

GENERAL NOTES EARTHING SYSTEM

A) General



1. Exact locations of earthing conductors, earth electrodes, test pit and earthing connections can be changed, if required, to suit the site conditions.
2. Neutral points of systems of different voltage, metallic enclosures and frame works associated with all current carrying equipments and extraneous metal works associated with electrical system shall be connected to a single earthing system unless stipulated otherwise.
3. Earthing shall comply with IEEE-80:2000 / IS: 3043-1987.

B) Earthing conductor layout

1. Earthing conductors in outdoor areas shall be buried at least 600mm below finished ground level unless stated otherwise.
2. Wherever earthing conductor cross cable trenches, under ground services duct pipes, rail tracks, road etc. It shall be laid at a minimum depth of 300mm below bottom surface of respective item.
3. Earthing conductors & leads along their run of trench, ladder, etc. shall be supported by suitable welding / clamping at regular intervals. Earth conductors along cable trenches shall be on the wall preferably nearer to the tray.
4. Earthing conductor around the building shall be buried in earth at a minimum distance of 1000mm from the outer boundary of the building.

C) Equipment and structure earthing

1. All Earth Strip shall be taken along edge of structure.
2. All equipments/structures/steel columns shall be connected to near by main earth conductor by at least two risers.
3. Every alternate post of the fence and gates shall be connected to earthing conductor by one riser as shown in respective drawings.
4. All Structure/Equipment shall be earthed as shown in respective Drawings.
5. Earthing with Copper strip should be avoided. GI flat can serve the purpose.

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| | | EXECUTION PURPOSE | | | |
| | |  GUJARAT ENERGY TRANSMISSION CORPN.LTD. S.P.VIDYUT BHAVAN, RACE COURSE, VADODARA - 390 007 | | | |
| | | <u>General Notes on Earthing System</u> | | | |
| | | DRAWN: | CHECKED: | APPD: |  |
| | | D.K.P. | P.B.M. | EE (ENGG) ACE (ENGG) | SIZE: A4 |
| | | SCALE: | DATE: | DRG. NO: | SHEET: REV: |
| R0 | FIRST PREPARATION | N.T.S. | 01-06-08 | GETCO / E / STD / P-012 | 3A OF 24 R0 |
| REV: | DESCRIPTION : | | | | |