

Layher Ladders Instructions for Assembly and Use

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Ladders



Layher® 

More Possibilities. The Scaffolding System.

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▶ NOTE

The products or assembly variants shown in these instructions for assembly and use may be subject to country-specific regulations. The user of the products bears the responsibility for compliance with such regulations. Subject to local regulations, we reserve the right not to supply all the products illustrated here.

Your Layher partner on the spot will be happy to provide advice and answers to all questions relating to the approvals for the products, to their use or to specific assembly regulations.

► 1. INTRODUCTION

These instructions for assembly and use relate to assembly, modification and dismantling of ladders from Wilhelm Layher GmbH & Co. KG, of Güglingen-Eibensbach, Germany.

The instructions cannot cover all the possible applications. If you have any questions about specific applications, please contact your Layher partner.

Only original Layher components may be used for assembly.

Visually check all components prior to assembly to ensure that they are in flawless condition. Do not use damaged components.

When ascending, descending and using any ladder, there is a **risk of falls**. All work with and on the ladder must be done in such a way that the risk of falls is kept as low as possible.

When assembling, dismantling and using any ladder, there is a **risk of the ladder falling over**. When ladders fall over, persons and property might be damaged. All work with and on the ladder must be done in such a way that the risk of it falling over is kept as low as possible.

▶ 2. GENERAL

2.1 Before using the ladder (Excerpt from EN 131)

- ▶ Does your health allow you to use the ladder? certain health conditions, the taking of medication, and alcohol or drug abuse can lead to a safety risk when using the ladder;
- ▶ when transporting ladders on roof racks or in a truck, prevent any damage by ensuring that they are fastened/attached properly;
- ▶ check the ladder after its delivery and before initial use in order to ascertain its sound condition and the functioning of all parts;
- ▶ visually check the ladder for absence of damage and for safe use at the start of every working day during which the ladder must be used;
- ▶ for commercial users, regular checks are required;
- ▶ ensure that the ladder is suitable for the intended use;
- ▶ do not use damaged ladders;
- ▶ remove all substances from the ladder, e.g. wet paint, dirt, oil or snow;
- ▶ before using a ladder for work, conduct a risk assessment on the basis of the legal regulations applying in the country of use.

2.2 Setting up the ladder (Excerpt from EN 131)

- ▶ the ladder must be set up in the correctly angled position, e.g. correct setting-up angle for simple ladders (inclination angle about 1:3), rungs or steps horizontal, and double ladders fully opened;
- ▶ locking devices, where provided, must be fully activated before the ladder is used;
- ▶ the ladder must be standing on a flat, horizontal and immovable surface;
- ▶ a simple ladder should be leaning against a flat and firm surface and be safeguarded before use, e.g. by attaching or using a suitable device to ensure stability;
- ▶ the ladder must never be repositioned from above;
- ▶ when the ladder is being positioned, bear in mind the risk of collisions, for example with pedestrians, vehicles or doors; lock doors (but not emergency exits) and windows in the work area, if possible;
- ▶ ascertain if there are any risks from electrical equipment in the work area, e.g. high-voltage cables or other exposed equipment;
- ▶ the ladder must rest on its feet, not on the rungs or steps;
- ▶ the ladders must not be placed on slippery surfaces (e.g. icy, smooth surfaces or obviously fouled though firm surfaces), unless additional measures have been taken to prevent the ladder from slipping and to make the fouled surfaces sufficiently clean.

2.3 Use of the ladder (Excerpt from EN 131)

- ▶ do not exceed the maximum load for the respective ladder type;
- ▶ do not lean too far out; users should keep their belt buckle (the navel) between the stringers and stand with both feet on the same rung;
- ▶ do not climb off a simple ladder from a height without additional safeguards, e.g. fastening or use of a suitable device to ensure stability;
- ▶ do not use double ladders for climbing onto a different level;
- ▶ do not use the top three rungs of a simple ladder to stand on;
- ▶ do not use the top two rungs of a double ladder to stand on without a platform and holding device for hand/knee;
- ▶ do not use the top four rungs of a double ladder with attached extension ladder to stand on;
- ▶ ladders should only be used for light work of short duration;
- ▶ for unavoidable work under electrical voltage, do not use conducting ladders;
- ▶ do not use ladders in the open in poor weather conditions, e.g. in strong winds;
- ▶ take precautions to prevent children from playing on the ladder;
- ▶ lock doors (but not emergency exits) and windows in the work area, if possible;
- ▶ ascend and descend facing the ladder;
- ▶ grip the ladder tightly during ascent and descent;
- ▶ do not use the ladder for bridging purposes;
- ▶ wear suitable shoes when using the ladder;
- ▶ avoid excessive lateral pressures, for example when drilling into masonry and concrete;
- ▶ do not stay too long on the ladder without regular breaks (tiredness is dangerous);

- ▶ Simple ladders for access to a greater height should be extended at least 1 m above the contact point;
- ▶ articles being transported when climbing the ladder should not be heavy, and easy to handle;
- ▶ avoid work causing lateral pressures on double ladders, e.g. lateral drilling through solid materials (such as masonry or concrete);
- ▶ when working on a ladder, grip it with one hand or (if this is not possible) take additional safety precautions.

2.4 Repair, maintenance and storage

Repair and maintenance work on the ladder must be performed by an expert. If in doubt, the ladders should be repaired at the manufacturer's plant. The ladder should be stored where it is dry and protected from UV light.

2.5 Checking the ladder

In addition to the daily visual check, the professional insurance association also specifies a regular and documented inspection of the ladder. This check should be performed by a qualified person. For support and documentation, a ladder inspection book can be found at our internet site www.layher.com or in our price list.

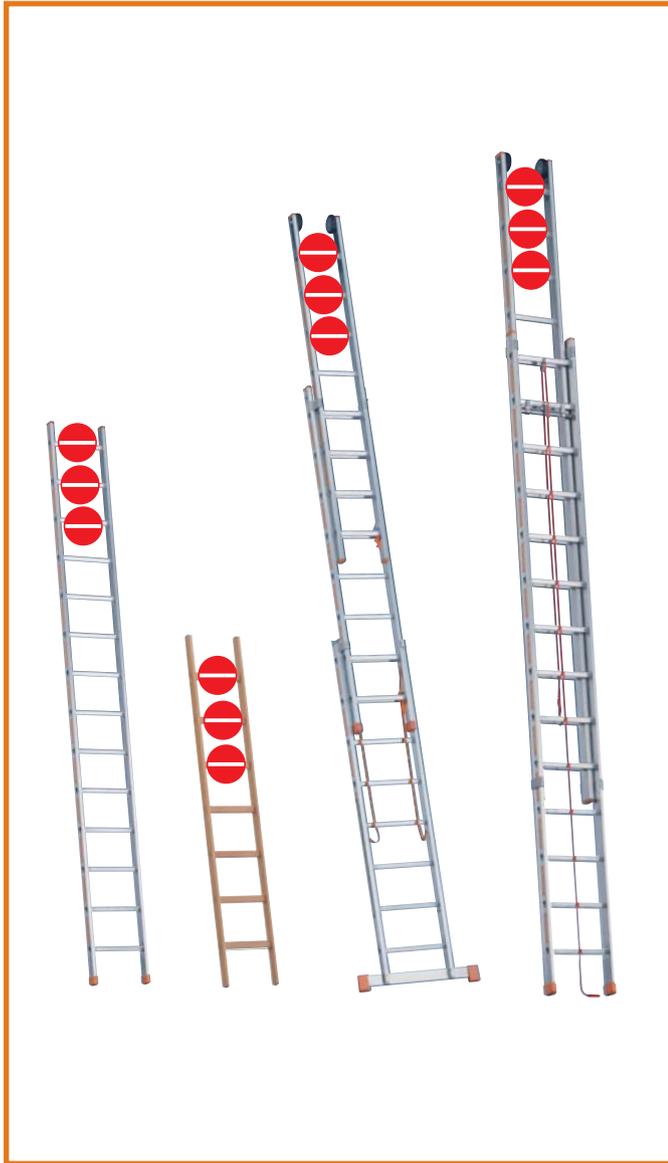
▶ 3. SIMPLE LADDERS

3.1 Pictogram description

Read instructions	
Maximum load	 
Correct setup angle	
Set up on flat surface	 
Avoid leaning out sideways	 
Clear away any detritus on the ground	 
Set up on firm surface	
Projection beyond the contact point of the ladder	 

Climbing sideways off the ladder is not permitted	
Use the ladder in the right setting-up direction [only if required by its design]	
Visual check	
Only one person on each accessible leg of the ladder	

3.2 Permitted rungs / steps



3.3 Assembly of extension ladder

Before use, ensure that the suspension hooks are correctly snapped in. The bottom ladder section must be positioned on the wall side.



3.4 Assembly of rope extension ladder

The top ladder section must be positioned on the wall side.



There is a risk of injury when the top ladder section is lowered. The ladder may only be held by its rungs, since the guide element of the top section slides along the stringer of the bottom section.

To extend the ladder, pull on the rope (Fig. 1). To let down the ladder, pull the top section a short way upwards so that the drop catch opens. Then pull the rope away from the ladder and allow it to slide slowly through your hand (Fig. 2). There is no risk involved if you let go of the rope. If this happens, the top section catches at the next rung.



Fig. 1



Fig. 2

▶ 4. DOUBLE LADDERS

4.1 Pictogram description

Read instructions	
Maximum load	 
Set up on flat surface	
Open completely before use	
Avoid leaning out sideways	 
Set up on firm surface	
Climbing sideways off the ladder is not permitted	 
Ensure that the devices for preventing over-spreading and for locking [where provided] snap in	 

Visual check	
Only one person on each accessible leg of the ladder	

4.2 Permitted rungs / steps



4.3 Assembly of double ladders with rollers

The stiffeners must be snapped in before use.



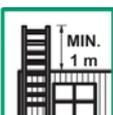
The operation of the ladder rollers must be checked before use.
The rollers must retract under load..



► 5. MULTIFUNCTIONAL LADDERS

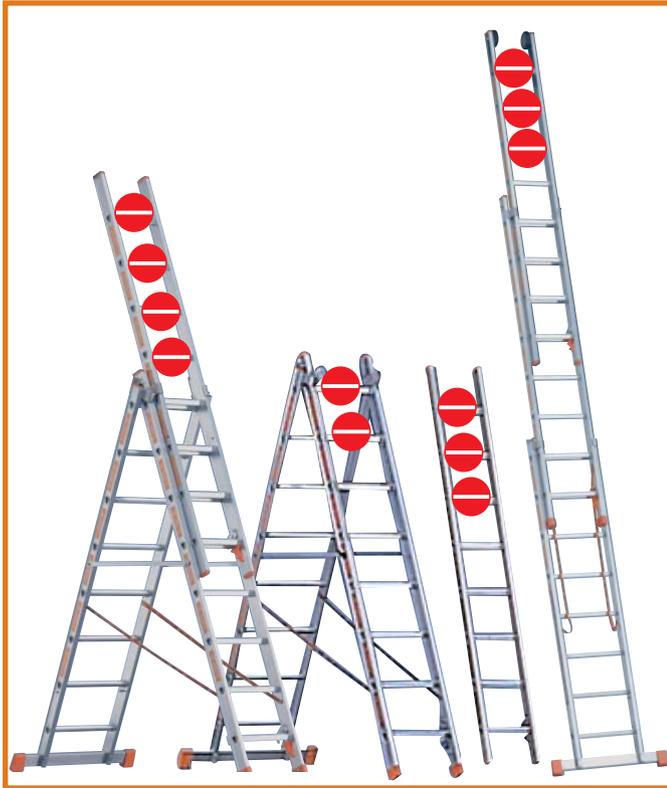
5.1 All-purpose ladders

5.1.1 Pictogram description

Read instructions	
Maximum load	 
Correct setup angle	
Set up on flat surface	 
	
Clear away any detritus on the ground	 
Set up on firm surface	
Projection beyond the contact point of the ladder	 
Avoid leaning out sideways	 

Open completely before use	
Use the ladder in the right setting-up direction [only if required by its design]	
Climbing sideways off the ladder is not permitted	 
Ensure that the devices for preventing over-spreading and for locking [where provided] snap in	 
Visual check	
Only one person on each accessible leg of the ladder	 

5.1.2 Permitted rungs



5.1.3 Assembly in λ position

The stiffeners must have snapped in before use.

Before use, ensure that the suspension hooks are correctly snapped in. The bottom ladder section must be positioned on the wall side.



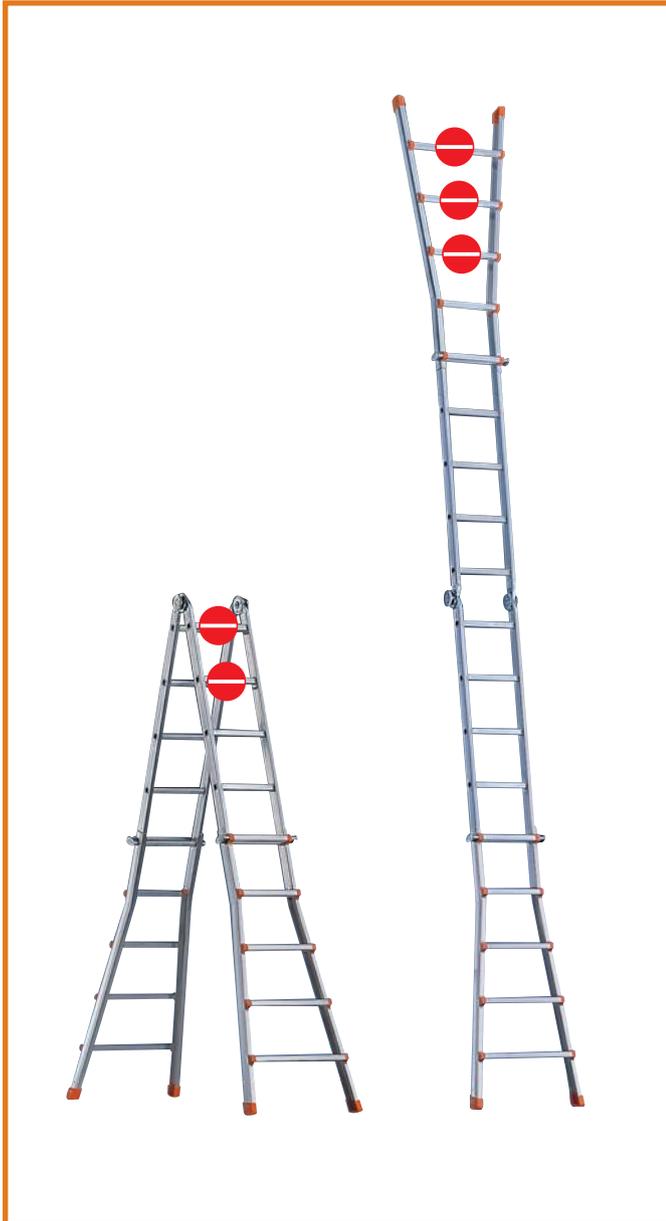
5.2 Telescopic ladders

5.2.1 Pictogram description

Read instructions	
Maximum load	 
Correct setup angle	
Set up on flat surface	 
	
Avoid leaning out sideways	 
Open completely before use	
Clear away any detritus on the ground	 

Set up on firm surface	
Projection beyond the contact point of the ladder	 
Use the ladder in the right setting-up direction [only if required by its design]	
Climbing sideways off the ladder is not permitted	 
Ensure that the devices for preventing over-spreading and for locking [where provided] snap in	 
Visual check	
Only one person on each accessible leg of the ladder	 

5.2.2 Permitted rungs



5.2.3 Joints

Caution:

Only use ladders when both joints have engaged. The joint is unlocked by pulling the large cast-iron knob outwards. It self-locks in the 180° setting. In the 40° setting the angle is only limited on one side. The ladder can still be folded together. If it is required to increase the angle, the joint locks.



Locked joint



Unlocked joint

5.2.4 Locking elements

Caution:

Only use ladders when all locking elements have engaged.



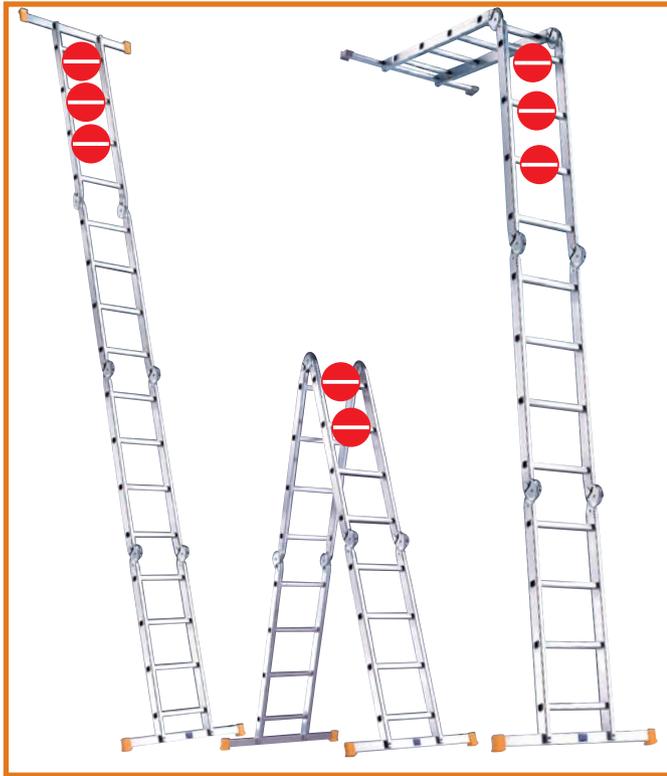
5.3 Car boot ladders

5.3.1 Pictogram description

Read instructions	
Maximum load	 
Correct setup angle	
Set up on flat surface	 
Avoid leaning out sideways	 
Open completely before use	
Clear away any detritus on the ground.	 

Set up on firm surface	
Projection beyond the contact point of the ladder	 
Use the ladder in the right setting-up direction [only if required by its design]	
Climbing sideways off the ladder is not permitted	 
Ensure that the devices for preventing over-spreading and for locking [where provided] snap in	 
Visual check	
Only one person on each accessible leg of the ladder	 

5.3.2 Permitted rungs



5.3.3 Car boot ladder as working platform

Only the car boot ladder 1020.012 can be used as a working platform, since the standing height must not exceed 1m. For use as a working platform, the platform 1020.100 must be used.



5.3.4 Joints

Centre joint:

Caution: Only use ladder when the joints have engaged.



Engaged centre joint



Unlocked centre joint



Engaged trestle joint



Unlocked trestle joint

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