

EARTH MAT AND TAILS

- 1. Main earth mat shown  to be ϕ 10mm black annealed copper (unless otherwise indicated) buried at least 1000mm below finished ground level wherever possible. Where passing under deeper foundations and drains, it is to be 150mm below concrete. Backfilling around such earth rods to be well compacted. Where a concrete blinding is cast under building foundations the earth mat meshes are to be installed on top of the blinding and under the concrete footing of columns etc. Where passing over drains with less than 1000mm of cover, it is to be buried as deeply as possible. To be 600mm outside safety fence, as indicated on foundation and/or earthmat layout. Rod transverse crossings are indicated thus  and these crossings must be jointed using crimpet, (See Note 5) by the method shown on Sheet C5/3. Rod to rod perimeter joints (tee) must be made using the method shown on Sheet C5/2 and are indicated thus 
- 2. Earth tails shown thus  to be 2 x separate ϕ 10mm black annealed copper rods (unless otherwise indicated) Tails to be vertical at column or equipment support earthing points (Sheet 31) clamped to the steelwork using clamp (Sheet C6) by the method shown on Sheet C7, then run at a depth of 150mm below ground level, dropping down and jointed to main earth mat at points shown thus  using crimpets (Sheet Note 5) and by the method shown on Sheet C5/2.
- 3. Where earth tails cross they should be crimped together.
- 4. Where main earth mat is not dimensioned, it is to be placed as close to the main column foundations as possible.
- 5. Only connections complying to IEEE Std 837-1989 " IEEE standard for qualifying permanent connections used in Substation grounding" are acceptable. Crimped connections that comply are shown in the table with it associated compression tool and die.

Make	Connector	Compression Tool	Die	No. of Crimpung Operations
Simel	C75E	Simabloc C12	12SX260CU	1
Simel	C75E	Burndy Y35	U-F	1
Burndy	YGHC26C26	Burndy Y35	U-O	1
Burndy	YC26C26	Burndy Y35	U-O	1
Burndy	YC26C26	Burndy Y35	U-E	3

THE C.A.D. REFERENCE NUMBER IS:
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EARTHING STANDARDS							0.54/393		
							SHEET C1		

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