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

GB/T 47586-2026

**Decals and their application requirements for manned
spacecraft**

载人航天器标志及使用要求

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Foreword

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71 National Standards of the People's Republic of China Manned Spacecraft Markings and Usage Requirements Published on 2026-05-

25 Implemented on December 1, 2026 State Administration for Market Regulation The State Administration for Standardization issued a statement.

1.Scope This document specifies the types, design requirements, and usage requirements for manned spacecraft markings. This document applies to the design and use of markings for manned spacecraft and their equipment, as well as for incoming and outgoing supplies. (Manned lunar exploration spacecraft) For reference and use.

4.Types of logos The logos are divided into the following five categories.

a) Identification information labels. These should include equipment diamond-shaped labels, equipment Chinese labels, cable labels, connector labels, pipeline labels, and structural labels. Direct shipment markings, cargo markings, goods markings, waste markings, and electronic identity information markings, etc.

b) Positioning and orientation markers. These should include quadrant position markers, area position markers, compartment position markers, path markers, and fluid flow direction markers. Zhi et al.

c) Warning signs. These should include emergency signs, warning signs, and prohibition signs, among which. 1) Emergency signs should include emergency exit signs, emergency direction signs, emergency operation signs, and emergency use signs; 2) Warning signs should include. Beware of high voltage, Beware of static electricity, Beware of impact,

Beware of corrosive substances, Beware of sharp objects, and Beware of... High/low temperature markings, pressure vessel markings, warning against lasers, and warning against electromagnetic radiation markings; 3) Prohibition signs should include signs prohibiting stepping, touching, bumping, and looking directly at.

d) Operation instruction signs. These should include operation instruction signs, inspection point signs, assembly positioning signs, product layout signs, and tool indicators. Logos, etc.

e) Alternate flag.

5.1 General Requirements

5.1.1 Content The requirements for the logo content are as follows:

- a) The content of the logo should be reflected in the form of text, Arabic numerals, graphic symbols, and outlines;
- b) The information contained in the logo should be complete, accurate, concise, easy to understand, and unambiguous;
- c) The text of the sign should use common phrases or terms;
- d) It should be consistent, unique and traceable.

5.1.2 Text The requirements for the logo text are as follows:

- a) For Chinese characters in the logo, boldface should be the preferred font; for English characters, Times New Roman should be the preferred font.
- b) Warning signs are generally in bilingual (Chinese and English) format;
- c) The height of the text markings inside the cabin should ensure that the astronaut's viewing angle is not less than 24° from their operating position or the specified observation distance. Outside the cabin... The viewing angle of the sign text should be no less than 39°, and the character height should be no less than 11.5mm;
- d) The width/height ratio of letters and numbers should be 3.5 to 4.5, and the width/height ratio of Chinese characters should be 3.5 to 4.5;
- e) The stroke width of letters and numbers should be 1/8 to 1/6 of the character height, and the stroke width of Chinese characters should be 1/10 of the character height;
- f) The spacing between characters should be between 1/4 and 1/2 of the character width;
- g) The text on the sign should be arranged from left to right or from top to bottom according to the reading order and the position of use;

6 Requirements for the use of the logo

6.1 General Requirements The general requirements for the use of logos are as follows:

- a) Signs should be placed in areas requiring human identification, judgment, or procedural operation, or where danger may exist; signs should also be placed where astronaut monitoring and operation are required. All equipment and loads should be labeled with the Chinese name of the product.
- b) The markings should be placed in a prominent position on or near the part to be identified, and should be clearly visible when identifying and handling the product.
- c) The location of the markings should be chosen to minimize interference with other functions, avoid the product's reference surface and mating surface, and avoid obstructing other information. Information is selected from areas on the outer surface of the product that are no longer being processed.
- d) The fixing surface of the sign is generally a flat surface. When it must be fixed to a curved surface, the content of the sign should be fully readable.
- e) When the product is covered, a mark should be placed on the corresponding part of the covering material.
- f) The markings used outside the spacecraft should be easily visible to astronauts or visible using a reflector.
- g) The labeling process should not generate any extraneous material or contamination on the product, nor should it affect the product's functionality or performance.
- h) Spare signs are used to replace the original signs or to add additional sign information, such as when the original sign is detached, damaged, or the QR code is not working properly. Backup flags can be used for situations such as identification, addition of on-orbit notification messages, or addition of on-orbit products to the electronic information management system; multiple The spare signs should be able to be used in combination.
- i) Products going up and the same products used in orbit should be distinguished by the product code and batch number in the identification information mark.
- j) The description of the product logo appearing in the product-related documents should be consistent with the logo actually used on the product.

6.2 Requirements for the Use of Manned Spacecraft Markings

6.2.1 Positioning and Orientation Markers The requirements for the use of positioning and orientation markers on manned spacecraft are as follows:

- a) Corresponding quadrant position markers should be installed at each hatch, section,

bulkhead, and other location on the manned spacecraft. These quadrant position markers should correspond to the area... Domain location markers are generally used in combination.

b) In relatively independent areas such as hatches, sections, and functional areas of the manned spacecraft, including sleeping areas, hygiene areas, dining areas, and medical monitoring areas. Appropriate area markers should be set up for protected areas and storage areas; areas with the same function but different locations should be marked accordingly. Distinguish by code, such as "Sleep Zone 1", "Sleep Zone 2", and "Sleep Zone 3".

c) Generally, module position markers are placed near the hatches connecting each module and the node module to provide astronauts with directions of travel within the passageway. The location of the reachable compartment is indicated by this sign, which is a combination sign and is usually used in groups; the "-" on the compartment location sign indicates the current compartment. area.

d) Access controls should be installed at the external hatches, module junctions, astronaut transfer paths, the ends of paths, handrails, and foot restraints along the paths. Path markings, including handrails and footrests on external paths, should be sequenced using numerical codes; path markings should have For continuity, multiple signs can be arranged at intervals when needed.

6.2.2 Warning signs The requirements for the use of warning signs on manned spacecraft are as follows:

a) Emergency exit signs shall be installed at the docking hatch of manned spacecraft in accordance with the provisions of

5.5.3 in GB 2894-2025; (b) Continuous emergency directional signs should be installed along the path guiding personnel inside the manned spacecraft to a safe area;

c) In situations that endanger the safety of astronauts and the spacecraft, emergency response measures should be implemented near the areas and products requiring immediate operation. Emergency operation sign;

d) Emergency use signs should be placed near equipment or supplies for emergency use, including astronaut emergency food, repair equipment, and emergency supplies. Life-saving supplies, fire extinguishing equipment, and protective equipment, etc.;

e) On a manned spacecraft, any product that an astronaut might step on, touch, bump into, or look directly at could be damaged or cause injury to the astronaut. Appropriate prohibition signs should be set up in all locations to remind astronauts to pay attention.

6.3 Requirements for the use of instrument and equipment markings

6.3.1 Identity Information Markers The requirements for using identification information tags