COMPLIANCE LABORATORY

Test Report

On Behalf of

Zhejiang Leader Industry & Trade Co., Ltd.

Step Stool

Model： AY-H003HS, AY-H002HS, AY-H004HS, AY-H002BS, AY-H003BS, AY-H004BS, AY-H002BL, AY-H003BL, AY-H004BL, AY-H002XB, AY-H003XB, AY-H004XB, AY-H002YS, AY-H003YS, AY-H004YS, AY-H002MW, AY-H003MW, AY-H004MW, AY-H002YY, AY-H003YY, AY-H004YY, AY-HT002HS, AY-HT003HS, AY-HT004HS, AY-HT002BS, AY-HT003BS, AY-HT004BS, AY-HT002BL, AY-HT003BL, AY-HT004BL, AY-HT002XB, AY-HT003XB, AY-HT004XB, AY-HT002YS, AY-HT003YS, AY-HT004YS, AY-HT002MW, AY-HT003MW, AY-HT004MW, AY-HT002YY, AY-HT003YY, AY-HT004YY

Prepared For : Zhejiang Leader Industry & Trade Co., Ltd.

Building 2, No. 2-1 Industrial Avenue, Sulukou Shangcun, Longshan Town, Jinhua City, Zhejiang Province

Prepared By : Eport (Shenzhen) Electronics Co., Ltd.

Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C

Date of Test	:	**April 08-12, 2024**
Date of Report	:	**April 12-15, 2024**
Report Number	:	**EPTC-LD-S240A870**

Test Report EN 14183: 2003 Step stools	
Testing laboratory ……...:	Eport (Shenzhen) Electronics Co., Ltd.
Address …… :	Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C
Testing location ……..…:	Eport (Shenzhen) Electronics Co., Ltd. Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C
Applicant …… :	Zhejiang Leader Industry & Trade Co., Ltd.
Address …….. :	Building 2, No. 2-1 Industrial Avenue, Sulukou Shangcun, Longshan Town, Jinhua City, Zhejiang Province
Standard …… :	EN 14183: 2003
Result …… :	EN 14183: 2003
Procedure deviation …… :	N.A.
Non-standard …… :	N.A.
Type of verdict object …… :	Step Stool
Trademark …… :	N.A.
Model/type reference …….. :	AY-H003HS
Manufacturer …… :	Zhejiang Leader Industry & Trade Co., Ltd.
Address …….. :	Building 2, No. 2-1 Industrial Avenue, Sulukou Shangcun, Longshan Town, Jinhua City, Zhejiang Province

Possible case verdicts :	
Case does not apply to the verdict object …….. :	N (.A.)
Verdict object does meet the requirement ……:	P(ass)
Verdict object does not meet the requirement … :	F(ail)

Name and address of the testing laboratory : **Eport (Shenzhen) Electronics Co., Ltd.**
Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C

Reported by :

Signature

April 15, 2024
Date

Mark Zhang / Project Engineer
Name and Title

Approved by :

Signature

April 15, 2024
Date

Eliza Chen / Manager
Name and Title

General remarks:	

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced except in full without the written approval of the testing laboratory.

Attached with:

A. 1 page of photo documentation
B. Copy of marking plate see appendix 2

Remark 1:

1. All tests were conducted on AY-H003HS unless otherwise special.
2. All models are the same material and load capacity (max.150kg)

EN 14183			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
4.	**Functional dimensions, designations, requirements**		**P**
4.1	General		**P**
	The drawing are examples only and products need not correspond. However, dimensions are binding. Step stools shall only be fitted with steps that are uniformly spaced to within a tolerance of ±2mm.		**P**
	If the top surface is less than 240mmx400mm, the step stool or stair type steps with a height of more than 750mm shall have a handrail.	The top surface is 250mmx450mm, no handrail	**P**
	All type of products covered by this standard may be fitted with castors and wheel		**N**
4.2	Step stool with fixed or folding legs	Fixed legs	**P**
	There shall be no gap between the projection of the steps to the ground		**P**
	Designation of a step stool with fixed legs(A) with three steps		**P**
	Designation of a step stool with folding legs that are braced when in use(B) with three steps		**N**
4.3	Rigid or folding stair type steps		**P**
	There shall be a minimum of 150mm not overlapping distance between the steps. Designation of stair type steps(C) with three steps		**P**
4.4	Fold-out/pull-out step stool		**P**
	Designation of a step stool with fold-out steps(D) with three steps		**P**
	Designation of a step stool with pull-out steps(E) with three steps		**N**
4.5	Dome type step stool		**N**
	The platform shall have a minimum area of 600 cm^2 and shall include a square of 200mmx200mm.		**N**
	Designation of a dome type step stool(F)		**N**

EN 14183			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
5	**Additional requirements**		**P**
5.1	Materials		**P**
5.1.1	General		**P**
	The requirements for materials only apply to load-bearing components		**P**
5.1.2	Plastic		**N**
5.1.3	Steel		**N**
5.1.4	Aluminium	Have a thickness of at least 1.20mm	**P**
5.2	Steps and platforms	Steps	**P**
	Top surfaces of steps and platforms shall have resistance against slipping		**P**
	The contact surface of the coverings shall adhere firmly to the steps		**P**
	Steps and platforms shall be firmly and durably connected to the stiles		**P**
	When loaded as specified in 6.2, the platform and the steps shall show no signs damage, such as fractures, or cracks	No signs damage, such as fractures, or cracks	**P**
5.3	Slip resistance		**P**
5.3.1	Feet or bottom end of stiles		**P**
	Feet or bottom ends of stiles shall be soled with a slip resistant material(e.g.rubber). Requirements of 5.3 are considered to be met if successfully tested according to 6.3	By safety rubber shoes	**P**
5.3.2	Rollers and wheels		**N**
	Where rollers or wheels are fitted, step stools and rigid steps shall be designed so as to prevent any accidental displacement when loaded. Rollers shall either be automatically locked or automatically disabled once the step stool or rigid steps are loaded.		**N**

EN 14183			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
5.4	Opening restraint and compression security devices		**P**
	Step stools and stair type steps shall be prevented from unintended folding when deployed for use		**P**
5.5	Design		**P**
	Finger traps(shearing points)shall be avoided as far as possible		**P**
	All connections shall be durable and have a strength corresponding to the strain. The connections shall be designed in a manner that arising notch tensions remain low		**P**
	Screws and nuts shall be secured against self-acting slackening, e.g. by means of safety devices with a blocking effect or being positive		**P**
	Welding of joints is permitted if welding procedures and welding personnel are suitable. EN719 and EN729-1 to EN729-4 shall be observed		**P**
5.6	Surface finish		**P**
	In order to avoid injuries, accessible edges, corners, and protruding parts	Be free of burrs, chamfered or rounded	**P**
	Metal parts susceptible to corrosion shall be protected by means of a paint coating or other coating.		**P**
	If wooden parts are coated, the coating shall be transparent and permeable to water vapour	Not use wooden	**N**
5.7	Hinges(turning points)		**P**
	Hinges shall connect the legs of the step stool durably. Hinges shall be designed in such a manner that no abutment of the step stool parts over the hinges is formed during use of the step stool		**P**

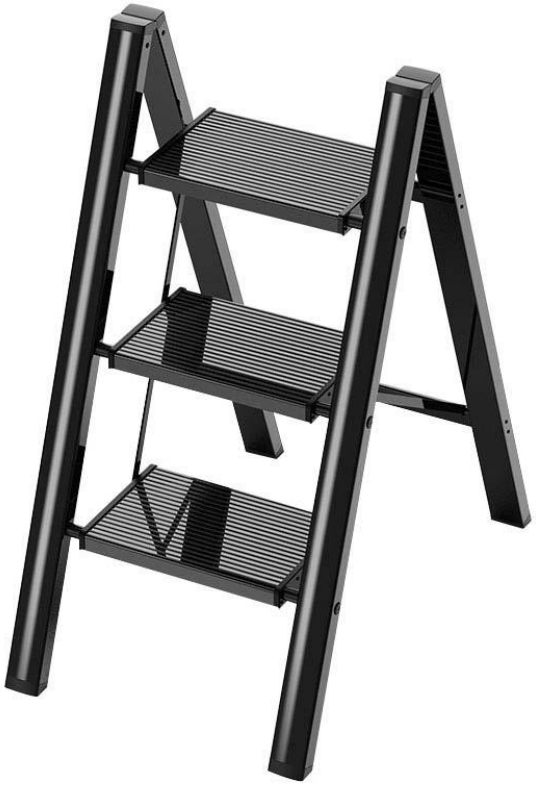
EN 14183			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	The hinge pin shall be secured against unintentional loosening. The diameter of steel hinge pins shall not be less than 5,0mm or screw M 6. Pins of other materials shall have at least the same strength. If the pin has several shearing points (piano hinges)there is no restriction as to the hings pin diameter		**P**
5.8	Padding	1.9mm	**N**
6.	**Test methods**		**P**
6.1	General		**P**
	An uncertainty of measurement of ±1,0mm is permitted for the tests specified in 6.2, 6.3 and 6.4		**-**
6.2	Vertical static load test of steps and platforms		**P**
	All type of products covered by this standard shall be subjected to this test on each step, platform and seat. The padding of a padded seat shall be removed for this test. The product shall be placed on a firm, flat surface and deployed for use as detailed in the instructions for use. Loading shall be applied centrally and evenly distributed over an area of 100mmx100mm. Firstly apply a pre-load of 200N for the duration of 1 min. After this remove the pre-load and set measuring equipment to read the resulting position of the surface the permanent deflection from the datum. Also measure the width of the surface being tested. Examine and record any cracks or ruptures of materials.	No cracks or ruptures of materials.	**P**
	Any permanent deflection of metal or plastic parts parts shall be max. 0,5% of the width of the platform or the step. Measurement shall be carried out 1 min after load removal.		**P**
6.3	Determination of friction coefficient		**P**

EN 14183			
Clause	**Requirement – Test**	**Result - Remark**	**Verdict**
	Position the product on a 2mm plain decorative high-pressure laminate(HPL)HPL EN 438-S333. Apply a load *F* of 125N to the centre of the bottom step(positioned as in 6.2). using appropriate measuring equipment measure the minimum horizontal pulling force *Z* required to overcome friction and cause the product to slide. Measure the weight of the product in newtons *G*	Test temperature:(20±5)℃ Duration:1 min μ =0.22	**P**
6.4	Seat suitability test		**N**
	This test only applies to step stools with padded seats		**-**
7	**Instructions for use**		**P**
	Suitable instructions for use have to be provided by the manufacturer. This shall include the maximum total load of not more than 150kg		**P**
8	**Marking**		**P**
	All marking shall be clear and durable and prominently positioned on the product. The marking shall include:		**P**
	-manufacturer's declaration of suitability of use. The manufacturer shall advise of any limit of use to which the product is allowed and any environment for which it is unsuitable(e.g."for indoor use only)		**-**
	-name of the manufacturer and/or supplier	Zhejiang Leader Industry & Trade Co., Ltd.	**-**
	-Product designation in accordance to clause 4	Step Stool	**-**
	-Year and month of manufacture and/or serial number	April, 2024	**-**
	-maximum total load	150kg	**-**

Appendix 1

The whole views of ‘Step Stool‘

Model: AY-H003HS



Appendix 2

The product marking label view of 'Step Stool'

Model: AY-H003HS

Step Stool

Model No: AY-H003HS

Standard: EN 14183

Max Load: 150Kg

Zhejiang Leader Industry & Trade Co., Ltd.

Made in China Manufacture date: April, 2024

-----End of Report------