



# Fall protection system

## FABA™ Climbing protection system

**AL2 MOBIL  
system**



**AL2 MOBIL-F  
system**



## FABA™ CLIMBING PROTECTION SYSTEM

### APPLICATIONS

- The FABA™ AL2 MOBIL system is a temporary climbing protection system that protects people against falling when moving around, e.g. working on towers, chimneys, high storage tanks, bridge piers, masts, aerial support masts, machines, equipment, high-rise racks, industrial plants, buildings and facades.
- The FABA™ AL2 MOBIL-F system has been especially designed for moving around on masts.

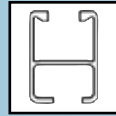
### Operating principle

The user to be secured must wear a harness with a fall-arresting device attached to it. This device travels inside a guide rail. In the event of a fall, the arresting device locks inside the rail and prevents an accident from occurring.

### Advantages

It is the fall prevention device (guided arrester) that enables the climbing protection system to ensure safe climbing up and down. FABA™ offers the only fall arrest system on the market with an enclosed glide roller system. In this system the fall prevention device rollers travel inside the rail. The result is optimal compensation of local constructive tolerances as well as consistently smooth running of the fall prevention device. Ultimately, this translates into the elimination of detrimental friction losses.

The climbing protection system consists of mobile, separate ladder sections, which can be assembled into a single unit as required and secured to the building. This might well be required for visual as well as technical reasons (e.g. wind force) or to restrict the access to protected areas.



## AL2 MOBIL & MOBIL-F SYSTEMS

- Ladder sections fitted with side guides that can be joined together
- Made from anodised aluminium
- Climbing protection profile dimensions: width 48 mm, height 65 mm (same as AL2 "Standard")
- Material thickness – 3 mm
- Arresting device catchment spacing – 70 mm
- Ladder rung spacing – 280 mm
- Maximum support bracket spacing (depends on the system design) – 840 mm to 1,680 mm
- Fall prevention device can also be used in our A 12 system

### AL2 MOBIL system special requirement

The support brackets that will be used for holding the ladder sections must be permanently secured to the building. Support brackets are available as the wall securings as well as mast mounting clamps.

### AL2 MOBIL-F system special requirement

The securing devices are part of the ladder section in this system. Safety belts can be used to secure the ladder section to the mast.



AL2 MOBIL system



AL2 MOBIL-F system

## Contents

Contents	3
Note	3
Information	4
Applicable regulations	5
<b>AL2 MOBIL system:</b>	
Installation planning aid	6
Example	7
Components	8 – 9
<b>AL2 MOBIL-F system:</b>	
Installation planning aid	10
Example	10
Components	11

## Certification notes:

The FABA<sup>TM</sup> AL2 MOBIL and AL2 MOBIL-F climbing protection systems have been designed for temporary use only in compliance with EU Directive 89/686/EEC and the EN 353-1 standard.

The EU prototype testing was undertaken by EXAM-DEKRA GmbH (Test-office Reg-No. 0158) in Bochum and is certified as approved under ZB 01/050.

End product quality assurance is also carried out by EXAM BBG Prüf- und Zertifizier GmbH in Bochum.

## Handling notes

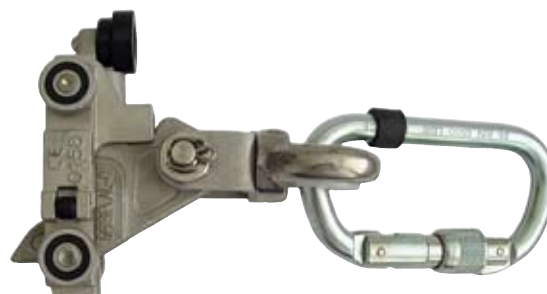
You must always abide by the instructions given in the relevant manual when handling the system or assembling the parts.

## Information

Climbing protection ladders with integrated safety systems produced in FABA™ AL2 MOBIL and AL2 MOBIL-F system versions with rungs and side guides for temporary attachment to buildings.

The systems listed above are only to be used in conjunction with FABA™ AL-R fall prevention devices (see picture).

*FABA™ AL-R fall prevention device, Order-No: 504 988*



### Technical data

- H-shaped extruded profile with two chambers
- Front chamber through which only the fall prevention device runs
- Rear chamber for double rungs and securing material
- Cut-outs in the back of the centre rail at regular intervals for fitting the support brackets. (AL2 MOBIL only)
- Asymmetric rail slots
- The back of the rail is has cut-outs at 70 mm intervals catching the fall prevention device
- Rungs made from a rectangular profile with profiled tread surface
- Version with side guides

### Note:

**Damaged components or components which have been used in a fall may not be used until tested by a technical expert.**

Only those persons who have been given expert training on FABA™ products by the TRACTEL Group in accordance with the code of practice BGG 906 (Basic regulations for the selection, instruction and certification of competence of experts in personal protective equipment used to prevent falling from a height – issued by the BGG “Personal protective equipment” technical committee) are regarded as technical experts with regard to FABA™ climbing protection systems.

The current edition of the BGG 906 code of practice can be obtained from Carl Heymanns Verlag KG, Luxemburger Straße 449 in D-50939 Köln, Germany.

It is the obligation of the employer or operator, as the case may be, to instruct the users of climbing protection systems as necessary, however **this must be done at least once a year.**

### Materials used:

Climbing protection systems are subjected to the most diverse climatic conditions and must be able to bear static loads and guarantee fall protection even after many years of service. FABA™ climbing protection ladders are manufactured in compliance with standards that ensure the highest quality.

The climbing protection ladder is made from aluminium extruded profiles and is fully anodised. Associated components (e.g. brackets, connectors, catches, etc.) are made from aluminium, hot-galvanised steel or non-rusting stainless steel. The combinations of different materials do not cause any problems (corrosion).

### Material characteristics of the parts used in the ladders:

- Material: Al Mg Si 0.5, strength 25  
DIN 1725 Part 1 (EN AW-6060 EN 755)
- Tensile strength: 245 N/mm<sup>2</sup>
- Yield point: 195 N/mm<sup>2</sup>
- Breaking strain A5: 8 %
- Tempered
- Anti-corrosion anodised coating (anodic oxidation),  
DIN 17 611-E6 – silver colour.  
coating thickness 20 µm.

## Applicable regulations

Please observe the generally accepted technical standards when installing the systems shown in this brochure on buildings or structures; we refer in particular to the following:

EEC 89/686	Directive covering personal protective equipment
EN 353-1	Personal protective equipment against falls from a height, climbing protection system fall arresters including a rigid anchor line
EN 354	Lanyards
EN 355	Energy absorbers
EN 358	Belts for work positioning and restraint and work positioning lanyards
EN 361	Full body harness
EN 362	Connectors
EN 363	Arrest systems
EN 364	Testing Procedures
EN 365	Instructions for use and marking



## Installation planning aid

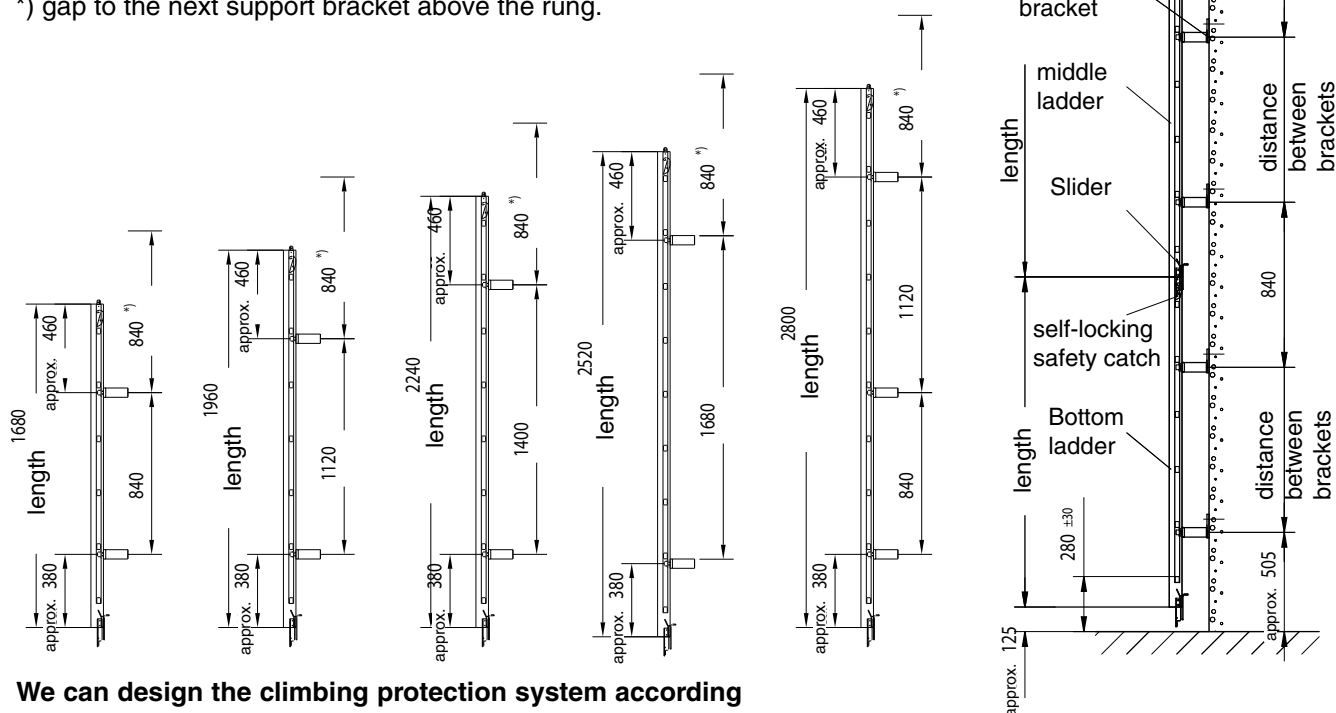
- The climbing protection systems and accessories shown here are **only to be used for the approved purpose**:  
Climbing protection ladders are to be used solely for safe climbing and not for lifting or transporting loads.
- The installation base or building must have an **adequate load bearing capacity**. You must ensure that area allotted for the support brackets is adequate.
- The mobile ladder parts are attached temporarily by continually fitting them on top of each other for the duration of the work on the building.
- We recommend using them up to a maximum height of about 12 m (handling is restricted above this height).
- Our AL2 MOBIL system is only to be used on buildings in compliance with DIN 18799 Part 2:
  - where the support bracket spacing is less / equal to the permitted maximum spacing,
  - where the arresting force of 6 kN can be spread over at least 4 securing points on the building.

The support bracket spacing must be suitable for use with the lower, centre and upper ladders.

\*) gap to the next support bracket above the rung.

The following must be given special consideration with regard to the support brackets:

- The support bracket spacing must be chosen so that it forms a 280 mm pattern.
- The bottom support bracket (centre of the securing head) must be 505 mm above the platform.
- The number and distribution of the support brackets is determined by the lengths of the separate parts of the ladder.
- There must be a gap of 460 mm to the next support bracket above the rung.
- The support brackets must be fitted so that they are aligned vertically.
- Use anchor fitting approved by the building authorities for securing the support brackets to the support structure.

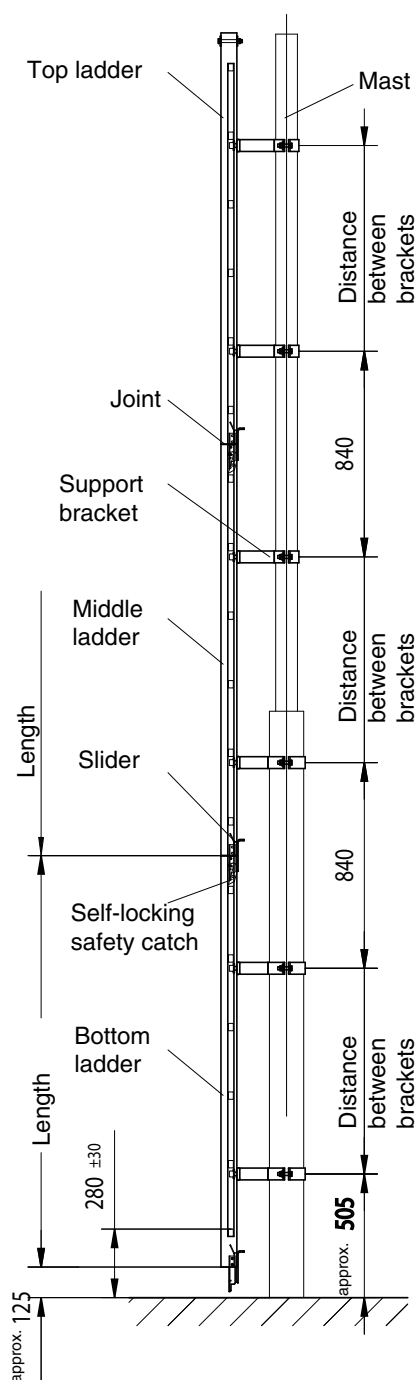


**We can design the climbing protection system according to your specific needs – Please contact us**

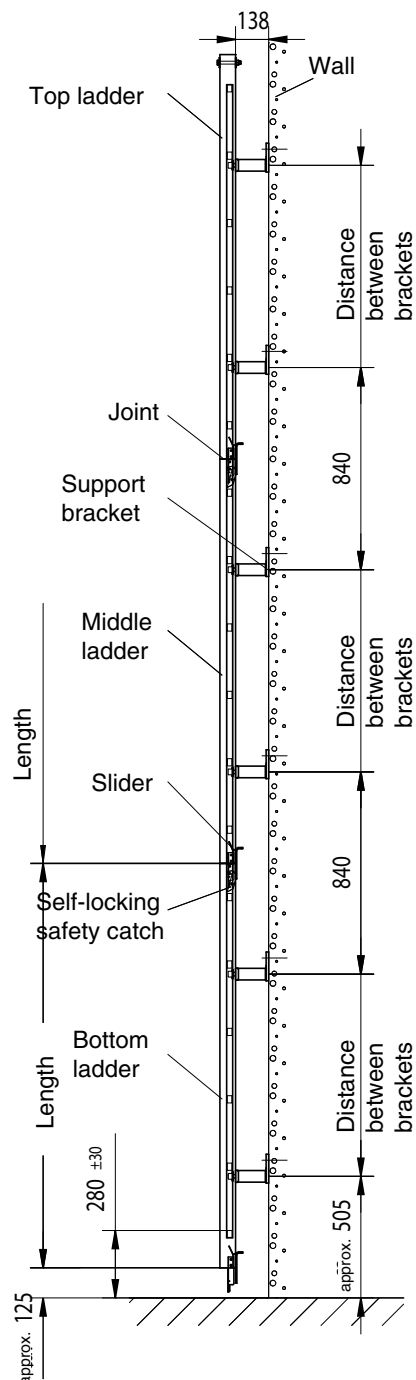
## Example: AL2 MOBIL system

Our AL2 MOBIL climbing protection system consists of separate, transportable ladder sections, which can be temporarily fitted to and hung from permanently installed support brackets. The ladder sections are fitted one above the other.

The ladders have been designed as lower, middle and upper ladder sections. We can also supply support brackets for fitting to masts and as wall mounts (others upon request).



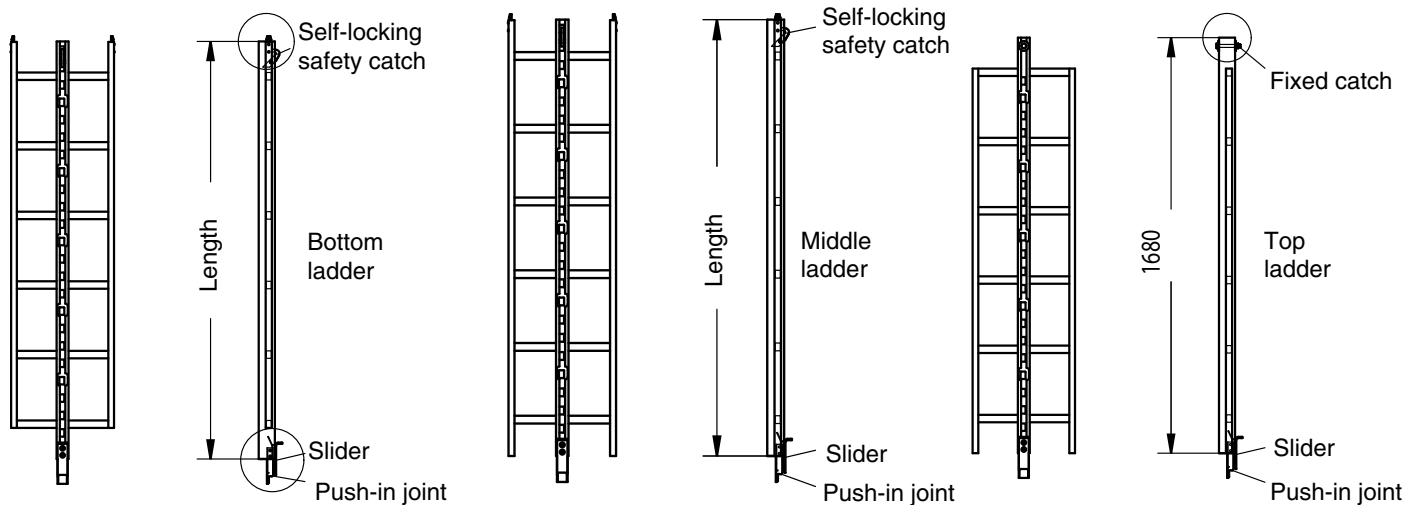
AL2 MOBIL  
Using on a round mast  
(different mast bindings)



AL2 MOBIL  
Use on walls  
(e.g. secured by anchors)

## AL2 MOBIL system ladder section

Aluminium centre rail ladder with side guides and cut-outs in the back of the rails spaced 280 mm apart.



- Top fitted with self-locking safety catch,
- Bottom fitted with push-in joint.
- Top fitted with self-locking safety catch,
- Bottom fitted with push-in joint, which the safety catch locks into and slider.
- Top fitted with fixed catch,
- Bottom fitted with push-in joint, which the safety catch locks into and slider.

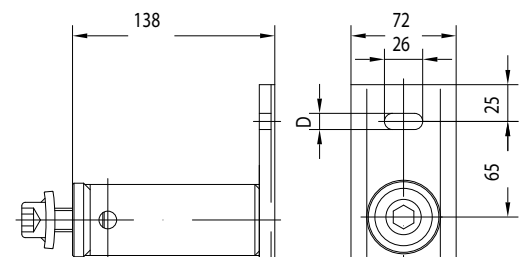
Order-No:	Name	Length / Note	kg
513 138	<b>Bottom ladder</b>	1,680 mm	6
513 148		1,960 mm	7
513 158		2,240 mm	8
513 168		2,520 mm	9
513 178		2,800 mm	10
504 638	<b>Middle ladder</b>	1,680 mm	6
504 678		1,960 mm	7
513 188	<b>Top ladder</b>	1,680 mm	6
511 085	Socket wrench SW 14* with T-handle (steel)	Accessories	—

\* Use the socket wrench to hand-tighten the guide head after you have hung up a ladder section.  
The mobile ladder section has the same properties as a fixed ladder.

## Support bracket for use with AL2 MOBIL system

The support ring consists of a welded part (plate with round spacer ring) made from hot-galvanised steel with a stainless steel guide head for holding and locking the ladder section in place.

Order-No:	Name	kg
513 437*	Support bracket d = 10.5	1,5
513 447	Support bracket d = 14	1,5
501 455*	Anchor bolt FZA 14 x 60 (1.4571)	0,4
501 465	Drill bit FZUB 14 x 60 (SDS+)	. / .
501 475	Installation device FZE 14	. / .



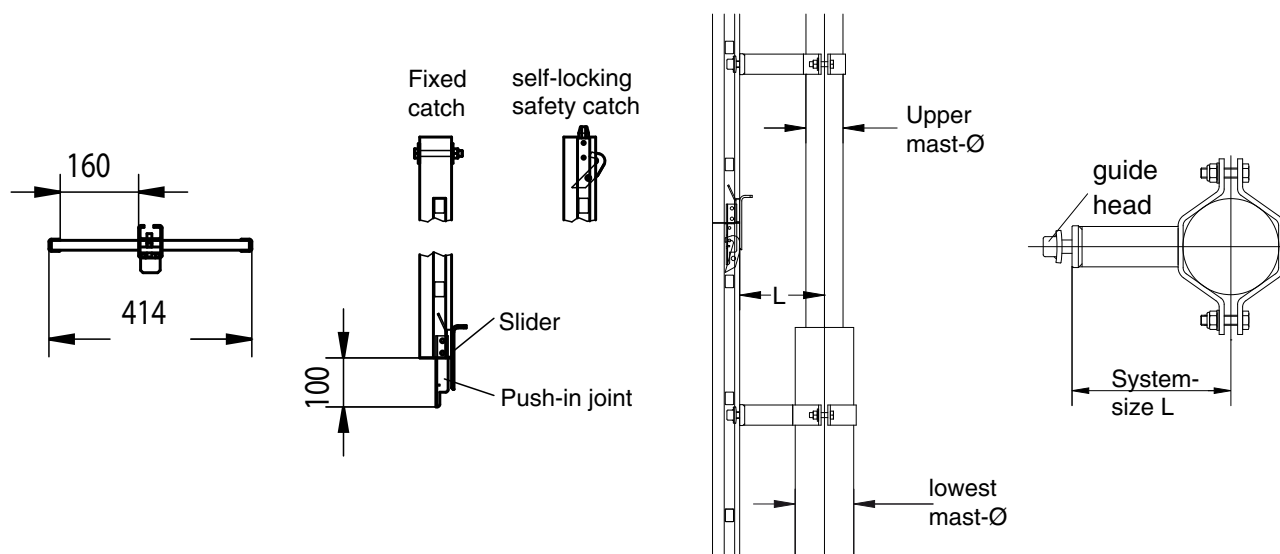
\* Recommended material assembly for use with concrete supports;  
concrete rating must be at least B25



## Mounting clamps with AL2 MOBIL system anchor line

A support bracket consists of a welded part (steel pipe with mounting halves) and a stainless steel guide head as well as the other mounting halves. The coding of the bracket consists of:

- The mast diameter at the point where the respective support bracket is fitted
- System dimension L (mast centre to back of rail)
- Example: Diameter 80 mm, system-size 203 mm  
Name: support bracket Ø80 / 203



for Ø given in mm	Order-No. according to system size L= (see below) mm and Ø										
	178	184	190	203	213	217	230	243	255	269	308
80,0				512 195	512 205						
88,9	512 115	512 155	512 145	512 125	512 135	512 165	512 175	512 185			
101,6		512 285	512 305	512 315	512 325	512 335	512 295	512 345			
114,3			512 045	512 065	512 075	512 085	512 095	512 055	512 105		
139,7				511 935	511 955	511 965	511 975	511 945	511 985		
159,0					511 995	512 015	512 025	512 035	512 005		
168,3						512 215	512 225	512 235	512 245		
193,7							512 255	512 265	512 275		
219,1								511 905	511 915	511 925	
244,5											
273,0											
350,0											512 355

Other versions not listed here are available upon request

System dimension L used in an installation is always determined using the lowest mast diameter. Dimension L is crucial for the selection of the other support brackets to be used in the same system dimension L.

## Example: AL2 MOBIL-F system

Our AL2 MOBIL-F climbing protection system consists of separate, transportable ladder sections, which can be temporarily attached to a mast as necessary. The ladder sections are fitted one above the other.

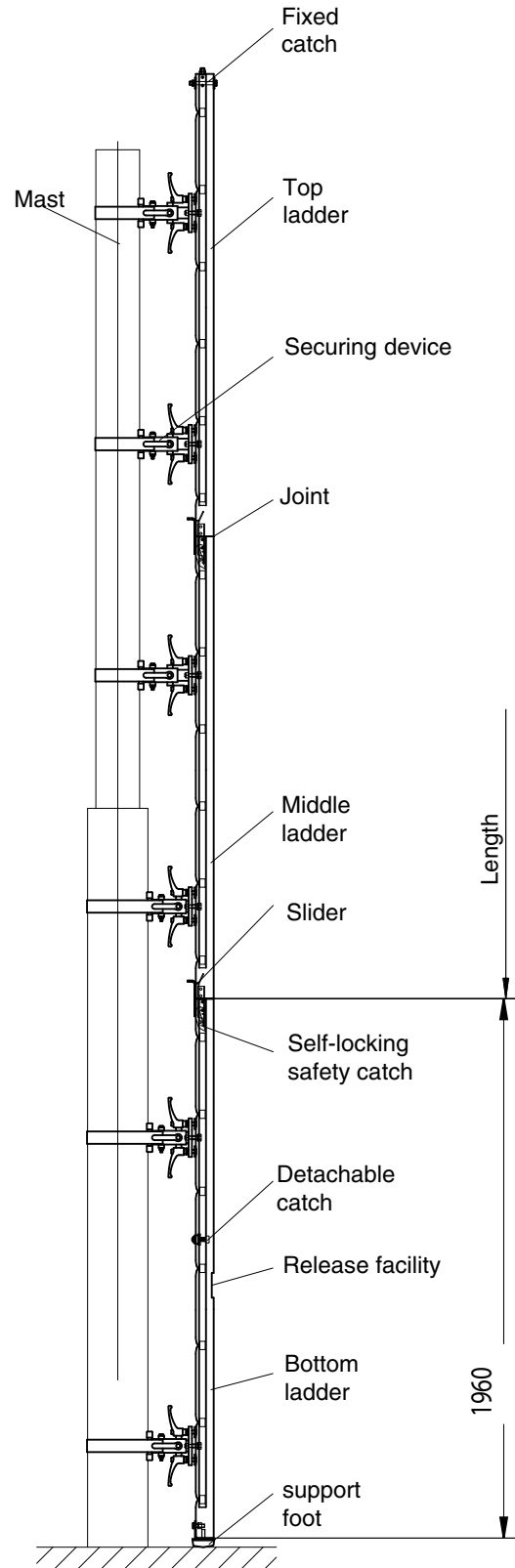
The ladders have been designed as lower, middle and top ladder sections. They are fitted with two adjustable securing devices, which have an integrated safety belt that must be looped around the mast.

## Planning aid for AL2 MOBIL-F system

- The climbing protection systems and accessories shown here are **only to be used for the approved purpose**: Climbing protection ladders are to be used solely for safe climbing and not for lifting or transporting loads.
- The installation base or building must have **an adequate load bearing capacity**. You must ensure that area allotted for the support brackets is adequate.
- The mobile ladder parts are attached temporarily by continually fitting them on top of each other for the duration of the work on the building.
- We recommend using them up to a maximum height of about 12 m (handling is restricted above this height).
- Our AL2 MOBIL-F system is only to be used on buildings in compliance with DIN 18799 Part 2:
  - where the securing device spacing is less / equal to the permitted maximum spacing,
  - where the arresting force of 6 kN can be spread over at least 4 securing points on the building.

### The following must be given special consideration with regard to the securing in place:

- The securing device spacing must be chosen so that it forms a 280 mm pattern.
- You must ensure that all of the securing device are mounted tightly in place on the separate ladder sections before you install the ladder.
- The spaces between the securing device must never exceed the stipulated spacing.
- There must be a gap of 460 mm to the next securing device above the rung.
- You must ensure that area allotted for the securing device is adequate.



## AL2 MOBIL-F system ladder section

- Aluminium centre rail ladder with side guides,

### Bottom ladder

- Top fitted with self-locking safety catch,
- Bottom fitted with support foot.
- Release facility for inserting the fall prevention device
- Detachable catch fitted above the release facility

### Middle ladder

- Top fitted with self-locking safety catch,
- Bottom fitted with push-in joint, which the safety catch locks into and slider.

### Top ladder

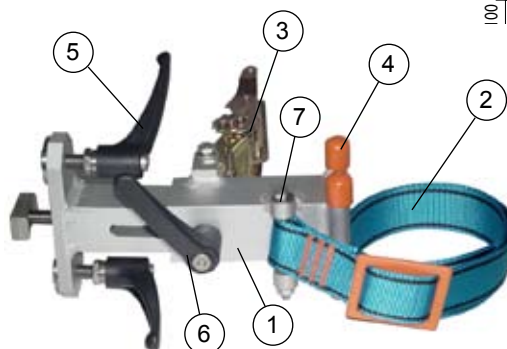
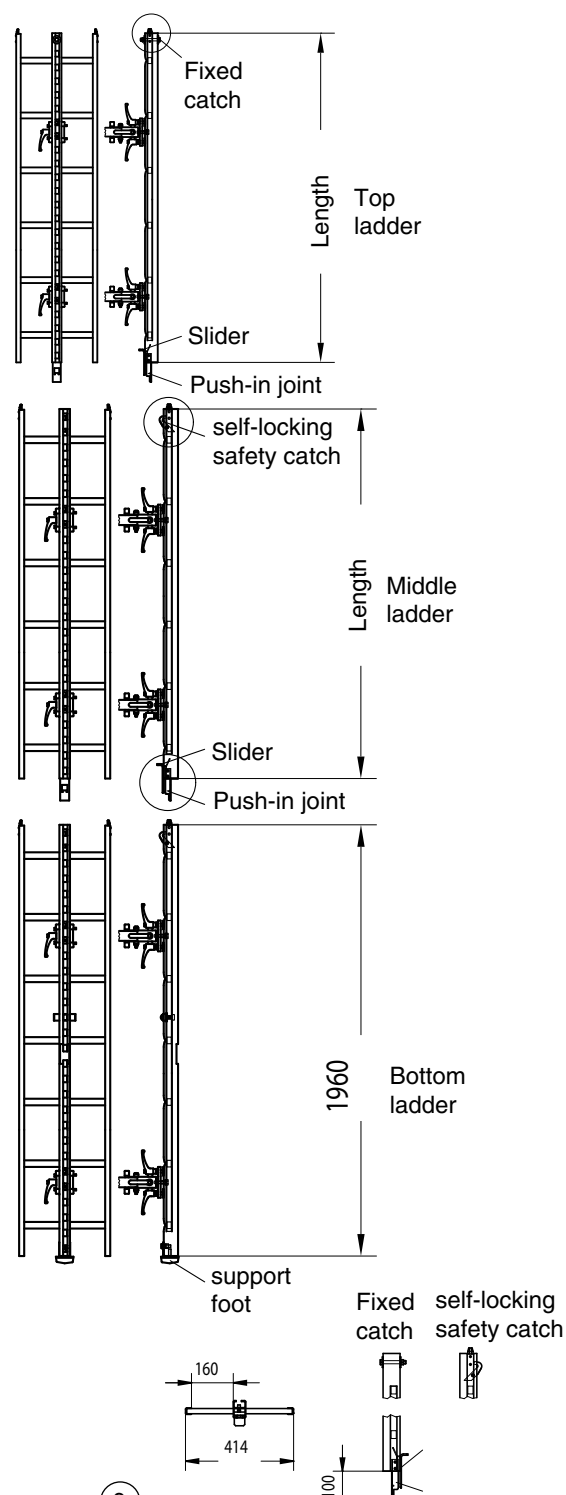
- Top fitted with fixed catch,
- Bottom fitted with push-in joint, which the safety catch locks into and slider.

Order-No:	Name*	Length (mm)	kg
511 807	Bottom ladder	1960	11,5
511 777	Middle ladder	1960	11,5
511 767		1680	10,5
511 797	Top ladder	1960	11,5
511 787		1680	10,5

\* including two securing devices with each, see Item 1 below

Name	Item
1 complete securing device	1
Safety belt	2
Pawl	3
Protective caps	4
Locking lever	5
Locking lever with bolt	6
M8 nut & socket with locking part	7

The securing device will be supplied a fully pre-assembled and complete units (2 x for each ladder section). These must be secured to the ladder section prior to use.





## **F** TRACTEL S.A.S.

RN 19 Saint-Hilaire-sous-Romilly • B.P. 38  
10102 Romilly-sur-Seine  
Tel. +33 / 3 / 25.21.07.00 • Fax +33 / 3 / 25.21.07.11

## **L** SECALT S.A.

3, Rue du Fort Dumoulin • B.P. 1113  
1011 Luxembourg  
Tel. +352 / 43.42.421 • Fax +352 / 43.42.42.200

## **D** GREIFZUG GmbH

Scheidtbachstr. 19-21 • Postfach 20 04 40  
51434 Bergisch Gladbach  
Tel. +49 / 2202 / 1004-0 • Fax +49 / 2202 / 1004-70

## **GB** TRACTEL UK Ltd.

Old Lane, Halfway  
Sheffield S20 3GA  
Tel. +44 / 114 / 248.22.66 • Fax +44 / 114 / 247.33.50

## **E** TRACTEL Ibérica S.A.

Carretera del Medio 265  
08907 L'Hospitalet (Barcelona)  
Tel. +34 / 93 / 335.11.00 • Fax +34 / 93 / 336.39.16

## **BE** **DK** **LU**

## **NL** TRACTEL Benelux B.V.

Paardeweide 38  
4824 EH Breda  
Tel. +31 / 76 / 543.51.35 • Fax +31 / 76 / 543.51.36

## **P** LUSOTRACTEL LDA

Alto do Outeiro Armazém 1 Trajouce  
2785-086 S. Domingos de Rana  
Tel. +351 / 21 / 444.20.50 • Fax +351 / 21 / 445.19.24

## **USA** TRACTEL Inc.

110, Shawmut Road • P.O. Box 188  
Canton MA 02021  
Tel. +1 / 781 / 401.32.88 • Fax +1 / 781 / 826.36.42

## **I** TRACTEL Italiana S.p.A.

Viale Europa 50  
20093 Cologno Monzese (MI)  
Tel. +39 / 02 / 254.47.86 • Fax +39 / 02 / 254.71.39

## **PL** TRACTEL Polska sp.oz.o

c/o Logos Polska sp.oz.o - Aleje Jerozolimskie 56 C  
00-803 Warszawa  
Tel. & Fax: +48 / 22 / 544.42.52

## **CDN** TRACTEL Ltd.

1615 Warden Avenue Scarborough  
Ontario M1R 2T3  
Tel. +1 / 416 / 298.88.22 • Fax +1 / 416 / 298.10.53

## **SGP** TRACTEL Singapore Plc.

50 Woodlands Industrial Parc E  
Singapore 757824  
Tel. +65 / 757 / 3113 • Fax +65 / 757 / 3003

## **UAE** TRACTEL Middle East

P.O. Box 25768  
Dubai / United Arab Emirates  
Tel. +971 / 4 / 343.07.03 • Fax +971 / 4 / 343.07.12

## **CN** TRACTEL China

Secalt Tractel Mechanical Equip. Tech. Co. Ltd.  
Unit A09  
399 Cai Lun Road  
Zhangjiang  
Hi-Tech Park  
SHANGHAI 201203  
T : 86 21 632 25 570 - Fax : 86 21 535 30 982

## **RUS** TRACTEL RUSSIA O.O.O

Ul. Yubileynaya, 10, kv.6  
Pos. Medvezhi Ozyora  
Shtcholkovsky oblast  
141143 Russia  
T : 7 915 00 222 45 - Fax : 7 495 589 3932