

TECHNICAL GUIDE

EXTERNAL CLADDING - INTERNAL CLADDING

sivalbp[®]
bois, technologie & design



Discover in our Technical Guide all the installation recommendations for our external and internal wood cladding.

To ensure proper installation, the rules published by the French code of practice DTU 41.2 (for external cladding) and 36.2 (for internal cladding) should be applied.

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FRENCH
MANUFACTURE



SUSTAINABLE
CERTIFIED WOODS



ECO-FRIENDLY
COMPANY



QUALITY AND
KNOW-HOW



ATTRACTIVE
SUSTAINABLE CLADDING



TECHNICAL GUIDE



EXTERNAL CLADDING

OUR INSTALLATION ADVICES



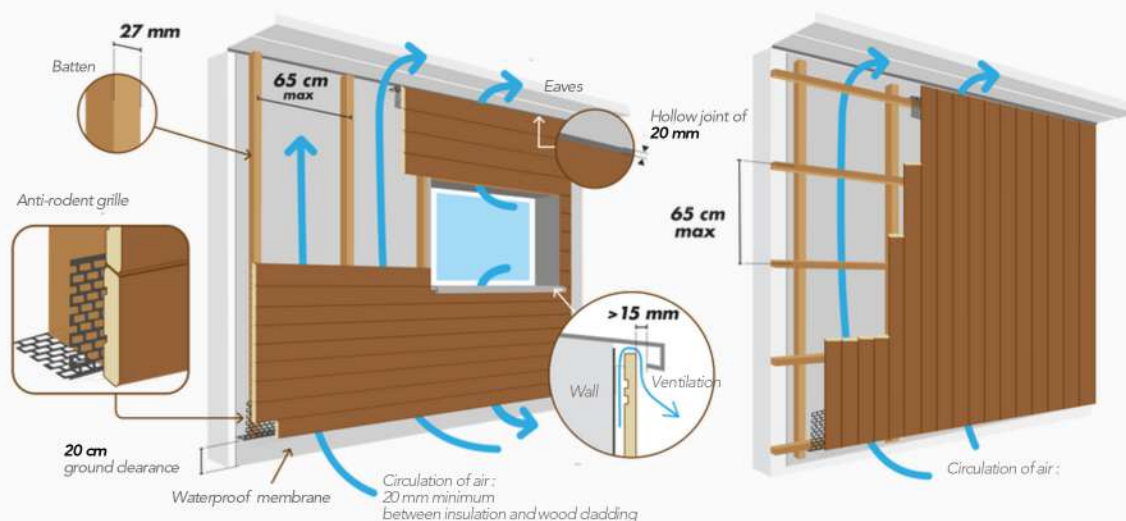
KEY TIPS FOR A CORRECT INSTALLATION OF SIVALBP CLADDING

This document does not replace the recommendations in the French Code of practice DTU 41.2

- 1 Have you got enough boards ?
Plan for cutting wastage (on average 12 to 18%)
- 2 Transport and store the boards in a dry place, sheltered from the elements and ventilated
- 3 Install on battens 27mm thick, spacing 65cm maximum measured between the centres of the battens
- 4 Ventilate imperatively : air inlet and outlet with anti-rodent grids
- 5 Ensure ground clearance of 20cm minimum
- 6 Handle the boards carefully
- 7 Attach with :
 - Stainless steel annular ring nails or twisted nails or stainless steel screws (minimum A2 - A4 if located near the coast).
 - 1 nail for boards < or equal to 125mm : refer to the Sivalbp profile diagrams
 - 2 nails for boards > 125mm : refer to the Sivalbp profile diagrams
- 8 Limit the penetration of the screw or nail head into the board to 1 mm maximum
- 9 All cuts must be touched up with our touch-up paint
- 10 Establish a protection perimeter at the foot of the wall to protect the frontages from splashing (bad weather, splashes of metal, etc.)
- 11 For vertical installation :
 - mandatory double battening
 - tongue positioned at the top
 - maintain a clearance gap (minimum 15mm) with the drip line, window surrounds, etc.
- 12 Warning :
any boards which are installed are deemed to be accepted

This document does not replace the recommendations of DTU 41.2.
Find out more about our installation recommendations for our Ecothermo solutions in our product data sheets.

EXTERNAL CLADDING INSTALLATION RECOMMENDED BY SIVALBP



Horizontal installation

Vertical installation : mandatory double battening



To ensure the products are correctly installed, the rules laid out in the French code of practice DTU 41.2 for external cladding, should be observed.

Outdoor cladding in solid or finger-jointed wood

These fulfil several purposes :

- A functional role : permanent protection against the elements.
- A thermal role : the thickness of the board, the wood itself and the air gap effectively improve the thermal insulation of the building.
- A mechanical role : resistance to shocks and attacks.
- The choice of finish, the support, the technical complexity and the quality of the installation are crucial.
- An aesthetic role : the finishing touch to embellish your project.

The different ways of installing wood cladding

- Horizontal: the most frequent method of installation. It gives the illusion that the building is larger thanks to the perspective lines. Sivalbp boards have grooved ends to ensure perfect joints. Sivalbp profiles with secret nailing give the boards stability and a long-lasting finish.
- Vertical: the most traditional method of installation. It gives the building a slender, elegant look. The tongue must be positioned facing the dominant wind. The bottom edge of the boards must be chamfered to facilitate water drainage.
- Diagonal: the most original method of installation.
- It gives the elements of the frontage a dynamic look. It requires great skill to install it and particular care must be taken for the cuts.
- Openwork: this is the most difficult method of installation but gives the building a light, airy look. It requires meticulous installation given the open joints requiring a more robust waterproof membrane and UV protection.

Areas of use

- Individual homes or multi-unit housing, urban developments,
- industrial buildings or civil engineering works.
- External covering on solid concrete walls, hollow breeze blocks, bricks, external plaster or timber frames.
- New constructions, extensions.
- Renovation of the aesthetic appearance of the home:
- to dress or replace the frontage.

Estimating the surface area

Measure the frontage and add 12 to 18% to take into account cuts (gables, corners, openings, etc.).

Preparation of the wood

- In order to "acclimatise" the wood, the boards must be removed from their packaging 24 to 48 hours before installation. The boards must be stored under shelter on the construction site in an open stack raised off the ground and protected from splashing.
- The boards must have a maximum moisture level of 19% when they are installed. In addition to this general rule, this moisture level must be systematically adapted to the climatic conditions in the region. Ideally the wood to be installed should have a moisture content as close as possible to the equilibrium moisture of the site. To do so, the installer should allow the cladding boards to stabilise before installation.

The waterproof membrane

The main function of cladding is not to be waterproof.

It is the waterproof membrane which ensures the frontage is watertight. The waterproof membrane is a film protecting against the wind and rain.

It is mandatory (except for walls which are already watertight, solid concrete walls).

It is attached during the installation of the secondary framework and the battens.

The air gap

The ventilated air gap is an essential cavity behind the cladding boards. It is created by discontinuous battens arranged vertically or horizontally.

This cavity allows the air to circulate and any moisture to escape. This gap must comply with the following parameters:

- ventilation inlets and outlets greater than or equal to 50cm²/linear metre. Thickness in the main section greater than or equal to 20mm. The battens must not restrict the circulation of air;
- location of air inlets at the top and bottom of the cladding;
- the top and bottom ventilation outlets must ensure ventilation is towards the outside and not towards the inside of the building;
- incorporation of anti-rodent ventilation grilles at the top and bottom.

Incorporation of anti-rodent ventilation grilles at the top and bottom.

The secondary framework is the support on which the cladding boards will be attached. It is an intermediate structure between the supporting structure and the cladding. The quality of the framework is crucial to increase the lifetime of the cladding. A secondary framework is constituted of battens attached to the structure of the building itself. These class 2 treated battens have very specific dimensions in order to guarantee the solidity of the structure and the effectiveness of the air gap.

- width greater than or equal to 30mm.
- minimum thickness of 27mm.

They must be attached at a minimum of 40cm and a maximum of 65cm apart.

They are attached using stainless steel nails or stainless steel twisted or annular ring nails penetrating at least 30mm into the uprights.

The arrangement of the battens depends on the type of installation selected.

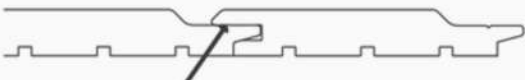
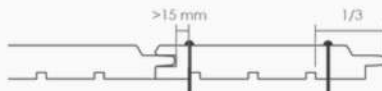
- Horizontal: single vertical rows of battens.
- Vertical: double battening for better ventilation.

Attachments of the boards

- The boards are attached to the battens using nails or screws.
- For boards less than 125mm (effective widths), just one nail is necessary.
- For wider boards, a second nail is required on the visible surface of the board.



Interlocking tongue and groove profile

PROFILES EFFECTIVE LENGTHS < OR = 125MM	PROFILES EFFECTIVE LENGTHS > 125MM
<u>SECRET NAIL</u>	<u>WITHOUT SECRET NAIL</u>
<p>1 single nail in the tongue, invisible attachment</p> 	<p>2 visible nails :</p> <ul style="list-style-type: none"> • 1 nail in the upper part of the board • 1 nail in the lower part of the board 

Openwork profiles

OPENWORK PROFILES	THICKNESS AND WIDTH 18x65 et 27x70
<p>PARALLÉLO 30 horizontal or vertical installation</p> 	<p>1 nail in the centre of the slat + double up the nails at the ends</p>  <p>With a maximum centre-to-centre distance of 400 mm 2 fixings if the centre-to-centre distance is between 40 and 65 cm</p>
<p>TRAPÉZO vertical installation</p> 	<p>1 nail in the centre of the slat + double up the nails at the ends</p>  <p>With a maximum centre-to-centre distance of 400 mm 2 fixings if the centre-to-centre distance is between 40 and 65 cm</p>

Specific points for the installation of openwork profiles


- The head of the nails or screws must not penetrate further than 1mm into the boards.
- Cut edges must be treated: preservation then finish. We also recommend that the ends of the boards should also be treated.
- The thickness of the battens used for the secondary framework must be a minimum of 27mm.
- For curved surfaces, the bending radius must be greater than 7m.
- A waterproof membrane satisfying the standard must be installed (unless the wall is made of shuttered concrete).

Protection against external factors

A few tips to optimise the durability of your cladding :

- Ensure there is sufficient ground clearance: the first board must be installed at a distance of at least 200mm from the finished external ground level.
- Direction of the boards: the tongue must always be placed at the top for horizontal installations, or towards the dominant winds when installed vertically.
- The cladding must not be in direct contact with other materials.
- The nearest plants must be kept away from the cladding.
- You are advised to cover the ground with gravel to allow rainwater to drain away quickly.
- The ends and any cuts must be treated with the same finish.
- Where surfaces join (corners, window surrounds, etc.) specific measures must be taken to ensure rainwater drains away to the outside of the frontage.

The "1 Fix" - Certificates of compliance with French Code of practice DTU 41.2 - FCBA

COLLECTION	WOOD SPECIE	THICKNESS X WIDTH FACE COVER	BOARD	PROFILE	1 FIX	
AUTHENTIC ÉLÉGANCE NEW AGE	• Western Red Cedar	18 X 130	Planed Solid Wood Sanded Solid Wood	CHANFRÉA	FCBA Report N° 2014.216.120 of 30.04.2014	
ÉLÉGANCE NEW AGE	• larch A Choice	27 X 125	Brushed Solid Wood	SOLÉA II AFFINÉA	FCBA Report N° 2012.508.1347.2 of 12.12.2012	
AUTHENTIC ÉLÉGANCE NEW AGE	• Douglas	21 X 125 27 X 125	Planed Solid Wood Sanded Solid Wood Brushed Solid Wood	LINÉA SOLÉA II AFFINÉA TABACOA	FCBA Report N° 2012.508.1347.2 of 12.12.2012	
ÉLÉGANCE NEW AGE	• Nordic Spruce	21 X 125	Brushed Solid Wood	LINÉA	DTU 41.2	
ÉLÉGANCE NEW AGE VINTAGE	• Nordic Pine EcoThermo	20 X 125 27 X 125	Brushed Solid Wood	LINÉA SOLÉA II TABACOA II	FCBA Report N° 2012.508.1347.2 of 12.12.2012	



TONGUES-AND- GROOVE PROFILES (GROOVED ENDS)

CHANFRÉA



Chanfréa Profile available in 20x125

Installation according to FCBA certificate of compliance
FCBA Report N°2014.216.120

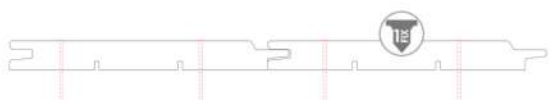
CHANFRÉA ÉVO



Chanfréa Evo Profile available in 20x150

Installation according to DTU 41.2

LINÉA



Linéa Profile available in 20x125 & 21x125

Installation according to FCBA certificate of compliance
FCBA Report N°2012.508.1347.2

LINÉA ÉVO



Linéa Evo Profile available in 18x182 - 20x130 - 20x150 & 21x157

Installation according to DTU 41.2

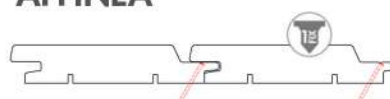
SOLÉA II



Soléa II Profile available in 27x125

Installation according to FCBA certificate of compliance
FCBA Report N°2012.508.1347.2

AFFINÉA



Affinéa Profile available in 27x125

Installation according to FCBA certificate of compliance
FCBA Report N°2012.508.1347.2

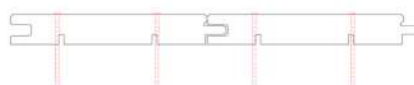
TABACOA II



Tabacoa II Profile available in 27x125

Vertical installation only
Installation according to DTU 41.2

MICRO 2



Micro 2 Profile available in 18x180 - 20x155 - 20x175 & 20x185

Installation according to DTU 41.2

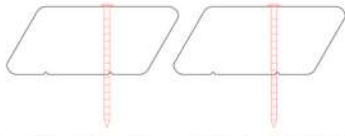
CLAVÉA



Clavéa Profile available in 21x125

Installation according to DTU 41.2

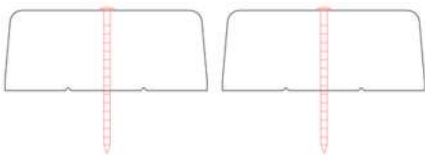
PARALLÉLO 30



Parallélo 30 Profile available in 20x65 & 27x70

Installation according to DTU 41.2
Double nailing at the ends

TRAPÉZO



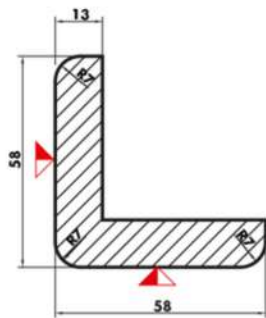
Trapézo Profile available in 18x65 - 20x65 & 27x70

Installation according to DTU 41.2
Vertical installation only
Double nailing at the ends



EXTERNAL CLADDING ACCESSORIES

CORNER TRIM



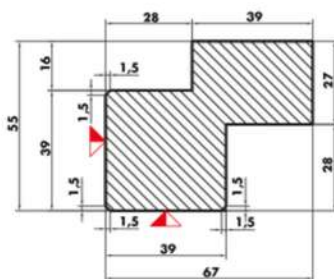
58 x 58

- Nordic Spruce
- Red Douglas Fir



COMPLEX CORNER TRIM

Compatible with Soléa II & Tabacoa II profiles

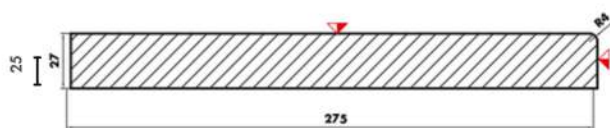


67 x 55

- Larch
- Red Douglas Fir
- Western Red Cedar
- Nordic Pine (Ext. EcoThermo)



WINDOW BOARD

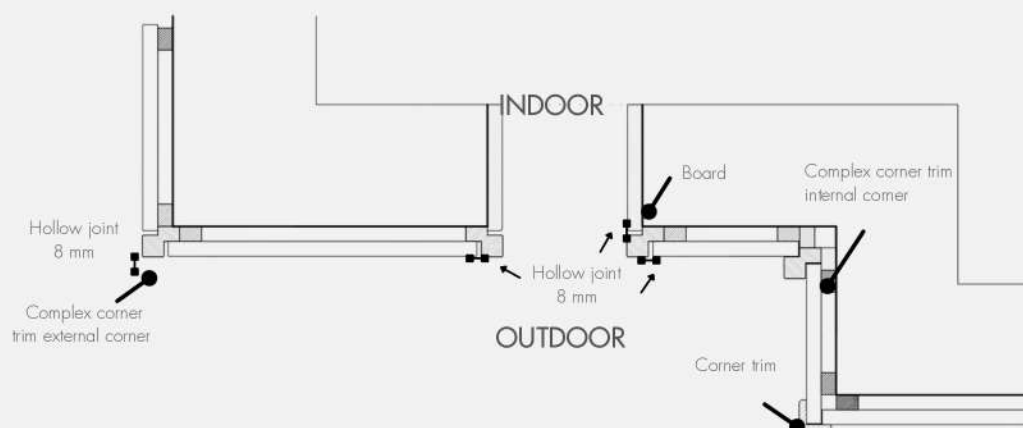


25 x 275

- Red Douglas Fir
- Nordic Pine (Ext. EcoThermo)



ACCESSORIES SIMULATION





INTERNAL CLADDING

OUR INSTALLATION ADVICES





To ensure the products are correctly installed, the rules laid out in the French Code of practice **DTU 36.2** for internal cladding should be observed.

Installation advices

- Store the boards for a few days before installation, laid horizontally in open stacks in the room where they are to be installed.
- Preparation: install the internal cladding on a perfectly dry support, avoid direct contact with the floor.
- Particular care should be taken when installing the first board, as this board serves as a reference for the following.
- Easy installation thanks to the grooved ends.
- Solid wood boards are attached to battens fitted a maximum of 40cm apart and which allows the air to circulate.
- The purpose of the air gap thus created is to allow moisture and any steam condensation which has passed through the wall to escape. This air gap is essential in damp environments such as kitchens, bathrooms or sheltered outdoor areas.
- The air gap must be at least 10mm everywhere on the wall.
- Installation in damp rooms is possible if an adequate ventilation is ensured (windows, CMV...).
- The wainscot mustn't be directly in contact with the water.
- Installation of the battens also allows thermal or acoustic insulation to be inserted and wiring to be hidden if necessary.
- Ensure the boards are aligned and correctly slotted together.

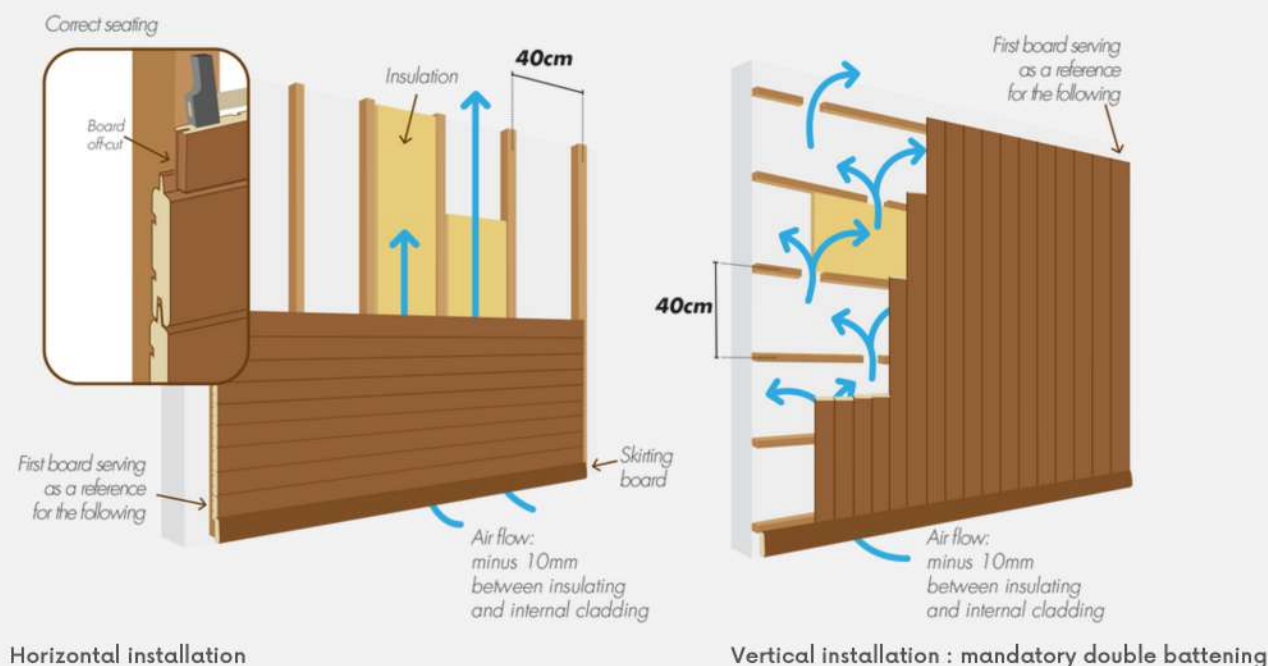
Type and direction of installation

Wainscot can be installed horizontally, vertically or obliquely, on wood walls or masonry walls.

A few rules for nailing

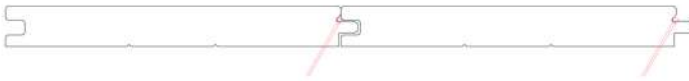
- Nail the boards on each batten.
- The nails must be at least 3.5 times longer than the thickness of the lower edge of the board
- To avoid splitting, use nails with a shank less than 3.5mm in diameter.
- Nailing at an angle improves pull-out resistance.

INTERNAL CLADDING INSTALLATION RECOMMENDED BY SIVALBP



TONGUES-AND- GROOVE PROFILES (GROOVED ENDS)

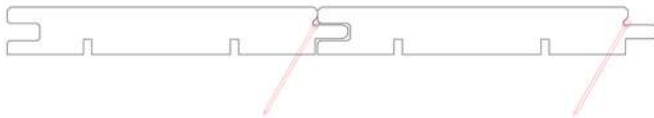
MICRO 1



Micro 1 Profile available in 19x155 - 19x185 & 19x210

Installation according to [DTU 36.2](#)

MICRO 2



Micro 2 Profile available in 20x185

Installation according to [DTU 36.2](#)

ALPEN



Alpen Profile available in 19x180 & 19x205

Installation according to [DTU 36.2](#)





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