

Guide for Installation and Maintenance of New Electrical Switchboards

An Electrical Switchboard is one of the most important items installed within a building. No matter what size it is important that your Switchboard remains operational to optimal performance and remains safe as hidden potential faults can have a major impact and could cause costly outages.

We have provided this guide to help with aspects relating to first receiving your New Electrical Switchboards to ongoing Routine Maintenance,

When Receiving your New Switchboard and Installation

Caution and care is required when lifting and moving a Switchboard as these can be heavier than most people think. For smaller Switchboards the right lifting techniques are extremely important as to avoid personal injury to yourself and others and most commonly avoid back injuries. For larger Switchboards Cranes, Forklifts, HI-AB Trucks etc can be used but these should be used in conjunction with the proper lifting aspects for the type of design and construction that has been used.

If your Switchboard has arrived with packing on take care to remove the packing without damaging the Switchboard in particular the Structure and Paint work etc.

If your Switchboard is not going to be installed after arriving and being unwrapped then it should be covered to safeguard against the weather and site conditions its being stored in. Be sure that the covering used doesn't provide sweating of the Switchboard. It is also important to make sure that your Switchboard is kept dry, moisture free and dust free.

Checks should be made on your Switchboard before installation as components could have moved and connections may have worked loose. Checks on cabinets and/or any other notable damage should also be made and reported straight away. These checks are important as components and their mountings etc as well as connections may have moved or come loose. If electrical connections have come loose then they need to be tightened to the appropriate supplier's recommendations and marked accordingly.

When installing your Switchboard it is important to understand what type of Switchboard it is, the weight of it, fixing details and the position it is to be installed.

Care should be taken in making sure that Seismic requirements are adhered to. Again these should be as per the type of Switchboard being installed as per the manufacturer's requirements and as per your local regulations / standards.
We can offer Seismic Evaluations for your requirements.

Maintenance and Inspection of your New Switchboard

Regular Maintenance of your New Switchboard is very important as it will increase your Switchboards Lifespan and also prevent replacement of Fewer Parts and costly Downtime. It is recommended that Regular Maintenance is carried out at least every 12 months however more frequent if required.

We note that in many cases many people will have access to your New Switchboard and could have made Changes, Modified or Remove Panels etc so the Switchboard may not be as you think it was or as it was Originally Installed.

Regular Maintenance should be carried out by Experienced Personal and in a Safe Environment with all Safety Precautions taken.

Regular Maintenance and Inspection should at least consist of the following.

- Visual Inspection for Obvious Changes.
- Internal Cleaning to remove any accumulated Dust or any other Foreign Bodies as these can cause Flash Overs.
 - Checking Cable Connections and Condition of Cabling.
 - Checking of Busbars and Connections for Hot Spots and re torquing Bolted Connections. Use the recommend torque settings for the appropriate type and size of Bolts.
- Checking Connections of Electrical Components for Tightness and Hot Spots.
 - Checking the Operation of Devices, Handles, and Circuit Breakers etc.
 - Thermal Imaging Tests
 - Checking of Door Seals etc.
 - Checking that Switchboard is Dry and no Moisture Present.
- Checking all Shrouds, Barriers are not missing and complete and fixed in place correctly.
- Checking Condition of Cabinetry and Paint Work looking for any Deterioration.
 - Checking for any Noise and Vibration.
- Provide well maintained Evidence Records of your Maintenance including Test Results, Findings, Areas of Concern, Condition of Components, Date, Maintenance Inspectors Name etc.
- Provide updated list of appropriate Spares as Components change over time.

Disclaimer – This is a guide only and should be read in conjunction with the latest standards and codes.