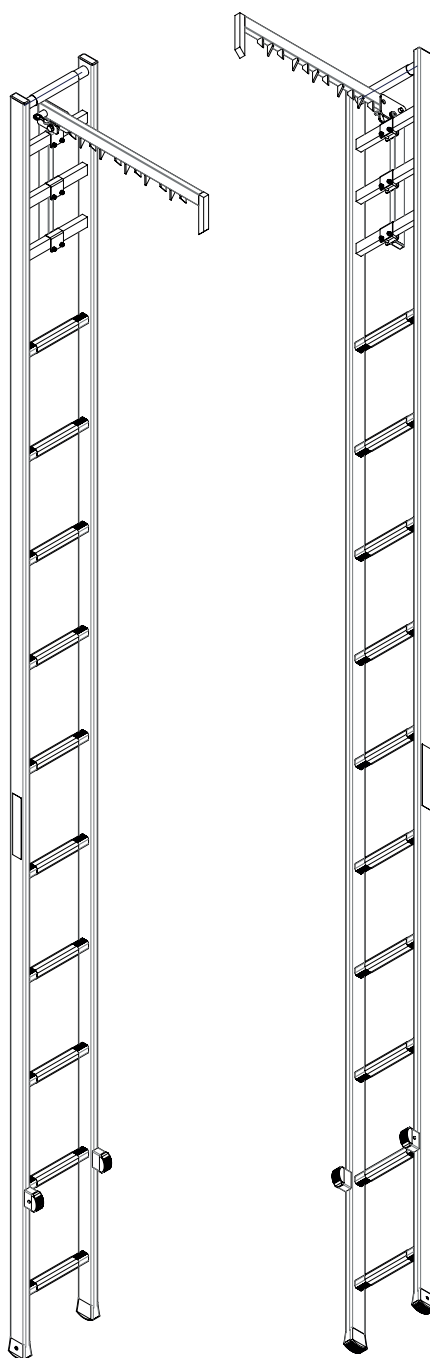


# User information for hook ladders

115006



## Content

1	General . . . . .	3
2	Accident prevention when using portable ladders . . . . .	4
3	Safety regulation . . . . .	5
3.1	Behaviour when working near electrical systems and overhead lines . . . . .	5
4	General use . . . . .	6
5	Hook ladder . . . . .	8
5.1	Advancing the hook ladder . . . . .	10
6	Tests . . . . .	14
7	Visual inspection . . . . .	15
8	Load tests . . . . .	16
9	Repairs and maintenance . . . . .	17
9.1	Replacing rung cover . . . . .	17
10	Warranty and liability . . . . .	19

# 1 General

In fire service, ladders replace approach routes and rescue routes whenever structural traffic routes are not available or passable. Please always be sure to use "the correct ladder for the respective deployment mission."

- Portable fire ladders must only be used by persons who have been trained in accordance with German Fire Service Regulation (FwDV) 10.
- Only ladders that are suitable for the intended purpose and have no safety defects must be used.
- Prerequisite for handling in terms of safety is the knowledge of the safety notes and safety regulations.
- This information brochure and instruction manual, in particular the safety regulations, must be observed by all persons.
- For exercises and deployment with portable ladders, the provisions of German Fire Service Regulation 10 (FwDV 10) "Portable Ladders" must be observed.
- Ladders must be subjected to a visual inspection for wear and flaws before and after each use.
- Ladders must be inspected regularly in accordance with the "Inspection principles for fire service equipment and devices" (DGUV Principle 305-002).
- The hook ladder is only authorised for one person!
- Access ladders must not be used to rescue persons by carrying them up or down the ladder.



## Caution

The caution warns of the risk of fatal accidents or injuries if operating and working instructions are not followed precisely or not followed correctly.



## Caution

The caution note is placed next to work or operational procedures that must be strictly adhered to in order to prevent damage or destruction to the system



## Notice

Notice stands for technical requirements and important information which must be particularly observed.

## 2 Accident prevention when using portable ladders

**Country-specific and regional rules and regulations must be observed.**

The currently valid version of the Accident Prevention Regulation (UVV) "Fire Service" (DGUV Regulation 49) applies to training, exercises and deployment.

In terms of their properties and design, type-tested portable ladders for fire service conform to the currently valid version of standard DIN EN 1147. The sample test also includes testing for load-bearing capacity and stability under operating conditions in accordance with the accident prevention regulations for fire brigades (DGUV Regulation 49).

Stability is ensured once adequate measures can be taken against tipping over or rolling away.

To protect against the hazards of fire service during training, exercises and deployment, the following personal protective equipment must be made available and used:

- Firefighter's protective suit
- Firefighter's helmet with neck guard
- Firefighter's gloves
- Firefighter's protective footwear
- Firefighter's safety tether on special order.

In the event of certain hazards, special personal protective equipment items must be available which correspond to these hazards in type and quantity.

When handling ladders during training, exercises and deployment, the following hazards may arise, among others:

**Falling down:** e.g. when using a defective ladder or one not suitable for the intended purpose; due to improper climbing.

**Ladder overturning/falling:** e.g. due to – an unstable setup; –improper water output by the ladder; – flaws in a need-based safety, in the case of crosswind.

**Rolling/sliding away:** e.g. due to unsecured climbing to or on traffic routes.

**Tipping over:** e.g., when the ladder is placed against unsecured support points such as tension wires, rods, glass plates, unlocked doors and the like.

**Electricity:** e.g., by mounting the ladder in the immediate vicinity of current-carrying cables, or due to their contact with the ladder.

In order to prevent these hazards, we strongly recommend carefully reading and observing the following notes.

## 3 Safety regulation

### 3.1 Behaviour when working near electrical systems and overhead lines

When working with electrical appliances, the regulations of the employers' liability insurance associations (e.g. DGUV Information 203-004) must be observed.

Work in the vicinity of or on unprotected electrical systems may only be carried out if:

- the system is activated.
- the system has been secured against being switched on again.
- the system has been checked to ensure that it is de-energised.
- the system has been short-circuited using an earthing bar.
- neighbouring live parts have been secured against contact.
- A sufficient safety distance must be maintained when working in the vicinity of overhead power lines.

Rated voltage (volts)	Safety distance (metres)
up to 1 kV	1 m
more than 1 kV to 110 kV	3 m
more than 110 kV to 220 kV	4 m
more than 220 kV to 380 kV	5 m
with unknown mains voltage	5 m
Safety distances according to DIN 75 105/VDE 0105-1	

If safety distances cannot be maintained, the overhead lines must be disconnected in consultation with the operators and secured against reconnection (see above for further safety measures).

## 4 General use

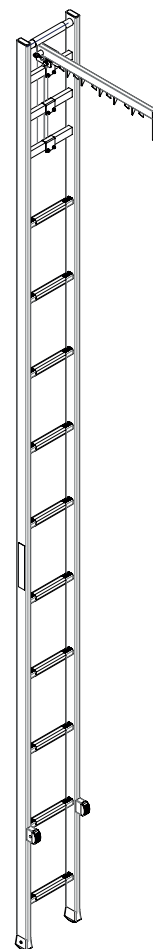
- Ladders must only be used according to their intended application. Any application not in line with the intended use is impermissible.
- Portable fire ladders must only be used by persons who have been trained in accordance with German Fire Service Regulation (FwDV) 10 and are familiar with this information brochure and the instruction manual.
- Before use of the ladders, all components must be checked for proper condition and functional capability. In the event that defects are discovered, ladders must not be used.
- Ladders must only be set up on ground that can adequately bear a load; this can be achieved by means of load-distributing bases.
- Ladders must be secured against sliding away.
- Ladders must be secured against sliding and overturning, e.g., by tethering the top of the ladder with a safety line or by holding on to the ladder.
- Ladders must only be placed against secure support points.
- At access openings, ladders must be placed flush to one side of the opening.
- If ladders are used outdoors, wind conditions must be observed in particular. E.g. tether the top of the ladder to prevent it from tipping over.
- If ladders are set up at or on traffic routes, sufficient safeguarding must be observed, e.g. by setting up safety guards, warning lights, warning labels, etc.
- It must be ensured that the permissible use load is not exceeded.
- It is impermissible to jump on the ladder.
- Climb ladders evenly and without vibration to the extent possible.
- When climbing up or down, or topping the ladder, grasp only the rungs; do not hold on to the rails.
- Nestle your body closely up against the ladder while climbing and grasp only the rungs with both hands.
- Parapets of wall openings must be straddled when entering and exiting the opening.
- Do not climb out above the upper support point of a ladder.
- From portable ladders, water must only be output with branch pipes that can be isolated. The ladder must be fastened at the top and the branch pipe guide must be secured with the safety tether. B-pipes must not be used from portable ladders.
- In order to prevent pressure surges, only open and close branch pipes slowly on ladders.

- Do not spray to the side on ladders
- When climbing ladders, carry the hose over your shoulder; do not place it in the tether.
- Carry hose lines via ladders only up to the 1st floor above ground. It is safer to hoist hoses using the firefighter's line.
- Do not let hose lines hang free, but rather secure them in the centre of the rung using a hose holder.
- Users must be instructed regularly on the proper use of the ladders.
- When setting up and using ladders, ensure that electrical overhead lines are not contacted. An adequate safety distance must be maintained between ladders, or persons on ladders, and live parts.
- An unoccupied ladder installed on the premises may not be removed without further ado.

## 5 Hook ladder

### Technical data

Permissible load kg	108 kg / 1 person
Length	4400
Weight approx. kg	11.0
Clear width between the rungs	250
Outer width	300
Stile height	60
Stile width	25
Step/rung height	28
Step/rung depth	29
Number of steps/rungs	10
Rung spacing mm	335



### Fittings

With heat-insulating, non-slip plastic covering

Folding hook made of galvanised steel secured with locking bolt

Rubber feet as spacers

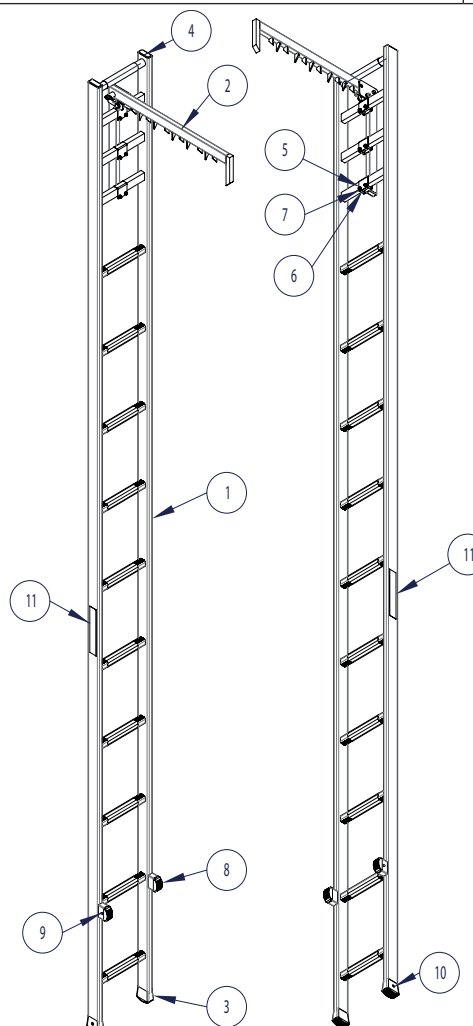
10 climbing rungs welded with stiles, 3 hook rungs and  
1 cover rung

Corrosion-resistant galvanised steel fittings



## 5 Hook ladder

Item no.	Name of the item	Order no.
1	Ladder section	01430.110.00.7
2	Hook	7076814
3	Outside shoe	00167.002.01.1
4	Cover cap	019695
5	Hexagonal nut	00140.306.00.0
6	Hexagonal head screw	00101.285.00.0
7	U-washer	81202
8	Inside shoe	019601
9	Self-drilling screws	00150.551.00.0
10	Blind rivet	00152.266.45.0
11	Type sticker	00250.115.00.6



## 5.1 Advancing the hook ladder

The hook ladder is always used by one team.

The team ordered to take the hook ladder forward takes the hook ladder from the vehicle with the support of the engine driver.

A member of the fire brigade carries it - hook in front and facing inwards - to the ladder point.



Carrying method of the hook ladder

The hook is folded out on the object.

The hook ladder is then erected, lifted up by the stiles and hooked into the intended position. Ensure that there is sufficient clearance under the base of the ladder so that the hook ladder does not sag when climbing.



Attaching the hook ladder

The members of the squad ascend one after the other. The first firefighter gets in.



Climbing the hook ladder

The second firefighter, preferably sitting on the parapet, lifts the hook ladder by the stiles and attaches it to the floor above.

The first member of the fire brigade secures the firefighter, for example by holding on to the fire brigade safety harness.

The process is repeated as you continue to ascend.

On towers used for hook ladder climbing, it must be possible to secure the trainees against falling.

The hook ladder is returned in reverse order.

## **Principles of use**

- Do not use the hook ladder as an extension ladder.
- Always point the hook of the ladder away from the body when the hook is unfolded.

## 6 Tests

### Test intervals

Ladders must be subjected to a visual inspection and load test by a qualified person according to the following schedule:

- Visual and functional inspection at least every 12 months
- Load test at least every 24 months
- Whenever the ladder appears non-operational
- Whenever the ladder has been used in a way other than its usual intended purpose.
- After major heat exposure
- After each repair, unless the rung covers are to be replaced.

Ladders that are damaged or exhibit defects, or that no longer appear safe for use, must be withdrawn from use. These ladders may only be made available for use after proper corrective maintenance once the original strength is re-established and safe passage on the ladder is guaranteed.

Ladders that do not comply with the regulations must be withdrawn from use.

The test results must be entered in a test sheet or test book.

## 7 Visual inspection

**The following items must be ensured during the visual and functional inspection of the ladders:**

- After the load test, neither damage nor permanent changes in shape are discernable.
- Check ladder rails and rungs for cracks, chipping, severe deformation or wear.
- Check connection between rail and rung for stability.
- Check all threaded and riveted connections for stability.
- Check weld seams for cracks or noticeable defects.
- Check or remove corrosion on load-bearing components.
- Check integrity of alignment for distortions and deflections.
- Check rung covers for damage.
- Check ladder feet for heavy wear or other defects.
- Marking present.

**Additionally for hook ladder made of aluminium**

- the folding device on the folding hook is smooth-running and functional.

## 8 Load tests

### Hook ladder load test

According to DGVU Principle 305-002



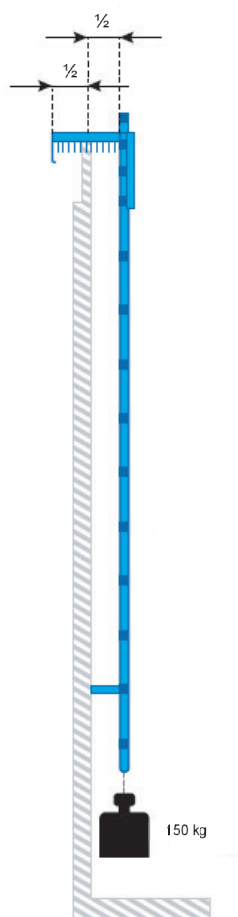
#### Caution

**The qualified person must only perform non-destructive tests, or else there may be a risk of the ladder sustaining damage.**

#### Test arrangement

To check the hooks, mount the ladder vertically at the centre of the hook and apply a load of 150 kg at the centre of the lowest rung for a period of 60 s (see figure).

In order to prevent damage to the rung, it must be protected by a support of approx. 10 cm in length.



The ladder is safe to operate if neither damage nor permanent changes in shape are discernible after loading.



## 9 Repairs and maintenance

Repairs must only be performed by qualified persons.

Ladders that are no longer capable of being repaired must be destroyed immediately.

Use the manufacturer's original replacement parts for repairs.

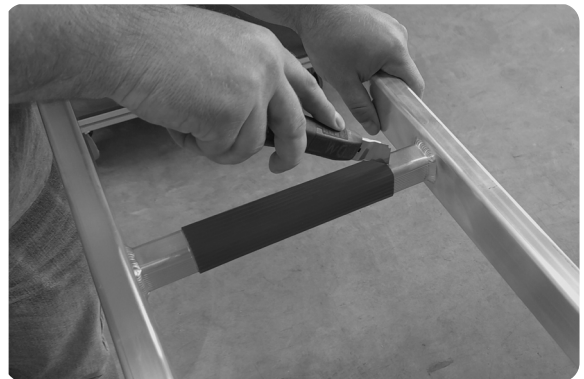
All threaded connections must be secured against inadvertently coming loose.

Do not repair deformed ladders; scrap them.

Take into account the cost effectiveness of repairing the ladder as well.

### 9.1 Replacing rung cover

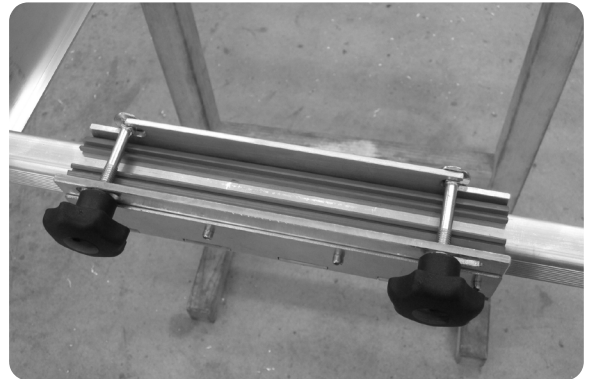
Remove the damaged rung cover as shown in the picture:



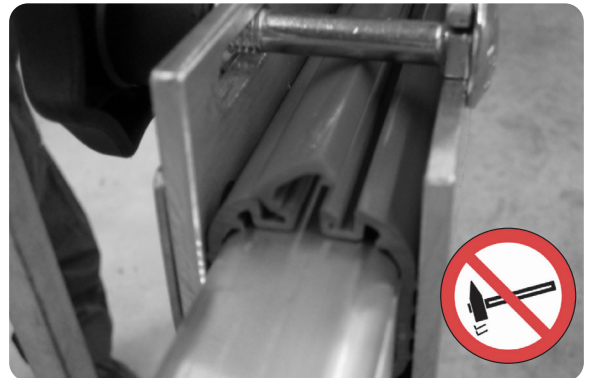
Slide the new rung cover over the rung. Make sure that the corrugation has the same direction as the rung. For extension ladders, ensure that the lock is fitted on the outside (away from the other part of the ladder).



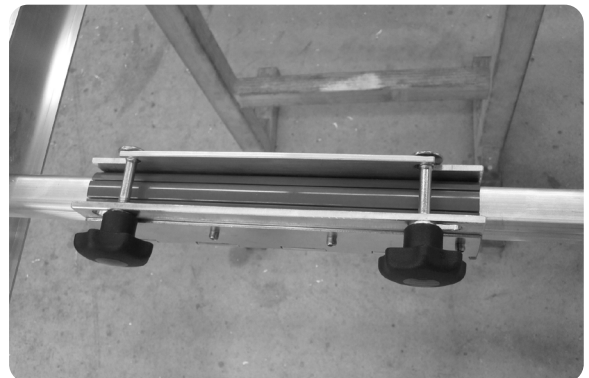
Clamp the rung cover to the rung using the assembly tool. Ensure that the rung guard is in contact with the base of the tool and is centred on the rung. The rung protection can also be attached using two sturdy battens and screw clamps.



Clamp the tool together with the star grips. Now put on the fastening strip and clip in a hook from left to right. Then the second hook in the same procedure. You can use a wooden handle for clipping in.



Now loosen the screws of the assembly tool and remove it. Check the rung protection for tight fit.



## 10 Warranty and liability

The scope, period and form of the warranty are recorded in the terms and conditions of sale and delivery of MUNK GMBH. For warranty claims that arise from inadequate documentation, the assembly and usage instructions applicable at the time of delivery are always authoritative.

Beyond the terms and conditions of sale and delivery, the following applies:

No liability will be assumed for personal injuries or property damage that have arisen due to one or several of the following reasons:

- Improper use of the firefighter's ladder,
- improperly performed repairs,
- Use of other than original replacement parts,
- Use of the ladder with defective components,
- inadequately qualified or insufficient assembly and user personnel,
- Structural modifications to the firefighter's ladder,
- Disaster situations due to the effect of foreign matter and excessive force.

The operator must ensure on its own responsibility that the safety provisions are adhered to. Furthermore, the intended use must be guaranteed.

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## Safety Made in Germany.

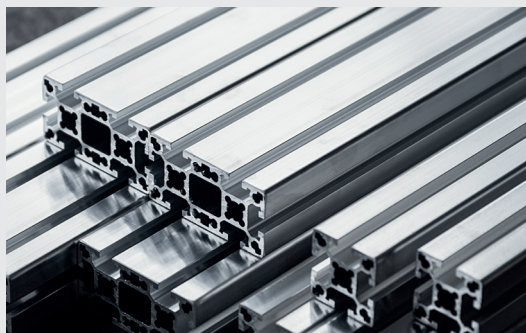
MUNK Günzburger Steigtechnik is a brand of the MUNK Group and stands for ladders, rolling scaffolding and special constructions in premium quality.



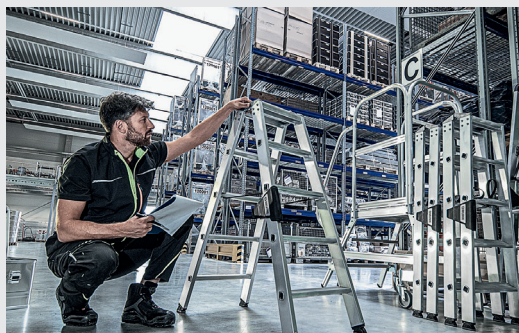
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