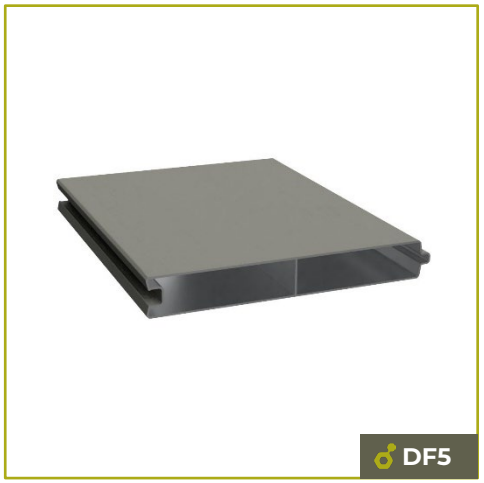








duofuse®
INVITING OUTDOOR SPACES

INSTALLATION INSTRUCTIONS

Duofuse Slim Line

Horizontal installation
Fence with aluminium posts

INST-DF-1001 · Version 0.2 · 26/10/2026 · EN
www.duofuse.com · Produced by Plastivan

General information

duofuse
INVITING OUTDOOR SPACES

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General information

Before you start the installation, we recommend that you read these installation instructions carefully. The latest version is always available on the website (https://www.duofuse.com). Questions can be sent to info@duofuse.com. Plastivan accepts no liability if these instructions are not followed.

INSTALLATION

Do not install the fence at temperatures below 5 °C. Allow the profiles to acclimatise for at least 24 hours before processing. Remove the packaging, if present.

SAFETY

The wood composite boards do not provide a load-bearing structure. Duofuse fences must not be used as a balustrade or as a boundary for decks raised more than 200 mm above ground level.

PERSONAL PROTECTIVE EQUIPMENT

Make sure you wear the appropriate personal protective equipment, such as safety glasses, hearing protection, gloves, safety shoes and other equipment where applicable.

PROCESSING DUOFUSE® PRODUCTS

Duofuse® products can be processed with conventional tools. Drill at low speed and high torque. Collect offcuts, sawdust and waste carefully, prevent spillage or dispersal, and dispose of it in accordance with the applicable environmental regulations. Place protective barriers if necessary to prevent contamination of soil and water.

APPEARANCE OF DUOFUSE® PRODUCTS

After the first rain showers, run marks or rings may appear on the wood composite. They are caused by lignin being released from the wood and are temporary. Rinsing with a garden hose removes them for the time being, and over time they disappear completely.

Colour and brushing may vary between production runs and are not contractually binding. We therefore advise against mixing boards from different production batches. The production date is printed on the top of each board.

DAMAGE

In the event of damage, contact the distributor or installer who supplied or installed the fence.

EXPANSION

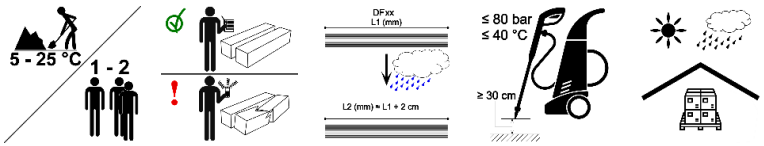
Wood composite is subject to expansion when exposed to weather conditions such as changes in temperature and humidity. For a board 2 metres long, the total expansion can be up to 20 mm. Allow for this natural expansion during installation to avoid stress.

STORAGE

Stack Duofuse® products flat and protected from rain, sunlight and other external factors.

MAINTENANCE

For normal maintenance, a brush or a pressure washer (max. 80 bar, min. 30 cm distance) is sufficient. Remove grease and oil stains with a household degreaser. Stubborn dirt, such as organic stains, green deposits or moss, is best treated with diluted bleach (25% bleach at 10° and 75% water). Do NOT use solvents. Remove stains immediately so that they do not dry or soak into the material. More information on maintenance is available at: https://www.duofuse.com



All images show the DF7, but the installation method does not apply to this board only, so read the explanations carefully.

Installation overview



ALUMINIUM SUPPORT
DF1SUPA (incl. screws)

ALUMINIUM POST CAP
DF1CA8.5

ALUMINIUM TOP PROFILE
DF1UA28 (1.80 m | 2.00 m)

ALUMINIUM U-PROFILE 90° CORNER
DF1UA2840 (2.10 m)

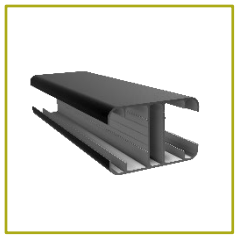
ALUMINIUM BOTTOM PROFILE
DF1TA28 (1.80 m | 2.00 m)

TONGUE AND GROOVE BOARD
DF1 / DF5 / DF6 / DF7 (1.80 m | 2.00 m)

ALUMINIUM POST
DF1PA85 (2.10 m | 2.70 m | 3.00 m)
[Maximum height above ground = 2.10 m]

Required components

Standard installation



DF1PA85
Aluminium post



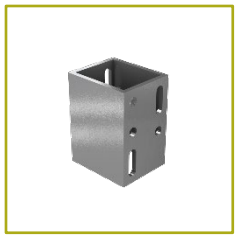
DF1CA8.5
Aluminium post cap



DF1UA28
Aluminium top profile

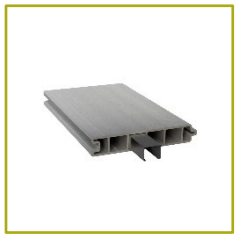


DF1TA28
Aluminium bottom profile

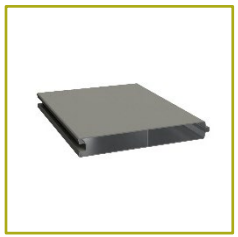


DF1SUPA
Aluminium support

Available boards



DF1B150
Tongue and groove WPC



DF5BA200
Tongue and groove Aluminium



DF6BP250
Tongue and groove PVC

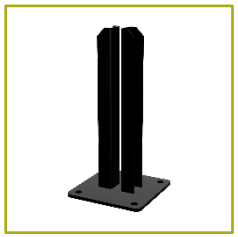


DF7B200
Tongue and groove WPC

Optional

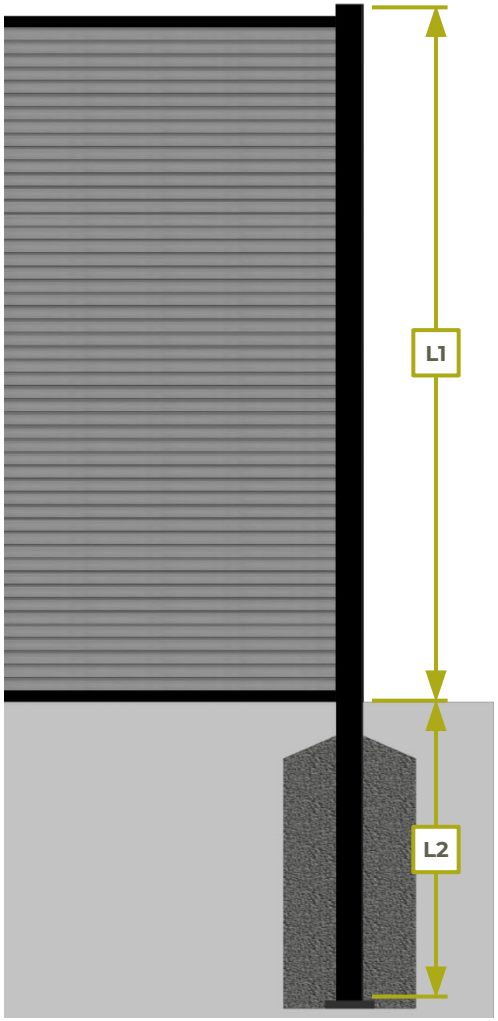


DF1UA2840
Aluminium U-profile 90° corner



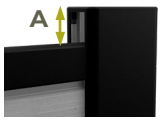
DFPHA30
Post holder

Length of the posts



LENGTH ABOVE GROUND LEVEL (L1)

L1 = expansion (A) + 35 mm + (number of boards × height) + 35 mm



Expansion (A)
see table per board



Top profile (1×)
DF1UA28
Height: 35 mm



Bottom profile (1×)
DF1TA28
Height: 35 mm

PER BOARD

BOARD	EXPANSION (A)	HEIGHT
DF1B150	50 mm	150 mm
DF5BA200	30 mm	200 mm
DF6BP250	30 mm	250 mm
DF7B200	50 mm	200 mm

LENGTH BELOW GROUND LEVEL (L2)

L1 (ABOVE GROUND)	L2
> 1500 mm	800 mm
1200 – 1500 mm	700 mm
≤ 1200 mm	600 mm

Note: if the boards can rest directly on a concrete gravel board or on a solid base, the bottom profile is not mandatory and you do not need to include those 35 mm. However, we recommend using the bottom profile as standard. When using a concrete gravel board, make sure that the height of the part protruding above ground level is included in the calculation of the post length above ground.

Distance between the posts

When installing the posts, it is important to space them correctly so that the boards have sufficient room for expansion.

EXAMPLE: BOARD LENGTH (L) = 2000 mm

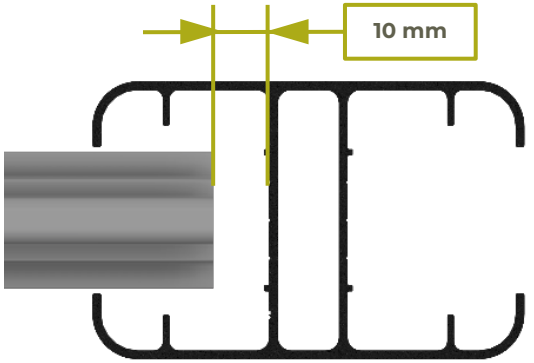
Distance between the posts (A)

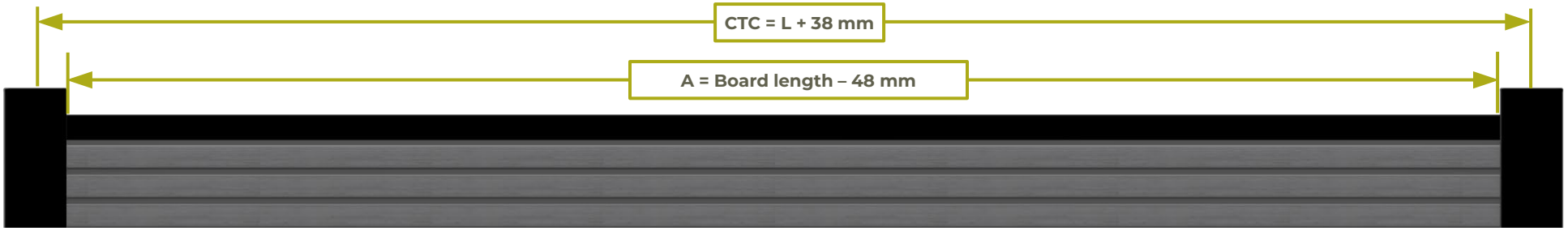
= Board length (L) – 48 mm
= 2000 mm – 48 mm
= 1952 mm

Centre-to-centre distance of posts (CTC)

= Board length (L) + 38 mm
= 2000 mm + 38 mm
= 2038 mm

Expansion gap





Top and bottom profile

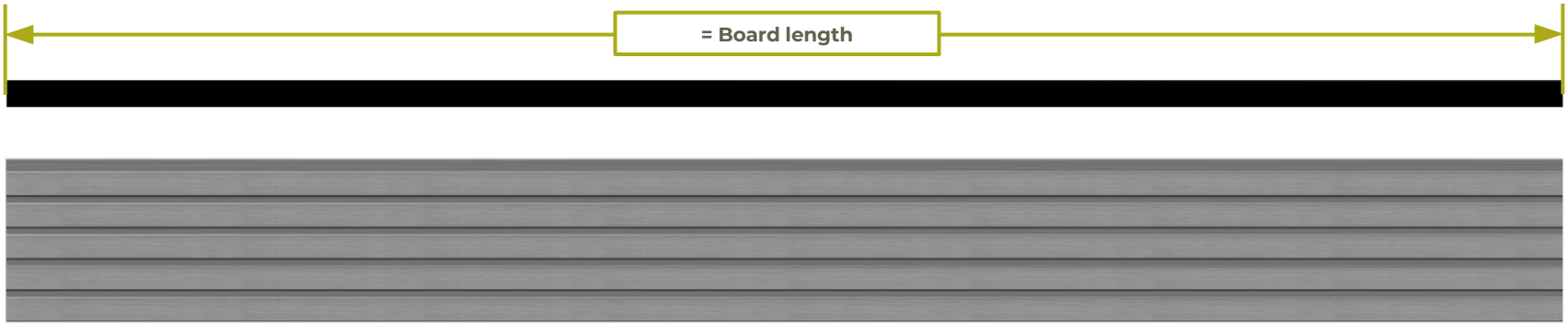
The length of the top and bottom profile is determined by the length of the board. They are available as standard in lengths of 1800 mm and 2000 mm.



DF1UA28
Aluminium top profile

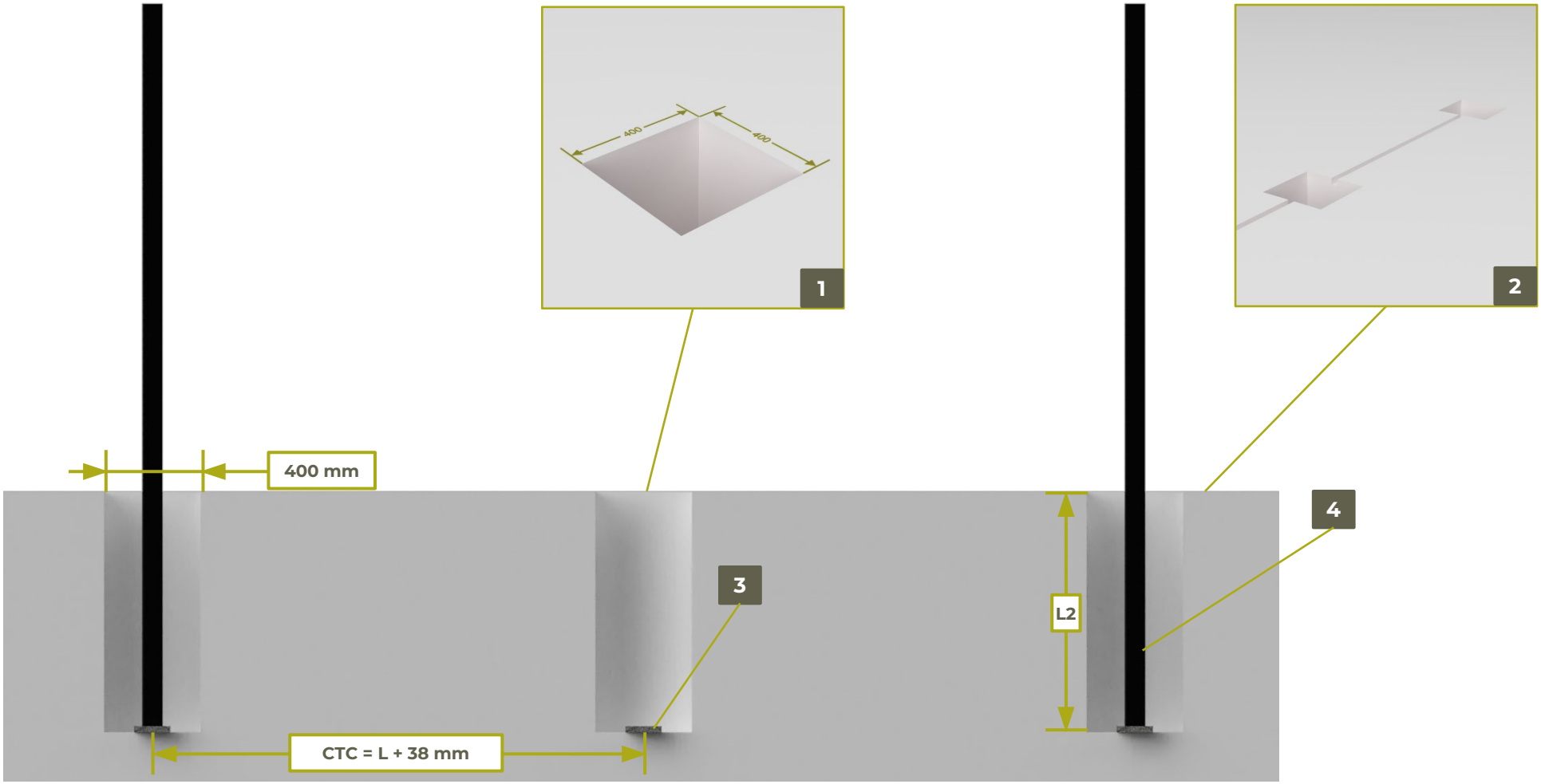


DF1TA28
Aluminium bottom profile



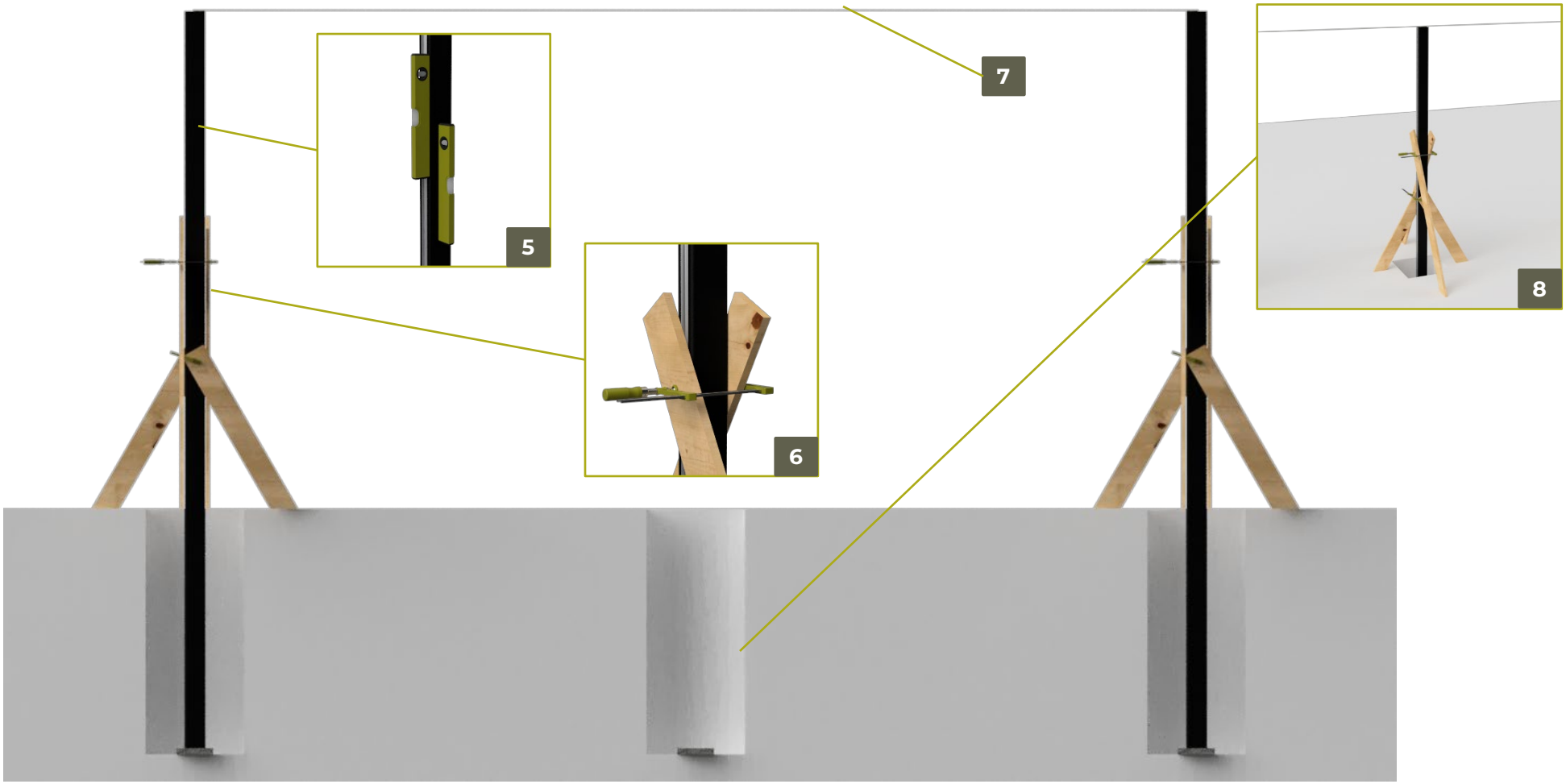
Installing the posts in the ground

1 Dig holes of 400 × 400 mm at the correct centre-to-centre distance (CTC) according to the board length (L).
2 Optional: dig a trench between the holes for a concrete gravel board or aluminium profile (DF1TA28).
3 Place a tile or stone at the bottom to prevent the post from sinking.
4 Check the depth: it must correspond to the post length (L2) plus the tile (if used).



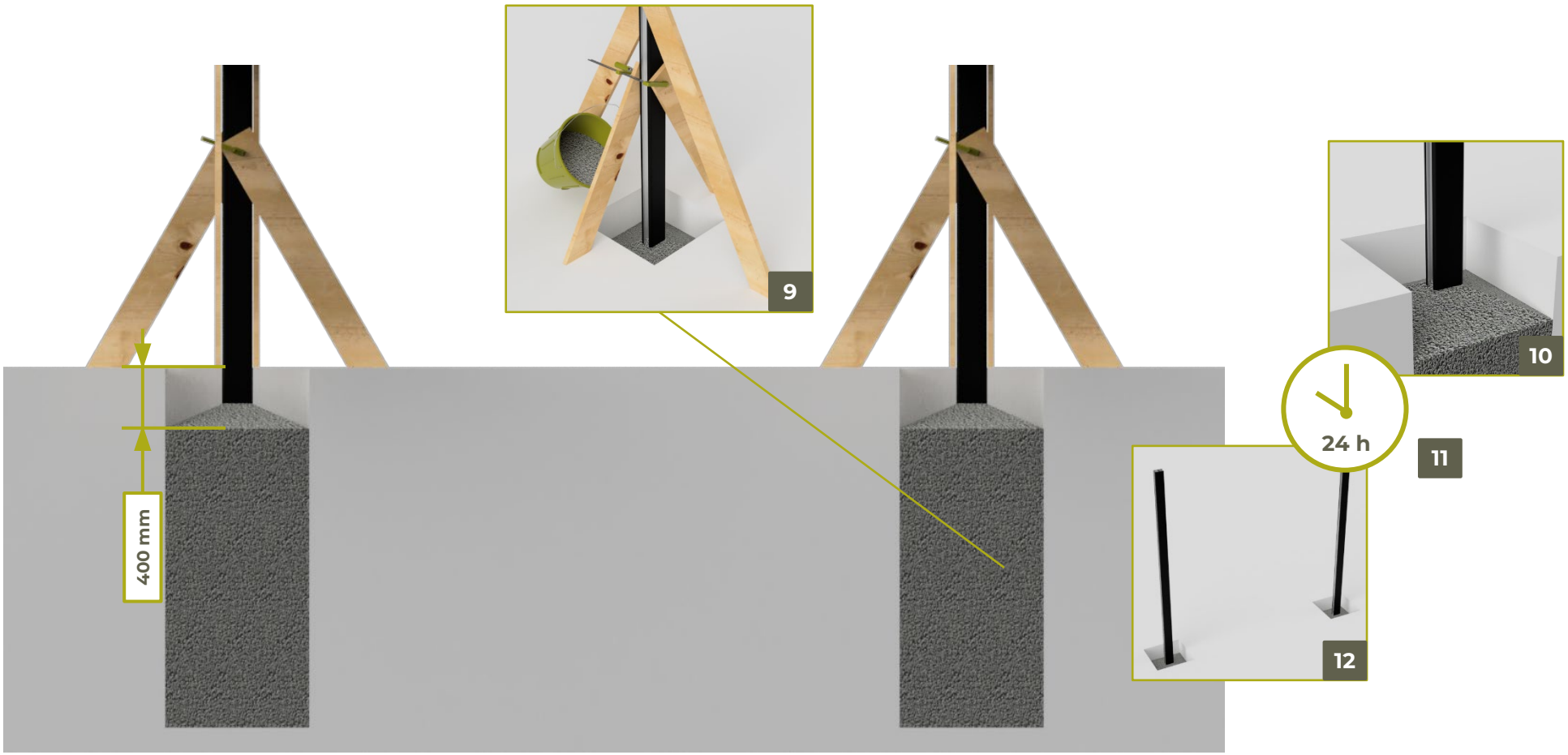
Installing the posts in the ground

Start by placing the first and last post in the row.
5-6 Check that they are plumb and secure them temporarily.
7 Stretch a string line between the tops to ensure alignment and height.
8 Place the intermediate posts, check that they are plumb and also secure them temporarily.



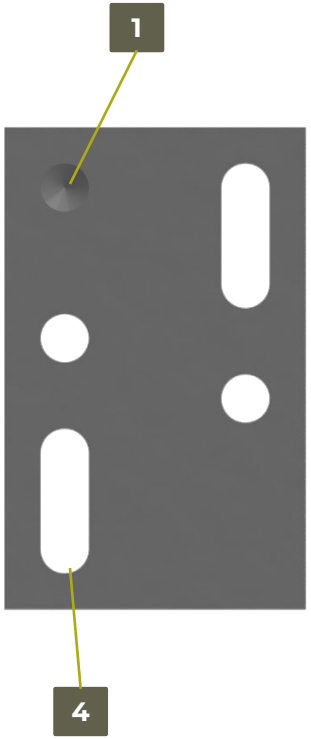
Installing the posts in the ground

9 Fill at least 2/3 of the holes with (rapid-set) concrete, up to a maximum of 100 mm below the edge. Check that the posts are still plumb.
10 Slope the edges to prevent water accumulation and cracks in the concrete.
11 Wait at least 24 hours before installing the boards; for rapid-set concrete, refer to the packaging.
12 The result is a firmly anchored structure.



Installing the bottom profile

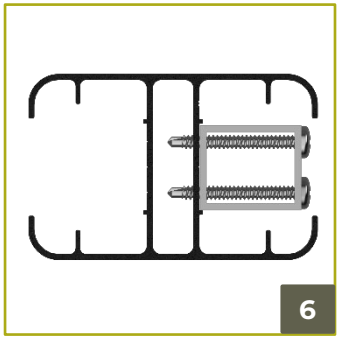
1 Make sure the marking at the top left is always visible when installing the aluminium support block, so that the screws cannot collide with each other.
2 Position the block at the correct height (level with the ground).
3-4 Mark and drill the holes for the adjustment screws in the centre of the slotted holes. Use the block as a template.
5 Screw the block in place.
6 Example of the position of the screws in the post.
7 Place the bottom profile (mandatory for DF1, DF6 and DF7), check that it is level and adjust the block if necessary.
8 Now secure the block with locking screws (use a low torque setting).
9 The bottom profile is now ready for installing the boards.















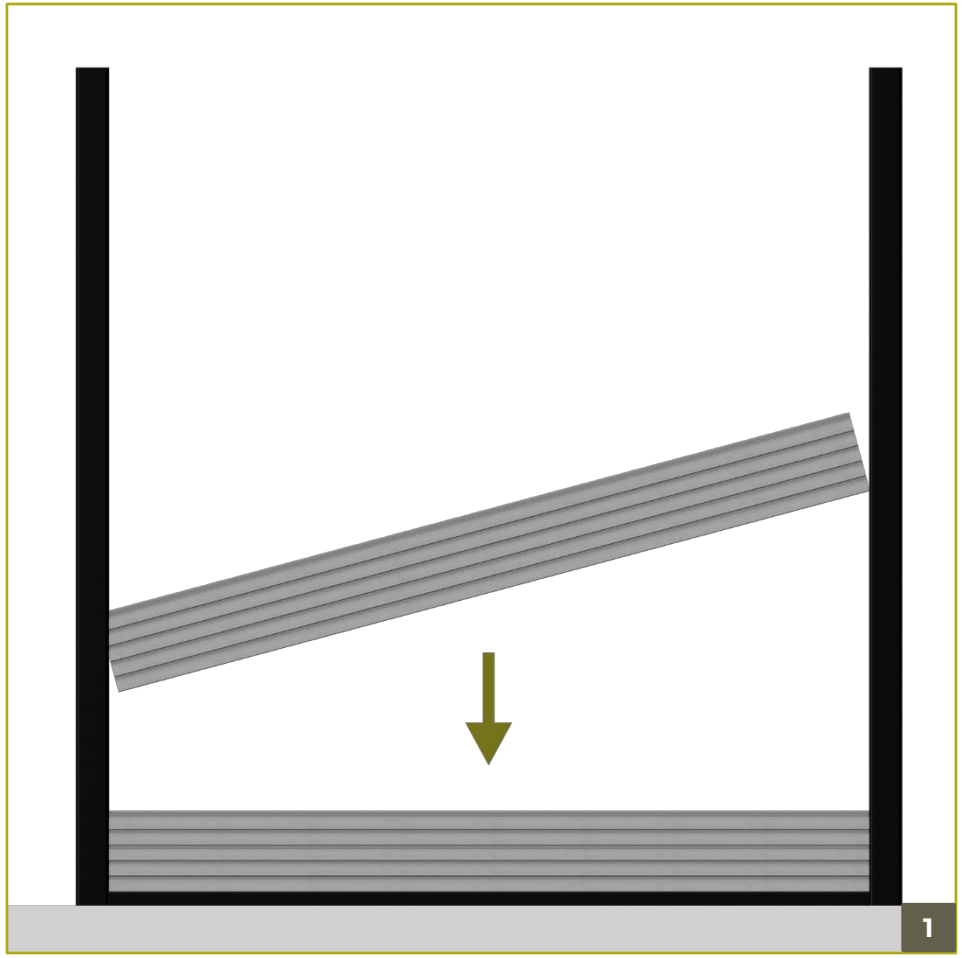


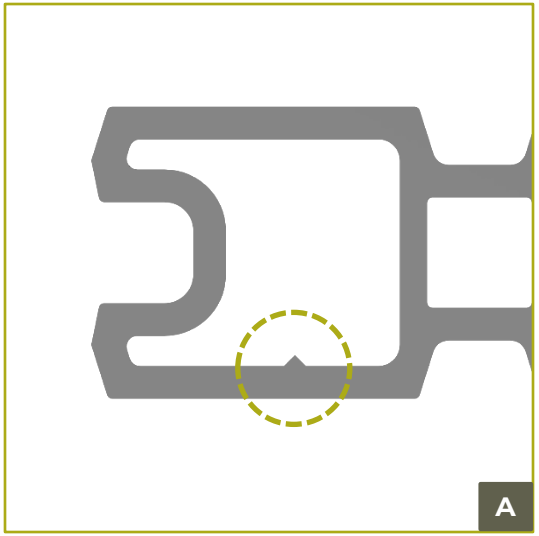
Installing the boards

If necessary, cut the boards to size.

1 Insert the boards one by one between the posts.

A If the boards have a marking, make sure they always face the same direction to avoid colour differences. The marking (a small triangle) is located on the inside of the board, in one of the openings. It can easily be felt or checked with your finger.

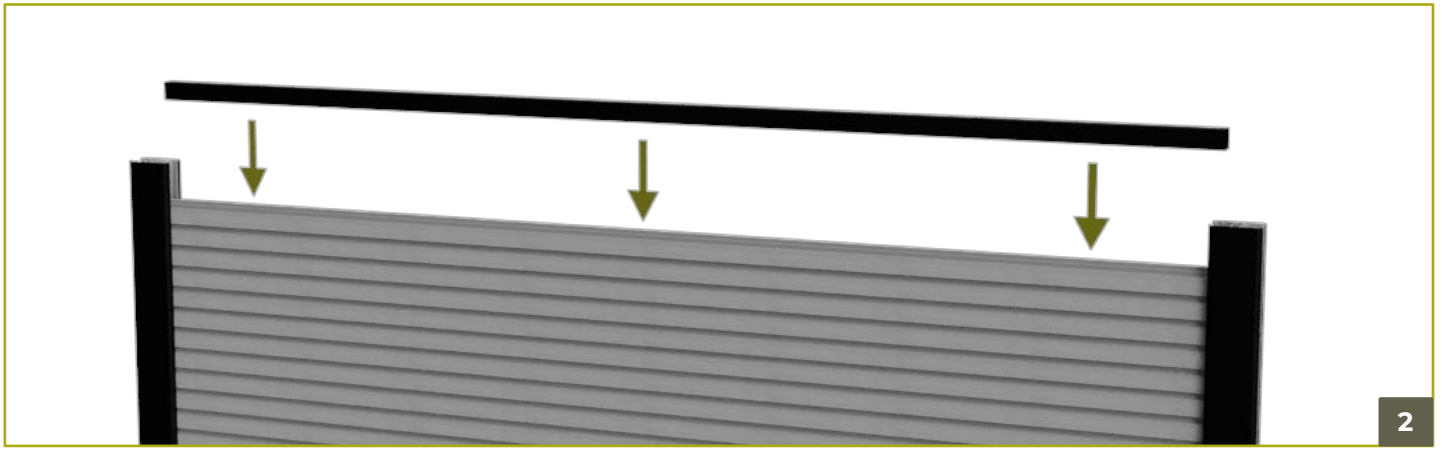




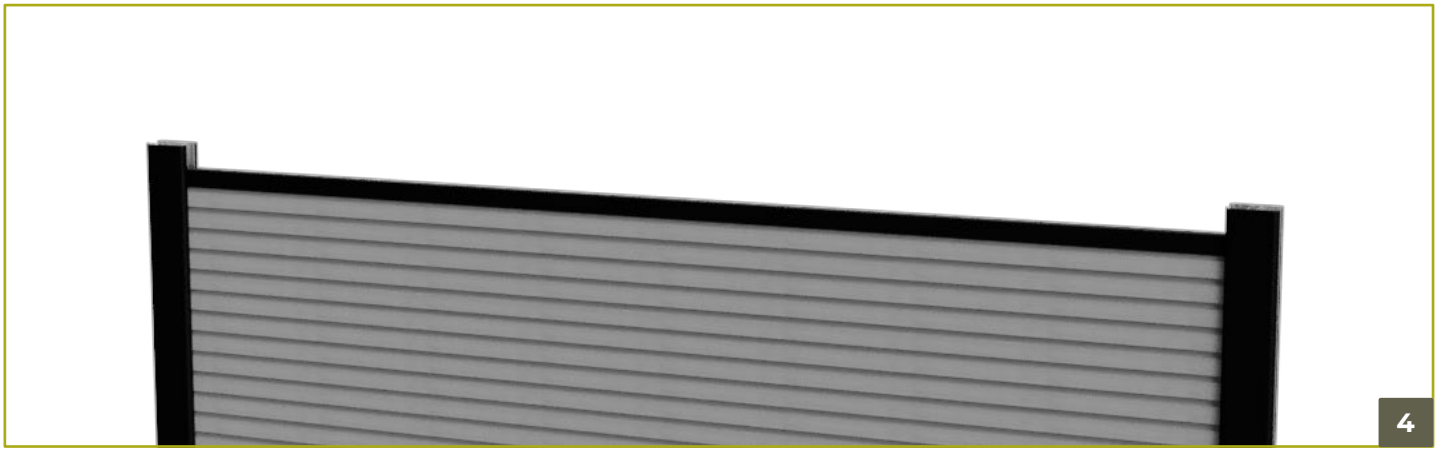
Installing the top profile

1 To finish the top of the fence, use a top profile (DF1UA28).
2-4 Place the top profile on the top board in the slots provided in the post.
If desired, the top profile can be fixed to the top board with a polymer sealant adhesive.



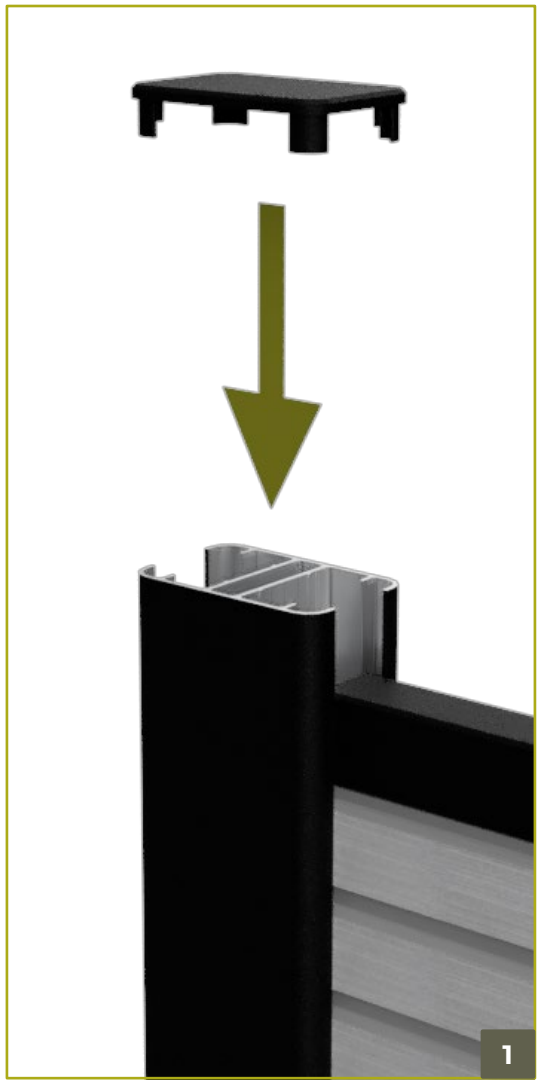






Installing the post cap

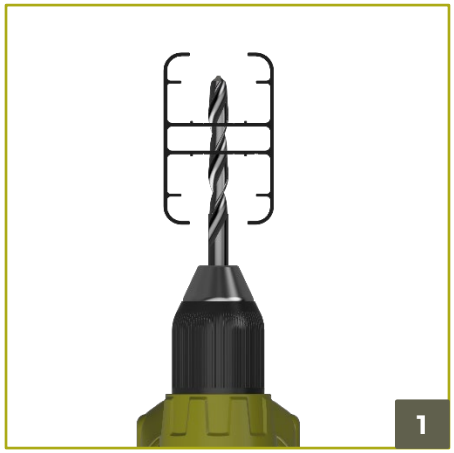
1-2 Place the post cap on top of the post. Use a rubber mallet if necessary.





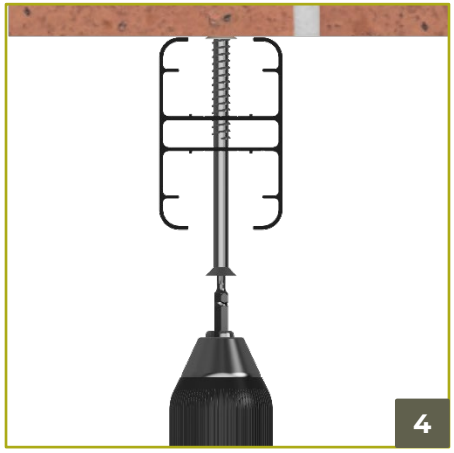
[Optional] Installing a post against a wall

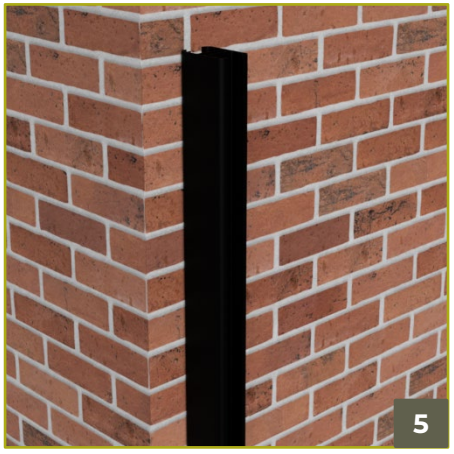
1 Drill at least three holes in the post for the screws. Make sure they are evenly distributed along the length of the post.
2 Then drill holes in the wall at the same height as the holes in the post.
3-5 Fix the post to the wall with screws and wall plugs. Make sure the screws are at least 120 mm long.









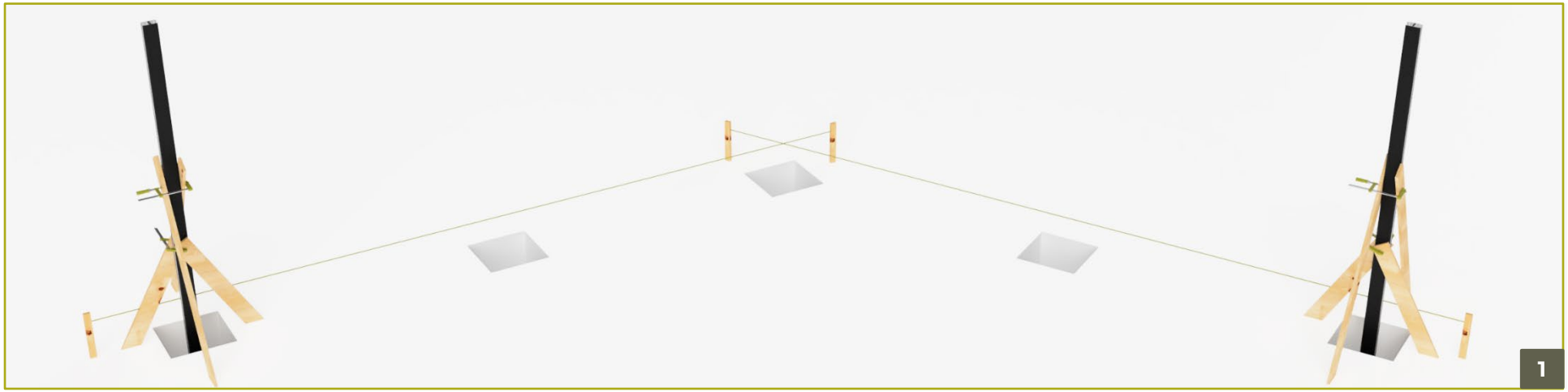


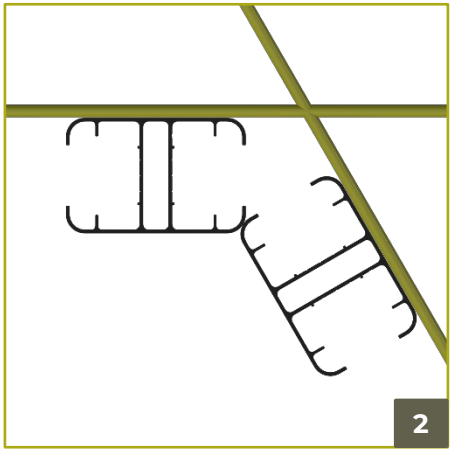
[Optional] Creating a corner in the layout (variable)

An obtuse or acute angle can be achieved using two standard posts (DF1PA85).

1 First dig the holes for all posts. Place the first and last post in the row and secure them temporarily. Then, at ground level, stretch a string line from each end post to the corner. Make sure these lines touch the posts and run parallel to the fence panel to be installed.

2 The posts can now be placed at the intersection of the two lines. Check the alignment with the two end posts.

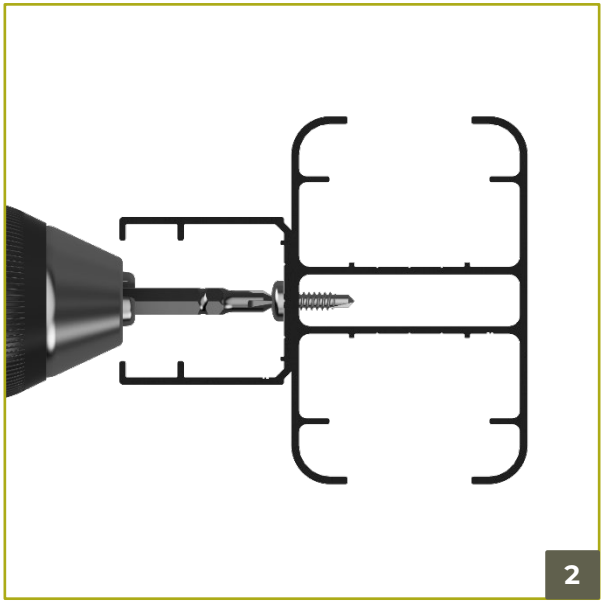


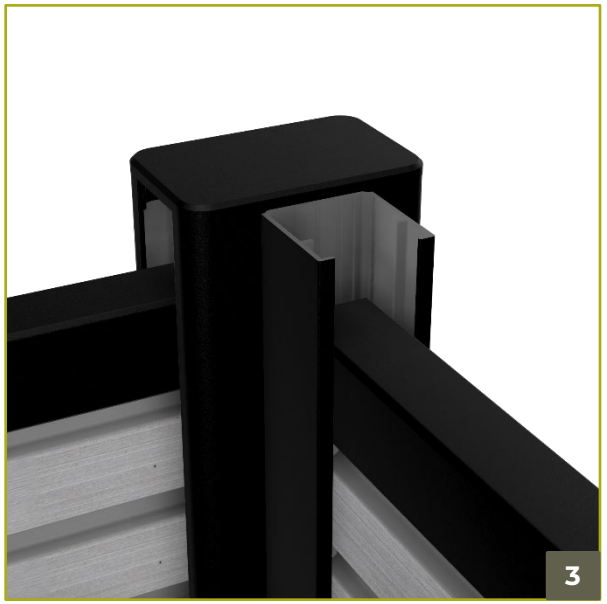


[Optional] Creating a corner in the layout (90°)

1 Drill at least three holes in the aluminium U-profile (DF1UA2840) for the screws. Make sure they are evenly distributed along the length of the profile.
2 Fix the profile to the post with self-drilling screws (diameter 4–4.5 mm and length min. 16 mm).
3 The 90° corner is now complete.

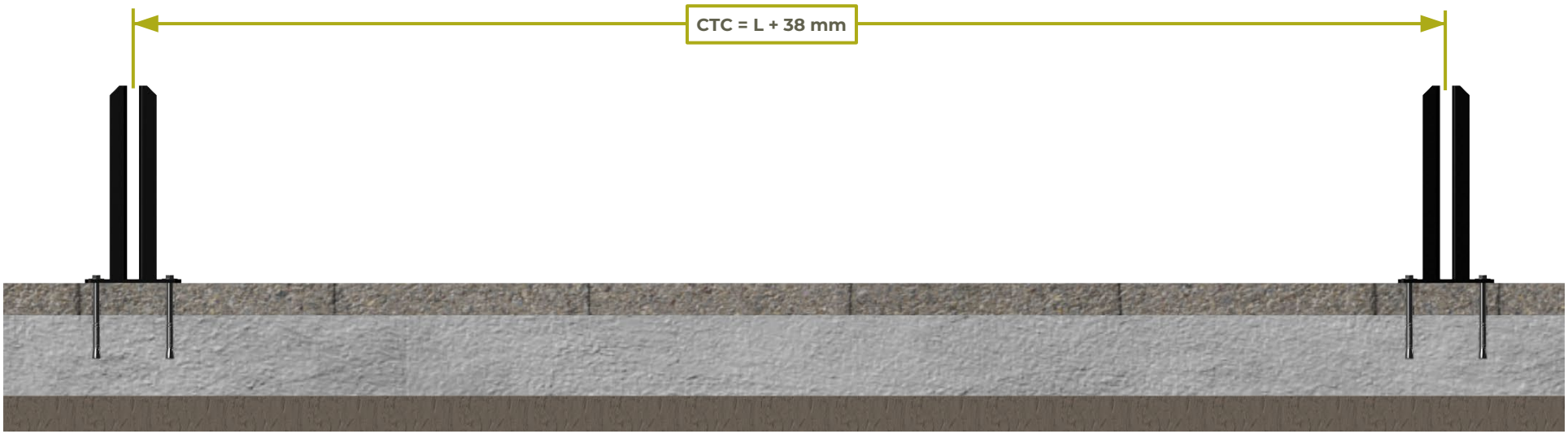






[Optional] Installing the posts with a post holder

Place the internal post holders in the desired position, at the correct centre-to-centre distance (CTC), and mark the holes with a 13 mm drill bit. Remove the post holder and drill the holes deep enough for the chosen fixing. Check that the post holder is level in both directions and, if necessary, raise the lowest side with glazing blocks, shims or plastic packers. Fix the post holder with chemical anchors (follow their instructions) or wedge anchors (min. 100 mm long, thread diameter 12 mm). Then cut the post to the correct length and place it on the post holder.

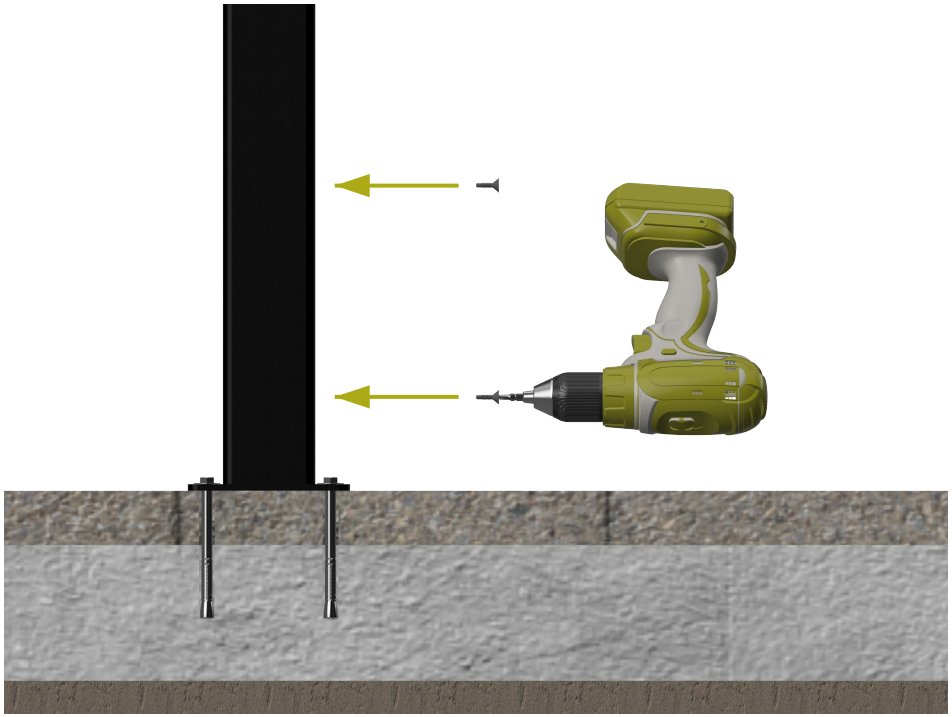


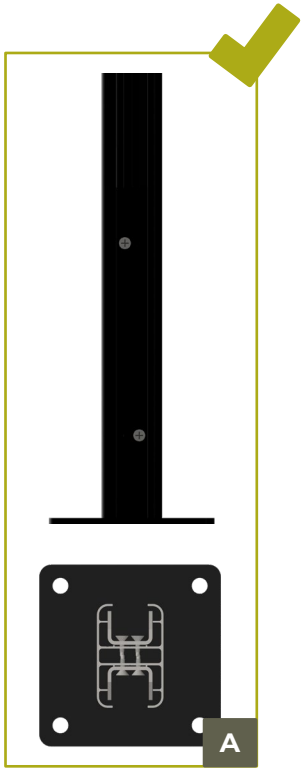
Note: a solid base means an existing patio (tiles) or a concrete slab at least 100 mm thick.

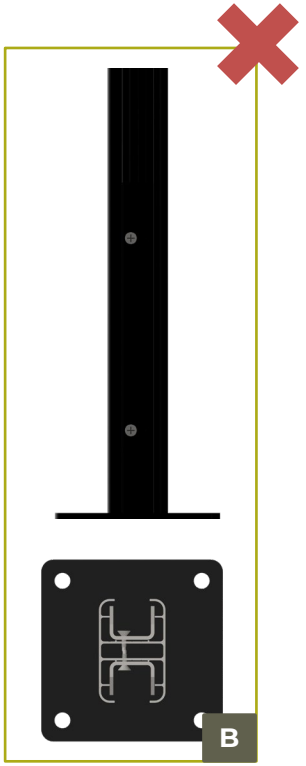
[Optional] Installing the posts with a post holder

Fix the post to the post holder with 4 self-drilling screws (supplied with the post holder).
The maximum height of a post in combination with a post holder is 2.10 m.

[A] Example of correct positioning of the screws for fixing the post and the post holder.
[B] Examples of incorrect positioning of the screws for fixing the post and the post holder.



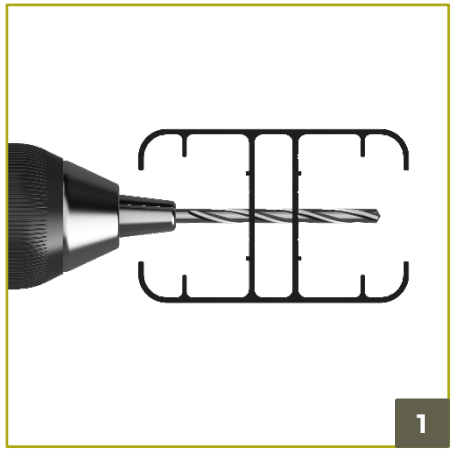


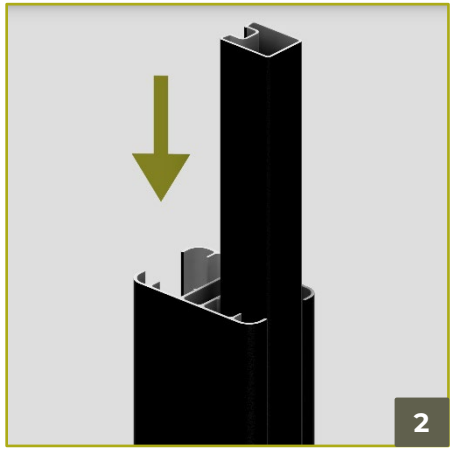


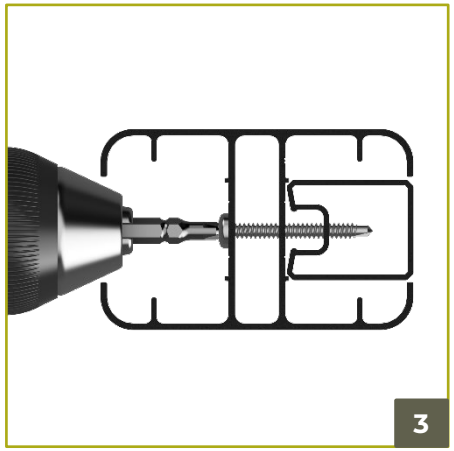
Note: in areas exposed to strong wind, we recommend anchoring the posts in the ground. For fences longer than 20 metres, we recommend anchoring one post in the ground after every 4 posts on a post holder. (1 x in the ground | 4 x post holder | 1 x in the ground | 4 x post holder | 1 x in the ground | 4 x post holder | 1 x in the ground)

[Optional] Finishing the end post

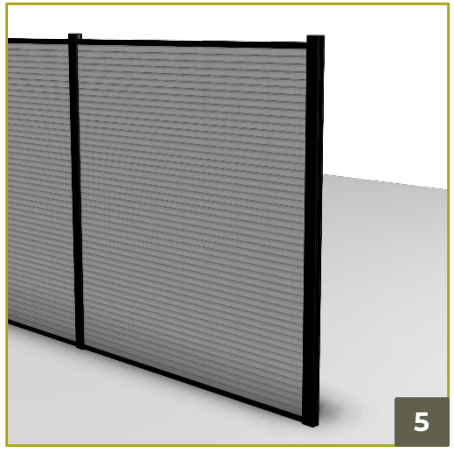
1 Drill at least three holes in the aluminium post for the screws. Make sure they are evenly distributed along the length of the post.
2 Slide/insert the profile (DF1UA28) into the post.
3 Screw the profile in place with self-drilling screws (diameter 4–4.5 mm and length min. 40 mm).
4-5 Install the boards, the top profile and the post cap as explained in the previous steps. The end post is now finished.











Notes

duofuse® INVITING OUTDOOR SPACES

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