

Installation instructions for SILVADEC[®] aluminium fencing

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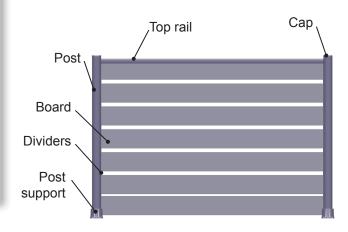
PLEASE READ CAREFULLY BEFORE STARTING ANY INSTALLATION OF SILVADEC® ALUMINIUM FENCING

Before starting installation on site, we strongly recommend that you read this document in full, so as to understand any potential installation issues.

Do not install fencing in an environment likely to permanently scratch fence boards, posts, post finishing profiles, post supports or caps. These are made of scratch-sensitive aluminium alloy. Fence boards are not structural elements. Silvadec[®] aluminium fencing is intended for vertical use and is not designed to support a load or to act as an anchoring point.

Our guarantee only covers Silvadec[®] components that are assembled together (for example, our guarantee will not cover posts used with exotic wood boards).

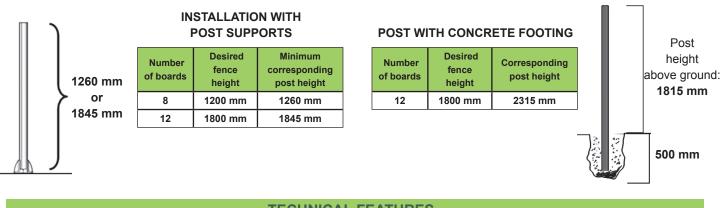
We decline all liability and void our guarantee in case of failure to comply with the instructions below. It is IMPERATIVE that corner posts are braced to ensure increased resistance to wind.



ASSEMBLY AND CALCULATING THE NUMBER OF FENCE COMPONENTS REQUIRED (WITH OR WITHOUT CONCRETE FOOTING)

INSTALLATION ON SINGLE SHELL POST SUPPORTS (SMOOTH FINISH ACCESSORIES ONLY) MAY ONLY BE USED FOR POST HEIGHTS UP TO 1260 mm. INSTALLATION ON DOUBLE SHELL POST SUPPORTS (SANDED FINISH ACCESSORIES ONLY) MAY BE USED FOR FENCE POSTS TO A MAXIMUM HEIGHT OF 1845 mm.

N.B.: before cutting any posts to height, remember that posts must always be taller than the stacked boards. It is VITAL to retain a gap of AT LEAST 15 mm between the cap and top rail. WHEN CUTTING POSTS ADD A MARGIN OF AT LEAST 15 MM TO THE TOTAL STACKED HEIGHT OF THE BOARDS AND OTHER ACCESSORIES.



TECHNICAL FEATURES

Board dimensions: 148 x 21.3 mm (+/- 0.5 mm) Standard length: 1797 mm (+/- 2 mm) Board weight: 2.4 kg (+/- 5%)

A) INSTALLING FENCING WITH POST SUPPORTS

The Silvadec[®] fencing range offers aluminium accessories in two different finishes, sanded or smooth. Each finish corresponds to a post profile and post support type.

We recommend that you fix post supports to a uniform, flat and stable concrete slab with a minimum width of 20 cm. Check the flatness of the installation surface. We STRONGLY advise against fixing post supports to hollow footings (hollow blockwork for example).

TOOLS AND MATERIALS FOR INSTALLATION

• Drill

- Spirit level
- String
- Tape measure
- M10 stainless anchor bolts (ideally products designed for railing installation)
- 4 per post support
- Pencil (optional)
- Mallet (optional)
- Set of Allen keys

A-1) FENCING INSTALLATION WITH SINGLE SHELL POST SUPPORTS

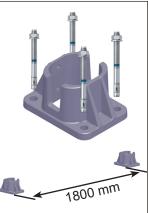
INSTALLING A FENCE WITH SINGLE SHELL POST SUPPORTS LIMITS POST HEIGHT TO 1260 mm, I.E. A STACK OF 8 ALUMINIUM BOARDS.

REMEMBER TO INCLUDE A GAP OF AT LEAST 15 mm AT THE TOP OF THE POST (between the cap and the top board).

A11. POSITION the 1st post support. MARK the anchor points. REMOVE the post support. DRILL the holes as per industry

standards. **RE-POSITION** the post support (wedge if necessary to ensure proper support). **INSERT** and tighten the 4 anchor bolts.

FIX the second post support in the same way, adhering **WITHOUT FAIL** to the 1800 mm distance between supports. Do not use anchor bolts of less than 8 mm in diameter. *Silvadec is in no way liable for the choice of hardware used for the installation*.



Take care to correctly orient the post supports during installation.

A12. INSERT the 2 posts into the post supports.

Check that the posts are vertical using a spirit level.

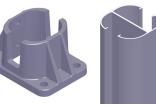


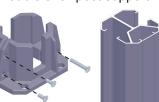
A13. SCREW the pressure screws onto the posts using a No.4 Allen key until the assembly no longer moves (hand tightening).



TWO FINISHES - TWO TYPES OF POST SUPPORT AND POST

Smooth finish Single shell post support Sanded finish Double shell post support





A-2) FENCING INSTALLATION WITH DOUBLE SHELL POST SUPPORTS

INSTALLING A FENCE USING DOUBLE SHELL POST SUPPORTS LIMITS POST HEIGHT TO 1845 mm, I.E. A STACK OF 12 ALUMINIUM BOARDS.

IN THIS CASE, CUT THE POSTS (initially supplied at a length of 2315 mm) TO A SUITABLE LENGTH NOT EXCEEDING 1845 mm, BASED ON THE STACKING CONFIGURATION CHOSEN (number of boards, divider heights, design kit, etc.). REMEMBER TO INCLUDE A GAP OF AT LEAST 15 mm AT THE TOP OF THE POST (between the cap and the last board).

<u>N.B.</u>: FOR SAFETY REASONS, IF INSTALLING AN ELEVATED FENCE ON A LOW WALL, THE "WALL+FENCE" HEIGHT MUST NOT EXCEED 2.20 m.

A21. POSITION the post in the post support, leaving a sufficient gap for the post to slide easily into the cavity provided. TAKE CARE WITH THE ORIENTATION OF THE POST IN THE POST SUPPORT: the two openings in the post must be opposite the open parts of the post support. The removable strip in the post (see paragraph "INSTALLING FENCE CORNERS - 3 IN 1 POST" on page 7) must be opposite the 3rd open part of the post support.



TIGHTEN the two halves of the post support against the sides of the post by tightening the 3 installation screws.

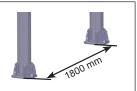
A22. POSITION the post support + post assembly on the concrete slab. MARK the anchor points. REMOVE the post support. DRILL the holes as per industry standards. RE-POSITION the post support + post

RE-POSITION the post support + post assembly (wedge if necessary to ensure proper support).

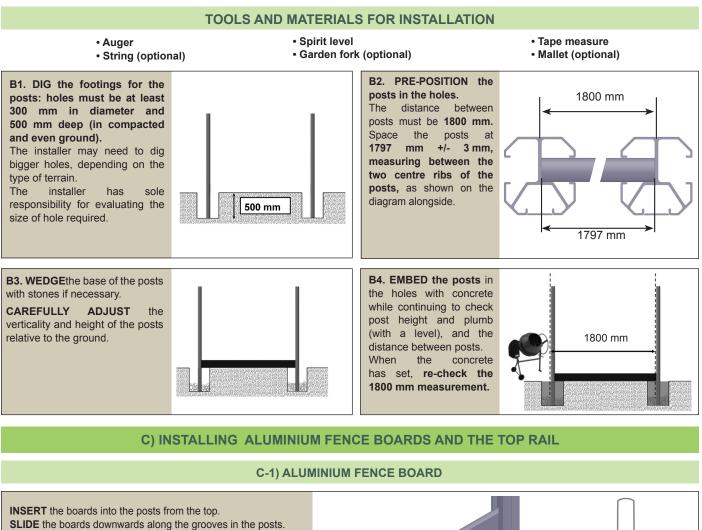
Insert and tighten the 4 anchor bolts. Do not use anchor bolts with a diameter of less than 8 mm or exceeding 12 mm.

A23. REPEAT the process for the second post + post support assembly. IT IS ESSENTIAL TO ADHERE to the distance of 1800 mm between posts, even for a corner installation.





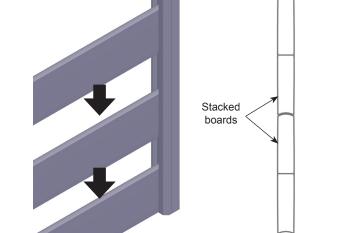
FOR THE INSTALLATION OF THE POSTS INTO CONCRETE FOOTINGS, WE RECOMMEND THAT 2 PEOPLE WORK TOGETHER. Great care is needed for the installation of the posts in concrete footings.



STACK the boards on top of each other.

Do not glue, weld or screw boards and halfway support profiles to each other or onto the posts.

The aluminium boards must descend fully into position in the posts.



C-2) TOP RAIL

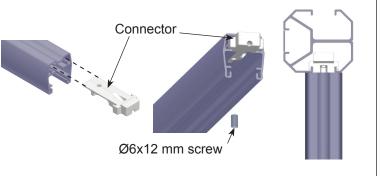
For an elegant finish to your SILVADEC[®] fence, a top rail can be installed above the top board.

An optional connector connects the rail to the post.

INSERT the connectors at each end of the rail, in the socket provided.

Each connector is fixed onto the rail with the headless screw provided (M6x12mm).

SLIDE the connector (connected to the rail) onto the post until the rail rests on the top board.

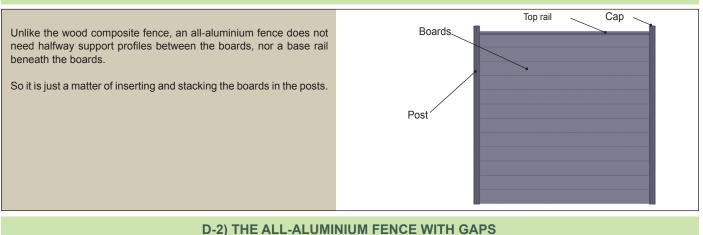


D) ALUMINIUM BOARD CONFIGURATIONS

Aluminium fence boards are an alternative to composite wood boards and can be used to create:

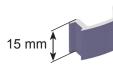
- an all aluminium fence
- a fence with gaps between the boards
- a fence mixing aluminium and composite wood boards (with or without gaps)

D-1) THE ALL-ALUMINIUM FENCE

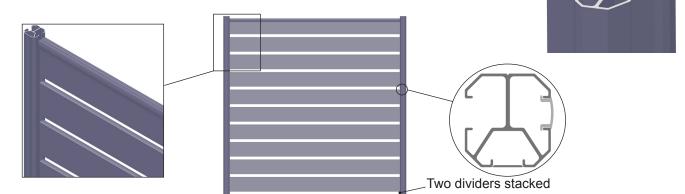


Gaps can be created in the aluminium fence using 15 mm dividers, sold separately.

Simply insert one or more dividers into the slots in the posts, between the aluminium boards.



<u>Configuration example:</u> height 1.8 m - boards with gaps of 30 mm (the height of two dividers). In this configuration the fence panel consists of 10 boards and 40 dividers.



N.B.: With this configuration, to achieve an equivalent height to a fence without gaps (1.8 m with embedded installation), a height adjustment of two staked dividers - so 30 mm - is required, beneath the first board.

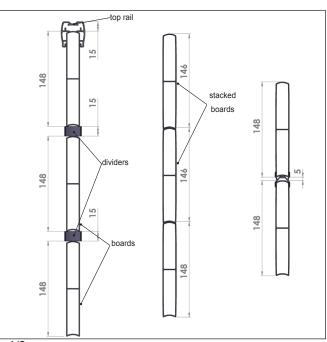
COMBINATION CALCULATIONS:

When calculating the number of boards and dividers needed for a fence with gaps, the stacked height of the boards, dividers and top rail needs to be considered.

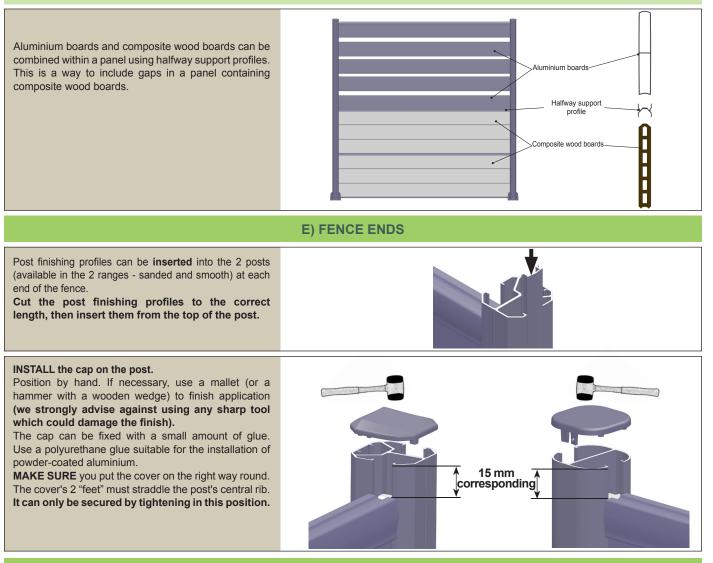
- Board height (between dividers): 148 +/- 0.5 mm
- Board height (stacked on another board): 146 +/- 0.5 mm
- Divider height: 15 +/- 0.5 mm
- Top rail height: 15 +/- 0.5 mm

If halfway support profiles are being used in the panel:

- Halfway support profile height: 5 +/- 0.5 mm

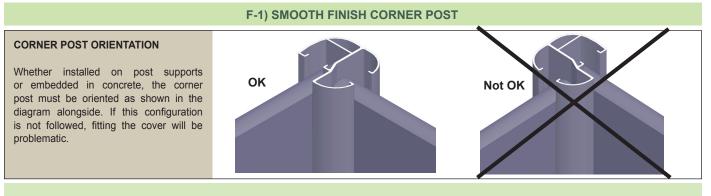


D-3) THE COMPOSITE WOOD AND ALUMINIUM FENCE



F) INSTALLING FENCE CORNERS

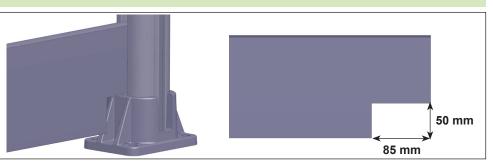
N.B.: SILVADEC[®] corner posts can only be used for two fences intersecting at 90°. For any angle other than a right-angle, two posts must be positioned together.



N.B.: when installing fences with corner posts, the posts MUST be braced to provide additional resistance to wind (above 90km/h).

IMPORTANT TECHNICAL FEATURE

When installing a corner post using a single shell post support, it is ESSENTIAL to cut the first fence board as shown in the diagram alongside.



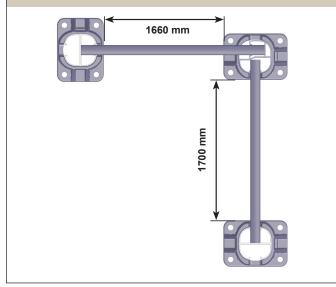
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F-11) INSTALLATION WITH POST SUPPORTS

F-12) INSTALLATION WITH CONCRETE FOOTINGS

POSITION the post supports for a 90° angle, following the orientation shown below. You MUST observe the distances between post supports shown below.

 $\ensuremath{\textbf{N.B.:}}$ refer to the next paragraph if you are using double shell post supports.

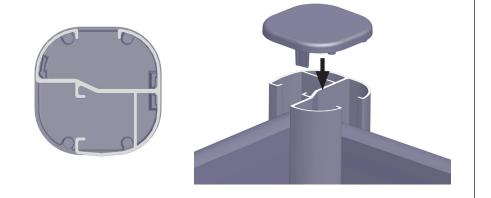


INSTALL the cap on the post.

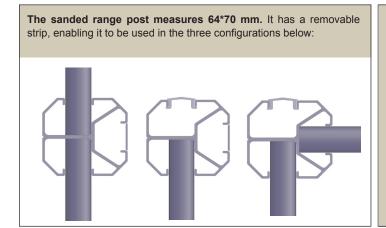
MAKE SURE you put the cap on the right way round.

The cover's 2 "feet" must straddle the post's central rib.

Only one position hides both feet. If the cap does not fit, the corner post has been installed the wrong way round (see preceding page).

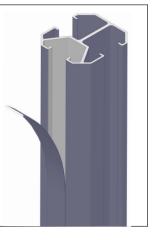


F-2) 3 IN 1 POST- SANDED RANGE



These strips are cut similarly to "easy-open cans". Use pliers to peel off the first 10 cm of the removable strip that is not required, then peel the rest of the strip by hand (N.B.: gloves must be worn for this procedure).

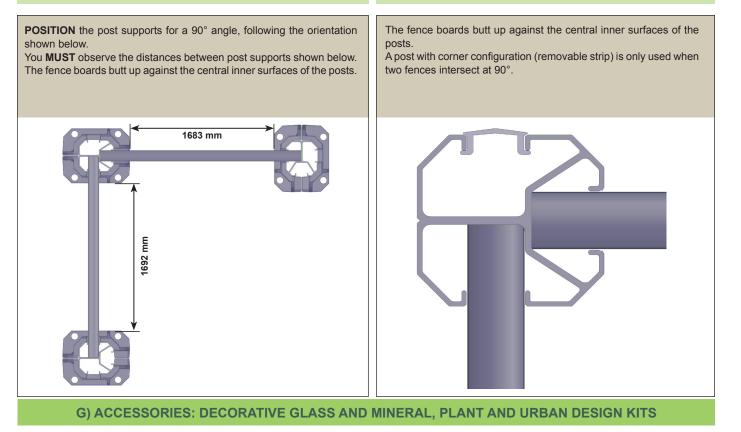
N.B.: corner posts MUST be braced to provide additional resistance to the wind (above 90 km/h).



The fence boards butt up against the inner surfaces of the posts. The distance between these surfaces must be 1797 mm.

1797 mm

F-22) INSTALLATION WITH CONCRETE FOOTINGS

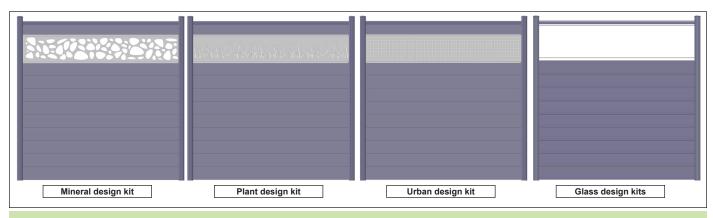


Decorative insert options involve REPLACING:

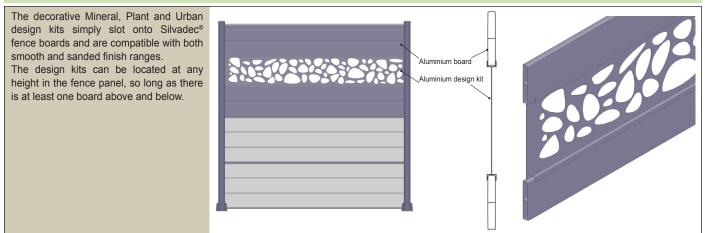
- 2 stacked fence boards with a Mineral, Plant or Urban design kit. These design kits can be located in the fence panel at any height and must be placed between two aluminium fence boards.

- 3 stacked fence boards with a Glass design kit (opal or transparent). These design kits can be located in the fence panel at any height and must be placed between two rails (half way support profiles, top rail).

You are strongly advised to wear gloves when handling these components.



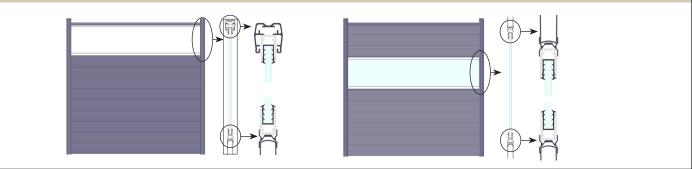
G-1) INSTALLING THE MINERAL, PLANT AND URBAN DESIGN KITS



G-2) INSTALLING GLASS DESIGN KITS

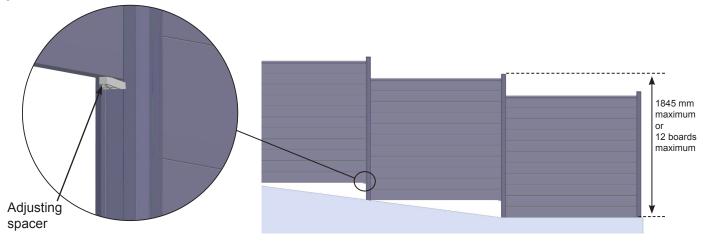
These decorative design kits can be located at any height in the fence panel, so long as there is a rail above and below (so halfway support profile and top rail or two halfway support profiles). They slot into the halfway support profiles or the top rail and are compatible with both smooth and sanded finish ranges.

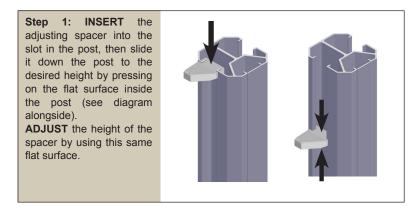
A Glass design kit replaces 3 aluminium Silvadec® fence boards.



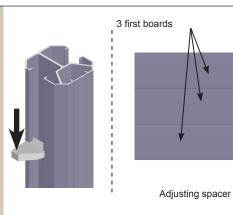
H) ACCESSORY: ADJUSTING SPACER

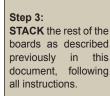
In order to level the boards, an **adjusting spacer can be INSTALLED BELOW the bottom board of the fence panel.** <u>N.B.:</u> Under no circumstances should the spacer be used to support more than 12 fence boards, and it must not be positioned more than 20 cm above ground level.

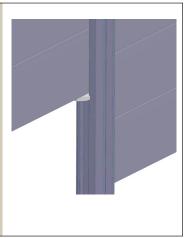




Step 2: To HOLD the spacer in position, press lightly on the end outside the post, then STACK the first three boards onto the adjusting spacer. ADJUST the level as necessary by moving the spacer up or down. NOW LOCK the spacer in position by pressing lightly on the board.







MAINTENANCE

In addition to the information provided below, please refer to our maintenance sheet delivered with the boards. It is available from our distributors and can be downloaded from our website www.silvadec.com. We can also simply send you one on request. This sheet must be passed on to the end user of the products.

BOARDS, POST SUPPORTS, POSTS, POST FINISHING PROFILES AND CAPS

- These five components are made of aluminium alloy, so do not rust. They can be cleaned with standard cleaning products. After washing, rinse thoroughly with clean, additive-free water. Never use products like petrol, acetone, alcohol, alkaline or acid products, sanding sponges, sandpaper or any abrasive in general.
- STRONGLY advise against applying any product containing acid and advise against use of any kind of solvent, which could affect the finish.
 The recommendation is to clean an all-aluminium fence at least twice a year, once in the spring, using soapy water (more effective if hot) and a sponge. N.B.: do use a broom or brush because some types may cause scratches.

DECORATIVE GLASS PLATES AND PERFORATED DESIGN KITS

- Glass plates can be cleaned with a soft cloth and a glass cleaner.
- We will not be held liable for any damage to a product that has not been kept in its original packaging.

STORAGE AND HANDLING

- We advise users to store fence components under cover and out of direct sunlight, in their original packaging.
- We will not be held liable for any damage to a product that has not been kept in its original packaging.
- Silvadec® fence boards must be stacked on a dry, flat surface, in a well ventilated place, so as not to suffer any distortion.

RECYCLING AND END OF LIFE

Fence components are made of aluminium alloy and can be recycled in the usual way at recycling centres.

Consult your local council on current legislation governing the installation of fencing. Silvadec[®] products are not conventional products. Please notify your insurance company. Sample colours provided are not contractually binding. The products used for powder-coating SILVADEC aluminium fence components are QUALICOAT certified.