



SIVALBP - TECHNICAL GUIDE



Douglas fir - NEW AGE - gris 102
Villages Nature Paris - © Pierre & Vacances Group-Center Parcs
Villeneuve le Comte (77) Jean de Gastines Architects (75)

external cladding / decking /
internal cladding

Dress up your projects,
wake up your homes



sivalbp[®]
wood, technology & design

12 KEY TIPS

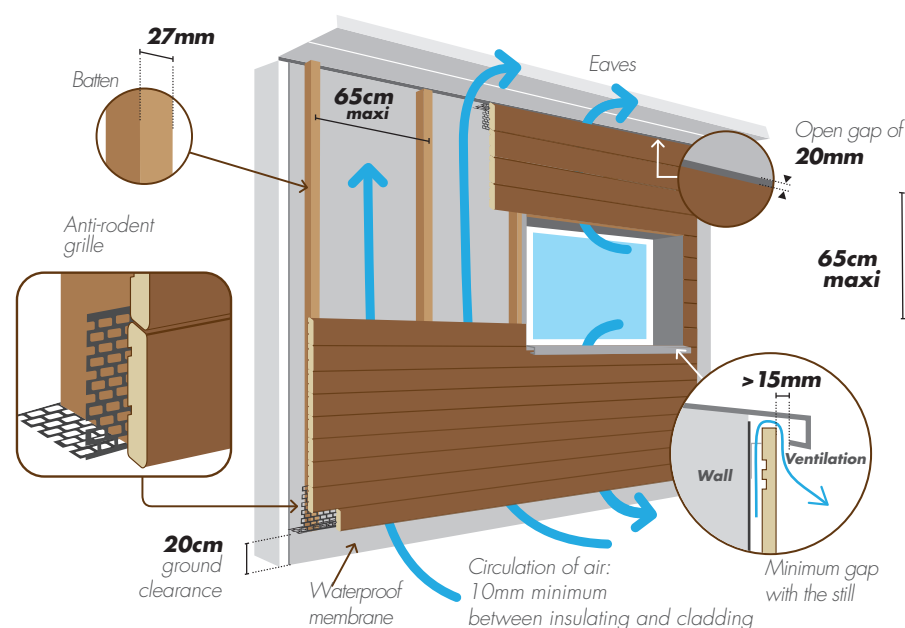
for a correct installation of Sivalbp claddings

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

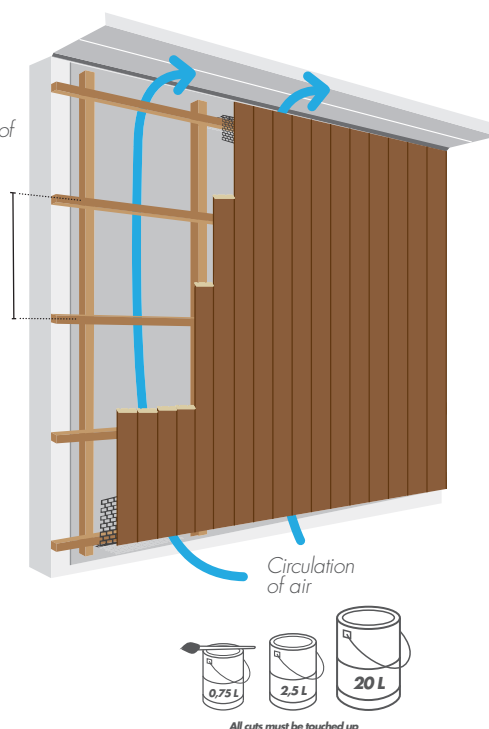
1	Have you got enough boards? Plan for cutting wastage (on average 12 to 18%)
2	Transport and store the boards in a dry place, sheltered from the elements and ventilated
3	Install on battens 27mm thick, spacing 65cm maximum measured between the centres of the battens
4	Ventilate imperatively: airs inlet and outlet with anti-rodent grilles
5	Ensure ground clearance of 20cm minimum
6	Handle the boards carefully
7	Attach with: <ul style="list-style-type: none"> 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 1mm maximum
9	All cuts must be touched up with our touch-up paint
10	For vertical installation: <ul style="list-style-type: none"> mandatory double battening tongue positioned at the top maintain a clearance gap (minimum 15mm) with the drip line, window surrounds, etc.
11	Establish a protection perimeter at the foot of the wall to protect the frontages from splashing (bad weather, splashes of metal, etc.)
12	Warning: any boards which are installed are deemed to be accepted

External cladding installation recommended by Sivalbp

horizontal



vertical: mandatory double battening



Installation advice - External cladding

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.

Preparation of the support: the secondary framework

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

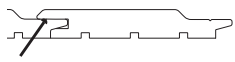
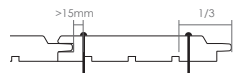
The boards are attached to the battens using nails or screws.

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.

Installation advice - External cladding

Interlocking tongue and groove profile

Profiles effective lengths < or = 125mm	Profiles effective lengths > 125mm
Secret nail	without secret nail
<p>1 single nail in the tongue, invisible attachment</p> 	<p>2 visible nails 1 nail in the upper part of the board + 1 nail in the lower part of the board</p> 

THE ADVANTAGES OF THE SIVALBP ATTACHMENT SYSTEM the "1 Fix" - Certificates of compliance with French code of practice DTU 41.2 - FCBA

- **COLORS** - Nordic spruce, kiln dried, Clavéa, finger-jointed, brushed, 21x150mm uses 1 single nail on the nailing line, which is invisible once installation is finished (certificate of compliance with DTU 41.2 according to FCBA report No. 2014.508.2120-1 of 30.04.2014).
- **AUTHENTIC** - Western red cedar, Siberian larch, Red Douglas fir, no finger-jointed, planed or brushed, élégia, chanfréa, linéa, soléa profiles, 21x125mm and 27x125mm use 1 single nail on the nailing line, which is invisible once installation is finished (according to FCBA report No. 2012.508.1347.2 of 12.12.2012).
- **AUTHENTIC/ELEGANCE/NEW AGE** - Western red cedar, kiln dried, finger-jointed or solid wood, planed, sanded or brushed 18x130mm, chanfréa profile uses 1 single nail on the nailing line, which is invisible once installation is finished (according to FCBA report No. 2014.216.120 of 30.04.2014).
- **ELEGANCE / NEW AGE** - Radiata pine clear II, Ext. EcoThermo, Soléa, 27x125mm and Chanfréa, 20x125mm uses 1 single nail on the nailing line, which is invisible once installation is finished (according to FCBA report No. 2014.205.261-2 of 18.09.2014 and report No. 2015.227.209 of 28.07.2015).

Openwork profiles

Openwork profiles	Thickness and width
	18x65 and 27x70
Parallélo 30 horizontal or vertical installation	<p>1 nail in the centre of the slat + double up the nails at the ends</p> 
Trapezo vertical installation	<p>1 nail in the centre of the slat + double up the nails at the ends</p> 

Specific points for the installation of openwork profiles

- Parallélo 30 is installed horizontally or vertically and trapezo only vertically, (mandatory double battening).
- 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

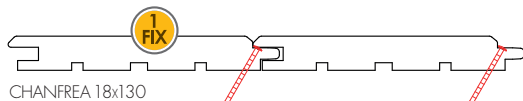
A few tips to optimise the durability of your cladding:

- 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.

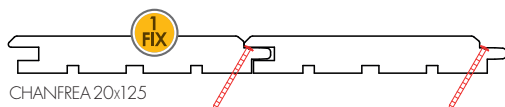
Tongues-and-groove profiles (grooved ends)

Chanfréa



CHANFREA 18x130

Installation according to FCBA certificate of compliance
FCBA report No. 2014.216.120

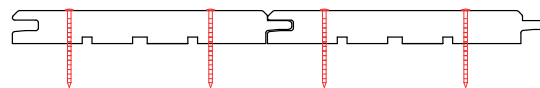


CHANFREA 20x125

Installation according to FCBA certificate of compliance
FCBA report No. 2012.508.1347.2
FCBA report N°2015.227.209

Chanfréa profile also available in: 19x125

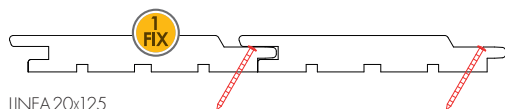
Chanfréa évo



CHANFREA EVO 21x157

Installation according to DTU 41.2

Linéa

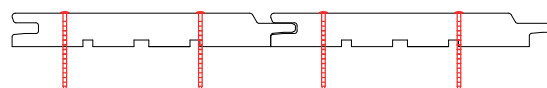


LINEA 20x125

Installation according to FCBA certificate of compliance
FCBA report n°2012.508.1347.2

Linéa profile also available in: 19x120 - 21x125

Linéa évo



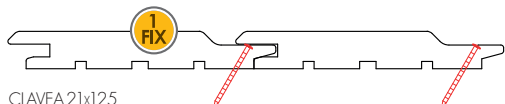
LINEA 21x157

Installation according to DTU 41.2

Linéa évo profile also available in:

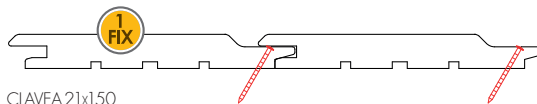
18x135 - 18x182 - 19x132 - 19x175 - 20x132 and 21x157

Clavéa



CLAVEA 21x125

Installation according to DTU 41.2



CLAVEA 21x150

Installation according to FCBA certificate of compliance
FCBA report 2014.508.2120-1

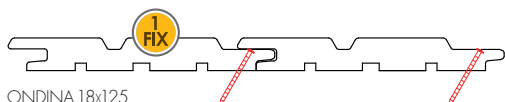
Soléa



SOLEA 27x125

Installation according to FCBA certificate of compliance
FCBA report n°2012.508.1347.2
FCBA report n°2014.205.261-2

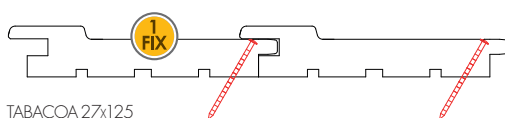
Ondina



ONDINA 18x125

Installation according to DTU 41.2

Tabacoa

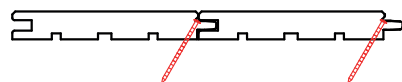


TABACOA 27x125

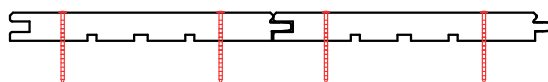
Vertical installation only - Installation according to DTU 41.2

Tongues-and-groove profiles (grooved ends)

Micro 2

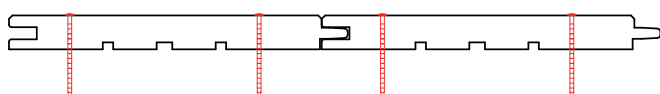


MICRO 2 TG 12mm
19x125



MICRO 2 TG 12mm
19x175

Micro 2 TG 12mm also available in:
19x180



MICRO 2 TG 15mm
20x180

Micro 2 TG 15mm also available in:
21x182

Openwork profiles (grooved ends)

Parallélo 30



PARALLELO 30 - 18x65

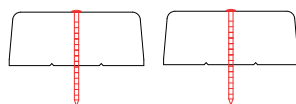
Double nailing at the ends



PARALLELO 30 - 27x70

Double nailing at the ends

Trapézo



TRAPEZO - 27x70

Vertical installation only

Double nailing at the ends

Installation advice - Decking

To ensure the products are correctly installed, the rules laid out in the French code of practice DTU 51.4 for decking should be observed.

The Sivalbp Atlantic profiles correspond to Type 1 described in the DTU 51.4.

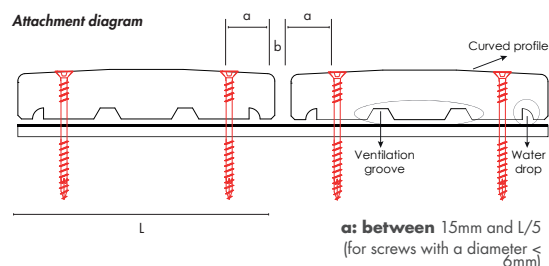
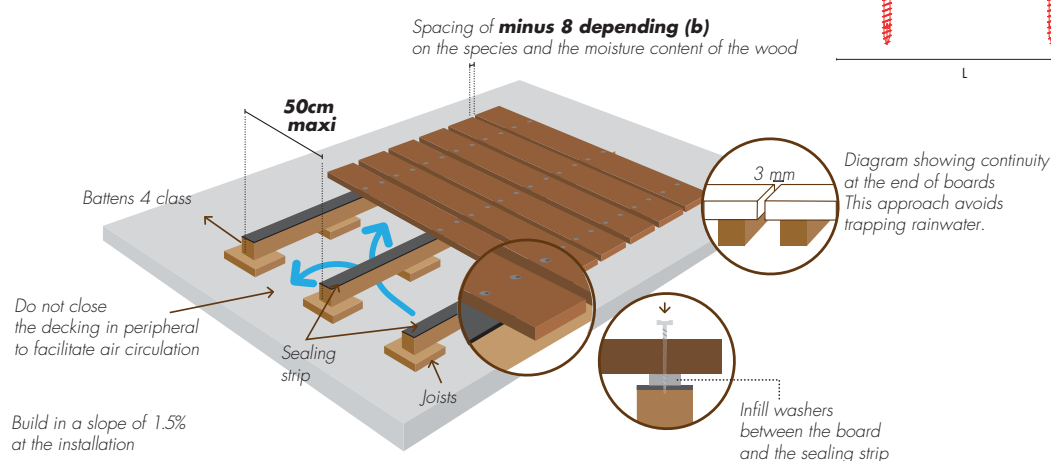
- The boards are never laid directly on the ground but are installed on battens (45mm minimum, 4 class), which are themselves insulated from the ground by joists (maximum 50cm between the centre of each batten).
- On natural ground, the structure must be firmly attached to the ground prepared beforehand. You are advised to lay a geotextile membrane.
- Build in a slope of 1.5cm per linear metre running the length of the decking to avoid rainwater stagnating.
- Provide a sealing strip between the joist and the board.
- Provide add infill washers between the board and the sealing strip.
- The boards must be attached using stainless steel screws (at least A2, with reinforced heads).
- Pre-drilled screw holes are essential.
- Do not close the decking in peripheral to facilitate air circulation.
- Non-reversible Curveo profile (smooth side uppermost).

Advice for attachment

Wood specie	Reference moisture content	Profile	Cross-sections	Pre-drilled board	Screw length	Screw diameter	Distance between boards*
Radiata pine clear II EcoThermo	8%	Curveo	27x135	mandatory	60mm minimum	4.5mm minimum	8mm minimum (b) to be defined according to the equilibrium moisture level $\text{Optimum moisture level} = \frac{(m \text{ sum} + m \text{ winter})}{2}$
Siberian larch	18%		27x140				
Red douglas fir	18%		27x140				

*Method of calculation in DTU 51.4

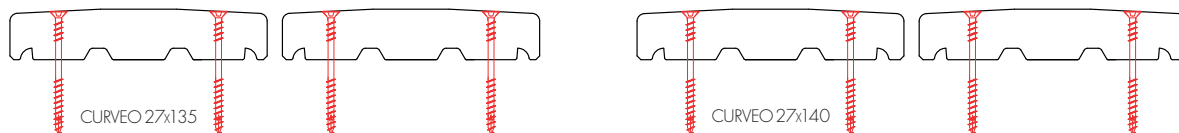
Decking installation recommended by Sivalbp



Decking profiles (profiles without grooved ends)

Curveo

- Grooved side=top side



Installation advice - Internal cladding

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.

A few rules for nailing:

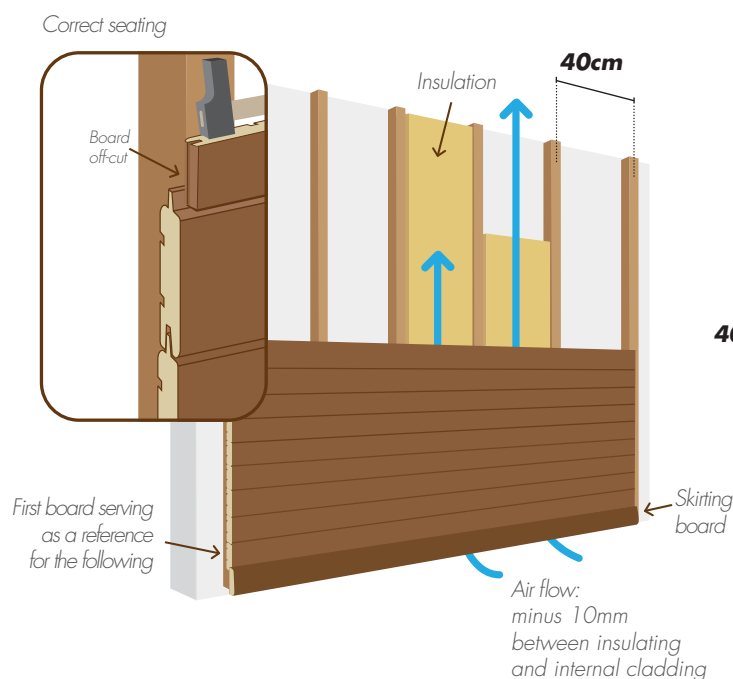
- Nail the boards on each batten.
- The nails must be at least 3.5 times longer than the thickness of the lower edge of the board.
- To avoid splitting, use nails with a shank less than 3.5mm in diameter.
- Nailing at an angle improves pull-out resistance.

Type and direction of installation:

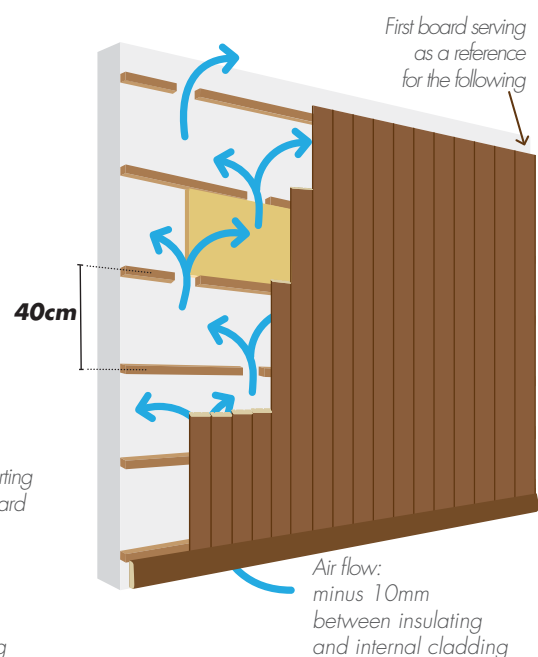
Wainscot can be installed horizontally, vertically or obliquely, on wood walls or masonry walls.

Internal cladding installation recommended by Sivalbp

horizontal



vertical: mandatory double battening



Tongues-and-groove profiles (grooved ends)

Micro 1



MICRO 1 19x155



MICRO 1 19x185



MICRO 1 19x210



MICRO 1 19x230

Micro 2



MICRO 2 TG 12mm
20x160



MICRO 2 TG 12mm
20x185



MICRO 2 TG 12mm
20x210

Jointif

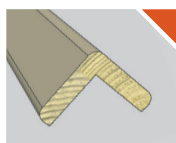


JOINTIF 19x180



JOINTIF 19x205

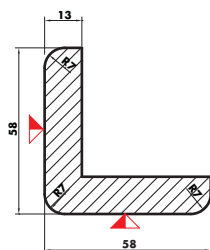
Sivalbp accessories



Corner trim

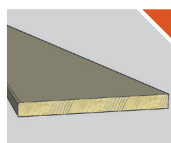
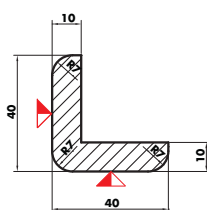
58 x 58

- Nordic spruce
- Siberian larch
- Red douglas fir



40 x 40

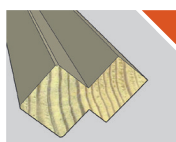
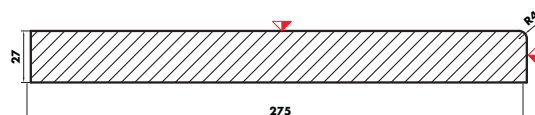
- Western red cedar



Window board

27 x 275

- Nordic spruce
- Siberian larch
- Red douglas fir
- Western red cedar
- Ext. EcoThermo Radiata pine clear II

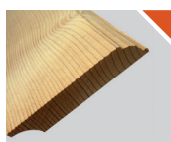
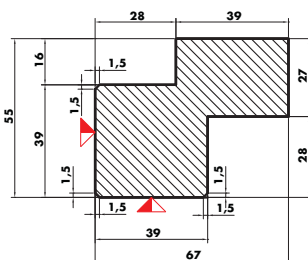


Complex corner trim

(Compatible with Soléa and Tabacoa)

67 x 55

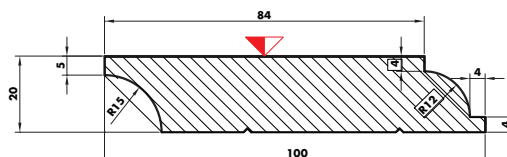
- Nordic pine
- Siberian larch
- Red douglas fir
- Western red cedar
- Ext. EcoThermo nordic pine



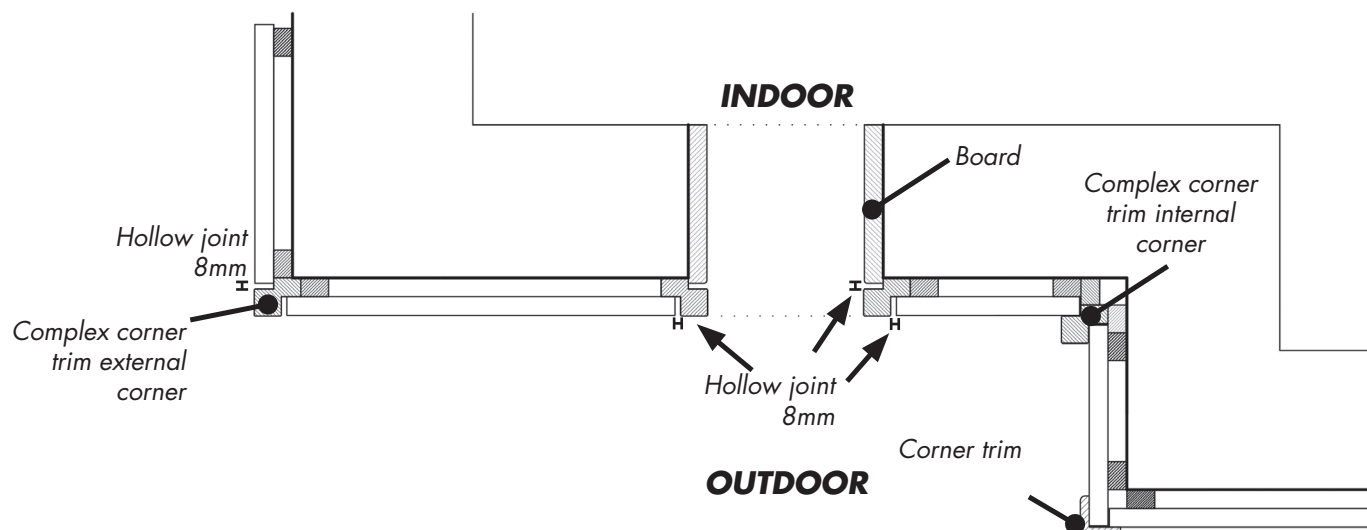
EcoThermo skirting board

20 x 100

- Int. EcoThermo nordic spruce



Accessories simulation



Sivalbp Euroclass C solutions

Sivalbp innovates and meets European regulations on fire by offering on larch cladding 27 for Euroclass C (below).

Other Euroclass D solutions available in 4 product ranges.

European building regulations required for external cladding behavioural fire restrictions, especially on some ERP and some residential buildings.

Description of products




- Siberian larch and mountain larch.
- Quality: A choice.
- Solid support, kiln dried to 18% (+/-2%).
- Surface: planned or brushed.
- Thickness > 20mm, width face cover: ≥ 125mm, length: all lengths.

Conditions of implementation


- With a maximum 40mm thick open air gap.
- Mounting with mechanical fastening (nails, screws...) on D structure or better (for example wood structure).
- Against a D substrate or better; with or without a waterproof protection of at least E.
- Installation according to french DTU 41.2.

WOOD SPECIE	THICKNESS X WIDTH FACE COVER IN MM	BOARD	PROFILE	EUROCLASS	TYPE OF INSTALLATION	
					HORIZONTAL	VERTICAL

WITH FINISH

ELEGANCE	 Siberian larch, A choice Nature 107	20x125	brushed solid wood	CHANFRÉA	C-s2, d0	✓	✓
		20x125	brushed solid wood	LINÉA	C-s2, d0	✓	✓
		21x157	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓
		21x182*	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓
		27x125	brushed solid wood	SOLÉA	C-s2, d0	✓	✓
NEW AGE	 Siberian larch, A choice Irisé 108 Gris 102	20x125	brushed solid wood	CHANFRÉA	C-s2, d0	✓	✓
		21x157	brushed solid wood	CHANFRÉA ÉVO	C-s2, d0	✓	✓
		20x125	brushed solid wood	LINÉA	C-s2, d0	✓	✓
		21x157	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓
		21x182*	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓
		21x182*	brushed solid wood	MICRO 2 LG15	C-s2, d0	✓	✓
		27x125	brushed solid wood	SOLÉA	C-s2, d0	✓	✓
VINTAGE	 Siberian larch, A choice Chocolat 104	21x157	brushed solid wood	CHANFRÉA ÉVO	C-s2, d0	✓	✓
		21x157	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓

WITHOUT FINISH

AUTHENTIC	 Siberian larch, A choice	20x125	brushed solid wood	CHANFRÉA	C-s2, d0	✓	✓
		21x157	brushed solid wood	CHANFRÉA ÉVO	C-s2, d0	✓	✓
		20x125	brushed solid wood	LINÉA	C-s2, d0	✓	✓
		20x132	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓
		21x182*	brushed solid wood	LINÉA ÉVO	C-s2, d0	✓	✓
		27x125	brushed solid wood	SOLÉA	C-s2, d0	✓	✓

FCBA Report n°18/RC-07 - 2018-01-31

* Not including DTU 41.2

**Serving you better also means helping
you to carry out your projects with:**

- ↘ resale support
- ↘ technical advice
- ↘ training
- ↘ quotes within 48 hours
- ↘ our top products in short delivery time
- ↘ collaboration for your specific projects



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