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

GB/T 35160.7-2026

**Test methods for agglomerated stone - Part 7: Determination of
ageing by xenon arc exposure**

合成石材试验方法 第7部分：耐氙灯老化性能的测定

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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 is Part 7 of GB/T 35160 "Test Methods for Synthetic Stone". GB/T 35160 has already published the following parts.

- 1.Determination of density and water absorption rate;
- 2.Determination of Bending Strength;
- 3.Determination of compressive strength;
- 4.Determination of abrasion resistance;
- 5.Determination of Thermally Catalytic Properties;

6.Determination of impact resistance;

7.Determination of Xenon Lamp Aging Resistance 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 Stone Materials (SAC/TC460). This document was drafted by: Yunfu Municipal Institute of Quality and Metrology Supervision and Testing, Guangdong Province; China National Building Materials Artificial Crystal Research Institute Co., Ltd.; and Zhangzhou Xinyang Technology. Technology Co., Ltd., Guangdong Liji Stone Co., Ltd., Guangdong Zhisheng Stone Co., Ltd., Yunfu Honghai Investment Co., Ltd., Hezhou Inspection and Quarantine Bureau Testing Center, Yunfu City Yun'an District Construction Industry Affairs Center. The main drafters of this document are. Yang Wu, Huang Ping, Lin Minxia, Jin Junmin, Zhou Junxing, Li Jianquan, Yan Xingyang, Liu Xu, Wei Fuguang, and Liu Zhiming. Yan Weiwan, Huang Liangxian, Jiang Zongchen, Hou Hui, You Shijun, Zhu Weiming, Liu Dewen.

GB/T 35160 "Test Methods for Synthetic Stone" aims to help people understand the physical and chemical properties of synthetic stone, and to provide guidance for the selection, design, and maintenance of synthetic stone. It provides a basis for production, processing, construction, installation, commercial application, and maintenance of synthetic stone, ensuring the quality and safety of synthetic stone building decoration projects, and providing a basis for synthetic stone... It provides technical support for the healthy development of the industry. GB/T 35160 consists of 7 parts.

1.Determination of Density and Water Absorption. The purpose is to specify the method for determining the water absorption and bulk density of synthetic stone using the drainage method. The test methods and applicable measurement range.

2.Determination of Flexural Strength. The purpose is to specify the test method and appropriate procedures for the flexural strength of synthetic stone in a dry state. The range of measurements used.

3.Determination of Compressive Strength. The purpose is to specify the test method and applicable conditions for the compressive strength of synthetic stone in a dry state. The measurement range.

4.Determination of Abrasion Resistance. The purpose is to specify the test method for determining the abrasion resistance of synthetic stone using the grinding wheel method. Applicable measurement range.

1 Scope

GB/T 35160.7-2026 is the Chinese national standard covering how engineered stone weathers - the resin that binds the mineral is what yellows and chalks under ultraviolet light,

which is why an agglomerated stone ages differently from the quarried material it imitates. Part 7 of the series, first edition of this part. It was issued on 28 January 2026 and has been in force since 1 August 2026, as a first edition. The document is under the responsibility of the China Building Materials Federation. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document describes the determination of the appearance and mirror properties of samples under xenon lamp exposure conditions with two different filters in a xenon lamp aging test apparatus. Test methods for changes in gloss, color difference, and flexural strength before and after aging. This document applies to the determination of the xenon lamp aging resistance of synthetic stone.

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/T 11942 Method for measuring the colorimetry of colored building materials

GB/T 13891 Method for Determination of Specular Gloss of Building Facing Materials

GB/T 16422.1-2019 Plastics - Laboratory Light Source Exposure Test Method - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 35165 and GB/T 16422.1-2019 apply to this document.

4.Principles When equipped with a suitable filter, a xenon lamp produces radiation with a spectral energy distribution similar to the ultraviolet and visible light spectrum of sunlight. Using a xenon lamp or a xenon lamp with a spray system, simulate the natural aging of materials exposed to sunlight (direct sunlight or through window glass) or in a humid environment. The samples were subjected to environmental conditions to measure changes in their appearance, specular gloss, color difference, and flexural strength before and after aging.

5 Instruments and Equipment

5.1 Forced-air drying oven A forced-air drying oven is used to maintain the temperature at $(40\pm 5)^{\circ}\text{C}$ and $(70\pm 5)^{\circ}\text{C}$.

5.2 Gloss meter It should meet the requirements of GB/T 13891. The test process adopts $(60 \pm 0.1)^\circ$ geometric conditions and the aperture diameter is not less than $\Phi 10\text{mm}$.

5.3 Colorimeter It should comply with the requirements of GB/T 11942.

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