

1. When to use a ladder?

A **ladder** is a device for temporary work at a height and can be used when the use of other, safer work equipment is not justified due to the low level of risk and short-term use or existing circumstances that cannot be changed by the employer.

The ladder may be used only when the work lasts **no longer than 30 minutes**, we are dealing with light work (the weight carried by a human does not exceed 10 kg). Always **maintain 3 points of support** when working on a ladder (e.g. 2 feet and one hand).

It is allowed to use a ladder with the maximum length:

- up to **4 m** for painting works,
- up to **3 m** for any other works.

When climbing a ladder **above 2 m**, the employee must be secured against falling from height (e.g. safety harness fastened to the anchor point located above the head).

Work with ladders is classified as particularly dangerous work, therefore, if technical and economic conditions allow, safer solutions should be used (e.g. scissors platforms, scaffolding). **Work over 4 m on ladders is non-routine work and requires IBWR preparation and approval of the LG Health and Safety Department.**

2. Legal requirements for ladders

Ladders are approved for use when they meet the requirements of **PN-EN-131**, which defines two groups of ladders:

- **PROFESSIONAL** - intended for use in a work environment,
- **NON-PROFESSIONAL** - intended for private use (at home).

Professional ladders must meet higher requirements for the strength of individual elements and be properly tested, they guarantee up to 50 000 cycles of ascent and descent, while non-professional ladders up to 10 000 cycles of use.

3. Types of ladders allowed for use

Due to the type and scope of use of the ladder, the following types are allowed:

- 1) **leaning (inclined) ladders (1),**
- 2) **spaced ladders (2),**
- 3) **articulated ladders (3),**

and **multi-purpose** ladders (being both leaning/inclined and spaced).

Due to their construction and purpose, all the above-mentioned types of ladders are intended for use in specific types of work. Both leaning (inclined) ladders and spaced ladders, articulated and multi-purpose ladders are approved for use only and only if they are intended for **PROFESSIONAL use**.



Remember!

When working at height, including the use of ladders, the use of appropriate personal protective equipment (PPE) is required:

- a) a helmet for work at height, with a fastened chin strap,
- b) safety shoes and workwear,
- c) a warning vest,
- d) depending on the type of work- other adequate PPE.



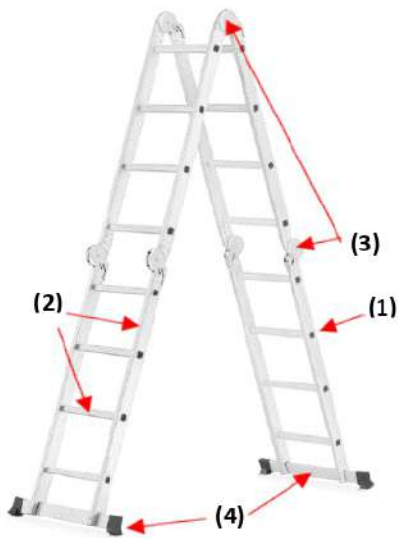
Professional
ladder marking



The manufacturer's label (sticker) placed on the ladder contains basic information on the principles of safe work, technical conditions for using the ladder and its intended use. Its presence is a condition for approving the ladder for use and confirming that it meets the relevant standards.

4. Before starting work

Before starting work on the ladder, make sure that its technical condition allows for safe work, therefore perform the following steps in the following sequence:



(1) check the fasteners (rivets, screws) - all connections must be complete, without any play or traces of corrosion.

(2) stringers and rungs must be complete, undamaged and not bent.

(3) connecting elements, guides, safety devices - they must function properly.

(4) feet and stabilizers - the feet / anti-slip safety feet must be undamaged.

The marking and operating instructions on the label of the ladder (sticker on the stringer) must be legible, painting the ladders and sticking to any materials is forbidden.

The technical inspection of the ladder is performed by an employee before starting work with its use and is responsible for it. If the ladder is incomplete, out of order, damaged or without label, the use of such a ladder is prohibited.

5. Rules of safe work on a ladder



The ladder should be set at the right angle to the ground, it is **65-75 °**, the base of the ladder is placed on the ground.



It is forbidden to place ladders on unstable, slippery ground and it is forbidden to lean the ladder against unstable, slippery and unchecked objects.



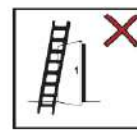
The ladder should protrude at least **1 m** above the level of the floor, ceiling etc. to which it leads, set flat with two stringers.



It is forbidden to use ladders in the vicinity of electric lines (**6 m horizontally**) and in places where they can be knocked over.



It is unacceptable to use the ladder contrary to its intended purpose and to perform welding works, detaching slings from prefabricated elements.



Remember!

Each ladder is subject to periodic inspection of its technical condition at least once a year, which should be performed by an employee with appropriate qualifications in this field. The result of such inspection should be documented in the Ladder Condition Assessment Protocol and kept in the documentation at the disposal of inspection institutions for a period of up to 5 years. The confirmation of such inspection is a label (indicator).

PASSED ✓

SERIAL No.

DATE	ENGINEER	NEXT DUE DATE

LADDER SAFETY INSPECTION

The first step that the employee must perform before using the ladder is to read the operating manual and follow the instructions with its provisions.



The base of the ladder should be undamaged and equipped with operable stabilizers (anti-slip safety feet). In case of damage, cracks, etc. - they are replaced with new ones.



It is forbidden to lean out of the ladder while in use and to descend / climb in a way other than facing the ladder.



It is forbidden to carry loads, materials, tools weighing **more than 10 kg** on the ladder, or to move the ladder while on its rungs.



It is unacceptable to use the last **3 steps** of a inclined ladder, and the last **2 steps** in the case of a spaced ladder - and straddle it.



6. Good and bad practices in working with ladders



Applying the principle of three points of support is important in safe work on a ladder, if the length of the ladder is not sufficient for the needs - do not use other objects, but change the ladder to a longer one.



The use of manufacturer's accessories increasing work safety on a ladder is a good solution, however, it is forbidden to introduce your own amateur solutions in the construction of ladders.



Remember!

Detailed requirements for safe work with certain types of ladders are contained in the ladder manual and on the label on the side of the ladder stringer.

Destroyed or damaged ladders are not subject to repair, broken, bent or cut elements disqualify the ladder from use. It is forbidden to repair ladders or their elements on their own.

Before starting work on the ladder, it is important to adjust the equipment to the needs (determine the length of the ladders, how to position them, space availability, room for maneuver)

Incorrect adjustment of the length of the ladder may result in the need for greater load on the upper limbs by limiting the freedom of their reach.

It is not allowed to use wooden ladders for professional use. Spaced ladders are not used as leaning.

7. Protection hierarchy when organizing work at height

When selecting fall protection measures, we **should always** use solutions in accordance with the hierarchy presented below: 1 - balustrades and platforms > 2 - Mobile Elevating Work Platform (MEWP) > 3 - scaffolding > 4 - "faraone" type platform ladders / folding stools > 5 - ladders



This method of using a ladder is strictly



Balustrades and platforms – PN-EN 13374, PN-EN 12811, PN-EN ISO 14122



Mobile Elevating Work Platform (MEWP) – PN-EN 280, CE



Scaffolding – PN-EN 1004, PN-EN 12811, PN-EN 12810, PN-M-47900



Platform ladder or folding stools – PN-EN 131, PN-EN 14183



Ladders – PN-EN 131

Remember!

When selecting protection measures, one should start with considering whether it is possible to eliminate the hazard at the place of work. If not, the design of the solution must take into account the need to implement the design.



Type of protection measures must be specified in Standard 7.1. If the ladder must remain in a dangerous place, exposed to being hit or in an area where a large number of people work - the work area should be appropriately separated and, if necessary, an observer should be set up.

A person exercising direct supervision over employees, when employees perform work activities contrary to applicable regulations and health and safety rules, is liable to penalties in the event of failure to react to any violations and accidents at work resulting from them.

Standard 131 requires the use of a wide base of stringers ladders with stabilizers (anti-slip safety feet) in all ladders over 3m long.



