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

GB/T 24721.2-2023

**Glass fiber reinforced plastic product for highway - Part 2:
Trunk**

公路用玻璃纤维增强塑料产品 第2部分：管箱

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Foreword

This document was issued on 17 March 2023 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 July 2023.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

Introduction

Glass fiber reinforced plastic materials for highway have been increasingly extensively applied

in the highway industry because of their suitable strength and favorable environmental adaptability. GB/T 24721 Glass Fiber Reinforced Plastic Product for Highway divides the standardization objects into two aspects: general and special. The general aspect of glass fiber

reinforced plastic materials for highway is taken as the first part of GB/T 24721, while the special aspect of specific glass fiber reinforced plastic products for highway is taken as other

parts of GB/T 24721. GB/T 24721, which aims to standardize the quality management of this

type of materials, is composed of five parts.

---Part 1: General Rule. The purpose is to clarify the general technical requirements and test methods for glass fiber reinforced plastic materials for highway.

---Part 2: Trunk. The purpose is to further standardize the quality level of glass fiber reinforced plastic trunk products for highway.

---Part 3: Duct. The purpose is to further standardize the quality level of glass fiber reinforced plastic duct products for highway.

---Part 4: Non-pressure Communications Well Lid. The purpose is to further standardize the quality level of glass fiber reinforced plastic non-pressure communications well lid products for highway.

---Part 5: Sign Base Panel. The purpose is to further standardize the quality level of glass fiber reinforced plastic sign base panel products for highway.

At present, due to the different flame-retardant properties of glass fiber reinforced plastic trucks

for highway under different flame-retardant environmental conditions, with the extensive application of UV and weather resistant glass fiber reinforced plastic products for highway, as

well as the application of the new type of high-strength glass fiber reinforced plastic materials

for highway to trunk products, it is necessary to revise and improve this document. In this revision, the technical indicators comprehensively consider the overall level of domestic production enterprises, and the content strives to satisfy the compilation principles of applicability, advancement and operability, hoping to satisfy the requirements of product quality

control.

Glass Fiber Reinforced Plastic Product for Highway - Part

2: Trunk

1 Scope

GB/T 24721.2-2023 covers the glass fibre reinforced plastic trunk used along highways, the second product part of a series whose general rules sit in GB/T 24721.1-2023. It classifies the product and then fixes the structural forms, the dimensions and their permitted deviations, and the model designation, so that a trunk ordered by code is the trunk that arrives. Technical requirements follow, then test methods that take specimen conditioning and the test environment from part 1 rather than restating them, then inspection rules and a clause on marking, packaging, transport and storage. Two appendices close the document: schematic drawings of the structural forms and of the parts a trunk is made from, and a normative method for determining the static friction coefficient of the inner wall. That friction figure is the one to look for. Cable is drawn through these runs over long spans, and a rough inner wall pushes the pulling tension up until the sheath is scored or the conductor is stretched, damage that stays hidden until the circuit fails months later. For makers of highway cable trunking, for the electrical and communications designers who specify it, and for the contractors who install and inspect it.

This document specifies the product classification, structures, dimensions and deviations, model, technical requirements, test methods, inspection rules, as well as marking, packaging,

transportation and storage requirements for glass fiber reinforced plastic trunk for highway.

This document is applicable to the production, inspection and usage of glass fiber reinforced

plastic trunk for highway (hereinafter referred to as "glass fiber reinforced trunk").

2 Normative References

The contents of the following documents constitute indispensable clauses of this document through the normative references in the text. In terms of references with a specified date, only

versions with a specified date are applicable to this document. In terms of references without a

specified date, the latest version (including all the modifications) is applicable to this document.

GB/T 24721.1-2023 Glass Fiber Reinforced Plastic Product for Highway - Part 1: General Rule

3 Terms and Definitions

This document does not have terms or definitions that need to be defined.

4 Product Classification, Structures, Dimensions, Deviations

and Model

4.1 Classification

In addition to the classification in accordance with the stipulations of 4.1 in GB/T 24721.1-2023, glass fiber reinforced trunks are also classified by material properties:

- a) General trunks;
- b) High-strength trunks.

4.2 Structures, Dimensions and Deviations

4.2.1 Structures and dimensions

NOTE: "?" means no unit required.

a This indicator is only applicable to trunks used in closed and semi-closed environments, for example,

tunnels.

b This indicator is applicable to glass fiber reinforced trunks with external coating.

6 Test Methods

6.1 Specimen Conditioning and Test Environment Conditions

In accordance with the stipulations of 6.1 in GB/T 24721.1-2023, conduct the test.

6.2 Reagents

In accordance with the stipulations of 6.2 in GB/T 24721.1-2023, conduct the test.

6.3 Test Instruments and Equipment

In accordance with the stipulations of 6.3 in GB/T 24721.1-2023, conduct the test.

6.4 Specimen

6.4.1 General requirements

In accordance with the stipulations of 6.4 in GB/T 24721.1-2023, conduct the test.

6.4.2 Special stipulations

The specimens shall be taken from three sides of the formed trunk body and the trunk cover.