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**Energy
Networks
Association**

**ENA TS 43-94 Issue 6 2017
Revision Summary**

Earth rods and their connectors

PURPOSE

TS 43-94 is a specification used for the procurement of earthing rods and associated connections

SCOPE

- The Specification defines requirements for earth rods used for earthing and/or lightning protection including
 - copper bonded steel rods;
 - copper rods;
 - deep driven techniques where required.

HISTORY

- Issue 5 published in 2012
- Minor revision in 2017

Summary of Amendments

- Amended to include earth rods and connectors for lightning protection systems.
- Galvanised earth rods removed from scope of document
- New clause permitting dimensional tolerance.
- Preferred earth rod dimensions: Amended shank diameter for nominal 9 mm diameter earth rod from “8.9 mm” to “9.5 mm”
- Option to use exothermically welded earth rods has been inserted
- Guidance for soft and hard soils introduced in Table 2.
- New requirements for
 - Solid copper earth rods
 - Deep driven earth rods

Nature of Revision

‘Cosmetic’
revision - Refresh

Revision overseen by
ENA Earthing Co-
ordination Group

Details of all
amendments can be
found in the
accompanying
‘Document
Amendment Summary’

Who is affected and why?

- Designers and installers of earthing systems
(To ensure earth rods are fit-for-purpose)
- Manufacturers
(To ensure earth rods are of appropriate quality)
- Procurement staff
(To ensure conformity of earth rods against TS 43-94 requirements)

Impact Assessment of Changes to TS 43-94

Rating Categories	Rating	Assessment
Nil	Nil	Safety
Negligible	Nil	Environment
Minor	Minor	Financial (costs/benefits) Galvanised rods no longer a purchase option. Additional requirements for some copper rod types.
Moderate	Minor	Asset Quality & Performance Some improvements in the performance of earth rods
Major	Nil	Statutory/Regulatory
	Nil	Reputation

The latest issue of the document is available from the ENA Engineering Catalogue via www.energynetworks.org. Further information can be obtained from ENA by emailing david.spillett@energynetworks.org