



metreel

FALLGUARD A12, AL2 & INVISIRUNG®

Vertical Fall Arrest Ladders

www.metreel.co.uk



PB008-0925

FALLGUARD A12, AL2 & INVISIRUNG®

Manufactured and tested in accordance with BS EN353-1, Metreel's **Fallguard** and **Invisirung®** Ladder Systems have been developed to provide the ultimate vertical fall arrest system.

Unlike other track based systems, **Fallguard** and **Invisirung®** has a unique asymmetrical profile, which coupled with its retaining carriage ensures correct orientation during insertion every time, without the need of additional bolt on guides.

Utilising the many features of the **Fallguard** and **Invisirung®** systems, users can negotiate both vertical and horizontal travel, without disconnecting from the safety system, to access all areas and perform their work in complete safety.

The **Fallguard** and **Invisirung®** systems incorporate notches within the track profile, which enable the retaining carriage to 'lock off' should a fall occur or even when resting. These notches can also be used for fixing various accessories and mounting brackets without compromising the safety of the user.

The notches are evenly spaced along each profile length and are closely positioned such that should a fall occur it is quickly, arrested reducing the shock loading to the body.



FALLGUARD A12

Supplied as double rung with integral safety rail or as a safety rail only for installation on existing ladders or climbing stirrups.

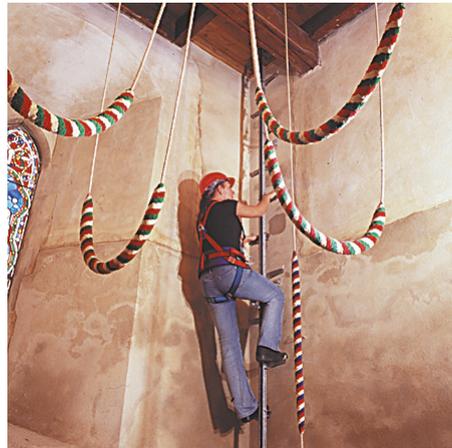
- ◆ Dimensions rail profile: 48 × 32 × 3 mm
- ◆ Material: Hot-dipped galvanised steel or stainless steel (1.4571)
- ◆ Spacing in between stops: 40mm
- ◆ Spacing in between rungs: 280mm
- ◆ Rungs: Straight and welded on the back of the rail
- ◆ Width of the ladder: 380mm
- ◆ Primary lengths: 5600 and 2800mm
- ◆ Adjustment lengths: 560, 840, 1120, 1400, 1680, 1960, 2240, 2520, 3080, 3360, 3640, 3920, 4200, 4480, 4760, 5040 and 5320mm
- ◆ Maximum distance between fixings: 1400mm for the ladder and 1960mm for the rail.



INVISIRUNG®

Supplied as a single folding rung ladder with integral safety rail and rung open/close locking mechanism.

- ◆ Dimensions rail profile: 48 × 32 × 3 mm
- ◆ Material: Hot-dipped galvanised steel or stainless steel (1.4571)
- ◆ Spacing in between stops: 40mm
- ◆ Spacing in between rungs: 320mm
- ◆ Rungs: folding and bolted on the back of the rail
- ◆ Universal lengths: 4480 and 5120mm
- ◆ Each system require a minimum of 4 supports
- ◆ Adjustment lengths as either top or bottom sections: 560, 840, 1120, 1400, 1680, 1960, 2240, 2520, 2800, 3080, 3360, 3640, 3920, 4200, 4760, 5040, 5320 and 5600mm
- ◆ Maximum distance between fixings: 1280mm



FALLGUARD AL2

Based on the principle of the **Fallguard** A12 System and is suitable for material in anodised aluminum. The design of the safety rail and sliders is asymmetrical and guarantees sliders are always used in the right direction.

- ◆ Dimensions rail profile (H-shaped): 48 × 65 × 3-6mm
- ◆ Material: Anodised aluminum
- ◆ Design: Ladder with a central upright or with additional side uprights or just rail
- ◆ Spacing in between stops: 70mm
- ◆ Spacing in between rungs: 280mm
- ◆ Rungs: Straight, inserted and set on the back of the rail
- ◆ Ladder width: 414mm
- ◆ Primary lengths: 5600 and 2800mm
- ◆ Adjustment lengths: 560, 840, 1120, 1400, 1680, 1960, 2240, 2520, 3080, 3360, 3640, 3920, 4200, 4480, 4760, 5040 and 5320mm
- ◆ Maximum distance between fixings: 1680mm for the ladder with central upright, 2520mm suitable for ladder with side uprights or the rail.



RETAINING CARRIAGES & HARNESES

The retaining carriage is a mobile component of the system and is attached to the user with a Karabiner. All retaining carriages are certified to the latest applicable standard (EN353-1) and comply with the European Regulation 2016/425 (PPE Regulation) with a maximum user weight of 150kg.

The following sliders are compatible with **Fallguard** and **Invisirung®** systems.

- ◆ **AL-D**
- ◆ **Grip**
- ◆ **EZ**

Each retaining carriage is designed for different uses according to application needs, the following table is aimed at guiding the user's choice. The safety rail of **Fallguard** and **Invisirung®** is a C-shaped profile, the retaining carriages glide inside the rail, offering a compact and comfortable solution.

Retaining Carriage Model		AL-D	Grip	EZ
Frequency of use	Occasional	✓		✓
	Daily		✓	✓
Application	Industrial	✓		
	Rescuer			✓
	Extensive Height		✓	
	Confined Access	✓		✓
Features	Insertion & Release any location			✓
	Anti-Reversibility	✓	✓	✓
Compatibility	Fallguard	✓	✓	✓
	Invisirung®	✓	✓	✓
Connector	Manual Locking (M10)	✓		✓
	Automatic Tri-Lock (M23)	✓	✓	✓

Harness HT120

Harness designed for movement (up or down) on structures equipped with an EN 353-1 rail.

The HT120 harness is equipped with an approved fall arrest umbilical attachment point. This attachment point, while being fall arrest approved, provides comfortable support going up or down. HT120 is the only harness on the market that offers this type of attachment point.

It's patented design prevents the user from falling backwards in the event of a fall, eliminating the risk of serious back injuries.

- ◆ 1 dorsal attachment point
- ◆ 2 thoracic attachment points
- ◆ 1 umbilical attachment point



Model	S	M	L
HT120 - Standard Buckles	61702	61712	61722

Type **EZ** (150kgs)

- ◆ The biggest advantage and difference of this retaining carriage is the ability to be inserted and released, with one hand, at any point along the safety rail.
- ◆ Compatible with A12, AL2 & Invisirung®.
- ◆ The carriage can only be inserted in the correct orientation thanks to the asymmetric profile.
- ◆ Robust and self operating locking system in the event of a fall.
- ◆ Available with manual (M10) or trilock connector (M23)
- ◆ User up to 150kg

Model	Part No
Fallguard EZ 150kg M23	513878
Fallguard EZ 150kg M10	513888



Type **AL-D** (150kgs)

The AL-D conforms to the latest applicable standard EN 353-1 and to the European Regulation 2016/425, certified for a user weighing up to 150kg.

This rigid vertical fall arrester is tested to stop the fall of one operator, with its tools and equipment, weighing up to 150 kg. It enables several operators to work in safety (each operator having his own AL-D retaining carriage) assuming there are no more than two operators within 10m and at least 3m between them.

In order to provide protection for the user up to the maximum allowed weight, all the products of the system must be HIGH CAPACITY RANGE 150 KG (Please note: The component with the lowest capacity always determines the maximum capacity of the entire fall arrest system).

Model	Part No
Fallguard AL-D 150kg M23	514008
Fallguard AL-D 150kg M10	514018



Type **Grip** (150kgs)

The Grip conforms to the latest applicable standard EN 353-1 and to the European Regulation 2016/425, certified for a user weighing up to 150kg.

This rigid vertical fall arrester is tested to stop the fall of one operator, with its tools and equipment, weighing up to 150 kg. It enables several operators to work in safety (each operator having his own AL-D retaining carriage) assuming there are no more than two operators within 10m and at least 3m between them.

In order to provide protection for the user up to the maximum allowed weight, all the products of the system must be HIGH CAPACITY RANGE 150 KG (Please note: The component with the lowest capacity always determines the maximum capacity of the entire fall arrest system).

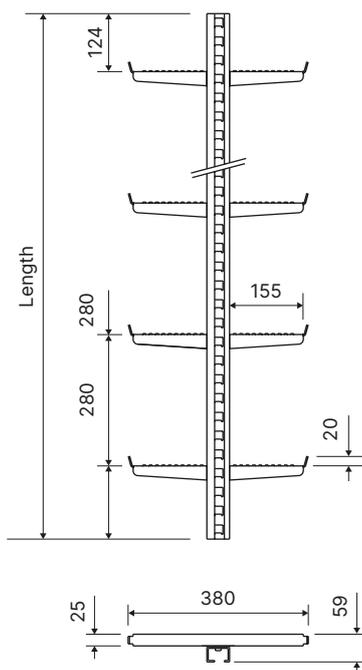
Model	Part No
Fallguard Grip 150kg	514408



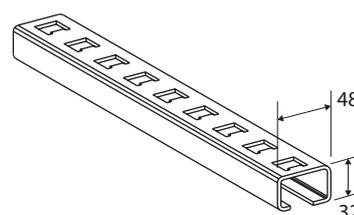
Fallguard A12 (Safety Ladder & Safety Rail)

Length (mm)	Safety Ladder			Safety Rail		
	Material		Weight (kg)	Material		Weight (kg)
	Galvanised Part No	Stainless Part No		Galvanised Part No	Stainless Part No	
560	616 020 056	616 024 056	2.4	601 060 056	601 062 056	1.4
840	616 030 084	616 034 084	3.6	601 060 084	601 062 084	2.1
1120	616 040 112	616 044 112	4.8	601 060 112	601 062 112	2.8
1400	616 050 140	616 054 140	6.0	601 060 140	601 062 140	3.5
1680	616 060 168	616 064 168	7.2	601 060 168	601 062 168	4.2
1960	616 070 196	616 074 196	8.4	601 060 196	601 062 196	4.9
2240	616 080 224	616 084 224	9.6	601 060 224	601 062 224	5.6
2520	616 090 252	616 094 252	10.8	601 060 252	601 062 252	6.3
2800	616 100 280	616 104 280	12.0	601 060 280	601 062 280	7.0
3080	616 110 308	616 114 308	13.2	601 060 308	601 062 308	7.7
3360	616 120 336	616 124 336	14.4	601 060 336	601 062 336	8.4
3640	616 130 364	616 134 364	15.6	601 060 364	601 062 364	9.1
3920	616 140 392	616 144 392	16.8	601 060 392	601 062 392	9.8
4200	616 150 420	616 154 420	18.0	601 060 420	601 062 420	10.5
4480	616 160 448	616 164 448	19.2	601 060 448	601 062 448	11.2
4760	616 170 476	616 174 476	20.4	601 060 476	601 062 476	11.9
5040	616 180 504	616 184 504	21.6	601 060 504	601 062 504	12.6
5320	616 190 532	616 194 532	22.8	601 060 532	601 062 532	13.3
5600	616 200 560	616 204 560	24.0	601 060 560	601 062 560	14.0

Safety Ladder



Safety Rail



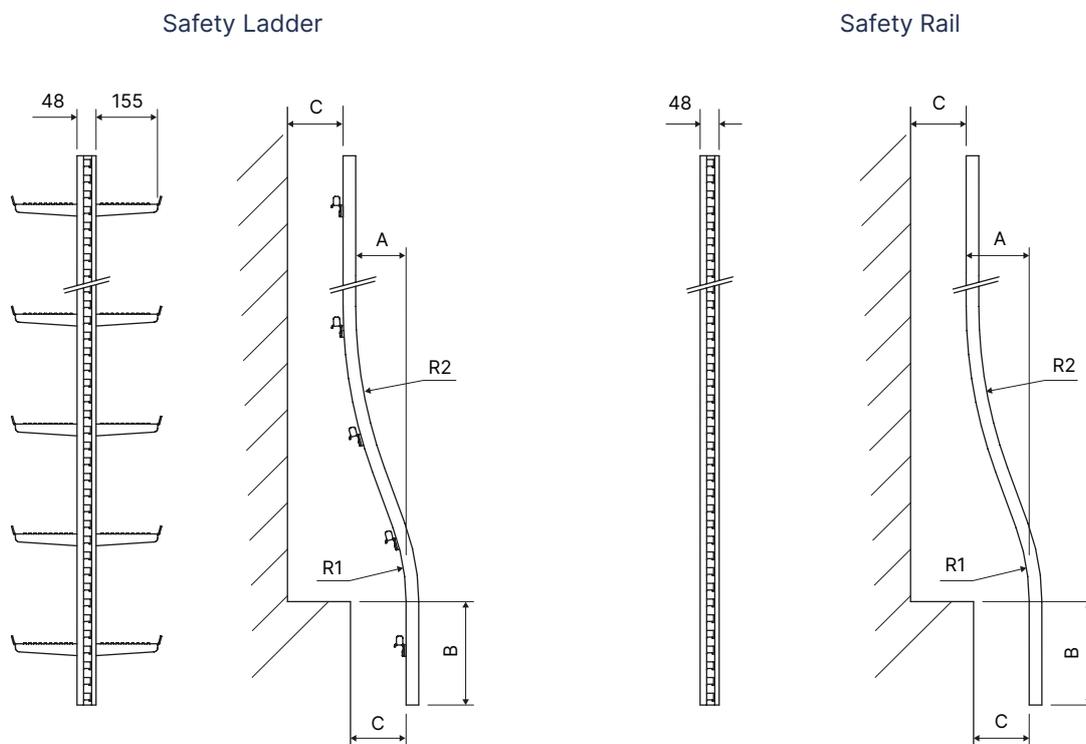
Fallguard A12 (Bends)

For Safety Ladder and Safety Rails

- ◆ All bends are factory made
- ◆ Available as Galvanised or Stainless Steel
- ◆ When enquiring, please supply a sketch similar to those below including all necessary dimensions as per the following:

- A = Projecting Part
- B = Straight Section
- R1 = Radius min. 500 mm
- R2 = Radius min. 1000 mm
- C = Distance from fixing surface min. 160 mm
(Depending on the type of brackets for ladders)

ORDERED TO CUSTOMER SPECIFICATION



Invisirung® (Safety Ladder)

Length (mm)	Universal Section Part No	Weight (kg)
2560	M61 060 256	11.9
4480	M61 060 448	20.7
5120	M61 060 512	23.8

Configuring Systems

When specifying a system please note that the following conditions must be considered:-

Ladder with ONE section

Use either a universal or top ladder sections.

Ladder with TWO sections

Use either, two universal sections or a universal section with either a top or bottom section or a top and bottom section.

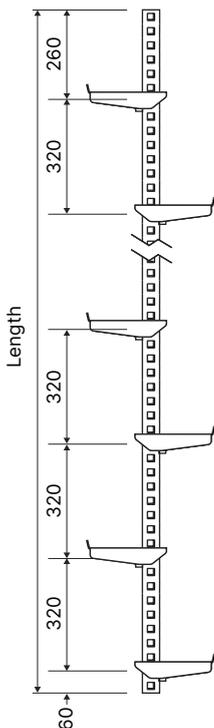
Ladder with THREE or more sections

Use only universal sections or universal sections in conjunction with either top and / or bottom sections.

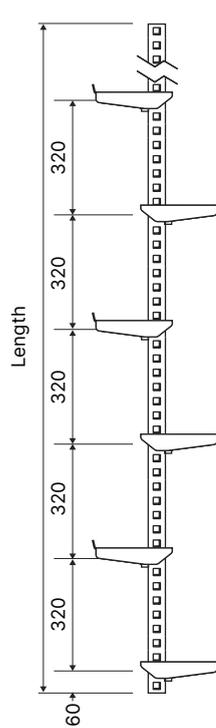
This ensures correct alignment of rungs.

Length (mm)	Top Section Part No	Bottom Section Part No	Weight (kg)
560	M61 060 056	M61 061 056	2.1
840	M61 060 084	M61 061 084	3.5
1120	M61 060 112	M61 061 112	4.9
1400	M61 060 140	M61 061 140	6.3
1680	M61 060 168	M61 061 168	7.7
1960	M61 060 196	M61 061 196	9.0
2240	M61 060 224	M61 061 224	10.4
2520	M61 060 252	M61 061 252	11.1
2800	M61 060 280	M61 061 280	12.5
3080	M61 060 308	M61 061 308	13.9
3360	M61 060 336	M61 061 336	15.3
3640	M61 060 364	M61 061 364	16.6
3920	M61 060 392	M61 061 392	18.0
4200	M61 060 420	M61 061 420	19.4
4760	M61 060 476	M61 061 476	21.5
5040	M61 060 504	M61 061 504	22.9
5320	M61 060 532	M61 061 532	24.2
5600	M61 060 560	M61 061 560	25.6

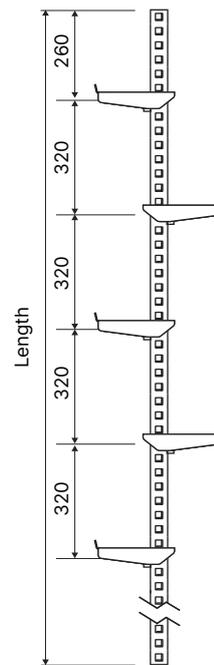
Universal Section



Top Section



Bottom Section

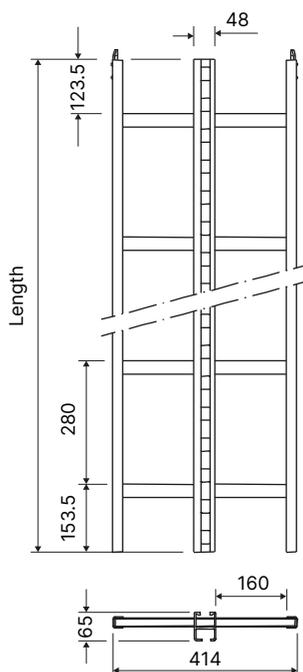


Viewed from the rear

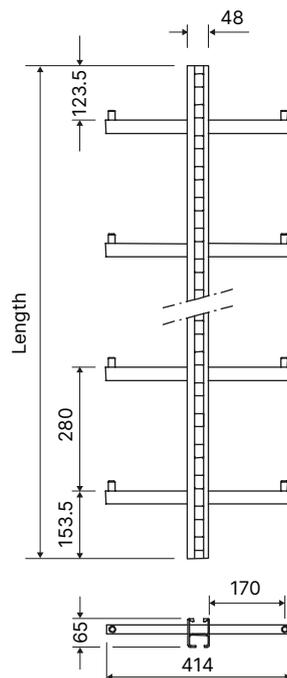
Fallguard AL2 (Safety Ladder & Safety Rail)

Length (mm)	Safety Ladder with Side Stringers		Safety Ladder with Anti Slip Pegs		Safety Rail Only	
	Part No	Weight (kg)	Part No	Weight (kg)	Part No	Weight (kg)
560	687 020 056	1.9	687 001 056	1.8	677 010 056	1.0
840	687 030 084	2.9	687 001 084	2.7	677 010 084	1.5
1120	687 040 112	3.9	687 001 112	3.6	677 010 112	2.0
1400	687 050 140	4.9	687 001 140	4.5	677 010 140	2.5
1680	687 060 168	5.9	687 001 168	5.4	677 010 168	3.0
1960	687 070 196	6.9	687 001 196	6.3	677 010 196	3.5
2240	687 080 224	7.9	687 001 224	7.2	677 010 224	4.0
2520	687 090 252	8.9	687 001 252	8.1	677 010 252	4.5
2800	687 100 280	9.9	687 001 280	9.0	677 010 280	5.0
3080	687 110 308	10.9	687 001 308	9.9	677 010 308	5.5
3360	687 120 336	11.9	687 001 336	10.8	677 010 336	6.0
3640	687 130 364	12.9	687 001 364	11.7	677 010 364	6.5
3920	687 140 392	13.9	687 001 392	12.6	677 010 392	7.0
4200	687 150 420	14.9	687 001 420	13.5	677 010 420	7.5
4480	687 160 448	15.9	687 001 448	14.4	677 010 448	8.0
4760	687 170 476	16.9	687 001 476	15.3	677 010 476	8.5
5040	687 180 504	17.8	687 001 504	16.2	677 010 504	9.0
5320	687 190 532	18.8	687 001 532	17.1	677 010 532	9.5
5600	687 200 560	20.8	687 001 560	18.0	677 010 560	10.0

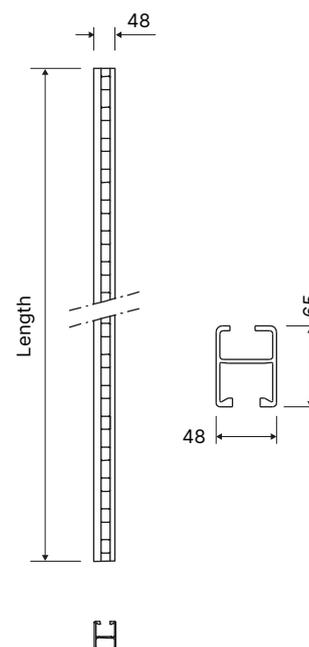
Safety Ladder with Side Stringers



Safety Ladder with Anti Slip Pegs



Safety Rail



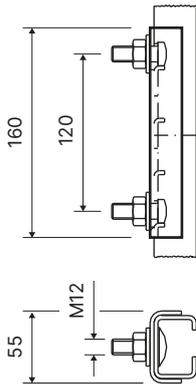
Rail Connectors

For connecting safety ladder or safety rail sections.

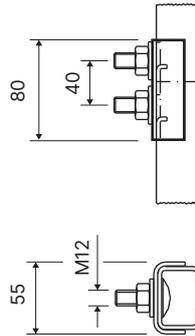
Note

For AL2 rail provide small gaps between adjacent rails for expansion - see installation instructions

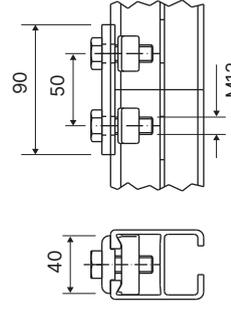
Part No	Description	Material	Weight (kg)
652 210 045	A12 Safety Ladder & Rail	Galv. Steel	0.5
652 210 047		St. Steel	0.5
M52 210 045	Invisirung®	Galv. Steel	0.35
673 002 001	AL2 Safety Ladder & Rail	Aluminium	0.35



A12 Safety Ladder & Rail



Invisirung®



AL2 Safety Ladder & Rail

Fixings

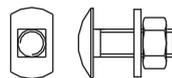
For attaching components and brackets to the safety ladder or safety rail. Fixings are usually supplied with all brackets and components - please confirm when ordering.

Note

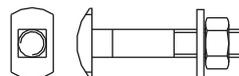
Normal bolt fixings cannot be used to connect direct to the safety rail section.

Part No	Description	Material	Weight (kg)
652 210 041	Screw Kit M12 × 35 includes nut and washer	St. Steel	0.8
652 210 043	Screw Kit M12 × 50 includes nut and washer	St. Steel	0.85
652 210 044	Screw Kit M12 × 60 includes nut and washer	St. Steel	0.9
690 048 101	AL2 M12 Screw, Special Nut & Curved Washer	Aluminium	0.35

A12 - M12 × 35



A12 - M12 × 50 & M12 × 60



AL2



Fixed Locks



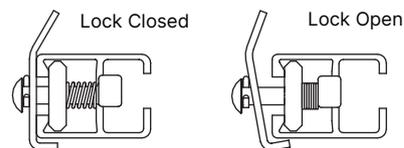
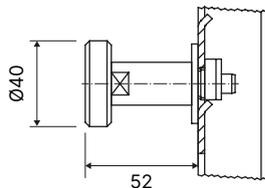
A12 Safety Rail & Invisirung®

Part No	Material	Weight (kg)
M52 210 016	St. Steel	0.1

AL2 Safety Rail

Part No	Material	Weight (kg)
690 251 000	St. Steel	0.1

Releasable Locks



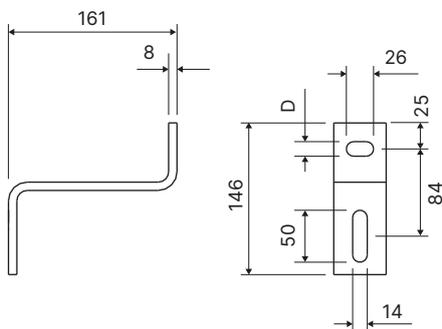
A12 Safety Rail & Invisirung®

Part No	Material	Weight (kg)
652 220 021	St. Steel	0.1

AL2 Safety Rail

Part No	Material	Weight (kg)
690 251 010	St. Steel	0.1

'Z' Brackets



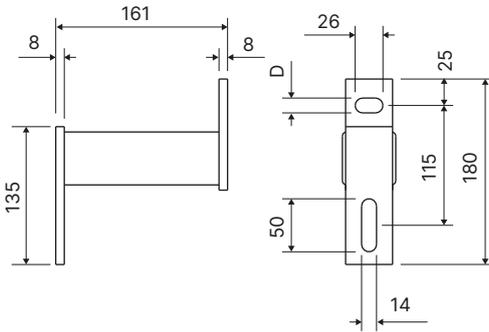
A12 Safety Rail & Invisirung®

Part No	D (mm)	Material	Weight (kg)
652 210 035	10.5	Galv. Steel	1.0
652 210 030	14.0	Galv. Steel	1.0
652 210 031	10.5	St. Steel	1.0
652 210 032	14.0	St. Steel	1.0

AL2 Safety Rail

Part No	D (mm)	Material	Weight (kg)
673 002 002	10.5	Galv. Steel	1.0
673 002 003	14.0	Galv. Steel	1.0
673 002 004	10.5	St. Steel	1.0
673 002 005	14.0	St. Steel	1.0

Square Tube Brackets



A12 Safety Rail & Invisirung®

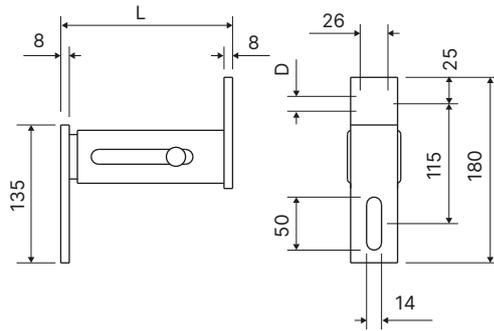
Part No	D (mm)	Material	Weight (kg)
652 210 204	10.5	Galv. Steel	1.5
652 210 202	14.0	Galv. Steel	1.5
652 210 205	10.5	St. Steel	1.5
652 210 203	14.0	St. Steel	1.5

AL2 Safety Rail

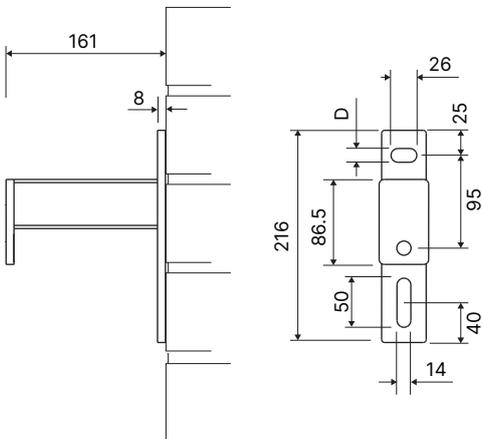
Part No	D (mm)	Material	Weight (kg)
673 001 008	10.5	Galv. Steel	1.5
673 001 006	14.0	Galv. Steel	1.5
673 001 009	10.5	St. Steel	1.5
673 001 007	14.0	St. Steel	1.5

Adjustable A12, AL2 Safety Rail & Invisirung® (NO FIXINGS)

Part No	D (mm)	Material	L (mm)
272817	10.5	Galv. Steel	140 - 210mm
272827	14.0	St. Steel	140 - 210mm



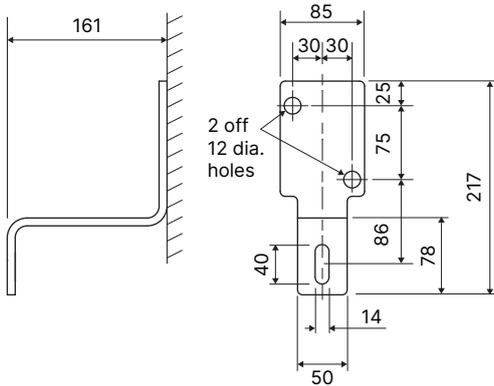
Brickwork Brackets



A12 Safety Rail & Invisirung®

Part No	D (mm)	Material	Weight (kg)
M52 210 960	10.5	Galv. Steel	1.0
M52 210 961	14.0	Galv. Steel	1.0

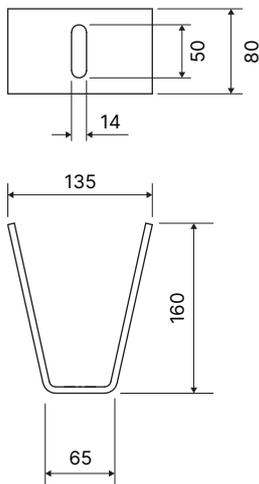
Wooden Pole Brackets



A12 Safety Rail & Invisirung®

Part No	Material	Weight (kg)
M52 210 920	Galv. Steel	1.0

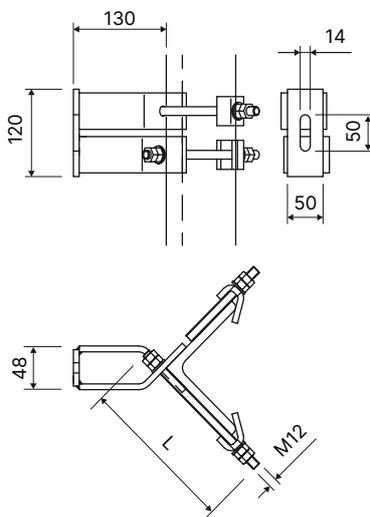
Weld Brackets



Adjustable A12, AL2 Safety Rail & Invisirung® (NO FIXINGS)

Part No	Material	Weight (kg)
652 205 035	Steel (Plain)	1.4
652 205 037	Steel with Primer	1.4
652 205 036	St. Steel	1.4

Corner Profile Brackets



A12 Safety Rail & Invisirung®

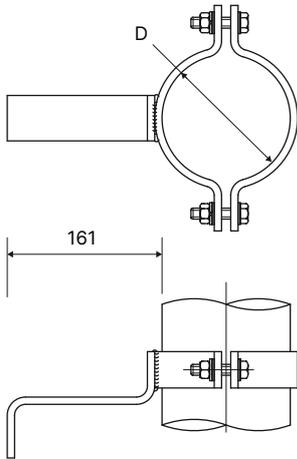
Part No	D (mm)	Corner Profile Size	Weight (kg)
652 211 000	220	Up to 130×130	1.6
652 211 001	300	130×130 to 200×200	1.8
652 211 002	350	200×200 to 250×250	1.9

AL2 Safety Rail

Part No	D (mm)	Corner Profile Size	Weight (kg)
673 004 056	220	Up to 130×130	1.6
673 004 057	300	130×130 to 200×200	1.8
673 004 058	350	200×200 to 250×250	1.9

Pole Clamp Brackets

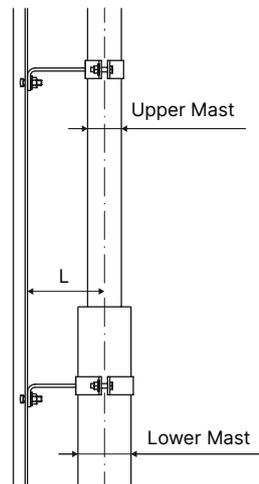
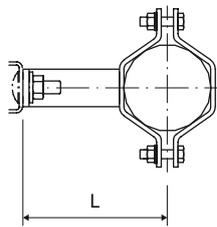
A12 Safety Rail & Invisirung®



Part No	D (mm)	Material	Weight (kg)
M52 210 904	88.9	Galv. Steel	1.4
M52 210 900	114.3	Galv. Steel	1.5
M52 210 901	139.7	Galv. Steel	1.6
M52 210 902	168.3	Galv. Steel	1.7
M52 210 903	193.7	Galv. Steel	1.8

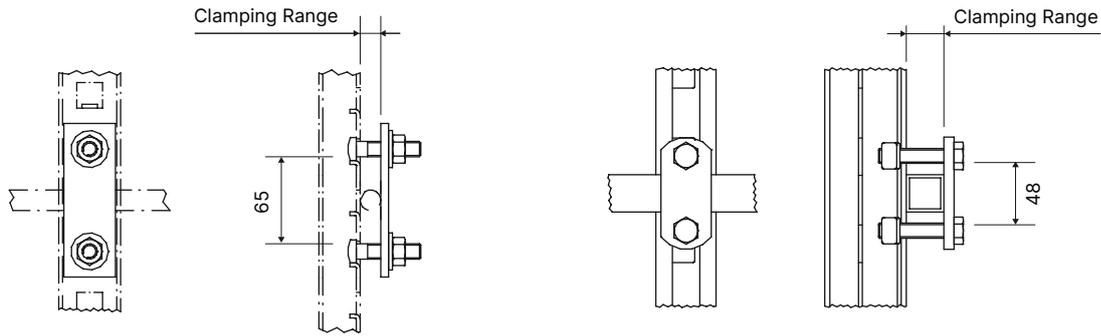
Multi Section Clamp Brackets

System dimension L used in equipment always results from the smallest mast diameter which is given. The measurement L decides the selection of further fixings to be used in the same system.



Pole Dia. in mm	A12 & Invisirung Systems Pt No 652 211 __ (Complete with 3 digits below)								
	AL2 System Pt No 673 004 __ (Complete with 3 digits below)								
	System Dimension "L" (mm)								
	184	190	203	213	217	230	243	255	269
80.0				010	011				
88.9	012	013	014	015	016	017	018	019	
101.6		020	021	022	023	024	025	026	
114.3			027	028	029	030	031	032	033
139.7				034	035	036	037	038	038
159.0					040	041	042	043	044
168.3						045	046	047	048
193.7							049	050	051
219.1								052	053

Rung Mounted Brackets (Round/Square)



A12 Safety Rail & Invisirung®

AL2 Safety Rail

Part No	Clamping Range	Material	Weight (kg)
652 210 005	16 to 25mm	Galv. Steel	0.3
652 210 010	25 to 40mm	Galv. Steel	0.3
652 220 210	16 to 25mm	St. Steel	0.3
652 220 211	25 to 40mm	St. Steel	0.3

Part No	Clamping Range	Material	Weight (kg)
690 100 115	15 to 20mm	St. Steel	0.5
690 100 120	20 to 25mm	St. Steel	0.5
690 100 125	25 to 30mm	St. Steel	0.5

Style Mounted Brackets (Rectangular)



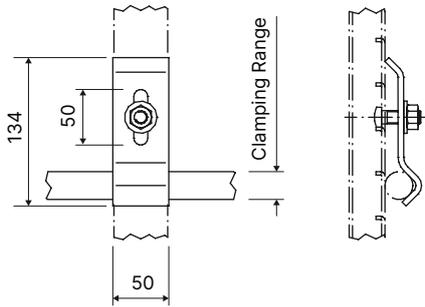
A12 Safety Rail & Invisirung®

AL2 Safety Rail

Part No	Clamping Range (mm)		Material	Kg
	a	b		
652 211 301	6 to 20	40 to 60	Gv. Steel	1.1
652 211 302	21 to 30		Gv. Steel	
652 211 303	31 to 50		Gv. Steel	
652 211 304	6 to 20	61 to 80	Gv. Steel	1.3
652 211 305	21 to 30		Gv. Steel	
652 211 306	31 to 50		Gv. Steel	
652 211 307	6 to 20	40 to 60	St. Steel	1.1
652 211 308	21 to 30		St. Steel	
652 211 309	31 to 50		St. Steel	
652 211 310	6 to 20	61 to 80	St. Steel	1.3
652 211 311	21 to 30		St. Steel	
652 211 312	31 to 50		St. Steel	

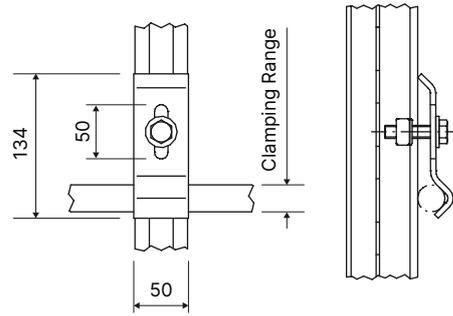
Part No	Clamping Range (mm)		Material	Kg
	a	b		
673 005 001	6 to 20	40 to 60	Gv. Steel	1.1
673 005 002	21 to 30		Gv. Steel	
673 005 003	31 to 50		Gv. Steel	
673 005 004	6 to 20	61 to 80	Gv. Steel	1.3
673 005 005	21 to 30		Gv. Steel	
673 005 006	31 to 50		Gv. Steel	
673 005 007	6 to 20	40 to 60	St. Steel	1.1
673 005 008	21 to 30		St. Steel	
673 005 009	31 to 50		St. Steel	
673 005 010	6 to 20	61 to 80	St. Steel	1.3
673 005 011	21 to 30		St. Steel	
673 005 012	31 to 50		St. Steel	

Rung Mounted Brackets (Round)



A12 Safety Rail & Invisirung®

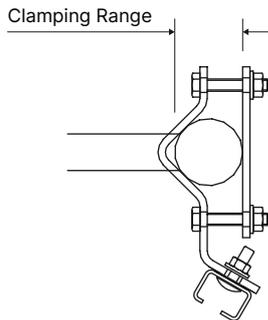
Part No	Clamping Range	Material	Weight (kg)
652 210 140	15 to 27mm	Galv. Steel	0.3
652 210 141		St. Steel	0.3



AL2 Safety Rail

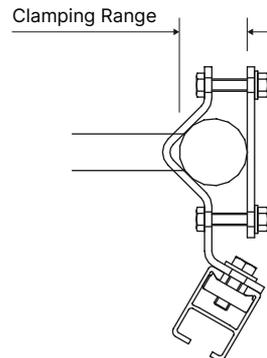
Part No	Clamping Range	Material	Weight (kg)
673 004 009	15 to 27mm	Galv. Steel	0.3
673 004 010		St. Steel	0.3

Style Mounted Brackets (Round)



A12 Safety Rail & Invisirung®

Part No	Clamping Range (mm)	Material	Kg
652 205 270	25 to 33mm	Galv. Steel	0.9
652 212 000	34 to 55mm	Galv. Steel	1.1
652 212 010	56 to 80mm	Galv. Steel	1.2
652 205 271	25 to 33mm	St. Steel	0.9
652 212 001	34 to 55mm	St. Steel	1.1
652 212 011	56 to 80mm	St. Steel	1.2



AL2 Safety Rail

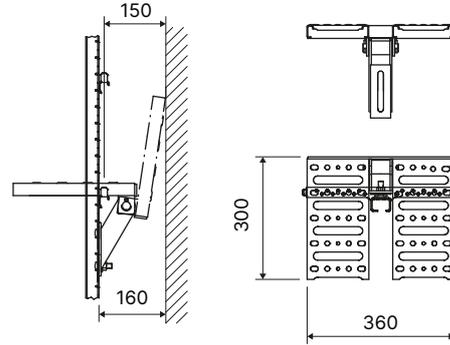
Part No	Clamping Range (mm)	Material	Kg
673 004 003	25 to 33mm	Galv. Steel	0.9
673 004 005	34 to 55mm	Galv. Steel	1.1
673 004 007	56 to 80mm	Galv. Steel	1.2
673 004 004	25 to 33mm	St. Steel	0.9
673 004 006	34 to 55mm	St. Steel	1.1
673 004 008	56 to 80mm	St. Steel	1.2

Rest Platforms

Recommended every 6-9 metres

A12 Safety Ladders

Part No	Material	Kg
652 210 050	Galv. Steel	3.8
652 220 050	St. Steel	3.8

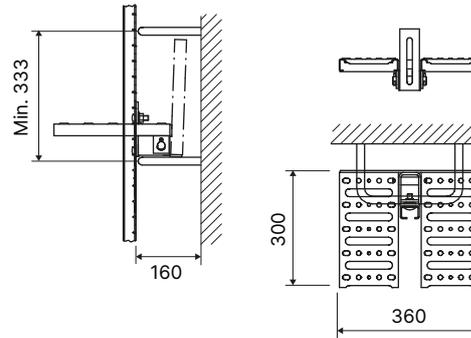


Invisirung®

Part No	Material	Kg
M52 200 060	Galv. Steel	3.8

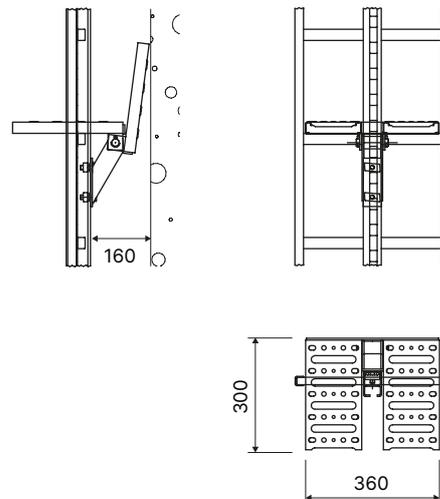
A12 Safety Rail

Part No	Material	Kg
652 210 051	Galv. Steel	3.8
652 220 056	St. Steel	3.8



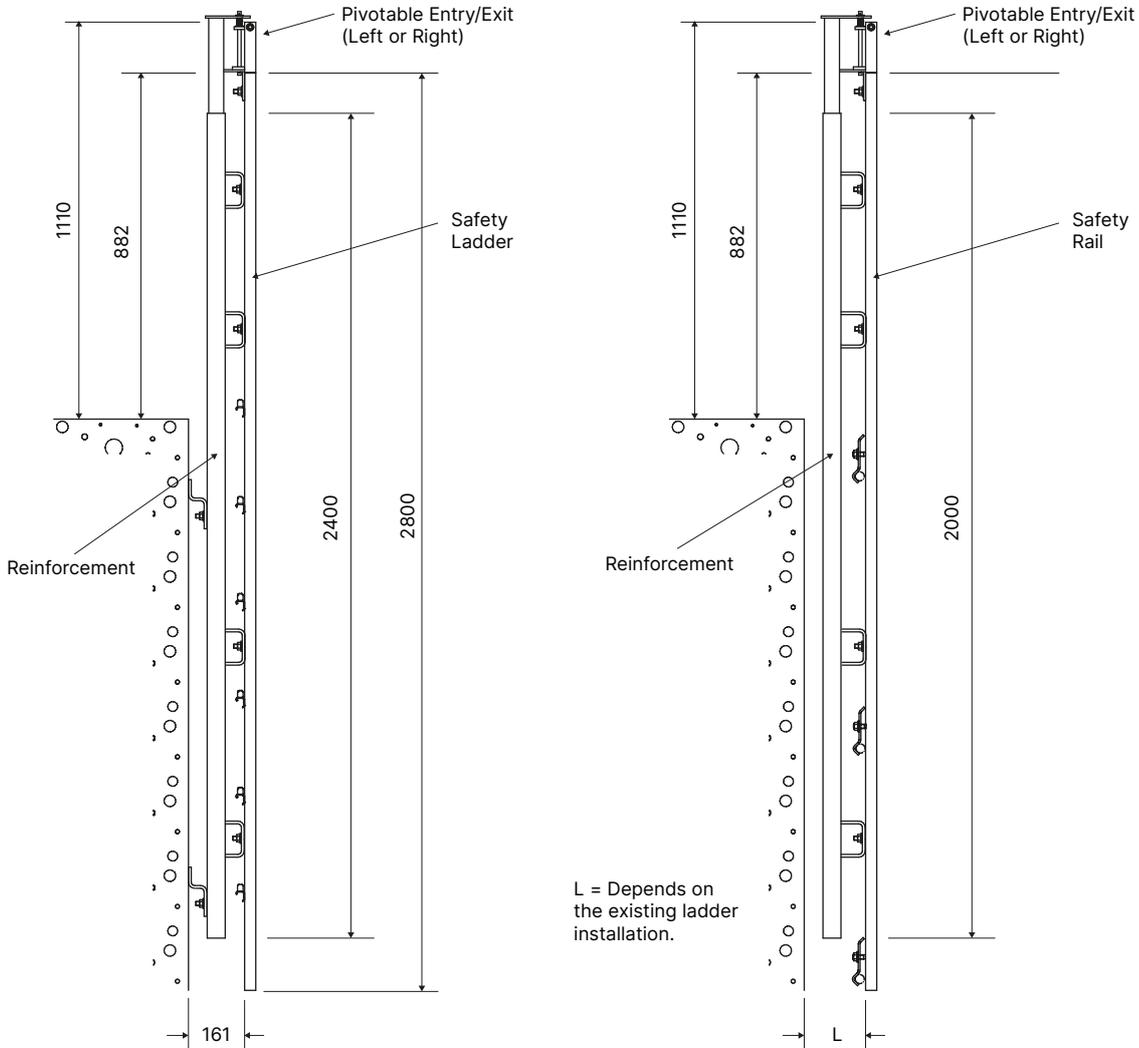
AL2 Safety Ladder

Part No	Material	Kg
673 003 003	Galv. Steel	3.8



Straight Step-Over

Step-over to a standing area at the top end of a ladder, e.g. stepping onto a roof. A complete Step-Over consists of a safety rail or ladder, a reinforced section and a pivotable entry/exit. All 3 elements should be used and are sold separately or as a kit.

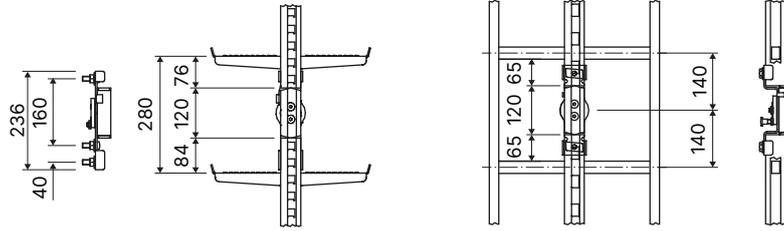


Part Description	Exit Direction	Safety Ladder		Safety Rail	
		Galv. Steel	St. Steel	Galv. Steel	St. Steel
Pivotable Entry/Exit	Right	530237	530247	530277	530287
	Left	530217	530227	530257	530267
Reinforcement		530337	530347	530357	530367
Step-Over		500378	500388		
Kit (Includes Fixings)	Right	272407	n/a	272917	n/a
	Left	272417	n/a	272927	n/a

Entry/Exit Sections

The Entry/Exit section allows for easy insertion and removal of the retaining carriage and can be provided at any location within the ladder system.

- ◆ The unit should be installed 1100mm above a work platform.
- ◆ The swivel section rotates 90° to allow the retaining carriage to be removed or inserted, whilst blocking the vertical path.
- ◆ The ladder section, to which the unit is attached, must be cut as shown to maintain the 280mm rug spacing.



A12 Safety Ladder & Rail

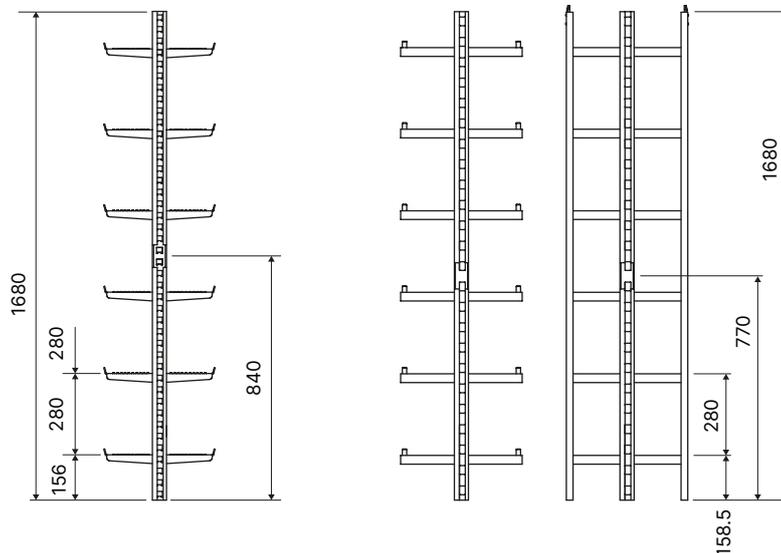
Part No	Material	Kg
652 210 080	Galv. Steel	1.6
652 210 081	St. Steel	1.6

AL2 Safety Ladder & Rail

Part No	Material	Kg
673 001 001	St. Steel	1.6

Cut-outs

Safety ladders with a cut-out enable easy insertion or removal of the retaining carriage along the ladder. To prevent unintentional removal of the retaining carriage, a releasable lock should be fitted around the cut-out position.



A12 Safety Ladder & Rail

Part No	Material	Kg
618 060 168	Galv. Steel	7.2
618 064 168	St. Steel	7.2

AL2 Safety Ladder & Rail

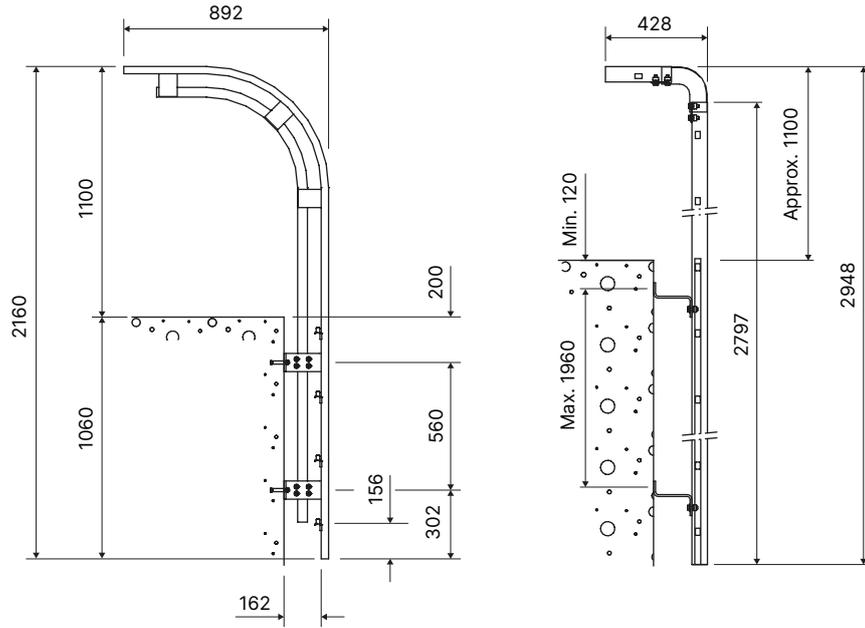
Part No	Ladder Type	Kg
687 005 168	Anti Slip Pegs	5.4
687 006 168	Side Stringers	5.9

Curved Step-Over

Step-over to a standing area at the top end of a ladder, e.g. stepping on to a roof.

The protected step-over is held firm with two brackets 200mm beneath the standing surface and secured with anchors (not provided).

A universal releasable lock must be fitted to the end of the curved upper section.



A12 Safety Ladder & Rail

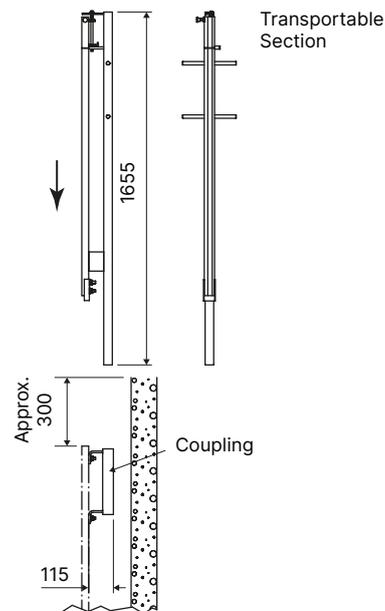
Part No	Material	Kg
652 210 070	Galv. Steel	22.0
652 210 071	St. Steel	22.0

AL2 Safety Ladder & Rail

Part No	Material	Kg
687 072 280	Side Stringers	11.0
687 071 002	Anti Slip Pegs	11.0

Confined Access Rail

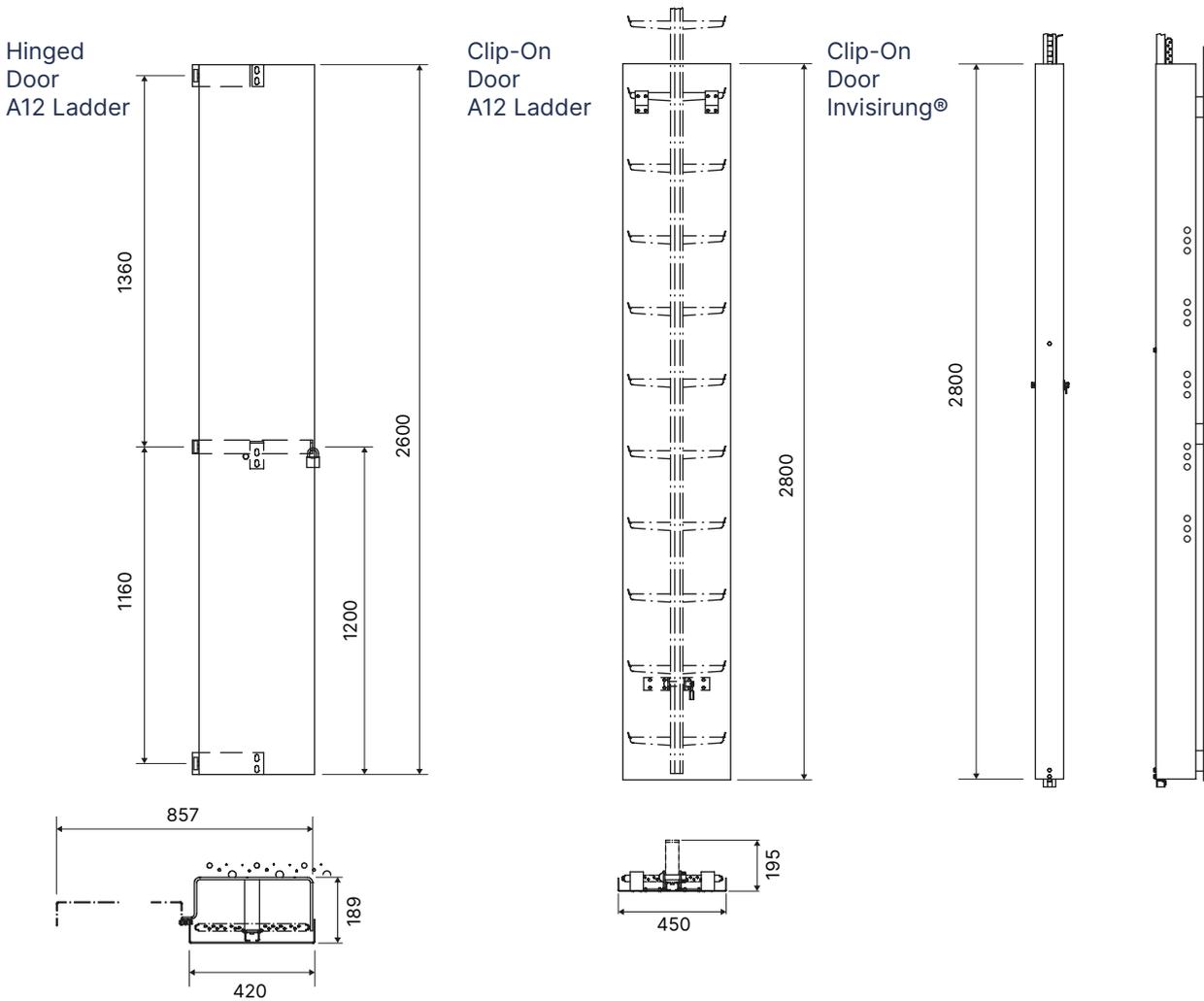
For use on shafts or manholes in combination with the A12 Safety Ladder System. The access rail is locked into the coupling and removed after climb completed.



Part No	Material	Kg
652 222 000	Transportable Rail	15.0
652 222 010	Coupling	1.9

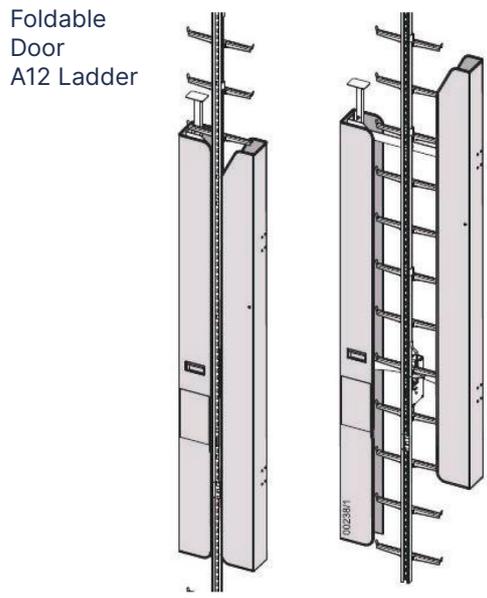
Non Access Covers

For use on shafts or manholes in combination with the A12 Safety Ladder System. The access rail is locked into the coupling and removed after climb completed.



Part No	Material
652 210 091	Hinged Door A12 Ladder
M52 210 095	Clip-On Door A12 Ladder
M52 200 090	Clip-On Door Invisirung®
503638	Foldable Door A12 Ladder

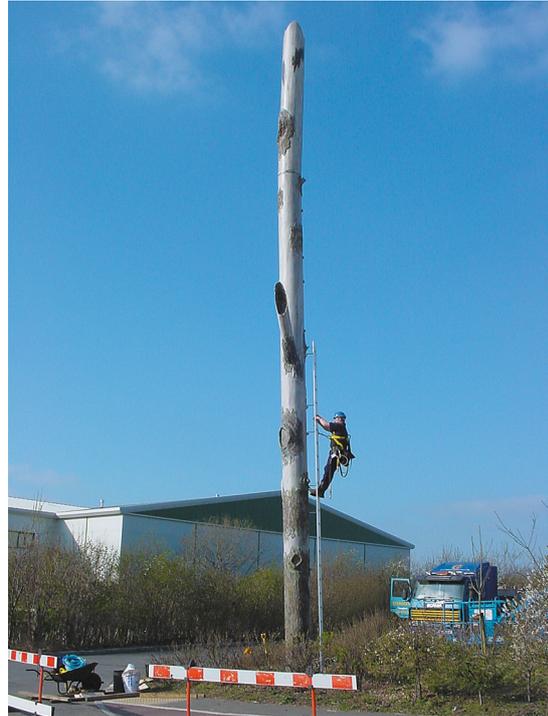
Non Access Covers for AL2 Ladder, please consult the sales office.



FALLGUARD AL2 MOBIL

Safety ladder for temporary use on various structure types. The fasteners that accommodate the ladder are permanently fixed. In the standard version, wall and post clamp brackets are supplied for the posts:

- ◆ Dimensions rail profile (H-shaped): 48 × 65 x 3-6mm
- ◆ Material: Anodised aluminum
- ◆ Design: Ladder with a central upright or with additional side upright
- ◆ Spacing in between stops: 70 mm
- ◆ Spacing in between rungs: 280 mm
- ◆ Ladder width: 414 mm
- ◆ Supplied in managable lengths of: 2800, 2520, 2240, 1960 and 1680 mm



FALLGUARD AL2 MOBIL-F

Designed for access to posts or masts with a circular cross-section. The fasteners are pre-installed on the ladder sections and provided with fastening straps to enable the ladder sections to be tightened and positioned directly on the post or mast.

- ◆ Dimensions rail profile (H-shaped): 48 × 65 x 3-6mm
- ◆ Material: Anodised aluminum
- ◆ Design: Ladder with a central upright or with additional side upright
- ◆ Spacing in between stops: 70 mm
- ◆ Spacing in between rungs: 280 mm
- ◆ Rungs: Straight, inserted and set on the back of the rail
- ◆ Ladder width: 414 mm
- ◆ Supplied in managable lengths of: 1960 and 1680 mm
- ◆ Maximum distance between fixings: 1680 mm
- ◆ Characteristics of connectors: Automatic release of the upper end stops when fitting the next Ladder section.

