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BS 04062018

THE NEW STANDARDS OF THE **EN 131**

A new European standard for ladders
according to the latest **EN 131** series standards



The best Ladders for professionals

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SAFETY IS THE MOST IMPORTANT

PN-EN 131-2+A2:2017

New significant changes will come into effect on 1 January 2018 for all ladders that can be used as a leaning ladders, and whose length exceeds 3 meters. The new regulations of the EN 131-1 standard, in a substantial part, refer to the obligation of equipping these devices with a stabilizer, which increases the width of the ladder support, and thus the safety of users.

The modified EN 131-2 standard also imposes on the manufacturers a number of new ladder strength guidelines and introduces a new division of ladders in terms of the user group.

All products are divided into two classes:

- „**Professional**“ is a ladder intended for use in a work environment.
- „**Non-professional**“ is a ladder for private use.

According to the new assumptions of the EN 131 series, all ladders must meet additional requirements

The study contains a summary of the following changes:

I. Expanding the base	str. 2
II. Strength test of stiles	str. 3
III. Torsional resistance test for standing ladders	str. 4
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VI. Test of torsional resistance of leaning ladders	str. 7

REQUIREMENTS

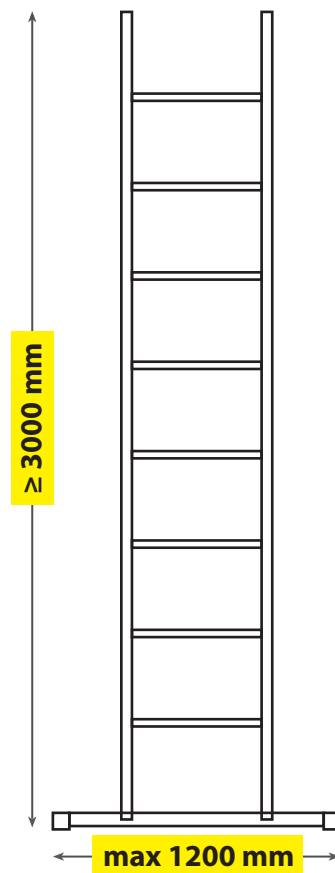
WIDENING OF THE BASE

OBJECTIVE

GUARANTEEING STABILITY

New requirement:

- For ladders with a height of more than 3000 mm, which can be used as a leaning ladder, the new standard requires widening the ladder base to a maximum of 1200 mm, depending on the length of the ladder.



Warning:

This new requirement means that in the case of multi-part ladders, some functions are no longer available:

- In case of existing sliding ladder construction, the length of which after sliding exceeds 3000 mm, parts of the ladder can no longer be used separately.

REQUIREMENTS

STRENGTH TEST OF STILE MEMBERS

OBJECTIVE

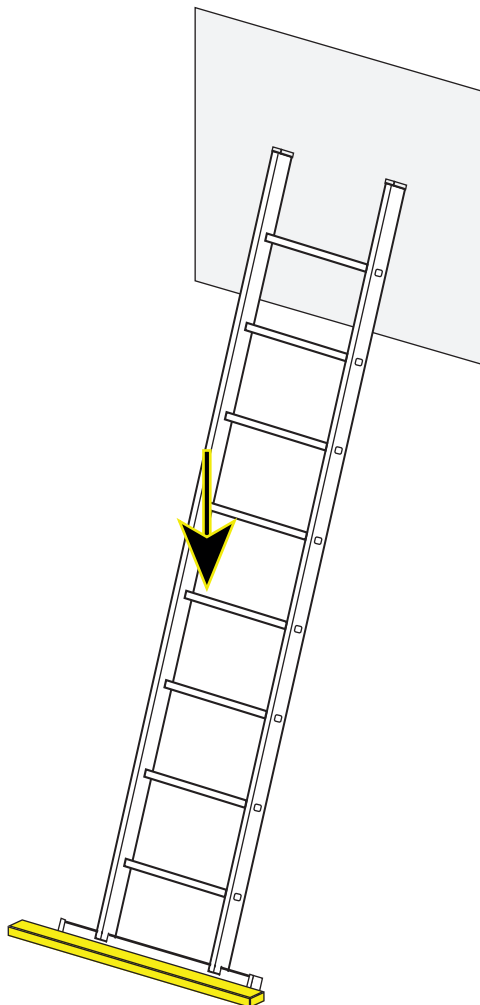
GUARANTEE OF STRENGTH

Test method:

- The step / rung in the position of use, is loaded with an eccentric test force:
 - about 270 kg for "**Professional**" class ladders,
 - around 225 kg for "**Non-professional**" class ladders.

Requirement:

- The ladder must not be damaged, the function must be ensured.



REQUIREMENTS

TORSIONAL RESISTANCE TEST FOR STANDING LADDERS

OBJECTIVE

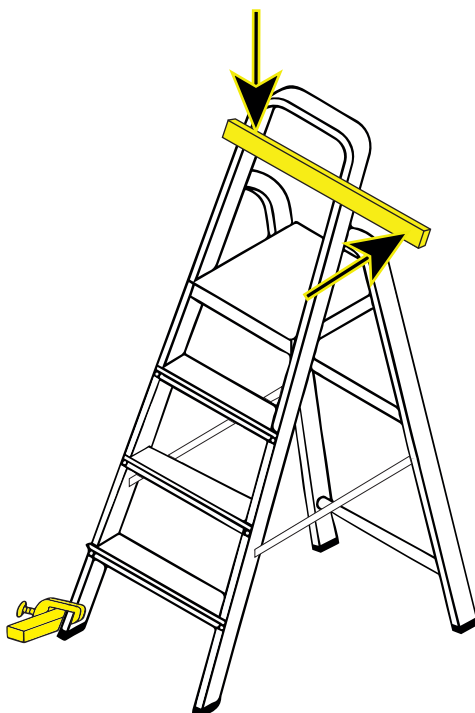
GUARANTEERING SAFETY

Test method:

- The ladder's foot is clamped.
- The ladder platform is loaded with a force of approx. 74 kg.
- Then the ladder is stretched from the side with a force of approx. 13.7 kg.

Requirement:

- During loading, the second ladder's foot may move away from its current position up to 25 mm.



REQUIREMENTS

CHANGING LOAD TEST

OBJECTIVE

GUARANTEEING STRENGTH

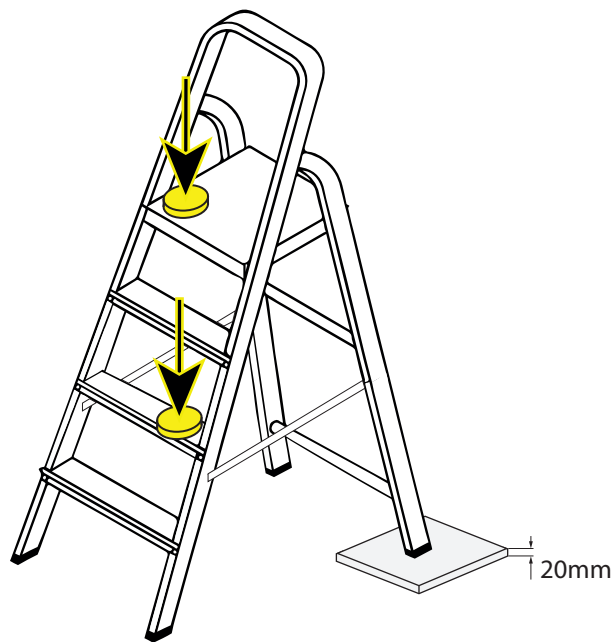
Test method:

Variable loading of the highest step or rung and middle step or rung ladder with a force of approx. 150 kg.

- Repetitions - for **"Non-professional"** class ladders: 10,000 cycles
- Repetitions - for **"Professional"** class ladders: 50,000 cycles

Requirement:

- There must be no damage



REQUIREMENTS

SLIP TEST OF THE BASE

OBJECTIVE

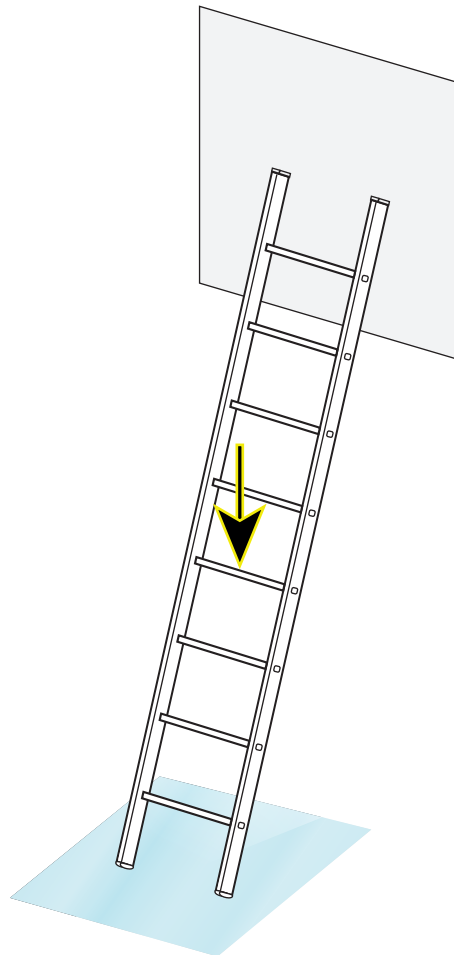
GUARANTEEING ANTI-SLIP

Test method:

- The ladder is standing on a glass plate.
- The ladder is loaded in the middle with a force of approx. 147 kg.
- The loading is repeated 4 times.

Requirement:

- Ladder feet can move up to 40 mm in 1 minute.



REQUIREMENTS

TEST OF TORSIONAL RESISTANCE OF DOCK LADDERS

OBJECTIVE

GUARANTEERING THE STIFFNESS OF THE LADDER

Test method:

- One of the ladder stiles is loaded in the center with a force of approx 64 kg, after which the deformation of both stringers is measured to a predetermined starting value.

Requirement:

- The difference between the deformation of both arms can be up to 0.07 the width of the ladder.

