Installation instructions for Weline

WIRE PROTECTION AND LIFELINE ATTACHMENTS
FOR VARIOUS PRODUCTS AND ROOF TYPES.

Version 3.1

WELAND

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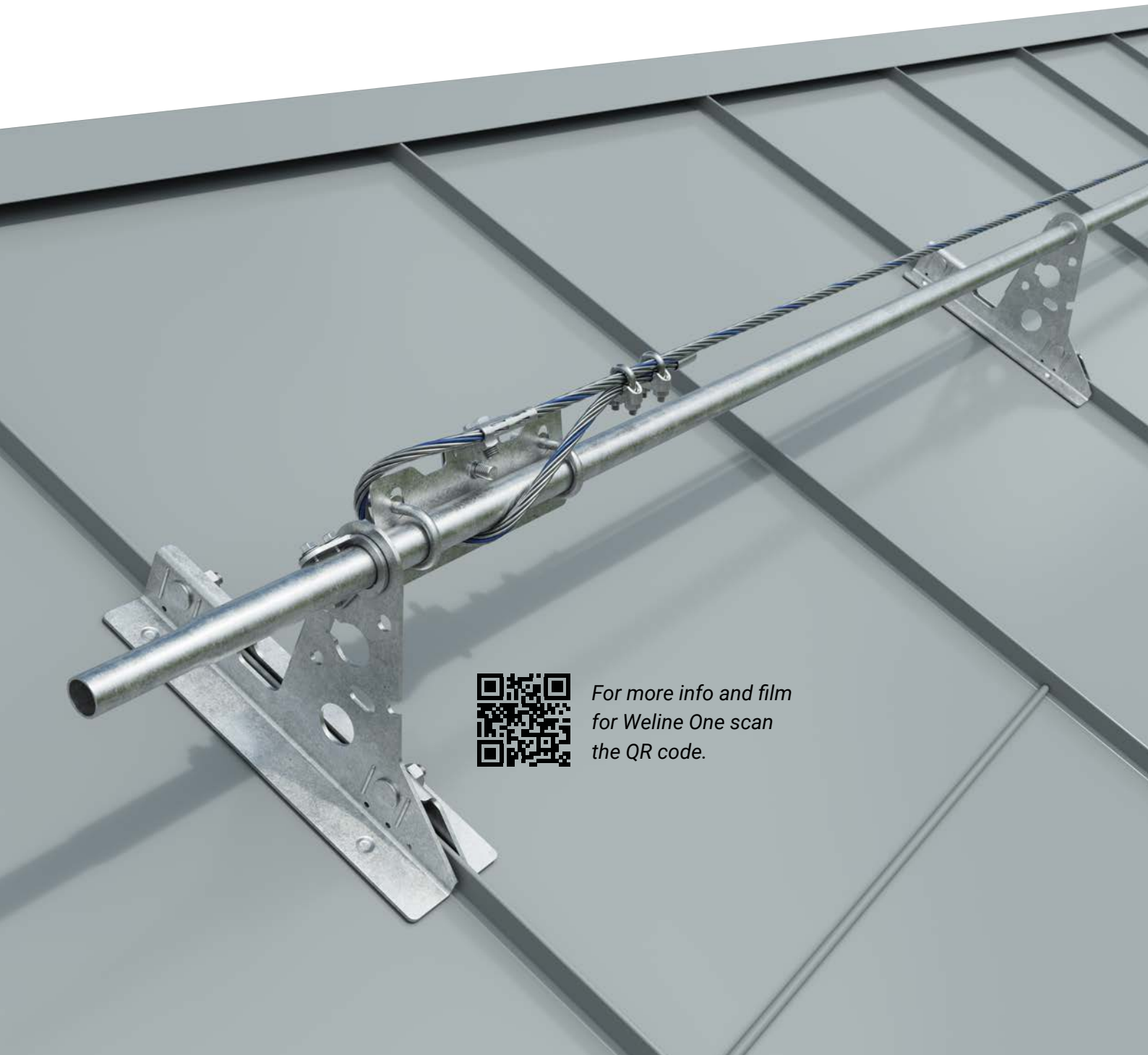
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Weline ONE is approved in accordance with the new European standard **EN 17235:2024** for permanent anchor devices and safety hooks.



For more info and film for Weline One scan the QR code.



Read this before starting the installation!

- It is extremely important that the points in this guide are followed when installing the Weline cable system.
- Pay particular attention to how you tighten the wire corners so that the cable runner runs freely past the corner.
- Also note that MA1008 describes which forces the system must endure.

Weland app

Download our app and follow the installation instructions. In the app you will find pictures, documentation, information about inspections/annual checks, installation instructions and news from Weland.

*The app is called **Weland Norge** and exists for iOS and Android.*

Download on the App Store

GET IT ON Google Play



Flexible fall protection

Weline ONE is suitable for both new construction and for supplementing existing roof installations. It can be mounted directly onto the roof surface or integrated into existing roof safety products—such as roof walkways, roof ladders, ridge railings, or facade ladders—making it suitable for both flat and pitched roofs. Weline ONE is approved for installation on all our roof safety products that comply with relevant standards and are certified and type-approved.

Art.nr. WL1337

NEWS!



Sealing plate roof protection on Bitumen and PVC/TPO

	Detalj	Art. nr.
1	Sealing plate OPTI 360x450	TP3645
2	Sealing plate (518x346) elevated 350x520	TP3551
3	Coach bolt M10x30	VB1301/VB1305

	Detalj	Art. nr.
4	Bolt M10x20	BU1201/BU1200
5	Nut M10	MU1001/MU1010
6	Rubber washer Ø50 M10	GB5010

Bitumen-based sealing layer

1. Protective cover and covering collar

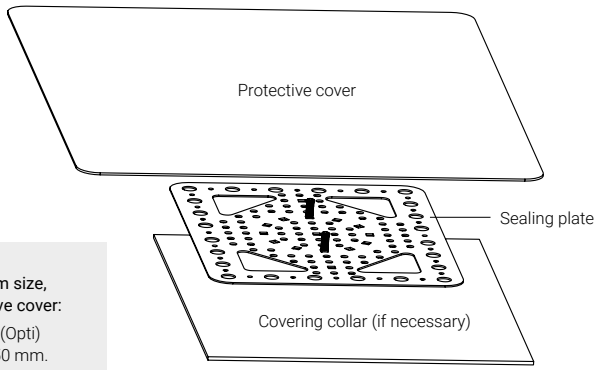
The protective cover must be ***at least 150 mm larger*** than the sealing plate in all directions. For TP3551, the cover must also be cut to the raised section.

If deemed necessary by the installer, a covering collar must also be fitted under the sealing plate. This collar must be 50 mm larger than the sealing plate.

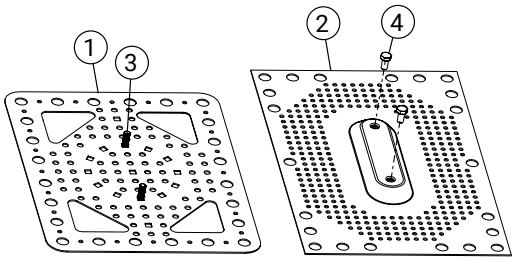
The sealing layer must be tested in accordance with EN 13707: 204+A2:2009 and satisfy the following minimum requirements:

Tensile strength: 550 N/50 mm
Shearing durability in joints: 550 N/50 mm
Tear strength: : 150 N
Resistance to cracks in joints: 150 N/50 mm

The work must be carried out by an approved roofer.

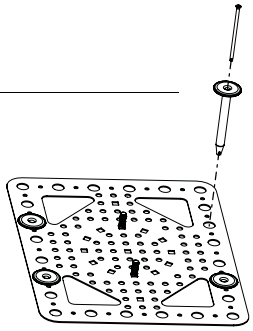


Minimum size, protective cover:
TP3645 (Opti)
660 x 750 mm.
TP3551 (Raised)
818 x 646 mm



2. Bolts

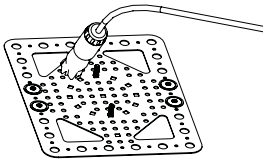
The OPTI sealing plate is installed using 2 coach bolts (3). Two M10x20 bolts (4) are fitted to the raised sealing plate (2),



3. Mechanical attachment

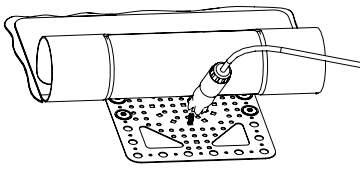
The sealing plates must be mechanically fastened to the bearing sub-roof; they must be capable of withstanding a tensile force of at least 4 kN per plate and be secured using a minimum of 4 fasteners (using more is encouraged).

NB! *Mechanical attachments are to be purchased separately and selected based on the type of roof construction.*



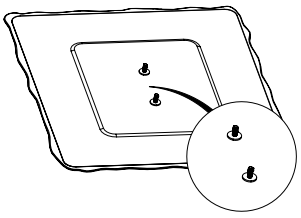
4. Pre-heat the substrate

Mark and pre-heat the substrate under the sealing plate so that the bitumen compound melts through the perforations in the plate.



5. Heating the sealing plate

Heat the protective cover together with the bitumen compound that has melted up through the sealing plate. Take care to ensure that sufficient heat is applied to melt the sealing plate into both layers. Finish by heating the protective cover around the entire sealing plate, securing it to the substrate.



6. Rubber washer

Finish by placing rubber washers (6) on the coach bolts (3)/bolts (4) and fit the bracket on top. Tighten the nuts (5).

	Detalj	Art. nr.
1	Sealing plate OPTI 360x450	TP3645
2	Sealing plate (518x346) elevated 350x520	TP3551

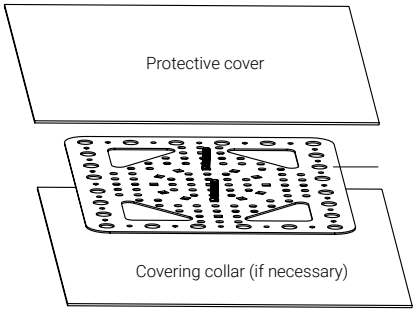
	Detalj	Art. nr.
3	Coach bolt M10x30	VB1301/VB1305
4	Bolt M10x20	BU1201/BU1200

PVC/TPO-based sealing layer

1. Protective cover and covering collar

The protective cover must be ***at least 50 mm larger*** than the sealing plate in all directions.

If deemed necessary by the installer, a covering collar must also be fitted under the sealing plate. This collar must be 50 mm larger than the sealing plate.



The sealing layer must be compliant with EN 13956 and satisfy the following requirements:

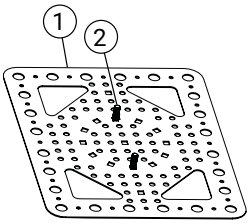
Tensile strength: min. 1050 N/50 mm (EN 12311-2)
Tear strength: min. 210 N/50 mm (EN 12310-2)
Shear strength in joints: min. 1000 N/50 mm (EN 12317-2)
Crack resistance in joints: min. 150 N/50 mm (EN 12316-2)

Minimum size, protective cover:
TP3645 (Opti)
550 x 460 mm.

The work must be carried out by an approved roofer.

2. Coach bolt

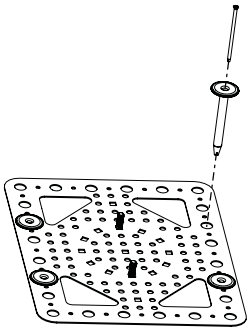
The OPTI sealing plate (1) is installed using 2 coach bolts (3).

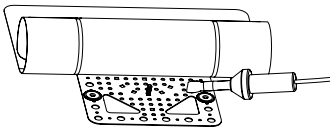


3. Mechanical attachment

The sealing plates must be mechanically fastened to the bearing sub-roof; they must be capable of withstanding a tensile force of at least 4 kN per plate and be secured using a minimum of 4 fasteners (using more is encouraged).

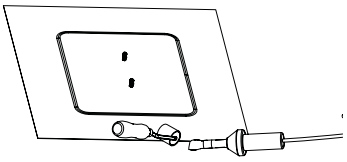
NB! *Mechanical attachments are to be purchased separately and selected based on the type of roof construction.*





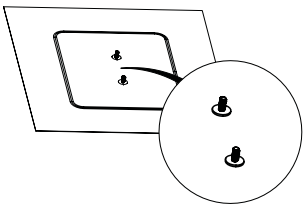
4. Welding sealing plate

Heat around the sealing plate and in the large triangles before fitting the protective cover.



5. Welding protective cover

Weld the protective cover securely around the sealing plate and carefully ensure that the surfaces also attach to each other in the triangles.



6. Rubber washer

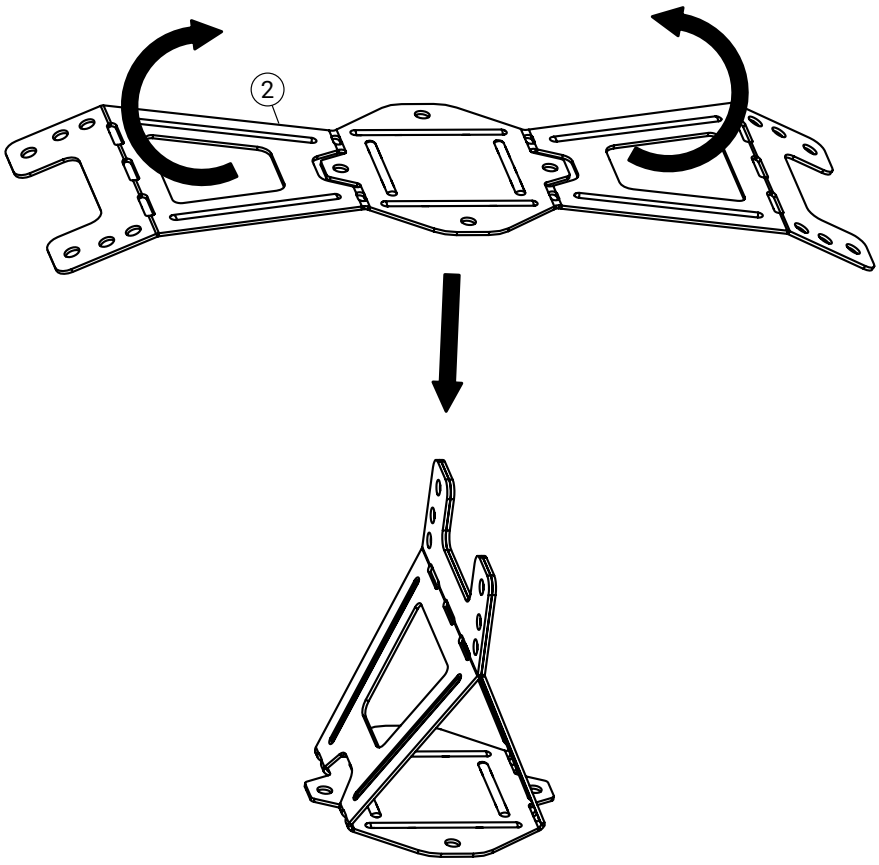
Finish by placing rubber washers (4) on the coach bolts (2) and secure using nuts (3).

Wire System – Weline on sealing membrane

	Detalj	Art.nr.
1	End bracket wire	WL1002
2	Bracket plain roof	WL1020
3	Wire runner open	WL1010
4	Wire bracket tube	WL1012
5	Wire joining tube	XWL1006
6	Wire clamping sleeve	XWL1014

	Detalj	Art.nr.
7	Wire	XWL1008
8	Bolt M10x20	BU1201/ BU1200
9	Nut M10	MU1001/ MU1010
10	Rubber washer Ø50 mm M10	GB5010
11	Infosign APP	IS1810

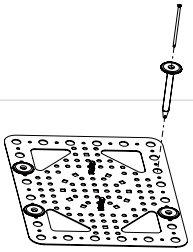
The maximum separation between supports is 10 m up to 15 degrees pitch.
Between 15-50 degrees gradient, the max. separation is 2.5m.
Above 50 degrees gradient, the max. separation is 1.2 m.



1. Fold Wire bracket

Fold the bracket (2) together by hand as illustrated above.
NB: *Bend only once. If this is bent several times, it will be damaged and must be replaced.*

For mechanical fitting of attachment plate, see MA1008



Installation Instructions

Wire System – Weline ONE on sealing membrane

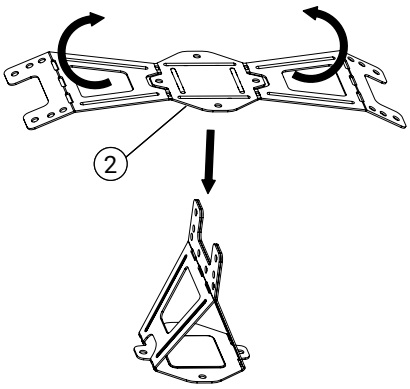
MA1810N

	Part	Part. no.
1	ONE wire bracket	WL1337
2	Bracket plain roof	WL1020
3	ONE wire lock bolt kit	BS1300
4	Bolt M10x20	BU1201/BU1200

	Part	Part. no.
5	Nut M10	MU1001/ MU1010
6	Rubber washer Ø50 M10	GB5010
7	Coach bolt M10x30	VB1301/ VB1305

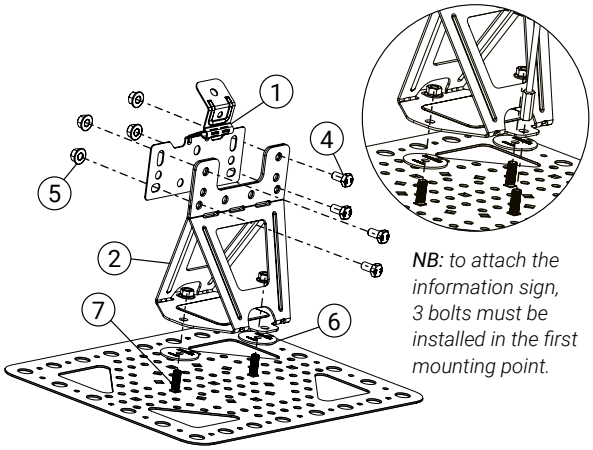
Check the wire to ensure that it has the blue Weland mark and that it is not damaged.

Read more about fastenings in relevant installation instruction MA1008



1. Wire bracket, plain roof

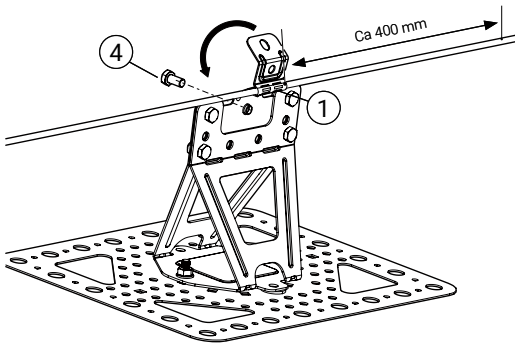
Fold the wire bracket (2) together by hand.
NB: *only bend once. Bending this several times will damage it and must be replaced.*



NB: *to attach the information sign, 3 bolts must be installed in the first mounting point.*

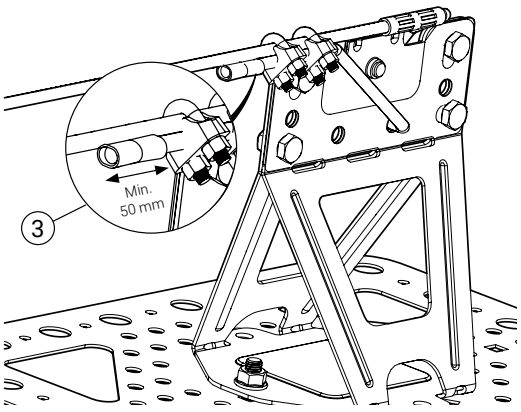
2. First bracket

Fit wire bracket (2) for plain roofs to the sealing plates. Attach using 2 x coach bolts (7), washers (6), and nuts (6) per bracket. Fit the ONE wire bracket (1) using 4 x bolts (4) + nuts (5).



3. Fit ONE wire bracket as start

Place wire in a ONE wire bracket (1), let out approx. 400 mm of wire and fold the bracket together. Secure using 1 x bolt (4).



4. Fitting wire lock

Pull the wire backwards and through the plain roof wire bracket and ONE wire bracket (1). Thread on clamp tube, clamp securely in position. Fit wire lock (3) at least 50 mm from the end of the wire. Tighten the wire lock to a torque of 10 Nm.

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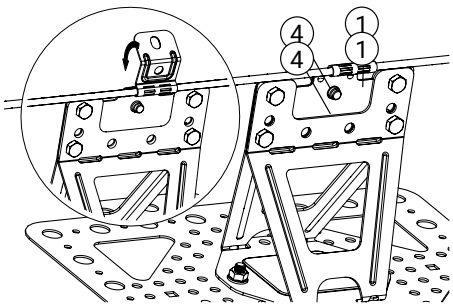
Installation Instructions

Wire System – Weline ONE on sealing membrane

MA1810N

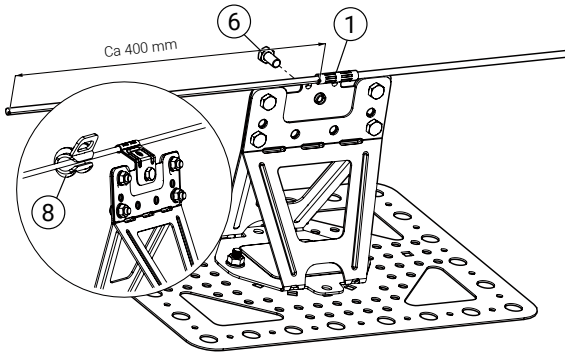
	Part	Part. no.
1	ONE wire bracket	WL1337
2	Bracket plain roof	WL1020
3	ONE wire lock bolt kit	BS1300
4	Bolt M10x20	BU1201/BU1200

	Part	Part. no.
5	Nut M10	MU1001/ MU1010
6	Rubber washer Ø50 M10	GB5010
7	Coach bolt M10x30	VB1301/ VB1305



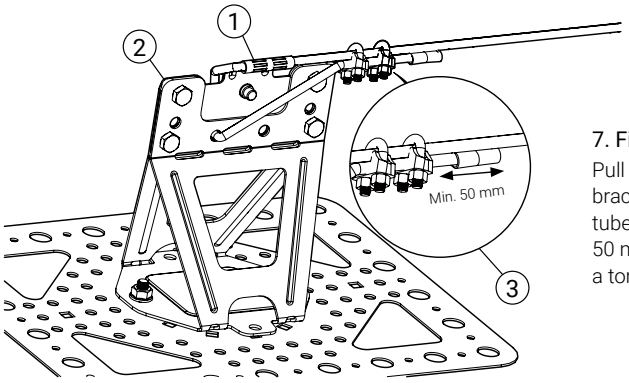
5. Fit ONE wire bracket

Place wire in ONE wire bracket (1), tension the wire by pulling it by hand and fold the ONE wire bracket together. Secure using 1 x bolt (4).



6. Finish wire

Fit any wire runners. Place wire in ONE wire bracket (1) (1), tension the wire by pulling it by hand and fold the ONE wire bracket together. Secure using 1 x bolt (4). Cut the wire approx. 400 mm from the bracket.

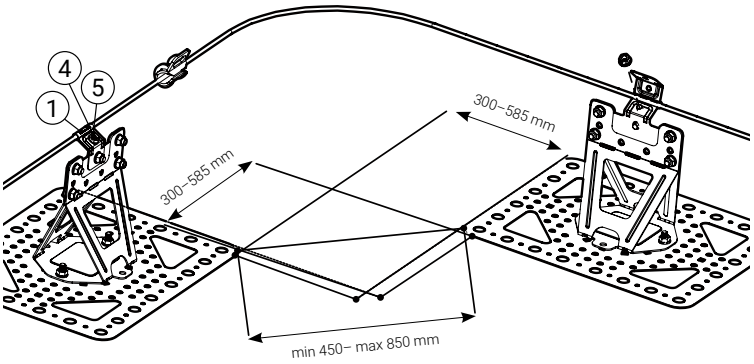


7. Finish wire

Pull the wire backwards and through the plain roof wire bracket (2) and ONE wire bracket (1). Thread on clamp tube, clamp securely in position. Fit wire lock (3) at least 50 mm from the end of the wire. Tighten the wire lock to a torque of 10 Nm.

8. Wire with terminal

Place the wire in one wire holder ONE (1) and lay it in an even arc so that the runner moves freely. Place the wire in the next holder and secure with bolt (4). Also install the bolt and nut (4.5) in the uppermost hole of the brackets. Position the mounting plate so that the diagonal distance between corners is 450–850 mm. This results in a spacing of 300 mm (minimum) to 585 mm (maximum) between the short side and the long side in both directions. The minimum dimension ensures that the roofing patches do not overlap, while the maximum dimension prevents the wire from sagging onto the roof.



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Installation Instructions

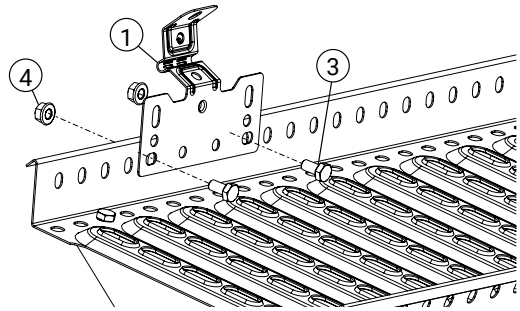
Wire System - Weline ONE on roof gangway

MA1811

	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300

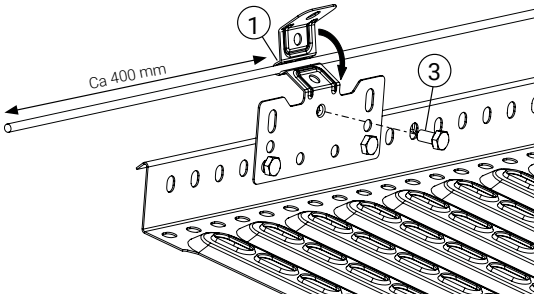
	Part	Part. no.
3	Bolt M10x20	BU1201/BU1200
4	Nut M10	MU1001/ MU1010

Check the wire to ensure that it has the blue Weland mark and that it is not damaged.



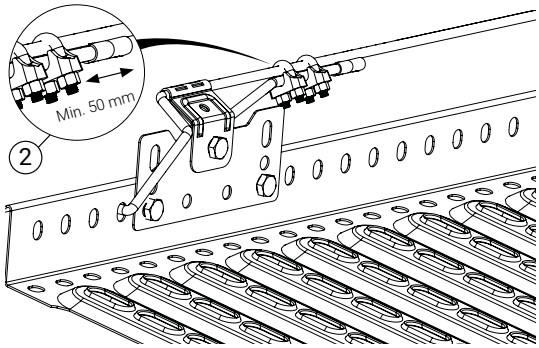
1. Fit ONE wire bracket

Fit a ONE wire bracket (1) to the gangway using 2 x bolts (3) + nuts (4) per bracket.



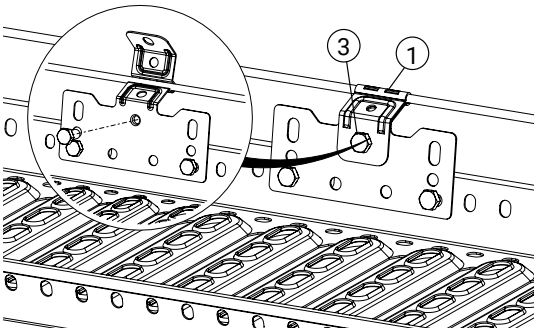
2. Fit ONE wire bracket as start

Place wire in ONE wire bracket (1), let out approx. 400 mm of wire and fold the bracket together. Secure using 1 x bolt (4).



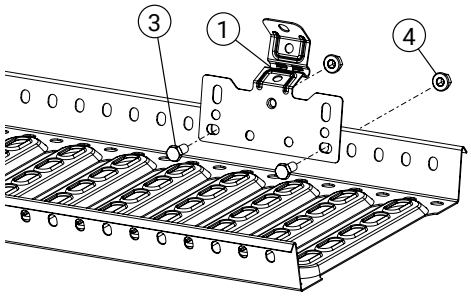
3. Lock installation

Pull the wire back through the gangway. Thread on clamp tube (2), clamp securely in position. Secure to outgoing wire using two wire locks (2). Tighten the wire lock to a torque of 10 Nm.



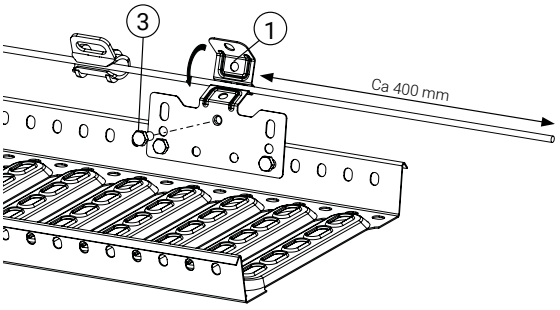
4. Fit ONE wire bracket

Place wire in ONE wire bracket (1), tension the wire by pulling it by hand and fold the ONE wire bracket together. Secure using 1 x bolt (3).



5. Finish wire

Fit a ONE wire bracket (1) to the gangway using 2 x bolts (3) + nuts (4) per bracket.



6. Finish wire

Fit any wire runners. Place wire in ONE wire bracket (1), tension the wire by pulling it by hand and fold the ONE wire bracket together. Secure using 1 x bolt (3). Cut the wire approx. 400 mm from the bracket.

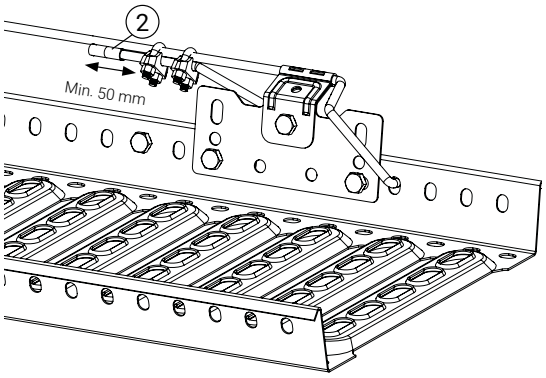
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Installation Instructions

Wire System - Weline ONE on roof gangway

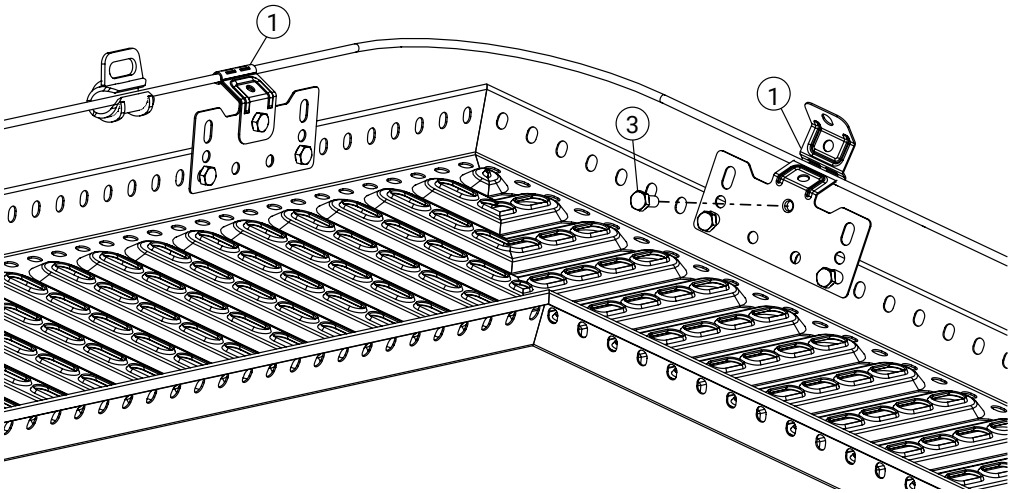
	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300

	Part	Part. no.
3	Bolt M10x20	BU1201/BU1200
4	Nut M10	MU1001/ MU1010



7. Finish wire

Pull the wire through the closest hole on the roof gangway to the outside of the gangway. Thread on clamp tube (2), clamp securely in position. Secure to the outgoing wire and two wire locks (2) at least 50 mm from the end of the wire. Tighten the wire lock to a torque of 10 Nm.



8. Wire corners and transitions

Place a wire in a ONE wire bracket (1) and make a uniform hoop, ensuring that the runner runs freely. Place in the next ONE wire bracket (1) and secure using 1 x bolt (3).

Installation Instructions

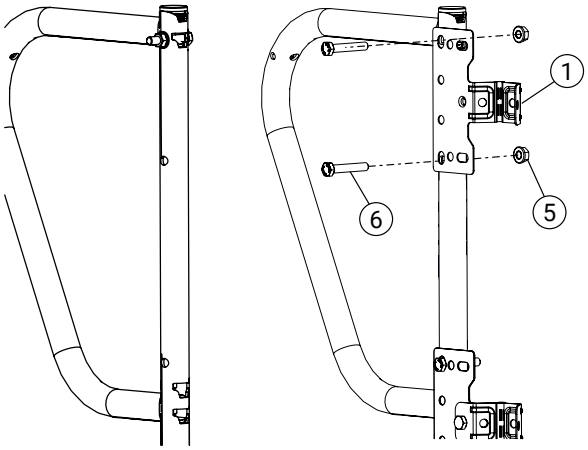
Wire System - Weline ONE on facade ladder/roof ladder

MA1812

	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300
3	ONE fall stop bolt kit	BS1301 L / BS1302 R
4	Bolt M10x20	BU1201/BU1200

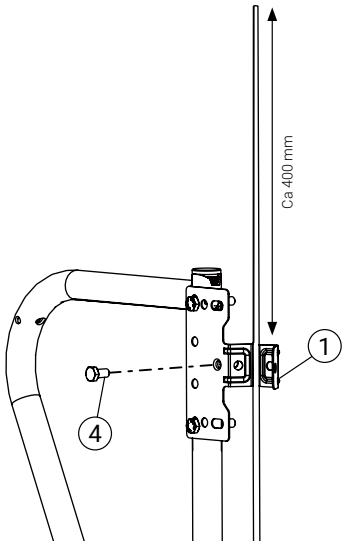
	Part	Part. no.
5	Nut M10	MU1001/ MU1010
6	Bolt M10x60	BU1601
7	Wire runner	WL1040

Check the wire to ensure that it has the blue Weland mark and that it is not damaged.



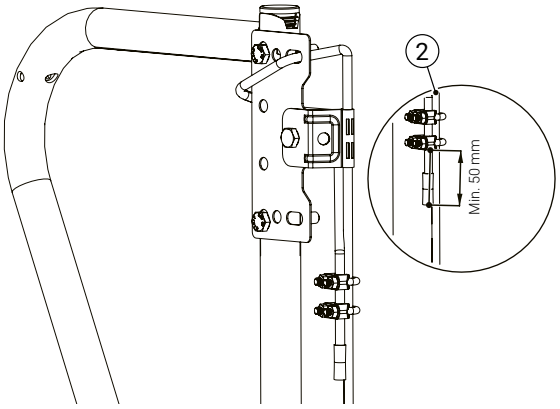
1. Fit ONE wire bracket

Fit the upper ONE wire bracket (1) to the handrail using 2 bolts (6) + nuts (5). If the ladder does not have a handrail, position the first ONE wire bracket as far up the ladder as possible.



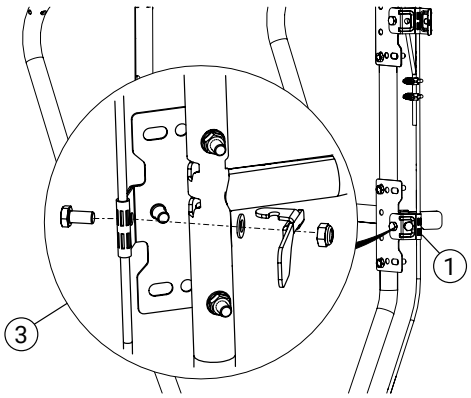
2. Fit ONE wire bracket as start

Place wire in ONE wire bracket (1), let out approx. 400 mm of wire and fold the bracket together. Secure using 1 x bolt (4).



3. Fit wire with wire lock

Pull the wire back through the wire bracket and secure with the downward wire. Thread on clamp tube (2), clamp securely in position. Fit two wire locks (2) at least 50 mm from the end of the wire. Tighten the wire lock to a torque of 10 Nm.



4. Installation of fall stop

Fit fall stop at c/c 1200 mm on ONE wire bracket (1) using bolt, washer + locking nut (3), fit fall stop on left or right hand side. Depending on which side the wire bracket is located.

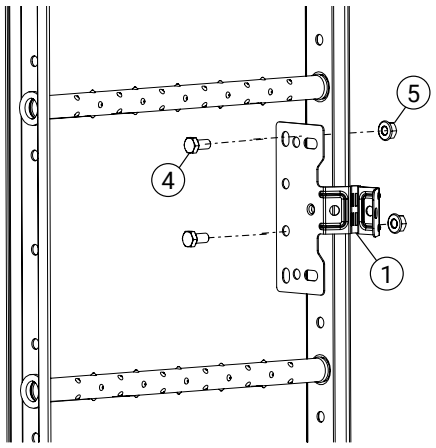
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Installation Instructions

Wire System - Weline ONE on facade ladder/roof ladder

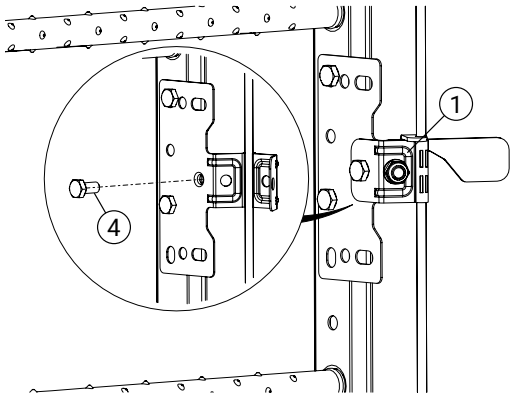
	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300
3	ONE fall stop bolt kit	BS1301 L / BS1302 R
4	Bolt M10x20	BU1201/BU1200

	Part	Part. no.
5	Nut M10	MU1001/ MU1010
6	Bolt M10x60	BU1601
7	Wire runner	WL1040



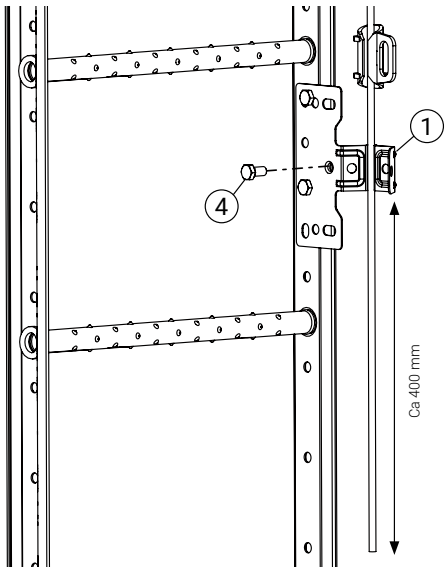
5. Installation of ONE intermediate bracket

Fit the ONE wire bracket (1) to the ladder using 2 bolts (4) + nuts (5) per bracket.



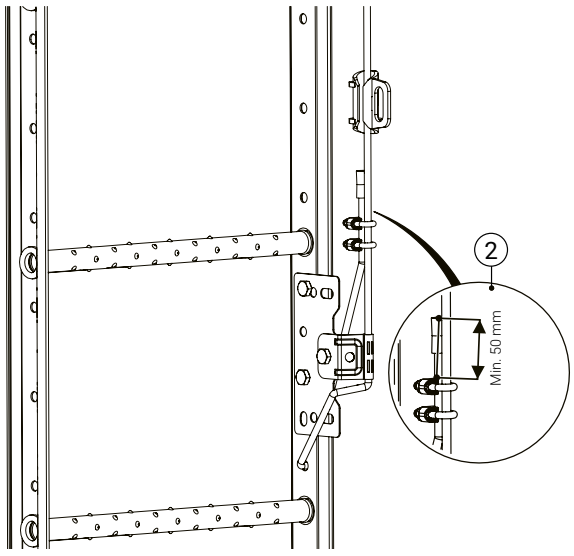
6. Wire installation

Place wire in ONE wire bracket (1), tension the wire by pulling it by hand and fold the ONE wire bracket together. Secure using 1 bolt (4). Fit fall stop as shown in Fig. 4.



7. Wire cutting

Fit any wire runners. Place wire in ONE wire bracket (1), tension the wire by pulling it by hand and fold the ONE wire bracket together. Secure using 1 bolt (4). Cut the wire approx. 400 mm from the bracket.



8. Finish wire

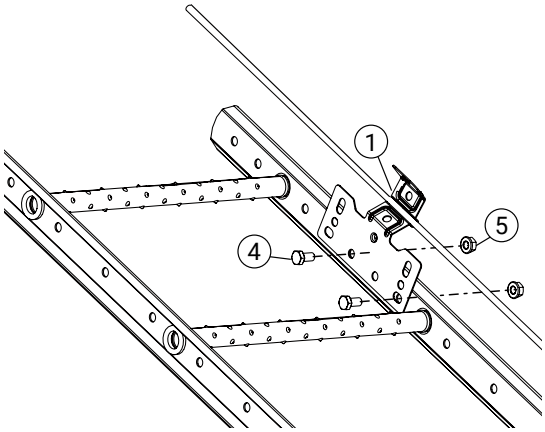
Pull the wire through the closest hole on the ladder to the outside of the ladder. Thread on clamp tube (2), clamp securely in position. Secure to the outgoing wire, install two wire locks (2) at least 50 mm from the end of the wire. Tighten the wire lock to a torque of 10 Nm.

Installation Instructions

Wire System - Weline ONE on facade ladder/roof ladder

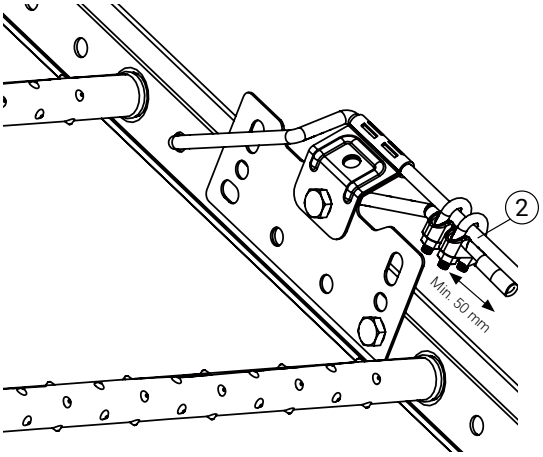
	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300
3	ONE fall stop bolt kit	BS1301 L / BS1302 R
4	Bolt M10x20	BU1201/BU1200

	Part	Part. no.
5	Nut M10	MU1001/ MU1010
6	Bolt M10x60	BU1601
7	Wire runner	WL1040



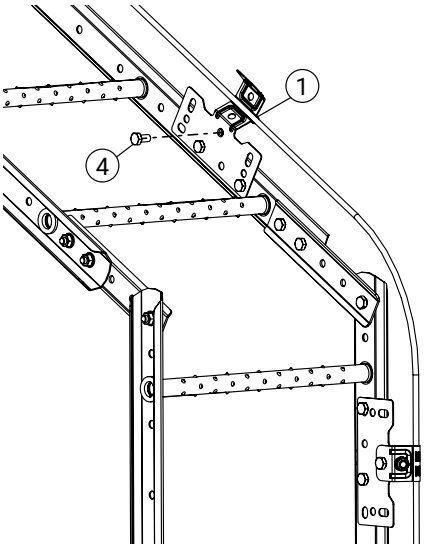
9. Fit ONE wire bracket as start/stop

Fit the ONE wire bracket (1) to the ladder using 2 bolts (4) + nuts (5) per bracket.



10. Installation of wire with wire lock as start/stop

Pull the wire back through the ladder side and secure with the downward wire. Thread on clamp tube (2), clamp securely in position. Fit two wire locks (2) at least 50 mm from the end of the wire. Tighten the wire lock to a torque of 10 Nm.



11. Wire installation, corners and transitions

Install a ONE wire bracket (1) and make a uniform hoop from the wire, ensuring that the runner runs freely. Fold the brackets together and secure using 1 x bolt (4).

Installation Instructions

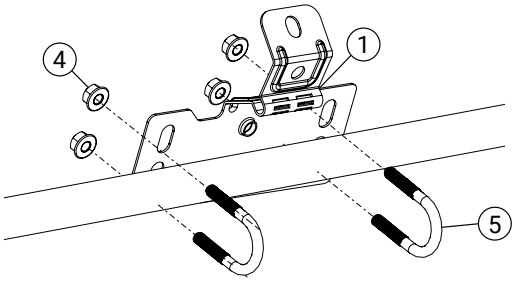
Wire System - Weline ONE on ridge railings

MA1813

	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300
3	Bolt M10x20	BU1201/BU1200

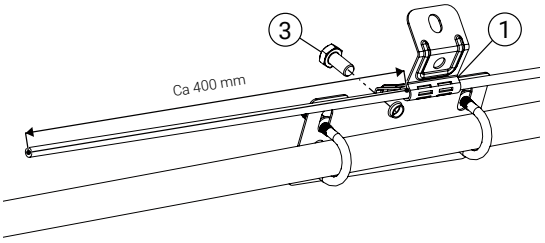
	Part	Part. no.
4	Nut M10	MU1001/ MU1010
5	U-fitting set	UB0850
6	Wire runner	WL1040

Check the wire to ensure that it has the blue Weland mark and that it is not damaged.



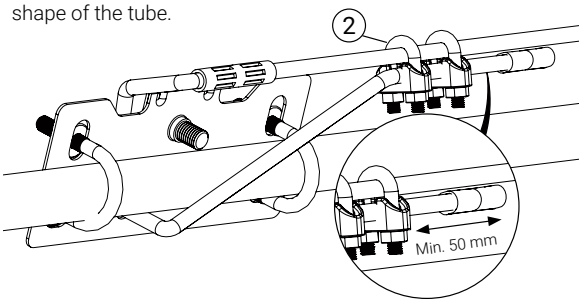
1. Fit ONE wire bracket

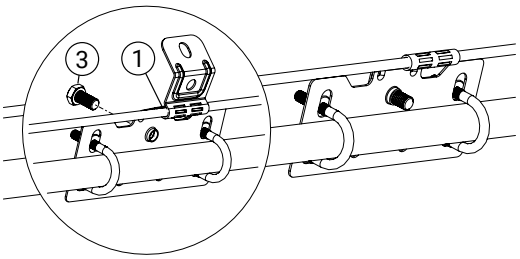
Fit the upper ONE wire bracket (1) to the ridge railing using 2 x U-fittings (5) + 4 x M8 nuts (4). Tighten the fittings to a torque of 5 Nm, the bracket will bend to the shape of the tube.



2. Fit ONE wire bracket as start

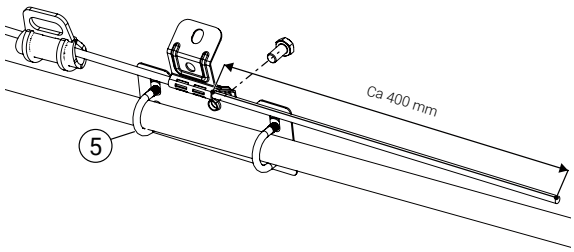
Place wire in ONE wire bracket (1), let out approx. 400 mm of wire and fold the bracket together. Secure using 1 bolt (3).





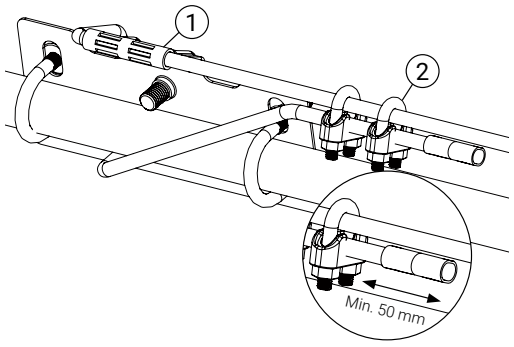
3. Fitting wire lock

Pull the wire back through the ONE wire bracket (1) and round the tube. Secure to outgoing wire. Thread on clamp tube (2), clamp securely in position. Fit two wire locks (2) at least 50 mm from the end of the wire. Tighten the wire locks to a torque of 10 Nm.



4. Fit ONE wire bracket

Place wire in ONE wire bracket (1), tension the wire by pulling it by hand and fold the ONE wire bracket (1) together. Secure using 1 x bolt (3).



5. Finish wire

Fit any wire runners (6). Fit ONE wire brackets (1) to the ridge railing using 2 x U-fittings (5) + 4 x M8 nuts (4) per bracket. Tighten the fittings to a torque of 5 Nm, the bracket will bend to the shape of the tube. Cut the wire approx. 400 mm from the bracket.

6. Finish wire

Pull the wire back through the wire bracket (1) and round the tube. Secure to outgoing wire. Thread on clamp tube (2), clamp securely in position. Fit two wire locks (2) at least 50 mm from the end of the wire. Tighten the wire locks to a torque of 10 Nm.

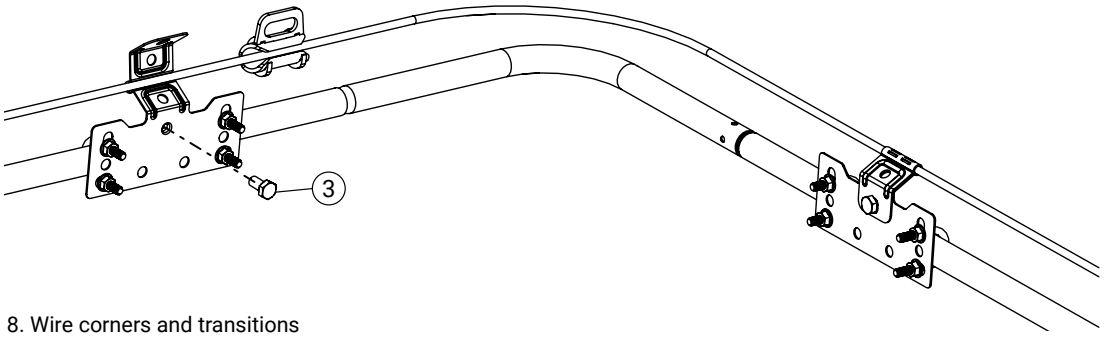
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Installation Instructions

Wire System - Weline ONE on ridge railings

	Part	Part. no.
1	ONE wire bracket	WL1337
2	ONE wire lock bolt kit	BS1300
3	Bolt M10x20	BU1201/BU1200

	Part	Part. no.
4	Nut M10	MU1001/ MU1010
5	U-fitting set	UB0850
6	Wire runner	WL1040



8. Wire corners and transitions

Place a wire in one of the brackets and make a uniform hoop of wire, ensuring that the runner runs freely. Place the wire in the next bracket and secure in position using a bolt (3).

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Snow depth marker

	Detalj	Art. nr.
1	Snow depth marker	NSDM2515
2	Sealing plate OPTI 360x450	TP3645
3	Bracket plain roof	WL1020

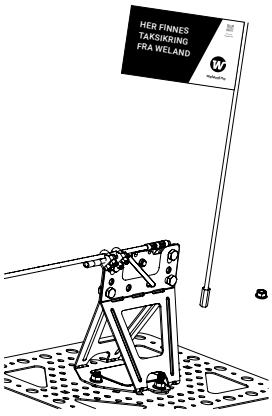
	Detalj	Art. nr.
4	ONE wire bracket	WL1337

Follow current regulations for working at heights. At heights above 2m, you must be properly secured.

The NSDM is mounted on the mounting plate in combination with our roof protection products.

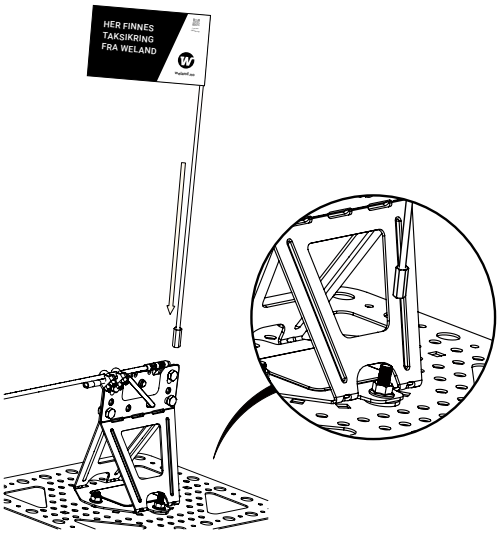
When installing Snow Depth Markers on an existing wire system, console WL1020 can be loosened if necessary and the bolt for attaching the Snow Depth Marker can be placed in an empty hole.

Sealing plate OPTI with Weline ONE



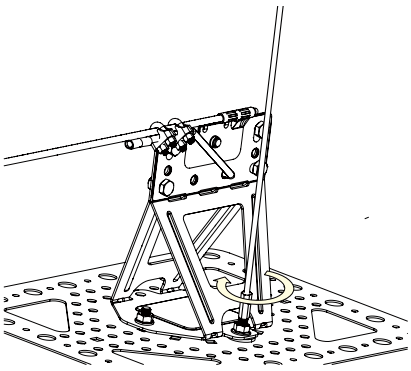
1. Snow depth marker

Remove the nut on the mount.
NOTE! *When reassembling, do not forget the rubber washer under the mount.*



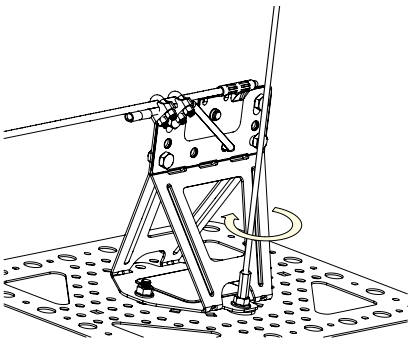
2. Install the long nut

Install the long nut with threaded rod on the bolt on the mount. ***NOTE!*** *Fits only when the mount is attached to the plate as illustrated above*



3. Long nut

The long nut is screwed down onto the fitting.

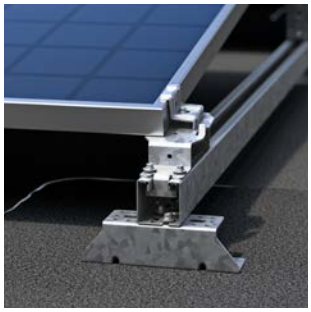


4. Threaded rod

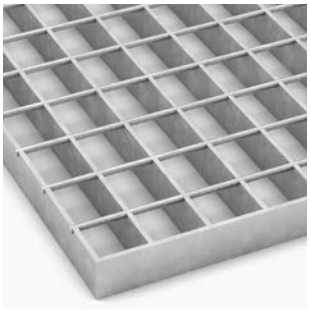
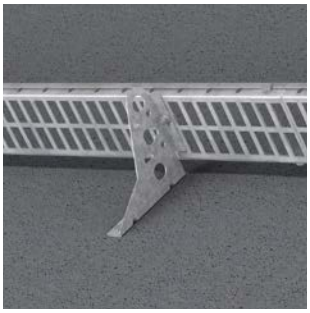
The threaded rod is screwed until it stops against the locking bolt.

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