

#### GOVERNMENT OF KERALA DEPARTMENT OF ELECTRICAL INSPECTORATE

#### METER TESTING AND STANDARDS LABORATORY

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# TEST REPORT OF EARTH ELECTRODE ENCASED IN MARCONITE CONDUCTIVE CONCRETE AS PER CUSTOMER REQUIREMENT (INTERIM REPORT)

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## TEST REPORT

Client : M/s En-emm electric,

Address: Jabees, Vadakkevila P.O.

Pallimukku, Kollam-691010

## Specification of Earth Electode:

Conductor Material

: Gl rod

Conductor Size

: Dia-16mm & length-3000mm

Earth enhancing material : Marconite

Size of embedding

: Dia-100mm & length-3000mm

Site Location: Meter Testing & Standards Laboratory, Engineering College P.O, Thiruvananthapuram-16

Instrument Used: Digital Earth Tester

Make	Model	Serial No.	Calibration Due Date
Megger	DET 2/2	101204243	23-04-2016

(Instrument used for measurement is calibrated and is traceable to National Standards)

Particulars of Test conducted

: Measurement of Earth Resistance

Method of Measurement

: Fall of Fotential Method

Test In accordance with Standard/Specification

: As per Section 37 of IS 3043 1987

## **TEST RESULT**

#### Measurement of Earth Resistance

Material	Quantity(No)	Length(mm)	Diameter(mm)
Marconite Embedded Earth Electrode	One	3000	100
Conductor Material-GI rod	One	3000	16

The earth electrode was installed on 19th of May, 2015 and subsequently measurement of earth resistance were carried out on the following dates and the readings are as below

Test conducted on 27.05.2015

Result: 21.3Ω

#### Note:

- 1. This is an interim report only. The actual value can be confirmed only after conducting repeated measurements.
- 2. This test result is valid for the earth electrode provided at the premises of Meter Testing & Standards Laboratory, Engineering College P.O, Thiruvananthapuram with above specifications only. The test result may vary depending on the soil conditions. The resistivity of our soil is  $157\Omega m$ .
- The test result may vary depending on the soil conditions. The resistivity or our soins 137320.
   This result relates only to the item tested and this certificate shall not be reproduced, except in full, without specific written approval from this Laboratory

**ELECTRICAL INSPECTOR (NC) IN CHARGE**