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Lightning Protection System Components (LPSC) - Part 1: Testing requirements for metal sheets' joints used in LPS

Composants des systèmes de protection contre la foudre (CSPF) - Partie 1: Exigences d'essais relatives aux jonctions des bandes métalliques utilisées dans les SPF

To be completed

This Technical Specification was approved by CENELEC on 2019-11-04.

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European foreword

This document (CLC/TS 50703-1:2019) has been prepared by CLC/TC 81X "Lightning protection".

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1 Scope

This document defines the requirements and testing for joints of metal sheets, with or without insulating coatings, used as natural components in roofs, facades or walls of buildings, suitable to conduct lightning current in LPS where the interconnection of these metal sheets does not ensure durable electrical connection.

NOTE This document does not deal with the lightning interception capabilities of these components. The connection clamps for connecting the metallic sheet with the down conductor to the earth termination system are LPSC, tested according to EN 62561-1.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1

metal sheets' joint

electrical and mechanical coupling between metal sheets

Note 1 to entry: Typical joints are shown in Annex A

3.2

metal sheet with insulating coating

metal sheet with a coating insulating protective paint or coating, typically with a thickness of some ten to some hundred micrometres, not regarded as an insulator for a lightning current

3.3

metal sheet without insulating coating

metal sheet without any insulating protective paint or coating

3 4

non-durable electrical joint

jointing of two metal sheets with or without insulating coating connected as typically shown in Annex A

3.5

type test

test required to be made before supplying a type of material covered by this standard on a general commercial basis, in order to demonstrate satisfactory performance characteristics to meet the intended application

Note 1 to entry: These tests are of such a nature that, after they have been done, they don't need to be repeated unless changes are made to the accessory materials, design or type of manufacturing process which might change the performance characteristics.