INSTRUCTION FOR USE

BPS
ACCESS SOLUTIONS

Aluminium ladders and steps

Manufactured at ALVE spol. s r.o.

EN 131

Read the instructions for use carefully before using (pic. 1)

picture 1

1. The main reasons for accidents occurring during use of ladders

a) Loss of stability

- Incorrect positioning (leaning the ladder at the incorrect angle, opening a stepladder incompletely)
- When the bottom of the ladder slips (the bottom of the ladder is not secured and slips away from the wall)
- Slipping to the side, falling to the side and overturning the top of the ladder (the ladder does not reach high enough over the upper contact surface or an unstable upper contact surface)
- Ladder condition (missing anti-slip feet)
- Coming down a ladder that is not secured at the top
- Terrain conditions (unstable soft soil, sloping terrain, slippery surfaces or soiled solid surfaces)
- Unfavourable weather conditions (windy weather)
- Collision with the ladder (door or a vehicle)
- Unsuitable selection of a ladder (too short, unsuitable activities)

b) Manipulation

- Carrying the ladder to the worksite (the ladder falling from a vertical position)
- Assembling and disassembling the ladder (the ladder falling from a vertical position during incorrect manipulation, having fingers pinched by another person)
- Carrying items up or down the ladder (heavy or large items, loss of stability)

c) The user slipping or falling

- Unsuitable footwear
- Dirty rungs or steps
- The user's dangerous actions (climbing the ladder two rungs at a time, sliding down the side-rails)

d) Structural defect in the ladder

- Condition of the ladder (damaged side-rails, wear)
- Over-loading the ladder

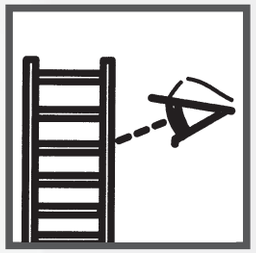
e) Danger posed by electrical current

- Unavoidable work under voltage (contact when establishing a defect)
- Positioning the ladder immediately next to electrical equipment under voltage (electrical mains above the user's head)
- Ladders damaging electrical equipment (covers or protective insulation)
- Incorrect selection of the type of ladder for electrical work

2. Instructions for use

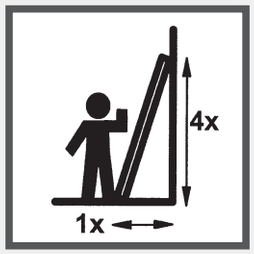
2.1 Before use

a) Make sure that you are fit enough to use the ladder. Using the ladder in certain states of health or when using certain medication, during excessive consumption of alcohol or drugs, may be dangerous.
b) When moving the ladder using a vehicle roof carrier or in vans, make sure it is suitably positioned and secured to prevent damage.
c) After the ladder is delivered, before it is first used, check the given condition and functionality of all components.
d) At the beginning of the day, when the ladder is to be used, perform a visual inspection of the ladder to make sure it is not damaged and that its use will not pose a risk (pic. 2).
e) In the case of professional users, a regular inspection is required (see periodic inspection once a year).
f) Make sure that the ladder is suitable for the specific activity.
g) Do not use a damaged ladder.
h) Remove any soiling from the ladder, for example wet paint, mud, oil or snow.
i) Before using the ladder at the workplace perform a risk assessment.
j) Please remove and discard white protective bungs to fit stabiliser bar. **DO NOT** use ladder with white protective bungs fitted!

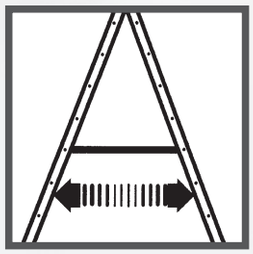

picture 2

2.2 Situating and positioning the ladder

a) The ladder must be situated in a suitable site and positioned at a suitable angle of 75o (1:4) (pic. 3), with rungs or steps on a level; stepladders must be opened completely (pic. 4).
b) Folding equipment of a type with wind-brace rods must be secured completely (pic. 5).
c) The ladder must be used on a level, horizontal and unmoving surface (pic. 6).
d) Ladders should be leaned against a flat and non-crumbling surface and should be secured before use, for example by lashing (pic. 7), or suitable stabilising elements should be used. Both upper ends of the ladder must be leaned against the wall so that the load is transferred uniformly to the wall. Do not use a ladder leaning against a post without post braces secured using a chain (pic. 8).
e) The ladder must never be moved from above.
f) When positioning the ladder take into consideration the risk of something colliding with the ladder in the work area, for example pedestrians, vehicles or doors; if possible secure doors (not emergency exit doors) and windows.
g) Establish any electrical risks within the work area, for instance electrical or other mains above the user's head, other unprotected electrical equipment (pic. 9).
h) The ladder must be supported on its feet, not on the rungs or steps.
i) Ladders must not be positioned on slippery surfaces (for instance on ice, shiny surfaces or heavily soiled solid surfaces), unless sufficiently effective measures are taken to prevent the ladder from slipping, or unless the soiled surface is sufficiently cleaned (pic. 10).



picture 3



picture 4

picture 5

picture 6

picture 7

picture 8

picture 9

picture 10

2.3 Using the ladder – general rules

a) Do not exceed the maximum loading capacity of the specific type of ladder. Max. 150 kg (pic. 11).

b) Do not lean out; during their activities users should keep the centre of their body (stomach) between the side-rails and both their feet on the same step/rung (pic. 12)

c) Do not step from a ladder leaning against a wall to a higher level without sufficiently securing it, for example by lashing or using a suitable stabilising element (pic. 13)

d) Do not use stepladders to access another level (a higher storey).

e) Do not stand on the upper three steps/rungs of a ladder leaning against a wall.

f) Do not stand on the upper two steps/rungs of stepladders without a platform and without a handle/railing (pic. 14)

g) Do not stand on the upper four rungs of three-piece ladders with the narrow part extended in the upper section.

h) Ladders should only be used for light and short-term work

i) Use ladders that are not conductive for unavoidable electrical work under voltage.

j) Do not use the ladder outside during unfavourable weather conditions, for instance during strong winds (pic. 15)

k) Take security measures to prevent children from playing on ladders.

l) If possible secure doors (not emergency exit doors) and windows in the work area to prevent falls from the ladder as the result of a collision between the ladder and door.

m) When getting on and getting off the ladder, always face the ladder (pic. 16).
n) When getting on and getting off the ladder hold onto the ladder securely.
o) Do not use the ladder as a bridge (pic. 17)
p) Use suitable footwear.
q) Avoid excessive lateral force, for example drilling into bricks or concrete when working on ladders leaning against a wall and stepladders.
r) When working on a ladder do not use chainsaws and other dangerous equipment, which could cause serious injuries.
s) Do not stay on the ladder too long without regular breaks (weariness is a risk)
t) Non-self supporting ladders should reach over the site of contact by at least 1.1 m (pic 18) for access to a higher storey
u) When carrying out work performed from a ladder, hold onto the handle; take additional safety measures if this is not possible.
v) When handling tall ladders their weight and the risk of the ladder falling from a vertical position must be taken into consideration.
w) Portable ladders must be secured against slipping by securing the side-rails at the top or bottom using anti-slip elements, or other measures that are equally effective. Folding and extending ladders must be used so that the individual parts are secured against movement.
x) Only one individual is permitted to work on the ladder (pic. 19; 20).

2.3.1 Using ALVE ladders

The FORTE (8xxx) ladder series is intended for professional use, the EUROSTYL (7xxx) series is intended for household use, for standard maintenance work. However, both series comply with the requirements of standard EN131, the only difference is in the service life of the ladder if used frequently.
After delivery check that the ladder has not been damaged during transport, this chiefly concerns the side-rails and rungs. Remove the packaging and check that the ladder is complete. Deliver the packaging to a waste collection facility for recycling.

1. One-part (simple) ladder
One-part ladders with rungs are supplied as a consignment with no additional assembly necessary, the ladder can be used after removal of the packaging by positioning the ladder in the correct position.

picture 11


picture 12


picture 13


picture 14


picture 15


picture 16


picture 17

picture 18

picture 19


picture 20

2. Double extension ladder

Double extension ladders are made up of two individual parts, which can also be used individually as simple ladders.

Procedure for work with this type of ladder:

a) Remove the packaging
b) Lay the ladder on the ground
c) Release the secured catch (pic. 21)
d) Extend the ladder to the required length (pic. 22)
e) Secure the catch
f) Lean the ladder against the wall while adhering to the abovementioned rules so that the narrower part is facing towards the user

3. Double extension ladder with rope

Double extension ladders with a rope are supplied as a single unit. Because this concerns a series comprising longer ladders (2x14 to 2x24 rungs), the ladders can be extended through a pulley with less strength necessary, which is chiefly suitable for ladders for professional use.

Procedure for work with this type of ladder:

a) Remove the packaging.
b) Lean the ladder against a wall, during which time the narrower part must face the user.
c) Take hold of the rope on the right-hand side and pull the narrow part of the ladder into the required position. To lock the ladder, stop pulling on the rope and release it by moving it approximately 20 cm back, during which time the catches in the rope mechanism will rest against a rung and the ladder is automatically secured against retracting (pic. 23).
d) If you need to retract an extended ladder, extend the narrower part another twenty centimetres upwards without releasing and pull the tensioned rope towards you, during which time the system of catches joined with a

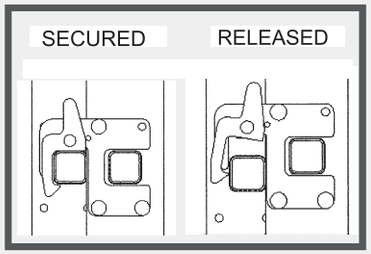
peg will be released; slowly release the rope you have pulled towards you into the required position. Then move the rope in the direction of the ladder and the catches will be secured again.

e) When extending and retracting the ladder do not place your hand between the rungs, or you risk injury.

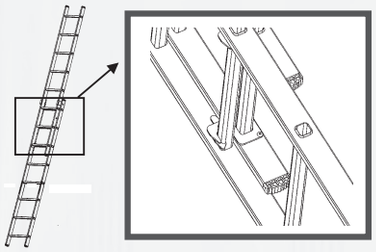
4. Two-piece combination ladder

The two-piece combination ladder is supplied without an installed stabiliser. It is made up of a non-dismantling unit of two ladders with straps and a stabiliser with connecting material, which is intended to attach the stabiliser. After the stabiliser is attached the ladder can only be used as one unit without the option of using the ladders individually.

The ladder can be used as a non-self supporting ladder, extension ladder or self-supporting A-frame ladder (step-ladder) (pic. 24).



picture 21



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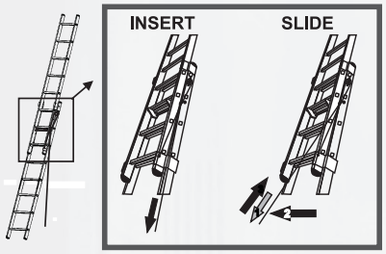

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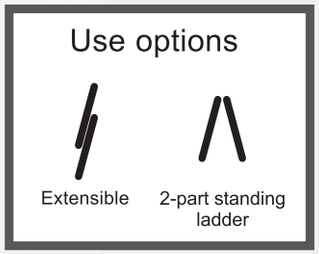


picture 24

Procedure for work with this type of ladder:

a) Remove the packaging.

b) Remove and discard white protective bungs to fit stabiliser bar. **DO NOT** use ladder with white protective bungs fitted!

c) Install the stabiliser according to the instructions (pic. 25), which are part of the stabiliser. The connecting material is attached to the stabiliser with a tape. Do not use the ladder without the stabiliser. The assembly is not sufficiently stable and the unprotected ends of the profiles will be damaged.

Non-self supporting extension ladder mode (pic. 26)

a) Lay the ladder on the ground.

b) Release the secured catch.

c) Extend the narrow part of the ladder to the required length. When inserting the hooks into the rung you must take care to prevent pinching and damaging the strap.

d) Secure the catch.

e) Lean the ladder against the wall while following all the above-mentioned rules so that the narrower part faces the user.

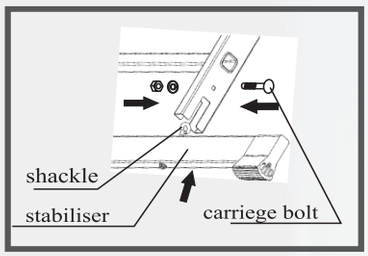
A-frame (stepladder) mode, self-supporting (pic. 27)

a) Stand the ladder up and open it like a stepladder as much as possible (the straps must be stretched tight (pic. 4)

Self-supporting A-frame (stepladder) mode on two surfaces of different heights (for example steps) (pic. 28)

This mode is only possible with types 7707, 7709 and 7711, which are adapted for this type of purpose.

a) Extend the ladder while folded to the required difference in height (max. possible overlap is two rungs) and open the ladder on the level of the rung like a stepladder so that the guide-rails are seated on the appropriate rung. Warning! When opening the ladder keep it parallel and do not twist it. When opening the ladder rest the rung symmetrically on the edges of both guide-rails, otherwise the guide-rails and the rung profiles can be damaged (pic. 29).



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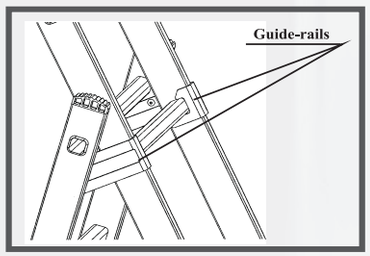


picture 29

picture 26

picture 27

picture 28

5. Three-piece combination ladder

The three-piece combination ladder is supplied without an installed stabiliser. It is made up of a dismantling unit of three ladders with straps, a stabiliser and connecting material intended for attaching the stabiliser. After the stabiliser is attached the ladder can then be used in several modes with the option of using the narrow part individually as a non-self supporting ladder. The ladder can be used as a non-self supporting ladder, extension ladder or self-supporting A-frame ladder or self-supporting A-frame ladder with an extension ladder (pic. 30).

Procedure for work with this type of ladder:

a) Remove packaging.
b) Remove and discard white protective bungs to fit stabiliser bar. **DO NOT** use ladder with white protective bungs fitted!
c) Install the stabiliser according to the instructions, which are part of the stabiliser (pic. 25). The connecting material is attached to the stabiliser with a tape. Do not use the ladder without a stabiliser, the assembly is not sufficiently stable and the unprotected ends of the profiles will be damaged.

Single non-self supporting ladder mode.

a) Lay the whole ladder on the ground.
b) Release the catch on the narrow part and remove the part from the assembly.
c) The individual part can be used as a non-self supporting ladder. When leaning the ladder against a wall turn it with the hooks facing the wall.

Non-self-supporting extension ladder mode (pic. 31)

a) Lay the ladder on the ground.
b) Release the secured catch. Extend the third part from the second ladder to the required length and secure the catch.
c) Release the secured catch. Extend the second part from the first ladder to the required length and secure the catch. When inserting the hook into the rung you must take care to prevent pinching and damaging the strap.
d) Lean the ladder against a wall while following the above-mentioned rules, so that the narrower part is facing the user.

Self-supporting A-frame mode (pic. 27)

a) Lay the complete ladder on the ground.
b) Release the catch on the narrow part and extend the part from the unit and remove it.
c) Stand the ladder up and open it like a stepladder to the maximum angle (the straps are stretched tight, pic. 4).

Self-supporting A-frame with extension ladder mode (pic. 32)

a) Stand the complete ladder up and open it like a stepladder to the maximum angle (the straps are stretched tight, pic. 4).
b) Extend the narrow part to the required length, secure the catch on the narrow part.

Self-supporting A-frame with extension ladder mode on a surface of two different heights (for example steps) (pic. 33)

This mode is only possible on types 7807, 7808, 7809, 7810 and 7811, which have been adapted for this purpose.

a) Extend the folded ladder to the required difference in heights (the max. possible overlap is two rungs) and open the ladder on the level of the rung like a stepladder so that the guide-rails are seated on the appropriate rung. Warning! When opening the ladder keep it parallel and do not twist it. When opening the ladder rest the rung symmetrically on the edges of both guide-rails, otherwise the guide-rails and the rung profiles can be damaged.
b) Extend the narrow part to the required length, secure the catch on the narrow part.
c) The end of the extended ladder must not extend over the width of the unfolded part of the ladder (pic. 34).
d) The set height must be selected so that the extended part of the ladder creates an angle of 75° with the floor.

6. Single-sided and double-sided stepladders

This concerns single-sided or double-sided stepladders with steps intended for professional use or in households depending on individual design. These can be used on level solid surfaces (not in the garden on soft terrain). Euro-style 91x and 92x series stepladders are not suitable for professional use; on the contrary 93xx and 94xx series are intended for professional use.

Procedure for work with this type of stepladder:

a) Remove packaging.
b) Stand the steps up and open them to the maximum angle (the straps are stretched tight, pic. 4), straps are used from type 915 on single-sided steps).
c) The platform with cut-out segments on single-sided steps must be seated onto the top pipe of the supporting section in the final phase of opening. There is no groove in the platform on type 93xx, the steps only need to be

opened to the maximum possible degree. When folding the steps the platform must be lifted at the back and the steps folded.

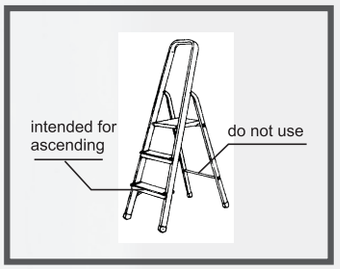
d) Do not step on the pipe or the profile of the supporting section of single-sided steps (pic. 35)
e) Carefully check the condition of the straps, which are there to prevent the steps from opening too much (pic. 36)

picture 36

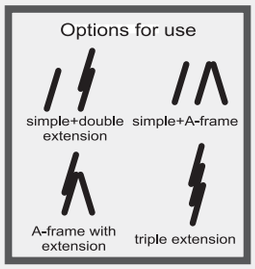
picture 31

picture 32

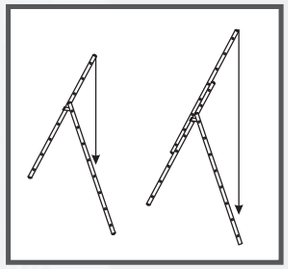
picture 33



picture 35



picture 30



picture 34

7. Articulated ladder

A combination ladder with rungs, manufactured in two sizes: 4x3 and 4x4 rungs. Six joints enable use of the ladder in several modes (pic. 37):

1) Non-self supporting ladder
2) Non-self-supporting articulated ladder
3) A-frame (stepladder)
4) Platform (only type 4410 – floor platform necessary).

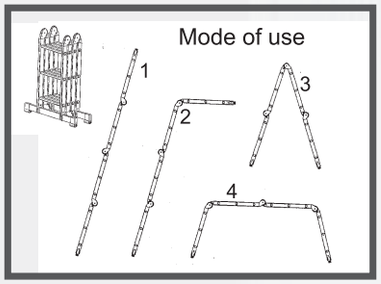
Type 4410 is supplied as the following unit:	Ladder 4x3 rungs	1 item
	Stabiliser	2 items
	Connecting material for attaching stab.	2 items
Type 4413 is supplied as the following unit:	Ladder 4x4 rungs	1 item
	Stabiliser	1 item
	Connecting material for attaching stab.	1 item

This ladder is valued for its small dimensions when folded, so it can be transported inside a passenger vehicle without having to install a roof-carrier.

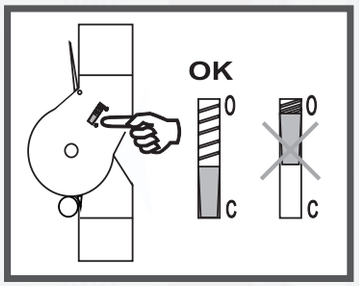
Procedure for work with this type of ladder:

a) Remove packaging.
b) Attach stabilisers (only one stabiliser on type 4413)
c) Open the ladder to the required positions. In specific places a wedge-shaped catch will fall into the groove in the joint in position "C" (this can be seen on each joint from the side, pic. 38), at this time the joint is locked and it cannot be moved. If you need to release the joint, move the levers on both sides in the direction away from the profile (pic. 39); the catches will move into position "O" and will remain released until they are moved to another position. Before climbing any mode of the articulated ladder you must check that all the catches are moved to position "C" and the joints are locked.

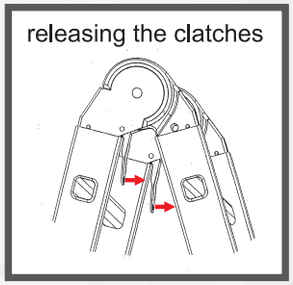
The ladder joints are reliable mechanisms, made up of several moving parts connected with the side-rail so that they cannot be dismantled. Therefore, the joints must be kept clean (remove sand, concrete and mortar). Before and after the season all joints should be lubricated with oil and the ladder stored in a dry place.



picture 37



picture 38



picture 39

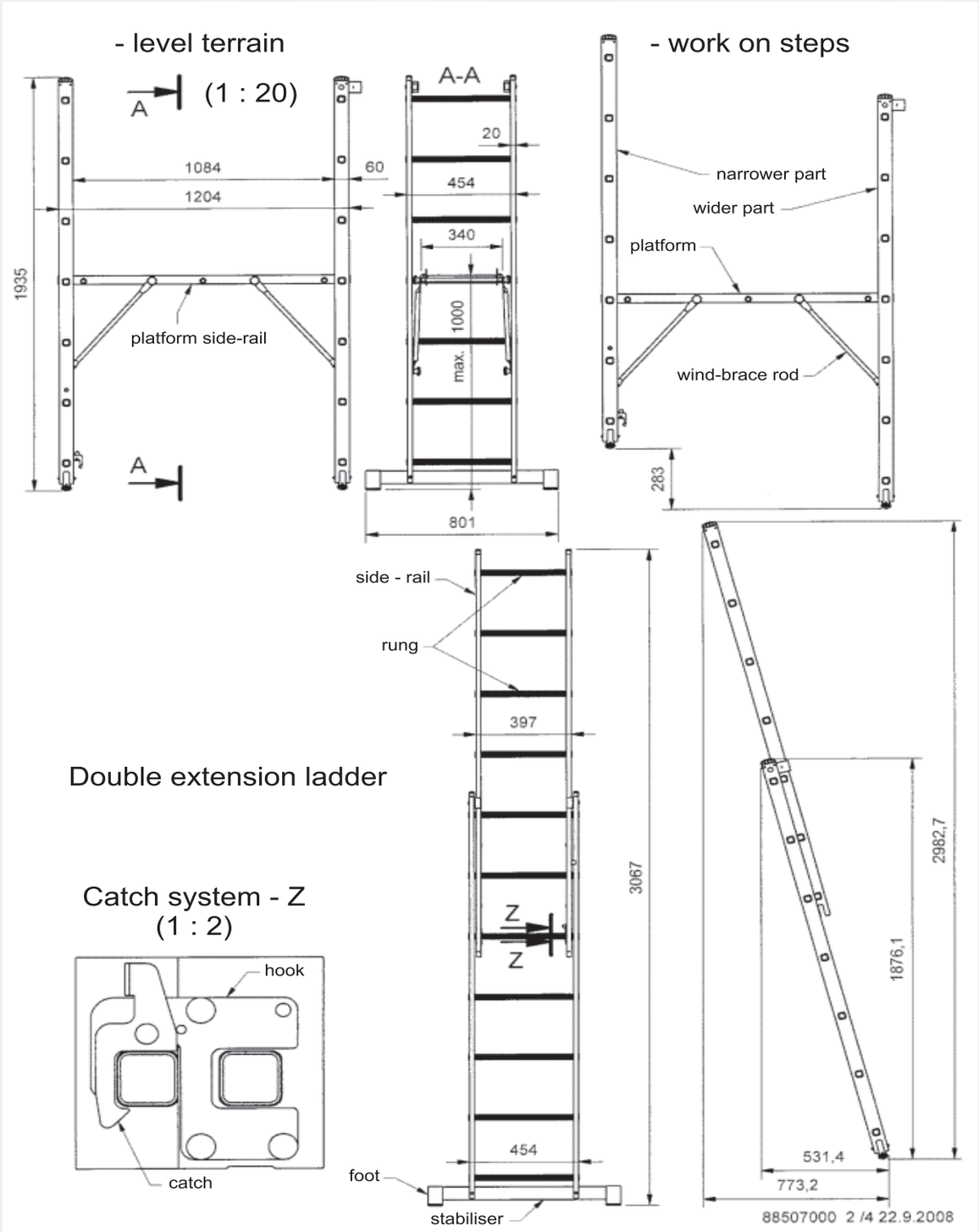
8. Work platform 8507

This multi-purpose work platform is intended for household use and can be used in several modes as a platform and also as a combination ladder. The loading capacity is up to 150 kg.

Type 8507 is supplied dismantled:

Dismantling combination ladder, 2x7 rungs	1 item
Stabiliser 8507 P (with narrower hole spacing)	1 item
Stabiliser 8507 S (with wider hole spacing)	1 item
Connecting material for stabilisers	2 items
Platform	1 item
Rod ZT-06	4 items
Set of connecting material for scaffolding 8507	1 item

WORK PLATFORM 8507 – modes of use



Before use you must:

a) Remove the packaging.

b) Install the stabilisers (with the exception of the narrow part in double extension ladder mode), so as to prevent damage to unprotected profiles or the floor.

This multi-purpose product can be used in the following modes (pic. 40):

1) *Single-unit non-self supporting ladder (2 items)*
   Lean the individual ladder parts against a solid wall, you can use them as two simple individual ladders.
2) *A-frame ladder with extension*
   During use the stabiliser must be removed from the narrower part of the ladder. Insert the narrower part of the ladder into the wider part, release the catch and gradually extend (or retract) to the required length, always so that the rungs of the individual parts are on a level opposite each other. After the hooks are seated on the selected rung, secure the catch again. The maximum length the ladder can be extended depends on the stop roller on the narrower part. Lean the ladder against a wall, during which time the narrower part must always face the user.
3) *Work platform for work on a level surface*
   Stand both the parts of the ladder opposite each other and place the platform at the required height (only on the fourth or fifth rung from the top of the ladder on both parts) so that the apertures in the platform side-rails are seated on the rungs of the individual ladder parts. Then secure all four catches. Secure the platform additionally against opening by attaching the four wind-brace rods so that on each side one end of each rod is screwed to the platform side-rail and one end to the ladder side-rail using a screw with a plastic head.
4) *Work platform for work on steps*
   Stand both parts of the ladder opposite each other with the required difference in height (the max. possible overlap is by one rung) and place the platform at the required height (only on the fourth or fifth rung from the top of the ladder on the individual parts) so that the apertures in the platform side-rails are seated on the rungs of the individual ladder parts. Then secure all four catches. Secure the platform additionally against opening by attaching the four wind-brace rods so that on each side one end of each rod is screwed to the platform side-rail and one end to the ladder side-rail using a screw with a plastic head.

The following applies for modes 3) and 4):

Only one person may work on the work platform and the total load must not exceed a weight of 150 kg! The platform is not constructed for climbing the actual structure, therefore you must use other safe means for ascending.

The platform must not be used without the stabilisers attached. The platform is not equipped or structurally designed for work at a height above one meter, consequently use above the specified height limit is forbidden.

2.4 Cleaning ladders and steps.

You may clean the products using standard detergents or alcohol. If the product is splattered by paint when painting, you can clean the products using the appropriate solvents intended for thinning the paints you are working with.

2.5 Ladder storage

1) Store the ladders in a dry airy area horizontally, supported in two or three places (depending on ladder size) or hung on their sides on two or three hooks.
2) Ladders should not be subject to the direct effects of weather for extended periods.
   In particular, ultraviolet (solar) radiation has a negative impact on the life of straps and plastic parts
3) Do not store the ladders in a vertical position, particularly if the ladder is not secured against failing and if there is a risk of children accessing the ladder.
4) Before storing the ladder, lubricate the moving parts (catches, joints) with oil.

3.1 Periodic inspections

If used professionally, the user is required ensure periodic annual inspections of ladders and steps. The inspection is carried out by the manufacturer, ALVE spol. s.r.o., or a technically competent employee, who is capable of assessing the condition of the ladder.

The following must be inspected on every ladder:

Spars

Check that the spars are not dented, the edges are not crushed, bent or otherwise deformed. Check that no damage has occurred during welding or grinding using a hand-held grinder/sander. If you are not sure that the spars retain sufficient strength, request a strength test according to EN 131-2 by a professional workshop. If the damage is excessive dispose of the ladder without tests.

Rungs

Check that the spars are not bent or otherwise deformed (after an item falls on a rung), that the rungs are not worn by friction, vibrations or something hitting the spars as a result of frequent transport on vehicles. Also check that the joins between the rungs and spars have not been loosened. Deformed and worn rungs are replaced and loose joins are re-assembled by a professional company with the necessary equipment.

Guide-rails

Check that the guide-rail connections are tight and that they are not deformed. Tighten loose connections and replace deformed guide-rails.

Hooks and catches

Check the attachment of individual hooks and catches, check that riveted connections have not become loose and that hooks and catches are not deformed. Replace deformed parts, re-rivet loose connections.

Joint reinforcement

Check attachment of joint reinforcements and for deformation. Replace deformed reinforcements, re-rivet connections.

Straps and wind-brace rods
Check the straps along their whole length, particularly at riveted connections. Straps must not be damaged, if damaged both straps must be replaced. Wind-brace rods must not be bent, ø6 attachment rivets must be solid and connected with the side-rail at a right angle. Damaged wind-brace rods must be replaced, damaged rivets must also be replaced.

Plastic profile ends
Check that these are complete, check the degree of wear of plastic ends and that the plastic is firmly seated in the profile. Worn plastic should be replaced and secured against falling out. Plastic must not be driven into the profile. If worn excessively, when the profile has also been damaged, symmetrically level both profiles at a right angle and replace the plastic with new parts and secure them against falling out. However, the damage to the profile as a result of excessive wear of the plastic must not be more than 5 mm. Plastic ends must be well secured so as to prevent the plastic from sliding into the profile if a greater load is put on the ladder, resulting in loss of stability.

Stabiliser
Check that the stabiliser profile is not damaged, that the stabiliser plastic is not worn. Replace worn plastic, replace stabiliser profile if damaged.

Overall rigidity
The ladder must be rigid, it must not wobble. If you are not sure of the overall rigidity the ladder must be tested using methodology according to EN 131-2 by a professional workshop.

4.1 Disposal of worn or damaged ladders and steps

No dangerous materials were used during manufacture of ladders. Ladders can be disposed of at waste collection facilities, or the ladder can be dismantled and separated into individual materials (aluminium, iron and plastic).

Regulations used when writing the instructions for use:

ČSN EN 131-1 Ladders – Terminology, types, functional dimensions
ČSN EN 131-2 Ladders – Requirements for testing, functional dimensions
ČSN EN 131-3 Ladders – Instructions for use
ČSN EN 131-4 Ladders – Ladders with one or several joints
National Guideline 362/2005 Coll.

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