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

MH/T 6035-2018

**Retro-reflective markers along taxiway
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces MH/T 6035-2005 "Reverse Reflective Markers on Taxiway Edges".

Compared with MH/T 6035-2005, the main technical changes are as follows.

- Delete "Markers are classified according to the form of installation base" (see 2005 version 3.1);
- Modify the naming of the model of the marker (see 4.2, 2005 edition 3.3);
- Delete "humidity" and "rain" (2005 version 4.1 b and e);
- Increase the "impact resistance" technical requirements (see 5.3.3.3);
- Increase the "bending resistance" technical requirements (see 5.3.3.4);
- Increase the "adhesion performance" technical requirements (see 5.3.3.5);
- Increase the technical requirements for "shrinkage performance" (see 5.3.3.6);
- Increase the technical requirements of "Releasable Paper Peelability" (see 5.3.3.7);
- Increase the "weather resistance" technical requirements (see 5.3.3.8);
- Increase the "impact resistance" test method (see 6.7.5);
- Increase the "bending resistance" test method (see 6.7.6);
- Increase the "adhesion performance" test method (see 6.7.7);
- Increase the "shrinkage performance" test method (see 6.7.8);
- Increase the test method of "Releasable Paper Peelability" (see 6.7.9);
- Add "weatherability" test method (see 6.7.10).

This standard was proposed and interpreted by the Airport Department of the Civil Aviation Administration of China.

This standard was approved by the Aircraft Airworthiness Certification Department of the Civil Aviation Administration of China.

This standard is under the jurisdiction of the China Academy of Civil Aviation Science and Technology.

Drafting organizations of this standard. China Civil Aviation Science and Technology Research Institute, Shanghai Shidaizhiguang Lighting Appliance Testing Co., Ltd.

1 Scope

This standard specifies the technical requirements, test methods, inspection rules, inscriptions for the retroreflective markers on the taxiway side (hereinafter referred to as markers) Brands and instructions, packaging, transportation and storage.

This standard applies to markers installed on the edges of taxiways and aprons in civil

airports to mark their boundaries.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 191 Packaging, Storage and Transportation Graphic Mark GB/T 18833-2012 Road traffic reflective film

3 Terms and definitions

Retroreflection

Reflected light is a kind of reflection that returns from the opposite direction close to the incident light. When the incident light direction changes in a large range, it can still maintain this nature.

Retroreflective sheeting Retroreflective materials that have been made into thin films and can be directly applied.

Retroreflector

An optical device with excellent retroreflective performance for the outer frame, text, and pattern of the marker surface.

4 Classification and naming

4.1

Markers are divided into three types. D, P, and W according to their ease of folding.

--D means that when the marker is hit by a collision, its fragile part will break;

--P means that the marker has no easy-foldable parts, and the part above the base is broken or broken when subjected to a collision;

--W means that the marker has no easy-folding parts, and the part above the base bends when subjected to a collision.

4.2

The model of the marker is named as follows.

5.1 Environmental requirements

Markers should operate normally for a long time in the following environments.

a) Temperature. -55 °C~65 °C;

- b) Wind load. the wind speed in any direction is not more than 160 km/h;
- c) Salt spray. exposure to salt-saturated atmosphere.

5.2 Appearance

5.2.1

The structure of the retroreflector on the marker should be designed to maximize its visibility. When the observer faces the marker, he sees the monochrome table the surface should be continuous and unbroken.

5.2.2

The marker should be a cylinder with a diameter of $7.5 \text{ cm} \pm 0.5 \text{ cm}$.

5.2.3

The bottom edge of the retro-reflective film should be at least 5.1 cm higher than the ground. In the case of easy-folding parts, it should be at least 7.6 cm higher than the ground.

5.2.4

At any viewing angle, the minimum retroreflective area should not be less than 150 cm². The membrane should extend to the top of the cylinder.

5.2.5

After installation, the total height of the marker from the road surface should be no more than 35.5 cm.

5.3.1 Adhesive

The adhesive of retroreflective film is divided into the following 4 levels.

- Level 1. Use pressure-sensitive methods to bond the adhesive to a smooth and clean surface without requiring heat, solvent or other bonding preparations;
- Level 2. The adhesive on the back glue should be bonded to the material by heat and pressure. The temperature reaches at least 66 °C and a permanent bond should be formed.

The material should be resettable under normal factory production conditions, and the substrate temperature should reach 38 °C without damaging the material. Level 2 materials can be more Hole, used to eliminate air when laminating the film on the thermal vacuum laminator. The particle size and frequency of the porous material should not be affected when printing the film.

damage;

- Level 3. The back glue should have a positionable adhesive for bonding to a smooth and