TEST REPORT

Report Number. ..... :	HA0126NB04065501SF
Applicant's name..... :	SHAOXING LITTLE TREE IMP & EXP CO., LTD.
Applicant's address ..... :	Building 1, No. 12, Shuizhu Natural Village, Xishan Village, Dashiju Town, Xinchang County, Zhejiang Province, China
Name of manufacturer ..... :	SHAOXING LITTLE TREE IMP & EXP CO., LTD.
Address of manufacturer..... :	Building 1, No. 12, Shuizhu Natural Village, Xishan Village, Dashiju Town, Xinchang County, Zhejiang Province, China
Name of factory (ies)..... :	SHAOXING LITTLE TREE IMP & EXP CO., LTD.
Address of factory (ies) ..... :	Building 1, No. 12, Shuizhu Natural Village, Xishan Village, Dashiju Town, Xinchang County, Zhejiang Province, China
Product Name ..... :	Ladder
Trade Mark(s)..... :	N/A
Model No. ..... :	LT-ladder004
Size. ..... :	46*52*60CM
Total number of pages..... :	25 pages
Standard ..... :	Ladders - Part 1: Terms, types, functional sizes Ladders - Part 2: Requirements, testing, marking Ladders - Part 3: Marking and user instructions EN 131-1:2015+A2:2025 EN 131-2:2010+A3:2025 EN 131-3:2018+A1:2025
Date of Receipt sample..... :	April 08, 2026
Date of Test..... :	April 09, 2026 to April 21, 2026
Date of issue ..... :	April 22, 2026
Test Report Form No...... :	HATEK_EN 131_1&2&3
Test Result ..... :	See next pages

Prepared By:
Ningbo HATEK Co., Ltd.
6F, No. 65, Mujin Road, National Hi-Tech Zone, Ningbo, Zhejiang 315013, China
Tel: +86-574-87171888 E-mail: info@hatek.com.cn

Prepared by:

Rick chen

Rick Chen / Project Engineer

Approved by:

Frank Jin / Technical Manager

Summary of testing:

From the result of our inspection and tests on the submitted samples, we conclude that they comply with the requirements of standards.

Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods.

Tests performed (name of test and test clause):	**Testing location:**
full tests.	Testing Laboratory name: Ningbo HATEK Co., Ltd. Address: 6F, No. 65, Mujin Road, National Hi-Tech Zone, Ningbo, Zhejiang 315013, China

Possible test case verdicts:

- test case does not apply to the test object ..... : N/A

- test object does meet the requirement ..... : P (Pass)

- test object does not meet the requirement ..... : F (Fail)

General remarks:

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 Issuing testing laboratory.

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

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

General product information:

1. This product is a household folding ladder.

<table>
<tr><th colspan="4">EN 131-1:2015+A2:2025</th></tr>
<tr><td>Clause</td><td>Requirement + Test</td><td>Result - Remark</td><td>Verdict</td></tr>
<tr><td>4</td><td>Functional sizes</td><td></td><td>P</td></tr>
<tr><td>4.1</td><td>General</td><td></td><td>P</td></tr>
<tr><td></td><td>The drawings are examples only and products need not correspond. However, dimensions are binding.
The rungs and steps of a ladder shall be equally spaced with a tolerance of ± 2 mm.</td><td></td><td>P</td></tr>
<tr><td></td><td>In addition to the requirements on the complete ladder, sections which can be dismantled without the
use of tools shall conform, section by section, with the requirements for one piece leaning ladders or
leaning rung ladders.</td><td></td><td>N/A</td></tr>
<tr><td>4.2</td><td>Leaning rung ladders</td><td></td><td>N/A</td></tr>
<tr><td>4.2.1</td><td>General</td><td></td><td>N/A</td></tr>
<tr><td></td><td>Functional sizes are given in Table 2.
Table 2 — Functional sizes of leaning rung ladders
Dimensions in millimetres
<table>
<tr><th></th><th>b_1[a]</th><th>b_2[a] where $l_1 \leq 3\,000$</th><th>b_2[a] where $l_1 > 3\,000$</th><th>e[b]</th><th>l_3 and l_4[a]</th><th>l_5</th><th>α</th></tr>
<tr><td>min.</td><td>280</td><td>340</td><td>$b_1 + 0{,}1\,l_1 + 2\,t$</td><td>—</td><td>$0{,}5\,l_5$</td><td>250</td><td>65°</td></tr>
<tr><td>max.</td><td>—</td><td>—[c]</td><td>—[c]</td><td>45</td><td>$l_5 + 15$</td><td>300</td><td>75°</td></tr>
</table>
[a] This dimension applies also to single parts of a ladder if they can be used separately e.g. as leaning ladder.
[b] The dimension e for extending ladders (see Figure 27) is relevant only when the upper section slides over the lower section.
[c] The dimension b_2 for leaning ladders may be limited to a maximum of 1200 mm at the discretion of the manufacturer.
!deleted footnotes"</td><td></td><td>N/A</td></tr>
<tr><td></td><td>The minimum permanently available base width for leaning rung ladders shall be derived from the
formula b2 in Table 2. Combination and multi-hinge ladders shall also meet the minimum base width
requirements in leaning ladder modes of use. For leaning ladders the method of achieving the
permanently available minimum base width is at the discretion of the manufacturer but it shall be
permanently incorporated in the design and not provided by removable components or accessories. It is permissible for a device which provides the required base width to be supplied for assembly by the end user with the use of tools. It is permissible for the design to allow for the base width bz or its position to be temporarily adjusted by the user. Where the base width can be temporarily adjusted by the user then instructions and markings shall be provided in accordance with the requirements of EN 131-3.</td><td></td><td>N/A</td></tr>
<tr><td>4.2.2</td><td>One-piece leaning rung ladders</td><td></td><td>N/A</td></tr>
<tr><td>4.2.3</td><td>Sectional ladders</td><td></td><td>N/A</td></tr>
<tr><td>4.2.4</td><td>Extending ladders</td><td></td><td>N/A</td></tr>
<tr><td></td><td>If the top ladder element is more than 3 ooo mm then it should not be separable if the design introduces
new hazards in use.</td><td></td><td>N/A</td></tr>
</table>

<table>
<tr><th colspan="4">EN 131-1:2015+A2:2025</th></tr>
<tr><th>Clause</th><th>Requirement + Test</th><th>Result - Remark</th><th>Verdict</th></tr>
<tr><td></td><td>The design of the stabilizer shall not create the possibility of foreseeable misuse or introduce additional hazards. See Figure 32.</td><td></td><td>N/A</td></tr>
<tr><td></td><td>The dimension of the overlap depends on calculation and design of the ladder. It is determined by the manufacturer. The function and carrying capacity of the overlap shall be verified by means of the test according to EN 131-2.</td><td></td><td>N/A</td></tr>
<tr><td>4.3</td><td>Standing rung ladders</td><td></td><td>P</td></tr>
<tr><td></td><td>The legs are connected with hinge joints and shall be secured from sliding apart. Functional sizes are given in Table 3.
Table 3 — Functional sizes of standing rung ladders
Dimensions in millimetres
<table>
<tr><th></th><th>b_1</th><th>b_2</th><th>l_4</th><th>l_5</th><th>α</th><th>β</th></tr>
<tr><td>min.</td><td>280</td><td>$b_1 + 0{,}1\ l_2 + 2\ t$</td><td>$0{,}5\ l_5$</td><td>250</td><td>65°</td><td>65°</td></tr>
<tr><td>max.</td><td>—</td><td>—</td><td>$l_5 + 15$</td><td>300</td><td>75°</td><td>75°</td></tr>
<tr><td colspan="7">!deleted footnotes"</td></tr>
</table></td><td></td><td>P</td></tr>
<tr><td>4.4</td><td>Combination ladders</td><td></td><td>N/A</td></tr>
<tr><td>4.4.1</td><td>General</td><td></td><td>N/A</td></tr>
<tr><td></td><td>When combination ladders are used as standing ladders, the ladder parts shall be secured from sliding apart.</td><td></td><td>N/A</td></tr>
<tr><td>4.4.2</td><td>Two-piece combination ladder</td><td></td><td>N/A</td></tr>
<tr><td></td><td>If the top ladder element is more than 3ooomm then it should not be separable if the design introduces new hazards in use. See Figure 32.
!Table 4 — Functional sizes of two-piece combination ladders
Dimensions in millimetres
<table>
<tr><th></th><th>b_1</th><th>b_2 in leaning ladder mode</th><th>b_2 in standing ladder mode</th><th>l_3</th><th>l_4</th><th>l_5</th><th>α</th><th>β</th></tr>
<tr><td>min.</td><td>280</td><td>$b_1 + 0{,}1\ l_1 + 2\ t$[a]</td><td>$b_1 + 0{,}15\ l_8 + 2\ t$</td><td>$0{,}5\ l_5$</td><td>$0{,}5\ l_5$</td><td>250</td><td>65°</td><td>65°</td></tr>
<tr><td>max.</td><td>—</td><td>—</td><td>—</td><td>$l_5 + 15$</td><td>$l_5 + 15$</td><td>300</td><td>75°</td><td>75°</td></tr>
<tr><td colspan="9">[a] For l_1 see Figure 27.</td></tr>
</table></td><td></td><td>N/A</td></tr>
<tr><td>4.4.3</td><td>Three-piece combination ladder</td><td></td><td>N/A</td></tr>
<tr><td></td><td>If the top ladder element is more than 3 0o0 mm then it should not be separable if the design introduces new hazards in use.</td><td></td><td>N/A</td></tr>
<tr><td>4.5</td><td>Leaning step ladders</td><td></td><td>N/A</td></tr>
</table>

EN 131-1:2015+A2:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	The permissible inclination a applies to the height of the touch-down surface above floor level, when the steps are in horizontal position. Functional sizes are given in Table 6. **Table 6 — Functional sizes of leaning step ladders** Dimensions in millimetres b_1 | b_2 where $l_1 \leq 3\,000$[a] | b_2 where $l_1 > 3\,000$[a] | l_4 | l_5 | α min. | 280 | 340 | $b_1 + 0{,}1\,l_1 + 2\,t$ | $0{,}5\,l_5$ | 230 | 60° max. | — | —[b] | —[b] | $l_5 + 15$ | 300 | 70° [a] This size applies also to single parts of a ladder if they can be used separately e.g. as leaning ladder. !deleted footnote" !b The dimension b_2 for leaning ladders may be limited to a maximum of 1 200 mm at the discretion of the		N/A
4.6	**Standing step ladders**		P
	The legs are connected with hinge joints and shall be secured from sliding apart.		P
	During the use of ladder the steps shall be in horizontal position.		P
	The projection of the handrail onto the platform shall not go beyond the latter.		P
	The radius of the horizontal edges of a platform shall be max 15 mm (see Figure 37) in order to avoid slipping at the edges of the platform.		P
	Functional sizes are given in Table 7. **Table 7 — Functional sizes of standing step ladders** Dimensions in millimetres b_1 | b_2 | c | d | l_4 | l_5 | l_6[b] | l_7 | α | β min. | 280 | $b_1 + 0{,}1\,l_2 + 2\,t$ | — | 600[a] | $0{,}5\,l_5$ | 230 | 250 | 250 | 60° | 65° max. | — | — | 30 | — | $l_5 + 15$ | 300 | — | — | 70° | 75° !deleted footnote" [a] Measured vertically. [b] It shall be possible to inscribe a square of 250 mm x 250 mm in the platform (see Figure 37). !deleted footnote"		P
4.7	**4.7 Standing rung and step ladder**		N/A
	The rung section shall be designed in accordance with 4.3 and the step section in accordance with 4.6.		N/A

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
4	**Requirements**		P
4.1	**General**		P
	The requirements are based upon a maximum total load of 1471 N (150 kg).		P
4.2	**Materials**		N/A
4.3	**Design**		P
	The design shall seek to minimize the existence of shearing and squeeze points and where they do exist to minimize the shearing and squeezing effects as far as practicable.		P
	NOTE Shear or squeeze points exist if the distance between two accessible parts relative to each other is less than 18 mm and more than 7 mm in any position during movement (see EN 581-1).		P
	All connections should be durable and have a strength corresponding to the strain. The connections should be designed in a manner that arising notch tensions remain low.		P
	Screws and nuts shall be secured against loosening, e.g. by means of self locking or mechanically locked safety devices.		P
	Nails are allowed only if their function is related to the production process, e.g. fixation during the drying of glues.		P
	Welding of joints is permitted if welding procedures and welding personnel are suitable. EN ISO 14731 and EN ISO 3834-1 to EN ISO 3834-4 have to be observed.		P
4.4	**Surface finish**		P
	In order to avoid injuries, accessible edges, corners, and protruding parts shall be free of burrs, for example chamfered or rounded.		P
	Metal parts susceptible to corrosion shall be protected by means of a paint coating or other coating. Under normal conditions aluminium alloys are not susceptible to corrosion.		P
	Wooden parts shall be smoothed and coated on all sides.		N/A
	The coating shall be transparent and permeable to water vapour.		P
4.5	**Hinges (turning points)**		N/A
	Hinges shall connect the legs of the standing rung ladders and the standing step ladders durably. Hinges shall be designed in such a manner that no abutment of the ladder parts over the hinges is formed during use of the ladder.		N/A

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	The hinge pin shall be secured against unintentional loosening. Pins shall have at least the same strength as M 6 (5.3 mm) pins of steel 8.8. If the pin has several shearing points (piano hinge) there is no restriction as to the hinge pin diameter.		N/A
	The hinges shall satisfy the tests according to 5.8.		N/A
4.6	**Opening restraints**		P
	The legs of the standing ladders shall be prevented from opening beyond the normal use configuration by means of opening restraints. If chains are used, all chain links with the exception of the first and the last one shall be free to move.		P
	The opening restraints shall satisfy the tests according to 5.8.		P
4.7	**Rungs/steps/platforms**		P
	Rungs, steps and platforms made of metal or plastics shall have a textured surface on the working face to reduce slipping. The contact surface of the coverings shall adhere firmly to the rungs or steps.		P
	Rungs and steps shall be firmly and durably connected to the stiles.		P
	Wooden rungs shall be tenoned and mortised into the stiles and glued and wedged in the case of through tenon construction. The minimum dimensions of wooden rungs are specified.		N/A
	Round rungs shall have a diameter greater than or equal to 25 mm. The top surface of flat standing surfaces shall have an angle less than or equal to 25° to the horizontal. For leaning ladders the angle related to the stile shall be 65° to 90° for rungs and 60° to 70° for steps.		N/A
	Rungs/steps/platforms shall satisfy the tests according to 5.6 and 5.7.		P
4.8	**Platform**		P
	If the topmost walking surface of a standing ladder is designed as a foldable platform, the latter shall be lifted up by a device when the ladder is folded.		P
	The platform shall satisfy the kick-up test according to 5.10.		P
4.9	**Ladder feet and anti-skid devices**		P
	Bottom ends of the ladder shall be slip resistant.		P
4.10	**Extending and sectional ladders**		N/A
4.10.1	**Rung/step hooks/locking devices**		N/A
	The ladder parts of push-up extension ladders shall be secured from unintentional closing and separation in the position of use.		N/A

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	All sectional and extending ladders shall be fitted with a locking device to keep the ladders hooks engaged on the rung during use. It is the choice of the manufacturer whether the operation of the locking device is manual or automatic. The locking device shall be capable of supporting the weight of the lower parts of the ladder.		N/A
	Locking devices on rope-operated extending ladders shall reliably ensure a safe catch.		N/A
	The rung/step hooks of rope-operated extension ladders shall be designed in such a way that the upper ladder parts cannot fall down by more than one rung per ladder part if the rope loosens or breaks. This safety requirement shall apply both when the ladder is vertical and in the position of use.		N/A
	During use of the ladder the rungs overlapping one another shall be in the same plane perpendicular to the stiles or in one horizontal plane or in any other plane between these.		N/A
5	**Testing**		P
5.1	**General**		P
	For all tests, unless otherwise stated in the particular test, the following tolerances apply:		P
	— ± 1 mm for longitudinal measurements;		P
	— ± 5 mm for the measurement of the distance between the supports and the overhanging length;		P
	— ± 1° for the measurement of angles;		P
	— ± 1 % for static forces and torque.		P
5.2	**Strength test for all ladders**		P
	The test shall be carried out on the complete ladder		N/A
	In the case of an extending ladder, the test shall be carried out with the ladder fully extended.		N/A
	In the case of a combination ladder, the test shall be carried out with the ladder fully extended in all of its usable configurations.		N/A
	In the case of standing ladders the test shall be carried out with the ladder fully extended in the position of use.		P
	In the case of sectional ladders the test shall be carried out with the ladder at full length with all permitted pieces.		N/A
	Where the ascendable side of the ladder cannot be determined by the construction of the product, it shall be tested twice. For the test on the second side a new ladder shall be used. Prior to carrying out the test on the second side of the new ladder, it shall be subjected to all of the preceding tests in the test sequence given in Table A.1.		N/A

<table>
<tr><th colspan="4">EN 131-2:2010+A3:2025</th></tr>
<tr><th>Clause</th><th>Requirement + Test</th><th>Result - Remark</th><th>Verdict</th></tr>
<tr><td></td><td>Ladders with separately extending stiles shall be tested with their stiles in the least favourable position.</td><td></td><td>N/A</td></tr>
<tr><td></td><td>Lateral or pole type stabilizers shall not be deployed in this test if the design permits the ladder to be used with the lateral or pole type stabilizers removed or temporarily adjusted as permitted by EN 131-1:2015, 4.2.1, General.</td><td></td><td>P</td></tr>
<tr><td></td><td>Erect the ladder in its position of use at the maximum extension. Leaning ladders shall be erected at (65 ± 0.5)° (measured at vertical height of 1 m) with the top resting against a smooth vertical surface and with the base of the ladder restrained where it makes contact with the ground to prevent it slipping. The test load F in Figure 10 from Table 2 shall be applied to the rung or tread nearest the centre of the ladder and at a point 50 mm from the inside of one stile and distributed over a 100 mm of the length of the rung or tread for a period of 1 min. Care should be taken to apply the load smoothly.
Table 2 — Strength test for all ladders
<table>
<tr><th>Ladder class</th><th>Test load F
N</th></tr>
<tr><td>Non-professional</td><td>2 250</td></tr>
<tr><td>Professional</td><td>2 700</td></tr>
</table></td><td></td><td>P</td></tr>
<tr><td></td><td>Where the test ladder includes a base stabilizer bar then clearance under both stiles of the ladder of a minimum 10 mm shall exist throughout the test, e.g. by putting distance pads under the feet. On completion of the test remove the load and inspect the ladder.</td><td></td><td>N/A</td></tr>
<tr><td></td><td>The ladder shall remain functional with no fracture or visible cracks. The ladder shall sustain the load without ultimate failure. Permanent deformation shall be allowed.</td><td></td><td>P</td></tr>
<tr><td>5.3</td><td>Bending test of the stiles</td><td></td><td>P</td></tr>
<tr><td></td><td>The test shall be carried out on the complete ladder. In the case of extending ladders and combination ladders the test shall be carried out on the complete extended ladder. Sectional ladders shall be tested at full length with all permitted pieces. The test shall be carried out without supporting legs if not permanently fixed to the ladder.</td><td></td><td>P</td></tr>
<tr><td></td><td>Where the ascendable side cannot be determined by the construction of the product, or where it is a multiple part combination ladder the ladder shall be tested twice. For the second test the ladder shall be rotated 180° about the longitudinal axis.</td><td></td><td>P</td></tr>
<tr><td></td><td>The ladder shall be placed horizontally on supports situated 200 mm from each end of the ladder.</td><td></td><td>P</td></tr>
<tr><td></td><td>The supports shall be cylindrical with diameters between 25 mm and 100 mm and one shall be free to rotate the other shall be fixed.</td><td></td><td>P</td></tr>
</table>

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	The test load shall be slowly applied in the middle of the ladder equally to both stiles over a width of 100 mm while it has to be taken care that an applying by jerks is avoided.		P
	A pre-load of 100 N shall be applied for the duration of one minute. The position of the ladder after removal of the pre-load is the origin for the measurement.		P
	A test load F of 750 N shall be applied vertically on the centre of the ladder for a duration of at least 1 min.		P
	Thereby the maximum permissible deflection fmax as a function of the distance l between the supports shall be:		P
	— f_{max} =5 × l² × 10^{-6} mm for ladders of length less than or equal to 5 m;		P
	— f_{max} =0.043 × l— 90 mm for ladders of length more than 5 m and less than or equal to 12 m;		N/A
	— f_{max} =0.06 × l— 294 mm for ladders of length more than 12 m.		N/A
5.4	**Lateral deflection test of the ladder**		P
	This test shall be conducted on all one-piece ladders as well as on each ascendable part of multiple-piece ladders (standing ladders, sectional ladders, combination ladders, extending ladders) and on the supporting-legs of standing rung-or step-ladders.		P
	The ladder shall be placed horizontally on supports situated 200 mm from each end of the ladder.		P
	The supports shall be cylindrical with diameters between 25 mm and 100 mm and one shall be free to rotate the other shall be fixed.		P
	The ladder shall be placed in the lateral position.		P
	A pre-load of 100 N shall be applied for the duration of one minute. The position of the ladder after removal of the pre-load is the origin for measurement.		P
	A load F of 250 N shall be applied to the lower stile equidistant from the supports.		P
	The deflection is measured equidistant from the supports 1 minute after loading.		P
	Thereby the maximum permissible deflection fmax as a function of the distance l between the supports shall be f_{max} =0.005 l, in millimetres		P
5.5	**Bottom stile ends test**		P

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	Place the ladder laterally, with the longitudinal axis of the ladder in the horizontal position. The lower stile is to be fixed to the support so that the stile ends overhang the supporting surface. If the rungs/steps are bolted, riveted, or similarly fixed to the stile the edge of the support shall be in line with the bottom lower edge of the assembling hole. If the rungs/steps are fixed to the stile without the stile being penetrated the edge of the support shall be in line with the lower edge of the rung/step.		P
	If the ladder has a bar type stabilizer, then this test is not carried out.		N/A
	A rigid load block 50 mm wide is placed with its end up to and parallel with the end of the stile. The load block shall rest on the stile and shall affect the whole width of the stile. The lateral deflection f of the stile end is measured at the outer edge of the load block in the longitudinal axis.		P
	A vertical force F of 1100 N is placed in the middle of the load block and is maintained for one min. The permanent deflection after removal of the test load together with any damages are noted.		P
	The test is repeated on the lower stile without turning the ladder.		P
	The permanent deflection fin each test shall not exceed 2 mm.		P
	Neither fracture nor visible cracks are allowed.		P
	This test shall also be performed on supporting legs.		P
5.6	**Vertical load on rungs, steps and platforms**		P
5.6.1	**General**		P
	A pre-load F of 200 N shall be applied for the duration of one minute. The position of the rung/step/platform after removal of the pre-load is the origin for measurement.		P
5.6.2	**Rungs and steps**		P
	In the position of use of the ladder a test load F of 2600 N shall be applied vertically on the mid-point of the weakest rung or step of any design evenly distributed over a width of 100 mm and a depth equal to the rung/step and for the duration of one min.		P
	The maximum permanent deformation after removal of the test-load shall be less than or equal to 0.5 % of the inner width b1 (see EN 131-1), measured underneath the tested step.		P
5.6.3	**Platform**		P
	The platform shall be tested at two positions, in the centre and at a corner of the front edge.		P

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	With the ladder positioned as in use, a test load F of 2 600 N, uniformly distributed over an area of 100 mm x 100 mm shall be applied for the duration of one min.		P
	The maximum permanent deformation after removal of each test load shall be less than or equal to 0.5 % of the inner width b1 (see EN 131-1), measured from above the platform parallel to the rungs or steps at the point where the load has been applied. The requirement after the second test shall be that no permanent deformation greater than 0.5 % of bi is visible at the connection between platform and stile measured from the underside.		P
5.7	**Torsion test of rungs and steps**		P
	A torque M of 50 Nm shall be applied on the midpoint of the rung or step via a 100 mm wide clamping device. The torque shall be applied alternately 10 times in clockwise and 10 times in counterclockwise direction for a period of 10 s each.		P
	During testing there shall be no relative movement in the connection between stile and rung/step.		P
	After the test a permanent deformation shall be 1° at maximum with a tolerance of ± 0.2°.		P
5.8	**Test of opening restraints and hinges of standing ladders**		P
5.8.1	**General**		P
	This test is for standing ladders or combination ladders used as standing ladders. For the purpose of this test, the working position for these ladders is two parts connected at the top and secured against sliding away from each other. Where a ladder is fitted with both automatic and manual restraint devices, only the automatic device shall be employed. The engagement of a ladders manual restraint device is only permitted where no automatic device is fitted.		P
	Each leg of the ladder in the working position is placed on a platform provided with multidirectional rollers. The effects of friction, from both the rollers and floor surface, shall be negligible. The test is to be conducted on a clean, smooth finish concrete floor.		P
	After removal of the test loads of the tests according to 5.8.2 to 5.8.4 no visible permanent deformation shall occur on the hinge joints, opening restraint devices and their attachments. The ladder shall not show any visible damages such as cracks, indentations, etc. Permanent deformation is acceptable only if it does not impair the fitness for use of the ladder.		P
5.8.2	**Bilaterally ascendable ladder**		N/A

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	The test load F of 2600 N is divided into two loads of 1300 N, distributed over two plates each 100 mm long with a width at least equal to the surface of the rung or step to be applied to the uppermost rung or step as close as possible to the stiles for a duration of 1 min. This test is then repeated on the other leg.		N/A
5.8.3	**Standing ladder with platform**		P
	The test load F of 2600 N is divided into two loads of 1300 N, distributed over two plates that are each 100 mm x 100 mm to be applied to front edge of the platform as close as possible to the stiles for a duration of 1 min. This test is then repeated on the rear edge of the platform.		P
5.8.4	**Unilaterally ascendable ladder**		P
	The test load F of 2600 N is divided into two loads of 1300 N, distributed over two plates each 100 mm long with a width at least equal to the surface of the rung or step to be applied to the uppermost rung or step of the ascending leg as close as possible to the stiles for a duration of 1 min.		P
5.9	**Test for ladder rung/step hooks of extending ladders and combination ladders**		N/A
	The ladder is extended by at least one rung/step distance and placed in a vertical position. The length of the test piece will be left to the choice of the tester.		N/A
	A uniformly distributed test load F of 3500 N shall be applied vertically to the upper part of the ladder for a period of 1 min.		N/A
	After removal of the test load, there shall be no permanent deformation which impairs the fitness for use of the ladder.		N/A
5.10	**Kick-up test of the platform of standing ladders**		P
	Place the standing ladder in the working position on a level surface and apply a force F of 100 N over a 100 mm width to the pivoted edge of the platform at an angle of 90° to the horizontal towards the vertical centre line of the steps. The platform shall not lift from its stop by more than 6°.		P
5.11	**Feet pull test**		P
5.11.1	**For ladder feet made of one part**		P
	Fix the ladder. Attach a fixing to the centre of a ladder foot. The force is to be applied in a direction most likely to separate the foot from the stile.		P
	A load of 150 N shall be applied for 1 min.		P
	After the test, the foot shall remain functional and show a separation from the stile of less than or equal to 4 mm.		P

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
5.11.2	**For feet made of one part on stabilizer bars supplied by the ladder manufacturer**		N/A
	Prevent the ladder from moving by placing stops around one pair of feet. Apply the force to a free foot in the position and direction most likely to separate the foot from the stabilizer bar.		N/A
	A load of 150 N shall be applied for 1 min.		N/A
	After the test, the foot shall remain functional and show a movement from its original position of less than or equal to 4 mm.		N/A
5.11.3	**For ladder feet and feet of stabilizer bars made of more than one part**		N/A
	The relevant test in 5.11.1 or 5.11.2 shall be performed. Additionally, the section of the foot that generates resistance to movement relative to the ground shall have a load of 150 N applied for 1 min in a location and direction that is likely to be the most critical, as determined by the tester. After the test, there shall be no indication of separation between the different parts of the foot.		N/A
	If the sections of the ladder foot that provide the friction between the ladder and the ground are loosened or lost, this shall be clearly visible when the ladder is in the position of use. When these sections are worn through, this shall also be visible during the pre-use inspection of the ladder.		N/A
	The sections of the ladder foot that are designed to provide the friction between the ladder and the ground shall be the only part of the foot in contact with the ground under user or test load with in the position of use. This part of the ladder foot, even when worn, shall not be capable of being pushed inside the upper part of the foot when the ladder is in the position of use.		N/A
5.12	**Test on hand-/knee rails**		P
5.12.1	**Standing ladder top hand-/knee rails**		N/A
	The standing ladder shall be fixed horizontally. A vertical load of 300 N is applied to the top centre of the hand-/knee rail. The load shall be applied for 1 min over a length of 100 mm and a width at least equal to the hand-/knee rail material.		N/A
	After the test, the hand-/knee rail shall not show any visible permanent deformation, which does impair the fitness for use of the ladder.		N/A
5.12.2	**Side handrail**		N/A

<table>
<tr><th colspan="4">EN 131-2:2010+A3:2025</th></tr>
<tr><th>Clause</th><th>Requirement + Test</th><th>Result - Remark</th><th>Verdict</th></tr>
<tr><td></td><td>Set up the ladder in its position of use and at its fully extended length in accordance with the manufacturer's instructions. Place a stop to prevent movement of the foot of the stile to which the handrail being tested is attached. Apply a static load F of 400 N over a 100 mm pad to the centre of the rung or tread nearest the centre of the extended ladder. Maintain this load in position for the duration of the tests. Apply each test force according to Table 3 sufficiently slowly to eliminate any dynamic effects. Apply each force 10 times and maintain it for 5 s each time. Apply outward forces A, B and C in two directions (perpendicular and parallel to the plane of the ladder) and downward force D parallel to the plane of the ladder. Apply the force given in Table 3 and apply an outward force A, B and C also at any other point on the handrail which due to its design is likely to cause failure. Apply each force separately.
Table 3-Testloads for handrail test
<table><tr><th>Direction</th><th>Direction N</th></tr><tr><td>Outward force A</td><td>100</td></tr><tr><td>Outward force B</td><td>100</td></tr><tr><td>Outward forceC</td><td>100</td></tr><tr><td>Outward forceD</td><td>500</td></tr><tr><td>Static load F</td><td>400</td></tr></table></td><td></td><td>N/A</td></tr>
<tr><td></td><td>Upon completion of the tests there shall be no failure of handrail fixings. The permanent deformation at the points of application of load shall not exceed 15 mm. The distance between the stile and the handrail during the test shall not be less than 15 mm.</td><td></td><td>N/A</td></tr>
<tr><td>5.13</td><td>Maximum extension of ladder</td><td></td><td>N/A</td></tr>
<tr><td></td><td>Extend the ladder to the maximum possible length. The lower stile ends of the upper sections are not permitted to pass the second rung from top of the section underneath.</td><td></td><td>N/A</td></tr>
<tr><td>5.14</td><td>3-part combination ladder in A-position test</td><td></td><td>N/A</td></tr>
<tr><td></td><td>For a three part combination ladder in the “A” position with the top section fully extended in the working position, the free movement of the top section shall be less than or equal to 5°.</td><td></td><td>N/A</td></tr>
<tr><td>5.15</td><td>Torsion test for standing ladders</td><td></td><td>P</td></tr>
<tr><td></td><td>The test shall be carried out on all standing ladders and all combination ladders in standing ladder mode.</td><td></td><td>P</td></tr>
<tr><td></td><td>The test shall be carried out with the standing ladder in the position of use on a flat, smooth and level floor.</td><td></td><td>P</td></tr>
<tr><td></td><td>One stile of the front section shall be secured to locate the ladder. Mark the floor adjacent to the other stile to form a datum for measurement.</td><td></td><td>P</td></tr>
<tr><td></td><td>One stile of the front section shall be secured to locate the ladder. Mark the floor adjacent to the other stile to form a datum for measurement.</td><td></td><td>P</td></tr>
</table>

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	A vertical load F1 of 736 N uniformly distributed, is applied to topmost rung or step or the platform of the ladder.		P
	A horizontal load F2 of 137 N shall be applied to the end of the load bar towards the rear of the ladder perpendicular to the bar and parallel to the ground.		P
5.16	**Test methods for plastic ladders**		N/A
5.17	**Durability test for standing ladders**		P
5.17.1	**General**		P
	This test is for standing ladders or any ladder that can be used as a standing ladder.		P
	The test has criteria of 10000 cycles for non-professional class and 50000 cycles for professional class and this test to be a conditioning test before the test of opening restraints and hinges of standing ladders.	non-professional 10000 cycles	P
5.17.2	**Principle**		P
	The standing ladder is placed in position of use on the testing surface with the 4 standing ladder stiles constrained to a fixed part by elastic rope/tape to prevent excessive progressive movement of the standing ladder.		P
	Two equal loads P1 and P2 are applied to the standing ladder by testing apparatus following a well-defined load versus time law of cycles: one load is applied to the topmost rung/step/platform and the other one is applied to the rung/step in the middle of the ascending leg.		P
	The load application shall continue until the defined load value is no longer maintained by the thrust device or until to the collapse of standing ladder or until the defined number of cycles for each class has been achieved.		P
	The maximum number of cycles is registered.		P
5.17.3	**Apparatus**		P
5.17.4	**Test condition-Ambient condition**		P
5.17.5	**Test requirements**		P
5.17.6	**Test procedure**		P
5.18	**Base slip test for leaning ladders**		N/A
5.18.1	**Ladders to be tested**		P

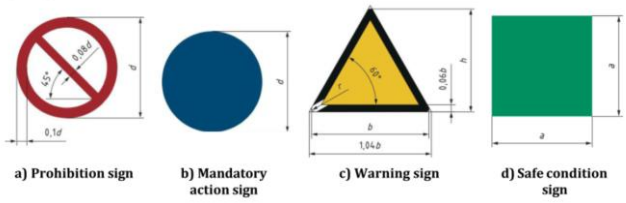
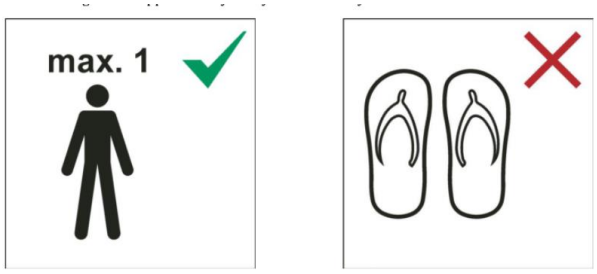
EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	All leaning ladders or ladders that may be used as a leaning ladder shall be tested in accordance with Table 5. **Table 5 — Base slip test for leaning ladders** Ladder type / Test type Single part leaning ladders 4 m or less in length — The whole ladder shall be tested. Single part leaning ladders greater than 4 m in length — A 4 m length from the lower end of the ladder shall be tested. Multi-part sectional or extending leaning ladders where the fully assembled length or fully extended length is less than 4 m — The whole ladder is tested in the fully assembled or fully extended condition. Multi-part sectional ladders where the fully assembled length is greater than 4 m — The base section or an assembly of parts including the base section shall be tested with a length closest to a maximum of 4 m. Extending leaning ladders where the fully extended length is greater than 4 m — The ladder shall be extended to a length closest to a maximum of 4 m. Multi-part sectional ladders where the parts are less than 4 m in length — The base section or an assembly of parts including the base section shall be tested with a length closest to a maximum of 4 m. Multi-part extending ladders where the parts are less than 4 m — The ladder shall be extended to a length closest to a maximum of 4 m.		P
	Where the ascendable side cannot be determined, the test shall be repeated. For the second test the ladder shall be rotated 180° about its longitudinal axis. Optionally, a second ladder may be used.		P
	Where ladders have stabilizing devices they should be deployed in this test the way the manufacturer designed.		N/A
	In the case of combination ladders that may be used as a leaning ladder, they shall be tested as a leaning ladder.		N/A
	The feet of the ladder shall be new.		P
	The surface supporting the base of the ladder shall be a sheet of float glass conforming to the requirements of EN 572-2. The glass shall be of a suitable thickness to support the weight of the ladder.		P
	The surface supporting the upper end of the ladder shall be firm and smooth stainless steel, smooth glass or smooth high pressure laminate.		P
5.18.2	**Pre-test procedures**		P
	Prior to carrying out the test, the float glass surface supporting the base of the ladder and the surface supporting the upper end of the ladder shall both be cleaned using pure industrial grade ethanol, and a clean-room dry hygiene wipe. After cleaning remove any remaining ethanol with another cleanroom dry hygiene wipe.		P
	Prior to carrying out the test, the feet of the ladder shall be cleaned with a low particulate, dry hygiene wipe suitable for use in an ISO class 5 clean room according to EN ISO 14644-1.		P
	The supporting surfaces shall be left to dry for 20 min before positioning the ladder.		P
5.18.3	**Test procedure**		P

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Clause	Requirement + Test	Result - Remark	Verdict
	The ladder shall be positioned at an angle of 75° or the maximum angle up to 75° permitted by the design. Its feet shall be on the float glass base and with the top of the ladder resting against the upper supporting surface. Confirm the angle of the ladder is correct by measuring it with an inclinometer accurate to within ± 0.5° positioned on the stiles and adjacent to the base of the ladder.		P
	The base of the ladder shall be restrained to prevent outward movement.		P
	A datum shall be established at the base of the ladder as the origin of measurement for outward movement of the feet of the ladder.		P
	The air temperature shall be measured within 100 mm measured horizontally from the ladder feet and at a height no greater than 10 mm from the float glass surface supporting the base of the ladder. The surface temperature of the float glass supporting the base of the ladder, the ladder feet and the air temperature surrounding the feet shall be (20 ± 2) C before the testing and shall remain within this range during the testing.		P
	A vertical downwards test load of 1471 N shall be applied to the midpoint of the fourth rung down from the top of the ladder		P
	The feet of the ladder shall be allowed to settle for a period of 2 min.		P
	The restraint preventing outward movement of the base of the ladder shall then be removed.		P
	After a period of 1 min the restraint preventing outward movement of the ladder shall be replaced.		P
	Measure any outward movement of the ladder feet relative to datum established for the origin of measurement.		P
	Repeat the test procedure 4 times.		P
5.18.4	**Test requirement**		P
	The ladder feet shall not move outwards more than 40 mm with respect to the origin for measurement.		P
5.19	**Strength test for lateral type stabilizers on leaning ladders which are in the plane of the ladder**		N/A
5.19.1	**Test Procedure**		N/A
5.19.2	**Test requirement**		N/A
5.20	**Strength test for pole type stabilizers on leaning ladders which are not in the plane of the ladder**		N/A
5.20.1	**Test procedure**		N/A
5.20.2	**Test requirement**		N/A
5.21	**Torsion test for leaning ladders**		N/A

EN 131-2:2010+A3:2025			
Clause	Requirement + Test	Result - Remark	Verdict
5.21.1	**Test Procedure**		N/A
5.21.2	**Test Requirement**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4	**Provision of safety marking and user instructions**		P
	The producer shall be responsible for the content of the safety marking and user instructions and the provision of the instructions for each ladder. The safety marking and user instructions shall be in the language of the country where the ladder is originally placed on the market.		P
	The user instruction shall indicate that it shall be read before using the ladder.		P
	The distributor shall ensure that the safety marking and user instructions are provided for each ladder and that the user instructions are provided in the official languages of the country where the ladder is placed on the market.		P
	The following list of text within supplementary safety information symbols need not be translated: a) max.; b) min.; c) H20; d) Oil, e) Up; f) Stop.		P
5	**Reasons for accidents**		P
	The following list of hazards and examples of their causes, which is not exhaustive, are common reasons for accidents encountered when using ladders and are the basis on which the information in this standard has been developed:		P
	a) loss of stability:		P
	b) from handling:		P
	c) slip, trip and fall of user:		P
	d) structural failure of ladder:		P
	e) electrical hazards:		N/A
6	**Marking and user instruction**		P
6.1	General		P
	All marking detailed under Clause 6 shall be fixed permanently, according to EN 131-2, to the ladder surface.		P
	In 6.3, the minimum requirements for marking and user instructions are specified.		P
	The user instruction shall list the items to be inspected and checked. The minimum list of items is shown in Annex A. Details of how to obtain the pass/fail criteria shall be in the user instructions or marked on the ladder;		P

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Clause	Requirement + Test	Result - Remark	Verdict
	The user instruction shall be supplied with the ladder and should be made available on the producer's website also.		P
	The user instruction shall include identity and address of the producer and/or distributor including website address.		P
	User instructions shall repeat all safety markings which are on the ladder.		P
	The maximum number of safety signs should be reduced to a number that users are able to identify and comply with when using the ladder.		P
6.2	**Basic marking on the ladder**		P
	Basic marking information may be given in the form of safety signs or text. The marking shall include:		P
	a) identity and address of the producer and/or distributor including website address for information about the ladder;		P
	b) type of ladder and possible modes of use (description of the type, number and length of the parts, maximum length of ladder in use, maximum standing height measured in position of use according to the recommendation of the manufacturer);		P
	c) classification of use “professional” or “non-professional” as specified in EN 131-2;		P
	d)number of the general standard EN131 or if a dedicated standard exists (e. g. a multi-hinge ladder according to EN 131-4) the number of this standard (e. g. EN 131-4) ;		P
	e) month and year of production and/or serial number (may also be stamped);		P
	f） weight of the ladder (in kg) and maximal total load (in kg);		P
	g) insulation, if any. Information a), b), c) and f) shall also appear on the packaging or be otherwise clearly visible to the consumer before the purchase.		P
6.3	**Safety marking and user instructions**		P
6.3.1	General		P
	The basic safety marking shall be attached to all ladders and ladder parts which can be used separately as an easily viewed symbol.		P

EN 131-3:2018+A1:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	The marking to indicate the top most rung/step that shall be used for standing on, shall be placed: —on the stile of the ladder adjacent to or on the last/allowed; or —on the first /not allowed rung/step; or —on the label for safety marking.		P
6.3.2	Safety signs		P
6.3.2.1	Basic safety signs		P
	The geometric shape of basic safety signs shall be in accordance with ISO 3864-1, ISO 3864-3 and be based upon the EN ISO 7010 template for safety signs with a minimum size d and h of 15 mm(see Figure 1).  a) Prohibition sign b) Mandatory action sign c) Warning sign d) Safe condition sign Figure 1 — Basic safety signs according to ISO 3864-1		P
6.3.2.2	Supplementary safety information symbols		P
	The supplementary safety information symbols are meant to instruct the user of a ladder about what is necessary and what is not allowed for a safe use of a ladder in order to avoid accidents e.g. by falling from the ladder. “Necessary" is indicated by a green tick and “Not allowed” is indicated by a red X(see examples in Figure 2).  a) Necessary action b) Not allowed Figure 2 — Supplementary safety information symbols		P
	Compared to the basic safety signs according to 6.3.2.1 supplementary safety information symbols may include numbers, letters and more detailed (finer) symbols.		P
	The minimum height h of supplementary safety information symbols is 15 mm.		P
6.3.3	Basic safety marking and user instructions for all ladders		P

EN 131-3:2018+A1:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	Table 1 shows the minimum requirements for safety marking, user instructions and the mandatory symbols for all ladders.		P
6.3.4	Leaning ladders		P
	Table 2 shows in addition to the basic requirements (see 6.3.3) the minimum requirements for safety marking, user instructions and the mandatory symbols for leaning ladders.		P
6.3.5	Standing ladders		P
	Table 3 shows in addition to the basic requirements (see 6.3.3) the minimum requirements for safety marking, user instructions and the mandatory symbols for standing ladders.		P
6.3.6	Combination ladders		N/A
	Where a combination ladder is designed to be used as a leaning ladder, the safety marking and user instructions shall comply with the requirements of 6.3.4.		N/A
	Where a combination ladder is designed to be used as a standing ladder, the safety marking and user instructions shall comply with 6.3.5.		N/A
	Table 4 shows in addition to the requirements of 6.3.3 and 6.3.4 and/or 6.3.5 where relevant, the minimum requirements for safety marking, user instructions and the mandatory symbols for combination ladders.		N/A
6.3.7	Extending ladders		N/A
	Table 5 shows in addition to the requirements of 6.3.3 and 6.3.4 the minimum requirements for safety marking, user instructions and the mandatory symbols for extending ladders.		N/A
6.3.8	Single or multi-hinge joint ladders		N/A
	Where a single or multi-hinge joint ladder is designed to be used as a leaning ladder, the safety marking and user instructions shall comply with the requirements of 6.3.4.		N/A
	Where a single or multi-hinge joint ladder is designed to be used as a standing ladder, the safety marking and user instructions shall comply with 6.3.5.		N/A
	Table 6 shows in addition to the requirements of 6.3.3 and 6.3.4 and/or 6.3.5 and 6.3.7 where relevant, the minimum requirements for safety marking, user instructions and the mandatory symbols for single or multi-hinge joint ladders.		N/A
6.3.9	Telescopic ladders		N/A

EN 131-3:2018+A1:2025			
Clause	Requirement + Test	Result - Remark	Verdict
	Where a telescopic ladder is designed to be used as a leaning ladder, the safety marking and user instructions shall comply with the requirements of 6.3.4.		N/A
	Where a telescopic ladder is designed to be used as a standing ladder, the safety marking and user instructions shall comply with 6.3.5.		N/A
	Table 7 shows in addition to the requirements of 6.3.3 and 6.3.4 and/or 6.3.5 where relevant, the minimum requirements for safety marking, user instructions and the mandatory symbols for telescopic ladders.		N/A
6.3.10	Mobile ladders with platform		P
	Table 8 shows in addition to the basic requirements (see 6.3.3) the additional requirements for safety marking, user instructions and the mandatory symbols for mobile ladders with platform.		P
7	**Repair, maintenance and storage**		P
	Repairs and maintenance shall be carried out by a competent person and be in accordance with the producer's instructions.		P
	NOTEA competent person is someone who has the skills to carry out repairs or maintenance, e.g. by a training by the manufacturer.		P
	For repair and replacement of parts, e.g. feet, if necessary contact the producer or distributor.		P
	Ladders should be stored in accordance with the producer's instructions.		P
	Ladders made of or using thermoplastic, thermosetting plastic and reinforced plastic materials should be stored out of direct sunlight.		P
	Ladders made of wood should be stored in a dry place and shall not be coated with opaque and vapour-tight paints.		P

Photo 1

Model: LT-ladder004
Description: Overall view



=====End of Test Report =====