

The Contractor shall record values of the tests made on all equipment. Three copies of all test data shall be given to the Consultant for record purpose.

The witnesses of any tests by the Consultant does not relieve the Contractor of his guarantees for materials/ equipment or any defects.

1.16 INSULATION RESISTANCE TESTS

Insulation resistance tests shall be made on all electrical equipment by using a megger tester of 500V for circuits upto 250 Volts and 1000V for circuits upto 500 volts.

The insulation resistance values of cables, transformers and switchgear etc., shall be as per B.S.S. and Pakistan Electricity Rules.

Before making connections at the ends of each cable run, the insulation resistance measurement test of each cable shall be made. If insulation resistance test readings are found to be less than the specified minimum, the cable shall be replaced and the new cable installed and tested.

All switchgears shall be given an insulation resistance measurement test after installation, before any wiring is connected. Insulation tests shall be made between open contacts of circuit breakers, switches and between each phase and earth.

If the insulation resistance of the circuit under test is less than the specified value, the cause of the low reading shall be determined and removed. Corrective measures shall include dry-out procedure by means of heaters if equipment is found to contain moisture. After all tests have been made, the equipment shall be reconnected as required.

1.17 EARTH RESISTANCE TEST

Earth resistance tests shall be made by the Contractor on the earthing system, separating and reconnecting each earth connection as required.

The electrical resistance of the E.C.C together with the resistance of the earthing leads measured from the connection with earth electrode to any other position in the complete installation shall not exceed 3.0 OHM.

Earth resistance test shall be performed as per Electrical inspector's requirements. Where more than one earth electrode is installed, the earth resistance test of each electrodes shall be measured by means of resistance bridge instrument.

1.18 CONTINUITY TEST

Continuity test on all the sub and main circuits should be performed for phase, neutral & earth wires.

1.19 STORAGE/HANDLING OF MATERIALS

All materials and equipments shall be very carefully handled during transportation, loading and unloading at site to avoid any damages. Proper and safe storage of materials shall be sole responsibility of the contractor. For any damages caused to the equipment/material the contractor shall be responsible for bringing back the original finish / condition.

END OF SECTION