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

GB 21976.6-2012

Escape apparatus for building fire - Part 6: Escape rope

建筑火灾逃生避难器材 第6部分：逃生绳

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Foreword

Section 4 of this chapter, Chapter 6, and

7.1 are mandatory, the rest are recommended. GB 21976 "building fire escape evacuation equipment" includes 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 621 976. 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. gold Wei, Li

Baozhong, Gu Wenjie, Wang Yi, Zhu Yun, Peng Bin Bin. This section first release. Building fire escape evacuation equipment Part 6. escape rope

1 Scope

GB 21976.6-2012 is the Chinese national standard on escape apparatus for building fire - part 6: escape rope, 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 5 November 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 June 2013. 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 rope models, technical requirements, test methods, inspection rules, marking, packaging, transportation and storage. This section applies to the ropes, carabiners and safety belts (optional) composed for the event of building fire escape rope single use.

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 GA494 fire with fall protection equipment

3 Models

Model methodology escape justice as follows: Escape Evacuation Equipment Escape rope - - Rope length. integer marked in meters (m) / - Rope Diameter. integer marked in millimeters (mm) Example. Length 6m, diameter 9mm escape rope, the model for TS-6/9. 4. Technical Requirements

4.1 Structure Escape rope core rope should wrap Shengpi cored rope structure. One end of the rope should bight structure and connected to a safety hook the other end optional With seat belts.

4.2 appearance quality Escape rope surface should be free of any mechanical damage

phenomenon, the whole rope thickness uniformity, consistent with the structure.

4.3 length and diameter Escape rope diameter of not less than 8mm. Nominal value with the factory control, length tolerance of $\pm 0.2\text{m}$, diameter tolerance is $\pm 0.5\text{mm}$.

4.4 breaking strength Minimum escape rope breaking strength of not less than 10kN.

4.5 Elongation When the load reaches 10% of the minimum breaking strength and elongation of the safety rope shall be not less than 1% and not more than 10%.

4.6.1 Safety hooks shall be of metal material and provided preventing safety device mistakenly open, the safety device should be locked reliably.

4.6.2 safety hook through strength testing, body and safety hook safety device shall not obvious deformation, fracture, loss and other anomalies.

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

4.7.2 After the strength test the seat belt webbing and buckles and other components shall cause rupture phenomenon.

5 Test methods

5.1 structure and appearance quality inspection Visual method to escape justice by the structure and appearance quality inspection.

5.2 length and diameter measurement With universal length measuring measuring rope (ending both ends of the whole rope escape rope not included in length) and diameter. The length and the same rope 3 times the diameter measurements are required, the arithmetic mean of the three.

5.3 breaking strength and elongation test Carried out according to the method specified in GA494 escape rope breaking strength and elongation testing.

5.4 Test safety hook

5.4.1 by visual inspection reports and viewing the material approach to safety hook structure and materials to be checked.

5.4.2 The safety hook and pull both ends of the upper and lower jigs machine connected safety device in the locked state. Rally stretching speed is set at 30mm/min, and then applying a tensile load 10000N on the hook to keep 5min.

5.5 Test seat belt

5.5.1 by visual inspection reports and viewing materials approach to belt structure and

materials to be checked. Then measured with a universal measuring tool Belt length, width and thickness, measure any 3 points, the arithmetic average of three points.

5.5.2 The two ends of the belt of the upper and lower clamping jig Rally. Rally stretching speed is set at 100mm/min, and then applied to the sample Plus 6376.5N tensile loads, while maintaining 5min.

6.1 Type inspection

6.1.1 Type inspection requirements of this section shall be the inspection of all projects.

6.1.2 When one of the following conditions, type of inspection should be carried out.

- a) identification of new products into production time; B) after the official production, product structure, materials, production processes are greatly changed;
- c) Product Discontinuance more than one year, the production recovery;
- d) continuous production for three years;
- e) the national quality supervision bodies type inspection requirements.

6.2 Factory inspection

6.2.1 Products shall plant quality inspection departments qualified along with the certificate, before the factory.

6.2.2 factory inspection of project-based section

4.1 to 4.7. Wherein

4.3 will be seized items,

4.7 for the sampling project.

6.3 Sampling

6.3.1 Type inspection should be factory inspection of products at random 5 sets.

6.3.2 factory inspection to 500 sets in one batch sample sampling project should not be less than 5 sets; when less than 100 sets of batch sampling projects like Product should not be less than 2 sets.

6.4 Determine the rules

6.4.1 Type inspection Results type inspection items all satisfy the requirements of this part, judged as qualified.

6.4.2 factory inspection The test results will be seized items should be fully comply with this part. Any non-conformity, the product should only be resubmitted after rework test. Test