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

GB 4623-2014

Replacing GB/T 4623-2014

Circular concrete pole

环形混凝土电杆

(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 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).

1 Scope

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 1: Hot-rolled plain round steel bars GB 1499.2 Steel for reinforced concrete - Part 2: Hot-rolled ribbed steel bars GB/T 1596-2017 Fly ash for use in cement and concrete GB/T 3091 Welded steel pipes for low-pressure fluid transportation GB/T 3274 Hot-rolled steel plates and strips of carbon structural steel and

low-alloy structural steel GB/T 5223 Steel wire for prestressed concrete GB/T 5223.3-2017
Steel bars for prestressed concrete GB/T 5224 Steel strands for prestressed concrete GB/T
6170 Type 1 Hex Nut GB/T 8076 Concrete Admixtures GB/T 8170 Rules for rounding off
numerical values and the representation and determination of limiting values GB/T 14684
Construction Sand GB/T 14685 Construction pebbles and crushed stone GB/T 18046-2017
Granulated blast furnace slag powder for use in cement, mortar and concrete GB/T 21120
Synthetic fibers for cement concrete and mortar GB/T 23265 Short-cut basalt fiber for
cement concrete and mortar GB/T 27690 Silica fume for mortars and concrete GB/T 38143
Alkali-resistant glass fiber reinforced concrete and mortar for use GB 50010 Standard for
Design of Concrete Structures GB/T 50046 Standard for Corrosion Protection Design of
Industrial Buildings GB/T 50081 Standard for Test Methods of Physical and Mechanical
Properties of Concrete GB/T 50107 Standard for Testing and Evaluation of Concrete
Strength GB 50164 Standard for Quality Control of Concrete GB 50204 Code for
Acceptance of Construction Quality of Concrete Structures GB 50205 Standard for
Acceptance of Construction Quality of Steel Structures