



ZARGES



## The quality programme from ZARGES for professionals

Programme Z 600

2010

[www.zarges.com](http://www.zarges.com)

→ Shaft equipment / Fixed ladders

# ZARGES shaft equipment – fixed ladders

## Quality all the way down and all the way up

ZARGES also offers a range of high-quality fixed ladders for civil and environmental engineering – specially developed to meet the high requirements in these applications. Reliable solutions for sewage plants, shaft constructions, drainage shafts, landfill sites and other similar applications, building access or access to machinery.

The materials used depend on the specific requirements and the area of application:

- V2A X6CrNiTi18-10 (1.4301) or V4A X6CrNiMoTi17-12-2 (1.4571) stainless steel, pickled and passivated
- Hot-dip galvanised steel
- High-quality glass fibre reinforced plastic (GRP)
- Natural or anodised aluminium

**The following standards are applied:**

**ZARGES shaft ladders** DIN EN 14 396; **ZARGES fixed ladders** DIN 18799-1

Fixed ladders for construction works, DIN 14094-1 Escape ladder installations (in accordance with fire protection regulations) and DIN EN ISO 14122-4

Permanent means of access to machinery; **ZARGES handholds** DIN 19572, BGV D36 and GUV V36 §5 section 11 and work safety regulations; **ZARGES shaft covers** DIN 1229 (for water chambers, pumping stations, in above-floor-level design);

**ZARGES shaft covers** DIN EN 124 i.V. DIN 1229 (Class A125 – D400 in floor-level design);

**ZARGES fall arrester system** DIN EN 353-1

Shaft and fixed ladders have sturdy box section stiles and rungs with anti-slip step areas which ensure maximum safety. Like all our products, the components for our well and shaft covers have no sharp corners or edges. As additional protection, projecting ends of stiles on ladders can be sealed off with corresponding covers (included in the scope of delivery).

The range also includes shaft covers in various designs - including one with a ventilation chimney for wells, spring enclosures, overhead storage basins and other supply and disposal constructions.

The entire range has been tested and approved by the leading safety institutions (where applicable).

The majority of ZARGES products are of modular design and can thus be freely combined. In addition, our service includes customised solutions for specific projects, telephone and on-site support.

Due to space restrictions, not all products can be described in full detail on the following pages. You will find detailed descriptions in the planning folder “Shaft equipment – Fixed ladders” (Order No. 601 DE 08),

e.g. details of:

- shaft ladders in individual designs (floating ladders).
- a comprehensive range of additional accessories for all products.

## Z 600 Shaft ladders

Complies with the requirements of EN 14 396 "Fixed ladders for manholes".

### Hot-dip galvanised steel shaft ladder.

- Clear width 300 mm / 400 mm.
- 50 mm × 20 mm box section stiles.
- 29 mm × 29 mm perforated rung.

Length in m	1,12	1,40	1,68	1,96	2,24	2,52	2,80	3,08	3,36	3,64	3,92	4,20
Rungs	4	5	6	7	8	9	10	11	12	13	14	15
Clear width 300 mm, outside width 340 mm												
Order No.	47321	47322	47323	47324	47325	47326	47327	47328	47329	47623	47624	47625
Clear width 400 mm, outside width 440 mm												
Order No.	47331	47332	47333	47334	47335	47336	47337	47338	47339	47633	47634	47635

### Shaft ladder made from stainless steel V4A X6CrNiMoTi17-12-2 (1.4571).

- Clear width 300 mm / 400 mm.
- Stile size 50 mm × 20 mm.
- 29 mm × 29 mm perforated rung.

Length in m	1,12	1,40	1,68	1,96	2,24	2,52	2,80	3,08	3,36	3,64	3,92	4,20
Rungs	4	5	6	7	8	9	10	11	12	13	14	15
Clear width 300 mm, outside width 340 mm												
Order No.	47341	47342	47343	47344	47345	47346	47347	47348	47349	47643	47644	47645
Clear width 400 mm, outside width 440 mm												
Order No.	47351	47352	47353	47354	47355	47356	47357	47358	47359	47653	47654	47655

### Plastic (GRP) shaft ladder.

- Clear width 300 mm / 400 mm.
- GRP stiles, 58 mm × 25 mm.
- 30 mm × 30 mm non-slip plastic rungs.

Length in m	1,12	1,40	1,68	1,96	2,24	2,52	2,80	3,08	3,36	3,64	3,92	4,20
Rungs	4	5	6	7	8	9	10	11	12	13	14	15
Clear width 300 mm, outside width 350 mm												
Order No.	47361	47362	47363	47364	47365	47366	47367	47368	47369	47663	47664	47665
Clear width 400 mm, outside width 450 mm												
Order No.	47371	47372	47373	47374	47375	47376	47377	47378	47379	47673	47674	47675

**Note:** Combinations for further lengths on request.



The illustration above shows the following shaft ladders (from left to right):  
Hot-dip galvanised steel,  
stainless steel V4A X6CrNiMoTi17-12-2 (1.4571),  
plastic (GRP).

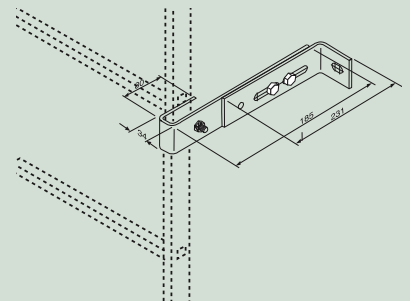
### Accessories

Description	Order No.
Ladder connector made from plastic	
Plastic, for 50 × 20 mm stiles	47700
Plastic, for 58 × 25 mm stiles	47706
Wall bracket for 150 mm stand-off.	
Hot-dip galvanised steel	47301
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	47304
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)*	47307
Wall bracket, adjustable for 150 – 300 mm stand-off. Larger adjustment ranges available on request, or see ZARGES planning folder "Shaft equipment/Fixed ladders."	
Hot-dip galvanised steel	47302
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	47305
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)*	47308

\* Version for GRP ladders

### Accessories:

Connecting sleeve and wall bracket



2 set of wall brackets are required for ladders with 4 – 9 rungs,  
3 sets of wall brackets are required for ladders with 10 – 15 rungs,  
5 sets of wall brackets are required for ladders with 16 – 24 rungs.

1 set = 2 brackets (right/left).

Fall arresters are stipulated for fixed ladders and manhole steps according to GUV V36 § 5. „Suitable holding devices must be provided above points of ... entry.“ (See also DIN 19572 Holding device for shafts, GUV C 5 and BGV C 5 Waste-water installations)

**ZARGES shaft handholds ensure safe access to shafts. They are inexpensive and cost-efficient. Simple to convert, so the handhold can remain in the shaft or be taken with you from job to job.**

- Corrosion- and acid-resistant stainless steel V4A X6CrNiMoTi17-12-2 (1.4571), pickled and passivated.
- Quick and easy to install in any shaft.
- Insulated handles for increased protection against slipping.
- Easy to use – simply insert the handhold in the socket and twist to engage.
- Economic efficiency through mobile use. Only the socket is permanently mounted in the shaft (Order Nos. 47206, 47260, 47261, 47262, 47266).
- Can be converted with locking screw so that the handhold can also remain in the shaft and be lowered (Order Nos. 47205, 47267).
- With BG test mark and number.

### Handhold (Fig. 1)

- Insulated handles, lower additional handles can be unscrewed.

Version	Length in m	Weight in kg	Order No.
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	1,60	4,0	47205
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	1,60	3,2	47267

### Sockets (Figs. 2, 3, 4, 5)

Version	Stand-off approx. in mm	Weight in kg	Order No.
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	30	1,1	47206
Square tubing, hot-dip galvanised steel	30	1,1	47260
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	80	1,5	47261
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	130	1,7	47262
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571) for rung-mounting	-	1,7	47266

### Access aid with safety handle (not illustrated)

- For attachment to masonry – lowerable.
- Scope of delivery: 1 handhold and socket.

Version	Length approx. in m	Order No.
Hot-dip galvanised steel, square, 45 mm × 45 mm	1,60	47210
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571), round, Ø 44 mm	1,60	47211

### Access aid with safety handle

- For attachment to ladder stile – lowerable.
- Can be used on both sides.
- Scope of delivery: 1 handhold and socket incl. fastening materials.

Version	Length approx. in m	Order No.
Hot-dip galvanised steel, square, 45 mm × 45 mm	1,60	47212
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571), round, Ø 44 mm	1,60	47213 <sup>1)</sup> / 47214 <sup>2)</sup> / 47215 <sup>3)</sup>

<sup>1)</sup> for stile size 50 mm × 20 mm, <sup>2)</sup> for stile size 58 mm × 25 mm,

<sup>3)</sup> for stile size 60 mm × 25 mm

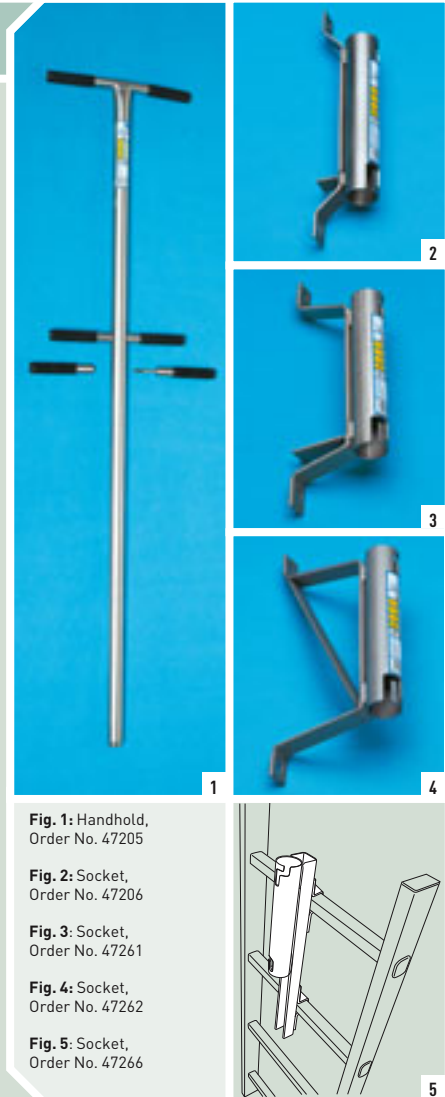


Fig. 1: Handhold, Order No. 47205

Fig. 2: Socket, Order No. 47206

Fig. 3: Socket, Order No. 47261

Fig. 4: Socket, Order No. 47262

Fig. 5: Socket, Order No. 47266

### Shaft entrance

- Surrounding, push-in cage with entry rung and shut-off cable for shafts of Ø 600 mm – 800 mm.

Version	Order No.
Aluminium	47232

### → Recommended attachment:

#### Connecting anchor system (without fig.)

Consisting of:

#### Order No. 47901:

1 anchor rod, M12 × 96, 2 M12 nuts, DIN 934 A4, 1 M12 washer DIN 125 A4.

and

#### Order No. 47902: Mortar cartridge M 12 × 75.

Version	Order No.
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	47900

#### Express anchor (without fig.)

Version	Order No.
Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	47207

## Z 600

### Well covers with ventilation chimney

**Protection against amphibians and vermin – the cost-efficient solution for clean drinking water.**

- Independent engagement lock, retention fixture for manual release only.
- From 800 × 800 mm / Ø 800 mm with gas pressure damper.
- EPDM seal, safety grating in ventilation pipe.
- Frame can be set in concrete or plugged to the wall.
- Cover made from sheet metal, 2.5 mm thick, with transverse reinforcement.
- Standard version in hot-dip galvanised steel. Stainless steel V2A X6CrNiTi18-10 (1.4301) or V4A X6CrNiMoTi17-12-2 (1.4571) on request.



1



2

**Note:** For well covers without ventilation chimney, see ZARGES planning folder for shaft equipment and fixed ladders.

#### Well cover, square (Fig. 1)

Shaft size in mm clear width	Hot-dip galvanised steel	Stainless steel V2A X6CrNiTi18-10 (1.4301)
	Order No.	Order No.
<b>With EPDM seal and ventilation chimney</b>		
625 × 625	47110*	47114
800 × 800	47111*	47115
1000 × 800	–	47180
1000 × 1000	47112	47116
1200 × 1200	47113*	47117*
<b>With EPDM seal, ventilation chimney and insulation</b>		
625 × 625	47118*	47122*
800 × 800	47119*	47123
1000 × 800	–	47190
1000 × 1000	47120*	47124
1200 × 1200	47121	47125*

\* Inquire for delivery times

#### Well cover, round (Fig. 2)

Shaft size in mm clear width	Hot-dip galvanised steel	Stainless steel V2A X6CrNiTi18-10 (1.4301)
	Order No.	Order No.
<b>With EPDM seal and ventilation chimney</b>		
625	47126	47129
800	47127	47130
1000	47128	47131
<b>With EPDM seal, ventilation chimney and insulation</b>		
625	47132*	47135
800	47133*	47136
1000	47134	47137

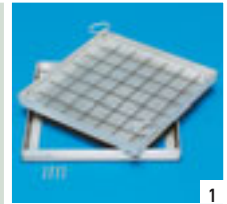
\* Inquire for delivery times

## Z 600

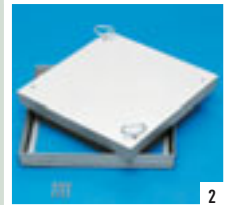
### Shaft covers made from aluminium, hot-dip galvanised steel and stainless steel

**The economic solution for shafts and drains both inside and out.**

- DIN EN 124 in conjunction with DIN 1229.
- Depending on the version, available with a choice of surface for filling by the customer on-site or with cover plate in aluminium, hot-dip galvanised steel or stainless steel.
- Tapered profile construction with multiple screwed joints.
- Easy to open. No sticking.
- EPDM seal (benzene-resistant seal on request).
- Impervious to odour and surface water.



1



2



3



4

#### Shaft covers with choice of surface.

(Figs. 1 to 3)

Shaft size in mm	Aluminium	Hot-dip galvanised steel	Stainless steel V2A X6CrNiTi18-10 (1.4301)
	Order No.	Order No.	Order No.
300 × 300	47000	–	47060
450 × 450	47001	47030	47061
500 × 500	47002	47031	47062
600 × 400	–	47032	–
600 × 600	47004	47033	47064
635 × 635	47005	47034	47065
800 × 600	–	47035	–
800 × 800	47007	47036	47067
1000 × 600	–	47037	–
1000 × 800	–	47038	–
1000 × 1000	47010	47039	47070

#### Shaft covers with cover plate.

(Fig. 4)

Shaft size in mm	Aluminium*	Hot-dip galvanised steel**	Stainless steel V2A X6CrNiTi18-10 (1.4301)**
	Order No.	Order No.	Order No.
600 × 400	–	47050	–
600 × 600	47021	47051	47096
800 × 600	–	47052	–
1000 × 800	47023	47053	47098
1000 × 1000	47024	47054	47099

\* Ribbed plate, \*\* Plate with lug pattern

## ZARGES fixed ladders – for permanent applications

ZARGES fixed ladders are an efficient and economic system based on the modular principle: Matching components can be put together to form many different combinations that are versatile enough to meet the demands of any area of application. This means that in many cases, you can save yourself the expense of a one-off customised solution. All components and versions can be supplied from stock. We will be pleased to assist you with comprehensive advice and put together a system that meets your requirements perfectly.

You have a choice of four different materials:

- Natural aluminium
- Colourless-anodised aluminium
- Hot-dip galvanised steel
- Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571), pickled and passivated

One feature shared by all the versions is the stiles made from robust, weatherproof box sections and non-slip rungs.

ZARGES fixed ladders comply with the following safety standards:

- DIN 18 799-1 (Fixed ladders for inspection, maintenance and cleaning work on structural installations – e.g. on buildings, chimneys, silos, shafts etc.)
- DIN 14 094-1 (Fire-fighting – emergency-ladder systems for rescuing people in danger)
- EN ISO 14122-4 (Access products for mechanical installations)
- To round off our range of fixed ladders in accordance with DIN 14 094-1 (Emergency-ladder systems - preventive fire protection), you can purchase standard and custom-built roof walkways, exit platforms, steps, etc., in accordance with DIN 14 094-2.

### **The safe and easy-to-install solution for all permanent means of access to buildings and machinery, with and without back hoops\***

- Complies with the latest national and international standards.
- Beading reinforcement on back hoops and hoop connection straps.
- Diameter of back hoops 700 mm.
- Wall brackets in accordance with the relevant legal specifications.
- All connectors can be screwed in.
- Supplied in sections as low freight units.
- Comprehensive range of accessories even for problematical structural conditions.

\* Prescribed for heights  $\geq 5,00$  m.

### **Our Service Plus:**

**ZPS** – the ZARGES Planning System.

Individual parts which are marked with this symbol also include in their scope of delivery:

- Static calculations for ladders and platforms.
- Drawings in interchangeable 2D and 3D formats.
- Details of the required extraction forces.



# Steigleitern

# Fixed Ladders

# Échelles à crinoline

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## Detailed information



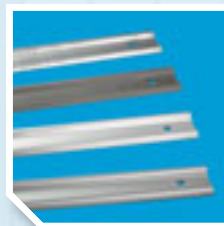
**Joint between stile and rung on an aluminium fixed ladder.**

- Stile 60 mm × 25 mm.
- Square rung 30 mm × 30 mm, serrated.



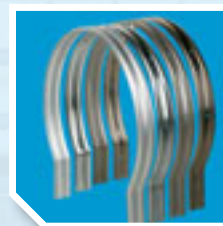
**Joint between stile and rung on a (hot-dip galvanised) steel and stainless steel fixed ladder.**

- Stile 60 mm × 25 mm.
- Perforated rung 30 mm × 30 mm.



**Hoop connection strap in aluminium, anodised aluminium, hot-dip galvanised steel or stainless steel.**

- Width 66 mm.
- Length 1400 mm.



**Back hoop in aluminium, anodised aluminium, hot-dip galvanised steel or stainless steel.**

- Ø 700 mm.
- Height 80 mm.

# Fixed ladders

**Z 600**

## Single-section fixed ladders

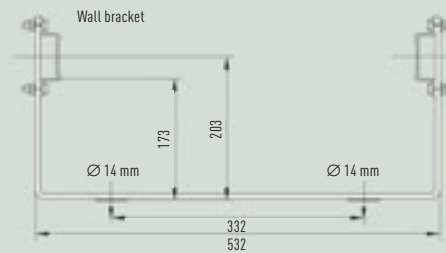
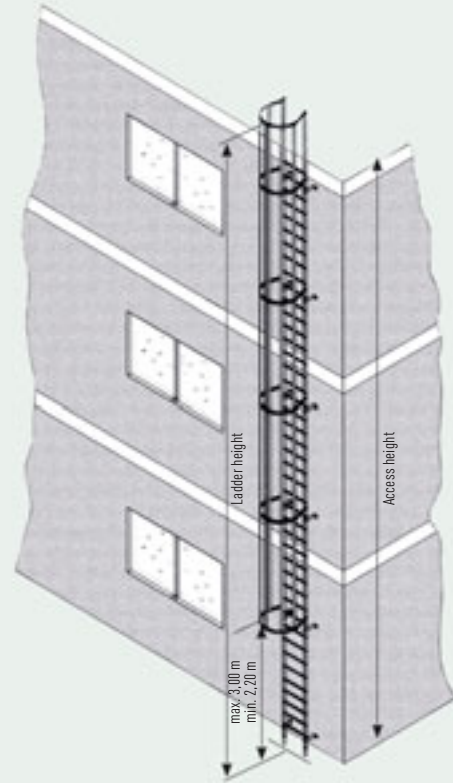
**ZPS**

The solution for access to buildings and machinery up to 10.00 m in height.

- Complies with the latest national and international standards.
- For permanent installation in accordance with BGV D 36 and DIN 18 799-1, DIN 14 094-1 and EN ISO 14 122-4.
- Rung spacing: 280 mm.
- Aluminium fixed ladders with all-ribbed 30 × 30 mm square rungs. Steel (hot-dip galvanised) and stainless steel ladders with 30 × 30 mm perforated rungs.
- Ladder width: 520 mm.
- Stile dimensions: 60 mm × 25 mm.
- We can also produce fixed-ladder designs that differ from the standard specification on request.
- The maximum distance between the wall brackets is 2.00 m. However, each ladder section must be mounted with at least 2 wall brackets.
- Wall bracket, Model No. 43257/44257.

**Note:** Plugs and screws/bolts for wall mounting are not included in the scope of delivery.

Single-section ladder systems longer than 10.00 m (not emergency-ladder systems according to DIN 14 094-1) in combination with fall arrester apparatus according to EN 353-1 instead of the back cage on request.



Overview of single parts	Anodised aluminium	Natural aluminium	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)**
	Order No.	Order No.	Order No.	Order No.
Ladder section 1,96 m (without wall bracket)	41240	42240	43240	44240
Ladder section 2,80 m (without wall bracket)	41241	42 241	43241	44241
Ladder section 3,64 m (without wall bracket)	41242	42242	43242	44242
Stile extension, one side, straight	43243*	43243*	43243	44243
Back hoop Ø 700 mm	41244	42244	43244	44244
Hoop connection strap, length 1400 mm	41245	42245	43245	44245
Rigid wall bracket, stand-off 200 mm (only in hot-dip galvanised steel and V4A X6CrNiMoTi17-12-2 (1.4571))	43257*	43257*	43257	44257

\* Hot-dip galvanised steel, \*\* Inquire for delivery times

### Standard lengths/equipment

(Rigid wall bracket, for 200 mm stand-off, stile extensions, straight, hot-dip galvanised steel, included in scope of delivery.)

Version		Anodised aluminium	Natural aluminium	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)*	Parts list						
Access height up to m	Ladder length incl. stile extension, in m	Order No.	Order No.	Order No.	Order No.	Ladder section 1,96 m	Ladder section 2,80 m	Ladder section 3,64 m	Stile extension	Wall bracket, rigid	Back hoop	Hoop connection strap
4,80	5,90	58148	58248	58348	58448	1	1	-	2	4	-	-
5,60	6,70	58157	58257	58357	58457	-	2	-	2	4	4	15
6,50	7,60	58165	58265	58365	58465	-	1	1	2	4	5	20
7,40	8,50	58174	58274	58374	58474	-	-	2	2	4	5	20
8,50	9,60	58185	58285	58385	58485	-	3	-	2	6	6	25
9,60	10,70	58196	58296	58396	58496	2	2	-	2	8	7	30

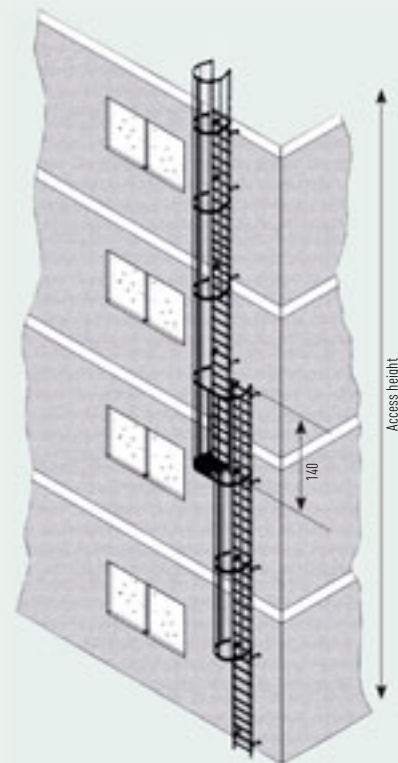
\* Inquire for delivery times

## Z 600 Multi-section fixed ladders

The ideal solution for building and machine access with rest platform.

ZPS

- Complies with the latest national and international standards.
- For permanent installation in accordance with BGV D 36 and DIN 18 799-1, DIN 14 094-1 and EN ISO 14 122-4.
- Rung spacing: 280 mm.
- Aluminium fixed ladders with all-ribbed 30 × 30 mm square rungs. Steel (hot-dip galvanised) and stainless steel ladders with 30 × 30 mm perforated rungs.
- Ladder width: 520 mm.
- Stile dimensions: 60 mm × 25 mm.
- We can also produce fixed-ladder designs that differ from the standard specification on request.
- The maximum distance between the wall brackets is 2.00 m. However, each ladder section must be mounted with at least 2 wall brackets.
- Wall bracket, Model No. 43257/44257.



**Note:** Prices for longer ladders and for ladders with fall arrester apparatus according to EN 353-1 instead of the back cage on request. Accident-prevention regulations stipulate that, for ladder systems with back cages, each ladder section must not be more than 10.00 m long. Systems which are more than 10.00 m long must be installed in sections with crossover platforms. If the characteristics of the building do not allow this, rest platforms must be fitted every 10.00 m. Order No. 43255/44255.

Overview of single parts	Anodised aluminium	Natural aluminium	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)**
	Order No.	Order No.	Order No.	Order No.
Ladder section 1,96 m (without wall bracket)	41240	42240	43240	44240
Ladder section 2,80 m (without wall bracket)	41241	42241	43241	44241
Ladder section 3,64 m (without wall bracket)	41242	42242	43242	44242
Stile extension, one side, straight	43243*	43243*	43243	44243
Back hoop $\varnothing$ 700 mm	41244	42244	43244	44244
Hoop connection strap, length 1400 mm	41245	42245	43245	44245
Back hoop for offset version	41247	42247	43247	44247
Rigid wall bracket, stand-off 200 mm (only in hot-dip galvanised steel and V4A X6CrNiMoTi17-12-2 [1.4571])	43257*	43257*	43257	44257
Rest platform (only in hot-dip galvanised steel and V4A X6CrNiMoTi17-12-2 [1.4571])	43255*	43255*	43255	44255

\* Hot-dip galvanised steel, \*\* Inquire for delivery times

### Standard lengths/equipment

(Rigid wall bracket, for 200 mm stand-off, stile extensions, straight, hot-dip galvanised steel, included in scope of delivery.)

Version		Anodised aluminium	Natural aluminium	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)**	Parts list								
Access height up to m	Ladder length incl. stile extension, in m	Order No.	Order No.	Order No.	Order No.	Ladder section 1,96 m	Ladder section 2,80 m	Ladder section 3,64 m	Stile extension	Wall bracket, rigid	Back hoop	Hoop connection strap	Back hoop*	Rest platform, rigid
10,70	11,80	58507	58607	58707	58807	-	3	1	2	8	7	35	2	1
11,80	12,90	58518	58618	58718	58818	-	1	3	2	8	8	40	2	1
12,60	13,70	58526	58626	58726	58826	-	5	-	2	10	8	40	2	1
13,80	14,90	58538	58638	58738	58838	4	-	2	2	12	9	45	2	1
14,90	16,00	58549	58649	58749	58849	1	-	4	2	10	10	50	2	1
15,70	16,80	58557	58657	58757	58857	-	1	4	2	10	11	55	2	1
16,80	17,90	58568	58668	58768	58868	-	-	5	2	10	11	55	2	1
18,00	19,10	58580	58680	58780	58880	-	3	3	2	12	12	60	2	1
19,10	20,20	58591	58691	58791	58891	3	-	4	2	14	13	65	2	1

\* For offset version, \*\* Inquire for delivery time

# Accessories for fixed ladders

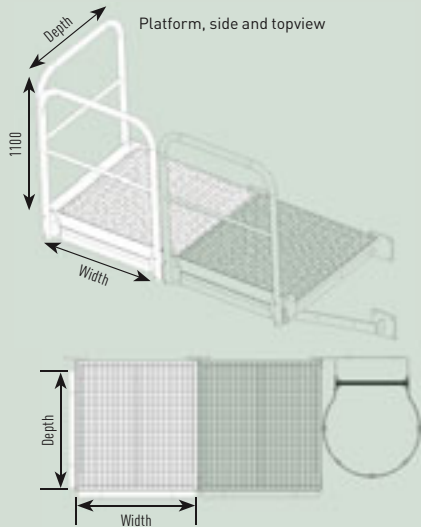
## Platforms

### Platform, hot-dip galvanised steel.

Open grid surface and 2 attachment brackets.  
Handrail on one side and at one end.  
Distributed load 3.5 kN/m<sup>2</sup>. Single load 1.5 kN.

**ZPS**

Size (W × D)	mm	800 × 860	940 × 1000
Weight	in kg	70,0	86,0
Order No.		43270	43275

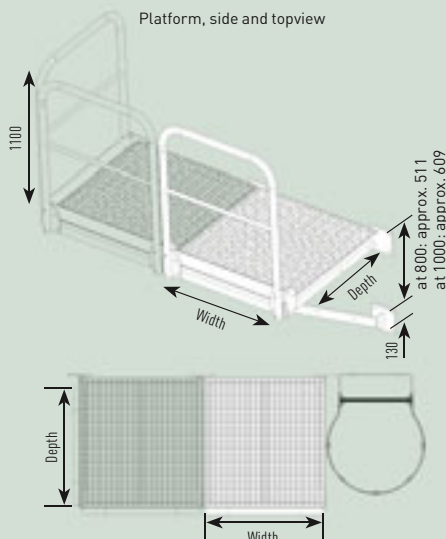


### Extension platform, hot-dip galvanised steel.

1 open grid surface and 1 wall bracket.  
Handrail on one long side with railing link.  
Extension platforms can be bolted together as required.  
The basic platform can generally be used as the end unit.  
Stainless steel version and other sizes on request.  
Distributed load 3.5 kN/m<sup>2</sup>.  
Single load 1.5 kN.

**ZPS**

Size (W × D)	mm	500 × 860	800 × 860	500 × 1000	940 × 1000
Weight	in kg	50,0	58,0	52,0	74,0
Order No.		43272	43271	43277	43276



## Exits

### Landing rail

Single side, length 500 mm.  
Height approx. 1100 mm,  
with floor bracket.  
Longer rails on request.

**ZPS**



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43248	44248*

\* Inquire for delivery times

### Stile extension, straight

Single- or double-sided.  
Height approx. 1100 mm.

**ZPS**



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43243	44243*

\* Inquire for delivery times

### Stile extension woffset

Greater lengths on request.

**ZPS**



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43049	44049*

\* Inquire for delivery times

### Landing with crossover

Surface hot-dip galvanised steel open grid, depth 800 mm.  
Railings on both sides.  
Exit ladder 0.98 m long, to be cut exactly to length by the customer.  
We recommend ground plates or adjustable wall bracket to fix exit ladder. Delivered in easy to assemble parts. Stainless steel and special sizes on request.

**ZPS**



Version	Anodised aluminium	Natural aluminium	Hot-dip galvanised steel
Order No.	41181	42181	43181



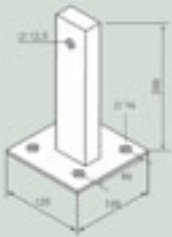
## Retractable entrance aid

For mounting to side of ladder stile. Can be used on both sides.  
Scope of delivery: 1 piece.  
Brackets for other formats, see shaft equipment planning folder or on request.



Version	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)	
External stile dimensions mm	60 × 25	
Length mm	1600	
Order No.	47215	

## Floor mounting



## Ground plate

For fastening a fixed ladder to the floor.  
When using fall arresters, the ladder must always be bolted to the floor.



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Plate dimensions mm	120 × 120	120 × 120
Welded peg, height 200 mm mm	50 × 20	50 × 20
Order No.	43253	44253*

\* Inquire for delivery times

## Rung extension



## Exit step

For extending the area of the top rung.



Version	Aluminium	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	40945	44254*

\* Inquire for delivery times

## Wall bracket

Wall brackets, standard design:

The distance between the wall brackets is max. 2.00 m.  
But each ladder section must be mounted with at least 2 wall brackets.

**Note:** special wall brackets on request.



## Rigid wall bracket

For 200 mm stand-off.  
The maximum distance between the wall brackets is 2.00 m.



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43257	44257*

\* Inquire for delivery times



## Adjustable wall bracket

Adjustable from 200 mm to 250 mm.



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43258	44258*

\* Inquire for delivery times



## Adjustable wall bracket

Adjustable from 250 mm to 350 mm.



Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43259	44259*

\* Inquire for delivery times

# Accessories for fixed ladders



## Wall bracket

Rigid, for 200 mm stand-off.  
Distance between axes of right and left holes 625 mm.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43249	44249*

\* Inquire for delivery times



## Wall bracket

Adjustable from 150 mm to 200 mm.  
Distance between axes of right and left holes 630 mm.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43250	44250*

\* Inquire for delivery times



## Wall bracket

Adjustable from 200 mm to 275 mm.  
Distance between axes of right and left holes 630 mm.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43252	44252*

\* Inquire for delivery times



## Wall bracket

Adjustable from 275 mm to 375 mm.  
Distance between axes of right and left holes 420 mm.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43251	44251*

\* Inquire for delivery times

## Handle



## Handle

Materials

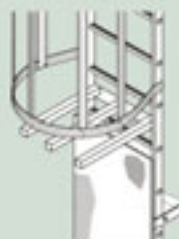
- Hot-dip galvanised steel.
- Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571), pickled and passivated.

Welded-on perforated plates at the ends. Other sizes on request.

Version	Hot-dip galvanised steel	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Length mm	400	600	400
Order No.	47216	47218	47217

Version	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)		
Length mm	600		
Order No.	47219		

## Security door



## Security door

Material: hot-dip galvanised steel.  
Concealed hinges, sheet metal planking. Fastening plugs at the top.

ZPS

Version	Lockable	Emergency operation, according to DIN 14 094-1
Order No.	43498	43499

## Rest platform



## Rest platform

Hinged, can be added later in any position.  
Platform size approx. 520 mm x 550 mm.  
Can also be screwed in place as a rigid platform.

ZPS

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	43255	44255*

\* Inquire for delivery times

## Base ladder

For weight reasons, we recommend the light alloy version, but can also supply this ladder in steel on request.



### Base ladder

Material: light alloy, natural  
Can be suspended. Length 3.18 m, effective length approx. 2.14 m.

**ZPS**

Order No.	41445
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## Pole barrier

On fixed ladders in combination with a fall arrester system, access guard EN 353-1. V4A X6CrNiMoTi17-12-2 (1.4571) stainless steel version on request. See chapter on fall arrester systems.



### Single-arm version

Self-closing by means of gravity lock.  
Material: hot-dip galvanised steel, with red coating.

**ZPS**

Order No.	43500
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V4A X6CrNiMoTi17-12-2 (1.4571) stainless steel version on request.

## Emergency exit ladder



### Emergency exit ladder

Material: light alloy.  
Can be used from heights of 5.60 m. Drop height approx. 2.50 m. Effective length approx. 2.50 m. Ladder length 3.20 m.

With automatic emergency release mechanism, access from above. The parts for the emergency release mechanism are supplied loose for self-assembly. Please follow the instructions. Appropriate safety measures should be put in place in the drop area (notices, posts etc.).

For weight reasons, we recommend the light alloy version.

Order No.	42446
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### Single-arm version

Self-closing by means of concealed spring mechanism.  
Material: hot-dip galvanised steel, with red coating.

**ZPS**

Order No.	43501
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V4A X6CrNiMoTi17-12-2 (1.4571) stainless steel version on request.



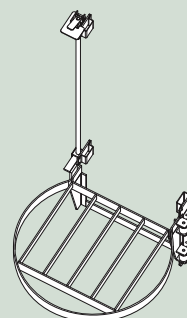
### Double safety barrier

Self-closing by means of concealed spring mechanism according to DIN EN ISO 14 122-4.  
Material: hot-dip galvanised steel.

**ZPS**

Order No.	43502
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V4A X6CrNiMoTi17-12-2 (1.4571) stainless steel version on request.



### Rotating platform with automatic emergency release mechanism

Material: hot-dip galvanised steel.

Order No.	43265
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V4A X6CrNiMoTi17-12-2 (1.4571) stainless steel version on request.

# ZARGES fall arrester system in accordance with EN 353-1

In accordance with GUV V-36, BGV D 36 § 5 (9), but also DIN EN 14 396, DIN EN ISO 14 122-4, fixed ladders, manhole steps and similar access equipment with a possible falling height of more than 5.00 m must be equipped „with structural devices for protecting persons against falling“.

ZARGES ZAST fall arrester system in accordance with EN 353-1 satisfies all the relevant requirements.

The economic and safe solution with ZARGES fall arrester systems:

- Rails made from hot-dip galvanised steel or stainless steel.
- Fastenings, safety slide mechanisms and safety belts can be combined in numerous ways in accordance with the modular principle to provide the optimum solution in each individual case.
- All stainless-steel versions are pickled and passivated.

**ZARGES fall arrester systems for the following areas of application:**

## **Double-stile fixed ladders:**

- On ZARGES fixed ladders according to DIN 18 799-1 and DIN EN ISO 14 122-4, DIN EN ISO 14 396.
- On chimneys or other tower-like structures.
- As building access elements (with a climbing height of more than 10.00 m of single-section design – not emergency-ladder systems as defined by DIN 14 094-1).
- On fixed ladders for shafts in accordance with DIN EN 14 396 with a possible falling height of more than 5.00 m.
- Manhole steps according to DIN EN 13 101 in conjunction with DIN 19 555 with a possible falling height of more than 5.00 m.
- In conjunction with other climbing equipment, e.g. manhole steps in accordance with DIN 1211-1 to 3, 1 212-1 to 3, DIN 1056 or also access boxes with ZARGES wall brackets with a possible falling height of more than 5.00 m.

## **Single-stile ladders:**

- If the on-site space conditions do not permit the use of double-stile fixed ladders, it is also possible to use so-called single-stile ladders, on which the fall arrester system simultaneously forms the ladder stile (centrally located).

## **For use on other products:**

- Naturally ZARGES fall arrester systems can also be mounted on non-ZARGES ladders. In this case, however, the customer must check and verify the suitability of the supporting climbing apparatus (ladder), especially with regard to the additional loads to be expected.

## Fall arrester systems for double-stile ladders

On ZARGES fixed ladders according to DIN 18 799-1 and DIN EN ISO 14 122-4, DIN EN ISO 14 396

### Arrester rail with jointing piece.

Length	m	1,40	1,96	2,80
Version		Hot-dip galvanised steel	Hot-dip galvanised steel	Hot-dip galvanised steel
Order No.		47530	47531	47532

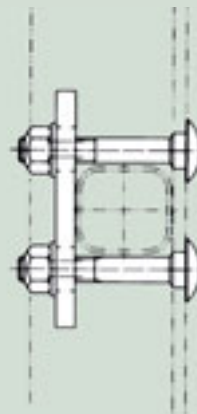
Length	m	1,40	1,96	2,80
Version		Stainless steel V4A X6CrNiMO-Ti17-12-2 (1.4571)	Stainless steel V4A X6CrNiMO-Ti17-12-2 (1.4571)	Stainless steel V4A X6CrNiMO-Ti17-12-2 (1.4571)
Order No.		47550	47551	47552



### Rung bracket.

For mounting fall arrester rails on ladders.  
Must be fitted at least every 1.68 m.  
Follow instructions for use when fitting.

Version	Stainless steel V4A X6CrNiMO-Ti17-12-2 (1.4571)
Order No.	47556



### Access door for fixed ladders with fall arrester systems in accordance with EN 353-1.

For use on double-stile fixed ladders.  
Self-closing thanks to concealed spring mechanism, with preinstalled fall arrester rail.  
Two self-locking entry and exit catches by means of gravity.  
When closed, secured by a locking bar which can simply be released by hand.  
Material: hot-dip galvanised steel.  
(material stainless steel on request).  
For mounting on: stile extension Order No. 43243 and offset landing rail Order No. 43248.  
See chapter on fixed ladders.  
Further stile sizes on request.

Order No.	43504
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V4A X6CrNiMO-Ti17-12-2 (1.4571) stainless steel version on request.



# Fall arrester systems for single-stile ladders

## Fall arrester systems for single-stile ladders

If the on-site space conditions do not permit the use of double-stile fixed ladders, it is also possible to use so-called single-stile ladders, on which the fall arrester system simultaneously forms the ladder stile (centrally located).

### Single-stile ladder with integrated arrester rail.

Available in hot-dip galvanised steel or stainless steel V4A X6CrNiMoTi17-12-2 [1.4571].

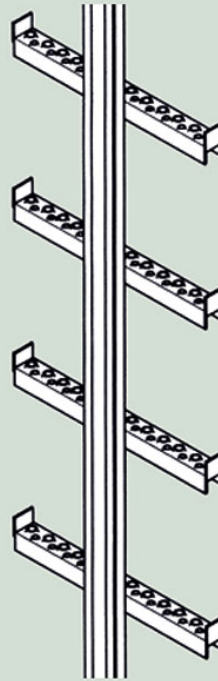
Non-slip perforated rungs with end stops, welded to the arrester rail.

Joining pieces between the individual ladder sections.

Ladder width 370 mm.

Length	m	1,40	1,96	2,80
Version		Hot-dip galvanised steel	Hot-dip galvanised steel	Hot-dip galvanised steel
Order No.		47533	47534	47535

Length	m	1,40	1,96	2,80
Version		Stainless steel V4A X6CrNiMoTi17-12-2 [1.4571]	Stainless steel V4A X6CrNiMoTi17-12-2 [1.4571]	Stainless steel V4A X6CrNiMoTi17-12-2 [1.4571]
Order No.		47553	47554	47555



### Rigid wall bracket

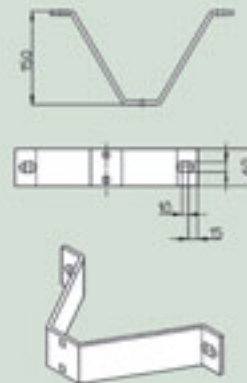
150 mm stand-off.

Suitable for rails and single-stile ladders.

Follow instructions for use when fitting.

Wall brackets are required at intervals of max. 1.12 m.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 [1.4571]
Order No.	47537	47557



### Adjustable wall bracket

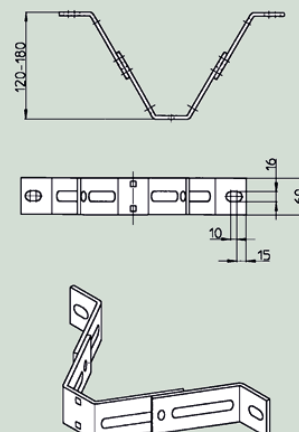
Adjustable from 120 mm – 180 mm.

Larger adjustment ranges on request.

Follow instructions for use when fitting.

Wall brackets are required at intervals of max. 1.12 m.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMoTi17-12-2 [1.4571]
Order No.	47538	47558



# Fall arrester systems for single- and double-stile fixed ladders

## Fall arrester systems for single- and double-stile fixed ladders



### ZARGES safety slide mechanism

All models:  
CE-tested to DIN EN 353-1.  
Extremely robust design.  
With strap fall arrester, karabiner and shackle. High degree of safety, in particular with the Flex models, due to multiple locking systems.

### ZAST Alu / VA (47562) and ZAST VA (47572)

Smooth running, ergonomically rounded form. Safety slide mechanism.

### ZAST-Optiflex Alu / Titan / stainless steel (47588)

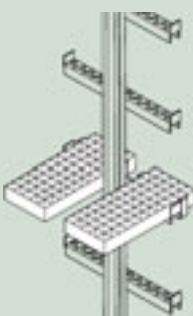
Like the ZAST-Flex but lower safety slide mechanism weight, designed as a roller-supported system.



#### Versions:

- ZAST Alu / VA
- ZAST VA
- Opti-Flex Alu / Titan roller-supported system

Version	Stainless steel and aluminium	Stainless steel V4A (1.4571)	Opti-Flex
Weight approx. kg	1,3	1,6	1,2
Order No.	47562	47572	47588



### Folding rest platform

Stipulated for attachment to fall-arrester ladders over 10.00 m high. Special versions on request.

Version	Hot-dip galvanised steel	Stainless steel V4A X6CrNiMo-Ti17-12-2 (1.4571)
Order No.	47539	47559



### Safety harness

EN 361 Type A

Order No.	47524
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### Swivel plate

For side exit and changing from horizontal to vertical position.

Version	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	47560



### Rail stop

Stainless steel  
V4A X6CrNiMoTi17-12-2 (1.4571)

Version	Separable	Rigid
Order No.	47564	47565



### Rail access extension

Plug-in.  
Length approx. 1.40 m.  
Swivel mechanism with safety handles and lock.

Version	Stainless steel V4A X6CrNiMoTi17-12-2 (1.4571)
Order No.	47561



### Pin for special handhold to fall arrester system

Rail access extension.  
Can be bolted to arrester rail or single-stile ladder.  
Length approx. 25 cm.  
With screw connection at the top if the rail extension is to be fitted permanently.

Version	Stainless steel V4A X6CrNiMo-Ti17-12-2 (1.4571)	Stainless steel
Order No.	47563	47573

# Installation and assembly instructions

## Installation and assembly instructions

### Shaft ladders

(chapter B)

Version	Order No.	Art. No. assembly instructions
Hot-dip galvanised steel, 300 mm	47321, 47322, 47323, 47324, 47325, 47326, 47327, 47328, 47329, 47623, 47624, 47625	291170
Hot-dip galvanised steel, 400 mm	47331, 47332, 47333, 47334, 47335, 47336, 47337, 47338, 47339, 47633, 47634, 47635	291170
Stainless steel, 300 mm	47341, 47342, 47343, 47344, 47345, 47346, 47347, 47348, 47349, 47643, 47644, 47645	291170
Stainless steel, 400 mm	47351, 47352, 47353, 47354, 47355, 47356, 47357, 47358, 47359, 47653, 47654, 47655	291170
GRP, 300 mm	47361, 47362, 47363, 47364, 47365, 47366, 47367, 47368, 47369, 47663, 47664, 47665	291170
GRP, 400 mm	47371, 47372, 47373, 47374, 47375, 47376, 47377, 47378, 47379, 47673, 47674, 47675	291170

### Handholds

(chapter C)

Version	Order No.	Art. No. assembly instructions
Handholds	47205, 47206, 47260, 47261, 47262	291177
Handholds with safety handle, for wall-mounting	47210, 47211	291176
Handholds with safety handle, for stile-mounting	47212, 47213, 47214, 47215	291226
Shaft handholds	47263, 47264	291174
Handholds double-stile	47233, 47234, 47235	291173

### Shaft covers

(chapter D)

Version	Order No.	Art. No. assembly instructions
Well cover, square	47110, 47111, 47112, 47113, 47114, 47115, 47116, 47117, 47118, 47119, 47120, 47121, 47122, 47123, 47124, 47125, 47180, 47190	291175
Well cover, round	47126, 47127, 47128, 47129, 47130, 47131, 47132, 47133, 47134, 47135, 47136, 47137	291175
Well cover, protruding, square	47140, 47141, 47142, 47143, 47144, 47145, 47146, 47147, 47148, 47149, 47150, 47151, 47152, 47153, 47154, 47155, 47181, 47191	291175
Well cover, protruding, round	47156, 47157, 47158, 47159, 47160, 47161, 47162, 47163, 47164, 47165, 47166, 47167	291175

### Shaft covers with a choice of surfaces

(chapter D)

Version	Order No.	Art. No. assembly instructions
Aluminium	47000, 47001, 47002, 47003, 47004, 47005, 47006, 47007, 47008, 47009, 47010, 47020, 47021, 47022, 47023, 47024	291155
Hot-dip galvanised steel	47030, 47031, 47032, 47033, 47034, 47035, 47036, 47037, 47038, 47039, 47050, 47051, 47052, 47053, 47054	291155
Stainless steel	47060, 47061, 47062, 47064, 47065, 47067, 47070, 47096, 47098, 47099	291155

### Fall arrester system

(chapter E)

Version	Order No.	Art. No. assembly instructions
Handholds	47541, 47561	290922
Pin for special handhold to fall arrester system	47563, 47573	290922
Arrester rails	47530, 47531, 47532, 47550, 47551, 47552	290922
Single-stile ladders	47533, 47534, 47535, 47553, 47554, 47555	290922
Safety slide mechanism	47562, 47572	290922
Safety slide mechanism	47582	291234
Rail stop	47564, 47565	290922
Swivel plates	47540, 47560	290922
Brackets	47537, 47538, 47543, 47545, 47546, 47547, 47548, 47556, 47557, 47558, 47566	290922
Rest platform	47539, 47559	290922

### Connecting anchor system

Order No.	Art. No. assembly instructions
47900, 47901, 47902	291178

### Fixed ladders

Order No.	Art. No. assembly instructions
All products	291229

### Security door

Order No.	Art. No. assembly instructions
43504	291257

### Pole barrier

Order No.	Art. No. assembly instructions
43500-43502	291256

### Shaft entrance

Order No.	Art. No. assembly instructions
47232	291263



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**ZARGES – the Number 1 in access technology in Europe** – stands for a range of more than 500 series products, but also for customised constructions whenever individual solutions are required to master special access problems.

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Order No. 207EN03



Product guide for  
access equipment

Order No. 205EN03



Brochure  
Safety & More

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