



ZARGES

Information from ZARGES: the latest version of EN 131-1+2



Reliable Safety

EN 131 – the most important improvements

The standard **EN 131-1+2***, which is applicable to ladders, has been comprehensively revised. The new version will take effect throughout Europe **at the latest by end of 2017**.

In this handbook, we would like to give you an overview of the individual tests required by the new standard as well as the most important improvements to make working on ladders safer. Please take note that as a result of the new European standard for ladders, some features are no longer available or only partially available.



Important to know:

In general, all products are categorised into two classes:

- “Professional” standard for ladders that are designed for use in a professional setting.
- “Non-professional” indicates ladders that are for home use.

*EN 131-1:2015 and EN 131-2:2010+A2:2017

EN 131

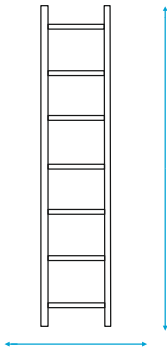
We are proud that today our ladders already comply with the latest version of EN 131-1+2: **From April 2017 onwards**, ZARGES will deliver only ladders that fall under the **“Professional”** category according to this standard.

Overview of the tests

Safety first: according to the latest version of the **standard EN 131-1+2**, all ladders need to fulfil additional and stricter requirements. You can read about the new or stricter tests in the overview.

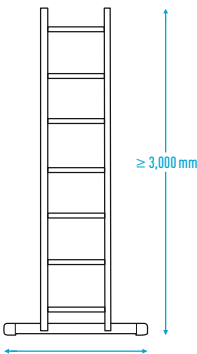
CURRENT

Base stabiliser
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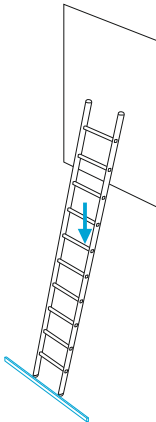
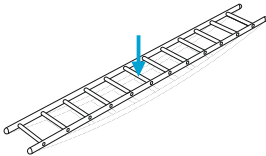


NEW

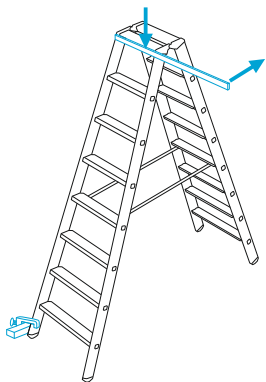
(EN 131 AT THE LATEST BEGINNING END OF 2017)



Stile strength test
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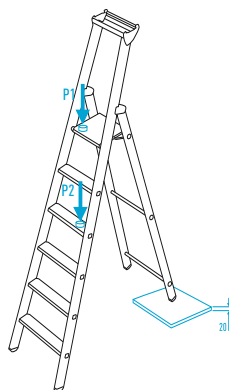


Torsion test steel ladders
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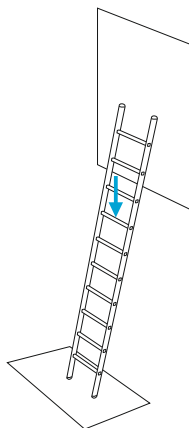
Continuous stress test
Page 9

X

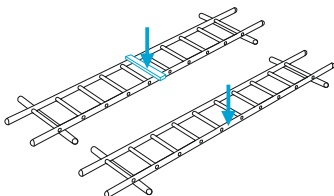
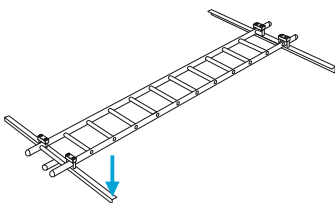


Base slip test
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X



Torsion test leaning ladders
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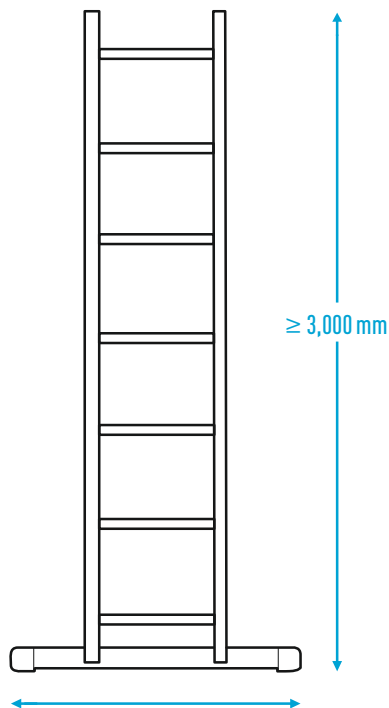


Requirement

“Base stabiliser”

The new requirements:

- All ladders 3,000 mm or longer that can be used as a leaning ladder are required by the new standard to have a base stabiliser.
- The required width of the base stabiliser may be up to a maximum of 1,200 mm, depending on the length of the ladder.



Please note:

Because of this requirement, a few features are no longer available for multi-part ladders:

- For push-up ladders that are longer than 3,000 mm when retracted, the ladder parts are no longer allowed to be used separately.
- For multipurpose ladders that are longer than 3,000 mm when retracted, the upper ladder is no longer allowed to be used separately; such ladders also may no longer be used on stairs.

Requirement

“Stile strength test”

What is tested:

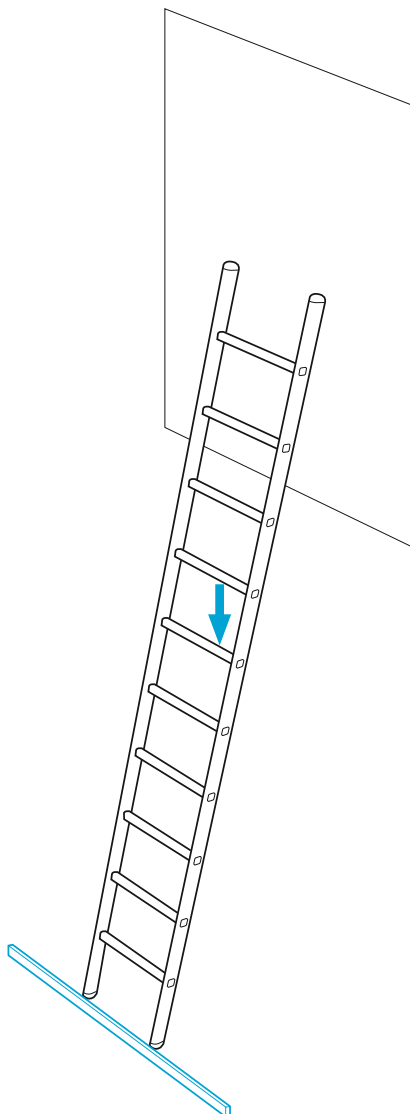
- The strength of the stiles

How is it tested:

- The step/rung is subject to a test load of 2,700 N (professional) or 2,250 (non-professional) in its usual use position.

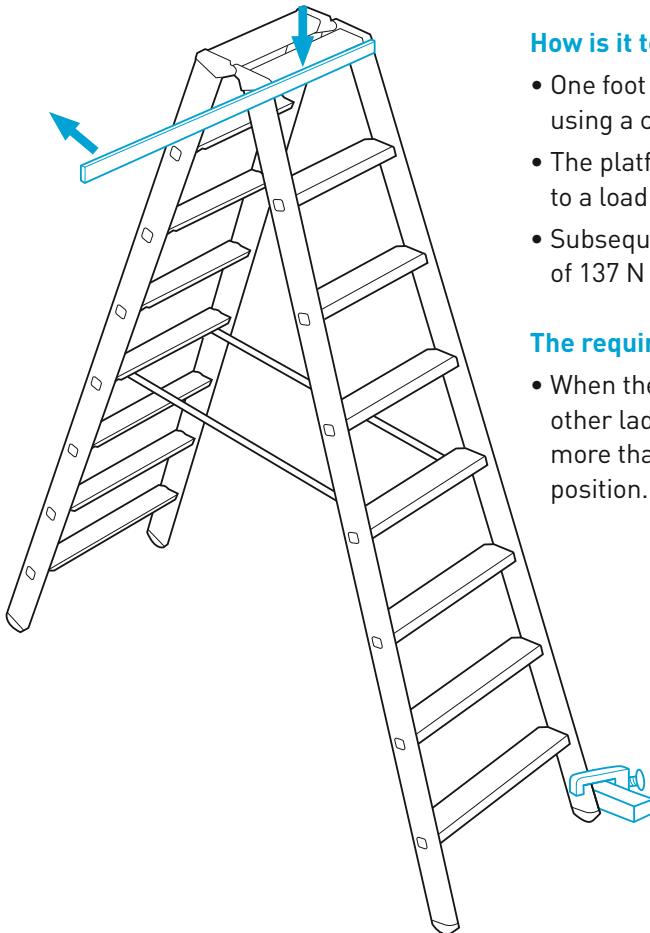
The requirement:

- The ladder must not be damaged and must retain its functionality.



Requirement

“Torsion test step ladders”



What is tested:

- Torsional stiffness

How is it tested:

- One foot of a ladder is secured using a clamp.
- The platform of a ladder is subject to a load of 736 N.
- Subsequently, a lateral pulling force of 137 N is applied to the ladder.

The requirement:

- When the test load is applied, the other ladder foot should not move more than 25 mm from its original position.

Requirement

“Continuous stress test”

What is tested:

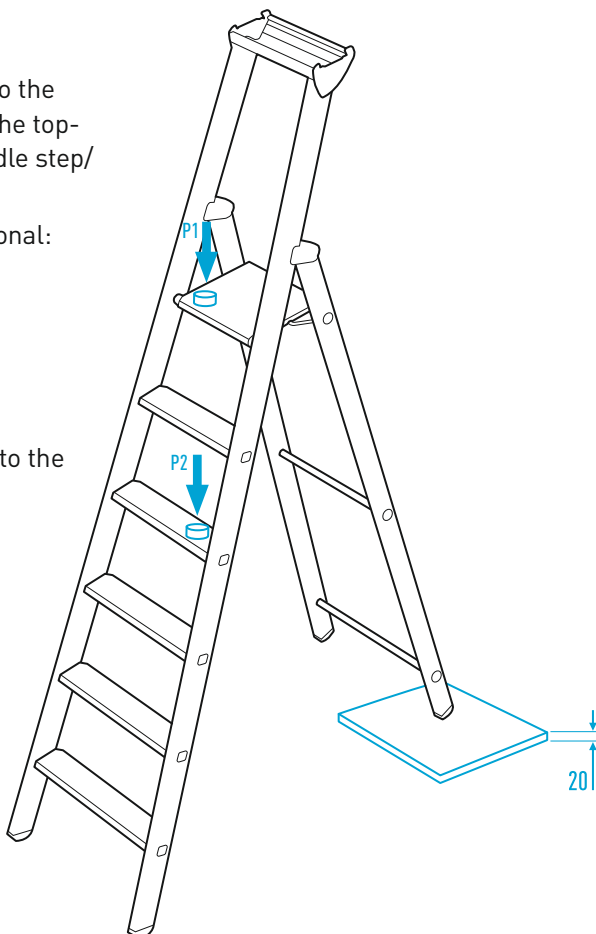
- Durability of the ladder

How is it tested:

- A load of 1,500 N is applied to the ladder alternately between the top-most step/rung and the middle step/rung of the ladder
- Repetitions for non-professional: 10,000 cycles
- Repetitions for professional: 50,000 cycles

The requirement:

- There should be no damage to the ladder.



Requirement

“Base slip test”

What is tested:

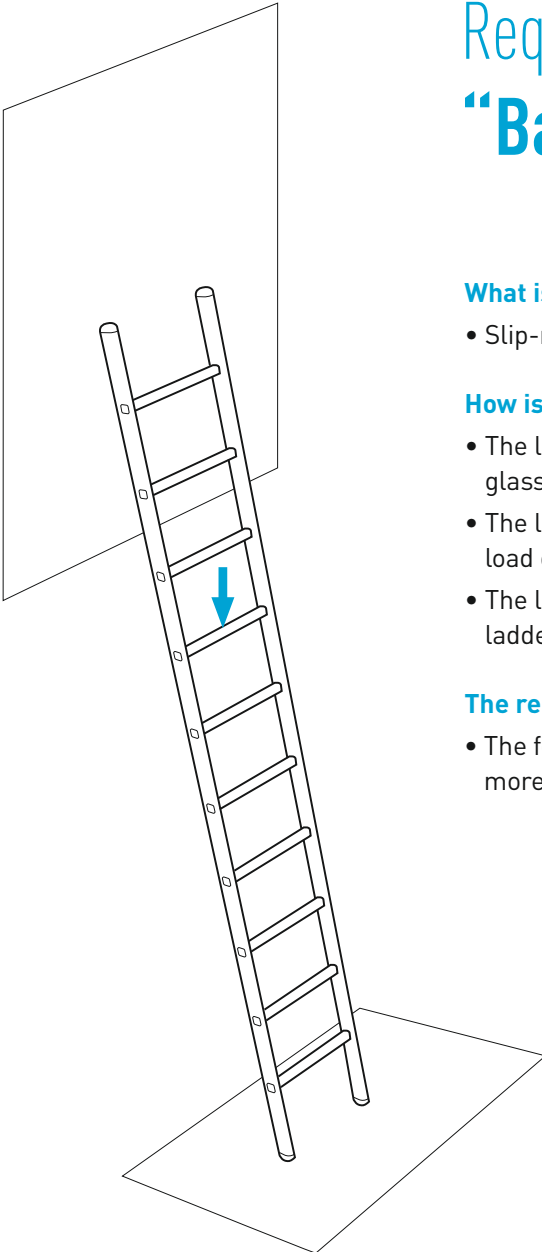
- Slip-resistance of the ladder end caps

How is it tested:

- The ladder is placed standing on a glass panel.
- The ladder is subject to a concentric load of 1,471 N.
- The load is applied 4 times to the ladder.

The requirement:

- The feet of the ladder should not slide more than 40 mm within 1 minute.



Requirement

“Torsion test leaning ladders”

What is tested:

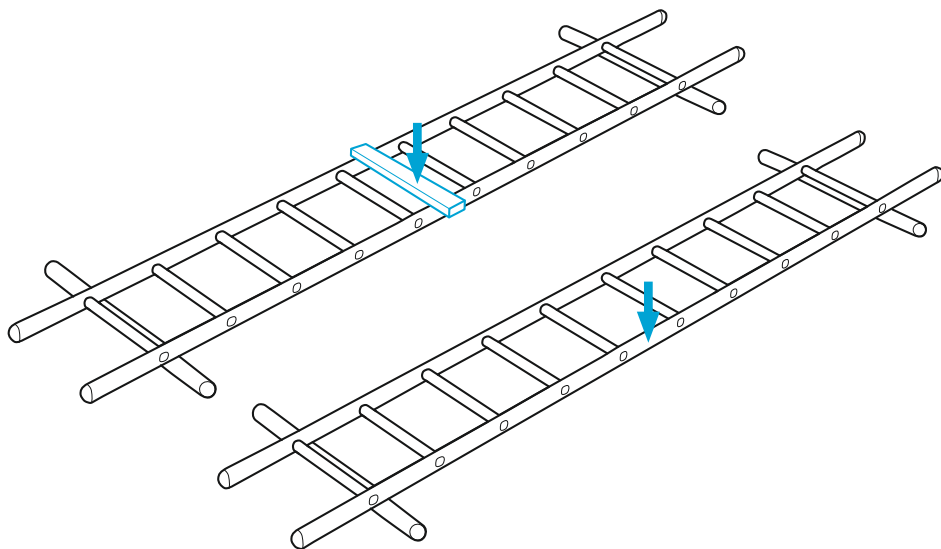
- Torsional stiffness

How is it tested:

- The first step involves applying a concentric load of 491 N to the ladder for 30 seconds. This is then done to determine the initial value.
- In the next step, a concentric load of 638 N is applied to one of the stiles and the deformation of both stiles are measured relative to the initial value.

The requirement:

- The difference between the deformation of the two stiles should not exceed 0.07 times of the ladder width.





ZARGES

ZARGES – Safety is our standard

The philosophy of ZARGES: safety first. This is why ladders made by ZARGES today comply with current national and international standards. And our certified development and manufacturing processes are guaranteed to give you safety and the highest reliability.

All relevant information can also be found online at
www.zarges.com/en131