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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 45629.2-2025

**Information technology - Data centre facilities and
infrastructures - Part 2: Building construction**

信息技术 数据中心设备和基础设施 第2部分：建筑结构

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 2 of GB/T 45629 "Information Technology - Data Center Equipment and Infrastructure". GB/T 45629 has been issued.

The following parts were laid out.

---Part 1: General Concepts;

---Part 2: Building Structure this document is equivalent to ISO/IEC 22237-2:2024 "Information technology - Data center equipment and infrastructure - Part 2: Construction". structure".

Please note that some content in this document may involve patents. The issuing

organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Information Technology Standardization Technical Committee (SAC/TC28).

Introduction

GB/T 45629 "Information Technology Data Center Equipment and Infrastructure" is proposed to consist of nine parts.

---Part 1: General Concepts. The purpose is to define commonly used terminology, parameters, and reference models for data center infrastructure.

---Part 2: Building Structure. This section aims to specify the construction requirements for data center infrastructure, etc.

---Part 3: Power Distribution. This section aims to specify the power supply, power distribution system, and lightning protection for data centers.

---Part 4: Environmental Control. The purpose is to specify temperature control, fluid control, vibration control, and particulate matter control for data centers.

Systems, etc.

---Part 5: Telecommunications Cabling Infrastructure. The purpose is to specify the telecommunications cabling for data center infrastructure networks and general information technology cabling.

Cabling, building automation cabling, etc.

---Part 6: Security Systems. The purpose is to define the security and risk control measures for data centers.

---Part 7: Management and Operations Information. This section aims to define the operational and maintenance requirements for data centers.

---Part 30: Seismic Risk and Impact Analysis. The purpose is to define the requirements for seismic activity and seismic risk assessment types for data centers.

Suggestions for a settlement.

---Part 31: Key Performance Indicators for Disaster Resilience. The purpose is to define the key performance indicators for the reliability, fault tolerance, and availability of data centers.

Key performance indicators.

Information technology data center equipment and infrastructure Part 2: Building Structure

1 Scope

This document, based on the standard classification and requirements for "physical security" in ISO/IEC 22237-1, specifies the requirements for data centers.

Construction requirements and recommendations for buildings and other structures to support data center availability.

This document specifies the following requirements and recommendations.

- a) Location and site selection (considering the natural environment and adjacent buildings);
- b) Environmental risk protection;
- c) Site layout;
- d) Building construction;
- e) Building layout;
- f) Access control;
- g) Physical intrusion protection;
- h) Physical fire protection;
- i) Waterproof;
- j) Construction quality measures.

This document does not address safety and electromagnetic compatibility (EMC) requirements, which are stipulated by other standards and regulations. However, the information provided in this document...

This helps to meet these standards and regulations.

For consistency between the data center and this document, see Chapter 4.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

ISO/IEC 22237-1 Information technology - Data center equipment and infrastructure - Part 1: General concepts (Informationtech-Note. GB/T 45629.1-2025 Information technology data center equipment and infrastructure - Part 1: General concepts (ISO/IEC

22237-1:2021, IDT) ISO/IEC 22237-3 Information technology data center facilities and infrastructure - Part 3: Power supply and distribution (Informationtech-ISO/IEC 22237-4 Information technology data center facilities and infrastructure - Part 4: Environmental control (Informationtech-ISO/IEC TS22237-5 Information Technology Data Center Facilities and Infrastructure Part 5: Communication Cabling Infrastructure (In-infrastructure) ISO/IEC 22237-6 Information technology - Data center equipment and infrastructure - Part 6: Security systems (Informationtech-