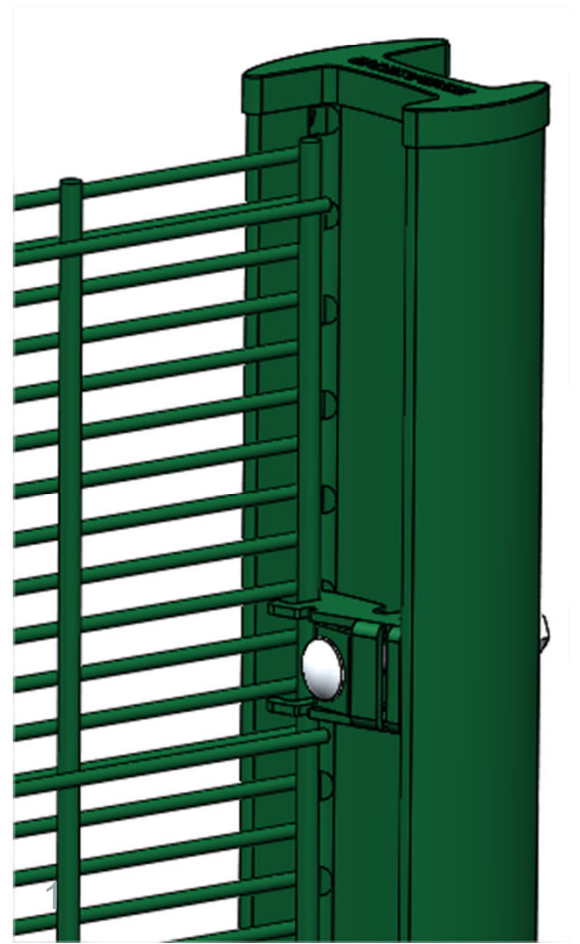
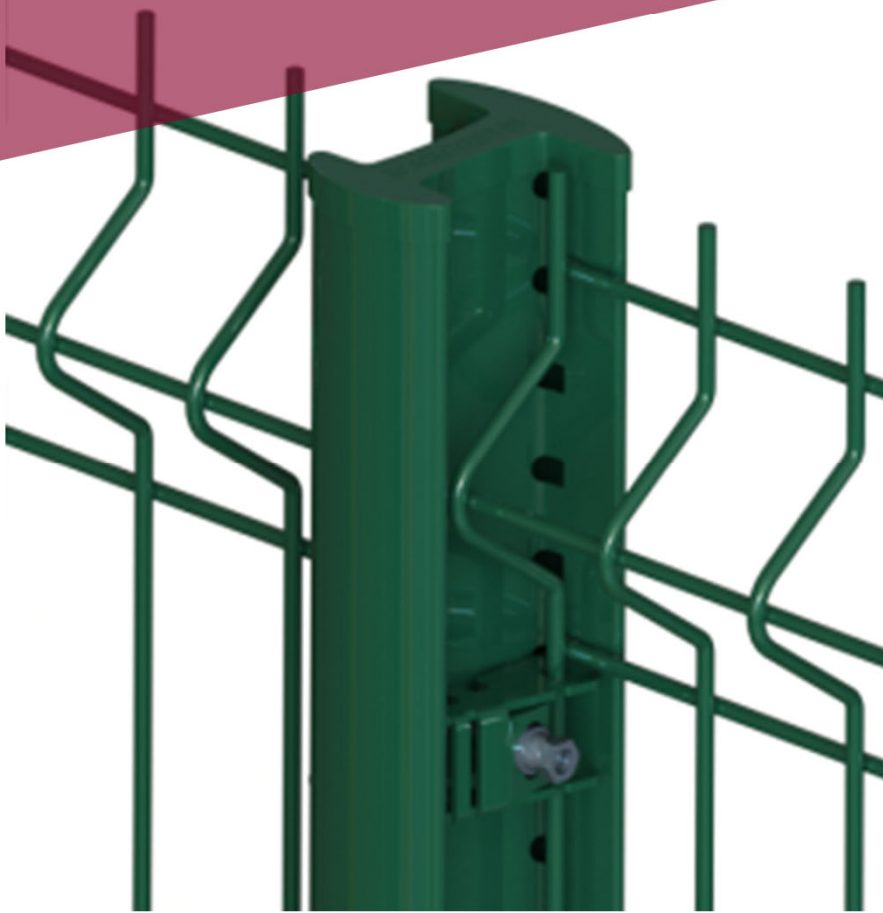


INSTALLATION MANUAL

UniLox[®]

Installation principle: Post-Post-Panel



1. Universal Aspect

2. Components of the fencing systems

2.1. UniLox Posts

2.2. UniLox Fixators and tools

3. Installation of the fencing systems

3.1. Foundations

3.2. Post orientation

3.3. Installation methods

3.4. Post-Post-Panel Installation

3.5. Material Quantities

3.6. Corners

3.7. Sloping

3.8. Installation with concrete plates

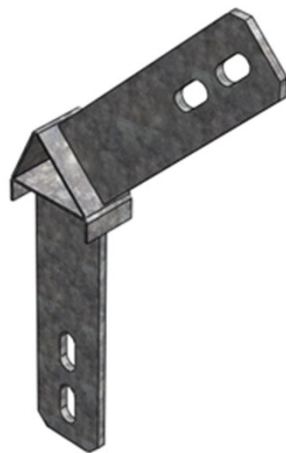
4. Optional Extras

1. UNIVERSAL ASPECT

UniLox posts:

The Base plates / Bent arms / Extension pieces / Foot plates and Tongue to fix the Unilox fixators are similar between UniLox and Bekafix(Ultra) posts.

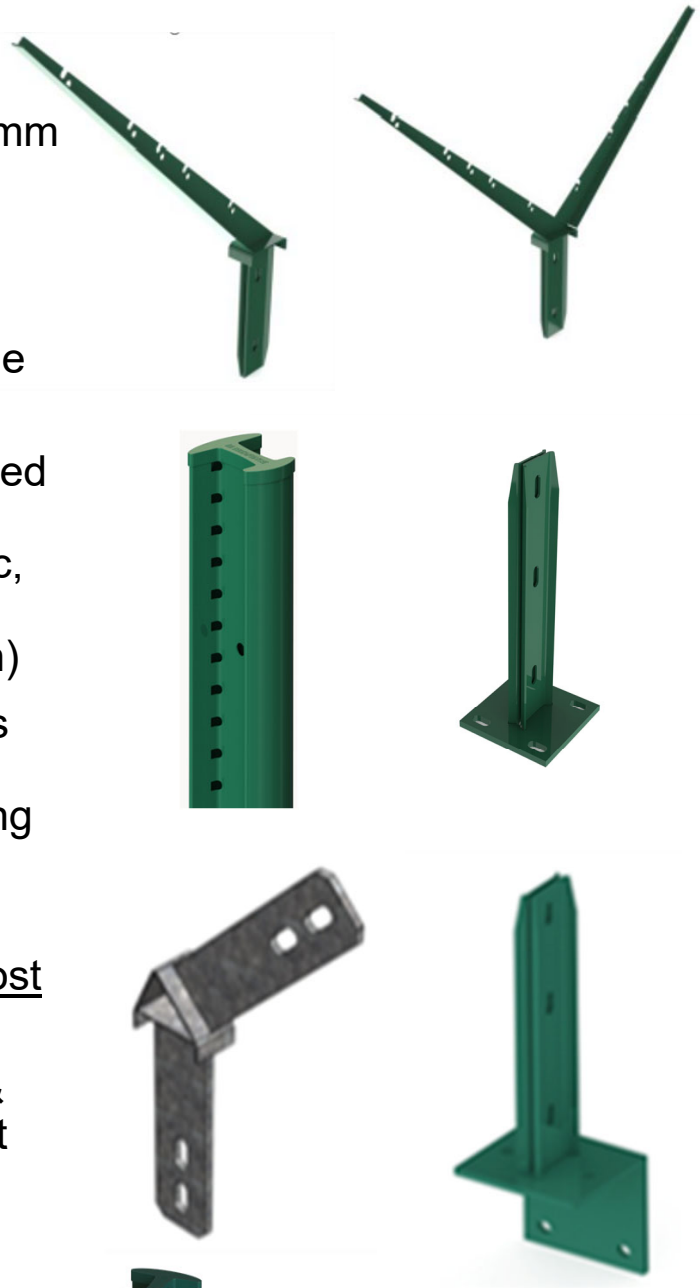
So the accessories (except fixators) are universally exchangeable between the posts



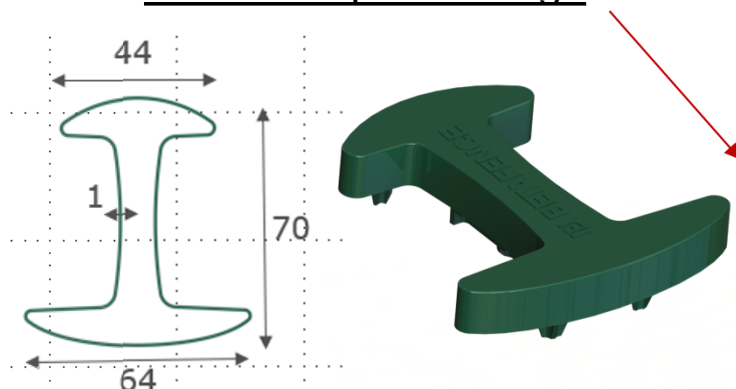
2. Components of the fencing systems

2.1. UniLox posts

- Profile 70x64x1mm / 70x44x1mm
- Posts are available for panel heights from 0.6 to 2.4 metres high
- The posts are galvanised inside and out then polyester coated
- This type of post can be installed with Nylofor 3D, 3D XL, 3D Essential, 3D Light II, 3D Basic, 2D, Zenturo, Bekafor, & the Securifor family (up to 2m high)
- Posts are pre-drilled with holes where the fixator clamps are clicked into place and for bolting fixators together through the posts.
- Each post is fitted with a PA post cap.
- A base plate can be inserted & afterwards screwed to the post
- Single and double bent arms / footplates are available as an additional option



Securifor up to 2m high

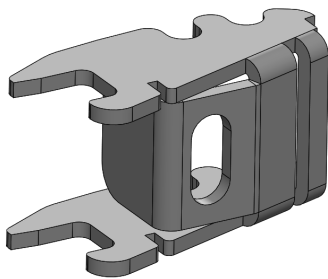


2. Components of the fencing systems

2.2. UniLox Fixators and tools

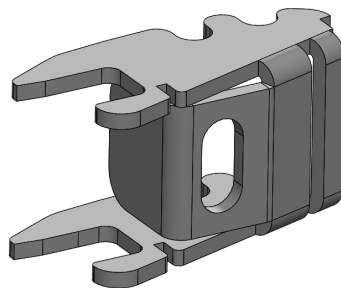
3 Different Fixators are available:

UniLox Standard Metal



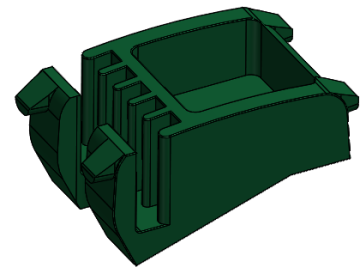
- All Nylofor (excl F/2D/2DS + 3DS)
- Bekafor
- Zenturo
- Securifor Flat, 3D & 4D

UniLox Heavy Metal



- Nylofor 2D/2DS
- Securifor 2D

UniLox PA Fixator



- Nylofor 3D
- Nylofor 3D XL
- Nylofor 3D Light & Basic
- Nylofor 3D Essential
- Bekafor



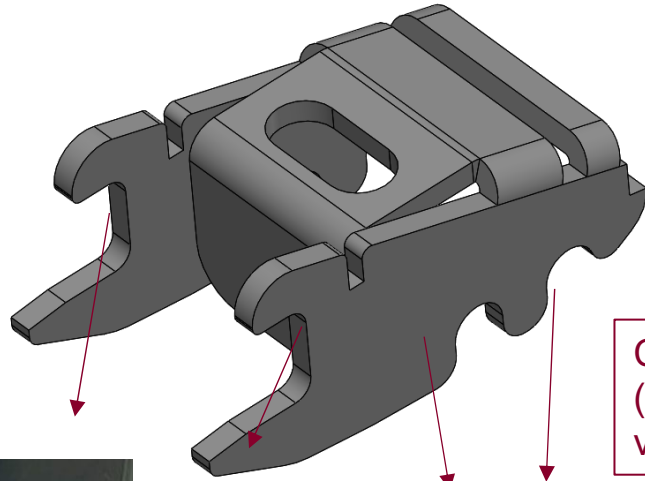
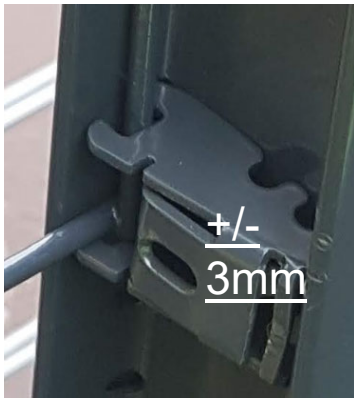
- Fixators are used to fix the panel to the side of the post.
- They are then clicked into place in the smaller perforated holes.
- To position the fixators the standard Bekafix(Ultra)/UniLox tong is needed

NOTE: For extra security fixators can be bolted together, through the post. UniLox fixators should always be used with **M6 x 60** mushroom head square neck bolts, washers and shear-off nuts.

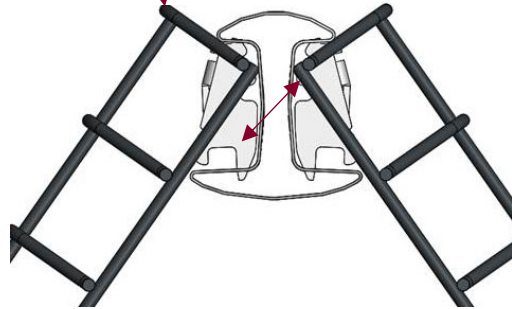
2. Components of the fencing systems

UniLox Fixators and tools

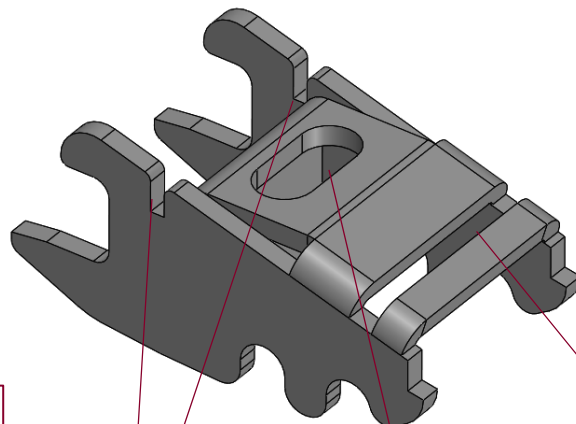
Standard cut outs for creating corners



Cut outs for panel (horizontal + vertical wire)



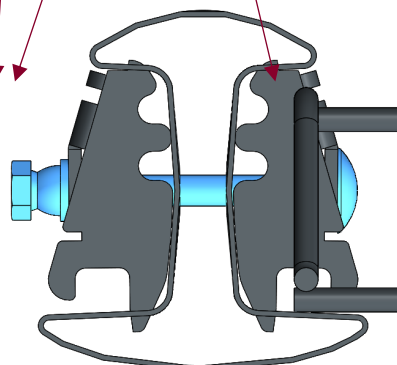
Cut outs for Screeno wave



Cut outs for Bekafix/UniLox tong



Hole for security bolt



3. Installation of the fencing systems

3.1 Foundations

- Firstly level the ground along the whole fence line as much as possible.
- Determine the centre-centre distance between posts. Use below table as a guideline for the different panel widths

Centre-Centre distance table

Post system:	Panel width		
	2000 mm	2500 mm	3000 mm
Centre-centre measurement UniLox Post for PO-PO-PA installation method	2040 mm	2540 mm	3040 mm
Tolerance on PO-PO-PA installation method	+/- 3mm		

- Align the fence line
- To determine the dimensions of the foundations it is advisable to consult a specialised engineer to evaluate wind loads and solar conditions and any other factors requiring specialist opinion (concrete quality directive B30)
- When installing in concrete, they need to be supported while the concrete sets.



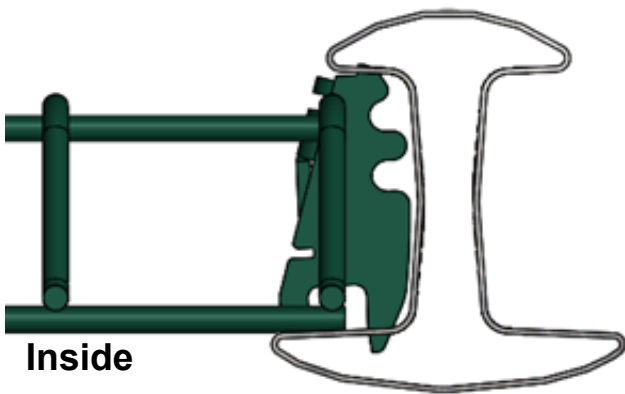
3. Installation of the fencing systems

3.2. Post orientation

IMPORTANT – the post's orientation changes! This depends on the type of panel which is being installed.

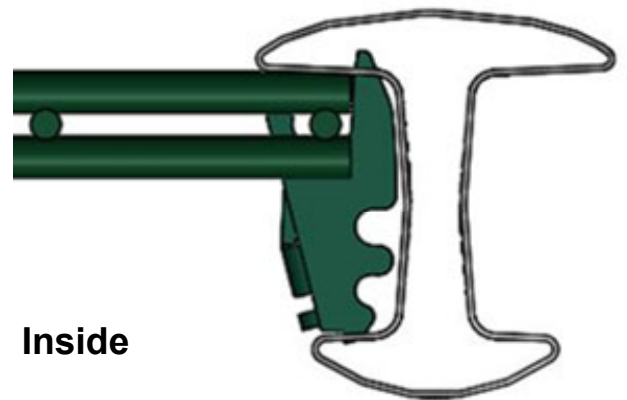
**Panels with 3D NOSE
(bent panels)**

Outside Perimeter

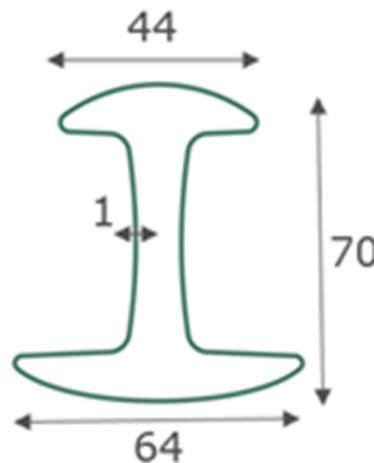


**Flat Panels
(without 3D nose)**

Outside Perimeter



The installation tong has to be used from the narrow side (44 mm) of the post.

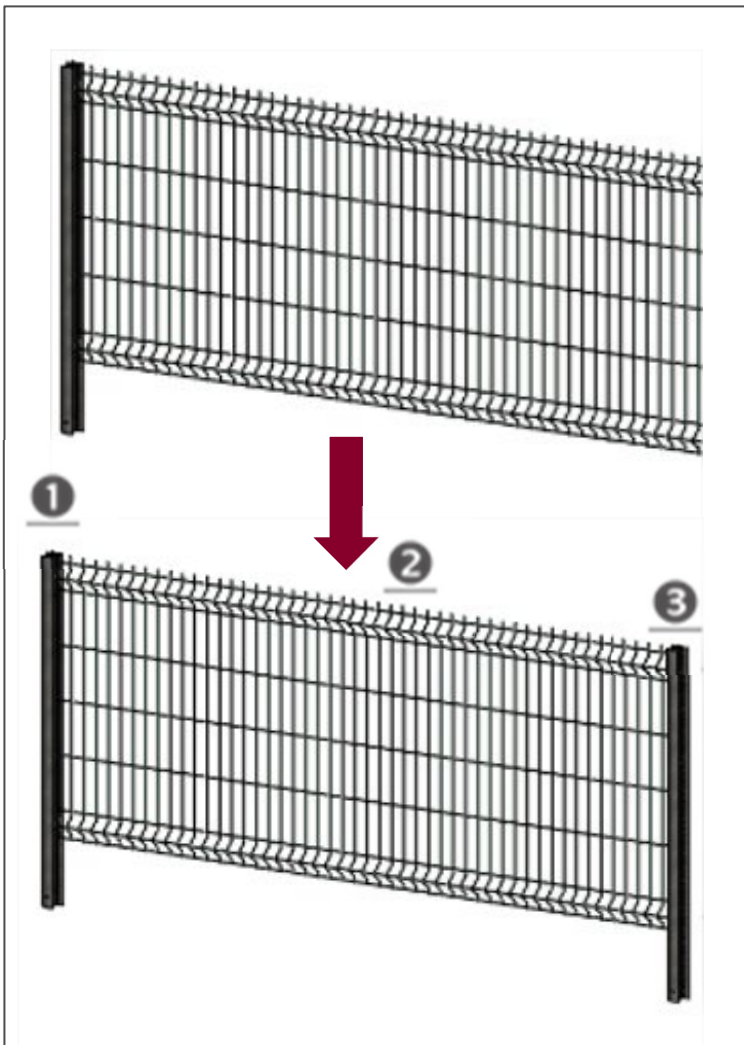


3. Installation of the fencing systems

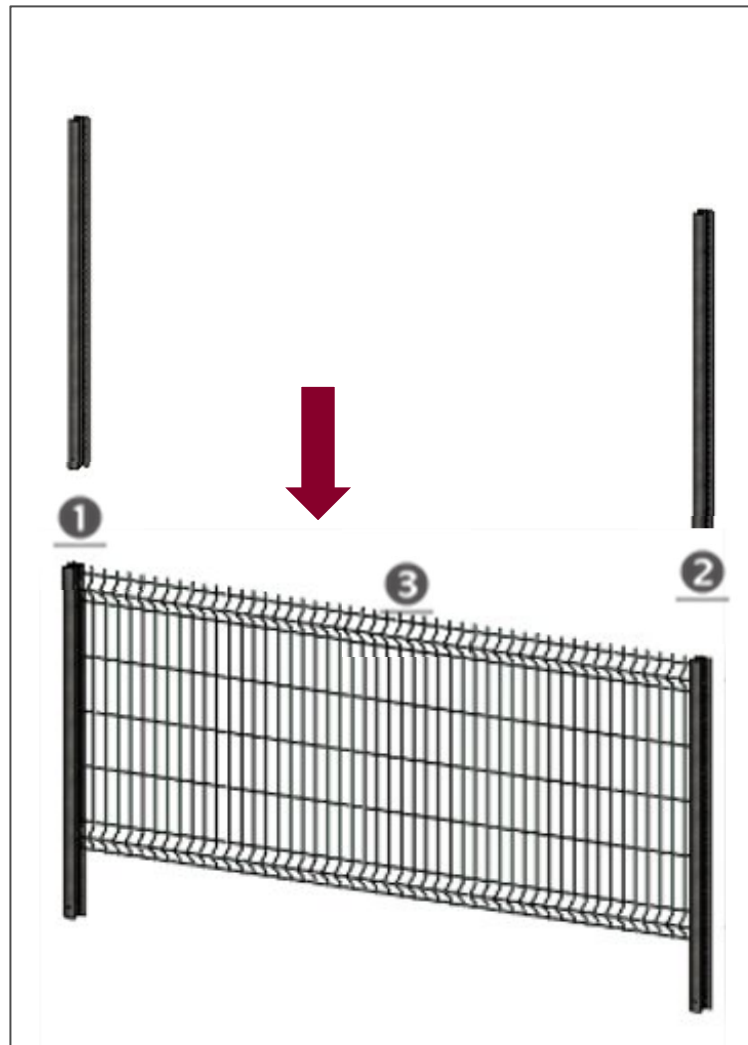
3.3. Installation methods

UniLox can be used in both installation methods:

PO-PA-PO = Post – Panel – Post
(the same as standard Bekafix(Ultra) / Izifix)



PO-PO-PA = Post – Post – Panel*

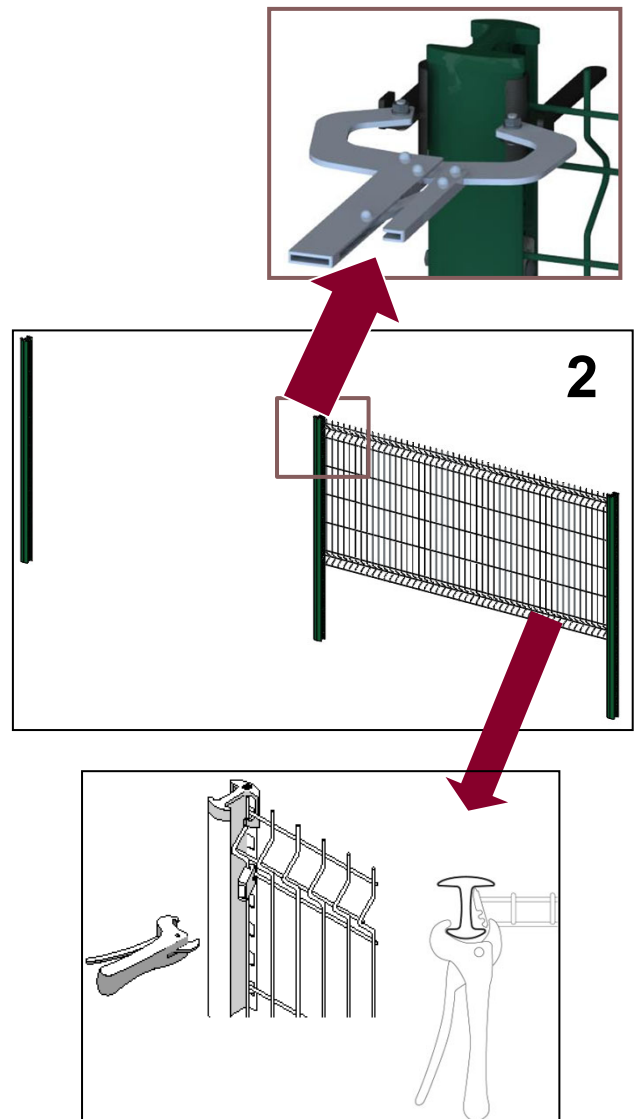
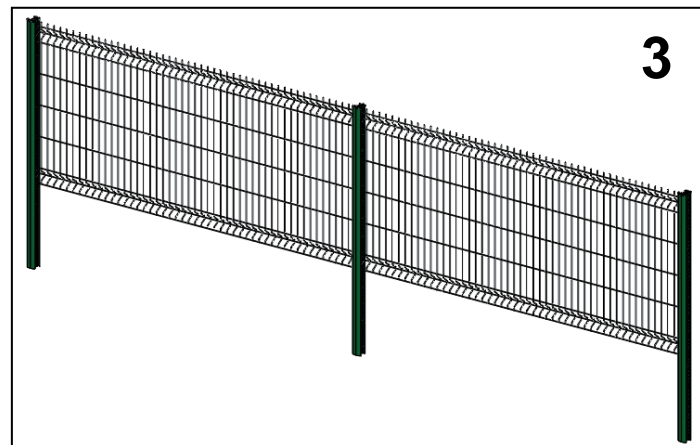
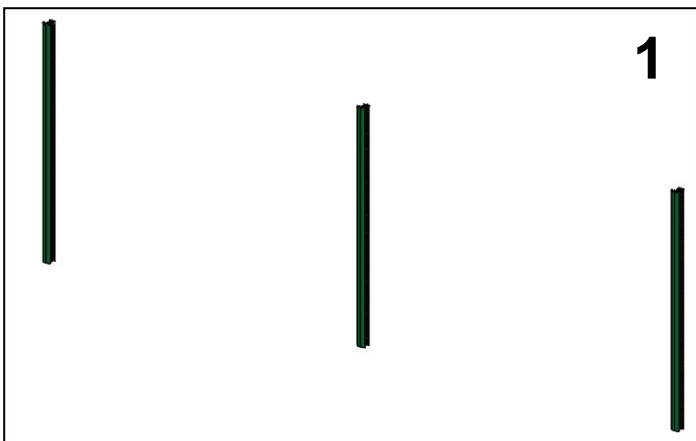


* FOR PO-PA-PO INSTALLATION METHOD PLEASE CHECK OTHER INSTALLATION MANUAL

3. Installation of the fencing systems

3.4. Post-Post-Panel Installation

- With this method accurate measurements between the posts are very important.
- Place all the posts in the concrete and wait until it sets
- Hook the panels into the hanging tong to ease the installation
- Attach the panels to the posts using the appropriate fixators with Bekafix/UniLox tong.

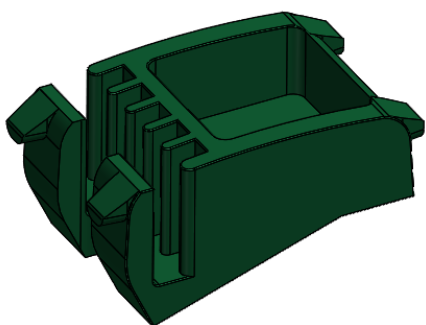


3. Installation of the fencing systems

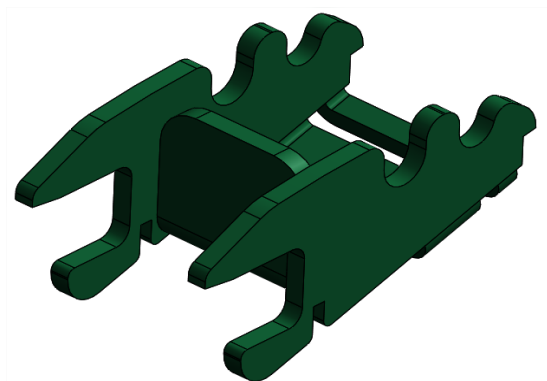
3.5. Material Quantities

NUMBER OF FIXATORS NEEDED PER POST

Panel height [mm]	UniLox post length on baseplate [mm]	UniLox post length for concrete [mm]	Number of fixators per intermediate / corner post	Number of fixators per end post
1030	1075	1475	4	2
1230	1275	1675	6	3
1430	1475	1975	6	3
1530	1575	1975	6	3
1630	1675	2175	6	3
1730	1775	2175	6	3
1830	*	2475	8	4
1930	1975	2475	8	4
2030	2075	2575	8	4



PA (Polyamide)



Metal

3. Installation of the fencing systems

3.6. Corners

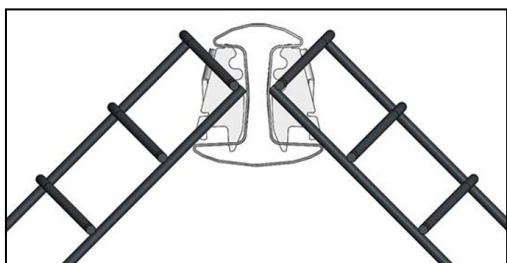
Profiled 3D panels / bent panels

A right or obtuse angle to 140 degrees can be made with one post. To make an acute angle 2 posts are needed.

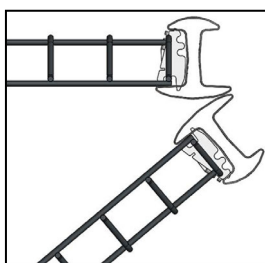
Flat panels

For all angles 2 posts are needed

RIGHT ANGLE



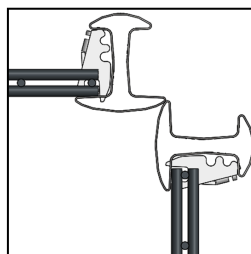
ACUTE ANGLE



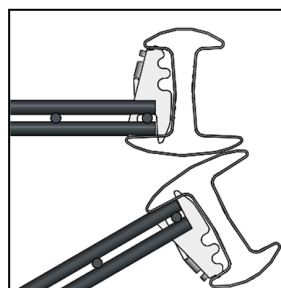
OBTUSE ANGLE



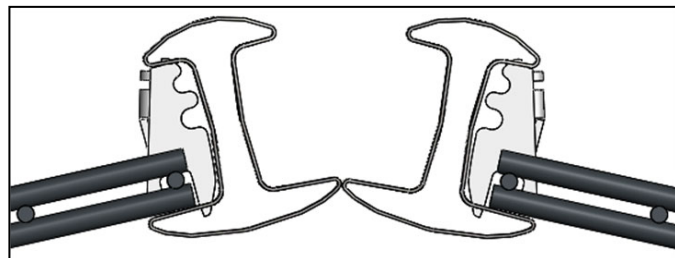
RIGHT ANGLE



ACUTE ANGLE



OBTUSE ANGLE



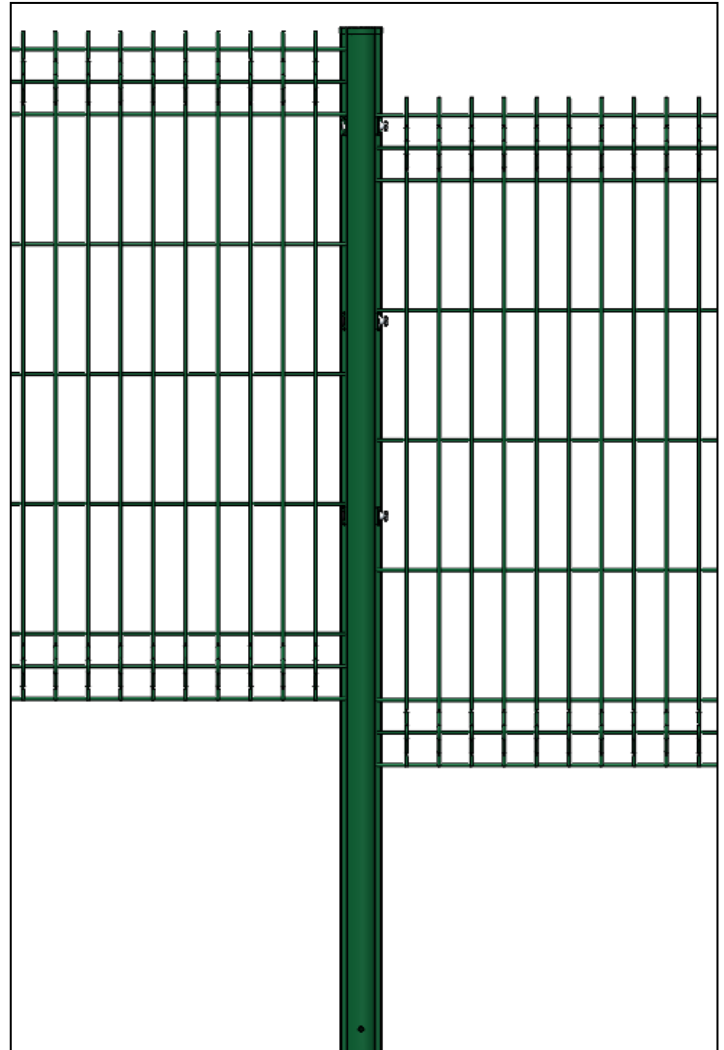
Place the corner post in line with the bisector of the right or obtuse angle required.

For an acute angle – place both posts into the same foundation. The panels are attached to the corner post only by means of metallic fixators (not PA fixators)

3. Installation of the fencing systems

3.7. Sloping

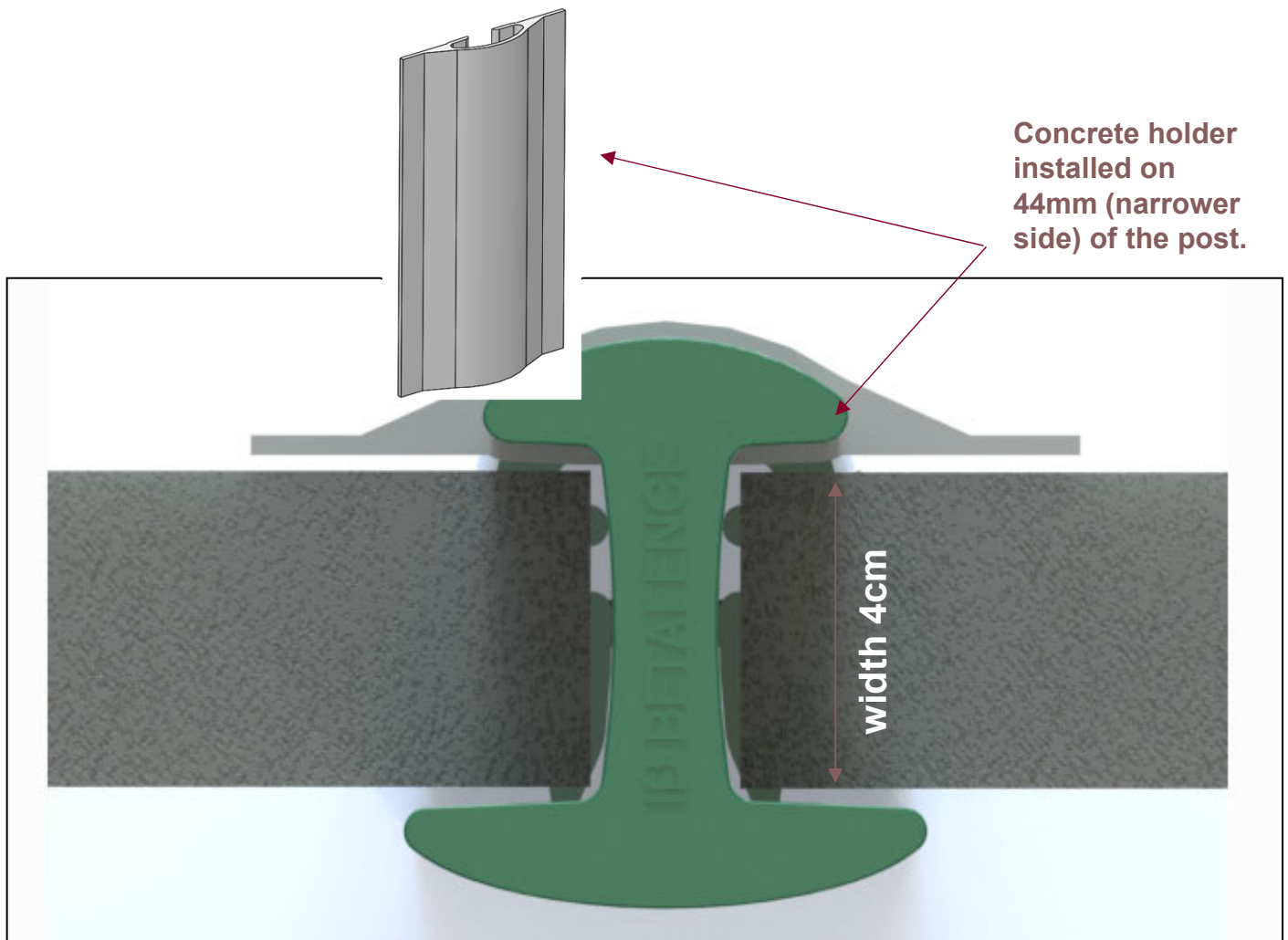
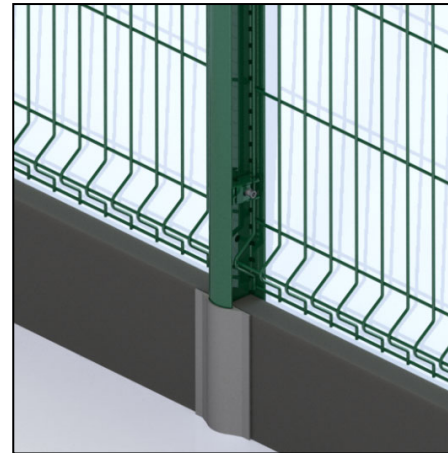
- **For effective stepping on a slope, it is important to plan and measure ahead of time!**
- Start at the highest point of the site and work “down” the slope.
- Follow the slope by fixing following panels lower on the post, as needed.
- **The pre-drilled holes will make this possible in minimum increments of 25 mm.**
- Longer posts might be needed on very steep slopes.



3. Installation of the fencing systems

3.8. Installation with concrete plates

- UniLox posts accommodate the usage of concrete slabs of 4cm width.
- A separate concrete slab holder provides extra stability on the narrow side of the post (44mm side).

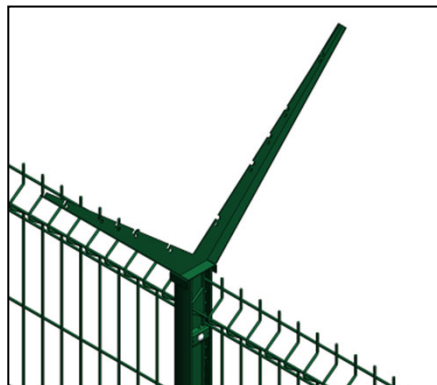


4. Optional extras

Bent arms

Allows for the installation of concertina & or barbed wire on top of the fence as an extra security measure (available in single or double configuration)

Attach the bent arm to the post with 2 x M8 x 20 bolts, washers & nuts through the pre-drilled holes (bolts not included)

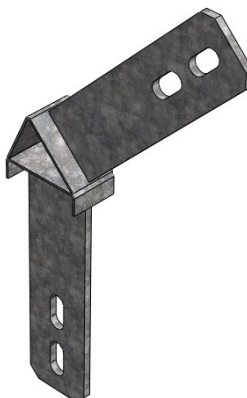


EXTENSION ARM CONNECTOR

To make a cranked fence under an angle of 45° (typically the “bent” panel is 630 mm high)

Maximum loading of this piece is 50 kg!

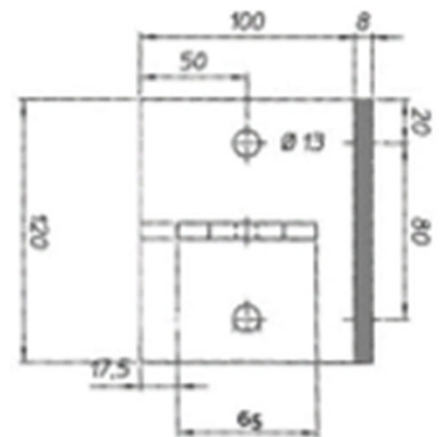
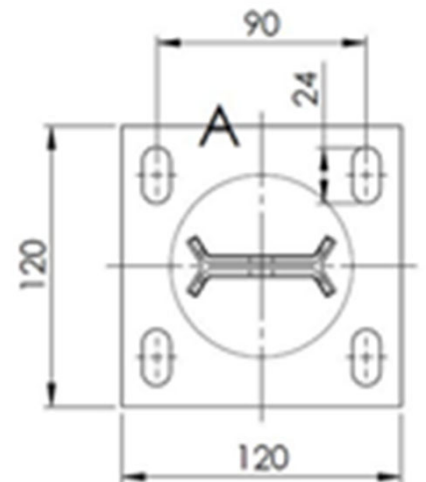
* In case of special requirements, it's advised to contact a project engineer for strength calculations.



4. Optional extras

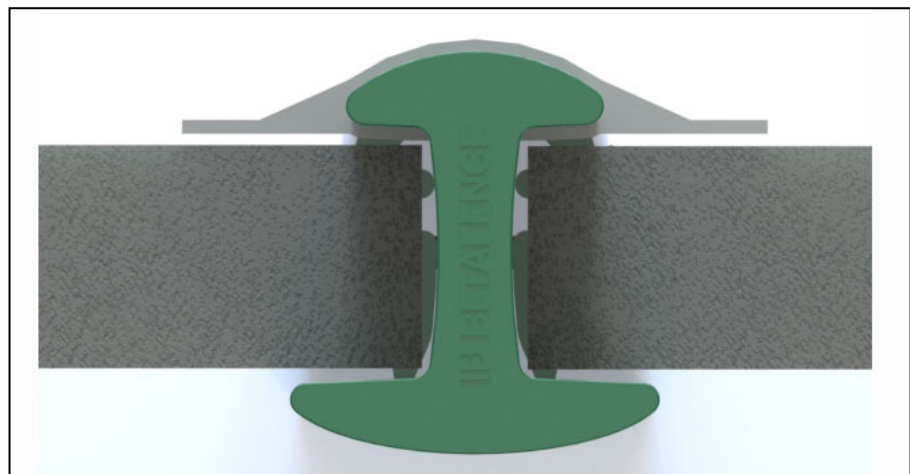
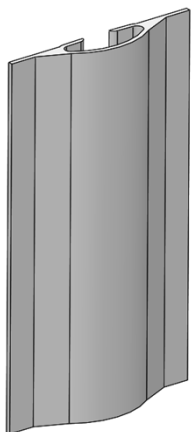
Separate footplate

- Allows for the installation of your post on footplate. The footplate is inserted in the posts. Holes to connect the footplate to the post with a bolt thru the post are foreseen in the post. (bolts not supplied with the footplate) Standard model or L shape model available



Concrete plate holder:

Allows for the installation of a concrete plate below your fencing system. (typically used to avoid erosion) Use the separate concrete plate holder on the “small side” of the post



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