

Thank you for choosing SILVADEC® cladding! We hope you will be completely satisfied with your purchase, and will enjoy it for many years to come!

READ CAREFULLY BEFORE INSTALLATION

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

The Atmosphere 175 cladding boards, made from Silvadec® co-extruded wood composite, are not structural components: they are not designed to be load-bearing. Their purpose is not to keep out water or insulate the building. This is a wall cladding product designed purely to improve the appearance. Co-extruded wood composite profiles consist mainly of wood fibres. As a result, they may suffer thermal expansion and changes in dimension, so strict compliance with the installation instructions is essential.

Before any installation, check that the building structure can support the weight of the cladding (for reference purposes, the board weighs 2.56 kg per linear metre). This product is designed exclusively for use as cladding.

1. WARRANTIES

Our guarantee applies only to Silvadec® products, provided they have been installed as per these installation instructions.

We will not be held liable and will void our guarantee in the event of failure to comply with the instructions below. All aluminium profiles from the Silvadec® cladding range have been designed to be installed with the Atmosphere 175 cladding board. The warranty will be void if these profiles are installed with any other product.

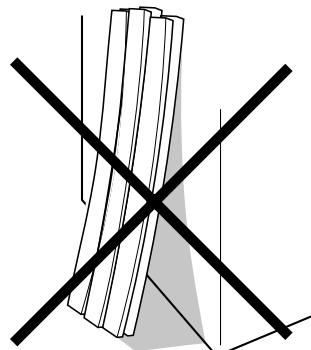
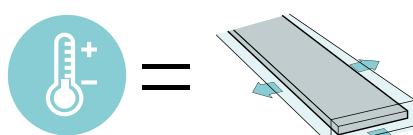
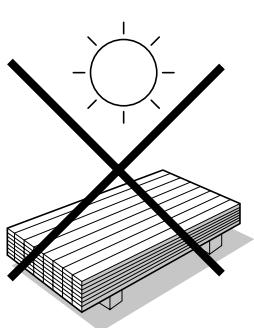
2. STANDARDS OF REFERENCE

The standards of reference for installing Atmosphere 175 cladding are Eurocode 1 - Actions on structures (EN 1991) and Eurocode 5 - Design of timber structures (EN 1995). Local regulations should also be observed.

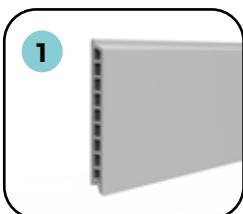
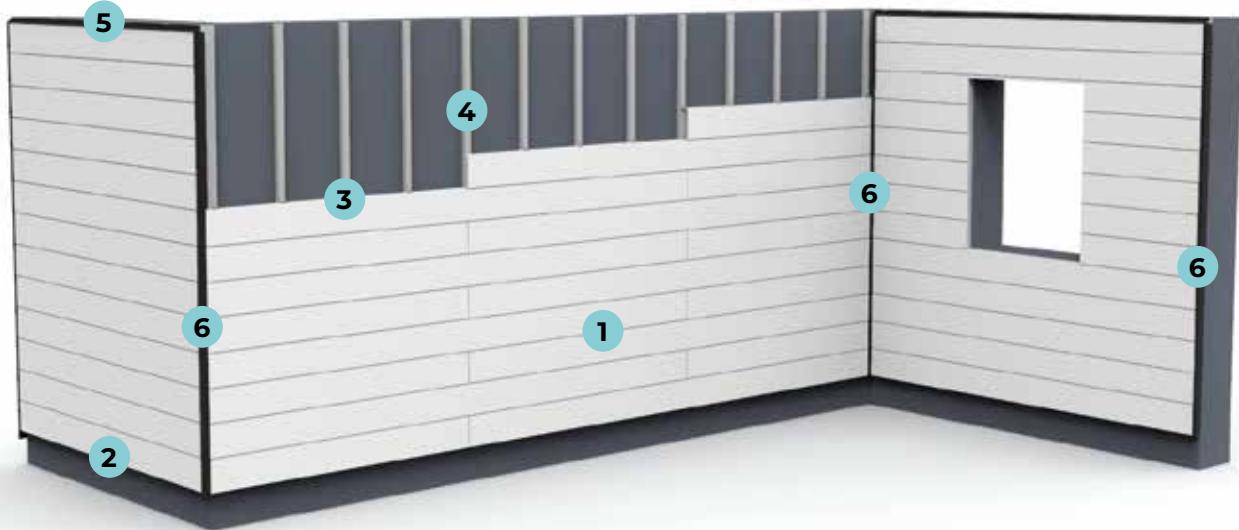
For any installation outside Europe, refer to the local building regulations specific to the area.

STORAGE AND HANDLING

Silvadec® boards and accessories must be stacked on a flat, dry surface, in a well-ventilated area, so as to prevent any deformation. We recommend breaking open the pallet to help with airflow. When handling, bear in mind that wood composite boards may be heavier than treated pine or other exotic species. During installation, avoid leaving the pallet in full sunlight, to avoid expansion variations when fitting pieces together.



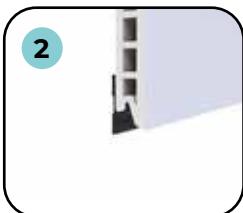
GENERAL DESCRIPTION



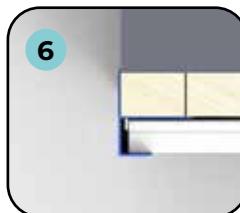
1. Cladding board
Atmosphere 175



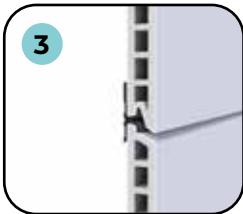
5. End profile



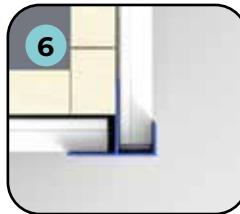
2. Start profile



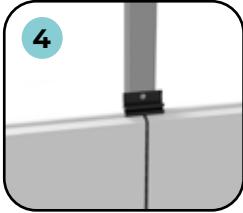
6. Corner profile
-Corner profile



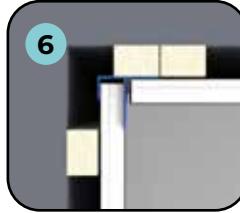
3. Clip



6. Corner profile
-Outward facing corner



4. Butting clip



6. Corner profile
-Inward facing corner

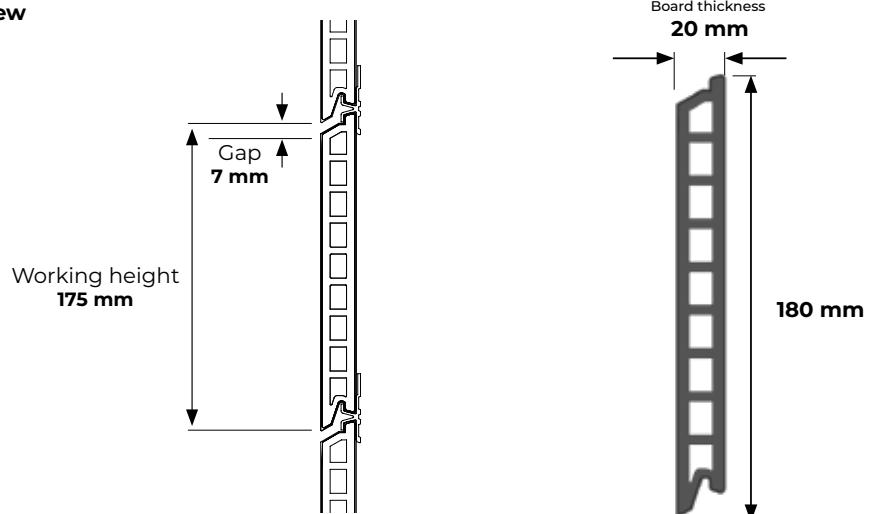


GENERAL DESCRIPTION (CONTINUED)

No.	Diagram	Name	Reference	Description	Material	Size Thickness x L	Unit weight
1		Cladding board Atmosphere 175	SIBARLAM2101 Rio Brown SIBARLAM2102 Sun Brown SIBARLAM2103 Limewash White	The Atmosphere 175 cladding board is produced using a unique co-extrusion method which covers the board in a thin layer of polymer material.	Silvadec® co-extruded wood composite	20 mm x 180 mm Working height 175 mm	9.22 kg (for one profile measuring 3.6 m) 2.56 kg/m (+/- 5%)
2		Start profile	SIBARDEB2100	Installed horizontally at the start of installation, it supports the boards. Under no circumstances should it be installed vertically.	Anodised aluminium alloy	12 x 37 mm Length: 2.4 m	0.51 kg
3		End profile	SIBARFIN2101 Rio Brown SIBARFIN2102 Sunshine Brown SIBARFIN2103 Limewash White	Installed horizontally at the end of installation, it supports the boards. Under no circumstances should it be installed vertically.	Powder-coated aluminium alloy	24 x 31 mm Length: 2.4 m	0.61 kg
4		Bag of 80 clips + screws	SIBARCLIP2111	This concealed clip ensures a 7 mm gap between boards. It is fixed directly onto the cleat. One bag of 80 clips is enough to cover about 5 m².	Anodised aluminium alloy	40 x 30 mm clip size (not including bag)	8.7 g clip weight (not including bag)
5		Bag of 16 butting clips + screws	SIBARCLIP2112	This clip is used for butting the boards. It is fixed directly onto the cleat. One bag is enough to cover about 5 m².	Anodised aluminium alloy	40 x 60 mm clip size (not including bag)	16.8g clip weight (not including bag)
6		Corner profile, multi-functional	SIBARANG2101 Rio Brown SIBARANG2102 Sunshine Brown SIBARANG2103 Limewash White	This multi-functional accessory can be used to create an inward or outward facing corner, and a finishing corner profile.	Powder-coated aluminium alloy	48 x 55 mm Length: 2.4 m	1.15 kg
7		installation spacer (in the clip bag)		This small spacer serves as an installation jig for positioning the board, factoring in the necessary expansion gap	white plastic	20 x 50 mm thickness: 5 mm	

TECHNICAL CHARACTERISTICS

Cross-section view of the cladding



PLANNING

1. LAYOUT

For one square metre of cladding, use the following quantities on average:

Horizontal installation	Vertical installation
Atmosphere 175 cladding board: 5.72 linear metres	Atmosphere 175 cladding board: 5.72 linear metres
Cleats: 3 linear metres	Cleats: 6 linear metres
Clips and screws: 16 clips + screws	Clips and screws: 16 clips + screws

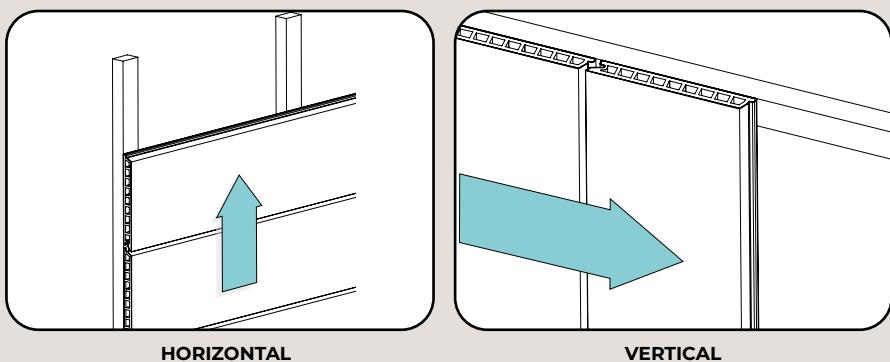
Vertical installation calls for 2 crossed layers of cleats, to provide ventilation (see chapter on vertical installation)

N.B.: the values given above are for reference only. They do not include, for example, the double cleat for installing corner accessories.

2. GENERAL POINTS

Installation direction

To place the boards correctly, always proceed as per the following diagrams.



Installing aluminium profiles on cleats

Use VBA 4x25 mm countersunk screws made of grade A2 stainless steel. For sites located less than 3 km from the seaside, we advise using grade A4 stainless steel screws. It is essential to make a chamfer at 90° so that the tightened screw head is flush with the aluminium profile. The aluminium profile must have a screw placed at least every 600 mm to guarantee optimum support.

Cutting and drilling

Atmosphere 175 cladding boards can be cut and worked with all standard tools commonly used for woodworking. Aluminium profiles can be sawn, milled or drilled using appropriate metalworking tools.

3. TOOLS AND MATERIALS TO USE DURING INSTALLATION

All the standard tools for installing timber cladding may be used.

We recommend using tungsten carbide-tipped saw blades and an electric screwdriver with adjustable torque. Never use a screwdriver in percussion mode.

PREPARING THE SUPPORT STRUCTURE

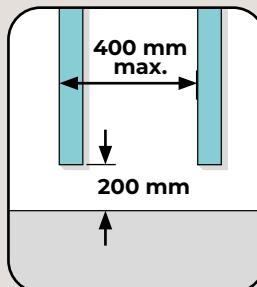
Wall

Make sure the screws or screw anchors needed to install the cladding are compatible with your support structure.

Cleats

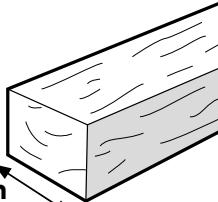
Distance between cleats: 400 mm maximum

The durability of the cleats must correspond to a usage class of at least 3B. The cleats will have a minimum thickness of 27 mm in order to guarantee satisfactory ventilation and firm fastenings. Their minimum width must be 40 mm.



Class 3B

27 mm
min.
40 mm
min.



Insulating membrane

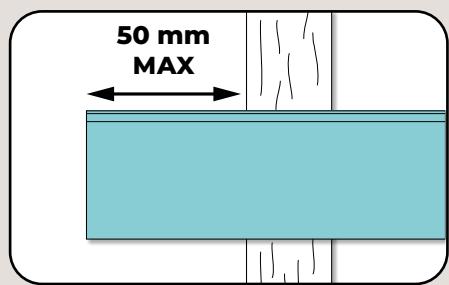
Choose an insulating membrane based on the size of the gap between boards, and the openwork percentage (see the technical recommendations from the insulating membrane manufacturers and in DTU 41.2).



INSTALLATION GENERAL POINTS

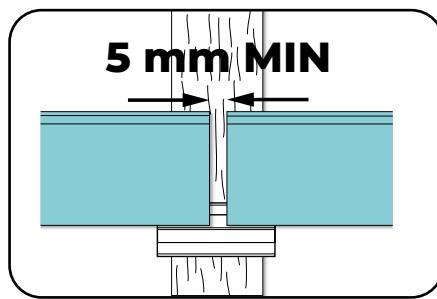
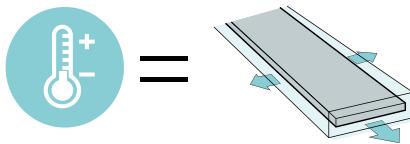
Overhang of the boards

The boards must be fitted to the cleats with an overhang not exceeding 50 mm.

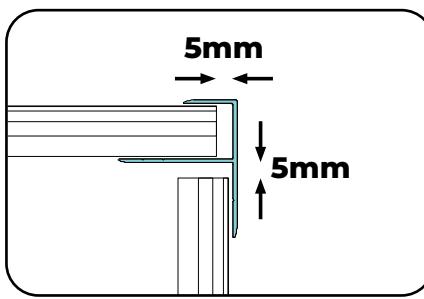


Expansion gap around the boards

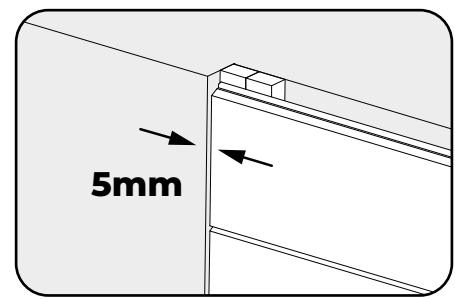
Silvadec® wood composite boards expand in the heat. When installing the boards, a 5 mm expansion gap must be left at the end of each. Use the white spacer in the clip bag to help you ensure this gap.



Between boards



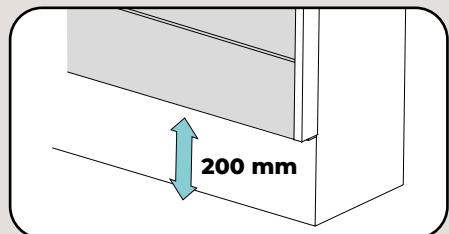
Between boards and the corner profile



Between boards and the wall

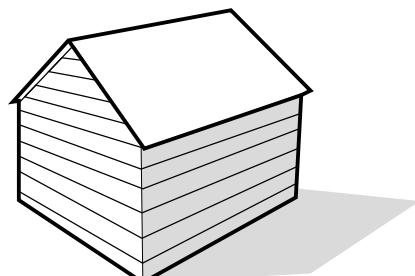
Space between the ground and the start of the cladding

There should be no construction element within 200 mm of the ground. We strongly recommend adding an anti-rodent grille beneath the lowest profile.



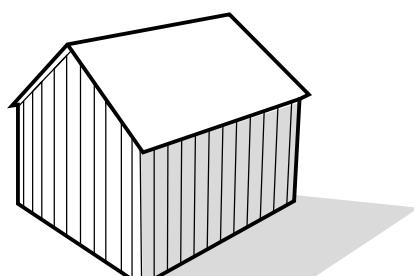
Type of installation

The Atmosphere 175 cladding board can be installed in two ways:



HORIZONTAL

page 6

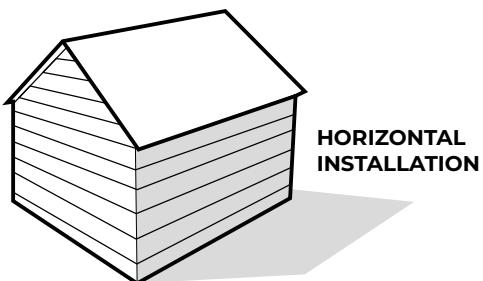


VERTICAL

page 14



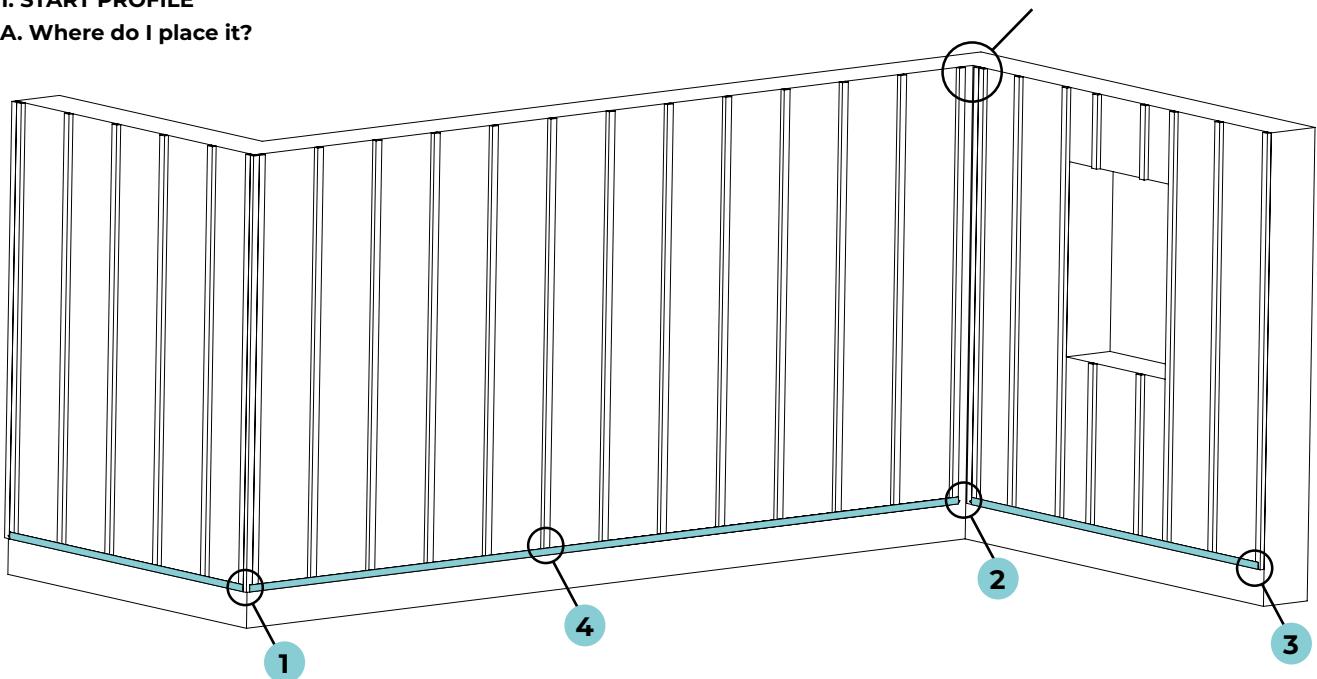
HORIZONTAL INSTALLATION



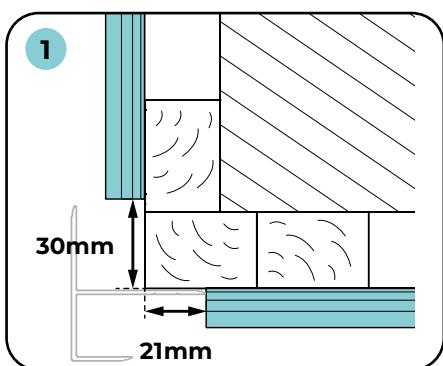
1. START PROFILE

A. Where do I place it?

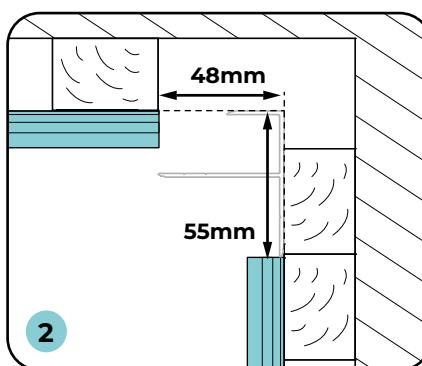
N.B.: use double cleats in the corners



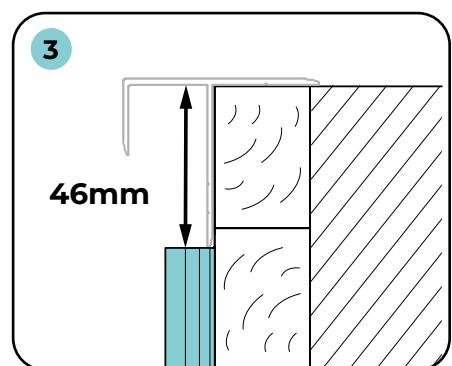
When positioning the start profiles, maintain the distances specified below in order to leave room for the multi-functional corner profile.



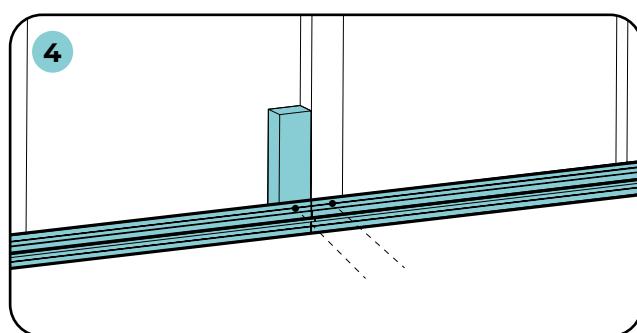
Outward facing corner



Inward facing corner



Corner profile



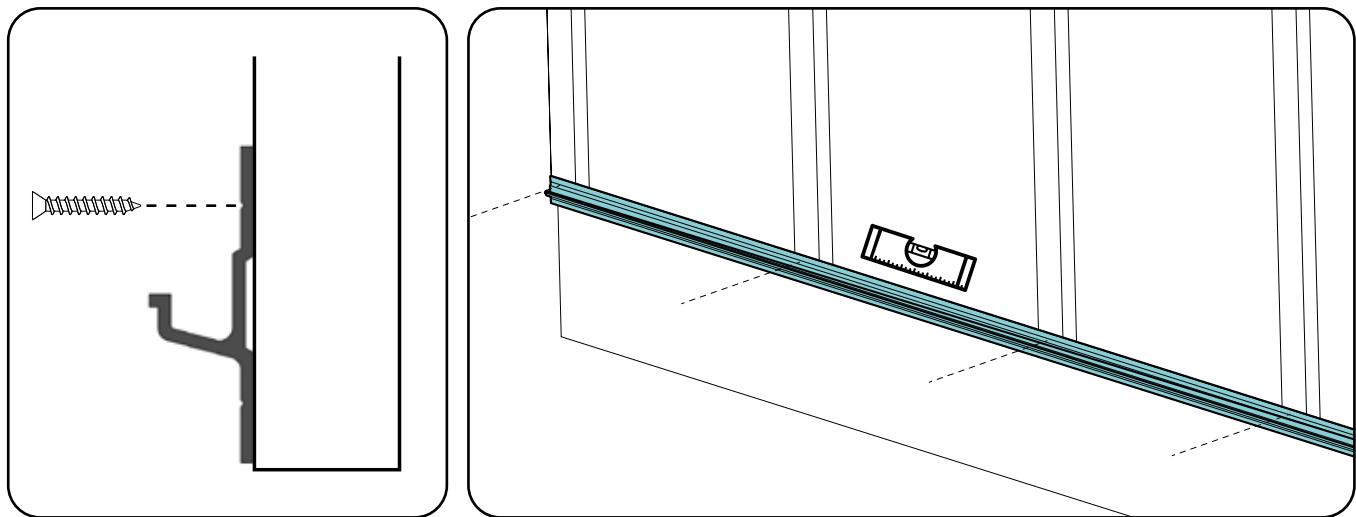
To butt a profile, add a second cleat to the structure at that location to help fix each end of the profile firmly in place.



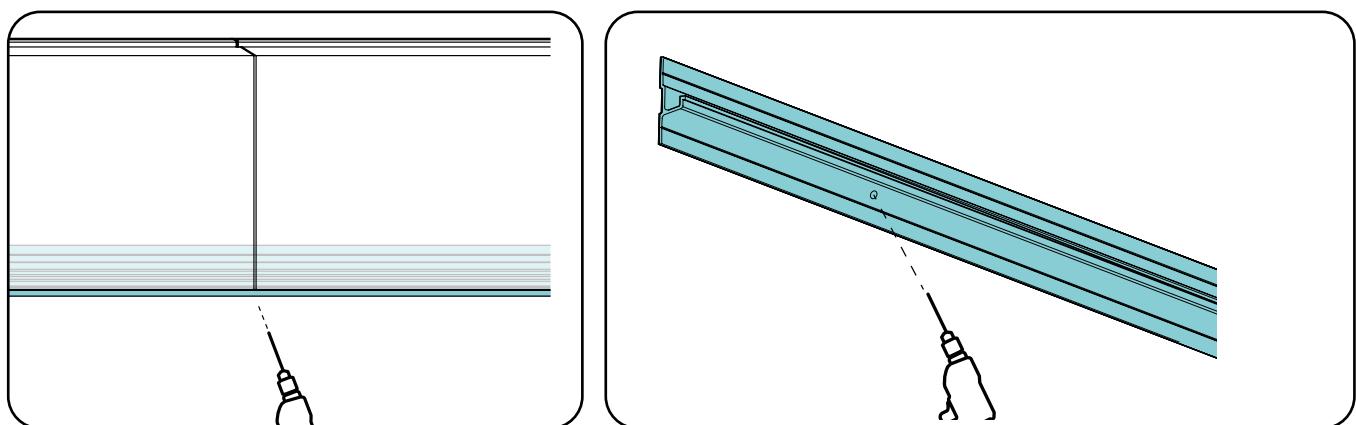
HORIZONTAL INSTALLATION (CONTINUED)

B. How do I fix it into place?

Drill a hole in the profile and screw it to each cleat. Use a spirit level to fasten the profile horizontally.



To prevent water pooling in the slot of the profile, drill a hole with diameter between Ø 3 mm and Ø 5 mm at the point where the board ends will meet. (for horizontal installation only).



Affix an anti-rodent grille to prevent rodent intrusion behind the cladding.

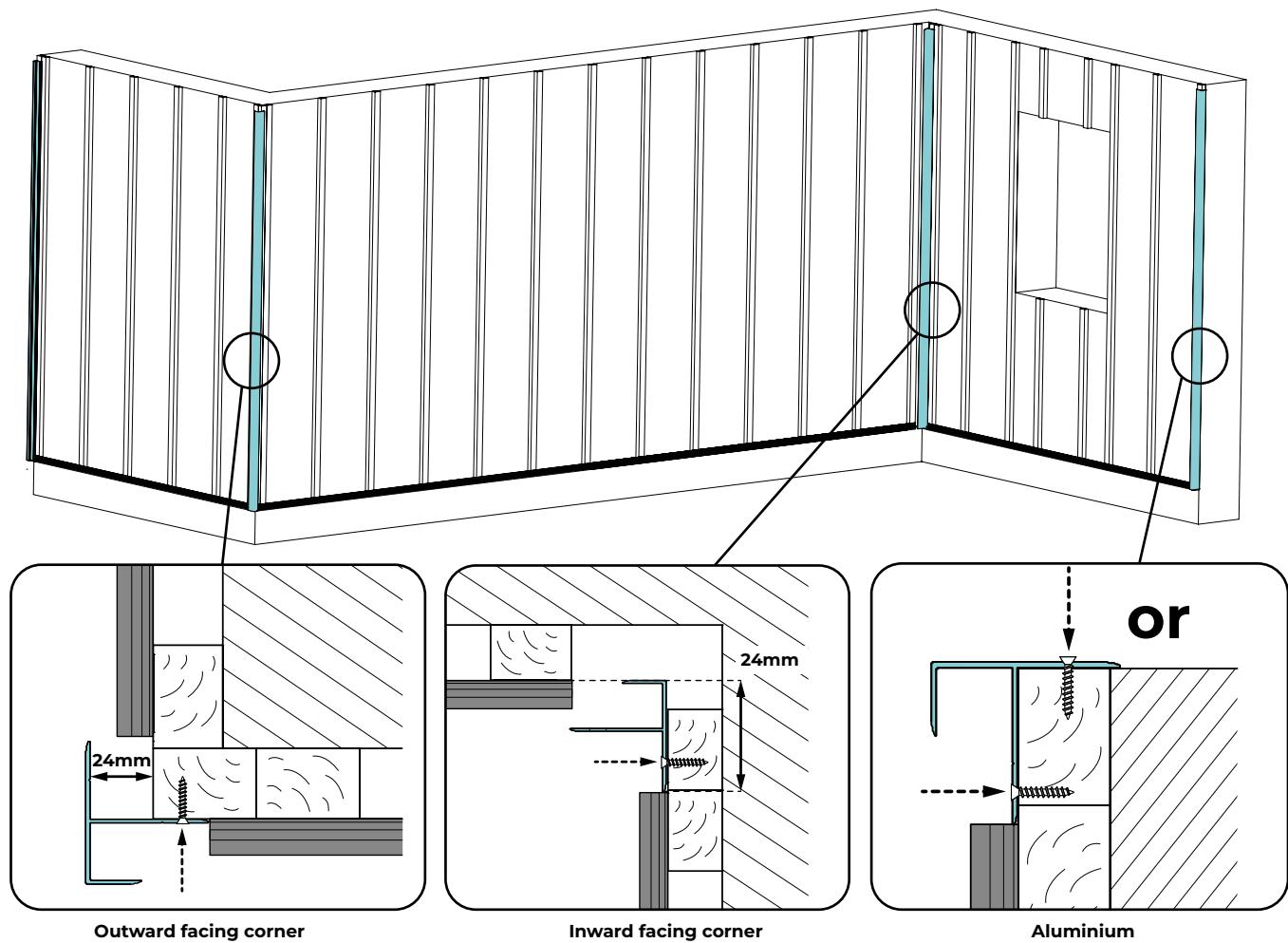


HORIZONTAL INSTALLATION (CONTINUED)

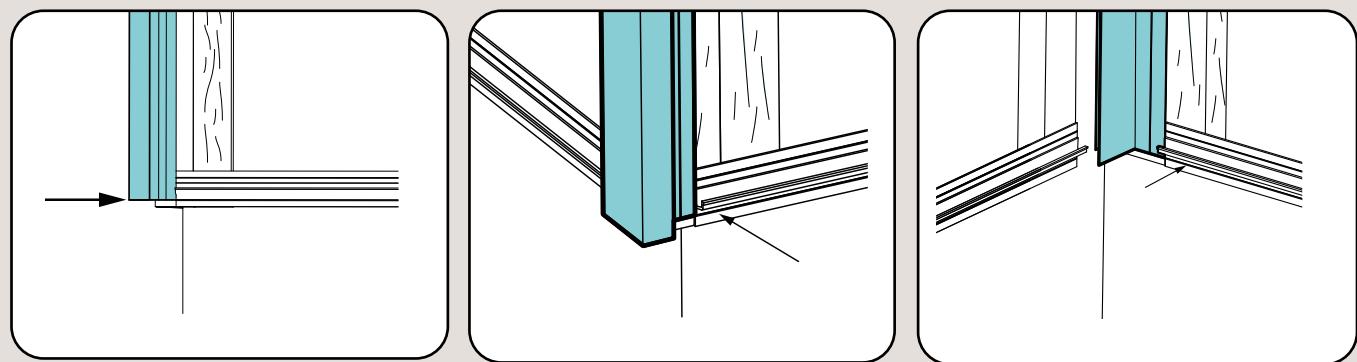
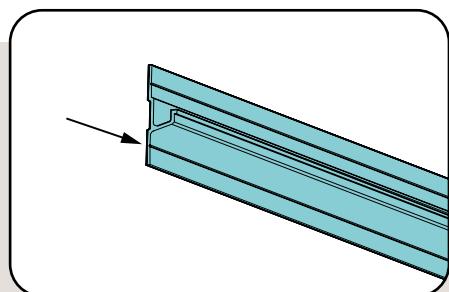
2. CORNER PROFILE, MULTI-FUNCTIONAL

A. Where do I place it?

The multi-functional corner profile can be used for inward and outward facing corners, and provide a finish for the corner.

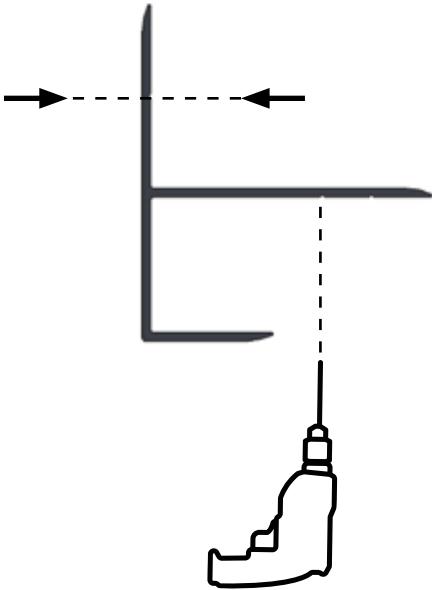


To position the corner profile correctly, use the low groove of the start profile as a marker.

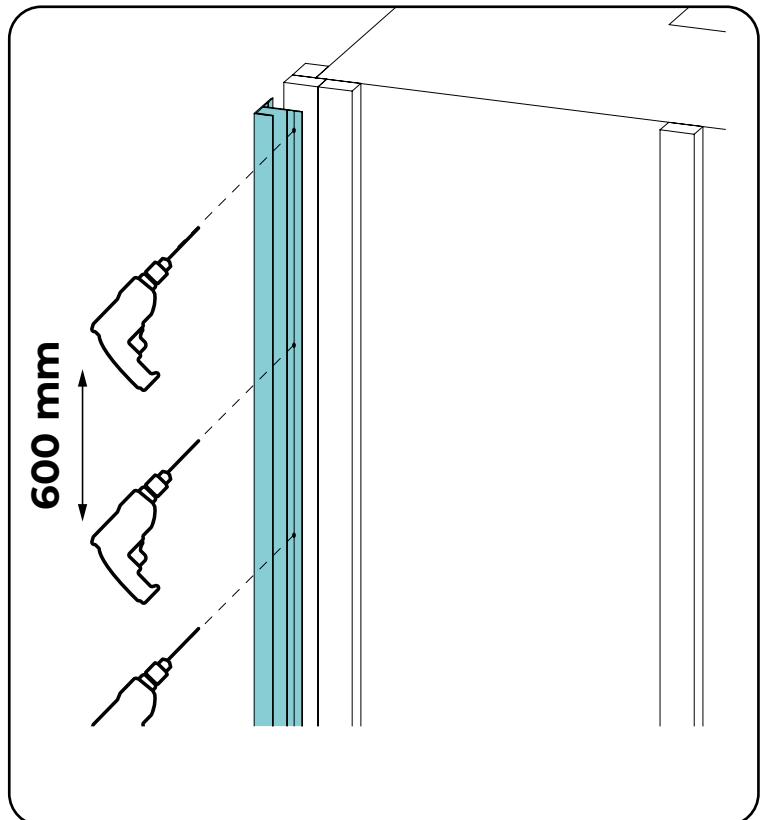


HORIZONTAL INSTALLATION (CONTINUED)

B. How do I fix it into place?



The multi-functional corner profile can have holes drilled into it in different places, depending on how it is used on the cladding.



Drill into the groove of the profile, then screw the profile onto the cleat, leaving a gap of 600 mm between adjacent screws.

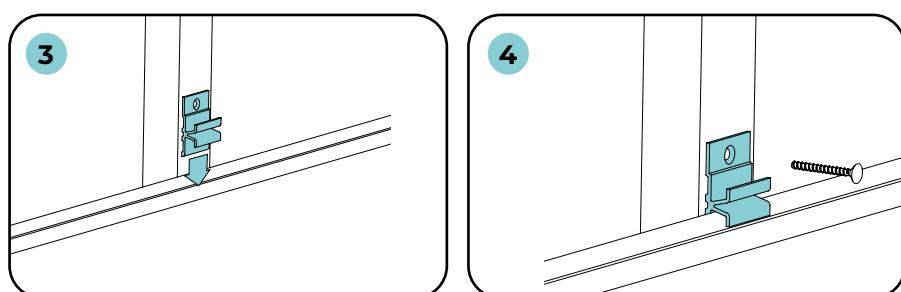
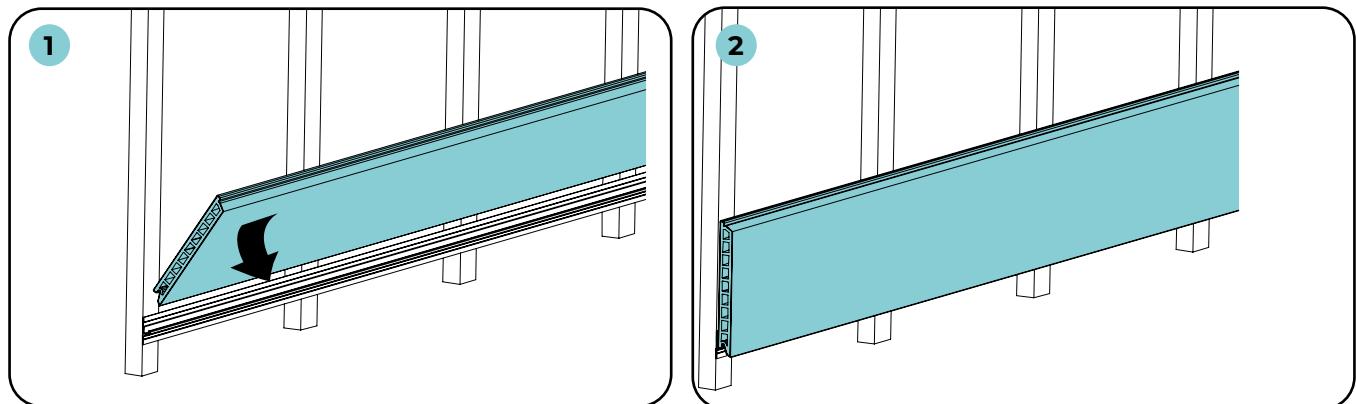


HORIZONTAL INSTALLATION (CONTINUED)

3. BOARD AND CLIP

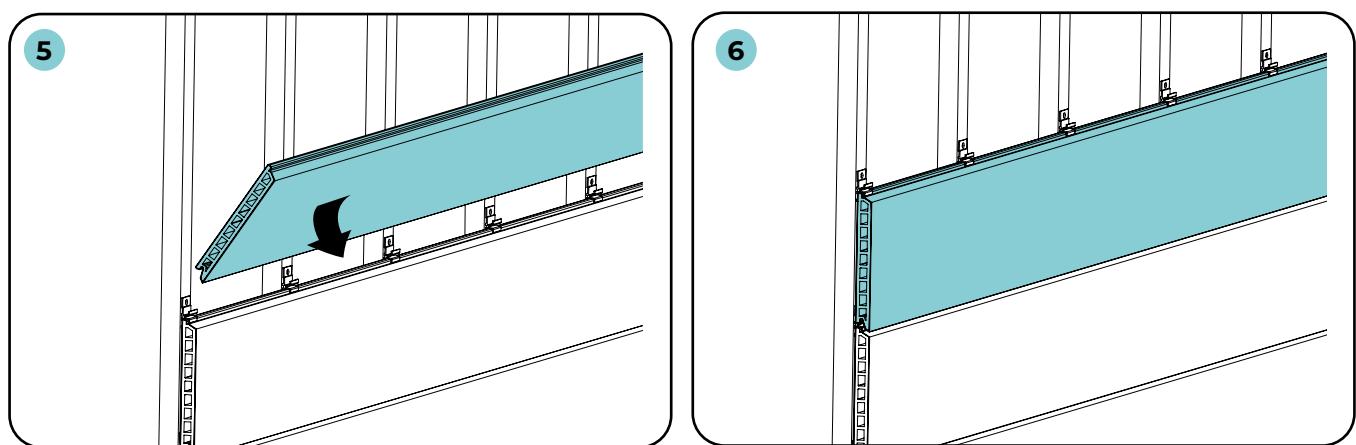
A. Fitting the boards

1-2. The Atmosphere 175 cladding board fits onto the start profile.



3-4. Fastening using clips

Fix the board in place using fastening clips, screwing these to the cleats (screws supplied with the clips). Place one clip on each cleat.



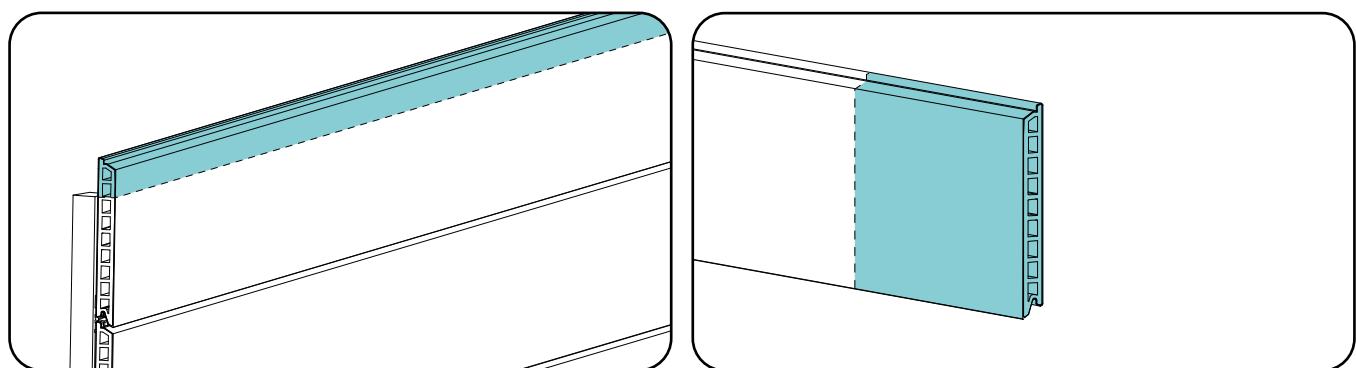
5. Fit the next board in the same way, continuing up to the top of the structure.

6. Fix each board in place using fastening clips, screwing these into place where each board meets a cleat.

B. Finishes

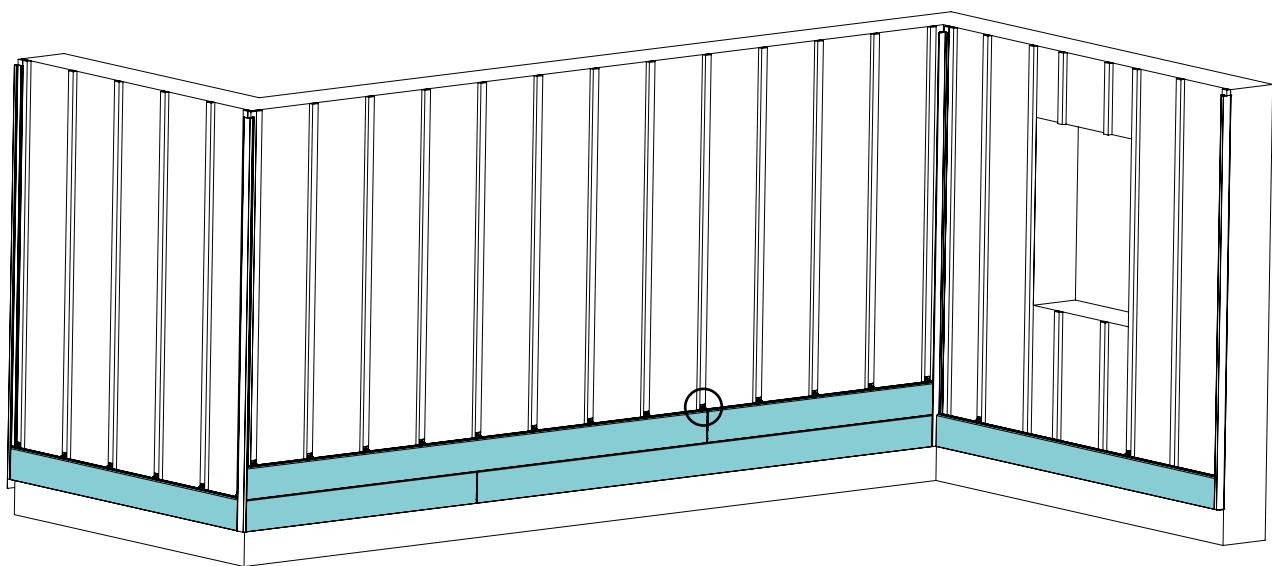
If required, the edge of the final board can be removed before fitting the end profile.

The boards can also be cut shorter.



HORIZONTAL INSTALLATION (CONTINUED)

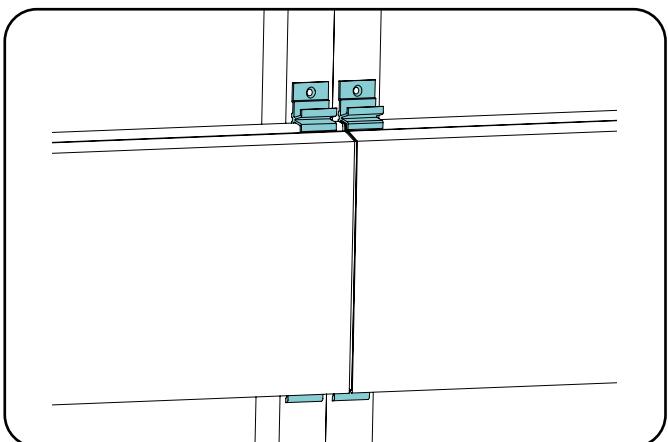
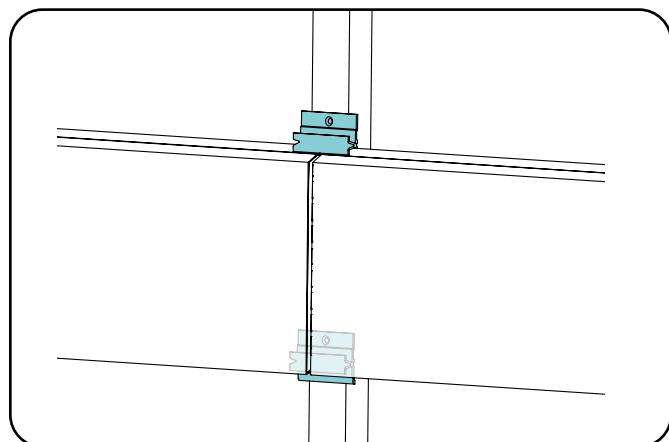
C. Butting the boards



There are two options when it comes to butting the boards:

Use the butting clip (wider than the cleat)
above and below the boards

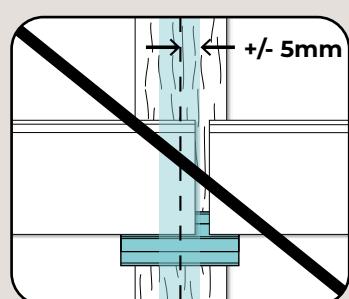
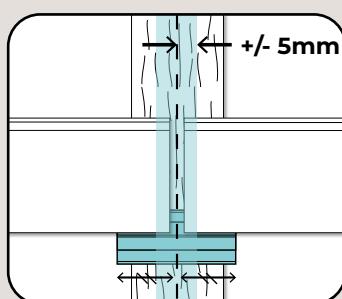
Install a second cleat in order to
affix 2 single fastening clips.



Reminder: The boards must be fitted to the cleats
with an overhang not exceeding 50 mm.

Centring tolerance

There is +/- 5 mm of tolerance as regards
centring boards on the butting clip.



CAUTION: make sure an expansion gap is left at the end of each board; see page 6.



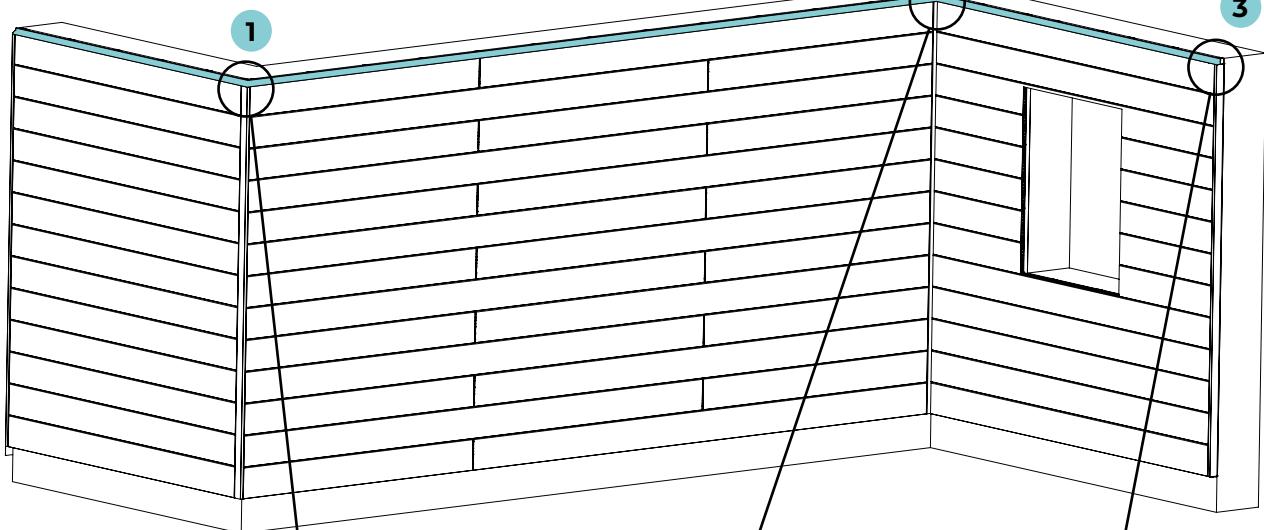
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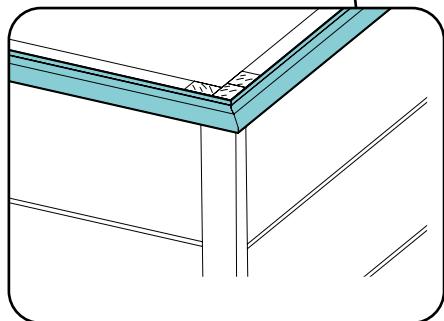
HORIZONTAL INSTALLATION (CONTINUED)

4. END PROFILE

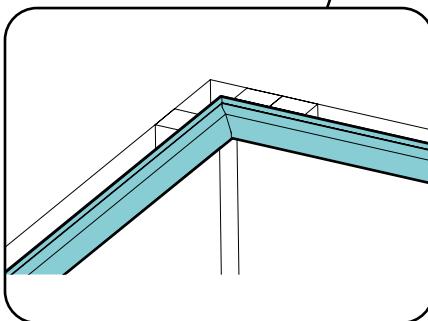
A. How do I place it?



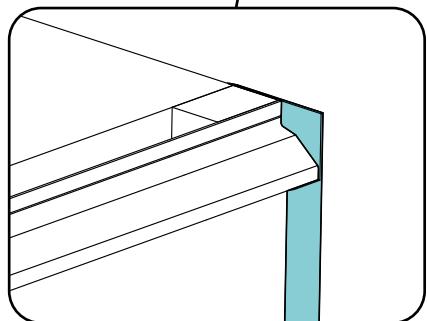
1 Outward facing corner



2 Inward facing corner

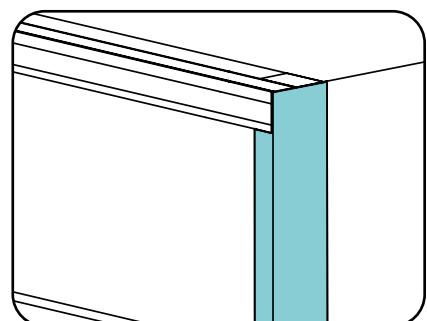
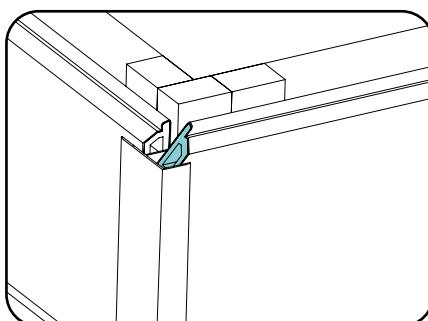
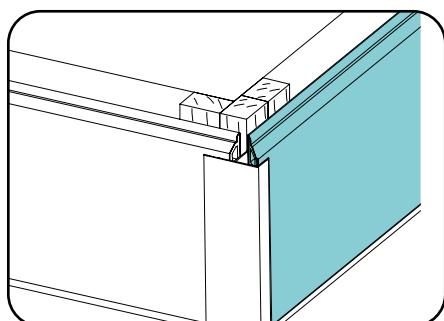


3 Corner profile



To make the join between profiles at corners, cut both end profiles at an angle of 45°

Cut the board

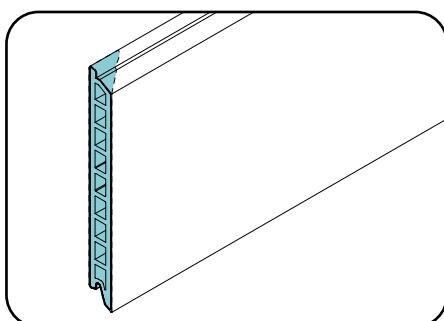


To create a successful 45° finish, cut the board beforehand.

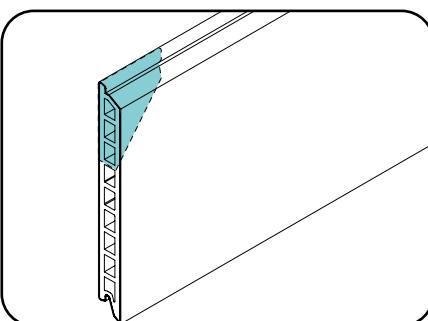
There are two cutting options:

To prevent any water ingress into the board, the corner profile has to be cut to create a corner profile upper finish.

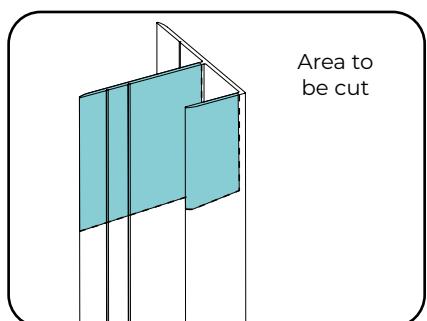
Make a chamfer in the height.



Make a chamfer on the corner



Finishing cut



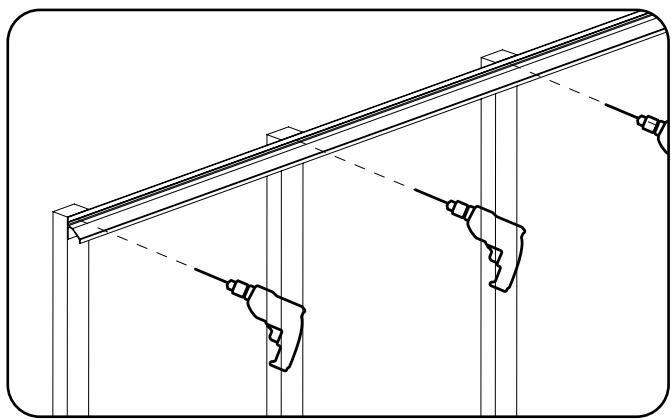
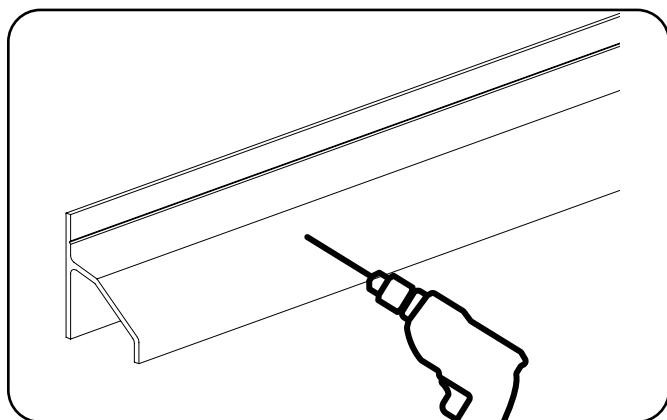
Area to be cut



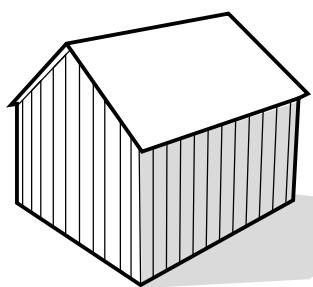
HORIZONTAL INSTALLATION (CONTINUED)

B. How do I fix it into place?

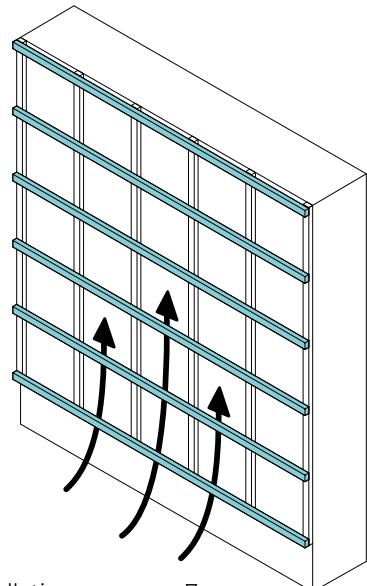
Drill and chamfer the groove of the profile and screw the profile to each cleat.



VERTICAL INSTALLATION



VERTICAL
INSTALLATION

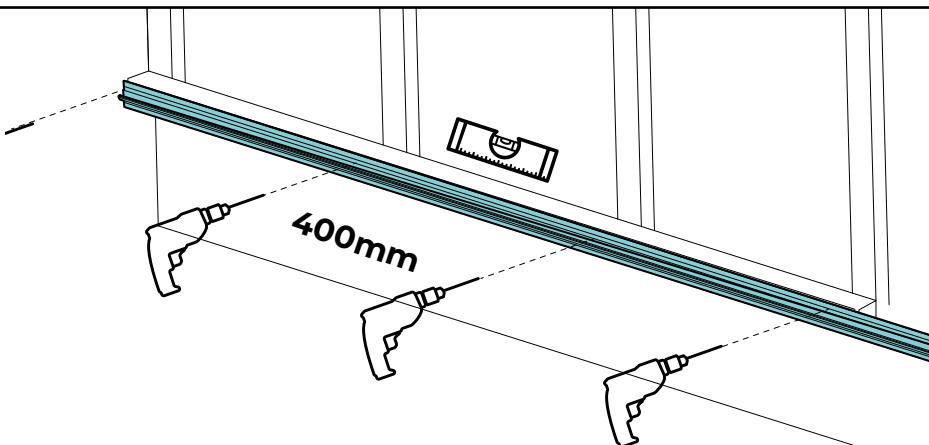


1. STRUCTURE

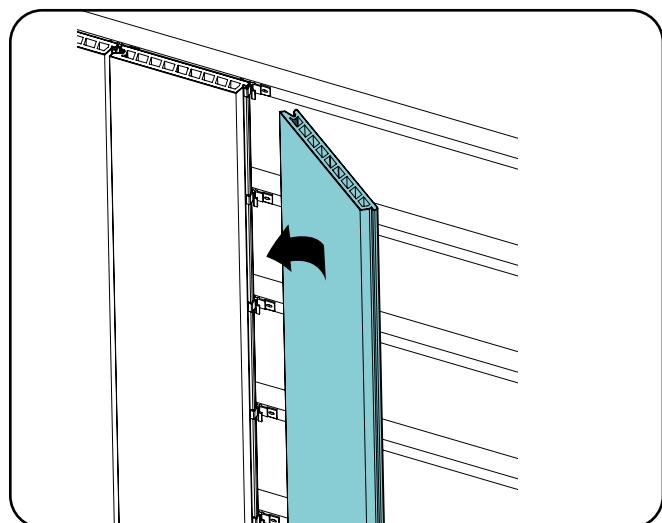
To ensure good ventilation, a vertical cladding installation must have a double-layer structure (1st layer = vertical cleats + 2nd layer = horizontal cleats).

2. START PROFILE

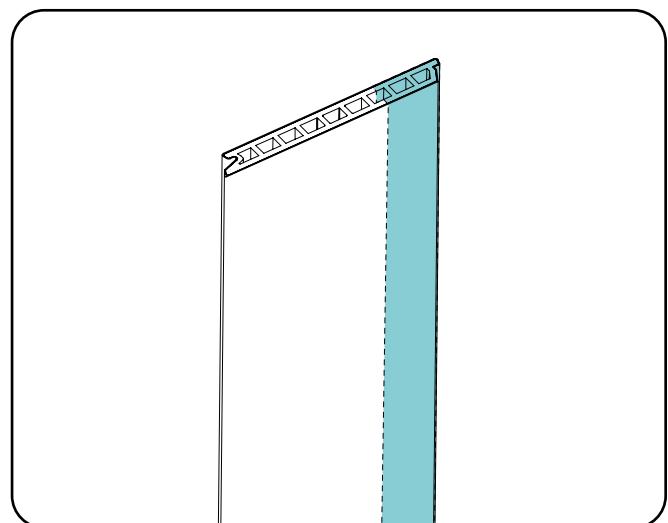
This is positioned and fixed into place in the same way as for a horizontal cladding installation; see page 7.



3. BOARD AND CLIP



The boards are fitted in the same way as for a horizontal installation



Again, the edge of the final board can be removed, to fit the cladding to the length of the wall



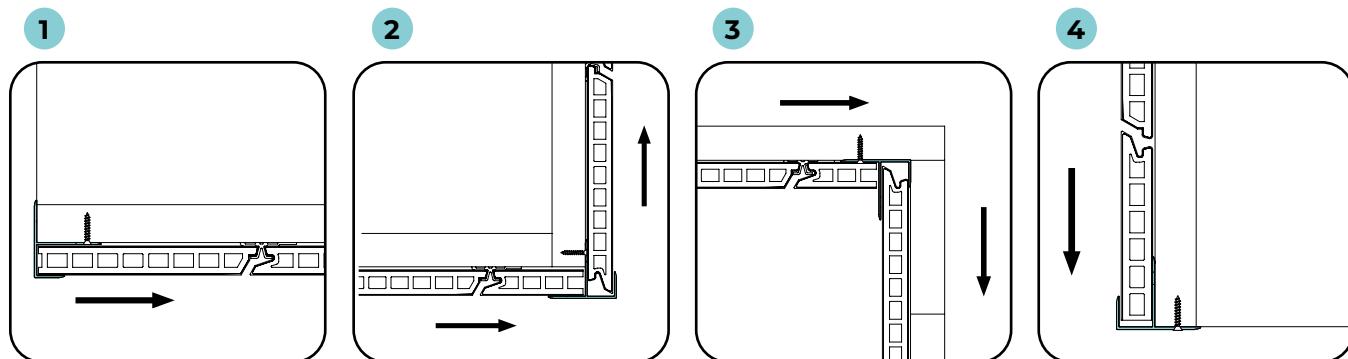
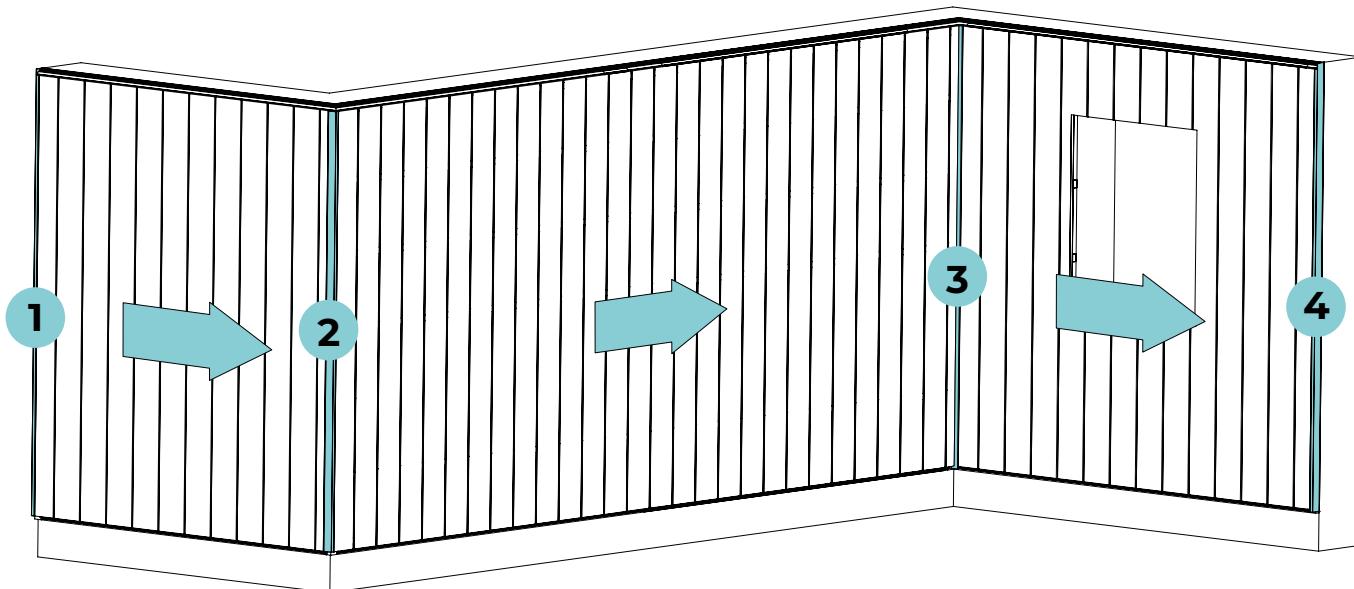
VERTICAL INSTALLATION (CONTINUED)

4. INSTALLATION DIRECTION

Boards installed vertically cannot be butted.

Vertical installation calls for a different fitting order from that of horizontal installation.

Depending on the case, boards installed vertically do not always fit into the corner profiles. This means the corner profile has to be fitted after the board. It is therefore important to fit corner profiles as and when the boards are installed. Example below:



Begin by fixing the corner profile into place before installing the first board.

Affix the corner profile after the last board on this wall has been installed.

Affix the corner profile before installing the last board on this wall. Then fix the board in place using a Silvadec® special composite screw.

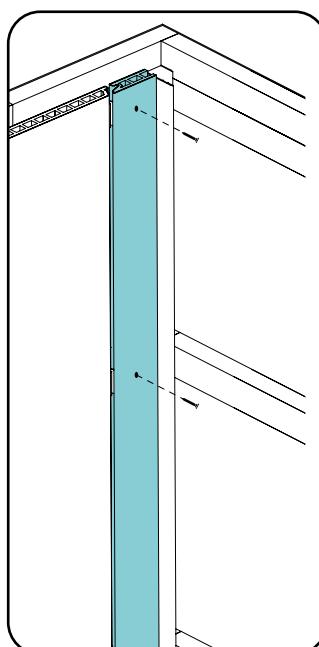
To finish with a corner profile, fix this profile in place after the final board.

3 CONTINUED

Boards that are not held by a corner profile must be screwed into place with Silvadec® special composite screws.

(SIVIS1701 SIVIS1702 SIVIS1703 SIVIS1704)

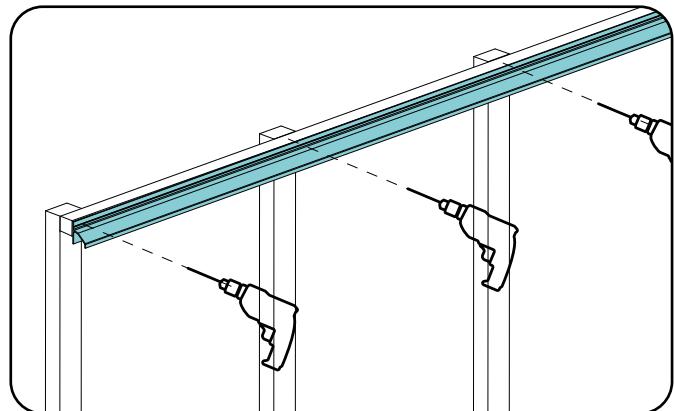
Beforehand, chamfer and drill holes ($\varnothing 4\text{mm}$) in the board, leaving a minimum distance of 25 mm between screws and the board edge.



VERTICAL INSTALLATION (CONTINUED)

5. END PROFILE

This is positioned and fixed into place in the same way as for a horizontal cladding installation; see page 13.



MAINTENANCE

Like any outdoor building product, the Silvadec® cladding range must be cleaned regularly. However, for persistent marks, rinse the cladding with plenty of water and brush if necessary. Do not use solvents and do not apply stain, paint or varnish. Co-extruded wood composite cladding profiles do not need any special treatment.

END-OF-LIFE RECYCLING

As with all household waste, burning wood composite in the open air is prohibited (article 84 of the French Departmental Sanitary Regulations). We strongly advise against the use of wood composite as fuel for boilers. Burning wood composite produces a significant quantity of clinker. We strongly advise against using wood composite in barbecues.

WARRANTY

Silvadec® wood composite is not a conventional product.

Please notify your insurance company. The colours and brushing of the co-extruded wood composite samples that we provide are not contractual. Profiles are guaranteed for 25 years against termites and fungal growth. This guarantee is limited to the supply of replacement profiles. For more detailed information on the warranty, please refer to the document "Warranty of Silvadec cladding profiles", reference "GAR-2".

