

*Royal*  
PARAGON HALL

**Rules and Regulations on Electricity Usage at Royal Paragon Hall**

1. All electrical equipment and installation must meet safety and standard requirements, namely IEC, BS, ASI, NEMA, DIN, VDE, UL, JIS, AS, or be approved by the Electricity Authority.
2. All equipment and components (such as electric wires, sockets, plugs, and switches) used in an electrical installation in the booth must be sufficient and durable.
3. Each electrical circuit must not exceed 10amp and must not serve more than 10 sockets at one time.
4. Electric wires in each electrical circuit must be at least 2.5 Sq.mm.
5. Any wiring longer than 50 meters requires a fuse which does not exceed the maximum current rating to prevent from any short circuit or overloading.
6. Wiring must be done by soldering or with mechanical tools (threaded wire or using pliers and insulators) and must be easily accessed for inspection.
7. Any wire larger than 6 Sq.mm. cross-sectional area requires proper installation, such as by soldering, and with specific equipment.
8. Wires or cables connected to Trench must be either VCT or NYY only.
9. Storing electric wires must be done properly. A circular rotary plug storage is prohibited.
10. Every extension lead must have their own fuses or switches which do not exceed 5 amp.
11. Connecting bare wires directly to the socket is strictly prohibited. A plug is required for the connection.
12. All wires on the floor must be safely and securely installed to prevent from any damage.
13. Wire connecting joints must be covered with an insulator or an equipment which is electric current resistant equal to insulated wires, and they should not be too tight.
14. Any connecting point of insulated wires with tape must strictly follow the regulations. It must not be in a wet area and should be easily accessed for inspection.
15. Electrical wiring in an area with sharp objects, friction, pressure, or through the windows or doors should be avoided. If it is necessary to do so, appropriate safety precautions to any physical damage must be provided.
16. Royal Paragon Hall reserves the rights to cut the power supply in the booth should there be any violation to the rules and regulations on electricity usage.

## 17. Directions and Instructions

### 17.1 Electrical Equipment

Most of the electrical equipment in the exhibition hall is in constant use; therefore, good maintenance is required. After use, should any damage be found and if the equipment is not safe to be used, it must be reported and destroyed. All electrical equipment must meet the standards required, namely Thai Industrial Standards Institute (TISI), UL, VDE, and IEC only. Electrical equipment in the exhibition includes the followings:-

### 17.2 Electric Wire or Cable

1. Wires and cables must meet the standard of TISI only.
2. Internal wires or cables must not be used outside the building as exposure to sunlight can cause damage to the wires. External wires or cables normally come with sunlight protection substance in the cover or insulators. This substance is mostly in black color, but other colors are also available.
3. Wires or cables must be used specifically for its purpose. Soft wires must not be used on the walls as they can be damaged from cable clips and clamps. Also, underground wires must be an NYY type and installed in a conduit or duct to provide protection against mechanical damage.
4. The size of electric wires must match the voltage, ampere, and the size of fuse or breaker used. Moreover, the size of the main wire or ground wire must also match the size of the main switch or an earth ground resistance meter.
5. Any wires that have been used must be rechecked for any scratch or damage. Also, there should not be too many connections in the same wire/system.

### 17.3 Main Switch

Main switch refers to a circuit breaker which controls the safety of electricity usage. This breaker can be switched on or off instantly to prevent excess electricity and short circuit.

1. A circuit breaker size must be sufficient to cut off the power before causing any damages in case of excess electricity or short circuit.
2. The IC or Interrupting Capacity of fuses or breaker must be higher than a short circuit current of the electrical system at the installation location. IC must be calculated based on the voltage used. For example, if IC = 10 kA for 120V, IC must be adjusted to 5kA in case of 240V.
3. All electrical wires connected to the circuit breaker must be secured. The connector used should be of an electrical terminal type. A direct connection of bare wires to the circuit breaker is prohibited.
4. A circuit breaker should be installed in either a wooden or metal box cover to prevent any accidental contact or crash with the breaker itself.
5. A circuit breaker must be inspected regularly for both physical and efficiency conditions. This includes an inspection of any crack (i.e. breaker's body crack), or loose screws of electrical wires.

17.4 Plug and Plug Socket

Plugs and sockets must have the following characteristics;-

1. All plugs must have insulated sleeves, and sockets should be recessed or large enough in order to prevent any direct contact to the energized socket.
2. All plugs and sockets must meet the universal standard such as UL, VDE, DIN, or DEMA.
3. All plugs and sockets must be used strictly with the appropriate electric current and voltage. For example, any plugs and sockets for 125V must not be used with 220V system.
4. All plugs and sockets must be connected securely when in use (tightly and without heat generation). A simple test of repeated plugging and unplugging (5-10 times) that does not loosen the connection is acceptable.

17.5 Lamp

Lamps must be inspected regularly both before and after use. This includes both physical inspection of the lamp shade and its lock, as well as an inspection of any electrical leakage in the lamp.

Electrical Installation

An electrical installation for an event must meet safety standard and in a timely manner. Therefore, it is required that there must be a good planning of the procedures and ready-to-use equipment as well as sufficient electrician team.

An electrical installation must comply with all electrical engineering and regulations by the Metropolitan Electricity Authority and Provincial Electricity Authority, and be carried out by experienced technicians only.

An electrical installation does not require only standardized equipment and tools, but it also requires physically and mentally capable professionals who possess knowledge and skills. Most important of all, they must not be careless as any minor mistake can lead to fatalities. In every operation, there must be a careful plan and control (by an electrical engineer or chief technician) according to electrical engineering rules and regulations to prevent any accidents in an electrical installation.

<b>Acknowledged by</b>	
Event's Name.....	Event's date.....
Organizer's Name .....	
Contact Person.....	Telephone No.....