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

GB/T 46752-2025

**Integrated high-efficiency air conditioning cold source systems
for buildings**

建筑整体式高效空调冷源系统

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Table of Contents

1.Scope	1
2 Normative References	1
2 Model 4	3
5 General Requirements	3
6 Requirements	4
8 Inspection Rules	7
10 Reference	15

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. 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 by the Ministry of Housing and Urban-Rural Development of the People's Republic of China. This document was prepared by the National Technical Committee on Standardization of Heating, Ventilation, Air Conditioning and Purification Equipment (SAC/TC143) and the National Standardization Committee on Refrigeration and Air Conditioning Equipment. It is jointly managed by the Technical Committee (SAC/TC238). This document was drafted by: China Academy of Building Research Co., Ltd., Jianke Environmental Energy Technology Co., Ltd., and Huaneng Jianke (Beijing) Technology Co., Ltd. Limited Company, Hefei General Machinery Research Institute Co., Ltd., China Northwest Architectural Design & Research Institute Co., Ltd., South China University of Technology Architectural Design Research Institute Research Institute Co., Ltd., Shandong Provincial Architectural Design and Research Institute Co., Ltd., East China Architectural Design and Research Institute Co., Ltd., Beijing University of Civil Engineering and Architecture, Zhongkai University College of Vocational Engineering, Guangdong Midea HVAC Equipment Co., Ltd., Qingdao Hisense Hitachi Air Conditioning Systems Co., Ltd., Broad Air Conditioning Co., Ltd., Guangdong Ou Ke Air Conditioning & Refrigeration Co., Ltd., Hangzhou Huadian Huayuan Environmental Engineering Co., Ltd., Hepuside Energy Consulting (Shandong) Co., Ltd., Gangneng (Wuxi) Energy Technology Group Co., Ltd., China Petroleum Pipeline Engineering Co., Ltd., China Construction Fifth Engineering Bureau Installation Engineering Co., Ltd., China Construction The companies involved are. Third Bureau Second Construction Engineering Co., Ltd., Shanghai Construction Group

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Building-integrated high-efficiency air conditioning cooling system

1 Scope

GB/T 46752-2025 is the Chinese national standard covering the chiller plant sold and rated as one machine - chillers, pumps, cooling towers and controls together - with the system efficiency across the whole load range rather than the chiller's own COP at full load, which is what actually determines the electricity bill. First edition, under the Ministry of Housing and Urban-Rural Development. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026.

This document specifies the model, general requirements, requirements, and testing procedures for building-integrated high-efficiency air conditioning cooling source systems (hereinafter referred to as "cooling source systems"). Methods, inspection rules, and markings, accompanying documents, and storage. This document applies to water-cooled chiller (heat pump) units with electric motor drive and vapor compression circulation in civil buildings, which meet the requirements for indoor environmental regulation. The section requires an integrated air conditioning cooling source system.

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.

GB/T 3216 Acceptance tests of hydraulic performance of rotary power pumps, Level 1, 2 and 3

GB/T 3797 Electrical control equipment

GB/T 4208 Degrees of protection provided by enclosures (IP code)

GB/T 7190 (all parts) Mechanical draft cooling towers

GB/T 7251.1-2023 Low-voltage switchgear and controlgear assemblies - Part