



#### Earth pit installation procedure for Rocky Soil for Cu-bonded earth rod / Pipe electrode / P-I-P electrode / Flat in Pipe electrode

1. Drill a bore of 400 mm dia hole to a depth up to 3050 mm from GL.
2. Fill up the bore using yellow soil.
3. Carry out the compaction of filled up soil.
4. At the centre of filled up soil, drill a bore of 150 mm for 24/38mm dia Cu- bonded electrode to a depth up to 3050 mm from GL.
5. At the centre of filled up soil, drill a bore of 200 mm dia in case of Cu-bonded Pipe / P-I-P / Flat in Pipe electrode to a depth up to 3050 mm from GL.
6. Insert the earth rod/Pipe electrode/P-I-P electrode/Flat in Pipe electrode down the hole with lower end centered and driven in 150/200 mm bore.
7. Fill the bore using Ground Enhancement Material around the rod/Pipe electrode/P-I-P/Flat in Pipe electrode.
8. Allow it to dry to enable the compound to set before fixing clamp & connections.
9. Carry out the work for provision of CI cover with chamber as per drawing.

#### SIZE OF ELECTRODE

SR. NO.	TYPE OF ELECTRODE	FOR 66KV SS	FOR 132KV, 220KV & 400KV SS	RESPECTIVE IS
1	CU- BONDED MS ELECTRODE	24 MM DIA (MIN.)	38 MM DIA (MIN.)	IS FOR STEEL : 2062/1992 IS FOR STEEL TUBE : 1239 (Part-I)/2004
2	CU- BONDED MEDIUM CLASS MS PIPE ELECTRODE	50 MM DIA, 3.6 MM THICKNES (MIN.)	80 MM DIA, 4 MM THICKNES (MIN.)	
3	CU- BONDED MEDIUM CLASS MS P - I - P ELECTRODE	OUTER PIPE - 50 MM DIA, 3.6 MM THICKNES (MIN.) INNER PIPE - 25 MM DIA, 3.2 MM THICKNES (MIN.)	OUTER PIPE - 80 MM DIA, 4 MM THICKNES (MIN.) INNER PIPE - 40 MM DIA, 3.2 MM THICKNES (MIN.)	
4	CU- BONDED MS FLAT - IN - MEDIUM CLASS MS PIPE ELECTRODE	MS FLAT-25X6 MM MS PIPE-50 MM DIA, 3.6 MM THICKNES (MIN.)	MS FLAT-50X6 MM MS PIPE-80 MM DIA, 4 MM THICKNES (MIN.)	

		R3	AS PER TECHNICAL REQUIREMENT
		R2	AS PER REQUIREMENT
		R1	AS PER REQUIREMENT
		R0	FIRST PREPARATION
SR NO.	REFERENCE	REV.	DESCRIPTION

#### EXECUTION PURPOSE



**GUJARAT ENERGY TRANSMISSION CORPN.LTD.**

S.P.VIDYUT BHAVAN, RACE COURSE,  
VADODARA - 390 007

#### TYPICAL ARRANGEMENT OF MAINTENANCE FREE TREATED EARTHPIT FOR ROCKY SOIL

DRAWN:	CHECKED:	APPD:	SIZE: A3
DE (ENGG.)	EE (CIVL) EE (ENGG.)	ACE (ENGG.)	
SCALE:	DATE:	DRG. NO:	SHEET: REV:
N.T.S	29.05.2020	GETCO / E / STD / P-021	2 OF 2 R3