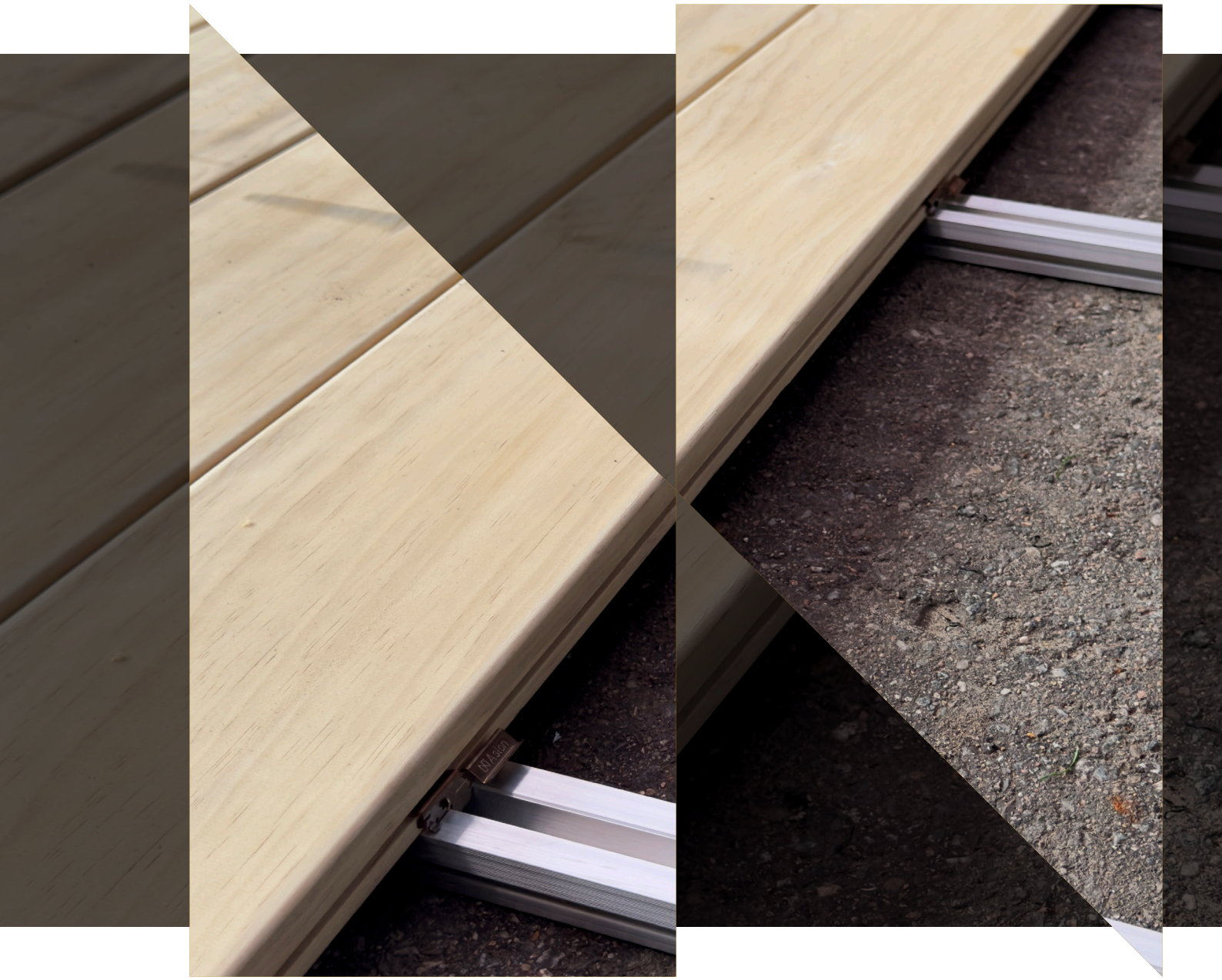
Aslon® Decking Substructure System



Aslon SYSTEMS

Every decking starts with a solid base

At Aslon Systems, we believe that the foundation of every deck starts with a solid base. As a producer and developer of substructure systems for decking boards, we stand for simplicity, efficiency and sustainability.

Sustainable
By using aluminium beams, moisture has no chance, making the system last many times longer than other substructures. Aluminium beams are lightweight, always straight and recyclable. With the smart functionality of the corresponding C-clip or D-bracket, a lot of time and effort is saved when laying a terrace.

Aslon Systems is based in The Netherlands and produces high-quality products in accordance with European standards.

The Aslon Decking Substructure System is a 100% European product.

accoya®

Since its launch in 2007, hundreds of builders and architects have chosen Accoya wood for applications such as cladding, terraces and decking in homes and buildings.

Accoya modified wood is a high-quality product. It is controlled and trusted not to visibly expand, shrink or warp. It is highly durable, withstands the test of any climate and is a highly rot-resistant wood species.

In addition, Accoya has a warranty of 50 years above ground and 25 years in ground or freshwater contact, ensuring the wood retains its quality for a long time.

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C-CLIP

Aslon Systems has developed a highly intelligent, patented decking clip that can be used in combination with all Aslon aluminium beams to quickly and easily install decking boards with a groove, without the need for screws.

The C-clip has been designed to be simple and smart and is installed in the aluminium beams by a twisting motion. Once installed, the clip can be inserted into the groove of the decking board using a convenient tool, eliminating the need for screwing. This combination of the C-clip and aluminium beam can save a significant amount of time during decking installation.

Due to the choice of material -RVS 1.4310 - AISI 301, and the shape of the C-clip ensures gripping force both on and within the decking boards as well as in the aluminium beams.

CLICK AND TWIST

Due to the C-clip's smart shape, a decking is easily installed.

SCREWLESS

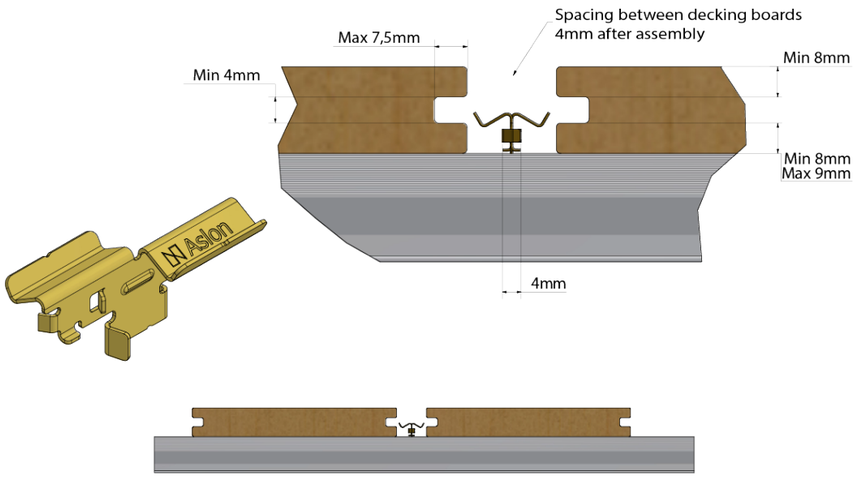
The C-clip's smart design allows easy installation of a decking by clamping on to the wood and beams.

FIRE CLASS

Due to the product composition of stainless steel, the clip has the correct fire class.

SPECIFICATIONS

Terrace boards should comply with the specifications below.

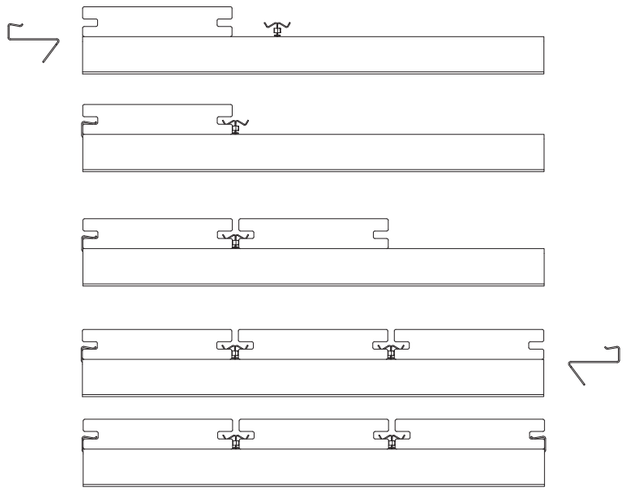


How does it work exactly? Watch this video:

INSTALLATION

The Aslon system is easy to install with only a few necessary tools.

1. Always start and end with a start-end clamp.
2. Position the first decking board against the start-end clamp.
3. Insert the C-clip into the aluminum beam in a matter of seconds.
4. Use the tool to push the C-clip firmly into the decking board.
5. Place the next decking board into the C-clip.
6. Repeat this process for the rest of the decking.



Watch the installation video.

TEST RESULTS

The Aslon systems components have undergone a corrosion test on composite wood samples and on the aluminum with metal C-clip.

PROCEDURE

1 Determination resistance corrosion artificial atmospheres

Resistance to Neutral Salt Spray (NSS) has been tested in accordance with ISO 9227 NSS.

General data

Apparatus number	COT S008
Type of water	Demineralised water (< 1 µS)
Salt	Sodium chloride (NaCl) p.a.
Test temperature	35 ± 2 ˚C
Collected salt solution	1.0 – 2.0 ml/hour/80 cm2
pH of the collected salt solution	6.5 – 7.2
Salt concentration of the collected solution	50 ± 5 g/l
Exposition angle	approx. 20 ˚ from the vertical
Test duration	720 hours

Immediately after exposure, the samples were visual evaluated for defects. Photos have been taken before, after and halfway through the test.

2 Determination of the resistance to Humidity–CH test

Resistance to water condensation has been tested in accordance with ISO 6270-2.

General data

Apparatus	Cleveland condensation tester
Temperature of the air space	40 ± 2 ˚C
Type of water	Demineralised water (< 1 µS)
Test duration	480 hours

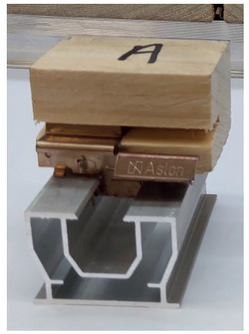
Immediately after the test, the samples were visually inspected for defects. Photos were taken before, after and halfway through the test.

CONCLUSION

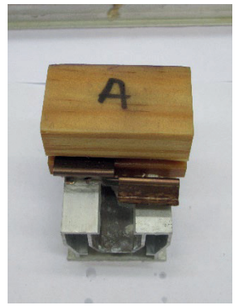
The tested combination of Aslon Systems products and Accoya products has been approved by both parties and can be used on decking boards.

The photos show an overview of the received samples before and after exposure.

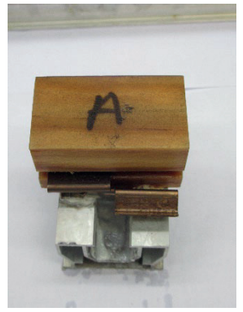
Before testing



After NSS test



After condensation test



D-BRACKET

Aslon Systems has developed a patented D-bracket that can be used universally in combination with all Aslon aluminium beams to mount grooved decking very quickly and easily.

After installing the first decking section, the D-bracket can easily be placed on the aluminium. Make sure that the long side of the hammer head nut is in the lengthwise direction of the aluminium beam. The D-bracket remains firmly in place due to the clamping feet. Then the D-bracket can be slid into the groove of the decking, where the groove should have a minimum height of 3.5 mm and a depth of 8 mm. This process is repeated for the following decking boards.

The screws can now be easily tightened between the boards using a special Torx bit. Use the slip setting on the machine to avoid over-tightening the screws.

FAST ASSEMBLY

The D-bracket is easily and quickly placed on the aluminium beam, speeding up assembly considerably.

ADJUSTABLE

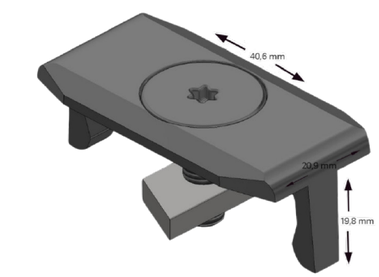
The D-bracket is height-adjustable, making it universally compatible with different decking parts and allowing flexible mounting.

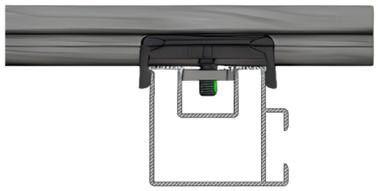
DEMONTABLE

The D-bracket can be tightened and loosened, allowing boards to be corrected and/or replaced.

SPECIFICATIONS

The D-bracket with specifications on the system.



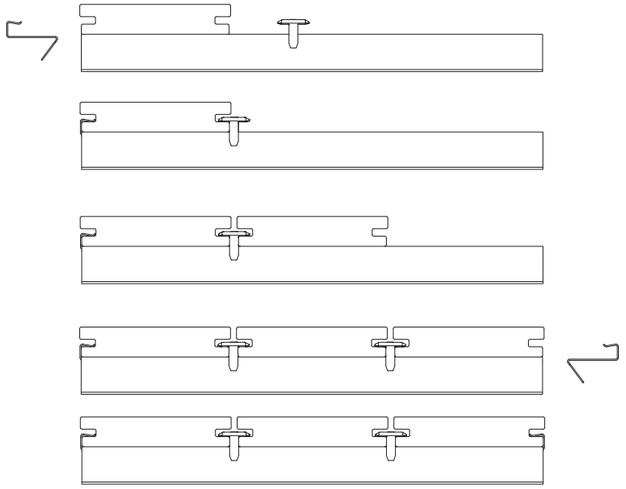


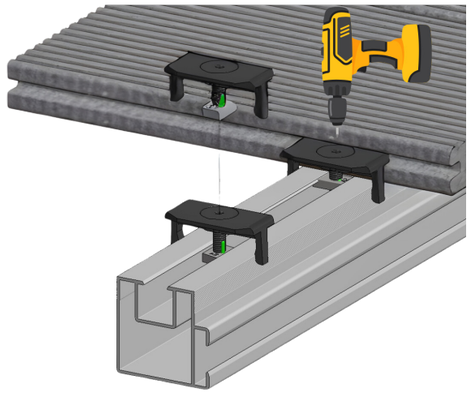
How does it work exactly? Watch this video:

INSTALLATION

The Aslon system is easy to install with only a few necessary tools.

1. Always start and end with a start-/end clip.
2. Position the first decking board against the start-end clamp.
3. Place the D-bracket on the aluminium beam. The D-bracket remains in place due to the clamping feet.
4. Push the D-bracket into the groove of the decking board.
5. Place the next decking board against the D-bracket.
6. Repeat this process for the rest of the decking.
7. Finally, tighten the D-bracket with an electric screwdriver, use the slip setting on the machine for this.





Watch the installation video.

TEST RESULTS

The Aslon systems components have undergone a corrosion test on composite wood samples and on the aluminum with D-bracket.

PROCEDURE

1. Material and methods
The Aslon Systems components were mounted on pieces of Accoya wood. The different wood-metal samples have been placed separately in a glass cylinder (diameter 10 cm, height 24 cm) containing 300 ml demi-water approximately 5 cm above the water surface. The glass cylinder has been covered with a plastic bag and elastic band and was placed in an oven at 40 °C. The parts were visually evaluated after 21 days (3 weeks) of exposure.

2. Results
The images show the results of the corrosion tests for Aslon Systems components mounted on Accoya wood. After 3 weeks of exposure to the humid environment at elevated temperature (40°C), metal parts of Aslon Systems showed no visible signs of corrosion.

3. Conclusion
Exposure to elevated temperature (40°C) and high humidity combined with Accoya showed no corrosion with the Aslon Systems components.

Before testing

After testing

ALUMINIUM BEAMS

Aslon Systems has developed the decking Substructure System especially for easy and very quick installation of decking boards which are provided with the correct groove.

Using our system saves at least 50% of assembly time compared to other systems. Aluminium beams are stronger and lighter than composite, plastic or wooden beams. The beams are also always straight.

Aslon Systems has developed three different types of aluminium beams, making it possible to achieve different heights and spans.

The Aslon Decking Substructure System is the key innovation for efficient, sustainable and cost-conscious installation!

100% RECYCLABLE

FAST ASSEMBLY

Few operations are required, saving you 50% of the time.

SCREWLESS

Thanks to the smart system, a terrace can be easily installed without using screws.

FIRE CLASS

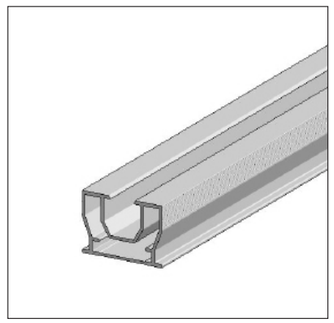
Due to the product composition, the system has the correct fire class.

STRONG AND LIGHT

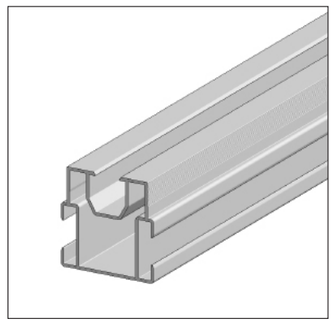
Aluminium beams are stronger, lighter and always straight in contrast to other substructure systems.

THE VARIETY IN BEAMS

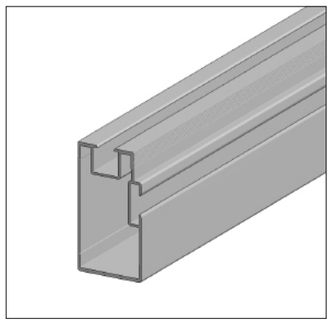
Aluminium beam 35x25 mm



Aluminium beam 40x40 mm



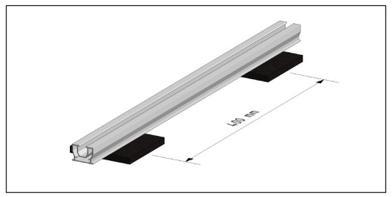
Aluminium beam 40x75 mm



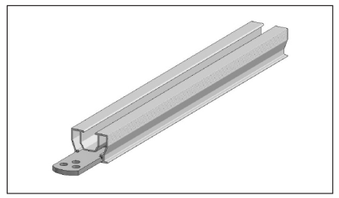
Connecting the aluminium beams

Aluminium beams are delivered with matching connecting pieces. Each type of aluminium beam has its own connecting piece. These connecting pieces create a strong and stable foundation for a deck.

Aluminium beam 35 x 25 mm

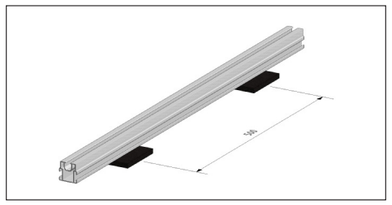


Connecting piece 35 x 25 mm

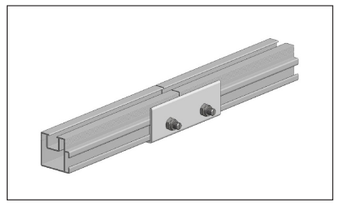


The aluminium beams can be connected with a connecting piece. Slide this at the underside into the chamber of the beam until it cannot go further. Now slide the next beam over the connecting piece.

Aluminium beam 40 x 40 mm

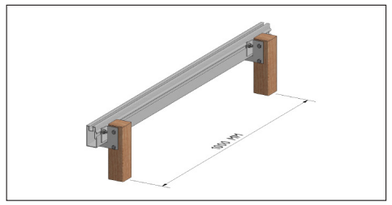


Connecting piece 40 x 40 mm

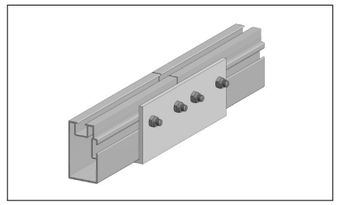


The aluminium beams can be connected with a connecting piece.

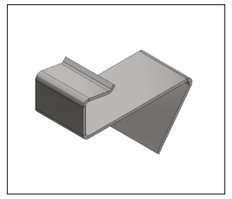
Aluminium beam 40 x 75 mm

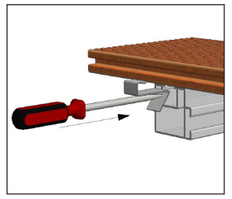


Connecting piece 40 x 75 mm



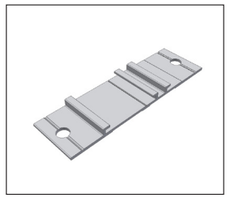
The aluminium beams can be connected with a connecting piece.

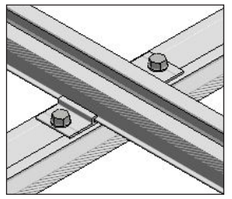




Start-end clamp

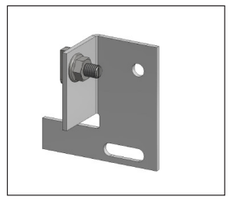
When starting to install a terrace, the first thing to do is to assemble a start-end clamp. The start-end clamp can be pushed into the aluminium beam with a flat screwdriver.

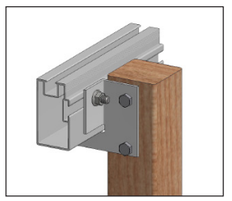




Flat mounting plate

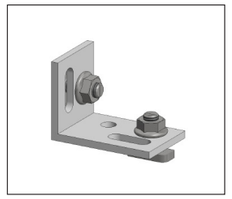
With the floor mounting plate, the aluminium beams can be fixed to for example a subfloor. It is also possible to make a cross connection.

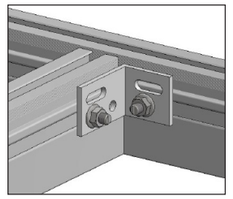




Mounting plate

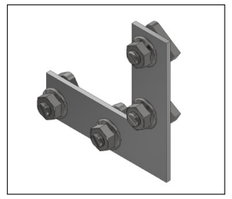
The mounting plate is used to attach aluminium beams to (Accoya) wood posts. When the (Accoya) wood posts are at the right height in the ground, the mounting plate is fixed to the posts with two coach bolts or wood screw bolts.

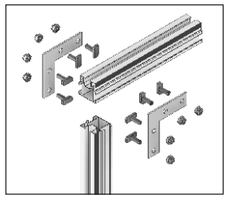




Multi-angle

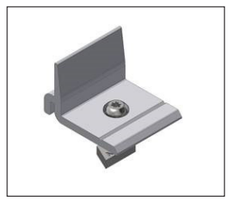
Use the multi-angle to fix aluminium beams on concrete surfaces or (Accoya) wood structures or picket posts. Fasten the multi-angle with the supplied hammerhead bolt and nut. Never use the aluminium beams as a floating, load-bearing structure.





Right-angle

With the right-angle it is very easy to make a stepladder or finish a raised border. The right-angle bracket can only be used in combination with the 40 x 40 and 40 x 75 aluminium beams.



Corner bracket

The corner bracket is used to easily make cross connections. Ideal for making floating constructions. The corner bracket clamps onto the aluminium beam, this creates a solid frame.

SCREW AND LEVEL PAD

Aslon Systems has developed a highly innovative screw and level pad to enable sub-constructions of terrace floors to be set at the right height quickly and easily.

The screw and level pad can be raised or lowered by using a screwdriver with the right bit or a loose Allen key while the aluminium beams are placed in the srew and level pad. This works much faster than floor supports that have to be adjusted manually to the correct height. The screw and level pad can be used in combination with the Aslon decking substructure system and results in an enormous time savings on installation of the system.

The screw and level pad is made of fiberglass hardened plastic and consists of the following three elements;
- A base element with screw thread on the outside and a recess for inserting an aluminium beam.
- A ring that is screwed on to the base element.
- A gear with which the ring can be turned up or down.

The internal height adjustment of the ring on which the beam rests is 0-30 mm. With a 40 mm raiser, the screw and level pad can be raised, allowing a wide variety of height differences to be easily achieved.

These joists pods can be placed on top of each other in order to achieve different heights. The screw and level pad has a free space of 46 mm between the sides, the maximum width of the aluminium beam that can be used is 45 mm.

FAST AND ACCURATE

Very fast and accurate height adjustment of substructures and floors using a screwdriver or Allen key.

ADJUSTABLE

Flexibly height-adjustable screw and level pad with additonal raiser for more variations in heights.

VERSATILE

Subsidence can be easily corrected, ensuring a long-term stable surface.

LOAD CAPACITY

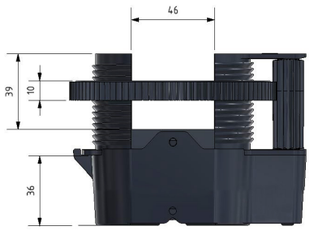
The screw and level pad is loadable up to 90kg due to material and shape choices.

Watch the video to see how it works.

Screw and level pad & Fillingplate

Joist pod for screw and level pad

Dimensions



Aslon SYSTEMS

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