2017

Wood *for facade*

since 1915
OVER 100 YEARS
PARTNER WITH PROFILE

wood profiles
seca

www.seca.at

Wood is unique!

Some special features and advantages distinguish wood from other building materials, which are often used in outdoor areas. Wood creates an almost imperceptible transition from inside to outside and manages a special pleasant atmosphere and outstanding comfort.

Almost all properties of wood are far superior to stone, concrete, steel and plastic, even at cooler temperatures, invite you to linger outdoors and offer a high level of quality.

Wood as a natural product gets its expressive aesthetics and quality of life through annual rings, grain, knots in the wood and its color shade.

„Wood is alive“ – in the outdoor area wood is exposed to strong influences of temperature, humidity and UV-radiation. Left untreated, it develops a silver-gray patina. By surface treatment, in addition to the wood protection, also a variety of design options arises.

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Siberian larch, Rhomb

Siberian & European larch

Natural and durable

Larch wood is extremely durable by nature, because of its content of resin. Therefore it is used usually untreated in the structural-facings sector.
In residential and commercial buildings as well as for farm buildings, larch brings especially in the horizontal and vertical use its advantages to bear. Whether rough-cut, brushed or planed, the natural graying of the untreated product evolves differently, depending on the sunlight and weathering. This results in charming accents in the differently exposed areas, and brings the natural character of the larch optimally to bear.

Rhomb
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
19 × 95 mm	A/B-VEH
24 x 68 mm	A/B-VEH
24 x 68 mm	A/B-VEH, TIGA Clip
21 x 93 mm*	A/B-VEH

Lengths (cm): **400,** 300, 510

*special profile

Double rhomb
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
24 x 146 mm	A/B-VEH

Lengths (cm): **400,** 300, 510

Rhomb tongue and groove
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
25 x 95 mm	A/B-VEH

Lengths (cm): **400,** 300, 510

Featheredge togue and groove
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
26 x 146 mm	A/B-VEH

Lengths (cm): **400,** 300, 510

Design cladding
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
20 x 146 mm	A/B-VEH

Lengths (cm): **400,** 300, 510

Siberian larch, Rhomb

Carport profile
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
24 x 120 mm	A/B-VEH

Lengths (cm): **400,** 300, 510

Smooth edge boards
Siberian larch

Properties:

- softwood with small annual rings
- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
20 x 55 mm	A/B-VEH
20 x 95 mm	A/B-VEH
20 x 140 mm	A/B-VEH
20 x 190 mm	A/B-VEH

Lengths (cm): **400,** 300, 510

Smooth edge boards
European larch

Properties:

- proven over centuries
- light brown to yellow-/reddish (the color may vary within a delivery)
- resistance class 3

Dimension (mm)	**Sorting**
19 x 95 mm	A/B-VEH
19 x 114 mm*	A/B-VEH
19 x 146 mm	A/B-VEH
24 x 120 mm	A/B-VEH

Lengths (cm): **400,** 300, 500

*left-over

Larch, smooth edge board


Larch, Rhomb

Rhomb system TIGA Clip

The recipe for success of the future is in the perfect combination of old proven tradition and modern technology

Through the fusion of proven over centuries facade wood, such as larch, for instance, and the TIGA fastening system, which was developed and tested in accordance with the highest standards of technology, this facade system will absolutely fulfill growing requirements of modern architecture and its construction method!

New in SECA!

Rhomb system TIGA Clip
Siberian larch

Properties:

- invisible fastening system
- ensures optimal and fast fixing!
- resistance class 3

Dimension (mm)	**Sorting**
24 x 68 mm	A/B-VEH

Lengths (cm): 400 – 510

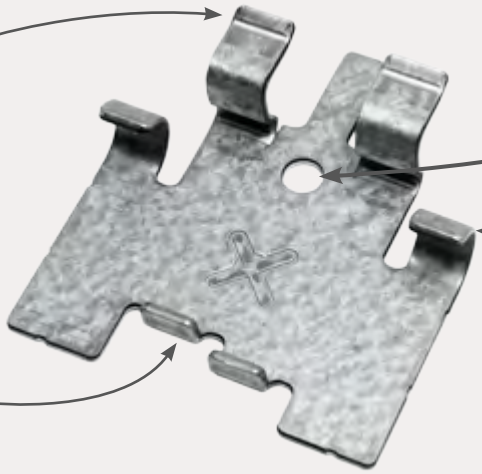
Invisible fastening

New!

„EASY, FAST, SAFE“

Integrated mounting and positioning stopper for easy fixing of facade plank

A single screw saves time during fixing and ensures perfect hold



The retaining brackets stabilize the plank perfectly without damaging it

Snap-action mechanism for intuitive and screwless fixing on the planks

TIGA Clip

- The hidden fastening clip prevents the facade profile from being damaged, which means that the weather influences cannot penetrate into the wood.
- The hidden screw isn‘t only an optical advantage, but also an optimal constructional wood protection, which ensures a substantial extention of the life of your wood facade.

Product videos on seca.at

White fir, Rhomb

White fir & spruce

Traditional woods

White fir is very well suited for coating with graying or gray glazes due to the dimensional stability as rift-/ and semi-rift goods and its ingredients. In order to make the transitional period during the graying process more equal, it is possible to set accents with color, so that the house could be dressed lively.

Untreated spruce wood is less durable, but well suited for coatings, since it can penetrate deep into the wood. With constructive wood protection spruce is a potential classic for long-lasting façades in residential and commercial construction.

Rhomb
White fir/Spruce

Properties:

- softwood with small annual rings
- proven over centuries
- mat grayish color
- resistance class 3

Dimension (mm)	**Sorting**
21 x 68 mm	Select, Fir/finger-jointed*
21 x 68 mm	A/B-VEH, Spruce/glazed*

Lengths (cm): **400,** 500

*Profile on request

Further dimensions on request!

Featheredge tongue & groove
Spruce

Properties:

- proven over centuries
- very good availability
- cheap properties
- perfectly suitable for coated surfaces

Dimension (mm)	**Sorting**
24 x 146 mm	A/B-VEH

Lengths (cm): **400,** 300, 500

Log Lap cladding
Spruce

Properties:

- proven over centuries
- very good availability
- cheap properties
- perfectly suitable for coated surfaces

Dimension (mm)	**Sorting**
24 x 146 mm	A/B-VEH

Lengths (cm): **400,** 300, 500

Smooth edge boards
Spruce

Properties:

- proven over centuries
- very good availability
- cheap properties
- perfectly suitable for coated surfaces

Dimension (mm)	**Sorting**
19 x 55 mm	A/B-VEH
19 x 94 mm	A/B-VEH
19 x 114 mm	A/B-VEH
19 x 146 mm	A/B-VEH
19 x 170 mm	A/B-VEH
19 x 194 mm	A/B-VEH
24 x 194 mm	A/B-VEH
28 x 146 mm	A/B-VEH

Lengths (cm): **400,** 300, 500

Thermo-ash, Rhomb

Thermo-ash

Extremely durable due to thermal treatment (215°)

By the thermal treatment, the wood species ash becomes a biologically sustainable, durable and dimensionally stable building material, which also is suitable for high architectural challenges in the façade area. The natural graying process is accelerated by the thermal treatment and the overall picture becomes more rapidly uniform and harmonious. Since predominantly knot-free wood is used for thermo-ash, this SECA product excels with high quality optics and perfect aesthetics.Thermo-ash is the first choice for demanding façade and terrace design in residential and commercial construction.

Rhomb (RhomboClip)

Thermo-ash

Hidden fixing with RhomboClip-system

(more on the page 17)

Properties:

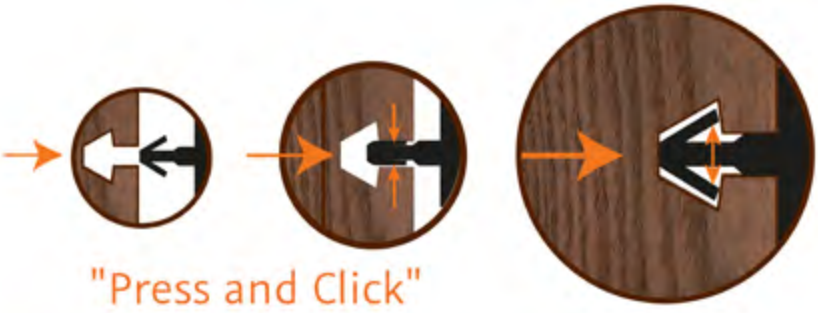
- smooth, elegant dark to medium brown
- very dimensionally stable
- largely free of knots
- resistance class 1

Dimension (mm)	**Sorting**
20 x 52 mm	Select

Lengths (cm): 150 – 360

Invisible fixing

The elegant thermo-wood facade
PaC-System®



Invisible pre-assembled substructure

Properties:

- with pre-assembled clip system
- suitable for 20 x 52 mm thermo-ash
- thermo-treated softwood
- resistance class 1

Dimension (mm)	**Sorting**
26 x 68 mm	Select

Lengths (cm): 200

Invisible fixing


Thermo-pine, Rhomb

Thermo-pine

The thermo-wood modified facade wood with the best price / performance ratio

The properties required in façade construction are dimensional stability, biological durability, fast processability, as well as low thermal conductivity, the best possible price / performance ratio, taking into account all efforts from the installation to the end of the useful life.

The thermally modified pine from Seca is the facade wood with the best price / performance ratio. A selection of clever profile alternatives offers the customer different styling tools for the façade.

Rhomb (RhomboClip)

Thermo-pine

Properties:

- thermo-treated softwood
- uniform medium- to dark brown
- easy to process
- dimensionally stable
- excellent price-performance ratio
- resistance class 2

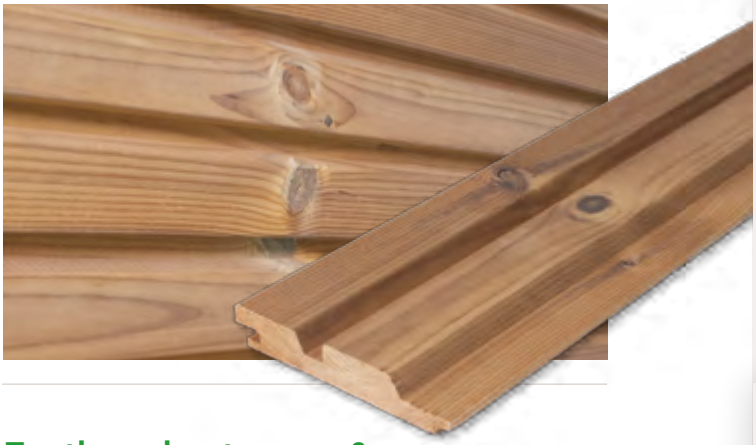
Dimension (mm)	**Sorting**
20 x 65 mm	A/B-VEH
20 x 65 mm	Select

Lengths (cm): 300 – 450

Invisible fixing

Double rhomb
Thermo-pine

New!



Properties:

- thermally treated softwood
- light brown to yellow-/reddish (the color may vary within a delivery)
- good static properties
- resistance class 2

Dimension (mm)	**Sorting**
24 x 140 mm	A/B-VEH

Lengths (cm): 360 - 510

Featheredge tongue & groove
Thermo-pine

Properties:

- thermally treated softwood
- light brown to yellow-/reddish (the color may vary within a delivery)
- good static properties
- resistance class 2

Dimension (mm)	**Sorting**
26 x 140 mm	A/B-VEH

Lengths (cm): 360 - 510

Rhomb
Thermo-pine

Properties:

- softwood with small annual rings
- light brown to yellow-/reddish (the color may vary within a delivery)
- good static properties
- resistance class 2

Dimension (mm)	**Sorting**
28 × 60 mm	A/B-VEH
20 x 94 mm	A/B-VEH

Lengths (cm): 390 - 540

Smooth edge boards
Thermo-pine

Dimension (mm)	**Sorting**
20 x 94 mm	A/B-VEH
20 x 140 mm	A/B-VEH

Lengths (cm): 390 - 540

Fixing options

The fixing of the façade has to fulfil at least two functions. Firstly, the absorption of the forces occuring on the façade (wind-, suction- und pressure forces) and secondly, the fixing of façade elements (absorption of deformation forces; allowing the swelling- and shrinking processes up to some extent).

Visible fixing

Screwing through the surface

The fixing is suitable for all profiles.

SIHGA L-GoFix® MS fixes the wood in outdoor area professionally and long-lived.

KompeFix® KF – the universal building material provides distance between the woods.

SIHGA FugiFix® FF keeps itself constantly in any position and cannot fall through the gap.

Hidden fixing

Screwing through the tongue

The fixing is suitable only for groove & tongue profile

- Rhomb groove-tongue siberian larch 25 x 95 mm
- Design façade siberian larch 20 x 146 mm
- Featheredge boards tongue & groove
  siberian larch 26 x 146 mm
  spruce 24 x 146 mm

SIHGA BohrFix® ZB is ideal for the fixing of façade formboards (groove-tongue).

Hidden screwing of groove & tongue-profile through the tongue. KompeFix KF provides the distance between the woods and thus serves for universal wood protection.

Hidden fixing

TIGA Clip - simple fast installation

The fixing is suitable for:

- All rhomb profiles TIGA Clip Siberian larch 24 x 68 mm

New!

TIGA Clip System is the professional way to fix the façades with the help of hidden screwing.

The rhomb profiles will not be damaged by fixing material.

A single screw saves fixing time and ensures perfect hold.

Hidden fixing

with RhomboClip

The fixing is suitable for:

- Thermowood-façades
  Thermo-ash 20 x 52 mm
  Thermo-pine 20 x 65 mm

The innovative harpoon shape ensures strong and stable hold.

The clip system provides the same distance between the woods, the general view is homogeneous.

Pre-installed substructure.

Hidden fixing

FassadenClip® FCS

The fixing is suitable for Rhomb profiles

The FassadenClip® FCS is optically the perfect solution for wood façades fixing.

By the screwing onto the back side the weathered surface of the façade remains undamaged.

The special form of FassadenClip® FCS ensures the distance to the battens for a good ventilation.

Wood creates atmosphere

Garden

Wood is long-lived and robust, with scope for variety and individual applications. This is especially true in the open air, because there are many possible fields of application: whether as decking, pergola, screening for noise attenuation, carports or children's playground equipment. Wood makes every garden and every terrace unique.
Modern architecture and garden design cannot and will not give up the renewable raw material. It is always an eye-catcher – it doesn't matter whether with natural patina or oiled and carefully maintained.

Living

Wood smells good, sounds good, feels good and always creates a cozy and warm living atmosphere.

Living rooms, which are decorated with wood, seem to be always warmer than they actually are. This reduces heating costs and enhances the well-being. Wood surfaces significantly contribute to the pleasant indoor climate, because wood effectively regulates indoor humidity.

Façade

Wood facades are en vogue. A façade gives to the building its characteristic appereance. For several generations already the exterior cladding is made of wood. Modern architecture increasingly discovered wood façades as a stylish and energy-efficient ingredient.

Building

Wood is one of the oldest building materials with a wide range of application. It has excellent physical properties that offer significant advantages both in the constructive / static area, and in the processing and installation. It is characterized by high stability and load-bearing capacity, without itself weighing a great deal.
Its internal structure makes wood an extremely durable building material, only if it was properly constructed and its surface is protected in case of need.

Façade coating with SECA

Your benefits

- Reordering of paint directly at SECA, or at your OSMO- or Synthesa-paint dealer in your area
- Coating with up-to-date vacuum technology and infra-red drying
- Samples are kept by SECA for project building – reproducible quality for follow-up projects
- Individual color design by paint formulation according to customer wish or RAL-color chart
- Eco-friendly products based on natural and sustainable raw materials
- Fast production even of special colors
- Quantity from 10 to ≥ 1000 m² possible
- Residual color may be provided by request for repairing and mending on site

wood profiles
Seca

Mineral wood protection

Wood facades: natural or coated? A question of aesthetics!

Greyed wood facades have a special charm. However, under certain circumstances it can take decades for a uniform silver-grey patina to develop, like those seen on mountain huts in the Alps. Untreated wood facades change their colour and surface structure depending on environmental influences. Determining when the effect may be achieved is difficult, as many factors have an influence on various building surfaces.

- With KEIM Lignosil-Verano, a silicate-based surface treatment has been developed that simulates a naturally beautiful, silver-grey patinised wood appearance from the very first day.
- As a result of consciously leaving out the protective function which is usually desirable in coatings, the applied Lignosil-Verano coat increasingly changes to natural grey over the course of time.
- The special feature: KEIM Lignosil-Verano is biocide- and solvent-free and guarantees a naturally mineral-matte, color-stable optics. The treated surfaces remain diffused.
- Combined with fast drying and extremely simple processing, Lignosil-Verano becomes a particularly economical and sustainable system.

Gray is not same gray ...

Ask your SECA-sales representative or your SECA-adviser
verkauf@seca.at

Water-based paints

Coating with thin- and middle-layer glazes

Each coating serves, in addition to design, also as protection for your wood façade against UV-radiation and weathering.

Grounding

- Primer with ingredients against insect attack and fungi reduces the bleeding of wood components, through bright glaze colors, for example, pure white.

Covering coating (appr. 30 – 60 µm)

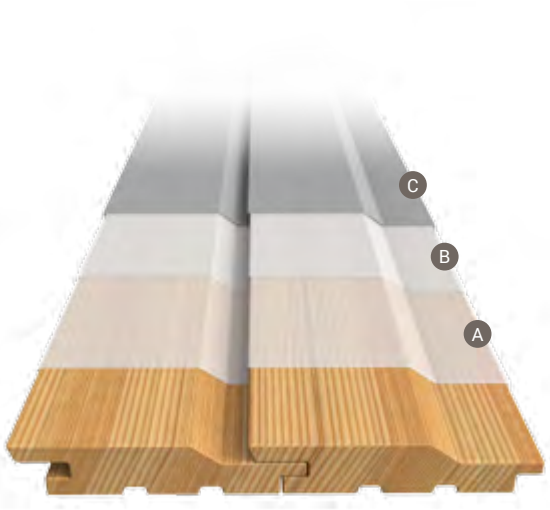
- best possible UV-protection
- preferred lighter tones (lightness value > 50)
- slight to moderate thermal strains

Glazing coating (appr. 20 – 60 µm)

- sufficient to good UV-protection
- preferred mid-tones (walnut, …)
- moderate thermal strains

Transparent UV-protective coating (appr. < 20 µm)

- good UV-protection
- slight thermal strains
- shorter maintenance intervals than for pigmented glazes



A Grounding
B 1. Coating
C 2. Coating

Glaze adhesion after surface finishing

Rough-cut
- very good adhesion
- less surface strains
- less cracking

Sanded
- good adhesion

Planed
- moderate paint adhesion

SYNTHESA

Water-based standard colors

UV-protection transparent

Twinproof Clear	Twinproof Extreme (by request)

Feel free to get a color guide for approval. There are standard-special colors and RAL-colors available for use in facade area! Ask your SECA-sales representative or your SECA-supervisor.

Covering coating

Pure white	Beige RAL1001	Light gray RAL7035	Signal gray RAL 7004	Iron gray RAL 7011	Brown red RAL 3011
Moss green RAL 6005	Special color by request				

our water-based paints protect the environment

Glazing coating

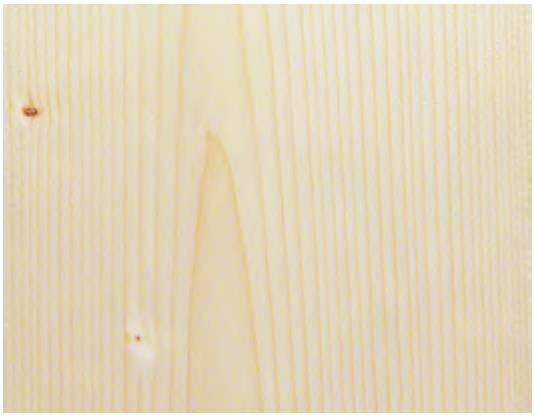
Pine	Stone pine	Larch	Oak	Walnut	Walnut tree
Redwood	Palisander	Ebony	Chestnut	Acacia	Special color by request

Glazing coating „Greywood“

Toskana 01	Nordic 01	Forest 02	Outback 03	Island 02	Special color by request

GREYWOOD COATED SURFACES TURN INTO NATURAL GRAYING!

Processed surface



Planed

Most of our products are produced with planed surface. By processing of raw material with the help of cutter blocks arises smooth and plain surface.

Brushed

During this processing step, the surface is roughened by means of brush screws. The softer growth zones/annual ring layers are brushed out and harder growth zones/annual ring layers stay. The result is a typical „wave“, rough surface.

Rough-sawn with fine band saw cut

The raw material is cut in the middle with a fine band saw blade, so that the rough-sawn appearance arises. Only after that the board is processed with the help of planing knives to get a desired shape.
This surface finishing perfectly suits with coating. It has a better adhesion than planed and brushed surfaces.

Orientation and exposure

MODERATE
- small temperature fluctuations
- less UV-strain
- small humidity fluctuations

STRICT
- short heating until noon, then slow cooling
- average UV-strain
- moderate humidity fluctuations

EXTREME
- strong heating & fast cooling
- intensive UV-strain
- strong humidity fluctuations
- intensive rainfall strain

Stress areas of wood façades

Depending on the location and orientation of a building, its façade surfaces are exposed to different stresses, which change the appearance.

In addition to the weather impact, the geographical location, sea level and local conditions such as hillside situation, bording trees etc. also contribute to stress. This different weathering on different sides of the building can lead to non-homogeneous discoloration.

Due to weather influence, untreated wood rapidly changes its color and structure. The natural tone changes into silvery color shade. The homogeneous surface is gradually getting a blotched appearance, and then depending on exposure, the façade becomes uniformly gray. Since the process depends on the intensity of the stress, the discoloration may be delayed in sheltered areas such as canopy tops, soffits or window sills. Often this accentuating effect is expressly desired. However, it can be strongly reduced by treating the wood with glaze or oil if desired. To provide such coating with durable protection, the façade must be regularly checked and maintained. As with all construction materials, it should also be done with untreated façades from time to time to ensure the quality of living in the long term.

Constructive wood protection

Wood protection begins with constructive considerations

Preventive wood protection includes not only the right choice of wood for a particular application, but especially constructive measures.

In order to lead them to success, the following basic rules must be observed:

- the lowest possible wood moisture content, in accordance with ambient atmosphere
- keeping distance from water, efficient drainage
- sufficient ventilation
- coverage of vulnerable structural elements
- protection of end grain
- sufficient distance to top ground surface

Wood building components contacting with the ground are a major challenge for the building industry. Especially at intersections it is important that the water is not collected, but can always flow off. Decisive for the durability of a wood structure in the open area is quick flowing off of rainwater as fast as possible and that the construction dries also fast. On the bottom surface of components the accumulation of water must be absolutely prevented. Drainage area with at least 15 ° slope guarantees fast draining. In order to prevent damage of the wood by splash water, wood building parts near the ground should have at least 30 cm distance to ground level. In the design of façades, ventilated constructions are well-proven where the air circulates around the wood cross section and therefore it can perfectly dry. It goes without saying, that SECA wood façades meet all these constructive protective measures in the best possible way.

Wood façades-variety

Horizontal wood façade

- profile geometry should include drainage area– outwards running water
- water runs crosswise from the fibers
- rain water is drained worse – the water easily penetrates into cracks, because they are located crosswise to the drain flow
- susceptible to sediment
- discoloration starts in the lower board area because of longer standing water
- ventilation with only one batten
- the width will be accentuated
- elegant – stylish – modern

Vertical wood façade

- optimal water flow – water can drain rapidly
- rapid drainage of rainwater and thus lower humidity stress
- for ventilation ground- and framework are needed
- end grain protection in the lower area has to be observed
- the height will be accentuated
- the drainage area must be cut

Closed wood façade

- non-transparent
- groove-and-tongue-connections for fast installation
- no UV-resistant film behind needed
- wind-driven rain resistant
- large cross sections are susceptible to cracking
- groove-and-tongue-connections absorb the swelling and shrinking of the wood
- fast installation

Open wood façade

- good air circulation
- distance is freely selectable - individual design
- installation inaccuracies easily compensated
- moderate installation costs
- small cross sections – dimensionally stable

Our wood species in comparison

Quality and durability

	European larch	*Siberian larch*	*White fir*	*Spruce*	*Thermo-pine*	*Thermo-ash*
Resistance class*	3 – 4	3	3	4	2	1
Durability	satisfying	satisfying	satisfying	satisfying	satisfying	excellent
Profile	Boards, carport profile	Boards, double rhomb, design facade, rhomb …	Rhomb	Boards	Rhomb	Rhomb
Knots	with knots	with knots	with some knots	with knots	with knots	with some knots
Resin discharge	moderate	moderate	no	moderate	no	no
Stability	middle hard	hard	soft	soft	soft	hard
Price	moderate	moderate high	moderate	low	moderate	high

* Determined durability value according to laboratory tests or experience in accordance with DIN 68364.

Resistance classes

The resistance classes describe or classify the wood's durability against wood damaging or destroying fungi and insects, termites or other wood pests. The resistance classes (also durability classes) are scaled from 1 (very durable) to 5 (not durable).

Color variations

Color variations become relative when wood is used outdoors due to the effects of UV-radiation repectively weathering and as a result a pleasant silver-gray patina develops. Graying may be delayed by treatment with pigmented oils and glazes or with regular treatment (1 to 2 times a year), also available in the desired color.

Quality

Who places priority on quality, must start by choosing the right raw material. That is why our wood comes from sustainable and certified forests. Only first-class, sorted and processed solid wood keeps up our strict quality requirements and leaves our production site as an honest brand product.

Your Seca-dealer:

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since 1915 OVER 100 YEARS PARTNER WITH PROFILE

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