(selekta and heritage-selekta)

Product description – Ecology – Technical data

Urbanline Euro Selekta Clad (selekta façade profiles and heritageselekta façade profiles) are identical in terms of their core material and surface texture. However, they are available with different surface coatings.

The **particle wood core** consists of processed timber. We use exclusively untreated pulpwood in the form of wood shavings, thinning material and round timber from sustainable, domestic forestry. Imported timber is not used - especially from tropical climates.

The binding agent used is a thermosetting artificial resin with building authority approval for outdoor use.

As a wood preservative, we use an eco-friendly boron-based product with building authority approval that does not contain lindane or PCP.

For the **low flammability** version, a mixture of boric acid and borax

is used as a fire protection agent. No isocyanates, phosphates or halogens are added.

Several layers of paper are impregnated with artificial resins for use as a coating. The surface and core are fused together without seams in a single process under the application of pressure and heat.

Colorpan

Base coating of paper impregnated with melamine resin, followed by coloured Colorpan surface coating using a pure, water-based acrylate. The pigments added are free of toxic heavy metals (no lead, chrome or cadmium).

Dekopan Plus

Multi-layer coating, printed or dyed; transparent, weatherresistant surface coating of the decor side. Rear side brown, no colour options.

Те	chnical data		Values	Unit	Test specification
1.	Density		800 - 950	kg/m³	EN 323
2.	Flexural strength		40 - 45	N/mm²	EN 310
3.	Elasticity modulus		4000 - 6000	N/mm²	EN 310
4.	Tensile strength vertical to the surface		2.0 - 3.0	N/mm²	EN 319
5.	Screw withdrawal strength ¹⁾		800 – 1300	N	WERZALIT TEST STANDARD
6.	Swelling after storage	after 2 h	0.3 - 0.6	%	EN 317
	in water at 20 °C	after 24 h	3.0 - 5.0	%	EN 317
7.	Moisture content		5 – 10	%	EN 322
8.	Temperature resistance	under permanent load under temporary load	-50 to +70 +120	°C	WERZALIT TEST STANDARD
9.	Fire behavior, class Standard version: B2 = normal flammability, s	pecial version B1: low flammability	B2 and B1 ²⁾		DIN 4102
	Length change due to moisture/heat exposure 3]		1 – 3	mm/m	WERZALIT TEST STANDARD
11.	Thermal conductivity 10		0.20	W/m·K	DIN 52 612
12.	Water vapour permeability diffusion-equivalent air layer thickness		5 – 15	m	DIN 52 615
13.	Cross-cut test 4]		GT OA – GT 1A		EN ISO 2409
14.	Scratch resistance		0.5 – 1.5	Ν	EN 438
15.	Light fastness		Level 8		DIN 54 004
16.	Chemical resistance		limited resistance		EN 438
17.	Cigarette burn resistance		not resistant to burns		as for EN 438
18.	Colour deviation ^{5]}		∆ E < 1		DIN 5033
19.	Impact load		impact resistant		WERZALIT TEST STANDARD

^{1]} 4 mm particle board screw, using a hole of 3 mm diameter, 10 mm deep.



Not available for all products, please ask for specific information 3) Maximum expected length change under extreme climate fluctuations.

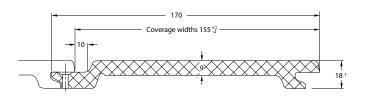
⁴⁾ Gt OA is the best, Gt 4A is the worst value.
5) With measurement geometry 0°/45°, standard illuminant "C".

(selekta and heritage-selekta)

General information, Profile dimensions, Calculating the required quantity & Guidelines

Scope

The scope of these installation instructions covers all installation variants of façade cladding, including soffits.



Calculating the required quantity (Calculation values exclude cutting waste)

		Required quantity/m ²	Required quantity/m ²	
	Coverage width	Standard lengths	Façade profile	Façade screw 3.5 x 30, stainless steel A2
Urbanline Euro Selekta Clad	d (Colorpan/Dekopan plus)	at max. fastening spacing	= 625 mm	
(heritage-selekta)	155 mm	5400 mm	6.45 linear m	10.3 pcs.
(selekta)	155 mm	2700 mm	6.45 linear m	10.3 pcs.

Note!

The wood decors are equivalent to natural wood surfaces, meaning that different grain textures are possible within a single shipment (plain and/or mottled). Unfortunately, sorting at the factory is not possible! In order to obtain a uniform overall finish, we recommend considering this fact and, for example, laying out the façade profiles before starting with the installation.

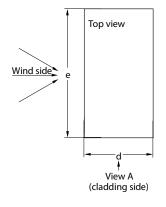
Installation lengths

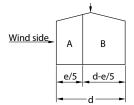
For installation lengths of more than 5400 mm, the profiles must be cut to a maximum length of 2700 mm in order to minimise the expansion joints.

Sub-framework for façade cladding

According to DIN 1055, Part 4, the increased wind suction at the edge areas of the building walls must be considered when planning the sub-framework.

The fastening spacing of the Urbanline Euro Selekta Clad [WERZALIT façade] profiles must be reduced to max. 300 mm in these areas; additional support battens must be provided as necessary.





The DIN requirements are presented here in a simplified form as a general rule of thumb. Precise information on this topic must be taken from DIN 1055, Part 4 from March 2006. The building dimensions are naturally of primary importance for determining the size of area A with increased wind suction (exterior pressure coefficients).

Example:

Wind side	e = 15 m		
Cladding side	d = 8 m		
Area with increased suction	A = e/5 = 3 m		
Batten spacing in area A	max. 300 mm		
Normal area	B = d-e/5 = 5 m		
Batten spacing in area B	max. 625 mm		

If two opposite main wind directions exist (e.g. west/east), area A must naturally also be observed on the other side of the cladding wall. In the above example, area B would then only be 2 m wide.

Fire Protection – see attached Fire Test Report



(selekta and heritage-selekta)

Horizontal installation

Sub-framework

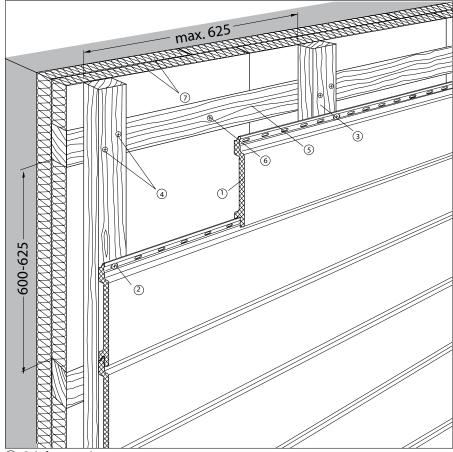
- Urbanline Euro Selekta Clad (UESC (Selekta / heritage-selekta façade profile)
- 2. Façade screw 3.5 x 30, stainless steel A2
- 3. Support batten 30 mm x 50 mm, spacing max. 625 mm
- 4. Fastening with 2 screws 4 x 60, stainless steel A2
- 5. Counter batten at least 40 mm x 60 mm
- Dowel and screw with building authority approval
- 7. Insulation in two layers, pressure-resistant

B - C Sections

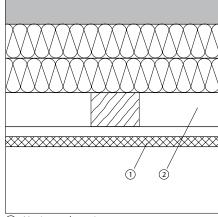
- UESC selekta / heritage-selekta façade profile
- 2. Back ventilation spacing at least 20 mm*]

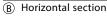
Important Building Design Notes:

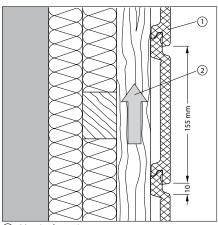
- The supporting wall must be watertight and correct flashings used in the event of any water penetration i.e. severe storms
- There must be ventilation/ drainage at the base of the wall
- Install breathable sarking over the stud frame keeping all overlaps pointing downwards and tape all joints
- Composite products expand and contract with temperature longitudinally – see installation instructions for joint options.



(A) Sub-framework







C Vertical section

^{*)} For selekta façade profiles in version B1 (low flammability) at least 40 mm.

(selekta and heritage-selekta)

Horizontal installation

A Fastening spacing

- UESC [selekta / heritage-selekta façade] profile
- 2. Façade screw 3.5 x 30, stainless steel A2
- 3. Punched holes
- 4. Support batten 30 mm x 50 mm

X = 3 or more supports, max. 625 mm

X = for only 2 supports, max. 300 mm;

Profile excess length max. 100 mm



Use only screws 3.5×30 , stainless steel A2. Always centre the screws in the punched fastening holes of the façade profile.



e. g. aluminium and wood sub-frameworks

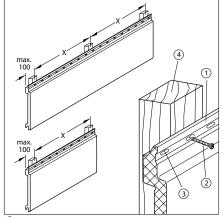
- 1. Building wall
- 2. Thermal insulation
- 3. Support batten
- 4. U bracket

Alternatively, other sub-framework systems can also be used, such as for very thick insulation layers.

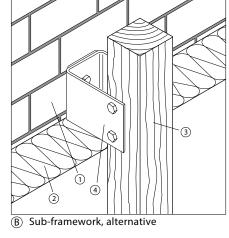
C Start of installation from below

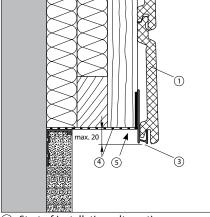
- 1. selekta / heritage-selekta façade profile
- 2. Starting profile T + G, aluminium
- Starting profile P, aluminium (alternative)
 We recommend a max. 20 mm projection of the starting profile P
- 4. Ventilation profile, plastic
- 5. Ventilation opening, continuous

Please note: Baseboard termination At least 100 mm spacing to the floor. Avoid designs that allow moisture build-up.

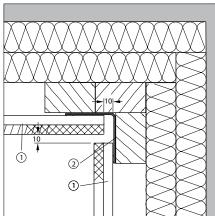


(A) Fastening spacing





C Start of installation, alternative



D Internal corner

D Internal corner

- selekta / heritage-selekta façade profile
- 2. Jointing tape, plastic or suitable construction adhesive
- Aluminium internal corner profile (Alternative)



(selekta and heritage-selekta)

Horizontal installation

A External corner

- 1. UESC (selekta / heritage-selekta façade profile)
- 2. External corner C, aluminium (two-part)
- 3. Aluminium external/internal corner profile (Alternative)
- 4. Cylinder sheet screw 3.9x16, stainless steel A2

The external corner C consists of lower profile and cover profile. The cover profile is clipped on after installation of the façade profile and secured to each profile bar in the upper area using cylinder sheet screws, pre-drilled to ø 3.2 mm.

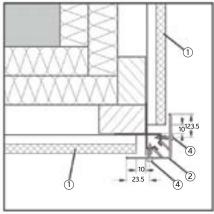
Please note: The Aluminium External/ Internal corner profile can be used in reverse for Internal corner applications

B Side termination

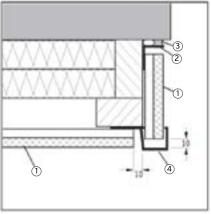
- 1. UESC (selekta / heritage-selekta façade profile)
- 2. Cover angle 30/20, aluminium
- 3. Sealing material
- 4. Connection profile F, aluminium

C Roof connection

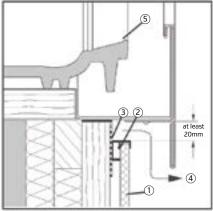
- 1. UESC (selekta / heritage-selekta façade profile)
- 2. Edge trim profile 2, aluminium (alternative spacer bar, 9 mm)
- 3. Ventilation profile, plastic
- 4. Ventilation opening, continuous
- 5. Roof tile



A External Corner



© Side Termination



(D) Connection to pitched roof

(selekta and heritage-selekta)

Horizontal installation

A - B - C Window lintel connection

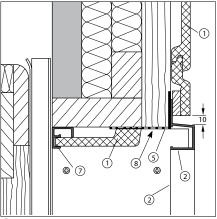
- 1. selekta / heritage-selekta façade profile
- 2 Connection profile F, aluminium
- 3 Z profile 1, aluminium
- 4 External corner profile 1, plastic (Cut off lower leg)
- 5 Ventilation profile, plastic
- 6 Cladding panel (alternative)
- 7 Edge trim profile 2, aluminium
- 8 Ventilation opening, continuous
- A At the transition between the reveal and the lintel, the connection profiles F are given a mitre cut.
- B The Z profile 1, aluminium, covers the vertical connection profile F.

C Window sill connection

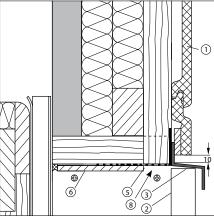
- 1. selekta / heritage-selekta façade profile
- Ventilation profile, plastic
- 3 Z profile 2, aluminium
- 4 Outer window sill
- 5 Ventilation opening, continuous

D Window reveal connection

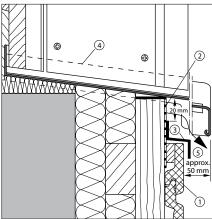
- 1. selekta / heritage-selekta façade profile
- 2. Connection profile F, aluminium
- 3. Sealing material
- 4. Aluminium external corner profile
- 5. Outer window sill



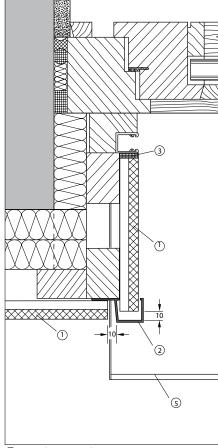
(A) Window lintel connection



(B) Window lintel connection, alternative



© Window sill connection



Window reveal connection

(selekta and heritage-selekta)

Horizontal Installation only for (selekta) UESC

Profile butt joints

The profiles can be installed in staggered arrangement or with a continuous vertical joint.

A Staggered arrangement

- selekta façade profiles, cutting length
- 2. Install 2 support battens in each joint area
- 3. Jointing tape, plastic

Profile butt joint with butt connector

When installing in a staggered arrangement, the expansion joints can be closed with butt connectors. Notch the groove lip on the back side of the façade profile. ► See images C to D

B - C - D Butt connector 1/155 (for selekta façade profile 155)

Place the butt connector 1/155 on the lower façade profile and nail it to the support batten. Slide the notched façade profiles from both sides onto the butt connector, expansion joint 10 mm.

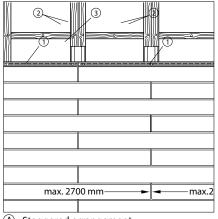
- 1. selekta façade profile
- 2. Butt connector 1/155, plastic

D Notching of the groove lip

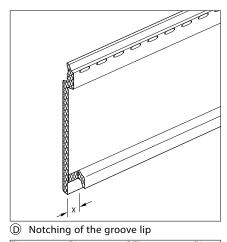
X = 25 mm, for butt connector 1/155

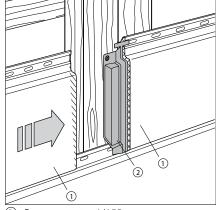
E - F Continuous vertical profile butt joint

- 1. selekta façade profile
- 2. Support batten, width at least 100 mm
- 3. Jointing tape, plastic
- 4. Cover profile T + G, aluminium
- 5. Pan head screw 4 x 40, stainless steel A2

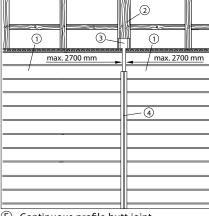


Staggered arrangement

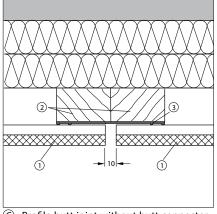




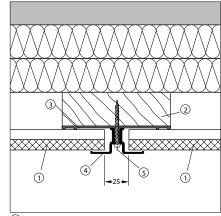
Butt connector 1/155



E Continuous profile butt joint



© Profile butt joint without butt connector



F Cover profile T + G

Tip:

Peg a 25 mm wide batten to the sub-framework at the joint location. Position the façade profiles flush on both sides. After installation of the façade profiles, remove the batten and screw on the cover profile T + G in its place.



(selekta and heritage-selekta)

Horizontal installation only for (heritage-selekta) UESC

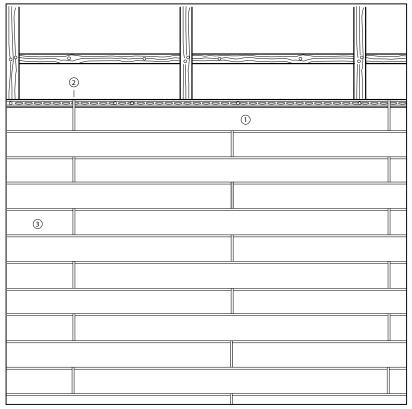
Profile butt joints

The profiles are installed in a staggered arrangement. There is no need to ensure an orderly joint arrangement.

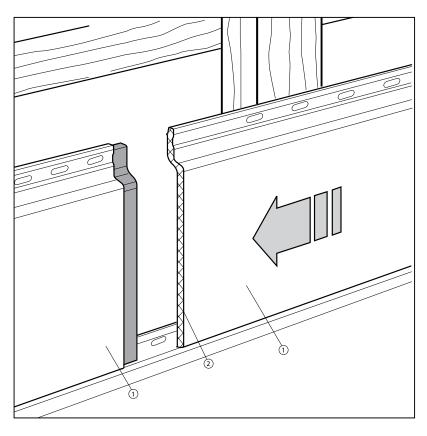
No battens are required under the joints.

A Staggered arrangement

- 1. heritage-selekta façade profile
- 2. No support batten is required in the joint area
- 3. Minimum length of the first profile: 675 mm



(A) Staggered arrangement





[selekta and heritage-selekta]

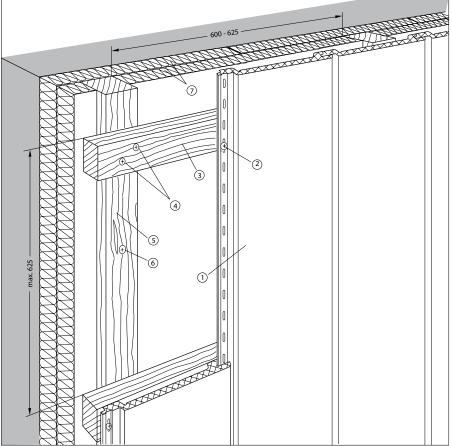
Vertical installation only for UESC (selekta)

A Sub-framework

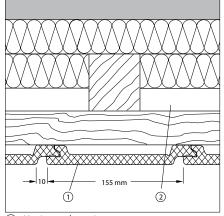
- 1. selekta façade profile
- 2. Façade screw 3.5 x 30, stainless steel A2
- 3. Support batten 30 mm x 50 mm, spacing max. 625 mm
- 4. Fastening with 2 screws 4 x 60, stainless steel A2
- Counter batten at least 50 mm x 80 mm, or at least 20 mm higher than second layer of thermal insulation. [See also note for B - C, no. 2]
- 6. Dowel and screw with building authority approval
- 7. Insulation in two layers, pressure-resistant

B - C Sections

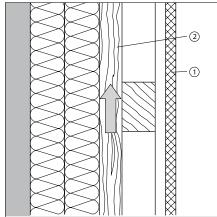
- 1. selekta façade profile
- Back ventilation spacing at least 20 mm*
- *) For selekta façade profiles in version B1 (low flammability) at least 40 mm.



(A) Sub-framework







C Vertical section

(selekta and heritage-selekta)

Vertical installation only for UESC (selekta)

A Fastening spacing

- 1. UESC (selekta façade profile)
- 2. Façade screw 3.5 x 30, stainless steel A2
- 3. Punched holes
- 4. Support batten 30 mm x 50 mm
- X = 3 or more supports, max. 625 mm
- X = For only 2 supports, max. 300 mm; profile excess length max. 100 mm

Fastening materials

Use only screws 3.5 x 30, stainless steel A2. Always centre the screws in the punched fastening holes of the façade profile.

B Sub-frameworks - alternatives

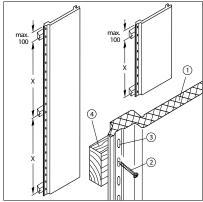
- Building wall
- 2. Thermal insulation, two layers
- Counter batten
- 4. U bracket
- Support batten 30 mm x 50 mm

Alternatively, other sub-framework systems can also be used, such as for very thick insulation layers.

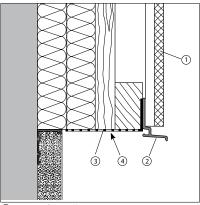
C Start of installation from below

- selekta façade profile
- 2. Layering profile, aluminium
- Ventilation profile, plastic
- Ventilation opening, continuous

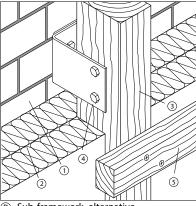
Please note: Baseboard termination at least 100 mm spacing to the floor. Avoid designs that allow moisture build-up.



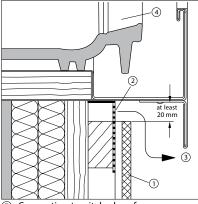
(A) Fastening spacing

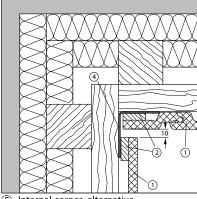


C Start of installation



B Sub-framework, alternative





Internal corner, alternative

Connection to pitched roof

- selekta façade profile
- Ventilation profile, plastic
- Ventilation opening, continuous
- 4. Roof tile

E Internal corner

- selekta façade profile
- Spacer bar, 9 mm
- 3. Aluminium internal corner profile
- 4. Jointing tape, plastic or suitable construction adhesive

10

(selekta and heritage-selekta)

Vertical installation only for UESC (selekta)

A External corner

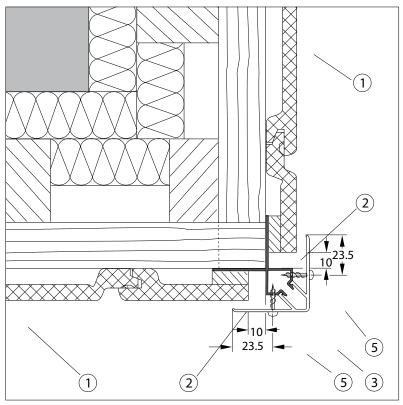
- 1. selekta façade profile
- 2. Spacer bar, 9 mm
- 3. External corner C (two-part), aluminium
- 4. Aluminium external/internal corner profile
- 5. Cylinder sheet screw 3.9 x 16, stainless steel A2

The external corner C consists of lower profile and cover profile. The cover profile is clipped on after installation of the façade profile and secured to each profile bar in the upper area using cylinder sheet screws, pre-drilled to Ø 3.2 mm.

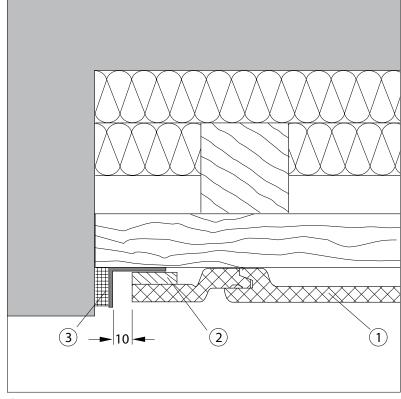
Please note: The Aluminium External/Internal corner profile can be used in reverse for Internal corner applications

B Connection to side in niche

- 1. selekta façade profile
- 2. Spacer bar, 7 mm
- 3. Cover angle 30/20, aluminium
- 4. Sealing material, e. g. Compriband



(A) External corner, alternative



 $\ensuremath{(B)}$ Connection to side in niche



(selekta and heritage-selekta)

Vertical installation only for UESC(selekta)

A - B - C Window lintel connection

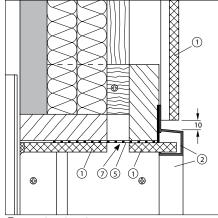
- 1. selekta facade profile
- 2. Connection profile F, aluminium
- 3. Z profile 1, aluminium
- 4. External corner profile 1, plastic (cut off lower leg)
- 5. Ventilation profile, plastic
- 6. Edge trim profile 2, aluminium Spacer bar, 9 mm (alternative to 6)
- 7. Ventilation opening, continuous
- A At the transition between the reveal and the lintel, the connection profiles F are given a mitre cut.
- B The Z profile 1, aluminium, covers the vertical connection profile F.

C Window sill connection

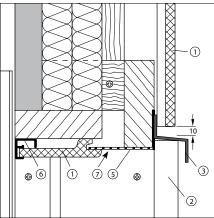
- 1. selekta façade profile
- 2. Ventilation profile, plastic
- 3. Outer window sill
- 4. Z profile 2, aluminium
- 5. Ventilation opening, continuous

D Window reveal connection

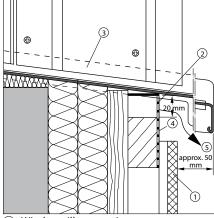
- selekta façade profile
- 2. Connection profile F, aluminium
- 3. Spacer bar 9 mm
- 4. Aluminium external corner profile, alternative external corner C, aluminium
- 5. Sealing material, e. g. Compriband
- 6. Edge trim profile 2, aluminium
- 7. Outer window sill



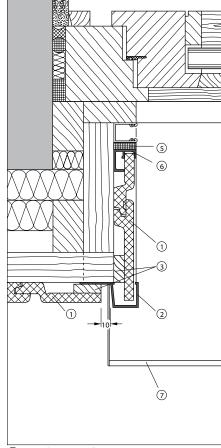
(A) Window lintel connection



(B) Window lintel connection, alternative



© Window sill connection



D Window reveal connection



(selekta and heritage-selekta)

Butt joints and diagonal installation

A - B Vertical installation, continuous

- 1. selekta façade profile
- 2 Install 2 support battens 30 mm x 50 mm in each joint area
- 3 Jointing tape, plastic
- 4 Z profile 1 or 2, aluminium, maintain a 10 mm expansion joint at top and bottom

C - D Vertical / horizontal installation, continuous horizontal butt joint

The sub-framework must be modified at the butt joint according to the installation direction.

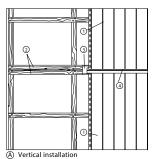
Note: Position the vertical support battens at the transition point at least 25 mm above the horizontal counter batten to ensure back ventilation*].

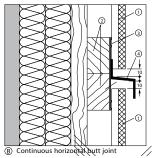
- 1. selekta façade profile
- 2 Support battens 30 mm x 50 mm
- 3 Jointing tape, plastic
- 4 Z profile 1 or 2, aluminium, maintain 10 mm gap at top and bottom
- 5 Back ventilation spacing at least 20 mm*¹

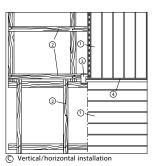
*¹ For selekta façade profiles in version B1 (low flammability) at least 40 mm!

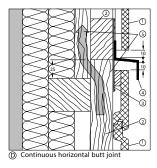
E - F Vertical / horizontal installation, continuous vertical butt joint

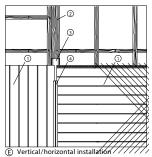
- 1. selekta façade profile
- 2. Support batten, width at least 100 mm
- 3. Jointing tape, plastic
- 4. Cover profile T + G, aluminium
- 5. Pan head screw 4 x 40, stainless steel A2

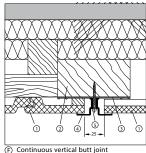








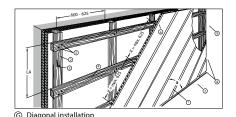




Tip: Peg a 25 mm wide batten to the sub-framework at the joint location. Position the façade profiles flush on both sides. After installation of the façade profiles, remove the batten and screw on the cover profile T + G in its place.

G Diagonal installation, sub-framework

- 1. selekta facade profile
- Counter batten, cross-section depending on thermal insulation + 20 mm for back ventilation spacing [see also note for C-D, no. 5]
- Approved dowel incl. stainless steel screw A2
- 4. Support batten 30 mm x 50 mm
- 5. Fastening with 2 screws 4 x 60, stainless steel A2
- 6. Façade screw 3.5 x 30, stainless steel A2
- 7. Layering profile, aluminium, see also page 8 A
- 8. Façade profile end pieces, fasten with at least 2 screws
- 9. Install corresponding battens



Support batten spacing = BS

Fastening spacing = X (measure parallel to the façade profile)

The spacing of the support battens $\mbox{\bf BS}$ depends on the selected installation angle α and the fastening spacing X

X = 3 or more supports, max. 625 mm

X = For only 2 supports, max. 300 mm

Examples:

Installation angle $lpha$	45°	60°	
	max. mm	max. mm	
BS = 3 or more supports	440	540	
BS = For only 2 supports	210	260	

13



(selekta and heritage-selekta)

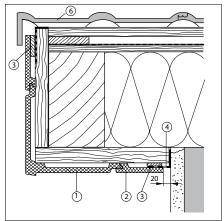
Soffits

A - B Soffit, installed lengthwise

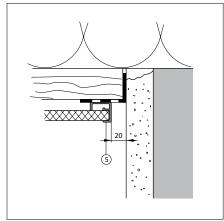
- 1. Universal angle 155
- 2 selekta / heritage-selekta façade profile
- 3 Spacer bar 9 mm
- 4 Ventilation profile
- 5 Alternative edge trim profile
- 6 Roof tile

C Soffit, installed crosswise

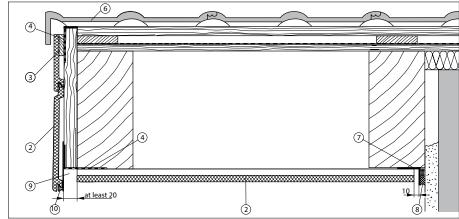
- 7. Cover angle 30/20, aluminium
- 8. Sealing material
- 9. Ventilation opening, continuous
- 10. Starting profile P







B Wall connection, alternative



C Verge section, soffit installed crosswise

(selekta and heritage-selekta)

General guidelines

Arguments for a back-ventilated curtain cladding of the exterior wall

- · Energy savings
- Weather protection
- Attractive design
- Increased building value

Handling

The selekta façade profiles must be stored in their packaging, lying flat and dry until use.

Sawing with power tools

Hard metal saw blade, high number of teeth, (tooth pitch approx. 10 – 15 mm), saw blade with alternate top bevel or hollow-tooth flat-top teeth.

Sawing with hand saws

A well-sharpened and dressed saw with small teeth is sufficient.

Fastening the façade profiles

Only with WERZALIT façade screws 3.5×30 , stain- less steel A2. Centre the fastening screws through the existing punched holes. The screws may only be screwed in until the screw head rests against the surface.

Fastening of all connection profiles

Only with WERZALIT façade screws 3.5 x 30, stainless steel A2.

Please note: Heavy structures, such as an awning, climbing trellis, etc., may not be fastened directly to the cladding or its sub-framework. Provide separate sub-frameworks.

Expansion

The length change of the façade profiles is approx.

1 – 3 mm/linear m, depending on moisture and temperature. Expansion joints of 10 mm must be maintained at profile butt joints and profile connections.

Sealing cut edges

Cut edges must be sealed free of pores with Werzalit edge sealant. Exception: Sufficiently covered cut edges under the roof overhang.

Sub-framework

Façade profiles are typically fastened to a wood sub-framework. In principle, the following guidelines should be followed for wood sub-frameworks:

- a) The wood must correspond to grade S10 (or MS10) according to DIN 4074
- b) The individual cross-section must be selected according to DIN 1052, Part 1.
- c) The wood must be protected according to DIN 68800, wood preservation.
- d) The sub-framework must be fastened using dowels and screws with building authority approval and in accordance with the instructions of the manufacturer.
- e) The support battens must be fastened to the counter battens with at least 2 wood screws, stainless steel A2, per intersection, in a diagonal arrangement.
- f) The sub-framework must be level and plumb. Dimensional tolerances can be found in DIN 18202 Part 2 and Part 4.
- g] All Structural framework must be in accordance to Australian Building Standards & Local Building Codes.

Thermal insulation

The thermal insulation must be dimensioned according to the current German energy conservation regulations (EnEV). The thermal insulation material must be fastened with appropriate hardware, such as insulation pins, in accordance with the instructions of the manufacturer. The installation must be made windproof to prevent cold air from flowing behind it. We therefore recommend installing in two layers with overlapping joints. The insulation must be flush against the wall.

Back ventilation

The back ventilation spacing must be at least 20 mm*].

^{*)} For selekta façade profiles in version B1 (low flammability) at least 40 mm.

The back ventilation cross-section may not be regularly diminished by battens or other objects. The ventilation inlets and outlets must have consistent widths of at least 20 mm.

If you have additional questions, please contact Urbanline Architectural – 1300 658 638. Subject to changes due to technical improvements.

