

SCHEDULE ' A '

TECHNICAL SPECIFICATION FOR EARTHING SETS (A & B) TYPES

SPECIFICATION NO: DIST/MM/I/EARTHING SETS -2008)

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SCHEDULE ' A '
TECHNICAL SPECIFICATION FOR EARTHING SETS (A & B) TYPES

1. SCOPE :-

The specification given here covers manufacture , testing and supply of Earthing Sets, complete in all respects.

2. GENERAL REQUIREMENTS :-

The Earthing sets described comprise of light class G.I. Pipe , Galvanized bolts and nuts , lead washer and wooden / PVC plug. The details of the component parts are given in drawing enclosed herewith (Drawing No. 62.54) .

3. MATERIAL DESCRIPTION :-

The pipe used for fabrication of Earthing Set shall be " Light " class G.I. Pipe of reputed manufacturer. The Earthing pipe shall be of continuous lengths without welding. The bolts and nuts should be of hot dip galvanized conforming to I.S.-1363/67 modified upto date and of reputed make.

4. H.T. EARTHING SETS :-

(" A " type) conforming to Drawing No. 62.54 . The overall length of the set shall be 1.910 meters and the nominal bore shall be 25 mm. Nominal wall thickness of pipe shall be 2.6 mm. Earthing Set shall be manufactured from Light Class G.I. Pipe conforming to I.S. : 1239/1990 or its latest version. Further , the Earthing set shall comprise of :

- a) One number hot dip galvanized M 12 X 55 N size bolt and nut of reputed make and conforming to I.S.: 1363/67 modified upto date.
- b) One number hot dip galvanized 3.175 mm thick Steel washer suitable for M12 (12 mm dia.) size bolt.
- c) One number 3.175 mm thick lead washer suitable for M12 (12 mm dia.) size bolt..
- d) One number Teak wood or Polythene or PVC Plug of size 4 mm X 15 mm.

5. L.T. EARTHING SETS :-

(" B " type) conforming to Drawing No. 62.54 . The overall length of the set shall be 1.220 meters and the nominal bore shall be 20 mm. Nominal wall thickness of pipe shall be 2.3 mm. Earthing Set shall be manufactured from Light Class G.I. Pipe conforming to I.S. : 1239/1990 or its latest version. Further , the Earthing set shall comprise of :

- a) One number hot dip galvanized M 12 X 55 N size bolt and nut of reputed make and conforming to I.S.: 1363/67 modified upto date.
- b) One number hot dip galvanized 3.175 mm thick Steel washer suitable for M12 (12 mm dia.) size bolt.
- c) One number 3.175 mm thick lead washer suitable for M12 (12 mm dia.) size bolt..
- d) One number Teak wood or Polythene or PVC Plug of size 4 mm X 15 mm.

Expect for the length and bore of pipe , general design of Earthing set shall be as per the enclosed drawing No. 62.54. The tenderer shall state the names of the manufacturers from whom he proposes to obtain the raw materials.

6. THREADING :-

Threading of the bolt and nut shall , conform to I.S. : 1963-1960 specification for black nuts , black hexagonal screws.

7. DRILLING :-

Holes in the pipe shall be drilled or machine punched. All burrs left by drill or punch shall be completely removed. Holes shall be so drilled that any two consecutive holes are not in one plane.

8. WORKMANSHIP :-

The materials are to be supplied as per the details given in the foregoing paras and the drawings. The workmanship and finish shall be good,. The Earthing Set shall not have any burrs at the cut points or at the holes.

9. TEST CERTIFICATES :-

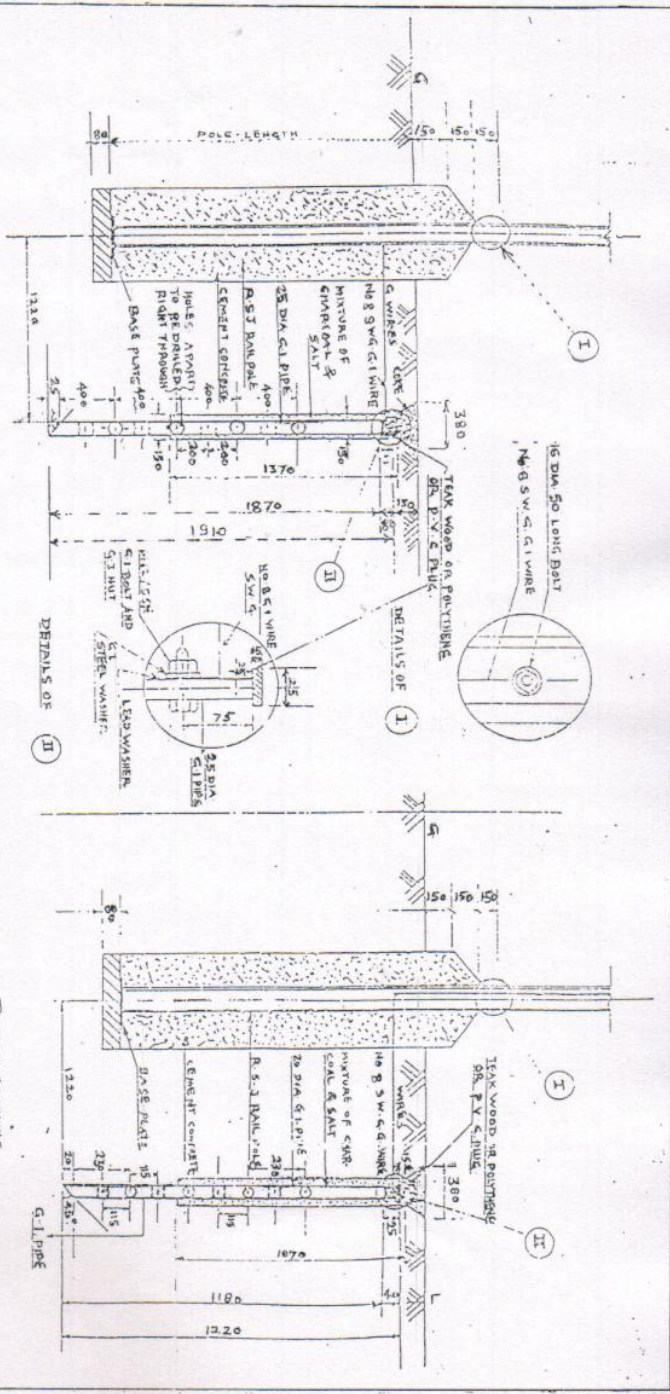
The supplier should submit test certificates for the following :

1. G.I. Pipe
2. Bolt and nut
3. Washers
4. Galvanizing of the Bolt, Nut and Washers

The Earthing sets shall be of continuous length in one piece without any joints visible or invisible.

10. FABRICATION TOLERANCE :-

Fabrication tolerance of +/- 1 % shall be permitted.



NOTE :-

- 1) 8 HOLES TO BE DRILLED ON G.I. PIPES USED FOR EARTHING SETS.
- BOTH 'A' & 'B' TYPE SHALL BE 8 MM DIA (5/16")
- 2) TWO CONSECUTIVE HOLES IN ONE PLANE SHALL BE 400MM (FOR 'A' TYPE), 230MM (FOR 'B' TYPE) APART. HOWEVER, HOLES ARE TO BE SO DRILLED THAT ANY TWO CONSECUTIVE HOLES ARE NOT IN ONE PLANE.
- 3) ALL HOLES ARE TO BE DRILLED THROUGH OR MACHINE PUNCHES.
- 4) TAPER AT THE END OF THE PIPE SHALL BE 45°.
- 5) FOR OTHER DETAILS REFER SPECIFICATION FOR EARTHING SETS.

ALL DIMENSIONS ARE IN MM
NOT TO SCALE

MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.	
EARTHING ARRANGEMENT OF POLE AND STRUCTURE OF H.I./L.T. LINE	
SECTION NO. 03	DRG NO. 62-54