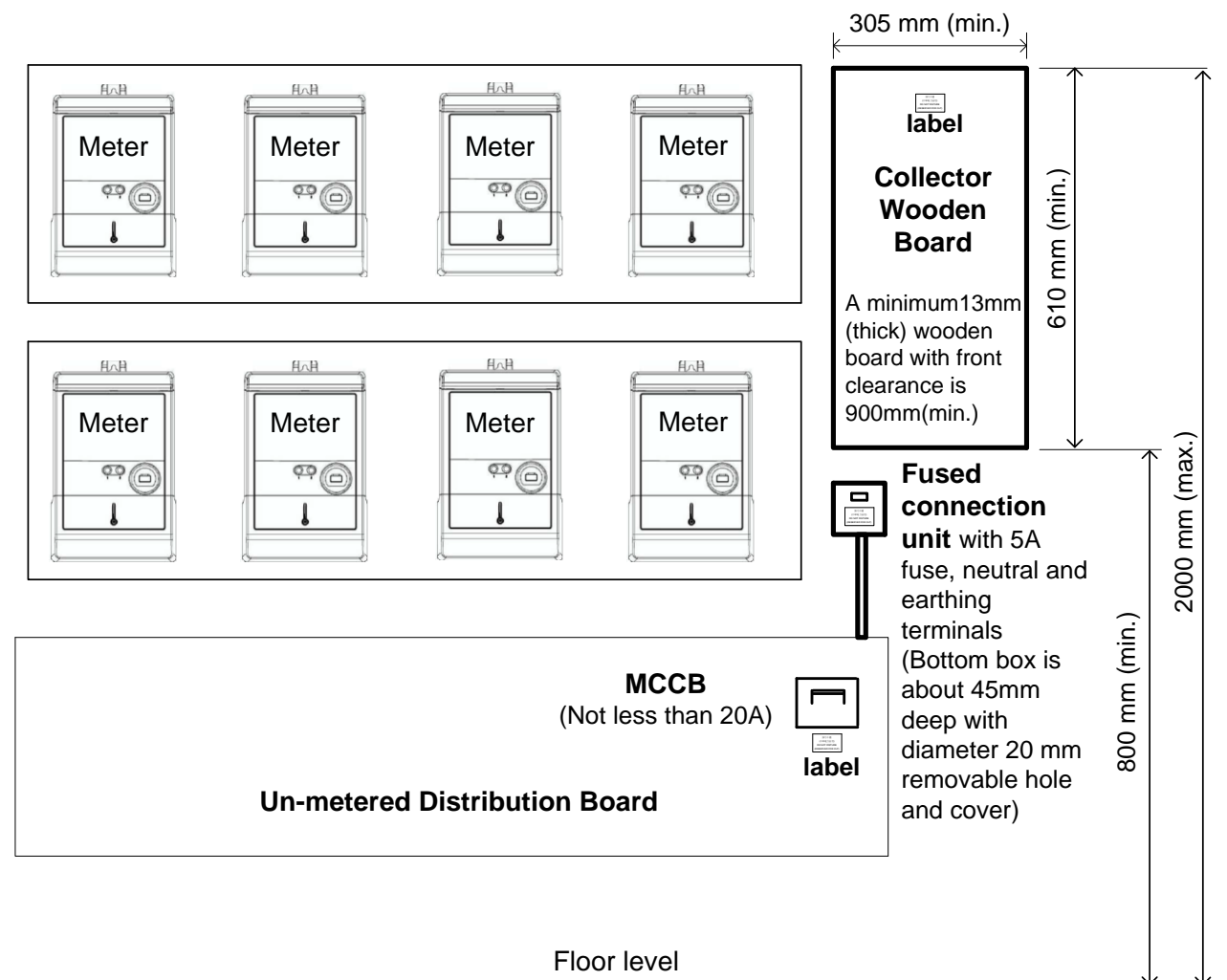
### 3.3 Requirements of Facilities Labels

Durable labels shall be provided on MCCBs, fused connection units and collector wooden boards. The label contents, font size and label size are showed in following sample.

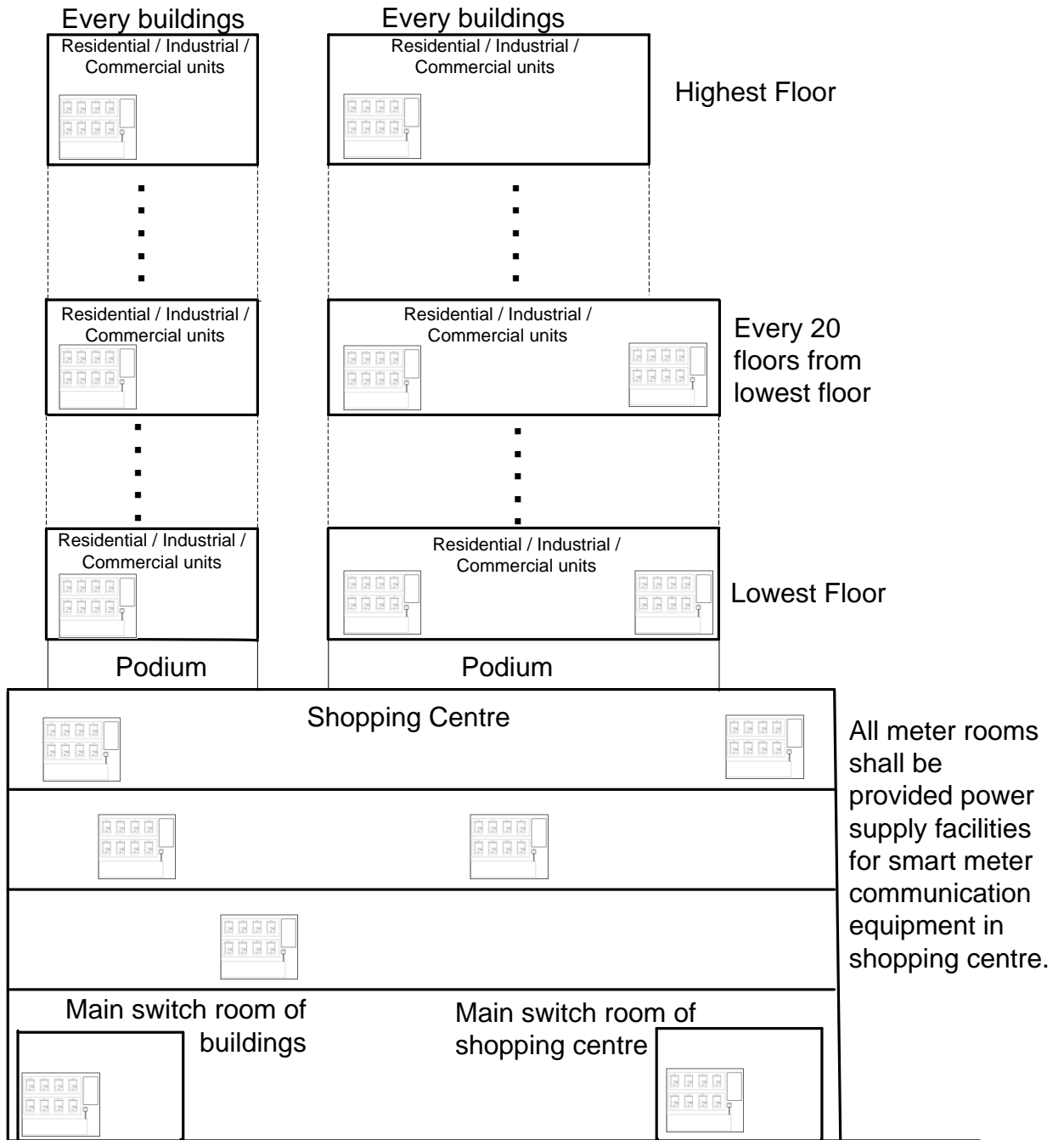


#### 4. Arrangement of Power Supply Facilities for Smart Meter Communication Equipment in the Meter Room

Picture below shows a typical power supply facilities arrangement for collector.



**5. Locations of Typical Power Supply Facilities for Smart Meter Communication Equipment in Buildings**



Shall provide power supply facilities for smart meter communication equipment.