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

GB 21976.5-2012

Escape apparatus for building fire - Part 5: Escape device

建筑火灾逃生避难器材 第5部分：应急逃生器

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Foreword

This Section 5, Chapter 7 and Chapter

8.1 are 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 521 976. 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 Standardization Technical Committee appliances Fire 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. Han Xiang, Zhu Qing, Li Baozhong, Jin Wei, Wang Yi, Zhu Yun, Li Changlin. Building fire escape evacuation equipment Part 5. emergency escape device

1 Scope

GB 21976.5-2012 is the Chinese national standard on escape apparatus for building fire - part 5: escape device, 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 part of GB 21976 specifies the terms and definitions emergency escape devices, models, technical requirements, test methods, inspection rules, and standard Chi, packaging, transport and storage. This section applies to buildings when the fire broke out, for emergency escape device dedicated trapped disposable.

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 9969 General Instructions industrial products YB/T 5197 rope aviation

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Emergency escape device escapedevice Emergency by the governor, ropes, belts,

safety hook and metal connectors composed of the governor and users with single-use drop Escape device.

4 Model

Emergency escape control Model Code by a class group and the main parameters, whose form is as follows: Escape Evacuation Equipment Y- Emergency escape device Rope length in Arabic numerals, in meters (m) Example. 15m length of rope emergency escape device, the model TY-15.

5 Technical requirements

5.1 Appearance quality The outer surface of the metal element of the emergency escape should be smooth, no rust, spots or burrs. Rope-end should be protected was bandaged. Each member shall No deformation, damage and other anomalies.

5.2.1 Ropes

5.2.1.1 Wire Rope Aviation should be used with wire rope diameter shall be not less than 3mm, the material shall comply with the YB/T 5197 requirements of.

5.2.1.2 cored rope Cored rope cord rope aviation should be used in diameter shall be not less than 3mm, the material shall comply with the YB/T 5197 requirements of. Outer Material should be cotton or synthetic material. Whole rope should be consistent with the structure, tightly woven, uniform thickness, no distortions.

5.2.2 belt Seat belt material should be cotton or synthetic material. Bandwidth 40mm ~ 80mm, with a thickness of 1mm ~ 3mm, with a length of 1000mm ~ 1800mm, and the length can be adjusted with a buckle by user bust size.

5.2.3 safety hook Safety hook should be made of a metal material and a safety device to prevent misuse of open, reliable safety device should be locked.

5.3 Load Emergency escape the minimum load, the standard load and maximum load shall comply with the provisions in Table 1. Table 1 in units of Newton Load the type of load value The minimum load of 343 ±

5.4 Strength

5.4.1 strength machine Emergency escape should be able to withstand a load of 4 times the maximum tensile load, after strength testing machine, rope, governor and other components should force No significant deformation, breakage, detachment and other anomalies.

5.4.2 belt and metal fittings strength Belts and metal connectors should be able to withstand

6.5 times the maximum load of the tensile load, after strength test, the seat belt webbing, buckles and Metal connectors shall breakage, breakage and shedding and other anomalies.

5.4.3 Safety hook intensity Safety hook shall withstand a tensile load 10000N, after strength test, safety hook body and safety devices must not change significantly changed Shape, fracture, loss and other anomalies.

5.4.4 rope strength Rope should be able to withstand four times the maximum load of the tensile load, after strength testing without obvious deformation, fracture phenomena, there is not rope core It has occurred with the cord from the outer phenomena.

5.5 the rate of decline Minimum load specified in Table 1, the standard load and maximum load state, slow down the rate of decline should be 0.16m/s ~ 1.5m/s.

5.6 Manual speed control function

5.6.1 emergency escape device may be provided with a manual speed control function.

5.6.2 Emergency escape device with manual speed control function, when a user without any speed operation, the rate of decline should be 0.16m/s ~ 1.5m/s.

5.6.3 When the governor put the state governor, the emergency escape the lowering speed can be adjusted to be between 0m/s ~ 1.5m/s.

5.7 Reliability After the emergency escape device reliability test trials the rate of decline, the rate of decline should be 0.16m/s ~ 1.5m/s. In the test Governor, carabiners, ropes and other components should be no deformation, damage and other anomalies.

5.8 Corrosion Resistance Emergency escape the metal parts should be corrosion-resistant materials or by the anti-corrosion treatment. After salt spray test, the metal emergency escape Member should be no significant corrosion. Then test the rate of decline, the rate of decline should be 0.16m/s ~ 1.5m/s.

6.1 Test conditions

6.1.1 The test conditions the rate of decline in wind speed should not be greater than 2m/s is the next.

6.1.2 When the rope length of the sample is less than 15m, lowering speed test test height rope length; when the rope length of the sample is not Less than 15m, height drop test speed test is 15m.

6.2 appearance quality inspection Were visually emergency escape device for visual quality inspection.

6.3 The main parts of the structure, size and material inspection