

Collection, logistics & treatment requirements for WEEE
- Part 2-4: Treatment requirements for photovoltaic
panels

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50625-2-4:2017 sisaldab Euroopa standardi EN 50625-2-4:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 50625-2-4:2017 consists of the English text of the European standard EN 50625-2-4:2017.
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English Version

Collection, logistics & treatment requirements for WEEE - Part 2-4: Treatment requirements for photovoltaic panels

Exigences de collecte, logistique et traitement pour les déchets d'équipements électriques et électroniques (DEEE)
- Partie 2-4: Exigences de traitement des panneaux photovoltaïques

Sammlung, Logistik und Behandlung von Elektro- und Elektronik-Altgeräten (WEEE) - Teil 2-4: Anforderungen an die Behandlung von Photovoltaikmodulen

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50625-2-4:2017) has been prepared by CLC/TC 111X "Environment".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2018-06-18
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2020-09-18

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under mandate M/518 given to CENELEC by the European Commission and the European Free Trade Association.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

This part 2 is to be used in conjunction with the latest edition of EN 50625-1.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to EN 50625-1.

This part 2 supplements or modifies the corresponding clauses in EN 50625-1, so as to convert that publication into the European Standard: *Treatment requirements for photovoltaic panels*.

When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

— additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

— requirements: in roman type

— *changes compared to part 1: in italic type*

Introduction

This clause of Part 1 is replaced with the following:

This European Standard aims to assist organisations in:

- achieving effective and efficient treatment of waste photovoltaic panels in order to prevent pollution and minimize emissions;
- promoting increased material recycling;
- promoting high quality recovery operations;
- preventing inappropriate disposal of photovoltaic panels and fractions thereof;
- assuring protection of human health and safety, and the environment;
- preventing shipments of waste photovoltaic panels to operators whose operations fail to comply with this normative document or a comparable set of requirements.

This European Standard supports the objectives of the Community's environment policy. These aim to preserve, protect and improve the quality of the environment, protect human health and utilize natural resources prudently and rationally. That policy is based on the precautionary principle and the maxims that preventive action to minimize environmental damage should, where possible, be rectified at source and the polluter should pay.

This European Standard contains requirements applicable to the treatment of photovoltaic panels and is a Part 2 of EN 50625-1, *Collection, logistics and Treatment requirements for WEEE - Part 1: General treatment requirements*.

This European Standard has been prepared in order to support European legislation under European Commission mandate M/518 and so uses some of the terms defined in European law.

1 Scope

This clause of part 1 is replaced with the following:

This European Standard is applicable to the treatment of photovoltaic panels as mentioned in the WEEE Directive under Annex 4.

The scope of this document is limited to photovoltaic panels with a minimum surface area of 0,2 m².

This European Standard applies to the treatment of photovoltaic panels until end-of-waste status is fulfilled, or photovoltaic panel fractions are recycled, recovered or disposed.

This European Standard addresses all operators involved in the treatment including related handling, sorting and storage of photovoltaic panels. This European Standard applies to all facilities including those whose treatment operations using mobile treatment installation.

2 Normative references

This clause of Part 1 is applicable.

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

Clause 3.26 of part 1 is replaced with the following:

3.26

photovoltaic panel (PV panel)

electrical equipment or component with the sole purpose to generate electricity from solar light for public, commercial, industrial, rural and residential applications

The following additions are made to this clause of part 1:

3.41

silicon based photovoltaic panel (Si PV panel)

PV panel utilizing different forms of silicon as semiconductor material

Note 1 to entry: Semiconductor material of Si PV panels may consist of electrically interconnected mono- or multi-crystalline silicon cells or microcrystalline or amorphous silicon. Silicon can be P-type or N-type silicon.

Note 2 to entry: The Si based PV panel can consist of a framed or un-framed glass-glass laminate or a framed or unframed glass-polymer laminate. Electrical connection of the photovoltaic panel is established through a junction box.

Note 3 to entry: The Si based PV panel may contain hazardous substances, e.g. lead, lead-oxide, fluor.

3.42

non-silicon based photovoltaic panel (non-Si based PV panel)

PV panel utilizing a micron scale layer of a compound semiconductor

Note 1 to entry: The semiconductor material may be composed of various materials, e.g. copper-indium-(gallium)-selenide (CI(G)S) or cadmium telluride (CdTe).

Note 2 to entry: The non-Si PV panel can consist of a framed or unframed glass-glass laminate or a framed or unframed glass-polymer laminate or a flexible substrate-superstrate laminate. Electrical connection of the photovoltaic panel is established through a junction box.