

ICS 13.220.10

CCS C85



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

GB 21976.4-2012

Escape apparatus for building fire - Part 4: Escape slide

建筑火灾逃生避难器材 第4部分：逃生滑道

Issued on: June 29, 2012

Implemented on: December 1, 2012

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

Chapter 4, Section 6 of this chapter, Article

7.1 is mandatory, the rest are recommended. GB 21976 "building fire escape evacuation equipment" is divided into the following sections.

- Part 1. with a guide;
- Part 2. escape ease down;
- Part 3. escape ladder;
- Part 4. escape slide;
- Part 5. emergency escape device;
- Part 6. escape justice;
- Part 7. Fire filter self contained breathing apparatus;
- Part 8. Chemical Oxygen fire self contained breathing apparatus; This section GB of Section 421 976. This section drafted in accordance with GB/T 1.1-2009 given rules. This section presents the People's Republic of China Ministry of Public Security. This part of the National Committee for Standardization fire apparatus fire accessories Technical Committee (SAC/TC113/SC5) centralized. This section drafted by: Ministry of Public Security Shanghai Fire Research Institute. The main drafters of this section. Ma Weiguang, Li Baozhong, Han Xiang, Jin Wei, Gu Wenjie, Zhu Fenglin. Building fire escape evacuation equipment Part 4. escape chute

1 Scope

GB 21976.4-2012 is the Chinese national standard on escape apparatus for building fire - part 4: escape slide, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 29 June 2012 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 December 2012. Classification: ICS 13.220.10, CCS C85. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section GB 21976 specifies the escape chute (hereinafter referred to as the slide) model, technical requirements, test methods, inspection rules, and standard Chi, packaging, transport and storage. This section applies to the building when the fire broke out, the weight of the user to rely on a certain speed in its internal downhill escape, the configuration is not higher than the height 60m and can be used repeatedly flexible slide.

2 Normative references

The following documents for the application of this document is essential. For dated

references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 191 Packaging - Pictorial signs

GB/T 528 Determination of vulcanized rubber or thermoplastic rubber tensile stress-strain properties

GB/T 3512 vulcanized rubber or thermoplastic rubber hot air and heat accelerated aging test

GB/T 3917.3 Textiles - Tear properties of fabrics - Part 3. Determination of trapezoid tear

GB/T 3923.1 Textiles Tensile properties of fabrics - Part 1. breaking strength and elongation Strip method

GB/T 5455 Textiles - Burning behavior - Vertical method

GB/T 9969 General Instructions industrial products

GB/T 10125-1997 Corrosion tests in artificial atmospheres - salt spray test

GB/T 13773.1 Textiles - Seam tensile properties of fabrics and products - Part 1. the strip method for seam strength determination Flexible Test Method FZ/T 01034-2008 Textiles - Woven fabrics stretch

3 Models

Chute Model Code by a class group and the main parameters, whose form is as follows:

Escape Evacuation Equipment D- Escape chute Escape chute length, in meters (m)

Example. A length of 20m slide, the model for the TD-20. 4. Technical Requirements

4.1 Structural requirements

4.1.1 inlet chute by a metal frame, metal connectors, slide the main body and the like.

4.1.2 chute body by an outer protective layer, an intermediate layer and an inner conductive slip damping layer and the like three layers of material combinations thereof, may also be the outer protective layer, Damping slip inner conductive layer of the composite material composition floor.

4.1.3 chute expand, extend the length of the protective layer should not exceed the damping layer, a conductive layer or damping slip sliding guide extending the length of the composite layer.

4.1.4 chute inlet connector body and the metal frame should be solid and reliable.

4.1.5 chute exit end can be set to protect the buffer pad or other device.

4.1.6 chute exit end can configure the appropriate weight of sandbags to prevent the use of

the outlet end of the chute produce flying, winding and curling, and Chute exit end disposed at its 360 ° azimuth and at night and visible warning signs.

4.2 appearance quality Slide appearance quality should meet the following requirements.

- a) the constituent material of the body slide in the longitudinal direction should be homogeneous, continuous;
- b) all parts slide the sewing line should be straight, neat, plain clothes, strong, elastic fit, stitches per 30mm shall not be less than 7-pin;
- c) the outer surface of the slide metal parts should be smooth, no rust, spots, burrs.

4.2 Appearance quality - sqrt sqrt 3

7.1 marks - sqrt sqrt 4

4.4.1 elongation - - sqrt 5

4.3.1 Flame retardant

5.2.1 shall be specified in the method chute protective layer flame retardancy test, the damage length should not exceed 100mm, and continued burning time Smoldering time shall be no more than 2.0s, there should not melt, drip phenomenon.

4.3.2 Breaking Strength Slide the protective layer, the method specified in

5.2.2 should guide the sliding layer or sliding guide damping composite layer breaking strength test, the protective layer of warp and weft Breaking strength of not less than 785N. Guiding the sliding layer or sliding guide damping composite layer warp and weft breaking strength of not less than 981N.

4.3.3 tearing strength Slide the protective layer, conductive lead slip sliding layer or damping

5.2.3 shall be specified composite layer tear strength test, the protective layer of warp and weft The tear strength of not less than 79N. Guiding the sliding layer or sliding guide damping composite layer warp and weft tear strength of not less than 118N.

4.3.4 seam strength Slide guide method specified in

5.2.4 shall be sliding layer or sliding guide damping composite layer seam strength test, the seam strength should not be less than 650N.

4.3.5 tensile elasticity For slide damping layer made of an elastic woven fabric composite layer damping slide guide method specified in

5.2.5 shall be subjected to a tensile elastic or test, Its zonal elongation of not less than 25%, the zonal deformation rate should not be less than 2%.