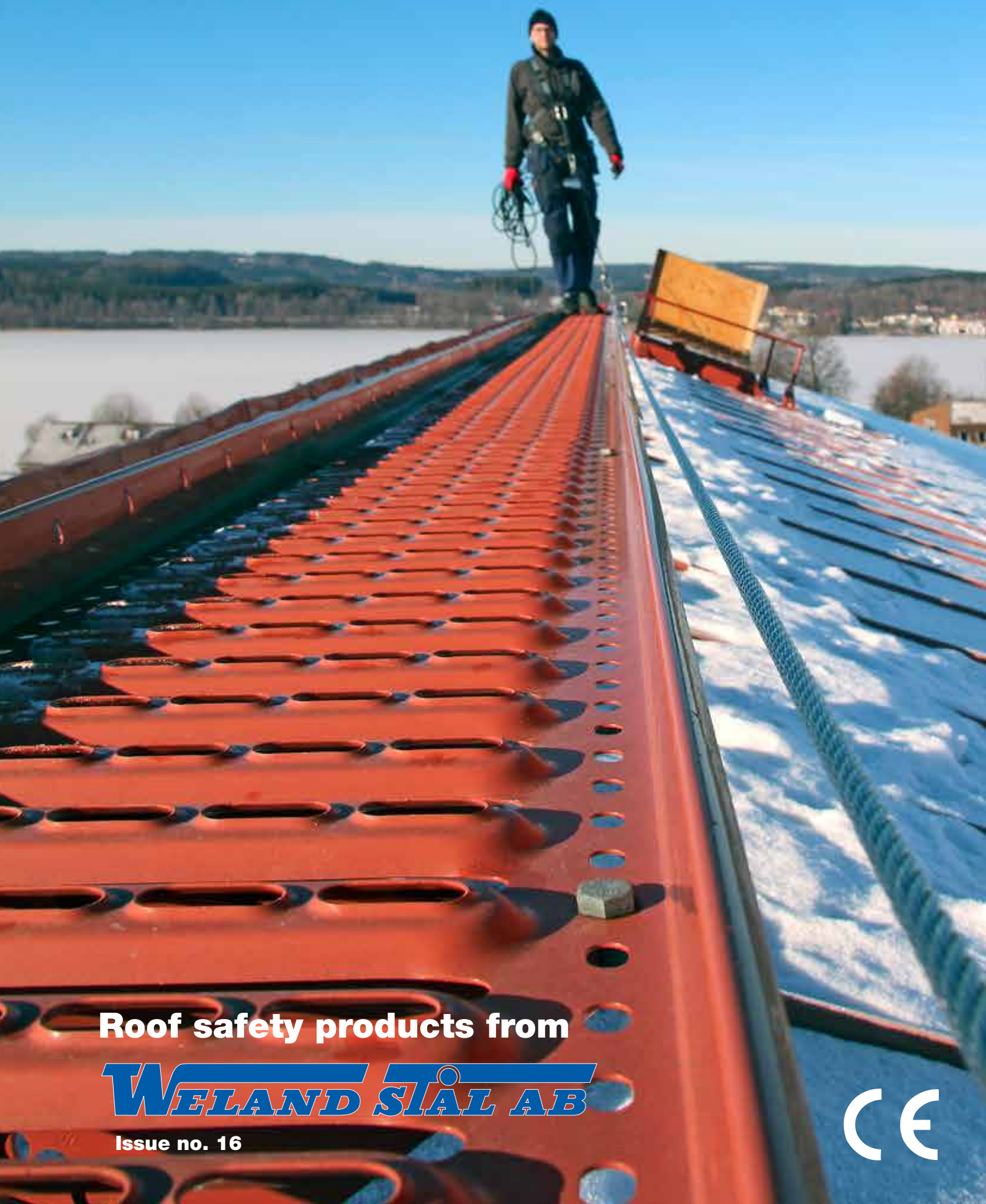


SAFETY ON THE ROOF



Roof safety products from

WELAND STÅL AB

Issue no. 16



WHY ROOF SAFETY?

Safety on our roofs is important, from the individual home owner to professionals who work on roofs. All roofs that can be accessed in some way must have roof safety equipment.

Ever since we were founded in 1980, we have conducted intensive product development in which we have made use of our own experiences, the opinions of our dealers, users, trade organisations, union representatives, etc. The number of products areas is constantly increasing, although the number of components included has decreased. This makes things easier for us, for our dealers and for fitters.

Apart from "roof safety products", we also stock a wide range of cat ladders with accessories as well as escape platforms with railings and brackets.

Our products are "CE" marked where this is possible or, alternatively, certified according to Swedish standards. We work for the environment and most of our products are registered in Basta and assessed in accordance with Byggsvarubedömningen, a Swedish building materials assessment tool. Weland Stål is certified according to ISO 9001 and ISO 14001.

On our website, you can find more information about why we are the leading supplier. Moreover, in less than a minute you can obtain an estimate and specification for what you need.



BYGGVARUBEDÖMNINGEN™

See more on our website www.welandstal.se



Download our app!



An app for people who want to find out quickly the current requirements for roof safety when they are on the roof.

Using your Smartphone, you can easily ascertain the roof gradient and snow zone. You quickly enter other facts and, together with pictures on the roof, you have created the basic data, which you can save or forward by mail. The app also includes risk analysis, work environment regulations and installation instructions.

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SURFACE TREATMENT

Hot dip galvanisation – the maintenance-free corrosion protection with an unsurpassed service life.

Hot dip galvanised steel has very long-lasting corrosion protection. In a normal environment it can have a service life of 60-80 years. The zinc that leaches out with the rain water forms compounds that do not dissolve easily, which in turn has a negligible impact on the environment.

All other surface treatment of steel gives rise to a need for maintenance, and during its life-cycle this has a significant impact on the environment. The most important reason for selecting hot dip galvanisation is the considerably prolonged maintenance-free service life. It is there that the really significant environmental benefit can be achieved!



Hot dip galvanised ridge rail on sedum roof.



Roof safety products painted brick-red.



Stainless steel



*Painted black
RAL 9005*



*Painted red
NCS 5040-Y80R*



*Painted grey
RAL 7011*



Hot dip galvanised

Magnelis for a better environment

For some parts, we have also started to use Magnelis sheet metal in our production. Magnelis is a relatively new surface treatment for sheet metal and the difference, with respect to zinc plate, is that it is alloyed with 3.5% aluminium and 3% magnesium. This alloying gives extremely good corrosion resistance.

Magnelis sheet metal is classed to withstand C5 marine environments and another great advantage is that the run-off rate is reduced to 25% compared to standard zinc plate. Even cut edges self heal, which makes further processing unnecessary. Parts manufactured in Magnelis sheet metal have a more glittery surface compared to hot dipped galvanised, however, with time the surface becomes dull in the same ways as standard hot dipped galvanised.

Weland Stål guarantees 30 years' useful life for parts manufactured in Magnelis.

Powder coating

Weland's roof safety products are hot-dip galvanised or Magnelis, but we can also offer our range in powder-coated versions. We keep black, red and grey in stock; other colours are painted to order. We use a 5-step pre-treatment with Bonderite, which gives the powder unique opportunities to bite into the steel.

Demand for brick red (RAL 8004) products has increased and we now offer painting without set-up costs every 3rd week.

Guarantee

We have long, solid experience of our products' durability. In recent years, we have refined our surface treatment processes and we can now give a 60-year guarantee on hot-dipped galvanised products and a 30-year guarantee for powder-coated products. Whether your choice falls on stainless steel or copper versions, the products will last long into the future.

RULES - REGULATIONS - USERS, WHAT APPLIES?

3 separate sections constitute the basis for assessing the roof safety.

Swedish Board of Housing, Building and Planning's Building Regulations:

Shall be considered as a minimum requirement when there is no need to consider professional use.

Work environment regulations:

For professional access to roofs, the roof should be provided with suitable roof safety devices. A risk analysis forms the basis for what is required in terms of roof safety.

Industry standards:

A tool for everyone with work environment responsibility for work on roofs. This should provide guidance in selecting the best technical layout for roof safety devices and best methods of working during roof work.

Bear in mind that:

- Mounting eyelets for cable are positioned with a maximum distance of 5 m between the eyelets and max. 10 m from the edge of the roof.
- Each roof section should be viewed as a separate roof.
- Snow guards are standardised according to BBR but frequently need to be installed to a greater extent.

Façade height: distance from the line of intersection between façade and roof to ground level. For safety devices on the roof, the façade height to the lowest ground level is calculated.

For entry devices, the façade height is calculated to the nearest climbing point.

SWEDISH BUILDING REGULATIONS, BBR 22

Roof gradients:

1:10 approx. 6°,
1:3 approx. 18°

Access devices

	Façade height	0 to 3 m			3 to 4 m			4 to 8 m			Over 8 m		
		< 6°	6 - 18°	> 18°	< 6°	6 - 18°	> 18°	< 6°	6 - 18°	> 18°	< 6°	6 - 18°	> 18°
Anti-slip guard for loose ladder	BBR 8:2421												
Fixed wall ladder with falling protection or internal climbing	BBR 8:2421												
Only internal climbing	BBR 8:2421												
Guardrails by climbing hatches	BBR 8:2421												
Fixed roof ladder and/or gangway to ridge, chimney or workplace	BBR 8:2422												
Gangway along the entire roof ridge	BBR 8:2422												

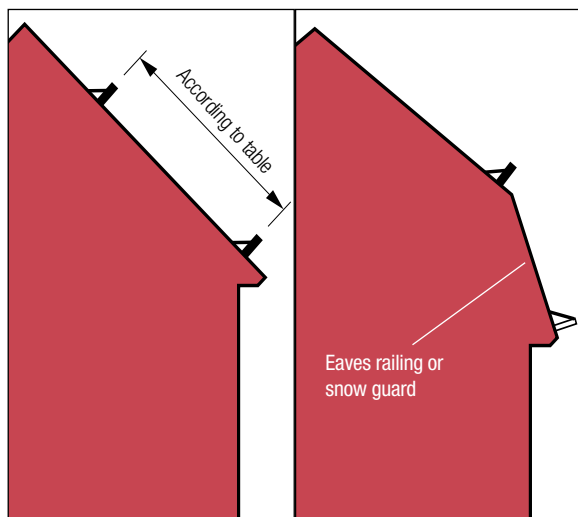
Safety devices

Fastening eyelets for safety lines	BBR 8:2431												
Ridge rail or gangway for securing safety line	BBR 8:2431												
Foot support at roof breaks and eaves	BBR 8:2432												
Safety device to prevent your foot going through (not above 60°)	BBR 8:2433												
Safety device against falling ice and snow by the building's entrances	BBR 8:2434												



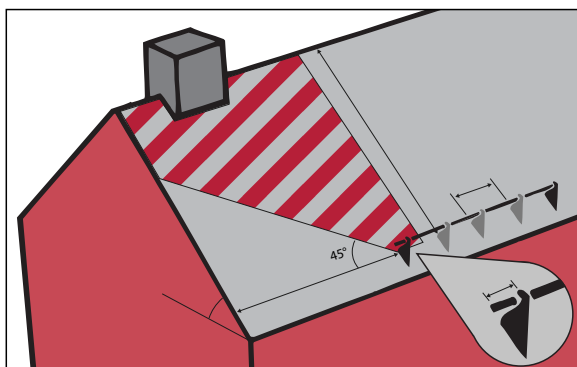
Coloured fields specify **requirements**

SNOW GUARDS IN DIFFERENT SNOW ZONES



Calculation of short snow guards

A snow guard that only covers a short part of the length of the building, e.g. over a door, runs a considerable risk of being overloaded. **You can perform calculations easily on our website: www.welandstal.se**



The tables are based on fixings c/c 1200 mm. Distance table for snow guards according to SS 83 13 35:2012 with snow zones according to BFS 2015-6-EKS 10 and form factor according to Eurocode SS-EN 1991-1-3. Loads on load-bearing elements – Parts 1-3: General loads – Snow load.

Snow guards are placed as close to the eaves as possible. On a mansard roof, the snow guards are placed above, but as close to, the change in slope as possible. In the case of long roof drops, snow guards are installed in several rows so that the free surface, in the direction of the roof drop, is not greater than that specified in table. Also bear in mind the possible occurrence of snow pockets. The top table is used for pentroofs and the lower for saddle roofs. You can find more information on our website, www.welandstal.se

Applies for Pentroofs

Roof gradient α	Snow zone according to BBR							
	1	1.5	2	2.5	3	3.5	4.5	5.5
6	60	40	30	24	20	17	13	11
10	37	24	18	15	12	10	8.1	6.6
14	27	18	13	11	8.9	7.6	5.9	4.8
18	21	14	11	8.5	7.1	6.1	4.7	3.9
23	17	12	8.7	7.0	5.8	5.0	3.9	3.2
27	16	10	7.7	6.2	5.2	4.4	3.4	2.8
33	14	9.1	6.8	5.5	4.6	3.9	3.0	2.5
38	13	8.6	6.4	5.2	4.3	3.7	2.9	2.3
42	13	8.4	6.3	5.0	4.2	3.6	2.8	2.3
45	13	8.3	6.3	5.0	4.2	3.6	2.8	2.3
50	13	8.5	6.3	5.1	4.2	3.6	2.8	2.3
55	13	8.9	6.7	5.3	4.4	3.8	3.0	2.4

Applies for Saddle Roofs

Roof gradient α	Snow zone according to BBR							
	1	1.5	2	2.5	3	3.5	4.5	5.5
6	55	36	27	22	18	16	12	10
10	31	21	16	13	10	9.0	7.0	5.7
14	22	14	11	8.6	7.2	6.2	4.8	3.9
18	16	11	8.2	6.5	5.5	4.7	3.6	3.0
23	13	8.4	6.3	5.1	4.2	3.6	2.8	2.3
27	11	7.5	5.6	4.5	3.7	3.2	2.5	2.0
33	10	6.6	5.0	4.0	3.3	2.8	2.2	1.8
38	9.4	6.2	4.7	3.7	3.1	2.7	2.1	1.7
42	9.1	6.1	4.6	3.7	3.0	2.6	2.0	1.7
45	9.1	6.1	4.5	3.6	3.0	2.6	2.0	1.7
50	9.2	6.2	4.6	3.7	3.1	2.6	2.1	1.7
55	10	6.4	4.8	3.9	3.2	2.8	2.1	1.8

WORK ENVIRONMENT REGULATIONS

The Swedish Work Environment Authority's new regulations apply from 1 January 2015. (AFS 1999:3 updated 15 April 2014). Apply for all activities where employees perform work on behalf of the employer. Apply for work where there is a risk of falling and the fall height exceeds 2 m. All movement / work shall be conducted with continuously anchored personal fall protection equipment (PFU).

The choice of fall protection must be preceded by a risk analysis.

If, considering the circumstances, it is not reasonable to use guardrails or equipment that provides equivalent protection, personal fall protection equipment must be used. During the assessment, the following must be considered: The time needed to install the guardrail or the equipment and the risks associated with this and the time required for the roof work to be done as well as the risks associated with the work if the guardrail or the equipment is not used.

Products that help when there is a risk of falling

Guardrail

Can be installed on gangways, ladders and directly on to roofs. Advantage: Personal fall protection equipment is not needed as long as you are on the right side. Disadvantage: Does not provide protection on other roof areas.

Wire system

Can be installed on gangways, ladders, ridge rails or directly on to roofs. Advantage: the user can then move freely across the entire roof area.



Snow guards on folded metal roof.



Roof safety products painted red.



Universal roof ladder.



Roof gangways and guardrails on tiled roofs.



Sliding ice protection installed on snow guard made of profile grating.



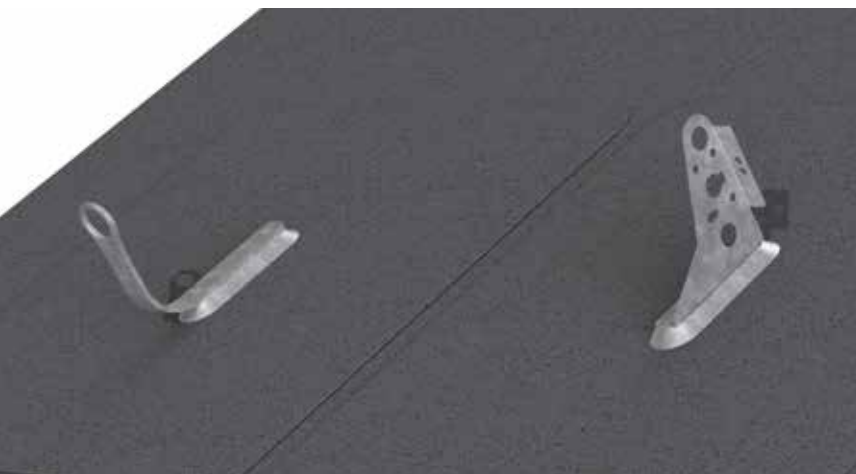
Roof gangway painted red.



Snow rake installed above snow guard in profile grating with sliding ice stop pins. The very best protection against sliding ice.

LIFELINE HOOK

Used to anchor the lifeline during temporary work on the roof. The lifeline fasteners are installed c/c max. 5 m. The lifeline hook is approved for roof gradients less than 6 degrees. Design in accordance with EN 517.



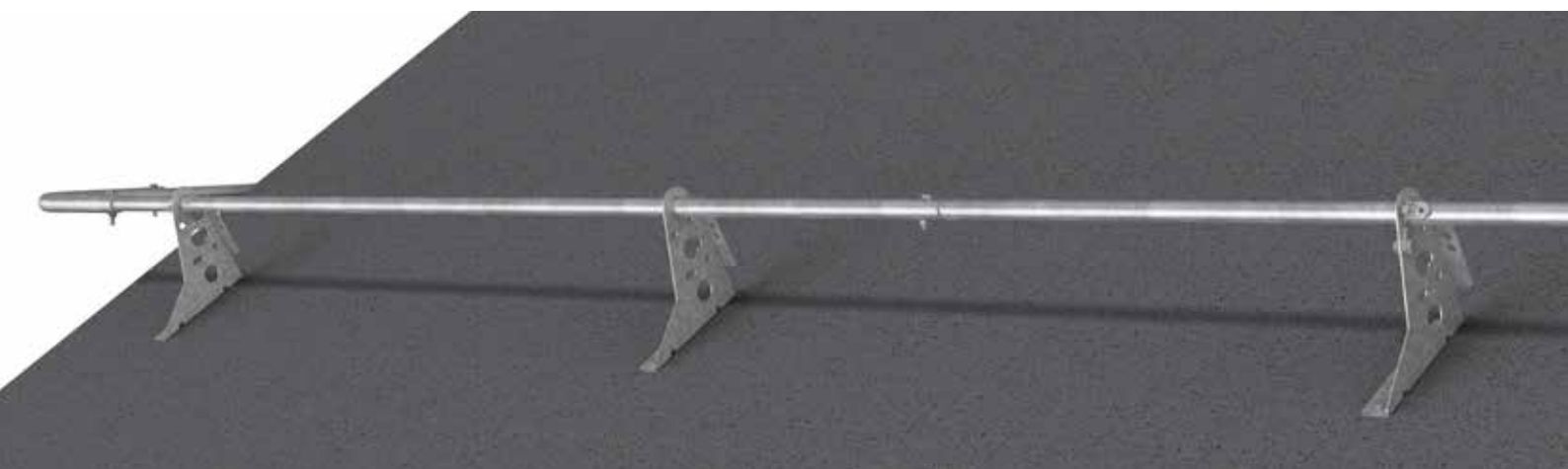
SNOW DEPTH INDICATOR

A simple solution to make clear where the fastening points for the lifeline are under the snow cover. The pennant can be adjusted to the height considered suitable when snow clearing has to be done.



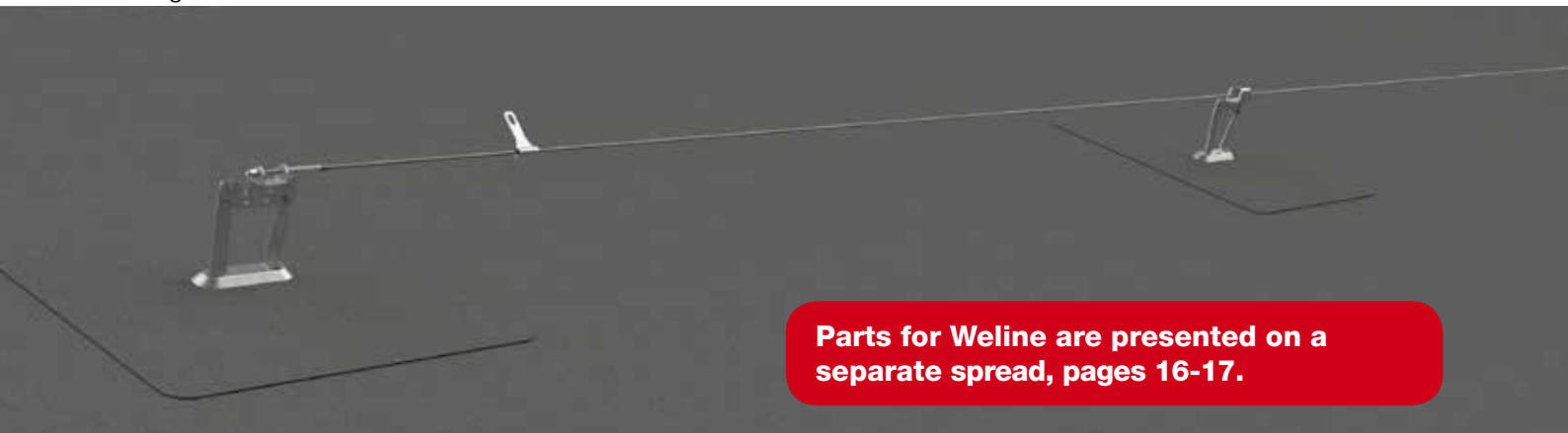
RIDGE AND EAVES RAILINGS

Used to anchor the lifeline during temporary work on the roof. Brackets for ridge/eaves rails are installed with c/c max. 1200 mm. The tubes are crimped at one end, which means that the tubes fit into each other and the joints only need to be secured with through bolts. It is also easy to slide the tubes into the mounts. Design in accordance with SS 831331.



FALL PROTECTION, WELINE

A specially produced fastener is used to install the wire system directly on to flat roofs. The fastener mounts directly on to the sealing plates and the maximum distance between fixing points is 10 m. With this fastener in the Weline series, it is easy to create a secure and functional safety solution for an unbeatable price. This solution can replace the ridge rail and lifeline fastener on roofing felt or membrane roofs.



Parts for Weline are presented on a separate spread, pages 16-17.

Lifeline hook

Used for roof gradients less than 6 degrees. Installed with max. 5 m distance. Approved in accordance with EN-517.

Part. no.	Description
NT 2001	Fixing for clay / concrete tiles
NT 6001	Bracket for plain roofs
NS 5000	Bracket type 5 for plain roofs

Snow depth indicator

Part. no.	Description
SN 1000	Snow depth indicator
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Railing tube (pre-drilled lengths of 3 metres)

The projecting tube, calculated from the last bracket, must not exceed 300 mm in length. The tube must be locked at both ends so that it cannot rotate or be pulled out.

Part. no.	Description
RR 2730	Tube Ø 27 mm, 3 m
BU 8401	Bolt set, 10x M8x40
MU 0801	Nut set, 10x M8

Locking railing tubes

The locking device is mounted on the outer side of the first and last bracket on each section.

Part. no.	Description
LA 2701	Locking device for 1 tubes (2 / section)
SS 5221	Screw set, 10x self-drilling 5.5x22
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

90° bend (for e.g. hipped roof)

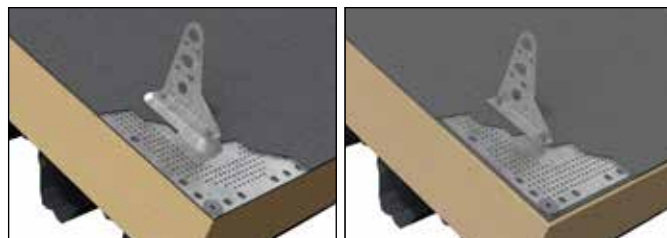
Part. no.	Description
GR 1002	For Ø 27 mm tube
BU 8401	Bolt set, 10x M8x40
MU 0801	Nut set, 10x M8

Bracket for clay and concrete roofs



Part. no.	Name	Roof type
TF 3000	Adjustable mount type 3	Flat roof tiles
BF 3000	Adjustable mount type 3	S-profile roof tiles
FP 3000	Footplate	
LF 3310	Lath bracket	
BU 1201	Bolt set, 10x M10x20	
TS 6301	Screw set, 10x wood screw 6x35	

Bracket for sealing layer



Part. no.	Name
NS 5000	Mount type 5
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TP 3551	Sealing plate, raised
TP 3552	Sealing plate, smooth
BU 1201	Bolt set, 10x M10x20
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket footplate



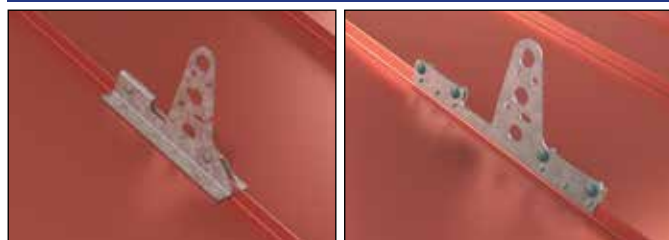
Part. no.	Name
FP 0300	Footplate 300x100
FP 1030	Footplate smooth 300x100
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TS 6301	Screw set, 10x wood screw 6x35
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Fixing profile for profiled metal roof



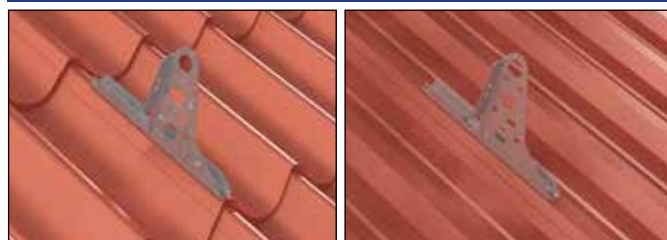
Part. no.	Name
NS 5000	Mount type 5
IP ----	Fixing profile 330 mm (specify type of roof plate)
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

Bracket for folded metal roofs



Part. no.	Description
FF 0300	Integrated standing seam mount, installed (for double-folded sheet metal)
GF 0008	Rubber foot clip 4 / mount
FF 0430	Integrated standing seam mount, installed (for snap-on-roofs)

Fixing profile Universal for profiled metal roof



Part. no.	Name
IP 5000	Fixing profile Universal
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

More detailed information about fastenings is available on pages 24-27.

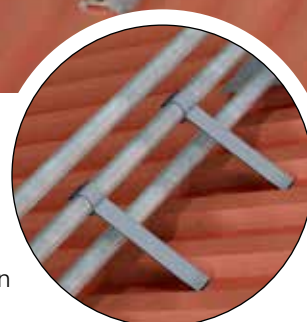
SNOW GUARD WITH 3 TUBES

A stable snow guard that is ideally suited for older roofs where an older appearance is desirable. Also works as an eaves railing. The brackets are installed with c/c max. 1200 mm. The tubes are crimped at one end, which means that the tubes fit into each other and the joints only need to be secured with through bolts. It is also easy to slide the tubes into the brackets. The projecting tube, calculated from the last bracket, must not be longer than 300 mm. The tube must be locked at both ends so that it cannot rotate or be pulled out. Design in accordance with SS 831335.



SNOW GUARDS MADE FROM PROFILE GRATING

Weland Stål's best-selling snow guard, largely due to its light weight and simple installation. Also approved as eaves railing. The brackets are installed with c/c max. 1200 mm. The grating is placed against the mounts and simply joined with through bolts. Also available in a version with small pins that prevent the ice from sliding down on plain roofs. Design in accordance with SS 831335.



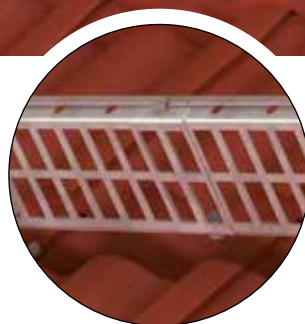
Sliding ice stop pins



Snow stop



Sliding ice stop pin



Joint



Joint profile grating with sliding ice stop pins



Snow guard with 3 tubes

Part. no.	Description
RR 2730	Tube Ø 27 mm, 3 m
BU 8401	Bolt set, 10x M8x40
MU 0801	Nut set, 10x M8
LA 2731	Locking device for 3 tubes, 2 / section
SS 5221	Screw set, 10x self-drilling
GR 1002	90° bend for Ø 27 mm tube
IS 3050	Sliding ice stop pin (length adjusted during installation)

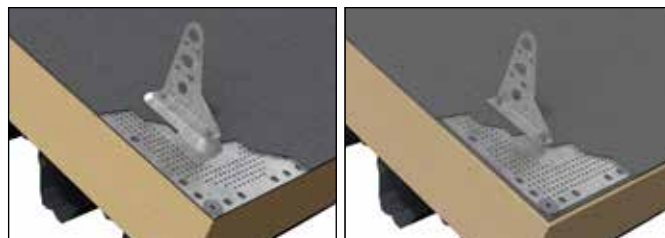
Snow guards made from profile grating

Part. no.	Description
SS 1515	Profile grating 1500 x 155
SS 1815	Profile grating 1800 x 155
SS 2415	Profile grating 2400 x 155
SS 3015	Profile grating 3000 x 155
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
KL 4701	Clamps 10x
IS 1240	Sliding ice protection profile grating, plastic
RP 1000	Gutter plate snow guard (non-stock item)

Snow guard made of profile grating with sliding ice stop pins

Part. no.	Description
IS 1500	Profile grating 1500 x 174 with sliding ice stop pins
IS 2400	Profile grating 2400 x 174 with sliding ice stop pins
IS 0140	Fishplate bracket 2 / joint
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
KL 4701	Clamps 10x

Bracket for sealing layer



Part. no.	Name
NS 5000	Mount type 5
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TP 3551	Sealing plate, raised
TP 3552	Sealing plate, smooth
BU 1201	Bolt set, 10x M10x20
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket footplate



Part. no.	Name
FP 0300	Footplate 300x100
FP 1030	Footplate smooth 300x100
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TS 6301	Screw set, 10x wood screw 6x35
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket for clay and concrete roofs



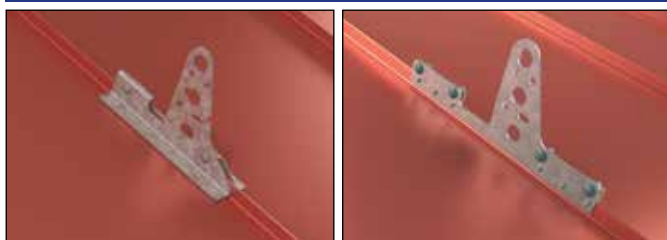
Part. no.	Name	Roof type
TF 3000	Adjustable mount type 3	Flat roof tiles
BF 3000	Adjustable mount type 3	S-profile roof tiles
FP 3000	Footplate	
LF 3310	Lath bracket	
BU 1201	Bolt set, 10x M10x20	
TS 6301	Screw set, 10x wood screw 6x35	

Fixing profile for profiled metal roof



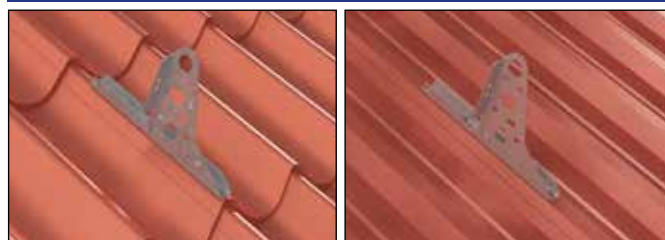
Part. no.	Name
NS 5000	Mount type 5
IP ----	Fixing profile 330 mm (specify type of roof plate)
SS 6191	Set of screws for fixing profile sheet thickness ≤ 0.7 mm
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10
SS 5221	Set of screws for fixing profile sheet thickness > 0.7 mm

Bracket for folded metal roofs



Part. no.	Description
FF 0300	Integrated standing seam mount, installed (for double-folded sheet metal)
GF 0008	Rubber foot clix 4 / mount
FF 0430	Integrated standing seam mount, installed (for snap-on-roofs) snap-on-roofs

Fixing profile Universal for profiled metal roof

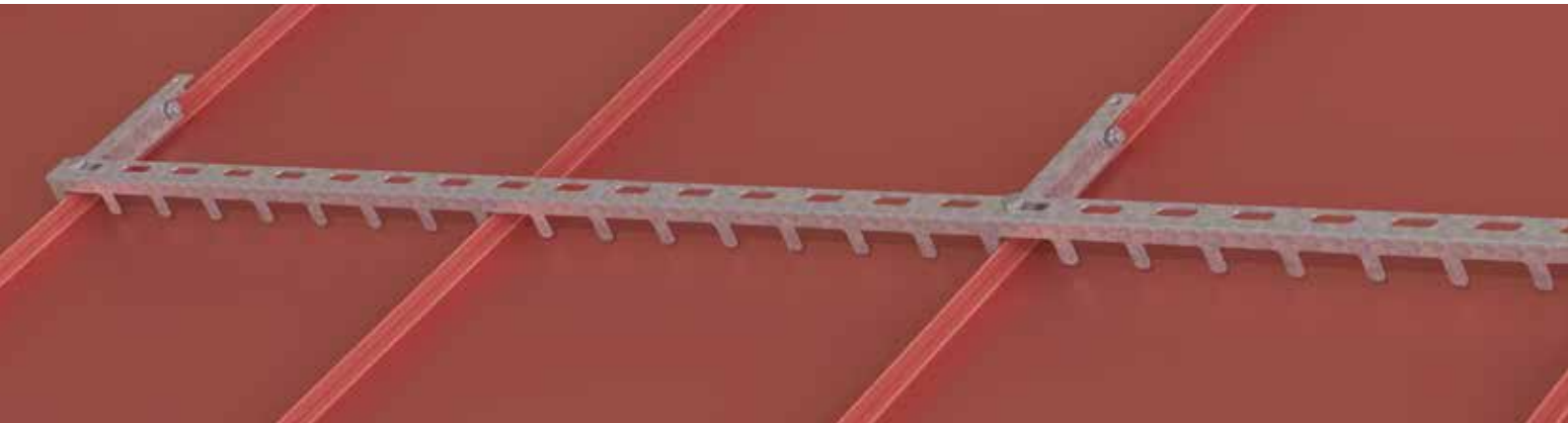


Part. no.	Name
IP 5000	Fixing profile Universal
SS 6191	Set of screws for fixing profile sheet thickness ≤ 0.7 mm
SS 5221	Set of screws for fixing profile sheet thickness > 0.7 mm

More detailed information about fastenings is available on pages 24-27.

SNOW RAKE

The snow rake is a unique product intended primarily for folded metal roofs. The snow rake does not satisfy the requirements according to SS 831335. However, it is an excellent complement when placed on the roof in several rows, distributing the snow pressure and creating an even snow cover. The snow then thaws with no risk of sheets of ice sliding down from the roof. The rake on its own works well on smaller roof surfaces and at lower roof gradients. Can also be installed for existing snow guards made of profile grating.



Snow rake

Part. no.	Description
SN 1242	Snow rake length 1270 mm

Standing seam mount for snow rake

Part. no.	Description
FF 0174	Standing seam mount for snow rake
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

SNOW SLIDING BARRIERS

Snow sliding barriers are a new product for installation on the eaves. They prevent the snow below the foot gutter from sliding off the roof.

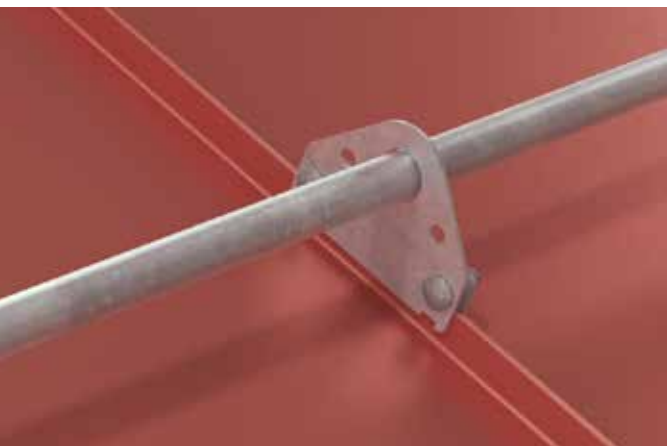


Snow sliding barriers

Part. no.	Description
SG 1275	Snow sliding barrier, length 1200 mm

SNOW STOP

Used and installed in the same way as the snow rake. However, it does not provide protection against sheets of ice sliding down from the roof.



Railing tube (pre-drilled lengths of 3 metres)

The projecting tube, calculated from the last bracket, must not exceed 300 mm. The tube must be locked at both ends so that it cannot rotate or be pulled out.

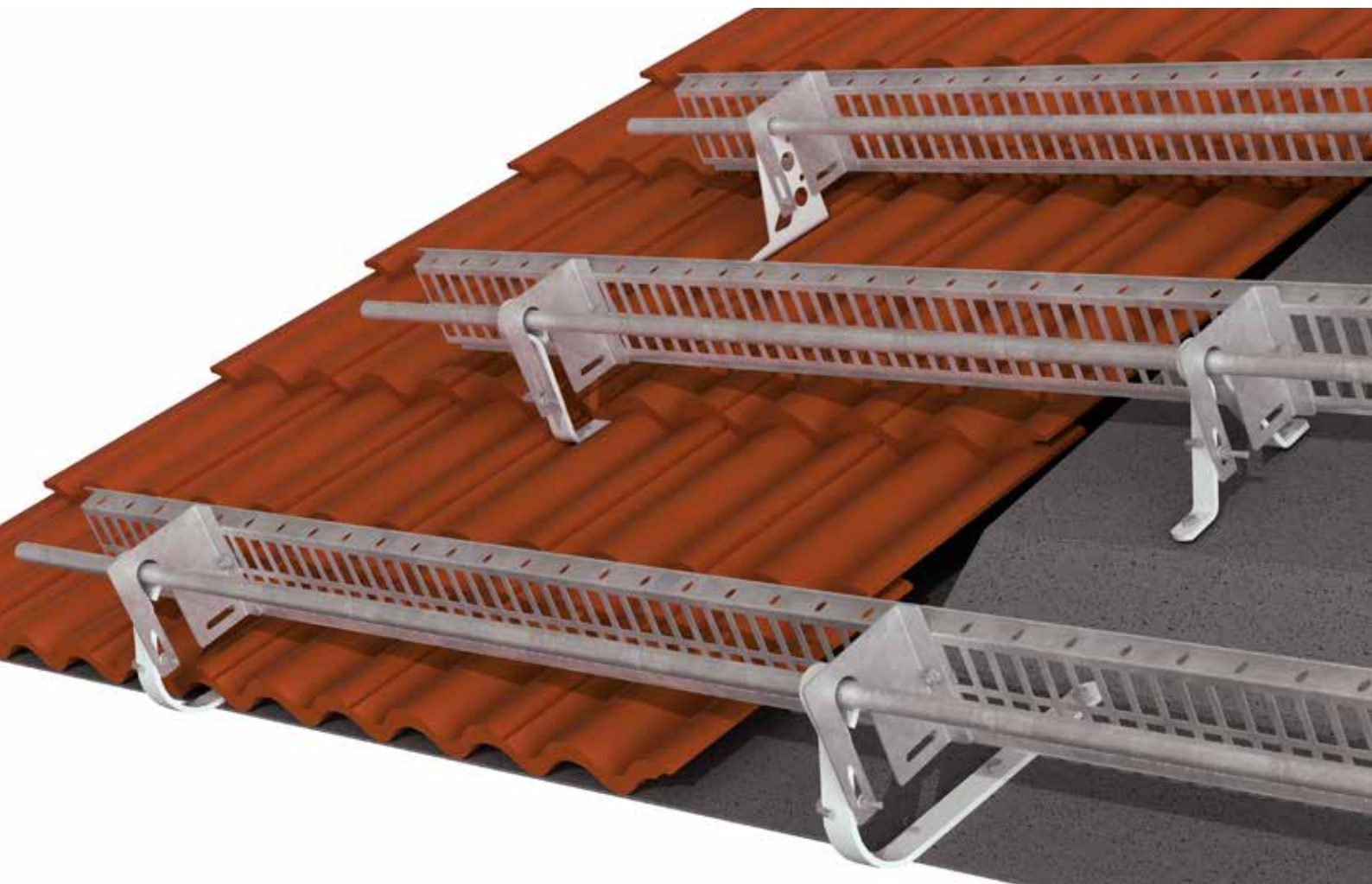
Part. no.	Description
RR 2730	Tube Ø 27 mm, 3 m
BU 8401	Bolt set, 10x M8x40
MU 0801	Nut set, 10x M8
LA 2701	Locking device 1 off

Standing seam mount for snow stop

Part. no.	Description
FF 0125	Standing seam mount, snow stop for 1 tube, installed

SNOW GUARD ATTACHMENT

An existing eaves railing can be supplemented with a snow guard attachment for profile grating. Fits all types of old brackets. The attachment can also be installed on brackets without tubes.



Fixing

Part. no.	Fixing
KS 1200	Bracket for railings with 1 or 2 tubes

Bolt set

Part. no.	Between bracket and existing bracket
JK 0875	Type 2, 4 and 6 for 4 brackets
BU 1201	Bolt set, 10x M10x20
KL 4701	Clamps 10x
MU 1001	Nut set, 10x M10

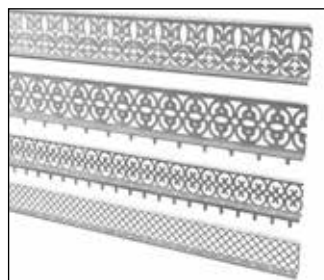
Profile grating

Part. no.	Description
SS 1515	Profile grating 1500 x 155
SS 1815	Profile grating 1800 x 155
SS 2415	Profile grating 2400 x 155
SS 3015	Profile grating 3000 x 155
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
KL 4701	Clamps 10x
IS 1240	Sliding ice protection profile grating plastic grey

Profile grating with sliding ice stop pins

Part. no.	Description
IS 1500	Profile grating 1500 x 174 with sliding ice stop pins
IS 2400	Profile grating 2400 x 174 with sliding ice stop pins
IS 0140	Fishplate bracket (2 / joint)
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
KL 4701	Clamps 10x

Special pattern and gutter plate



Profile grating with special pattern for period impression on older properties.



Gutter plate for safer snow guards on angled roofs

ROOF GANGWAY MADE OF PROFILE GRATING

Weland Stål's lightweight, stable roof gangway for moving along the roof. The gangway has a high kick strip and a raised walking surface for good grip in difficult conditions. The gangway is also approved for securing a lifeline, which makes the ridge rail superfluous in sections where the gangway is installed. The brackets are installed with c/c max. 1200 mm. Easy installation through threaded holes in the upper sections. The gangway is jointed with overlaps for simple adaptation of the length. The gangway can be easily equipped with wire as continuous fall protection. Version in accordance with SS-EN 516.



Stay



Fastening eyelet for roof gangway

Roof gangway 90° corner



GANGWAY AS "LADDER"

At roof gradients less than 15 degrees, a Weland roof gangway can be used as a "ladder" or gangway in the direction of the roof gradient. The gangway is installed on spacers at c/c max. 1200 mm in the same way as the roof ladder.



Fixing, see page 21

Top part, gangway bracket

Part. no.	Description
ÖB 3000	Suitable for all mounts
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
DS 5700	Spacer/mount

Gangway made of profile grating

A lightweight, stable gangway with excellent grip under all conditions. Weight only 4.9 kg/m.

Part. no.	Length x width
PB 0630	700 x 350 mm (construction dimensions 630 mm*)
PB 1190	1260 x 350 mm (construction dimensions 1,190 mm*)
PB 2450	2520 x 350 mm (construction dimensions 2450 mm*)
PB 2450H	Profile grating gangway 45° right
PB 2450V	Profile grating gangway 45° left
WL 1000	Bracket for wire
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
SB 3000	Stay (1 / section)

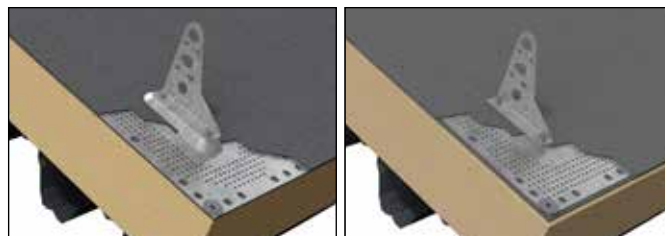
* Joined with overlaps, 70 mm

Fastening eyelet for roof gangway

Part. no.	Description
ÖM1000	Eye nut M10 25-45 HDG
SB4012	Swaged washer 40x3mm sst
BU1201	Bolt set, 10x M10x20

Parts for Weline are presented on a separate spread, pages 16-17.

Bracket for sealing layer



Part. no.	Name
NS 5000	Mount type 5
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TP 3551	Sealing plate, raised
TP 3552	Sealing plate, smooth
BU 1201	Bolt set, 10x M10x20
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket footplate



Part. no.	Name
FP 0300	Footplate 300x100
FP 1030	Footplate smooth 300x100
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TS 6301	Screw set, 10x wood screw 6x35
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket for clay and concrete roofs



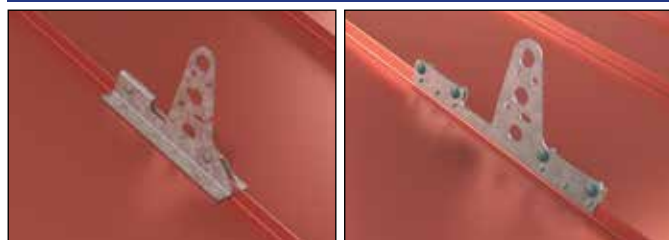
Part. no.	Name	Roof type
TF 3000	Adjustable mount type 3	Flat roof tiles
BF 3000	Adjustable mount type 3	S-profile roof tiles
FP 3000	Footplate	
LF 3310	Lath bracket	
BU 1201	Bolt set, 10x M10x20	
TS 6301	Screw set, 10x wood screw 6x35	

Fixing profile for profiled metal roof



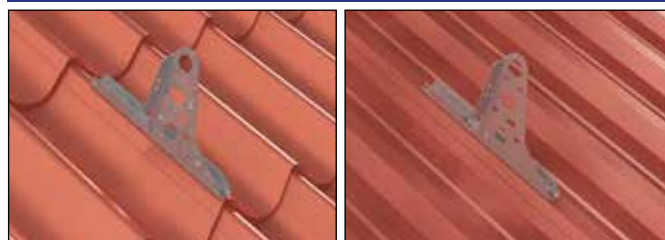
Part. no.	Name
NS 5000	Mount type 5
IP ----	Fixing profile 330 mm (specify type of roof plate)
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

Bracket for folded metal roofs



Part. no.	Description
FF 0300	Integrated standing seam mount, installed (for double-folded sheet metal)
GF 0008	Rubber foot clip 4 / mount
FF 0430	Integrated standing seam mount, installed (for snap-on-roofs)snap-on-roofs)

Fixing profile Universal for profiled metal roof



Part. no.	Name
IP 5000	Fixing profile Universal
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

More detailed information about fastenings is available on pages 24-27.

FALL PROTECTION, WELINE

Weland Stål's own fall protection, Weline, is available in three versions, Track, Claw and Tube.

Common to all systems is a wire that is installed along the roof gangway, roof ladder, ridge rail, work platform or directly on the roof. **Users couple their safety line to a runner or directly to the wire and they then have a very flexible safety system when carrying out work and maintenance on roofs and other exposed workplaces.**

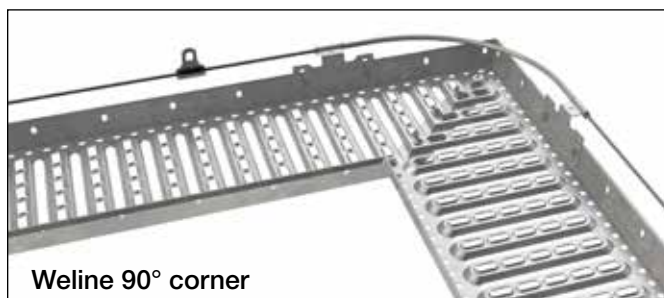
The Weland wire system can be connected to Weland Stål's roof safety products and other Swedish brands. Weline can be installed during new production and on older existing systems. For installation on existing roof safety systems, these must be installed with at least three fixing points on the roof, free from damage and installed according to the installation instructions applying on the installation date.



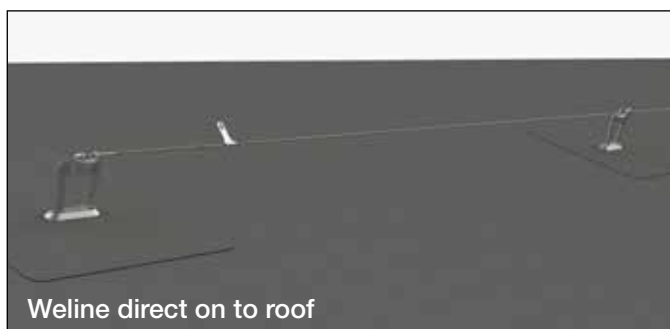
Weline on roof gangway



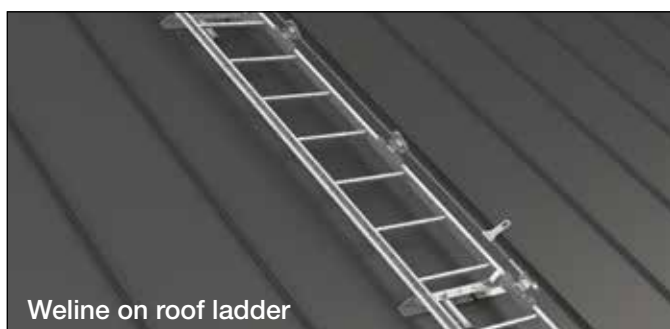
Weline on ridge rail



Weline 90° corner



Weline direct on to roof



Weline on roof ladder



Weline on cat ladder

Track

The users anchor their safety line in the runner on the wire and they can then move freely across the entire roof area without having to reconnect. Best used on straight stretches on horizontal or flat sections (maximum 15 degrees).

Claw

Users clip their own carabiner around the wire and they can then pass the support points with a single manoeuvre, without needing to reconnect. A suitable solution if there are several ascent points along the same wire. Can also be used along gangways and ladders in the direction of the roof fall, up to 50 degrees.

Tube

Used when there is a need to draw the wire along differences in heights or curves. Users connect to an open runner and can then move freely along the wire or roof area. Can also be installed along cat ladders and steep gradients with the fall stop's fitted support points.

Support points

Maximum distance between supports on vertical sections is 10 metres and along roof drops up to 15 degrees gradient. Between 15-50 degrees gradient, the maximum distance is 2.5 metres. Above 50 degrees gradient, maximum 1.2 metres. If users want to use the wire as a support during work, we recommend a maximum distance of 2.5 metres between the support points.

Note! Support does not mean that you can work suspended from the system, e.g. over the roof edge.

Planning

For sections shorter than 5 metres, wire is not normally considered to be necessary. The wire must be at least 0.5 metre shorter than the gangway/ridge rail or the ladder on which it is installed.

Weline track



Part. no.	Name
WL1001	Bracket for wire support HDG
WL1002	End bracket wire HDG
WL1004	Wire support track HDG
WL1005	Wire runner HDG
WL1009	Wire bracket smooth roofs HDG
XWL1007	End terminal mounted on wire sst
XWL1008	8 mm wire sst
BU1201	Bolt set, 10 off M10x20 mm HDG
VB1301	Bolt set, 10x carriage bolts M10x30 mm HDG
MU1001	Nut set, 10x M10 HDG
UB0850	Square bent U-bolt M8 2x

Weline claw



Part. no.	Name
WL1001	Bracket for wire support HDG
WL1002	End bracket wire HDG
WL1003	Wire support claw HDG
WL1005	Wire runner HDG
WL1009	Wire bracket smooth roofs HDG
XWL1007	End terminal mounted on wire sst
XWL1008	8 mm wire sst
BU1201	Bolt set, 10 off M10x20 mm HDG
VB1301	Bolt set, 10x carriage bolts M10x30 mm HDG
MU1001	Nut set, 10x M10 HDG
UB0850	Square bent U-bolt M8 2x

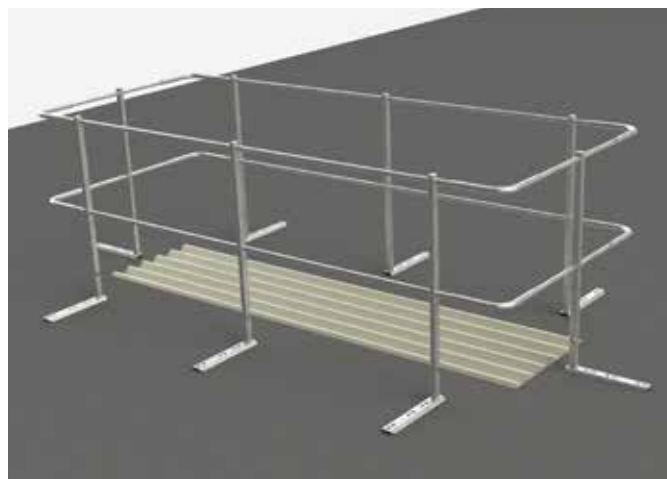
Weline tube



Part. no.	Name
WL1002	End bracket wire HDG
WL1003	Wire support claw HDG
WL1005	Wire runner HDG
WL1009	Wire bracket smooth roofs HDG
WL1010	Wire runner open HDG
WL1011	Wire corner hose
WL1012	Wire bracket tube HDG
WL1013	Wire bracket tube fall stop HDG
XWL1007	End terminal mounted on wire sst
XWL1008	8 mm wire sst
XWL1010	Wire runner open removable sst
XWL1011	Wire corner tube stainless steel
BU1201	Bolt set, 10 off M10x20 mm HDG
MU1001	Nut set, 10x M10 HDG
UB0850	WSquare bent U-bolt M8 2x

GUARDRAIL ON ROOF

A 500 mm high rail that is used to protect against putting your foot through roof hatches, windows, fire ventilation and lanterns. The railing can be installed at an angle, on 3 sides or around roof windows. Max. distance between posts is 1500 mm. Design in accordance with SS 831333.



Full height guardrail with light floods

HINGE FOR ROOF HATCH

The hinge is made in hot-dipped galvanised steel with a chain as opening stop and for securing, which prevents the hatch from blowing closed again. M8 bolt, washer and nut for fixing. The kit also includes 5 and 10 mm spacers to make it possible to adjust the gap between surround and hatch.

The hinge kit is complete and designed in accordance with the requirements in Bygg-AMA.



RAILING FOR ROOF GANGWAY/ LADDER

A simple, stable railing to prevent falling along evacuation routes or work levels. The railing is installed against the underside of the gangway module or with fixing angles on the side of the ladder. Baluster c/c max. 1200 mm. Terminating guards are mounted in the ends of the railing, if needed.



Railing installed directly on "sealing plate"



Railing installed on ladder

Railing tube

Part. no.	Description
RR 2730	Tube Ø 27 mm, 3 m
RR 2712	Tube Ø 27 mm, 1200 mm
BU 8401	Bolt set, 10x M8x40
MU 0801	Nut set, 10x M8

Baluster

Part. no.	Description
Baluster for guardrails on roofs	
SR 5002	End/centre baluster
SR 5001	Corner baluster
SS 5221	Screw set, 10x self-drilling 5.5x22
UB 0850	Square bent U-bolt 2x
Balusters for railings on gangway/ladders	
RS 1100	1,100 mm tall balusters
PL 4030	Plastic cover for 40x30 tube
SS 5221	Screw set, 10x self-drilling 5.5x22
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
TS 4000	Mount for ladder (2 / baluster)
RS 3030	Stay gangway railing 1/section HDG

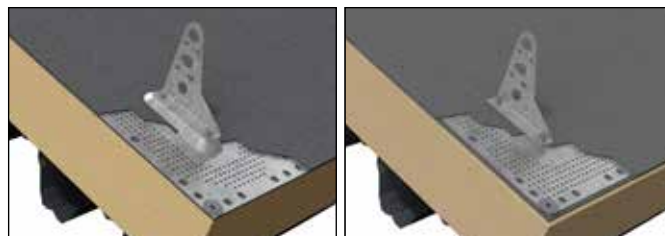
Terminating guard

Part. no.	Description
AB 1100	Terminating guard
UB 0850	Bolt set, for terminating guard 1x

Hinge to hatch

Part. no.	Description
GL 2800	Hinge for hatch, complete set, HDG

Bracket for sealing layer



Part. no.	Name
NS 5000	Mount type 5
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TP 3551	Sealing plate, raised
TP 3552	Sealing plate, smooth
BU 1201	Bolt set, 10x M10x20
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket footplate



Part. no.	Name
FP 0300	Footplate 300x100
FP 1030	Footplate smooth 300x100
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TS 6301	Screw set, 10x wood screw 6x35
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Bracket for clay and concrete roofs



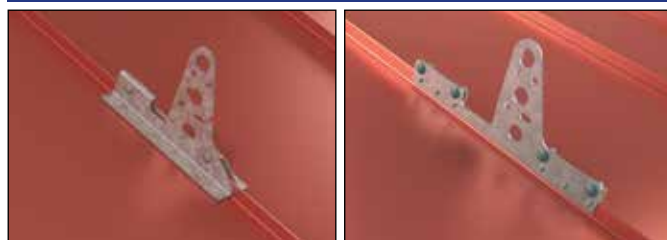
Part. no.	Name	Roof type
TF 3000	Adjustable mount type 3	Flat roof tiles
BF 3000	Adjustable mount type 3	S-profile roof tiles
FP 3000	Footplate	
LF 3310	Lath bracket	
BU 1201	Bolt set, 10x M10x20	
TS 6301	Screw set, 10x wood screw 6x35	

Fixing profile for profiled metal roof



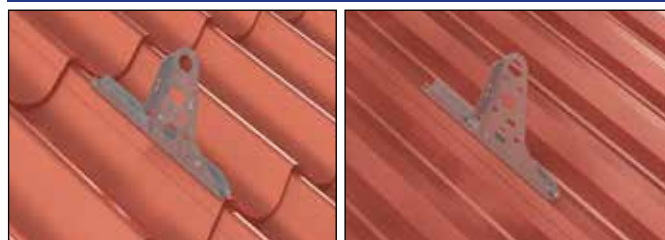
Part. no.	Name
NS 5000	Mount type 5
IP ----	Fixing profile 330 mm (specify type of roof plate)
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

Bracket for folded metal roofs



Part. no.	Description
FF 0300	Integrated standing seam mount, installed (for double-folded sheet metal)
GF 0008	Rubber foot clip 4 / mount
FF 0430	Integrated standing seam mount, installed (for snap-on-roofs) snap-on-roofs

Fixing profile Universal for profiled metal roof



Part. no.	Name
IP 5000	Fixing profile Universal
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

More detailed information about fastenings is available on pages 24-27.

ROOF LADDER

Lightweight ladder offering good stability. The rungs are profiled to provide increased anti-slip protection and are swaged on both the inside and outside for double safety. Approved for securing a lifeline. Version in accordance with SS-EN 12951. Fixing to roof at top and bottom; max. 5 m between the fixing points. Spacers against roof with max. 2 m interval.



STAIR TREADS FOR ROOF LADDER

Loose stair treads made of anti-slip profile metal. The stair tread is hooked around the roof ladder's rungs and locked with bolted joints. The stair tread has an angled tread surface which means that it can be used for roof ladders with a gradient of 8° to 35°. The stair treads fit Weland roof ladders.



Stair treads for Weland roof ladder

Part. no.	Description
TT 1535	Roof stair treads
BU 1201	Bolt set, 10x M10x20

Ladders

Part. no.	Length x width
ST 1540	1500 x 400 mm
ST 1840	1800 x 400 mm
ST 2440	2400 x 400 mm
ST 3040	3000 x 400 mm

Joint set

Part. no.	Description
SK 2500	One set, required per joint
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

Anti-slip guard (complete with bolt)

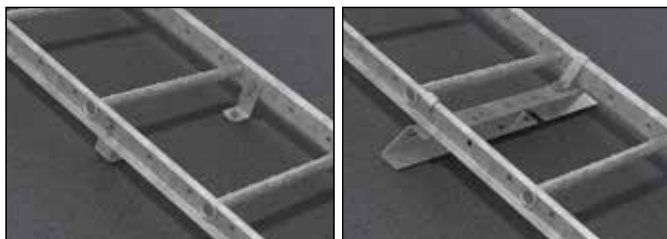
Part. no.	Description
GS 6001	Anti-slip guard double zm
BU 1201	Bolt set, 10x M10x20mm HDG
MU 1001	Nut set, 10x M10 HDG

Bracket for clay and concrete roofs



Part. no.	Name
DS 5700	Spacer, each
BS 5700	Bolt set, for spacer 1x
FJ 3030	Fixing iron, each
FP 0300	Footplate
TS 6351	Screw set, 10x wood screw 6x35
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
LF 3310	Lath mount, adjustable
LF 3312	Lateral displacement plate

Bracket for plain roofs



Part. no.	Name
TS 4000	Bracket type 4x Plain roofs
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
DS 5700	Spacer, each
BS 5700	Bolt set, for spacer 1x
GB 0010	Rubber washer Ø 35 mm (1 / mount)
ML 5002	Angle-iron backing plate, 500 mm
BU 1601	Bolt set, for angle-iron, 10x M10x60
MU 1001	Nut set, 10x M10
SF 0600	Quick fixing mount with nut and washer, 60 mm
SF 1350	Quick fixing mount with nut and washer, 135 mm
SF 0002	Rubber cone for quick fixing mount

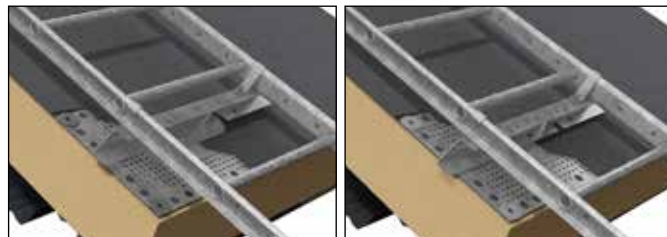
Bracket for strip and panel covering

Approved for installation to all types of double-folded sheet metal and seam-welded stainless steel.



Part. no.	Name
DS 5700	Spacer, each
BS 5700	Bolt set, for spacer 1x
FF 0174	Standing seam mount
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

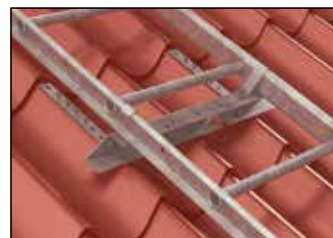
Bracket for sealing layer



Part. no.	Name
DS 5700	Spacer, each
BS 5700	Bolt set, for spacer 1x
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TP 3551	Sealing plate, raised
TP 3552	Sealing plate, smooth
FP 0300	Base plate 300x100 mm HDG
FP 1030	Base plate 100x300mm smooth zm
TS 6351	Screw set, 10x 6x35mm star sst
BU 1201	Bolt set, 10x M10x20
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

Fixing profile for profiled metal roof

In snowy regions, double fixing profiles are recommended for each spacer.



Part. no.	Name
DS 5700	Spacer, each
BS 5700	Bolt set, for spacer 1x
IP 0280	Fixing profile universal for ladder
SS 6191	Bolt set, for fixing profile sheet thickness ≤0.7 mm
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

Fixing plate for profiled metal roof



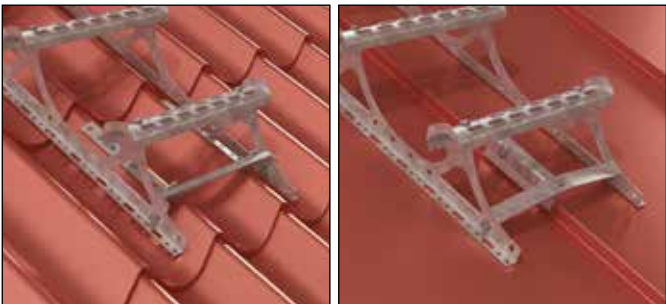
Part. no.	Name
DS 5700	Spacer, each
BS 5700	Bolt set, for spacer 1x
TP 1217	Universal fixing plate c/c 120-170 mm
TP 1722	Universal fixing plate c/c 170-220 mm
BS 0010	Set of bolts for fixing plate, 1 / plate

UNIVERSAL ROOF LADDER

A new, flexible ladder with a strong, lightweight design. The tread surface is domed with collared holes to provide a good foothold at different roof gradients. The width of the ladder is adapted during installation to fit different types of roof. Each module comprises 3 treads and 2 side pieces. A modern solution for the traditional home roof ladder. Design in accordance with SS-EN 12951.



Universal roof ladder	
Part. no.	Description
WS 0900	Universal roof ladder L= 900 mm c/c dimensions for the universal roof ladder 300, 360, 400 mm
WS 3600	Cross brace Universal ladder fixing profile 360 mm
WS 3601	Cross brace Universal ladder standing seam mount 360 mm
FJ 3030	Fixing iron, each
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10



ROOF TREADS ON TILED ROOF

These roof treads have a rounded tread surface made of anti-slip profile metal. The rounded tread surface means that the tread is suitable for just about all roof gradients. The treads are hooked in place around the batten. **The treads are type-approved and may be used when the façade height does not exceed 4 m or the roof gradient does not exceed 45°.**



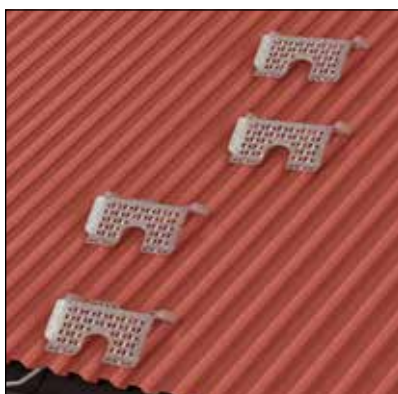
Roof treads	
Part. no.	Description
TS 1001	1 pantile concrete / 2 pantiles clay tiles 25 mm batten
TS 2001	1 pantile concrete / 2 pantiles clay tiles 50 mm batten
TS 1002	2 pantiles concrete 25 mm batten
TS 2002	2 pantiles concrete 50 mm batten
TS 1003	1 pantile clay tile 25 mm batten
TS 2003	1 pantile clay tile 50 mm batten

c/c measurement roof treads	
Type	c/c measurement
TS 1001, TS 2001	255 mm
TS 1002, TS 2002	300 mm
TS 1003, TS 2003	215 mm

ROOF TREADS ON METAL ROOF

An entirely unique product that is screwed directly into the roofing plates. The roofing plate must be at least 0.5 mm steel plate or 0.6 mm aluminium plate. The treads are suitable for all common types of roof profile. The treads can be installed directly above each other or in a zigzag pattern.

The treads are approved for use where the façade height does not exceed 4 metres.

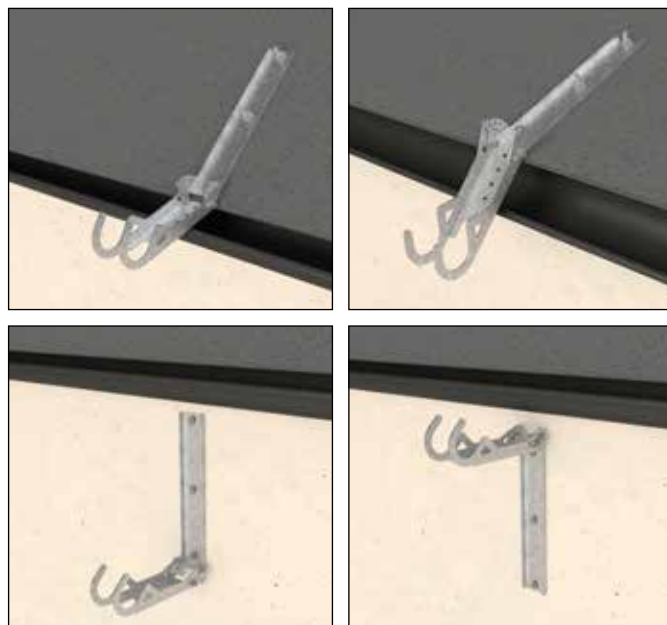


Roof treads

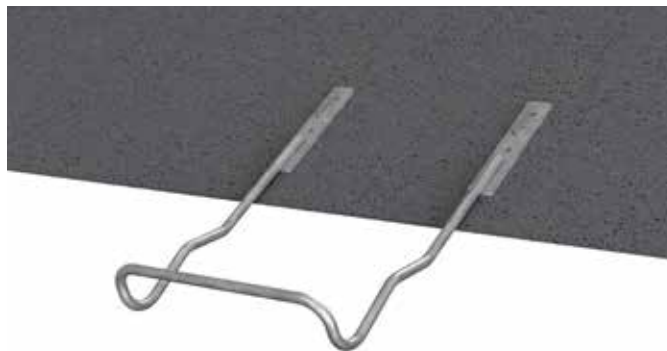
Part. no.	Description
TS 3000	Universal model width 300 mm
SS6191	Screw set, 10x self-drilling 6.3x19 mm sst

ANTI-SLIP GUARD

Anti-slip guards are installed on the eaves to secure the loose ladder and to prevent the ladder from sliding down, backwards or sideways while climbing up to the roof. The anti-slip guard should be installed to the side of the roof treads/gangway to facilitate moving from the loose ladder. Design in accordance with SS 831342.



Anti-slip guard double is installed on surround/roof edge without gutter or to ladder rung. Together with the bracket, it is fastened to suitable fastener on roof or wall.



Anti-slip guard for foot gutter/surround is screwed directly onto the roof.

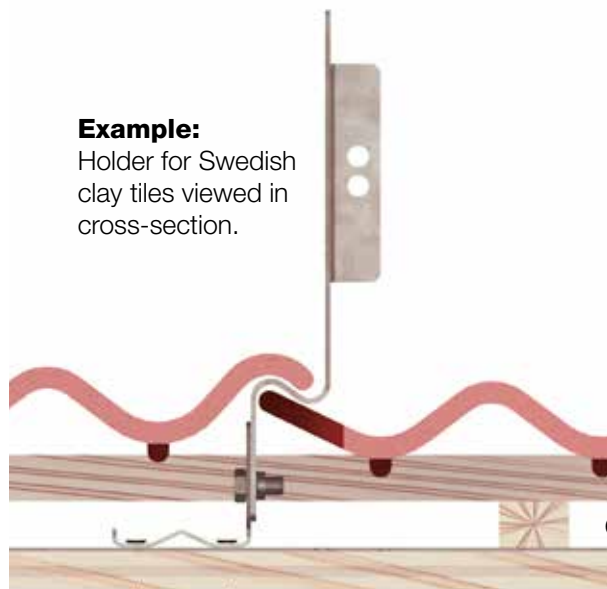
Anti-slip guard

Part. no.	Description
WG 1000	Anti-slip guard
GS6001	Anti-slip guard double zm
GS6002	Anti-slip guard bracket roof/wall zm
SS6191	Screw set, 10x self-drilling 6.3x19 mm sst

SELECT THE CORRECT BRACKET

Example:

Holder for Swedish clay tiles viewed in cross-section.



Batten

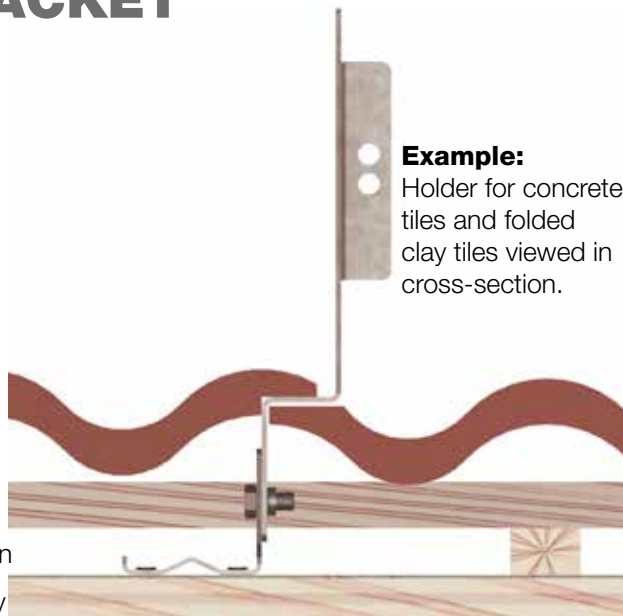
Counter batten

Roof underlay

Tongued and grooved board or Plywood

Example:

Holder for concrete tiles and folded clay tiles viewed in cross-section.



FIXING WITH FOOTPLATE

Fast, simple fixing of all product groups. The footplate is installed from above and is completely independent of how things appear underneath. The footplate is approved down to 17 mm tongued and grooved board/12 mm plywood.



Footplate

Part. no.	Name
FP 3000	Footplate, adjustable mount
FP 0300	Footplate for ladder
FP 1030	Footplate smooth
TS 6351	Set of screws
BU 1201	Bolt set, 10x M10x20
TS 6301	Screw set, 10x wood screw 6x35
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

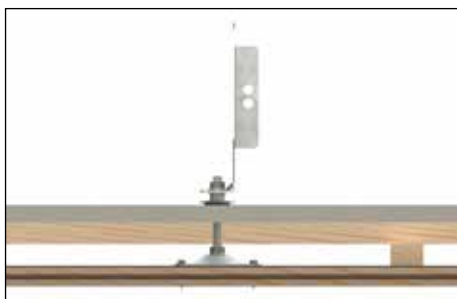
FIXING WITH LATH BRACKET

Simple fixing where there is a false ceiling of plastic film, fibreboard or particle board that does not allow fixing in the false ceiling. **The lath dimensions must be at least 45 x 70 mm.** The bracket is hooked around the lath and anchored with a screw. The fixing is approved for all product groups.

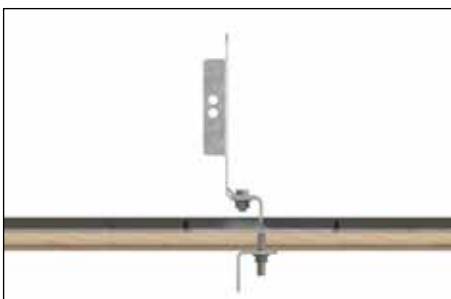


Lath bracket

Part. no.	Name
LF 3310	Lath bracket
LF 3312	Lateral displacement plate
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
TS 6301	Screw set, 10x wood screw 6x35



Drilled holes in smooth concrete tiles



Fixing plate slate roof



Drilled holes in fibre cement roof

FIXING WITH BACKING PLATE

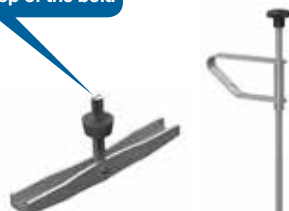
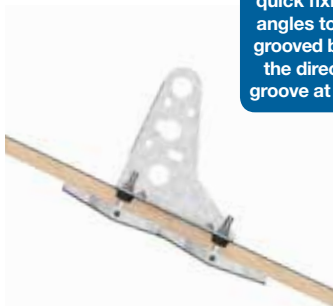


Backing plate made of angle-iron

Part. no.	Name
ML 5002	Angle iron Length 500 mm
BU 1601	Bolt set, 10x M10x60
MU 1001	Nut set, 10x M10

FIXING WITH QUICK FIXING MOUNT

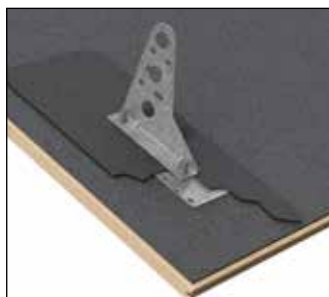
It is important to install the quick fixing mount at right angles to the tongued and grooved board. You can see the direction through the groove at the top of the bolt.



This quick fixing mount has been specially developed for installation at the eaves and other locations where it is difficult to install backing plates. Approved for all types of fixings in 22 mm tongued and grooved board.

Quick fixing mount

Part. no.	Name
SF 1350	Quick fixing mount 135 mm
SF 0600	Quick fixing mount 60 mm
SF 0002	Rubber cone
MU 1001	Nut set, 10x M10
SF 0001	Installation tools



FIXING FOOTPLATE

Approved for installation on underlying tongued and grooved board roofs min. 17 mm thick or plywood min. 12 mm thick.

Footplate

Part. no.	Name
FP 0300	Footplate 300x100
FP 1030	Footplate smooth 300x100
GB 0010	Rubber washer Ø 35 mm (2 / mount)
TS 6301	Screw set, 10x wood screw 6x35
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

FIXING FOR SEALING LAYER

Fixing for roof safety on sealing layer mat and roof membrane. The fixing fits all products in Weland Stål's product range. A unique product that allows simple, secure, sealed installation, regardless of the surface. The sealing plate is supplied in a raised and a smooth version. The raised version has pre-threaded holes to make installation easier. Tested and approved for all sealing layers according to minimum function requirement 121 specified in BRF report R57:1990.



Bracket for sealing layer

Part. no.	Name
TP 3551	Sealing plate, raised
TP 3552	Sealing plate, smooth
GB 0010	Rubber washer Ø35 mm (2 / mount)
BU 1201	Bolt set, 10x M10x20
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10

FIXING PROFILE

Weland fixing profile for profiled metal roof, secured to the side of the profile top for maximum strength using self-drilling screws in at least 0.5 mm steel plate.

The fixing profile is approved for all product groups. When ordering, specify the make and type of sheet metal. Stocked for the most common models of profiled sheet metal.

Fixing profile

Part. no.	Name
IP ----	Fixing profile 330 mm (specify type of roof plate)
IP 0280	Fixing profile universal for ladder
SS 6191	Screw set, for fixing profile sheet thickness ≤0.7 mm
VB 1301	Carriage bolt set, 10x M10x30
MU 1001	Nut set, 10x M10
SS 5221	Screw set, for fixing profile sheet thickness >0.7 mm

Tile-profiled sheet metal



Box profile sheet metal



Fixing roof ladder



FIXING PROFILE UNIVERSAL

Fixing profile Universal is installed on the top of the roof plate using 10 self-drilling screws. The fixing profile is suitable for all types of roof plate, whatever the model. The Universal fixing profile can be installed **to advantage on double roof plates to withstand large loads**. See our assembly instructions for the right combination of product and type of plate.

Fixing profile Universal

Part. no.	Name
IP 5000	Fixing profile Universal
SS 6191	Set of screws for fixing profile sheet thickness ≤0.7 mm
SS 5221	Set of screws for fixing profile sheet thickness >0.7 mm

Tile-profiled sheet metal



Box profile sheet metal



FIXING PLATE

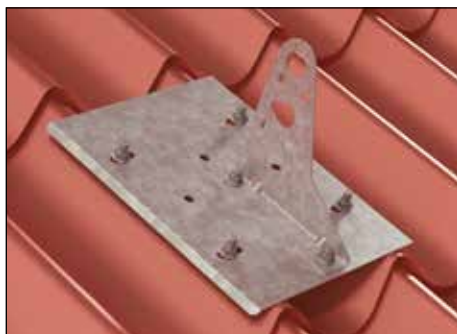
Weland fixing plate is used for all product groups on tile-profiled metal roofs and certain TRP metal roofs.

The fixing plates are installed with square bent U-bolts that are inserted from above. Approved for at least 0.5 mm steel plate.

Fixing plate

Part. no.	Name
TP 1217	Universal fixing plate, c/c 120-170 mm
TP 1722	Universal fixing plate, c/c 170-220 mm
BS 0010	Set of bolts for fixing plate, 1 / plate

Tile-profiled sheet metal



Box profile sheet metal

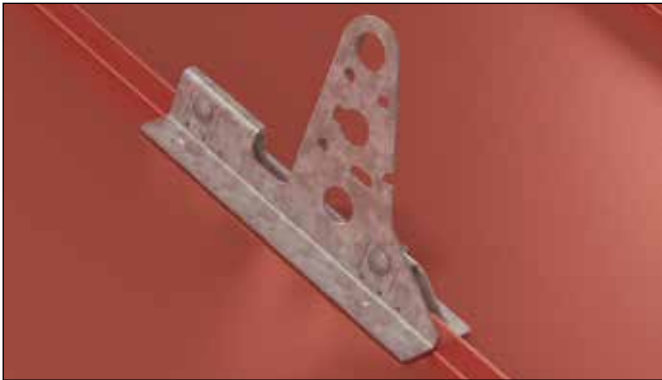


Fixing roof ladder



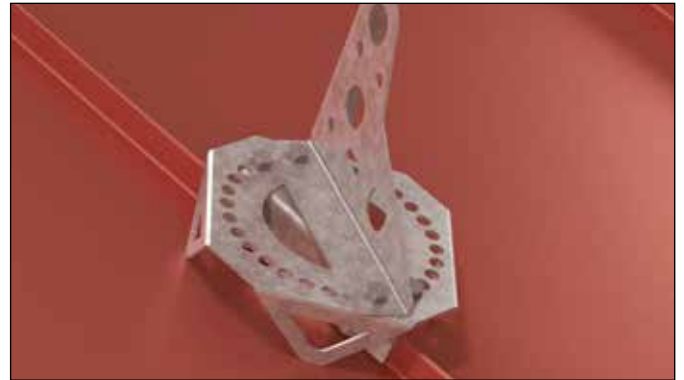
BRACKET FOR DOUBLE-FOLDED METAL ROOFS

Weland standing seam mount for folded metal roofs. Fixing is achieved without making any holes, by means of the bracket being clamped onto the standing fold. The mount fits all of Weland's product groups. Approved for installation on double-folded steel, zinc, stainless steel aluminium and copper plate as well as stainless steel seam-welded sheet metal.



Standing seam mount

Part. no.	Name
FF 0300	Integrated standing seam mount, installed
GF 0008	Rubber foot clix 4 / mount

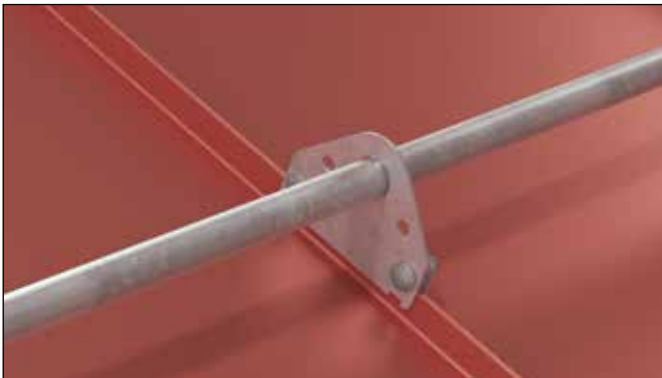


Standing seam mount for diagonal fold

Part. no.	Name
FF 0174	Standing seam mount
FS 2020	Support for standing seam mount diagonal fold
NS 5150	Mount 5 low model diagonal fold

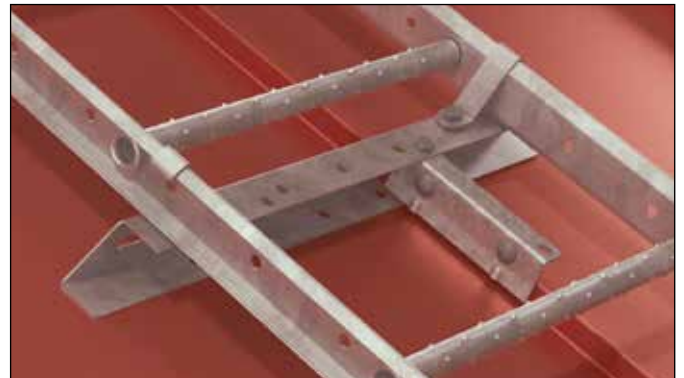
Standing seam mount for snow stop

Used and installed in the same way as the snow rake. However, it does not provide protection against sheets of ice sliding down from the roof.



Standing seam mount

Part. no.	Name
FF 0125	Standing seam mount, snow stop for 1 tube, installed

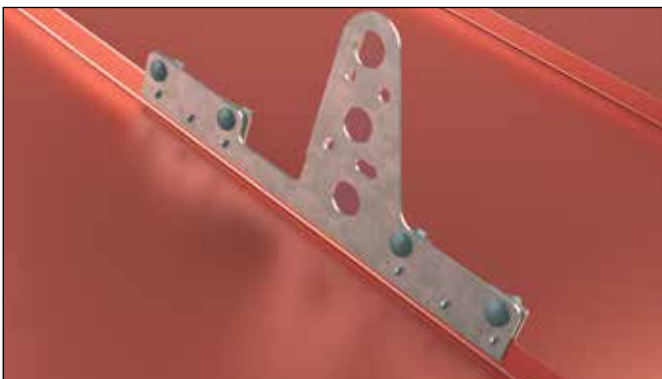


Standing seam mount

Part. no.	Name
FF 0174	Standing seam mount

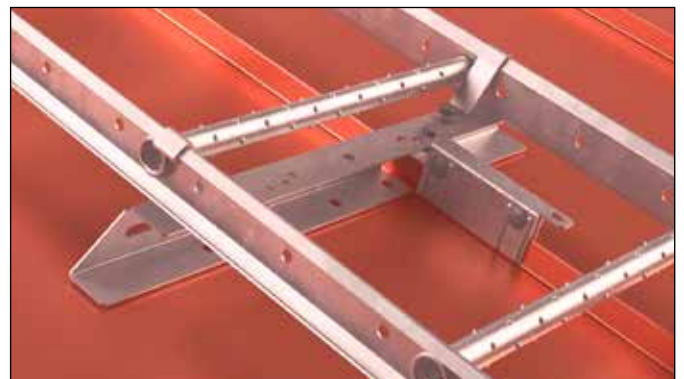
MOUNT FOR SNAP-ON-ROOFS

Standing seam mount for prefabricated strip covering, so-called Snap-on-Roofs. The mounts are approved for installation on all available makes of Snap-on-Roof and they function in the same way as the standard standing seam mounts.



Standing seam mount

Part. no.	Name
FF 0430	Integrated standing seam mount, snap-on-roofs



Standing seam mount

Part. no.	Name
FF 0180	Standing seam mount

PRODUCTS ACCORDING TO SIS STANDARD

The products are ideal for use on older buildings, in order to blend into the old environment.

The products are manufactured to order.



Ridge/eaves railings and lifeline hook

Bracket type 1, 2 and 6 c/c 150 mm hole for fixing. Bracket type 4 c/c 200 mm holes for attachment.

Bracket type 4, (Ridge/Eaves) for plain roofs

Part. no.	Description	Use
NT 4000	Mount, standard	Ridge / Eaves
GB 0010	Rubber washer Ø 35 mm	Sealing plain roof

Bracket type 1, (Ridge) for clay/concrete tiles

Part. no.	Description	Use
NT 1000	Mount, standard	Ridge rail

Bracket type 6, (Eaves) for tiles and plain roof

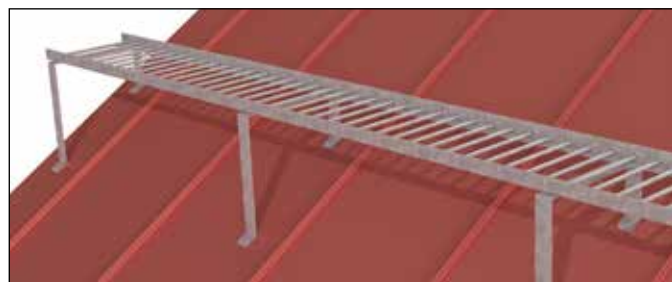
Part. no.	Description	Use
NT 6000	Mount, standard	Eaves
GB 0010	Rubber washer Ø 35 mm	Sealing plain roof

Bracket type 2, (Ridge/Eaves) for clay/concrete tiles

Part. no.	Description	Use
NT 2000	Mount, standard	Eaves
TS 2000	Mount type 2	Roof ladder

Railing tube, see page 8

Roof gangway



SIS gangway

Gangway module manufactured according to SS 831302. Only manufactured to order.

CAT LADDERS

Weland cat ladders are approved in accordance with SS 831340 and SS-EN ISO 14122-4. Permanently installed cat ladders are required for façade heights exceeding 4 m. The ladders end a suitable distance above the ground, depending on what accessibility you want. Escape ladders must end a maximum of 1.5 m above ground. Weland's ladders can be used for towers, silos, bridge piers, chimneys etc. In the case of tall ladders, there should be a rest landing if possible. For a fall height exceeding 4 metres, the ladder must be fitted with fall protection. Escape ladders should always have hoop guards when they are combined with an escape platform. This is to ensure that you do not "step out into open space".



CAT LADDER

Lightweight ladder offering good stability. The rungs are profiled to provide increased anti-slip protection and are swaged on both the inside and outside for double safety. Version in accordance with SS 83 13 40 and SS-EN ISO 14122-4.

Cat ladders with accessories are also stocked in a stainless steel, acid-resistant version.



Ladders

Part. no.	Length x width
ST 1540	1500 x 400 mm
ST 1840	1800 x 400 mm
ST 2440	2400 x 400 mm
ST 3040	3000 x 400 mm

Joint set

Part. no.	Description
SK 2500	One set, required per joint Fishplate bracket mounted with 8 x M10x20
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

Pair of brackets

Part. no.	Distance between outer wall and outer edge of the gutter
KS 0150	150 mm
KS 0300	300 mm
KS 4570	Adjustable 450-700mm
KS 7010	Adjustable 700-1000 mm Fixed pairs of brackets installed with 2x M10x20 with nuts. Adjustable with 8x
TS 4000	Fixing to floor
FP 0300	Base plate for walls
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10
SS 6191	Screw set<0.7, 10x 6.3x19
VB 1301	Carriage bolt set, 10x M10x30
SS 5221	Screw set, 10x 5.5x22

The max. distance between fixing points in the wall is 2500 mm. The brackets are placed closer together if the wall construction demands this.



Adjustable bracket



Stiffening

Reinforcement for cat ladder

Part. no.	Description
ST 1200	Stiffening rail cat ladder
BU1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

Suspension fitting

Part. no.	Number of sets per ladder
UB 5003	1 set
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

ACCESSORIES FOR CAT LADDER

Cat ladders that are used for evacuation should be provided with a safety cage. The safety cage for cat ladders is made from modules with a length of 900 mm. The safety cage ends 2.5-3 m above the ground. Safety cages with a lockable hatch can also be used to prevent unauthorised access.

The handrail is installed to the side of the ladders with or without safety cage. The handrail is folded 100 mm to the side to give more space for passing. The handrail can be equipped with anchorage points at the top that are used when working on a step plate. At the transition to the roof, the handrail is equipped with a hoop to bridge the gap to the roof surface or, alternatively, with a brace to the roof ladder. Handrails are normally installed one on each side, but in some cases, it may be sufficient on just one side. The handrail can also be used with an external sleeve for removability, which is useful when the ladder is installed below a hatch.



Standing platform

Part. no.	Size
SP 3040	300 x 400 mm, adjustable 0-20°
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

Safety cage

Part. no.	Description
SK 0650	Hoop guard set
SK 9005	Safety cage set 5 intermediate rails, 900 mm
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

Lockable hatch

Part. no.	Description
LL 4570	Lockable hatch cat ladder safety cage



Handrail with sleeve



Brace to roof ladder

Handrails

Part. no.	Description
HL 1200	Handrail cat ladder
HL 1240	Handrail hoop cat ladder
HL 1290	Handrail brace cat ladder
PL 0034	Plastic cover for 34 mm tube
ÖM 1000	Eye nut M10 25-45 HDG
BU 1050	Bolt M10x50 HDG
UH 0515	Sleeve for handrail
BU 1601	Bolt set, 10x M10x60
MU 1001	Nut set, 10x M10



Eyelet on handrail

Self-closing gate

The ladder can be equipped with a self-closing gate, if needed. The hinges are assembled on the handrail and the hoop is suitable for both types of handrail.

Part. no.	Description
HL5843	Gate hoop for handrail 585x435 mm
GJ3400	Hinge set tube 34 mm
SS5221	Screw set 5.5x22 10x

ACCESSORIES FOR CAT LADDER

In order to improve safety, ladders that are longer than 10 metres should be supplied with an intermediate landing/load distribution beam. On very long ladders, the distance between the intermediate landings should not exceed 6 metres. Design in accordance with SS 83 13 40/Machinery Directive.

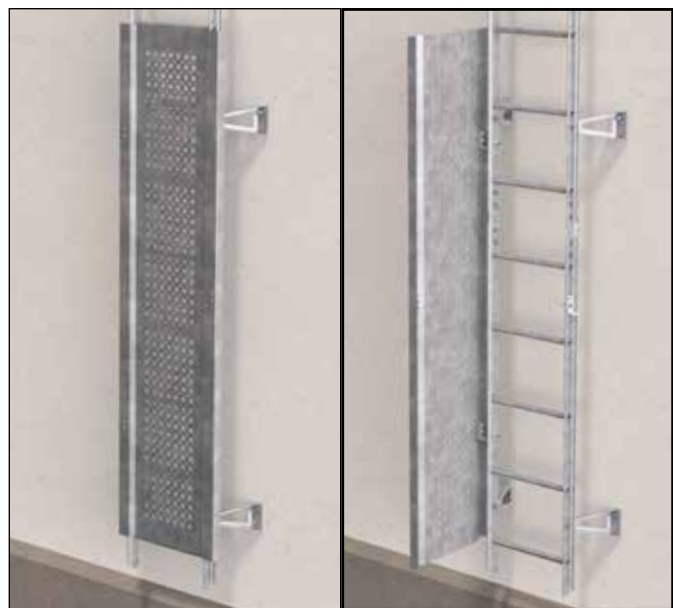


Intermediate landing

Intermediate landings comprise the following components: 1 grating with edging bar, 4 angle stays, 4 "half" safety cage hoops, 2 horizontal and 7 vertical flat bars.

Each intermediate landing requires 2.1 m extra ladder.

Part. no.	Description
VP 6060	Intermediate landing 600 x 600 mm



Anti-climbing device

Anti-climbing device, lockable

Part. no.	Description
KH 2100	Anti-climbing device, lockable

Weland Stål has developed a solution for those who need to get down but don't want to let others get up. We call it the Drop Down Ladder; this is a permanent cat ladder installed on the wall that is supplemented with an extra ladder, slide fitting and locking device.

With our solution, you can let the permanent ladder finish a good way up the wall and even so have access to an evacuation ladder that reaches all the way to the ground. On evacuation, you climb down the ladder and kick the locking device. The loose ladder comes undone and slides down to the ground. You then just continue, down to solid ground.



Drop down ladder

Drop down ladder

Part. no.	Description
FB 7000	Slide fitting
FB 7001	Lock catch
FB 7002	Rubber stop
BU 1040	Bolt M10 40x
SB 4012	Large washer, 1x
MU 1001	Nut set, 10x M10
FB 7005	Instruction plate

Foldable step plate

The foldable step plate is installed on the cat ladder where you want a temporary half-landing on long ladders or by a service position.

The plate is normally folded up behind the rungs and it is easily pulled out with the foot.

The step plate is available for the whole of the ladder's width or split up so it can be used with vertical fall protection railing/safety wire.

The single step plate is mounted using 2x M10x20 + locking nuts. The double plate is sold as a complete set with all necessary fastening material.



Single step plate

Double step plate

Foldable step plate

Part. no.	Description
SP 3740	Foldable step plate, single
LM 1000	Locking nuts M10 (2x single plate)
SP 3716	Foldable step plate, double

FOLDING CAT LADDER

Folding cat ladder that is primarily used for evacuation purposes. A simple, discreet product that can be mounted on various types of façade. When folded against the façade, it looks just like a 45 mm wide bar. The ladder is burglar proof and can only be folded out by pulling the cable outside the window. If required, the cable can be extended down to the bottom of the ladder, and then it can also be used for climbing up. The ladder is supplied in modules that are hot dip galvanised and powder coated in a discreet light grey colour (NCS 3502 B).

Ladder in normal position



Ladder folded out



Ladders

Part. no.	Length x width
FB 1250	1200 x 500 mm
FB 2450	2400 x 500 mm

Joint set (complete with one rung and bolt)

Part. no.	Description
FB 2000	One set required per ladder and joint

Bracket

The ladder is installed with brackets or with keyholes in the inner profile. The ladder must be installed 10-15 mm from the wall.

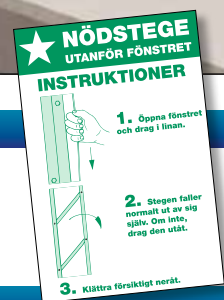
Part. no.	Distance between wall and ladder	Distance between brace
FB 0012	15-25 mm (standard bracket)	900-1200 mm
KS 0150	150 mm	900-1200 mm
BU 1601	Bolt set, 10x M10x60	
MU 1001	Nut set, 10x M10	
MB 3545	Spacer washer 35x40x5 plastic, 5x	
RB 1010-00	Stainless steel threaded bar, 1000 mm	

Top part, cable and plate

Part. no.	Description
FB 1000	Top part
FB 0010	Cable sold by the metre
FB 0001	Instruction plate

Handrail and standing platform

Part. no.	Description
HL 0300	Handrail for installation on wall
SP 0400	Standing platform for installation on wall

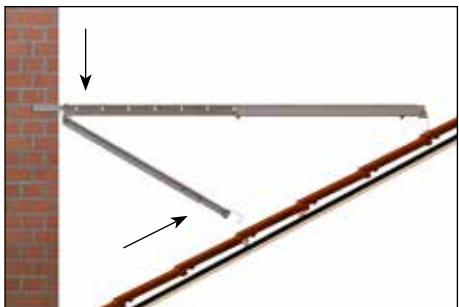
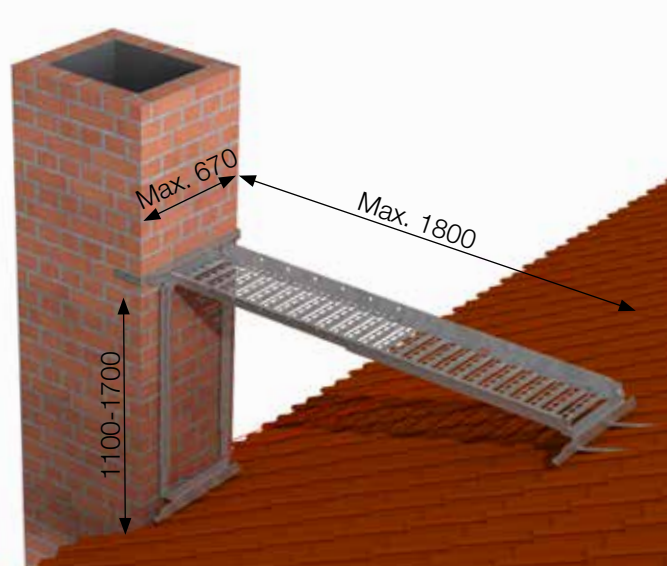


Help with planning and design

Size bottom edge window - ground ladder	Select
- 2.5 m	2.4 m
2.5 - 3.7 m	3.6 m
3.7 - 4.9 m	4.8 m
4.9 - 6.1 m	6.0 m
etc.	

CHIMNEY PLATFORM

Weland's chimney platform is supplied complete with gangway and support legs. The platform can be adjusted for different roof gradients and chimney heights. If the platform (when folded up) is more than 1 metre below the top of the chimney, a ladder and associated platform should be used instead. The platform can be folded down when not in use. In the event of platform lengths above 1200 mm, and additional gangway module must be ordered.



Chimney platform in folded position.

Platform (folding)

Part. no.	Description
PF 1218	Chimney platform, complete, 1200 x 350 mm
PB 0630	Gangway module

Fixing additional depending on roof.

Fixing, see pages 24 - 27

CHIMNEY TIE

Flexible chimney tie in one length for all chimney dimensions from 350 - 2200 mm. The tie can be installed 1 or 2 per side, with any overhang being cut off. When installing on chimneys, chimney ties should always be used due to the fact that chimneys "age" more quickly than other masonry. For this reason, hexagon head wood screws, expanders or similar are not suitable for use on chimneys.



Chimney tie

Part. no.	Description
SB 1135	Chimney tie L=1135 mm
BU 1601	Bolt set, 10x M10x60
MU 1001	Nut set, 10x M10
VB 1301	Carriage bolt set, 10x M10x30

CHIMNEY PLATFORM

We use our standard gangways and roof gangway railing for our chimney platforms. When installing Weland's chimney platform, we recommend the use of Weland chimney ties (page 34). For applicable regulations, see page 5.



Platform		Railing for platform	
Part. no.	Description	Part. no.	Description
PB 0630	Profile grating 700 x 350 mm	RS 1100	1000 mm tall balusters
PB 1190	Profile grating 1260 x 350 mm	PL 4030	Plastic cover for 40x30 tube
PB 2450	Profile grating 2520 x 350 mm	SS 5221	Screw set, 10x self-drilling 5.5x22
PK 0430	Bracket 400 mm	BU 1201	Bolt set, 10x M10x20
BU 1201	Bolt set, 10x M10x20	MU 1001	Nut set, 10x M10
VB 1301	Carriage bolt set, 10x M10x30	AB 1100	Terminating guard
MU 1001	Nut set, 10x M10	UB 0850	Bolt set for terminating guard
		RR 2730	Railing tube Ø 27 mm, 3 m
		BU 8401	Bolt set for tube joint, 10x
		MU0801	Nut set, 10x M8 HDG

ESCAPE PLATFORM

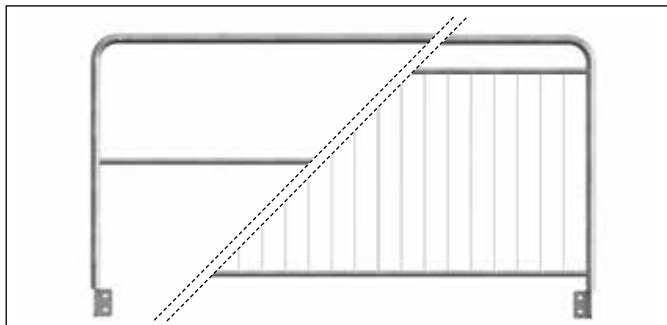
Weland's escape platform is made up of modules. If necessary, these can be connected together to make a larger platform. The platform can also be supplied with a floor made of e.g. wood or chequered plate. The railings and grating can also be made of stainless steel. Other dimensions are also available to order.



Platform

The platform comprises a frame with modular dimensions. Welded grating is placed on the frame. The grating does not need to cover the entire frame – a "hole" can be left for climbing up. Several modules can be connected together.

Part. no.	Description	Length x width
PF 1007	Platform	1000 x 700 mm
PF 1507	Platform	1500 x 700 mm
PF 2007	Platform	2000 x 700 mm
PF 1010	Platform	1000 x 1000 mm
PF 1510	Platform	1500 x 1000 mm
PF 2010	Platform	2000 x 1000 mm
JK 8481	J-hook set, 10x M8x48	
MU0801	Nut set, 10x M8	



Suspension bracket

Part. no.	Description
HK 0700	Universal version
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10



Standard railing 1100 mm high

Part. no.	Description	Length
UI 0742	Standard railing	700 mm
UI 1042	Standard railing	1,000 mm
UI 1542	Standard railing	1,500 mm
UI 2042	Standard railing	2,000 mm

Childproof railing 1100 mm high

Part. no.	Description	Length
UB 0742	Childproof	700 mm
UB 1042	Childproof	1,000 mm
UB 1542	Childproof	1,500 mm
UB 2042	Childproof	2,000 mm

Side bracket railing

Part. no.	Description
UV 1001	Side bracket left
UV 1002	Side bracket right
UL 4201	Lock washer bracket 10x
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

Kick strip

Part. no.	Description	Length
SL 0710	Kick strip	700 mm
SL 1010	Kick strip	1,000 mm
SL 1510	Kick strip	1,500 mm
SL 2010	Kick strip	2,000 mm
SS 5221	Screw set, 10x self-drilling 5.5x22	

Corner connection

Part. no.	Description
MK 4200	Gull wing connection

Bracket

Part. no.	Description
PK 0700	For 700 mm deep platform
PK 1000	For 1000 mm deep platform
BU 1201	Bolt set, 10x M10x20
MU 1001	Nut set, 10x M10

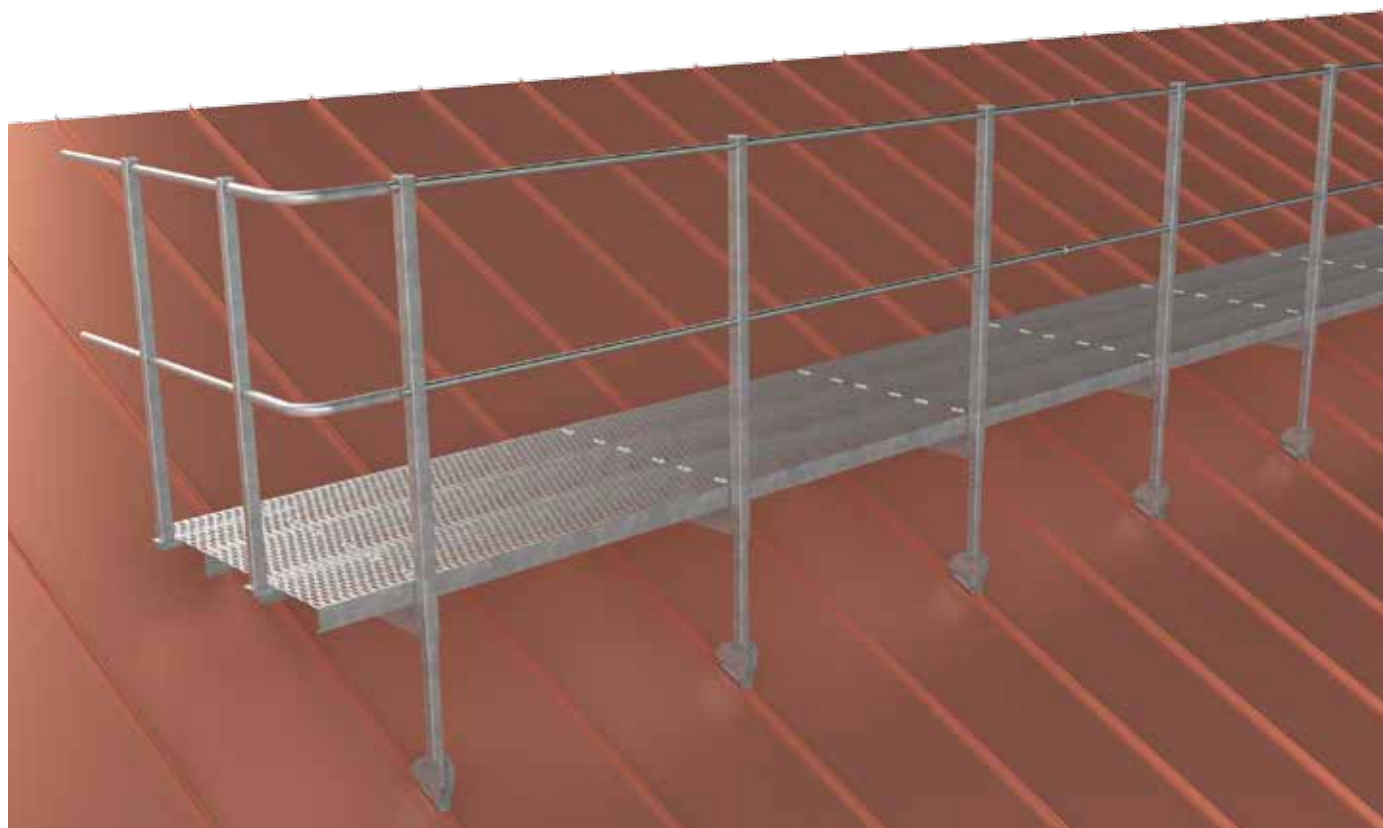
EVACUATION GANGWAY

Weland Stål has developed a new simple evacuation gangway. The evacuation gangway has been developed for when there is a need for wider walkways and transport routes on roofs.

The standard widths for the evacuation gangways stocked are 600, 900 and 1200 mm. If wanted, wider evacuation gangways can also be manufactured.

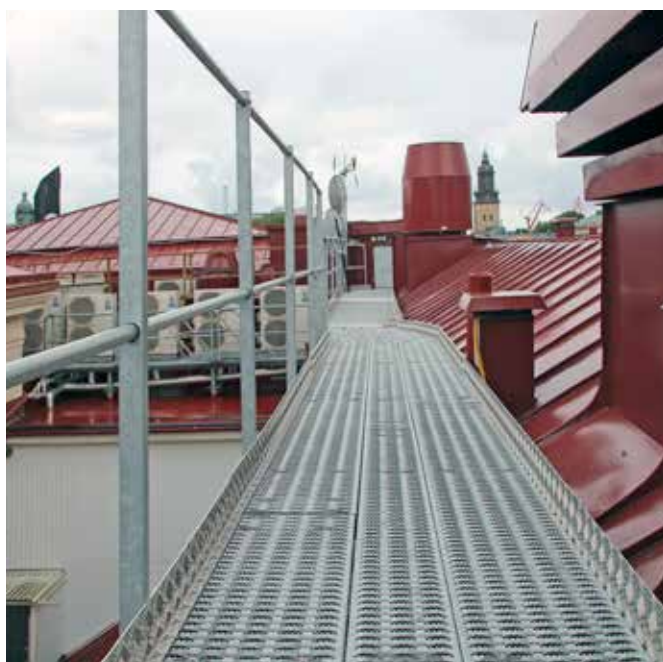
Thanks to loose parts that are assembled on site, installation is easy and flexible.

The attachment to the roof is carried out with sealing plate, fixing profile, footplate or standing seam mount and a foot that is adjustable to the roof's slope. The load-bearing profile is then bolted directly into the foot or, alternatively, the support leg, which suits the majority of roof slopes. Slit plank type flooring is then laid on the load-bearing profile. The railing is assembled as needed, on one or both of the sides.



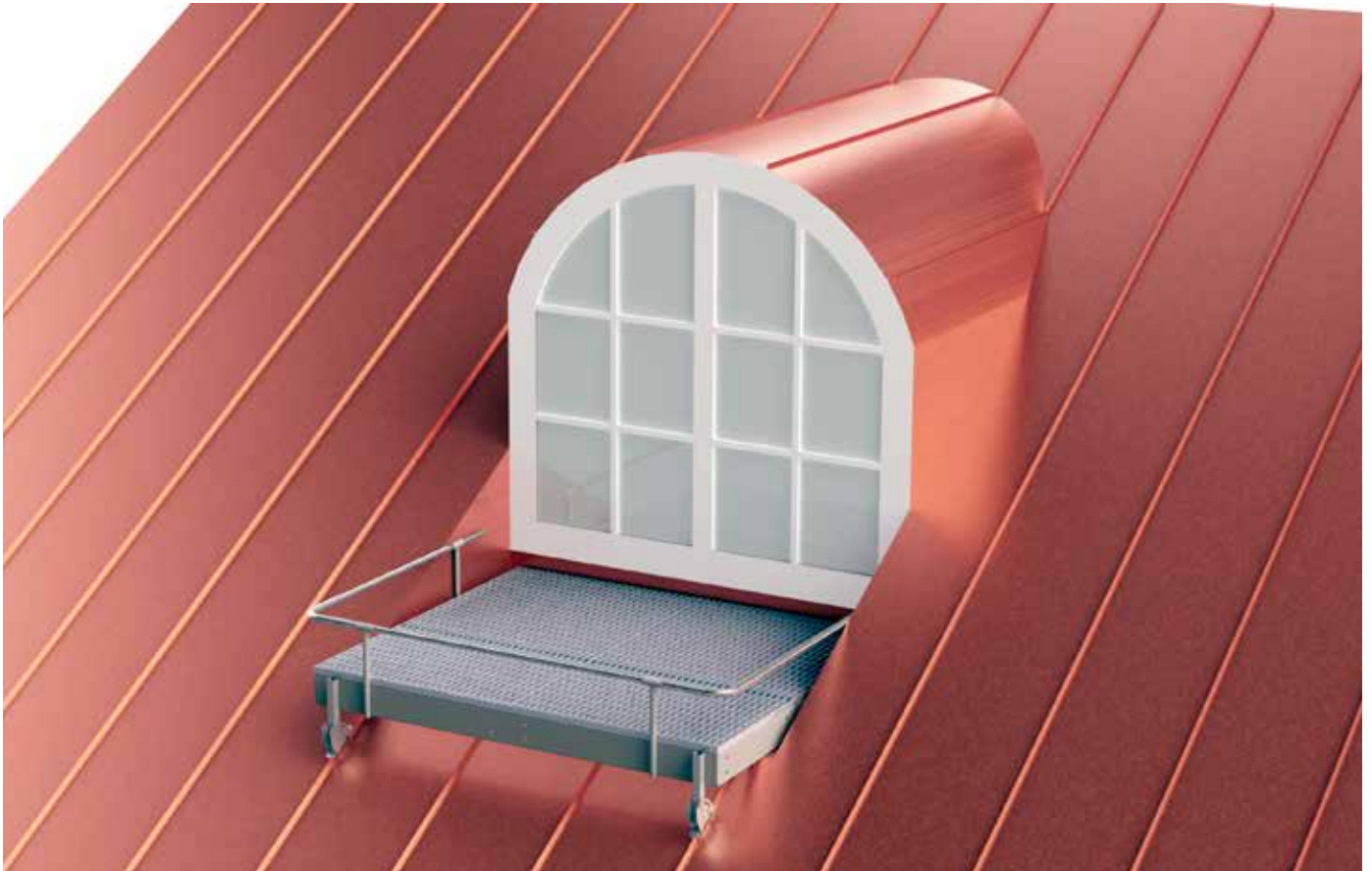
Evacuation gangway

Part. no.	Description
EU0150	Adjustable foot for EU gangway, HDG
EU0330	Joint for slit plank type flooring, HDG
EU0610	Load-bearing profile for EU gangway, HDG
EU0910	Load-bearing profile for EU gangway, HDG
EU1000	Support leg for EU gangway, HDG
EU1100	Railing post for EU gangway, HDG
EU1210	Load-bearing profile for EU gangway, HDG
EU1636	Top part for slit plank type flooring, HDG
EU3031	Slit plank type flooring EU gangway, 3000x310 HDG
RR2730	Railing tube 27 mm length 3 m HDG
PL4545	Plastic cover for 45x45 tube
BU1601	Bolt set, 10x M10x60 full thread HDG
MU1001	Nut set, 10x M10 HDG
SS5510	Self-drilling screw 5.5x100, sst
SS5221	Set of screws 10 off self-drilling 5.5x22mm sst



EMERGENCY BALCONY

Attic flats usually require some form of rescue platform on to which residents can escape in case of fire. We have solutions using standard parts for prompt delivery or more customised for simple installation. The size is adjusted to the width of the dormer window and the distance to the roof edge. Normal railing height is 150 mm but other sizes may occur.





Roof gangways and roof ladders on folded metal roofs.



Roof gangway / cat ladder



Guardrail installed with sealing plate.



Gutter plate snow guard.



Installation with raised sealing plate.



Spacer on special roofing tile.



Full height guardrail with light floods.



Roof gangway, roof ladder and snow guard.



Roof ladder on folded metal roof



Roof ladder on roof with flat roof tiles.



Roof ladder on roof with cedar wooden roofing tiles.

SPECIAL PRODUCTS

We stock some of our product range in stainless steel, and can manufacture most products to order in either stainless steel or copper.



Roof ladder and roof gangway made of stainless steel.



Ridge rail made of copper.



3-tube snow guard made of copper.



Ridge rail made of stainless steel.



Guardrail with tubes made of copper and brackets made of stainless steel.



Roof gangway made of copper.



Snow guard made of profile grating with special pattern and sliding ice stop pins.



Cat ladder made of stainless steel.



Roof ladder made of copper.



Chimney tie made of copper and loose ladder made of aluminium.

CERTIFIED PRODUCTS

Weland Stål's roof safety products are certified according to applicable standards and requirements. The inspection body is SP (the Technical Research Institute of Sweden). Our products are also approved according to Basta's and Byggsäkerhetsnämningens criteria. The company is also certified according to ISO 9001 and ISO 14001.

For example:

- SS 831331 (ridge and eaves railings)
- SS-EN 12951 (roof ladders)
- SS 831333 (railings)
- SS 831335 (snow guards)
- EN-516 (roof gangways)
- EN-517 (fixing points for safety lines)
- SS 831340 and SS-EN ISO 14122-4 (cat ladders)



SAFETY: IMPORTANT FOR EVERYONE

Safety on our roofs is important, from the individual home owner to professionals who work on roofs. All roofs that can be accessed in some way must have roof safety equipment. It is also important to know who is responsible for what.

The property owner is responsible for roof safety equipment being present and for it being maintained. During the construction period, the building proprietor is responsible for compliance with the regulations.

The person carrying out the installation work must ensure that the roof safety equipment is installed according to the instructions.

The employer is responsible for the employee being provided with personal safety equipment and for ensuring that this equipment is used.

The person carrying out the work must use the safety equipment he has been allocated.

Anyone working on roofs must have approved safety equipment

DEVELOPMENT AND TESTING

Weland Stål's roof safety products are certified and approved by the SP Technical Research Institute of Sweden.

We are constantly working with product development, and as part of this work we test the products in our own plant, in the same way as performed by SP. We are currently working extensively with deformation zones intended to brake falls. The fixings are also being developed according to the wishes and views of affected fitters. If you, as someone who uses our products, have any opinions or suggestions, we would be happy for you to contact us.

All with the aim of making our products even better.

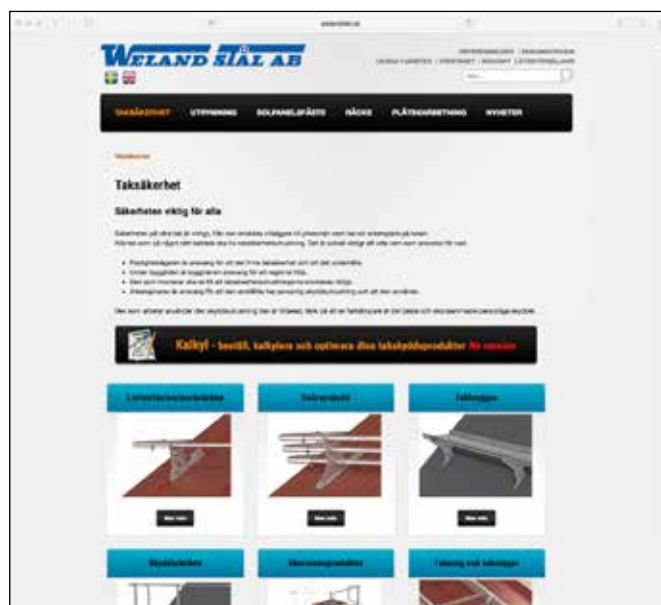


We are certified according to ISO 9001 and environmentally certified according to ISO 14001.



You can perform calculations and produce material specifications easily on our website:

www.welandstal.se



Fixings for solar panels

We have a complete range of fixings for solar panels. For all types of roof and all types of solar panel.

Contact us for a brochure!



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Dealers