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

**GB/T 9900-2025**

Replacing GB/T 9900-2008

**Rubber- or plastics-coated fabrics - Ventilation ducting**

橡胶或塑料涂覆织物 导风筒

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1 Warp and weft tensile strength (kN/m).  $\geq 26$ ,  $\geq 34$ ,  $\geq 40$

2 Tear strength in the warp and weft directions/N  $\geq 100$   $\geq 200$   $\geq 300$

3 Coating adhesion strength (N/m).  $\geq 500$   $\geq 700$   $\geq 1000$

5.1.3 Flame retardant properties

1 Flaming combustion time  $\leq 10$   $\leq 3$   $\leq 12$   $\leq 6$

2 Flameless combustion time  $\leq 30$   $\leq 10$   $\leq 60$   $\leq 20$

5.1.4 Antistatic properties

5.1.5 Heat resistance

## 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 replaces GB/T 9900-2008 "Rubber or Plastic Coated Fabric Air Ducts". Compared with GB/T 9900-2008, it has the following differences.

Aside from structural adjustments and editorial changes, the main technical changes are as follows.

a) The classification rules have been changed (see 4.1, Chapter 3 of the 2008 edition), and the schematic diagram of the air duct structure has been changed (see Figures 1 and 2).

The 2008 edition of Figures 1 and 2 added a model designation method (see 4.3);

- b) The physical and mechanical property requirements for coated fabrics have been changed (see 5.1.2, 2008 version 5.1.2);
- c) The flame retardant performance requirements for coated fabrics have been changed (see 5.1.3, 5.1.2 of the 2008 edition) and the flame retardant performance test methods (see 6.1.3,...). (2008 version 6.6)
- d) Requirements for positive pressure air ducts with nominal diameters of 1800mm and 2000mm have been added (see 5.2);
- e) A new connector material has been added, namely the zipper (see 5.2.4.2.2);
- f) The requirement for end ring deformation has been removed (see 5.2.4.1 in the 2008 version);
- g) A test method for the flame retardant properties of coated fabrics has been added (see Appendix A);
- h) The test principle in Appendix B, Test Method for Conductivity of Coated Fabrics (see A.1 in the 2008 edition), has been deleted, as has the electrode material section.

The quantity specifications (see A.2.2 of the 2008 edition) have been revised, and the schematic diagram of the electrodes has been changed (see Figure B.1, Figure A.1 of the 2008 edition).

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 Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Rubber and Rubber Products (SAC/TC35).

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The release history of this document and the document it replaces is as follows.

- First published in 1988 as GB/T 9900-1988, and revised for the first time in 2008;

- This is the second revision.

## 1 Scope

This document specifies the classification, structure and materials, specifications, requirements, inspection rules, marking, and packaging of rubber or plastic coated fabric air ducts.

The loading, transportation, and storage of the equipment are described, along with the corresponding testing methods.

This document applies to local ventilation applications in mines, tunnels, water conservancy projects, subways, and civil defense projects, using rubber or plastic-coated fabrics.

The positive and negative pressure air ducts are manufactured.

## 2 Normative references

GB/T 338

GB/T 394.1

GB/T 1222

GB/T 3078

GB/T 10111

GB/T 15335

## 3 Terms and Definitions

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

### 4.1 Classification

4.1.1 According to the ventilation method, they are divided into positive pressure air ducts and negative pressure air ducts.

4.1.2 According to safety performance, they are divided into Class S. flame retardant and antistatic properties; and Class D. flame retardant properties.

### 4.2 Structure and Materials

4.2.1 The positive pressure air duct consists of a cylinder body made of coated fabric by heat sealing or sewing, joints at both ends, and lifting rings installed on the cylinder body.

The structural diagram is shown in Figure 1.

4.2.2 The negative pressure air duct consists of a cylinder body made of coated fabric by

heat sealing or sewing, joints at both ends, a frame fixed to the cylinder body, and components installed on the cylinder.

It consists of components such as lifting rings on the body, and its structural diagram is shown in Figure 2.

4.2.3 When using spring steel wire, the spring steel wire shall meet the requirements of GB/T 1222; when using cold-drawn steel wire, the cold-drawn steel wire shall meet the requirements of GB/T 1222.

The requirements of GB/T 3078 shall apply; when using zippers, the zippers shall comply with the requirements of QB/T 5784. Index number explanation. 1 --- Connector; 2 ---Cylinder; 3 --- Rings; 4, 5 --- opposite sides.

Figure 1 Schematic diagram of positive pressure air duct structure Index number explanation. 1---Connector; 2---Reverse side; 3---Skeleton; 4---Hanging rings; 5---Pressure strip; 6---Cylinder body.

Figure 2 Schematic diagram of negative pressure air duct structure

### 4.3 Specifications and Models

FT - - -x- Nominal length (L), unit. m Nominal diameter (D), unit. mm S indicates flame retardant and antistatic properties; D indicates flame retardant properties.

S indicates plastic-coated fabric, and X indicates rubber-coated fabric.

Z represents positive pressure, and F represents negative pressure. air duct Example 1.

FTZSD600x10 indicates a nominal diameter of 600mm and a nominal length of 10m, using plastic-coated fabric with flame-retardant properties. Pressure duct. Example 2.

FTFXS800x10 indicates a nominal diameter of 800mm and a nominal length of 10m, using rubber-coated fabric with flame-retardant and antistatic properties.

Fabric-coated negative pressure air duct.

#### 5.1.1 Thickness

The thickness of the coated fabric should not exceed 0.8 mm.

#### 5.1.2 Physical and mechanical properties

The warp and weft tensile strength, warp and weft tear strength, and coating adhesion strength of the coated fabric shall meet the requirements of Table 1.

Table 1 Physical and mechanical properties Serial Number Item Name Require D < 500mm  
500mm ≤ D < 1000mm Positive pressure air duct with a diameter of 1000mm ≤ D  
≤ 2000mm;