

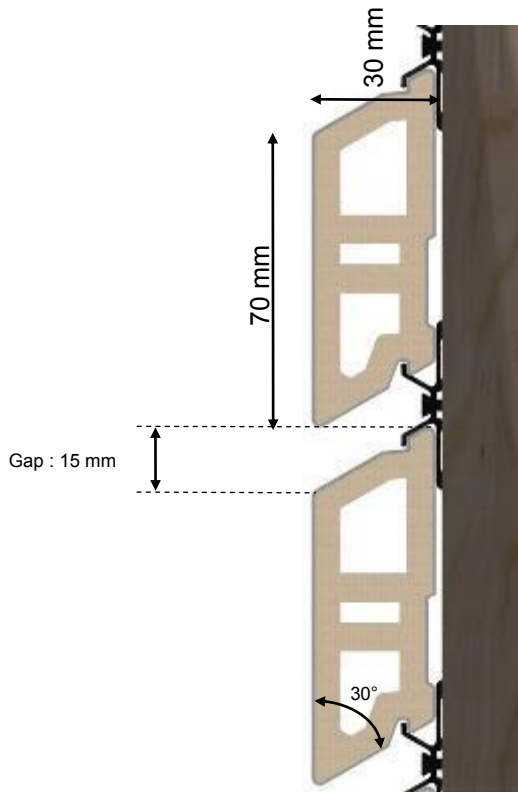
## CO-EXTRUDED LOUVER BOARD INSTALLATION INSTRUCTIONS

TO BE READ CAREFULLY BEFORE INSTALLATION

Before starting installation on site, we recommend strongly that you read this document in full in order to understand any installation issues. Silvadec co-extruded wood composite louver boards are not structural components: they are not designed to be load-bearing. They are not designed to be air or waterproof. This is a wall cladding product designed purely to improve the appearance. Co-extruded wood composite boards consist mainly of wood fibres. They may therefore suffer thermal expansion with dimensional changes; therefore compliance with these installation instructions is very important. Before any installation, check that the structure of the building can bear the load of the cladding (for reference purposes, the board weighs 1.8 kg per metre run). This product is designed exclusively for use as cladding. Our guarantee covers Silvadec products alone, provided they have been installed according to the installation instructions. We will deny any liability and cancel our guarantee if you fail to comply with the installation instructions below.



## LOUVER BOARD SPECIFICATION



Weight of a board: 1.80 kg per metre run

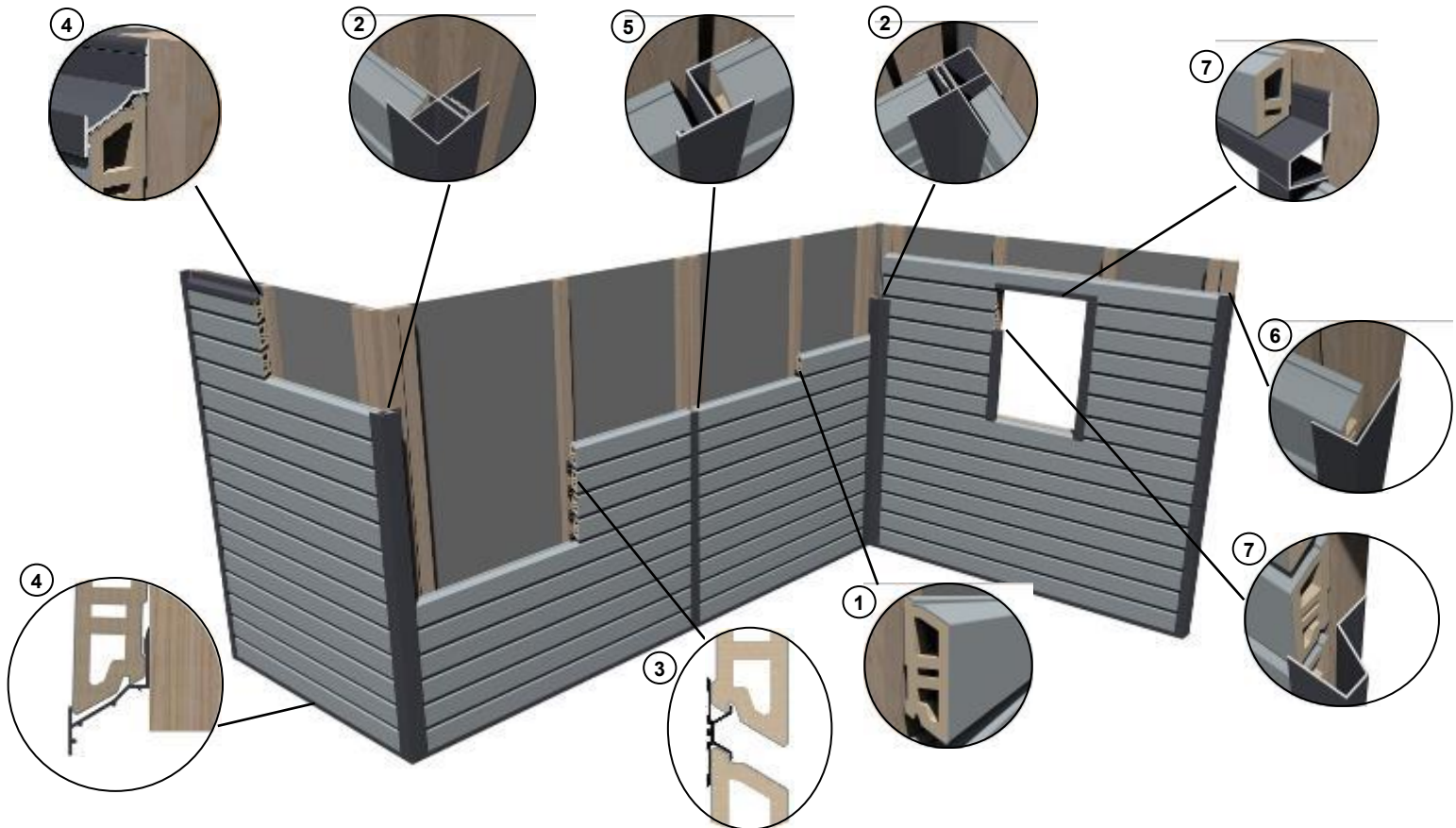
## LAYOUT

For a 15 mm gap between boards, use, on average the following quantities for one square metre of cladding:

| Distance between supports: 400 mm |               |
|-----------------------------------|---------------|
| Louver boards                     | 12 metres run |
| Supports                          | 3 metres run  |
| Clips and screws                  | 28            |

Attention : the values given above are indicative. For example, it doesn't take into account the double supports required to install the corner.

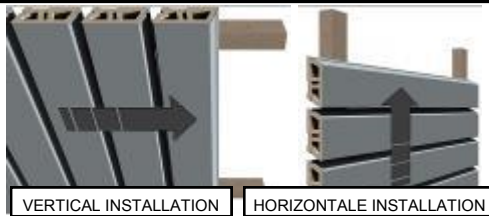
VIEW OF THE ASSEMBLY AND PARTS LIST



| n° | Name   | Drawing | Description  | Material  | Dimensions (thickness x width)                             | Unit weight  |
|----|--|---------|--|---|--|--|
| ①  | Louver boards  |         | Louver boards are produced using a unique co-extrusion method which caps the board in a thin layer of polymer material.                        | Forexia® co-extruded wood composite                             | 30 x 87 mm<br>Standard length: 3.6 m                       | <b>6.48 kg</b><br><i>(for a 3.6 m board)</i>       |
| ②  | Inside/outside corner                                      |         | This accessory is made from two 3.6 m profiles assembled together. .   | Thermo-coated aluminium   | 89 x 89<br>Length: 3.6 m                                   | <b>5,28 kg</b><br><i>(for both 3.6 m profiles)</i> |
| ③  | Bag of 140 clips for 15 mm gap between boards + 140 screws |         | This clip gives a 15 mm gap between boards. It is installed on supports.   | Anodised aluminium alloy (clips)<br>A2 stainless steel (screws) | Clip: 10 x 41 x 30 mm<br>TF VBA screw 4 x 30 mm (Torx T20) | <b>1,1 kg</b> per bag                              |
| ④  | Start and end profile                                      |         | Installed horizontally at the start and end of installation, it supports the boards. Under no circumstances should it be installed vertically. | Thermo-coated aluminium   | 34 x 52<br>Length: 3.6 m                                   | <b>1,25 kg</b><br><i>(for a 3.6 m profile)</i>     |
| ⑤  | Butting profile  |         | This covers the butting gaps between boards.   | Thermo-coated aluminium   | 34 x 63<br>Length: 3.6 m                                   | <b>1,66 kg</b><br><i>(for a 3.6 m profile)</i>     |
| ⑥  | Corner profile   |         | Finishing accessory placed in a vertical position; it covers expansion gap between the boards at the ends of the wall.                         | Thermo-coated aluminium   | 34 x 62.5<br>Length: 3.6 m                                 | <b>1,38 kg</b><br><i>(for a 3.6 m profile)</i>     |
| ⑦  | Window profile   |         | Its role is to hide expansion joints in the boards around openings.  | Thermo-coated aluminium   | 42 x 61<br>Length: 3.6 m                                   | <b>1,77 kg</b><br><i>(for a 3.6 m profile)</i>     |
| ⑧  | Installation jig (optional)                                |         | The jig indicates where you must nail the board, as well as the alignment of the nails on a wall.  | Transparent plastic   | 20x50 mm<br>Hauteur : 165 mm                               | <b>55g</b>   |

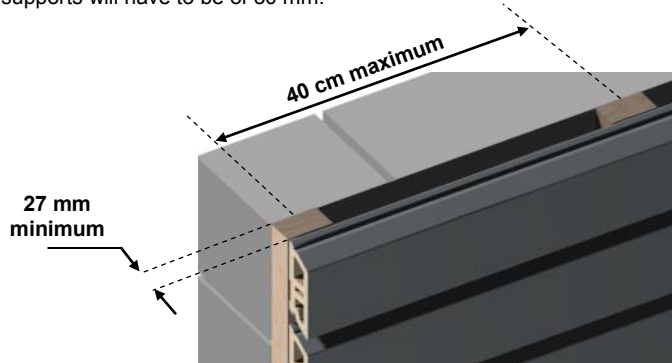
**Installation direction**

Always work according to these drawings.



**Supports**

Distance between supports: 40 cm maximum  
 Cantilever of the boards: 50 mm maximum  
 The supports used must have a durability class corresponding to a minimum 3b class of use.  
 They will have a minimum thickness of 27 mm in order to guarantee satisfactory ventilation and correct strength of the fixings. The minimum width of the supports will have to be of 30 mm.



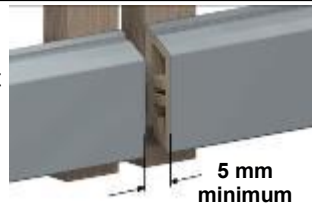
**Expansion in width between two boards**

The boards have been designed for openwork installation.  
 The gap between two boards must be at least 5 mm.

5 mm minimum

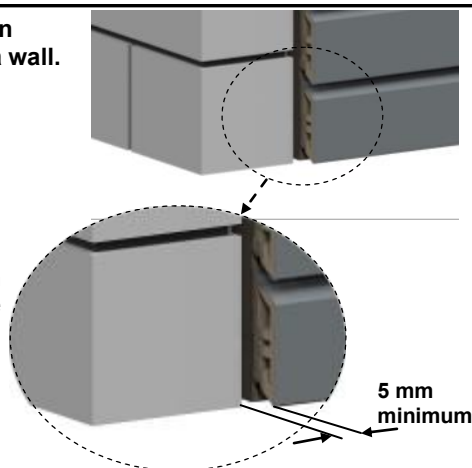
**Longitudinal expansion between two boards**

The longitudinal expansion gap must be at least 5 mm.



**Longitudinal expansion between a board and a wall.**

Leave at least a 5 mm gap at each end of the board.

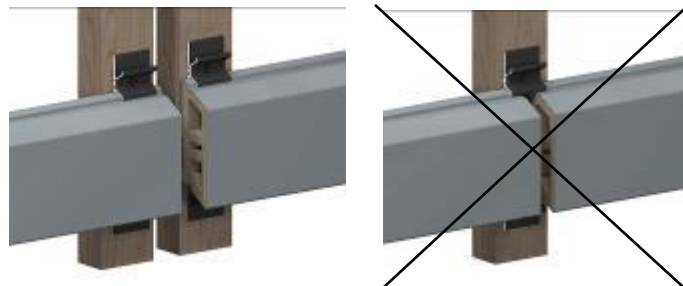


**Forexia®** wood composite is not a conventional product. Inform your insurer of this.

The colours and brushing of the co-extruded wood composite samples that we provide are not contractual.  
 Boards are guaranteed for 10 years against termites and fungi. This guarantee is limited to the supply of replacement boards.  
 For more detailed information on the warranty, please refer to the document "Forexia cladding section warranty", reference "GAR 2".

**Visible butting**

During an installation with visible butting, it is important to double the supports. If the boards are clipped, it is needed to install a clip on each extremity of the board.



**Space between the ground and the start of the cladding**

No piece should be less than 20 cm from the ground. We recommend strongly that you insert an anti-rodent grille.

20 cm

**Fixing of aluminium profiles on supports**

Use VBA 4 × 25 mm A2 stainless steel countersunk screws.  
 For building sites less than 3 km from the seaside, we advise using A4 stainless steel screws. It is essential to make a chamfer at 90° so that the head of the Screw is aligned with the aluminium section. This must be screwed at least every 60 cm to guarantee optimum support.

**Cutting**

Wood composite louver boards can be sawn and worked with all standard tools currently used for woodworking.  
 Aluminium sections can be sawn, milled or drilled using appropriate metalworking tools.

**Insulating membrane**

Choose an insulating membrane based on the size of the gap between boards and the openwork percentage (see the technical recommendations by the insulating membrane manufacturers).

**Maintenance**

Like any outdoor building product, the Silvadec cladding range must be cleaned regularly. However, if the stains remain, rinse the cladding with a lot of water, brush if necessary.  
 Do not use solvent and do not apply stain, paint or varnish.  
 Co-extruded wood composite louver boards do not need any special treatment.

**Storage**

Store wood composite profiles on a dry, flat surface, in a well ventilated place, so that they do not suffer any distortion.  
 Aluminium profiles and other accessories should be stored in a dry place where they are protected from moisture.

**Recycling and end of life**

As for all the household waste, it is forbidden to burn the wood composite outdoor (article 84 of the departmental health regulation). Furthermore, we deeply advise people against the use of wood composite as fuel for boilers. Actually, the combustion of composite wood lead to an important production of clinker. We strongly advise people against the use of composite wood in barbecues.

## TYPES OF INSTALLATIONS

It is possible to install louver boards vertically or horizontally.  
It is also possible to change the types of installation on a single wall.  
Boards must always be installed at right angles to supports.



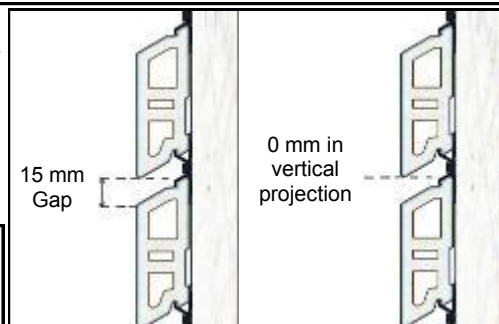
## TYPES OF INSTALLATIONS

### CLIPPED INSTALLATION for horizontal boards

Boards can be installed with Silvadec clips for cladding, providing a gap between boards of 15 mm (i.e. 0 mm in vertical projection).

Please remember that the manufacturer's warranty is not valid for boards installed with a clip different than the one sold for this purpose.

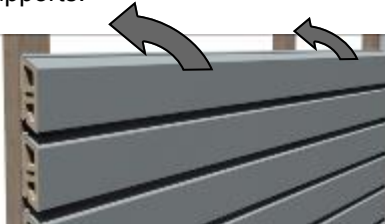
Clips bags include black aluminium clips and A2 stainless steel countersunk VBA screws, dimensions 4 × 30 mm. Clips can be used for horizontal or vertical installation.



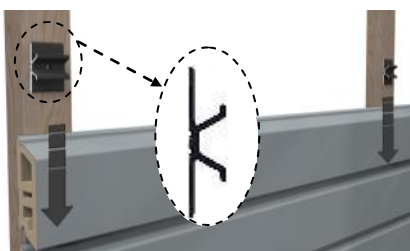
**Step 1 :** position the board in the clips according to the installation direction.



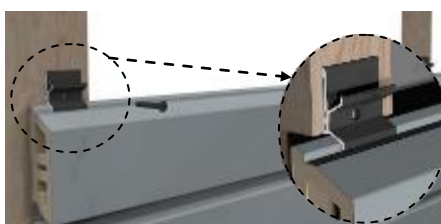
**Step 2 :** press the board against the supports.



**Etape 3 :** position the clips.



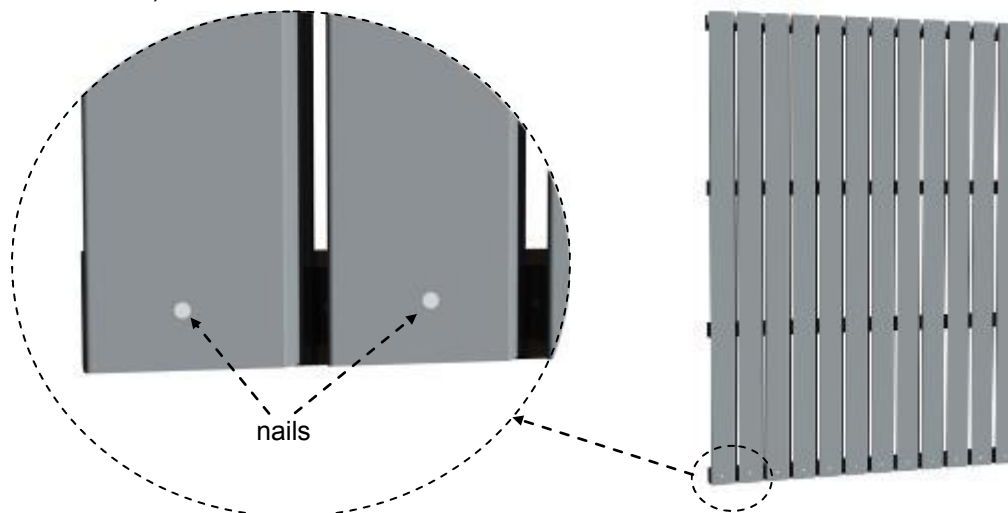
**Etape 4 :** screw the clips on to the supports.



Repeat the above 3 instructions, while installing the boards one after the others.

### CLIPPED INSTALLATION for vertical boards

The vertical boards installed with clips must be mechanically fixed in one point, in order to limit their sliding along the supports (nailed or screwed installation).



### NAILED INSTALLATION

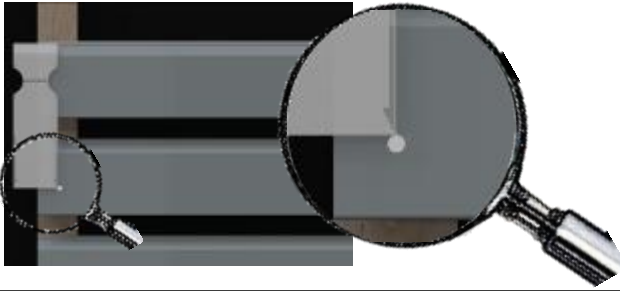
Boards can be nailed by hand or with a pneumatic nail gun.

In this case, the gap between boards can be different from that given by the clip, but it must not under any circumstances be less than 5 mm. It is then the installer's responsibility to select the insulating membrane correctly, based on the gap between boards and the openwork percentage. For nail installation, it is essential to set the power of the pneumatic nail gun so that the nail head does not penetrate more than 1 mm into the board. Insert a nail at each intersection between the board and the supports. It is essential to position the nails in the central hollow section. Use annealed A2 stainless steel nails, minimum length 55 mm. For building sites less than 3 km from the seaside, we advise using A4 stainless steel nails.

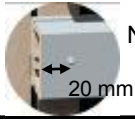
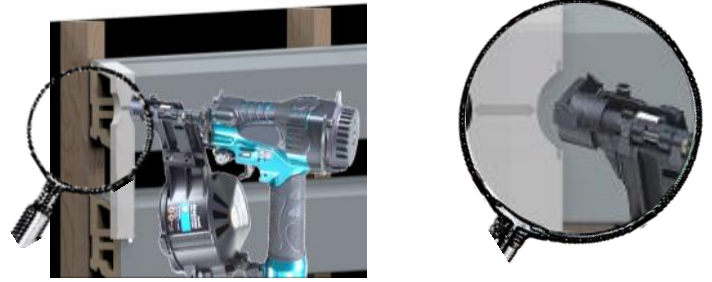


## NAILED INSTALLATION (continued)

**Step 1 :** Position the board and the installation jig provided for this purpose. This must be aligned on the bottom nail.



**Step 2 :** Position the pneumatic nail gun in the mark on the jig, aligned above the nail and then nail the board.



NB : Nails should not be placed less than 20 mm from the end of the boards.

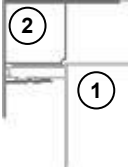
**In the event of screwed installation, boards will be fixed following the same instructions as for nailed installation. A pre-drilling would be necessary.**

## PROFILES INSTALLATION

All aluminium profiles from the Silvadec® cladding range have been designed to be installed with Silvadec louver board. The warranty will be void if these profiles are installed with any other product.

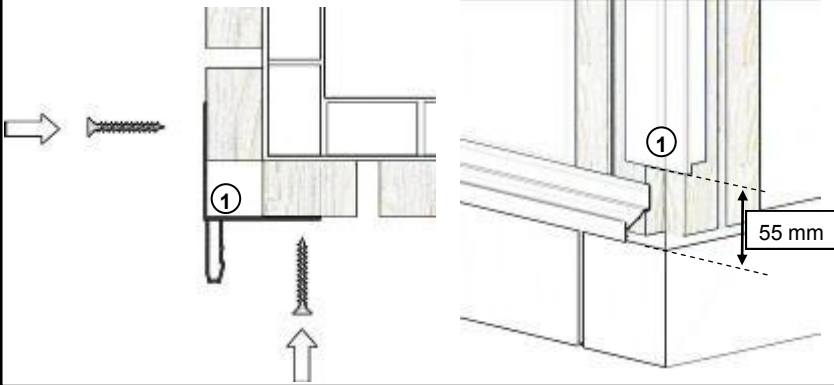
### CORNER

This accessory can be used for both inside OR outside corners. Its main function is to cover the longitudinal expansion gaps of the boards. Before any installation of a corner, it is important to double the supports on each of the two side walls.

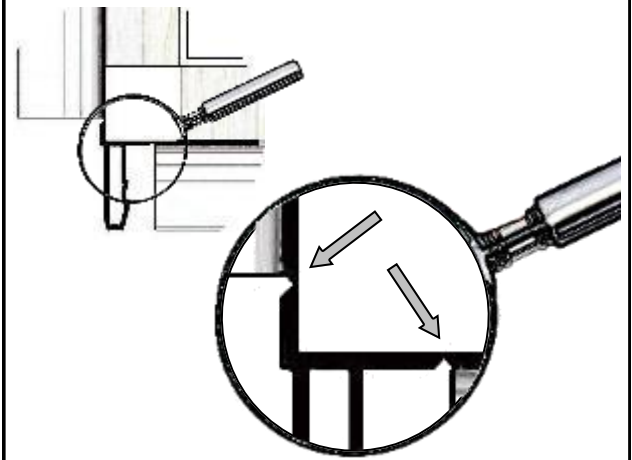


### INSTALLATION OF AN OUTSIDE CORNER

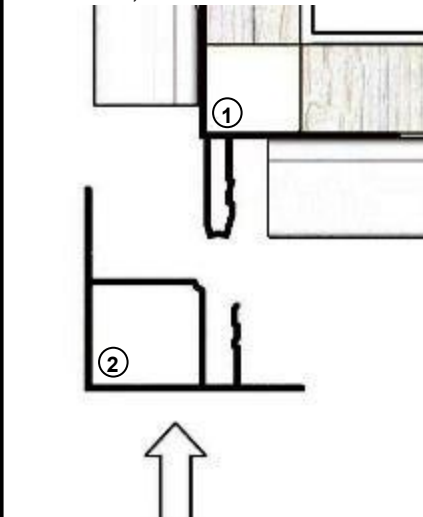
**Step 1 :** Fix profile ① by screwing it on to the supports. It is possible to use a start and end profile in the bottom part and in the top part of the wall. In this case, you will have to leave at least 55 mm gap at the top and at least 55 mm gap at the bottom and therefore reduce the length ① of the first profile by 110 mm and place it 55 mm from the start and end profile.



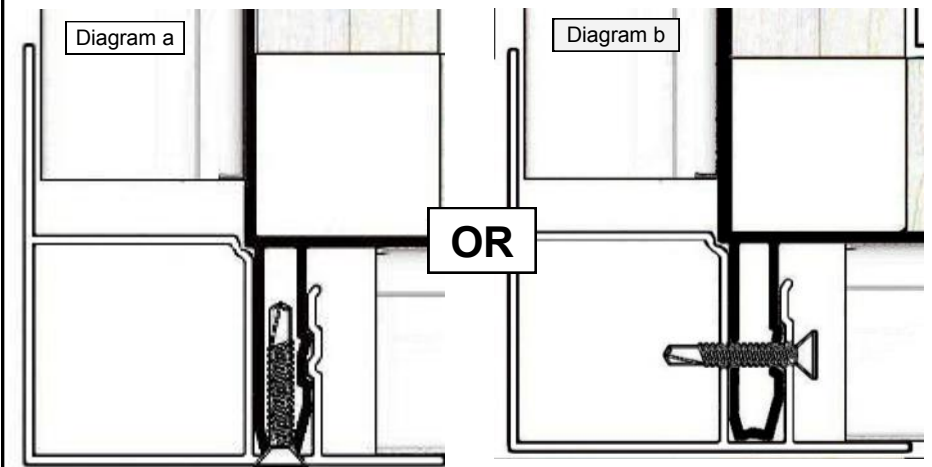
**Step 2 :** Install the boards, taking care to align them on the mark visible on profile ①



**Step 3 :** Insert profile ② into section ① using a hammer, until its about.



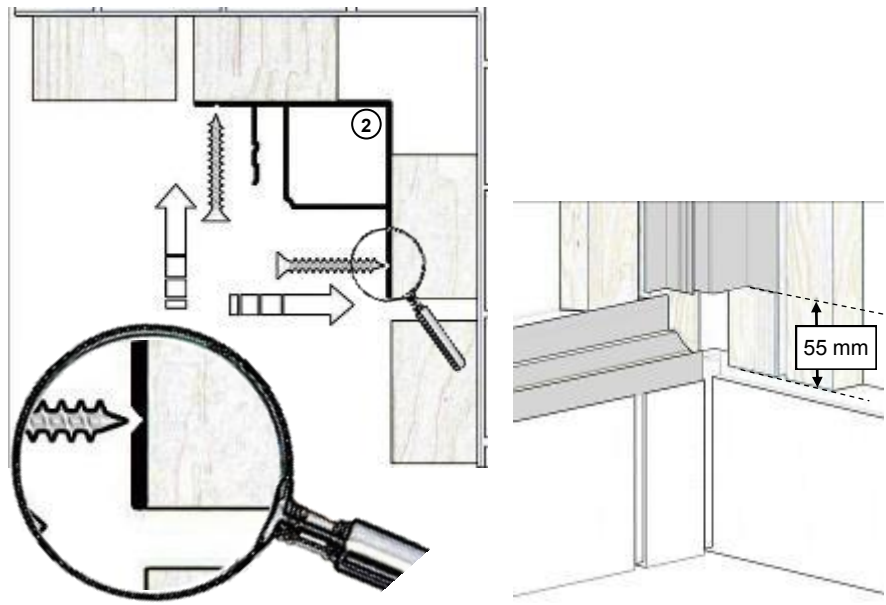
**Step 4 :** Eliminate any slip between the two profiles by inserting a stainless steel self-tapping screw (either outside - see diagram "a.", or inside - see diagram "b."). Only one screw per corner is needed.



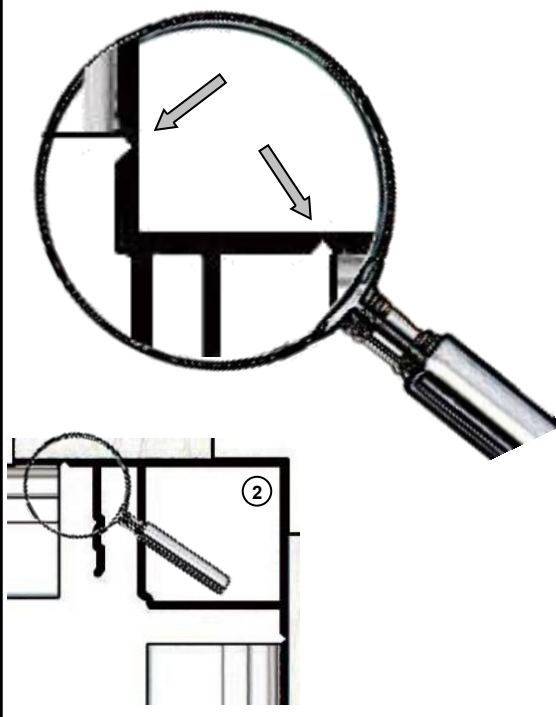
## CORNER (continued) INSTALLING AN INSIDE CORNER

**Step 1:** Position the support so that the profile (2) can be fixed to it by inserting screws into the marked holes. Next screw the aluminium profiles to the support.

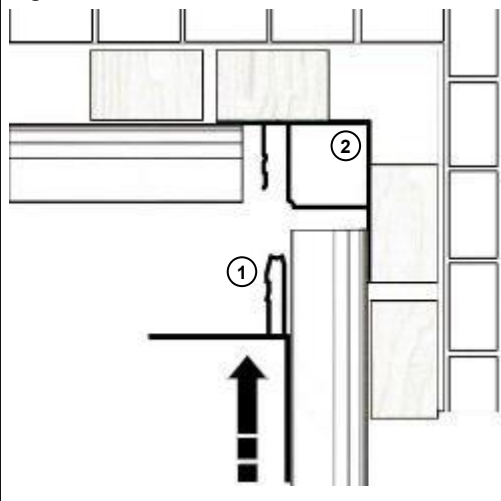
It is possible to use a start and end profile in the bottom part and in the top part of the wall. In this case, you will have to leave at least 55 mm gap at the top and at least 55 mm gap at the bottom and therefore reduce the length of the profile (1) by 110 mm and place it 55 mm from the start and end profile.



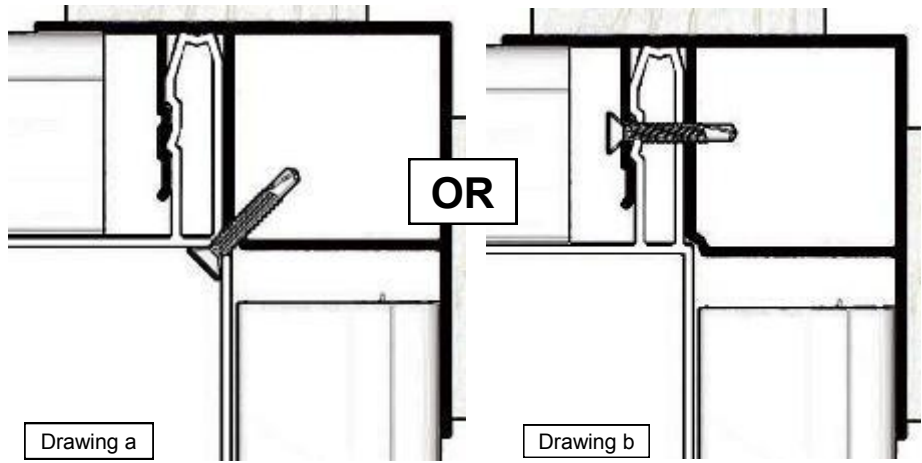
**Etape 2 :** Fix the boards, taking care to align them on the mark visible on profile (2)



**Step 3 :** Insert profile (1) into profile (2) using a hammer until it abuts.



**Step 4 :** Eliminate any slip between the two profiles by inserting a stainless steel self-tapping screw (either outside - see diagram "a.", or inside - see diagram "b."). Only one screw per corner is needed.

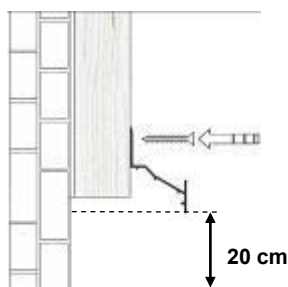


## START AND END PROFILE

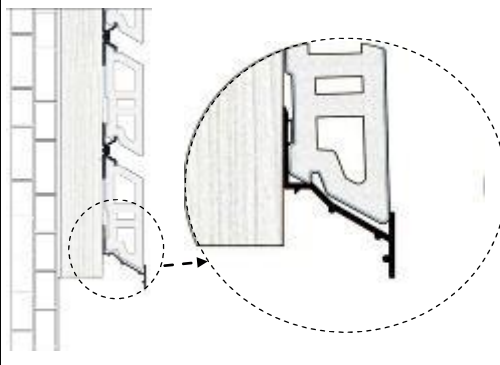
This section is only installed horizontally. It starts and ends the installation of vertical or horizontal boards. Its main function is to ensure that boards are supported properly.

### INSTALLING A PROFILE AT THE START OF INSTALLATION FOR HORIZONTAL BOARDS

**Step 1 :** Screw a start and end profile on to the supports, leaving a 20 cm gap between the ground and the bottom of the cladding. A screw is required for each intersection between a support and the profile.



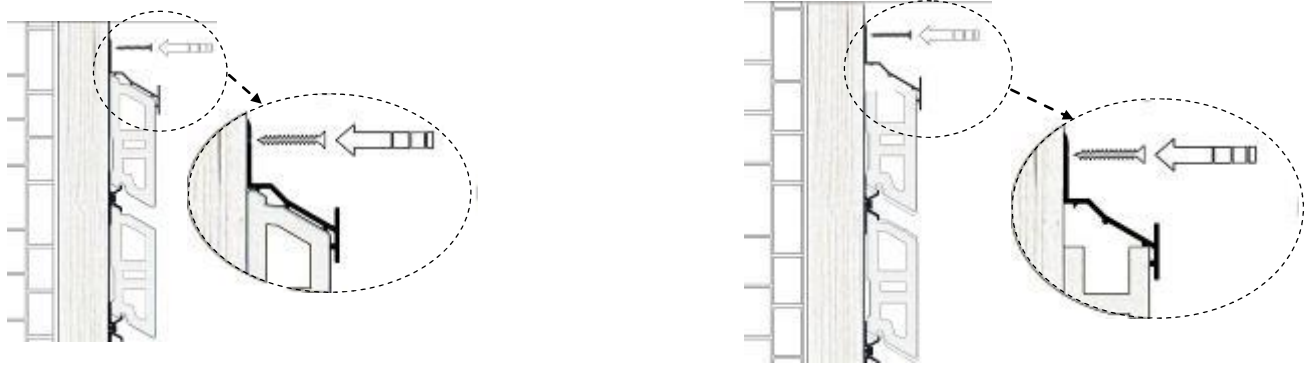
**Step 2 :** Continue the installation by fixing the boards (see paragraph regarding fixing the boards)



## START AND END PROFILE (continued)

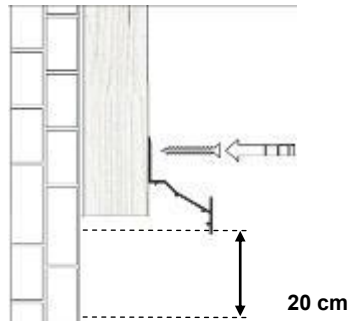
### INSTALLING A PROFILE AT THE END OF INSTALLATION, FOR HORIZONTAL BOARDS

At the top of the cladding, it is possible to insert a profile in order to provide support for the last board. To do this, fix a screw at each intersection between the profile and the supports.

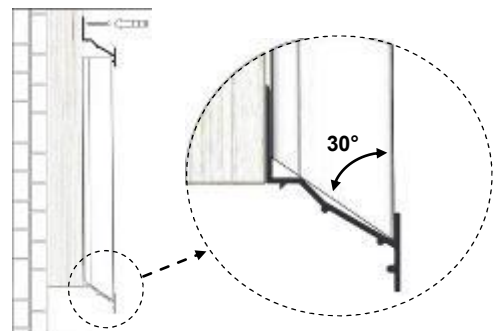


### INSTALLING A PROFILE AT THE START OF INSTALLATION FOR VERTICAL BOARDS

**Step 1 :** Screw a start and end profile on to the supports, leaving a 20 cm gap between the ground and the bottom of the cladding. A screw is required for each intersection between a support and the profile. You are strongly advised to insert an anti-rodent grille below this profile.

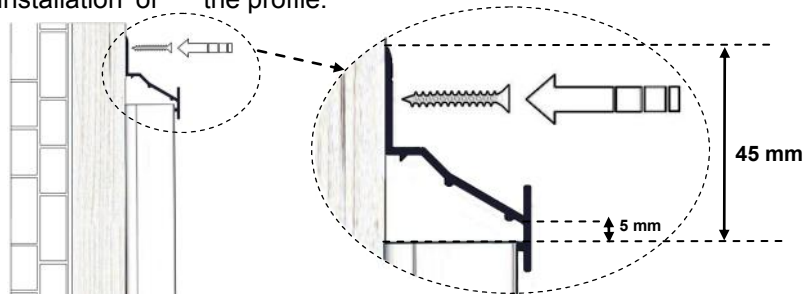


**Step 2 :** Continue the installation by fixing the boards (see paragraph regarding fixing the boards). Provide a 30° mitre at the base of each of the boards.



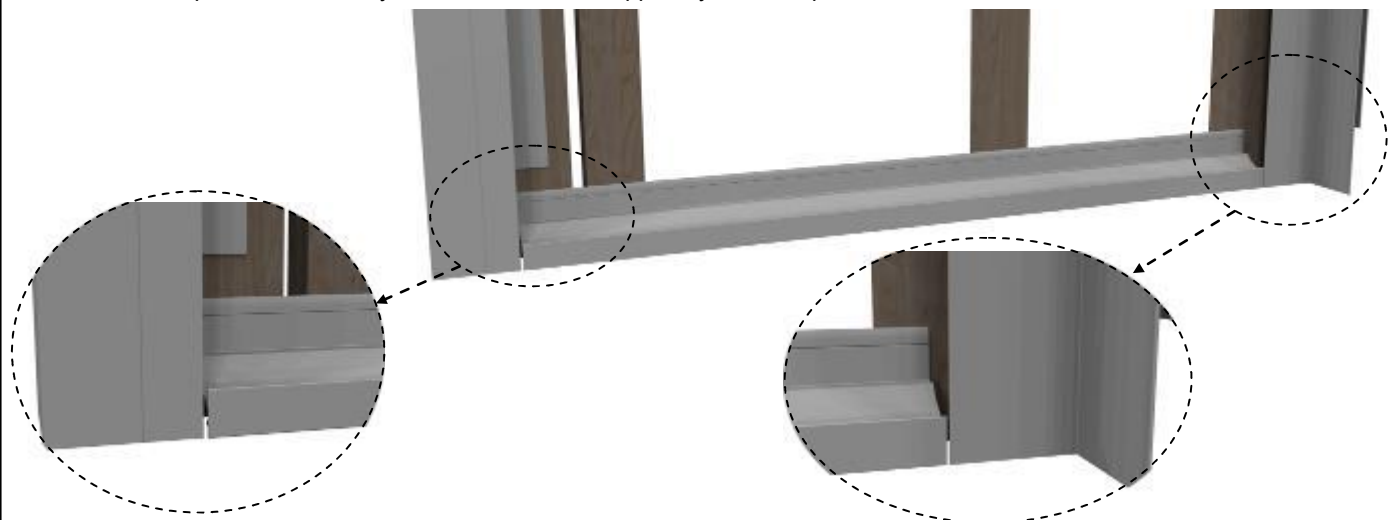
### INSTALLING A PROFILE AT THE END OF INSTALLATION, FOR VERTICAL BOARDS

At the top of the cladding, it is possible to insert a profile in order to provide support for the last board. To do this, fix a screw at each intersection between the profile and the supports. If the vertical boards cover the total height of the wall without butting, cut 45 mm away from the total length of the boards in order to leave the necessary space for the expansion gap and for the installation of the profile.



### INSTALLING A START PROFILE AND CORNERS

Position the start profile in such way that it won't be overlapped by a corner profil.



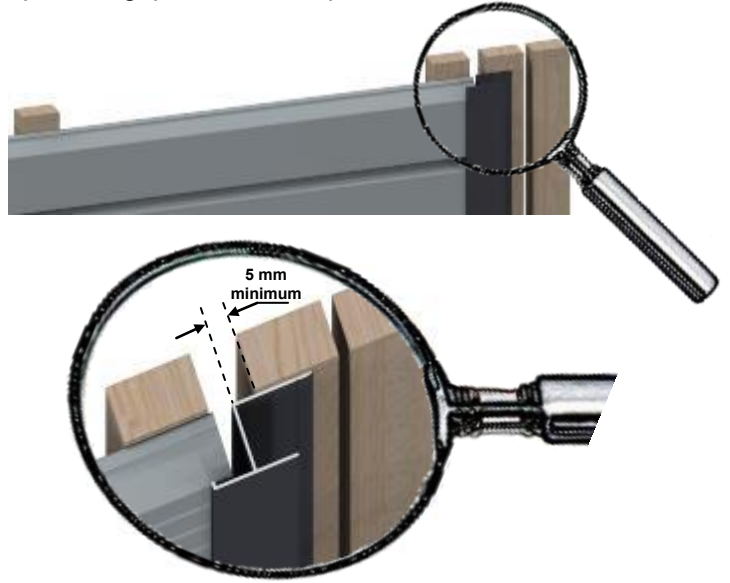
## BUTTING PROFILE

This profile is installed vertically and covers the expansion gap between the boards, installed horizontally or vertically.

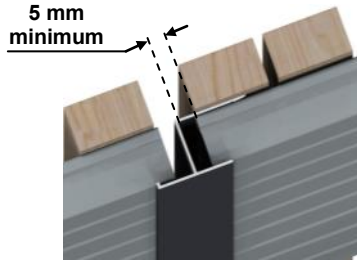
**Step 1 :** Fix the end of the boards on the first support.



**Step 2 :** Fix the butting profile, while leaving at least a 5 mm expansion gap between the profiles and the boards.

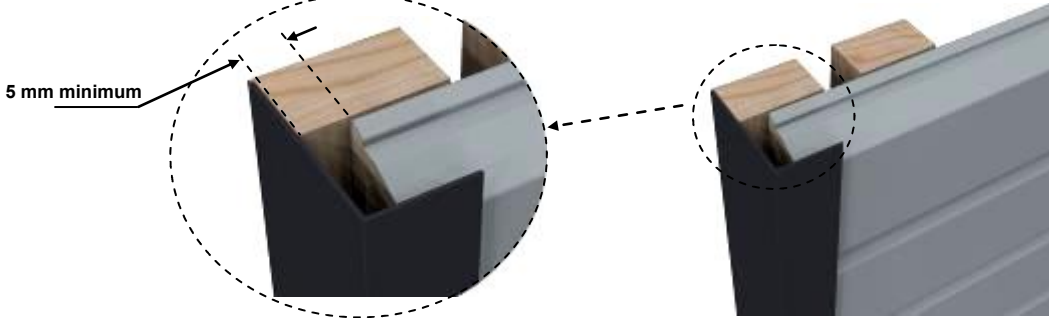


**Step 3 :** Fix the boards on the third support by leaving at least 5 mm of expansion gap between the profile and the boards.



## CORNER

A corner is used to cover the expansion gap at the end of the boards. The corner is screwed to the support.



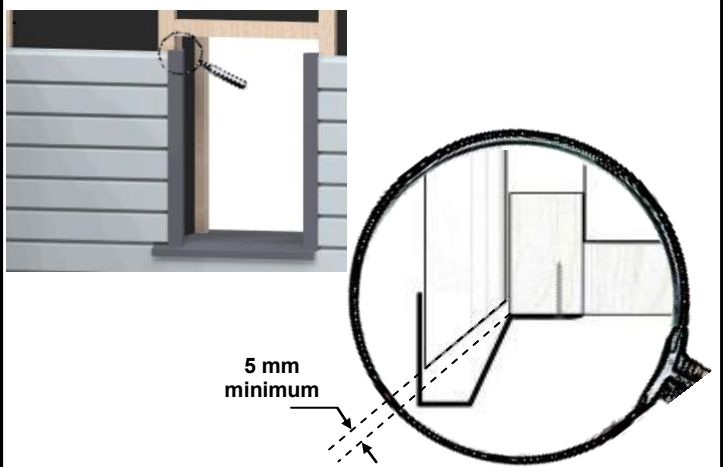
## WINDOW PROFILE

The window profile covers the expansion gaps on boards located on the main wall and in the window soffits. Before any fitting, it is important to place the supports on the circumference of the window

**Step 1 :** Fix window profile over the full height of the window.



**Step 2 :** Provide a mitre at the end of the boards so that the window profile covers them entirely. **Fix the boards, leaving a gap of 5 mm against the window profile.**



**Step 3 :** Fix the boards on the window soffit. For installing horizontal boards, you should make a 65° mitre and leave a butting gap of 5 mm.

