

TEST REPORT

APPLICANT : Eurofins Product Testing Service (Shanghai) Co., Ltd.

ADDRESS : No. 395 West Jiangchang Road, Jing'an District, Shanghai, China

SAMPLE DESCRIPTION : Steel Step Rolling Ladder

SH REPORT NO. : EFSH18041724

SAMPLE RECEIVED DATE : 20-Apr-2018

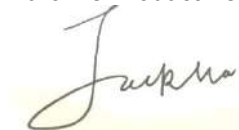
TURN AROUND TIME : 20-Apr-2018 to 25-Apr-2018

The following test item(s) was/were performed on selected sample(s) and/or component(s) appointed by applicant.

TEST REQUESTED	TEST METHOD/REGULATION	Result
Steel Step Rolling Ladder	Refer to BS EN 14183:2003, PM28 -as per client's request	Pass

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd Hangzhou Branch



Jack Ma
Hardline Lab Manager

Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to hz.info@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.

SAMPLE PHOTO



EFHZ18041363-CG-01

TO BE CONTINUED

TEST RESULT

Test Conducted:
Refer to BS EN 14183:2003 Steel Step Rolling Ladder (as per client's request)

1. Number to test sample: 1 Piece

2. Test result:

Clause	Test Method/ Requirement	Test Result
4	Functional dimensions, designations, requirements	N/A
5. Additional requirements		
5.1 Materials		
5.1.1 General: The requirements for materials only apply to load – bearing components.		
5.1.2 Plastic	When using plastic materials, ageing and temperature resistance have to be taken into account. Glass-fibre reinforced plastics shall be protected against penetration of water and dirt. The surface shall be smooth. The fibres shall be embedded.	N/C
5.1.3 Steel	Parts made of steel shall have a thickness of at least 0.9mm.	Pass
5.1.4 Aluminum	Parts made of aluminum shall have a thickness of at least 1.2mm	N/A
5.2 Steps and platforms	-Top surfaces of steps and platforms shall have resistance against slipping. -The contact surface of the coverings shall adhere firmly to the steps. -Steps and platforms shall be firmly and durably connected to the stiles -when loaded as specified in 6.2, the platform and the steps shall show no signs of damage, such as fractures, or cracks	Pass
5.3 Slip resistance		
5.3.1 Feet or bottom end of stiles	Feet or bottom end of stiles shall be soled with a slip resistant material. Requirements of 5.3 are considered to be met if successfully tested according to 6.3.	Pass
5.3.2 Roller and wheels	Where rollers or wheels are fitted, 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 ladder or rigid steps are loaded.	Pass
5.4 Opening restraint and compression security devices	Step ladder and stair type steps shall be prevented from unintended folding when deployed for use.	Pass
5.5 Design	-Finger traps shall be avoided as far as possible. -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. -Screws and nuts shall be secured against self-acting slackening. -Welding of joints is permitted if welding procedures and welding personnel are suitable.	Pass
5.6 Surface finish	-In order to avoid injuries, accessible edges, corners, and protruding parts shall be free of burrs, chamfered or rounded. -Metal parts susceptible to corrosion shall be protected by means of a paint coating or other coating. Under normal conditions aluminium alloy products are not likely to corrode and need no protection.	Pass

	-If wooden parts are coated, the coating shall be transparent and permeable to water vapour.	
5.7 Hinged (turning points)	<p>-Hinges shall connect the legs of the step ladder durably. Hinges shall be designed in such a manner that no abutment of the step ladder parts over the hinges if formed during use of the step ladder.</p> <p>-The hinge pin shall be secured against unintentional loosening. The diameter of steel hinge pins shall not be less than 5.0mm or screw M6. Pins of other materials shall have at least the same strength. If the pin has several shearing points there is no restriction as to the hinge pin diameter.</p>	N/A
5.8 Padding	An assembled seat may have padding, which shall not exceed a thickness of 20mm in an unload state.	N/A
6 Test methods		
6.2 Vertical static load test of steps and platforms	Apply a pre-load of 200N for 1 minute then remove the load, apply a load of 2600N for 1 minute then remove load. Load shall be applied over an 100mmX100mm area centrally and evenly distributed on each step/platform/seat. Permanent deflection shall be max.0.5% of the width of the platform or the step	Pass
6.3 Determination of friction coefficient	Apply a load F of 125N to the centre of the bottom step. Measure the minimum horizontal pulling force Z required to overcome friction and cause the product to slide. Measure the weight G of the product in Newton. Friction coefficient $\mu = Z/(G+F)$ shall be ≥ 0.20	Pass
6.4 Seat Suitability Test	<p>This test only applies to step ladders with padded seats.</p> <p>To test the seat as suitable for use as a climbing support, place a disc with a mass of 0,1 kg and a diameter of 100 mm on the centre of the seat. Place a cylindrical mass of 2 kg with a diameter of 100 mm on the disc.</p> <p>Measure and record the settlement of the disc due to the 2 kg mass after 1 min. When tested, the settlement shall not exceed 10 mm.</p>	N/A
7 Instructions for use	Suitable instructions for use have to be provided by the manufacturer. This shall include the maximum total load of not more than 150kg	Pass
8 Marking	<p>All marking shall be clear and durable and prominently positioned on the product. The marking shall include:</p> <ol style="list-style-type: none"> 1. 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. 2. Name of the manufacturer and/or supplier 3. Product designation in accordance to clause 4 4. Year and month of manufacture and/or serial number 5. Maximum total load 	Pass

Note:

N/A=Not applicable

N/C=Not conducted as client's requirement

*** END OF THE REPORT ***