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

GB/T 24725-2024

Raised pavement markers

突起路标

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting is required. This document replaces GB/T 24725-2009 "Raised road signs" and GB/T 19813-2005 "Solar raised road signs". Based on GB/T 24725-2009, it integrates the contents of GB/T 19813-2005. Compared with GB/T 24725-2009, In addition to structural adjustments and editorial changes, the main technical changes are as follows: Removed retroreflector, directional lens, omnidirectional lens, tempered glass, permanent raised road sign, temporary raised road sign, brightness factor Terms and definitions (see 3.2, 3.3, 3.4, 3.5, 3.6,

3.8 of the 2009 edition);

a) Added the terms and definitions of retroreflection, retroreflector, angle of incidence, observation angle, luminous intensity coefficient and raised road markings (see 3.1, 3.3, 3.4, 3.5, 3.6, 3.7);

b) The classification has been changed (see 4.1, 4.1 of GB/T 24725-2009);

c) The model mark has been deleted (see 4.3 of GB/T 24725-2009);

d) Added technical requirements for active luminous raised road signs (see 5.2);

e) Added technical requirements for combined raised road signs (see 5.3);

f) Added durability test method (see 6.11.3.2).

g) Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is under the jurisdiction of the National Technical Committee for

Standardization of Traffic Engineering Facilities (Highway) (SAC/TC 223). This document was drafted by: Highway Research Institute of the Ministry of Transport, China Highway High-Tech Traffic Inspection and Certification Co., Ltd., Beijing Zhongjiao Hua An Technology Co., Ltd. and the Engineering Quality Supervision Detachment of the Yunnan Provincial Comprehensive Administrative Law Enforcement Bureau of Transportation. The main drafters of this document are. Wang Lei, Zhang Zhiyong, Peng Lei, Han Yue, Bai Yuanyuan, Gong Boyan, Li Wei, Su Hejun, Zhu Chuangzheng, Wang Wei, Liu Yanfei, Andy Lau, Que Biao. The previous versions of this document and the documents it replaces are as follows: First published in 2009 as GB/T 24725-2009; This is the first revision, and the content of GB/T 19813-2005 "Solar Protruding Road Signs" was incorporated into the revision. Raised road signs

1 Scope

GB/T 24725-2024 is the Chinese standard for raised pavement markers, the retroreflective and active studs set into the road surface to delineate lanes at night and in rain. They matter most exactly when painted markings stop working: wet asphalt at night reflects a headlight beam away from the driver, and the raised marker is often the only delineation still visible. The standard sets the classification and the composition of the marker, then the technical requirements: for retroreflective markers, the coefficient of luminous intensity at the specified entrance and observation angles, in the dry and after wetting, the colour, the compressive strength, the impact and abrasion resistance, the resistance to weathering and to salt and oil, and the adhesion of the bond; and for active light-emitting markers, additionally the luminous intensity, the visibility distance, the power supply and solar charging performance, the sealing and the electrical safety. It then gives the test methods, the inspection rules and the marking, packaging, transport and storage. It took effect on 23 August 2024.

This document specifies the classification and composition, technical requirements, inspection rules, as well as marking, packaging, transportation and storage of raised road signs. The test method for raised road markings is described. This document applies to the production, use and inspection of raised road signs installed on roads, and can be used as a reference for raised road signs installed in other places.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies. in this document.

GB/T 191 Pictorial markings for packaging, storage and transportation

GB/T 2423.1 Environmental testing for electric and electronic products Part

3 Terms and definitions

The terms and definitions defined in JT/T 688-2022 and the following apply to this document.

3.1 Retroreflection Reflected light is a type of reflection that returns from a direction nearly opposite to the direction of the incident light.

Note. This property can still be maintained when the direction of the incident light changes within a large range. [Source: JT/T 688-2022, 3.1, modified]

3.2 Retroreflective element The smallest optical unit that produces retroreflection. [Source: JT/T 688-2022, 3.2]

3.3 Retroreflector A reflective surface or device with retro-reflective properties.