



SLOVENSKI STANDARD
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Equipment practice; Engineering requirements for outdoor enclosures; Part 2:
Unequipped enclosures

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Equipment practice; Engineering requirements for outdoor enclosures; Part 2: Unequipped enclosures

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Equipment Engineering (EE).

The present document is part 2 of a multi-part EN covering Equipment practice; Engineering requirements for outdoor enclosures as identified below:

Part 1: "Equipped enclosures";

Part 2: "Unequipped enclosures".

iTeh STANDARD PREVIEW National transposition dates (standards.iteh.ai)

Date of adoption of this EN:	12 February 1999
Date of latest announcement of this EN (doa):	31 May 1999
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 November 1999
Date of withdrawal of any conflicting National Standard (dow):	30 November 1999

Introduction

The present document is part 2 of a two-part EN, aimed at setting out on a common basis, the installation engineering requirements for telecommunication practice, housing equipment forming part of a telecommunications network. Part 2 specifies the engineering requirements for unequipped outdoor enclosures and part 1 the engineering requirements for outdoor enclosures.

The present document shall be referred to only when the supplier is asked for an unequipped outdoor enclosure ready to receive equipment supplied by different manufacturers.

The present document applies to the outdoor enclosures of all telecommunication equipment which forms part of a telecommunications network. The requirements for unequipped outdoor enclosures which this part lays down are based on the work of IEC Sub Committee 48D/WG 3.

Illustrative figures are contained in annex A.

1 Scope

The present document details requirements for outdoor enclosures which are supplied unequipped. The unequipped outdoor enclosures may be used for housing telecommunication equipment, forming part of a telecommunication network, installed outdoors on the ground. The unequipped outdoor enclosures are intended to accommodate various equipment from different suppliers, e.g. subracks in accordance with ETS 300 119-4 [4].

Requirements in the present document do not apply to outdoor enclosures or cabinets that can be entered by maintenance personnel.

The operating authorities should be given the data needed to help them plan infrastructure for outdoor applications. This includes equipment and traffic areas and installation transport (freight elevators, loading ramps, etc.) as well as locations of deployment for the outdoor equipment (streets, pavements, private areas, open public areas etc.).

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] Void. [SIST EN 301 169-2 V1.5.3:2006](https://standards.iteh.ai/catalog/standards/sist/c3cf784f-517a-4937-a187-d9b065adfb5/sist-en-301-169-2-v1-5-3-2006)
- [2] Void. <https://standards.iteh.ai/catalog/standards/sist/c3cf784f-517a-4937-a187-d9b065adfb5/sist-en-301-169-2-v1-5-3-2006>
- [3] ETS 300 119-3: "Equipment Engineering (EE); European telecommunication standard for equipment practice; Part 3: Engineering requirements for miscellaneous racks and cabinets".
- [4] ETS 300 119-4: "Equipment Engineering (EE); European telecommunication standard for equipment practice; Part 4: Engineering requirements for subracks in miscellaneous racks and cabinets".
- [5] Void.
- [6] IEC 61969-2: "Sectional specification; Co-ordination dimensions for cases and cabinets; Outdoor enclosures".
- [7] IEC 60917-2: "Modular order for the development of mechanical structures for electronic equipment practices - Part 2: Sectional specification - Interface co-ordination dimensions for the 25 mm equipment practice".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

cabinet: a free-standing and self-supporting enclosure for housing electrical and/or electronic equipment, usually fitted with doors and/or side panels which may or may not be removable.

3.2 Symbols

For the purposes of the present document, the following symbols apply:

D	outside depth
D ₁	mounting aperture depth
D _p	outside depth (plinth)
D _r	depth (top cover)
H	outside height
H ₁	mounting aperture height
H _p	outside height (plinth)
W	outside width
W ₁	mounting aperture width
W _p	outside width (plinth)
W _r	outside width (top cover)

3.3 Abbreviations (standards.iteh.ai)

For the purposes of the present document, the following abbreviations apply:

IDF	Interconnect Distribution Frame
MDF	Main Distribution Frame
PSU	Power Supply Unit

4 Definition of unequipped outdoor enclosures

4.1 Features

Unequipped outdoor enclosures in the understanding of the present document comprise cabinets only, compliant with the following:

- intended to be used in open air conditions;
- for weather unprotected locations;
- for stationary use.

The present document does not address the aesthetic appearance of the enclosures.

The present document covers applications which are located on the ground, including:

- streets;
- pavements;
- private areas;
- open public areas.

4.2 Internal equipment

Unequipped outdoor enclosures in the understanding of the present document comprise unequipped outdoor cabinets. Unequipped outdoor enclosures and the internal equipment can be delivered by various suppliers.

Types of equipment to be accommodated include:

- Subracks according to ETS 300 119-4 [4].
- Miscellaneous equipment, e.g.:
 - MDF/IDF (Main Distribution Frame (MDF) / Intermediate Distribution Frame (IDF));
 - PSU (Power Supply Unit);
 - batteries;
 - climate control;
 - heat exchanger;
 - cable termination.

5 Co-ordination dimensions for unequipped outdoor enclosures

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5.1 General (standards.iteh.ai)

The co-ordination dimensions are to be understood as overall dimensions, distinguished between:

- cabinet / top cover; <https://standards.iteh.ai/catalog/standards/sist/c3cf784f-517a-4937-a187-d9b065adfb5/sist-en-301-169-2-v1-5-3-2006>
- plinth.

The plinth is regarded as an option. The top cover is considered to be an integral part of the cabinet.

The co-ordination dimensions apply to outside dimensions and aperture dimensions as defined in ETS 300 119-3 [3], table 1. The principle of specifying values is based on general formulae, described in subclauses 5.2 to/and 5.4, and tables with a selection of the possible values. The dimension given in subclause 5.5 provide selections of required values.

To define appropriate co-ordination dimensions, the following basic assumptions have been made:

- The formulae for outside dimensions in part 1 and part 2 are identical. This is to achieve the same outside dimensions for economic reasons.
- The mounting aperture dimensions are based on the outside dimensions.

Mounting aperture dimensions, fastening points, space for external cable access, etc are according to ETS 300 119-3 [3], table 1, figures A.3 and A.4, with the exception of values W, D3 and D4 of figure A.3 and D MAX of figure A.4.

This is in order to guarantee compatibility with subracks as specified in ETS 300 119-4 [4].