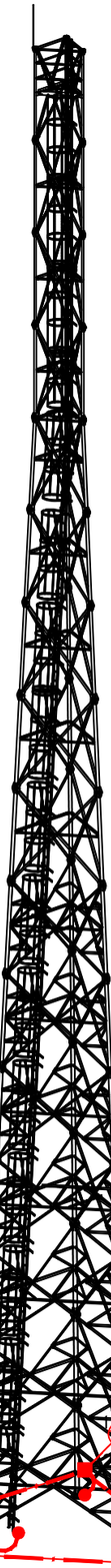
NOTES:-

TOWERS IN COASTAL AREAS:

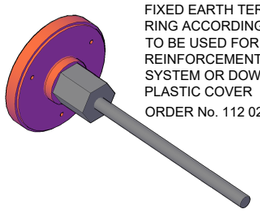
EARTHING MATERIAL TO CONSIST OF ALL STAINLESS CABLE ,EARTH ELECTRODES,CLAMPS ETC.

ALL OTHER INLAND AREAS:

ALL OTHER MATERIAL TO BE BARE OR INSULATED COPPER - GALVANIZED CABLE,EARTH ELECTRODES,CLAMPS ETC.



FIXED EARTH TERMINAL

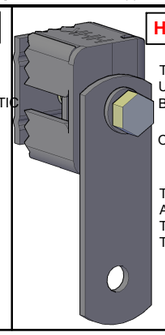


FIXED EARTH TERMINAL, V4A,Ø10mm CONTACT PLATE Ø50mm, M10 TERMINAL

FIXED EARTH TERMINAL WITH RED PLASTIC RING ACCORDING DIN EN 62561-1 TO BE USED FOR THE CONNECTION TO REINFORCEMENT,EARTH TERMINATION SYSTEM OR DOWN CONDUCTOR WITH PLASTIC COVER

ORDER No. 112 020

HHK/VARIO CLAMP

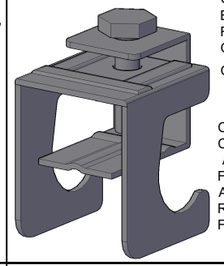


TERMINAL CLAMP, CLAMPING RANGE UPTO19mm St/tZn, WITH TERMINAL LUG, BORE Ø11mm

ORDER No. 111 384

TERMINAL CLAMP (HEAVY DUTY TYPE) ACCORDING TO DIN EN 62561 - 1 WITH TERMINAL LUG FOR THE CONNECTION TO STEEL CONSTRUCTIONS.

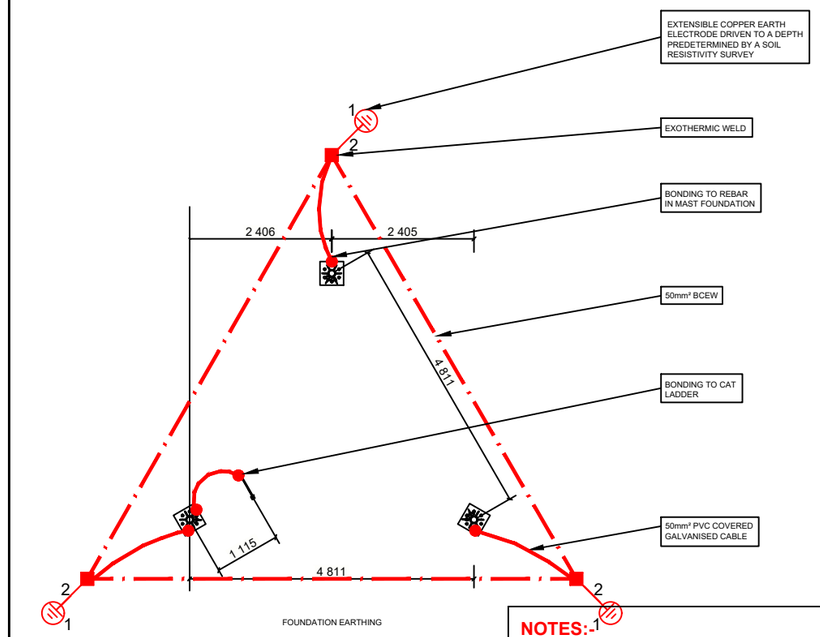
CONNECTING CLAMP

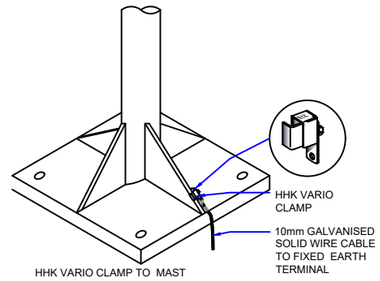


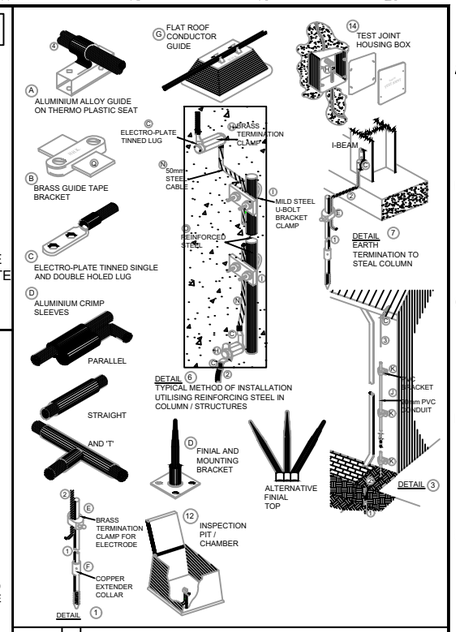
CONNECTING CLAMP, WITH BRACKET,ST/BARE Ø 6 -20 REINFORCEMENT/FL.30 OR Ø10

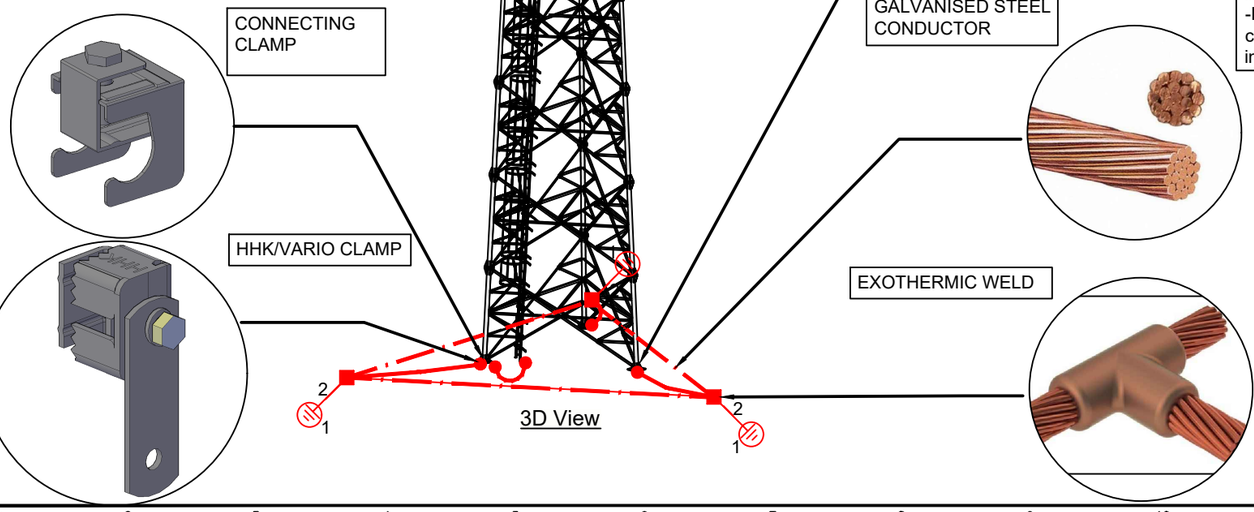
ORDER No. 111 423

CONNECTING CLAMP, WITH CLAMPING BRACKET,(JP/TYPE A) ACCORDING TO DIN EN 62561-1 FOR THE CONNECTION OF ROUND AND FLAT CONDUCTORS WITH THE REINFORCEMENT IN THE CONCRETE FOUNDATION







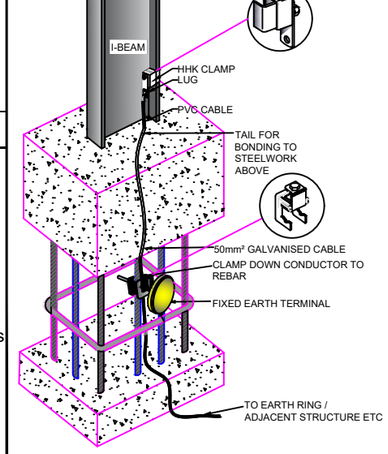


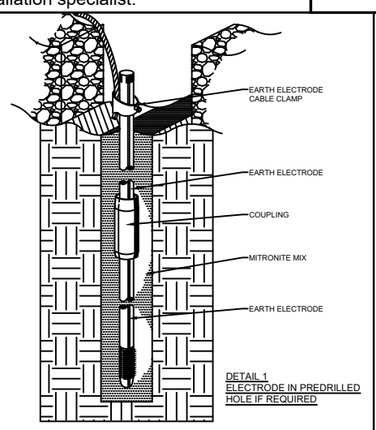
NOTES:-

-Design and installation of lightning protection and earthing system to be in strict accordance with SANS Codes of practice 10313 (2012), 10199 (2016) and 1063 (2015) in conjunction with SANS 62305-1-4 (2011) and IEC 62305-1-4: 2010.

-The materials specified are manufactured as per propster or similar certified products which are in compliance with sans 62561: 1-7 2012-2018, as per the materials installed in all our projects.

-Final commissioning to be accredited and certified by an E.L.P.A and SANS certified installation specialist.





NOTES:

1. Design and installation of lightning protection and earthing system to be in strict accordance with SANS Codes of practice 10313 (2012), 10199 (2016) and 1063 (2015) in conjunction with SANS 62305-1-4 (2011) and IEC 62305-1-4: 2010.

2. All earthing conductors to be bare copper earth wire or galvanised steel except the instrument high quality earth system where PVC earth conductor should be used.

3. The number and depth of extensible copper earth electrodes at each earth termination to be determined by a soil resistivity survey, to ensure that the resistance value before and after bonding into the system will comply to the SANS standards.

4. All earth electrodes for the earthing of lightning protection and the earthing of electrical equipment to be driven into the ground if possible, or installed into pre-drilled holes and backfilled with an electrical conductive compound (Mitronite). Top of electrode to be cadwelded to the bare copper earth conductor. The maximum depth of the pre-drilled holes to be up to 15 metres.

5.After completion of lightning protection and electrical equipment earthing system resistance test certificate and C.O.C must be supplied, fully in compliance with the relevant SANS standards.

LEGEND

1. Extensible COPPER EARTH ELECTRODE driven/drilled to a depth predetermined by soil resistivity survey.
2. 50MM²-70MM² COPPER / GALVANISED STEEL EARTH CONDUCTOR.
3. H.V.C LIGHTNING PROTECTION CONDUCTOR
4. 8mmØ ALUMINIUM AIR TERMINATION laid in aluminium alloy guides spaced at 1m intervals.
5. BONDING symbol.
6. BOND to reinforcing steel in column or slab.
7. EARTH TERMINATION bolted/clamped to steel (galvanised or copper)
8. BOND to waterpipe.
9. FINIAL (± 500mm) or ELEVATION.
10. 70MM² GALVANISED STEEL EARTH CONDUCTOR BONDING DOWN CONDUCTOR TO EARTH ELECTRODE.
11. EXOTHERMIC WELD.
12. ELECTRODE WITHIN INSPECTION PIT / CHAMBER.
13. H.V.C LIGHTNING PROTECTION SYSTEM MAST
14. TEST JOINT housing box (in wall).
15. ALUMINIUM DOWN CONDUCTOR laid in 20mm Ø PVC conduit (built into wall by others).
16. BUS BAR / EARTH BAR
17. MULTIPLE EARTH ELECTRODE GRID SYSTEM
18. 50mm² - 70mm² PVC covered CABLE

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NUMBER	REFERENCE DRAWING
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REV	DATE	REVISION	BY	CHK	CHIEF D/MAN	PROJ ENG.	ENVIR CONTR.	LOSS CONTR.	APPRV
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BRANCHES ALSO AT:
DURBAN, BLOEMFONTEIN, CAPE TOWN, POLOKWANE, RUSTENBURG, NELSPRUIT, BOTSWANA AND NAMIBIA.

H.H.K. Earthing & Lightning Protection Systems (Pty) Ltd
Johannesburg
HHK House, Cnr Ruth Cres & Ethel Ave
Northcliff Ext 12
Tel: +27 11 476 6917
Fax: +27 11 476 2251
e-mail: info@hhk.co.za

H.H.K

TRIANGLE LATTICE TOWER
PLAN VIEW AND 3D VIEW
TYPICAL EARTHING INSTALLATION&COMPONANTS

DRAWN	P.H	DATE	20.06.23	CHK'D	.	DESIGNED	.	REQUESTED	.

SHEET SIZE	SCALE	JOB NO	DRAWING NUMBER	REV
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