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

GB/T 4623-2025

Replacing GB/T 4623-2014

Circular concrete pole

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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 replaces GB/T 4623-2014 "Circular Concrete Poles". Compared with GB/T 4623-2014, the only changes are structural adjustments and editing. Aside from the sexual alterations, the main technical changes are as follows:

- a) The specifications for some tapered poles have been changed (see Tables 1, 2, and 3; Tables 1, 2, 3, 4, and 5 in the.2014 edition);
- b) The types of admixtures and their requirements have been expanded (see 5.1.4);
- c) Added requirements for fiber raw materials (see 5.1.5);
- d) Design requirements for concrete mix proportions have been added (see 5.2.1);
- e) The forming requirements for the reinforcing steel cage have been increased (see 5.3.4);
- f) Increased requirements for pole corrosion protection (see 5.8);
- g) The design strength grade requirements for concrete have been changed (see 6.1,,2014 edition of 6.1);
- h) Deflection requirements have been added for poles longer than 15m and shorter than or equal to 18m (see 6.4.1, 6.4.2, 6.4.3, and 6.4.4);

- i) Increased requirements for the destructive characteristics of utility poles (see 6.4.5);
- j) Added content to the marker lines (see 9.1);
- k) The schematic diagram of the main segments of the tapered bar has been revised (see Figure A.1, Figure A.1 in the 2014 version);
- l) The loading procedure has been changed (see B.5, 2014 version of B.5). 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 China Building Materials Federation. This document is under the jurisdiction of the National Technical Committee on Standardization of Cement Products (SAC/TC197). This document was drafted by: Suzhou Concrete and Cement Products Research Institute Co., Ltd., Hubei Changyao New Materials Co., Ltd., and Xuzhou Sanyuan. Pole Tower Co., Ltd., Guangxi Beihai Jingyi Electric Equipment Co., Ltd., Zhonggui Electric Equipment Co., Ltd., Suzhou Concrete and Cement Products Research Institute Research Institute Testing Center Co., Ltd., State Grid Electric Power Engineering Research Institute Co., Ltd., Fuyang Zhicheng Cement Products Co., Ltd., Zhejiang Yongda Electric Power Industrial Co., Ltd., Guangdong Guangze Industrial Co., Ltd., Zhejiang Rongdian Electric Power Equipment Co., Ltd., Shandong Zhongneng Pole Tower Co., Ltd., Beipiao Electric Power Pole Manufacturing Co., Ltd., Hubei Zhongnan Pipeline Co., Ltd., Wengniute Banner Shuangyuan Electric Power Cement Products Co., Ltd., Shandong Lutai Building Materials Technology Group Co., Ltd., Henan Dingli Pole Tower Co., Ltd., Yunnan Chuxiong Hengji Pipeline Industry Co., Ltd., Guangdong Xinrongrong Electric Power Technology Co., Ltd., State Grid Jiangsu Electric Power Research Institute, China Energy Engineering Northwest Electric Power Equipment Co., Ltd., Guizhou Chang Tong Group Intelligent Manufacturing Co., Ltd., Hefei Haiyin Pole Tower Co., Ltd., Hebei Tongli Cement Products Co., Ltd., Chengdu Yinxian Electric Pole Co., Ltd., and Xin Jiangtiantong Electric Power Equipment Co., Ltd., Guizhou Jingyi Electric Line Equipment Co., Ltd., Guangdong Longjiangyuan Cement Products Co., Ltd., Hainan Xinqiang Industrial Co., Ltd., Changzhou Tengyuan Electric Pole Co., Ltd., Tangshan Huatong Cement Products Co., Ltd., Inner Mongolia Autonomous Region Product Quality Inspection and Research Institute, Huzhou Yuantong Communication Equipment Co., Ltd., Guangxi Guitong Cement Products Co., Ltd., Yatai Yuantong Electric Power Co., Ltd., Guangdong Hui Hai Materials Co., Ltd., Danzhou Yushun Industrial Co., Ltd., Kazuo Power Cement Pole Factory, Shaoguan Huijian Cement Products Co., Ltd., Sichuan Province Jiu Industrial Co., Ltd., Guangdong Hengye Cement Products Co., Ltd., Hunan Henglitong Electrical Equipment Technology Co., Ltd., Jiangxi Yatai Power Equipment Limited Liability Company, China Power Construction Group Shandong Electric Power Pipeline Engineering Co., Ltd., Zhanjiang Dingli Industrial Co., Ltd., Linyi Tongtai Wire Pole Co., Ltd. The company, Jiangsu Haiheng Building Materials Machinery Co., Ltd., Guangdong Fengye Electric Power Equipment Co., Ltd., Yunnan Jingyi Electric Power Technology Co., Ltd., Changzhou Shimeihua Electric Pole Co., Ltd., Yunnan Tongcheng Industry and Trade Co., Ltd., Beijing Hanjiang Heshan Pipe Industry Co., Ltd.,

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1 Scope

GB/T 4623-2025 is the Chinese national standard covering the spun concrete pole that carries distribution lines - the prestressing and the wall thickness, the cracking and ultimate bending moments it is rated at, the straightness and the concrete cover, and the tests on a component that has to stand for decades. Issued on 31 October 2025, it has been in force since 1 May 2026, replacing GB/T 4623-2014.

This document specifies the classification, specifications, and marking of ring-shaped concrete poles (hereinafter referred to as "poles"), general provisions, technical requirements, and testing methods. Laws, inspection rules, marking, storage and transportation, product certificates. This document applies to utility poles used in fields such as power, communications, lighting, signaling, and photovoltaics.

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 175 General Purpose Portland Cement

GB 748 Sulfate-resistant Silicate Cement

GB 1499.1 Steel for reinforced concrete - Part