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IRISH STANDARD

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SAFETY REQUIREMENTS FOR SECONDARY BATTERIES AND BATTERY INSTALLATIONS

PART 2: STATIONARY BATTERIES

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EUROPEAN STANDARD **EN 50272-2**

NORME EUROPÉENNE

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ICS 29 220 20

English version

Safety requirements for secondary batteries and battery installations Part 2: Stationary batteries

Règles de sécurité pour les batteries et les installations de batteries
Partie 2: Batteries stationnaires

Sicherheitsanforderungen an Batterien und Batterieanlagen
Teil 2: Stationäre Batterien

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CENELEC

European Committee for Electrotechnical Standardization
Comité Europeen de Normalisation Electrotechnique
Europaisches Komitee fur Elektrotechnische Normung

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 21X, Secondary cells and batteries

The text of the draft was submitted to the formal vote and was approved by CENELEC on 2000-08-01.

The following dates were fixed.

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-04-01

Annexes designated "informative" are given for information only.
In this standard, annexes A and B are informative.

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Introductory note

1 For the preparation of EN 50272-2 the following European country's national standards have been taken into consideration:

Germany	DIN VDE 0510 Part 2 Batteries and battery installations
United Kingdom:	BS 6133 for lead-acid batteries BS 6132 for NiCd batteries
Sweden:	SS 408 01 10 relating parts for rechargeable batteries, erection and ventilation
Switzerland:	SEV 1000-1 and SEV 1000-2 relating parts of instructions for installations in buildings
Italy:	Doc. D.P R. 547, art. 302 and 303 , Safety in battery installations CEI 21-6 Part 3
Netherlands.	NEN 1010 relating parts of safety regulations for low voltage installations
Austria	ÖVE-C10 Part 2 , Batteries and battery installations
France	NF C15-100 , article 554 Batteries d'accumulateurs Article EC10, Règlement de securité contre l'incendie relatif aux établissemments recevant du public

Only those paragraphs have been considered where common agreement was found or specific need was recognised.

2 The described safety requirements comprise the protective measures to protect from hazards generated by the electricity, the electrolyte, and the explosive gases when using secondary batteries. In addition measures are described to maintain the functional safety of batteries and battery installations.

3 For the electrical safety (protection against electric shock) under clause 5 this document refers to HD 384.4.41 (IEC 60364-4-41) The pilot function of this standard is fully observed by indication of cross-reference numbers of the relevant clauses But interpretation is given where adoption to direct current (DC) circuits is required.

4 This safety standard comes into force with the date of publication and applies to all new batteries and battery installations. Previous installations shall conform with the existing national standards at the time of installation In case of redesign of old installations this standard applies

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1 Scope

This European Standard applies to stationary secondary batteries and battery installations with a maximum voltage of DC 1500 V (nominal) and describes the principal measures for protections against hazards generated from.

- electricity,
- gas emission,
- electrolyte

It provides requirements on safety aspects associated with the erection, use, inspection, maintenance and disposal

It covers lead-acid and NiCd batteries.

2 Main applications

Examples for the main applications are:

- Telecommunications,
- Power Station Operation,
- Central Emergency Lighting and Alarm Systems,
- Uninterruptible Power Supplies,
- Stationary Engine Starting,
- Photovoltaic Systems.

3 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments)

EN 166	Eye protection
EN 345	Safety footwear for professional use
EN 50091-1-2	Uninterruptible power systems (UPS) General and safety requirements for UPS used in restricted access locations
EN 50178	Electronic equipment for use in power installations
EN 60079-10	Electrical apparatus for explosive gas atmospheres Part 10: Classification of hazardous areas (IEC 60079-10)
EN 60529	Degrees of protection provided by enclosures (IP code) (IEC 60529)
EN 60623	Vented nickel-cadmium prismatic rechargeable single cells (IEC 60623)
EN 60896-1	Stationary lead-acid batteries - General requirements and methods of test Part 1: Vented types (IEC 60896-1)
EN 60896-2	Stationary lead-acid batteries - General requirements and methods of test Part 2: Valve-regulated types (IEC 60896-2)
EN 60900	Hand tools for live working up to 1 kV a c and 1,5 kV d.c. (IEC 60900, mod)
EN 60950	Safety of information technology equipment (IEC 60950, mod)
EN 60990	Methods of measurement of touch-current and protective conductor current (IEC 60990)

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