

Product description – Ecology – Technical data

Urbanline Alu Seleкта Clad (seleкта façade profiles and heritage-seleкта 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. We do not use imported timber, 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, weather-resistant surface coating of the decor side. Rear side brown, no colour options.

Cutting waste may not be burnt in small-scale incinerators (heating boilers, furnaces, fireplaces) according to the German ordinance for small-scale incinerators. There are no restrictions concerning its incineration in industrial wood incineration plants according to Section 4 BImSchV No. 8.2 (German Federal Immission Protection Ordinance). Cutting waste corresponds to category AII of the German ordinance for the disposal of waste wood (Altholz-Verordnung).

Scraps or removed material may in principle be **disposed of** as household waste or bulky refuse in a landfill or by incineration; however, please observe the requirements of your waste disposal service.

Alu Seleкта

The Alu Seleкта façade profiles are made of aluminium. The surface coating can be universal, powder coating or decorative coating (wood decor).

Installation Instructions: Urbanline Alu Seleкта Clad

Technical data		Values	Unit	Test specification
1. Density		2700	kg/m ³	EN 323
2. Flexural strength		-	N/mm ²	EN 310 / EN 438
3. Elasticity modulus		70000	N/mm ²	EN 310 / EN 438
4. Tensile strength vertical to the surface		215	N/mm ²	EN 319
5. Tensile strength		-	N/mm ²	EN ISO 527 / EN 438
6. Screw withdrawal strength ¹⁾		-	N/mm ²	WERZALIT TEST STANDARD
7. Swelling after storage in water at 20 °C at 100 °C	after 2 h after 24 h after 5 h	0.0 0.0 0.0	% % %	DIN 317 DIN 317 VHI quality seal / WERZALIT TEST STANDARD
8. Moisture content		0.0	%	EN 322
9. Temperature resistance	under permanent load under temporary load	-50 to +70 +120	°C °C	WERZALIT TEST STANDARD
10. Fire behavior,	standard version special version	non-flammable		DIN 4102-1 resp. DIN EN 13501-1
11. Length change due to moisture/heat exposure ²⁾		1 - 2	mm/m	WERZALIT TEST STANDARD
12. Thermal conductivity λ		280	W/m·K	DIN 52 612
13. Water vapour permeability diffusion-equivalent air layer thickness		0	m	DIN 52 615
14. Cross-cut test ³⁾		Gt 0A - Gt 1A		EN ISO 2409
15. Scratch resistance		0.5 - 1.5	N	EN 438
16. Brinell hardness ⁴⁾		-	N/mm ²	WERZALIT TEST STANDARD
17. Abrasion behaviour		-	U	EN 438
18. Light fastness		Level 8		EN ISO 105-B02
19. Chemical resistance		limited resistance		EN 438
20. Cigarette burn resistance		resistant to burns		as for EN 438
21. Colour deviation ⁵⁾		$\Delta E < 1$		DIN 5033
22. Impact load		impact resistant		WERZALIT TEST STANDARD / ETB Directive

¹⁾ 4 mm particle board screw, using a hole of 3 mm diameter, 10 mm deep

²⁾ Maximum expected length change under extreme climate fluctuations

³⁾ Gt 0A is the best, Gt 4A is the worst value

⁴⁾ 1000 N, 15 s application time, [force/area]

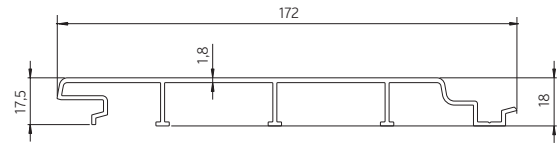
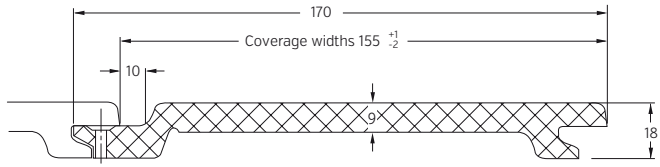
⁵⁾ With measurement geometry 0°/45°, standard illuminant "C"

Installation Instructions: Urbanline Alu Seleкта Clad

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)

Coverage width	Standard lengths	Façade profile	Required quantity/m ²	Required quantity/m ²
			self-drilling screws 3.9 x 16, stainless steel A2	
Urbanline Alu Seleкта Clad at max. fastening spacing = 625 mm				
Alu Seleкта	155 mm	5480 mm	6.45 linear m	10.3 pcs.

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

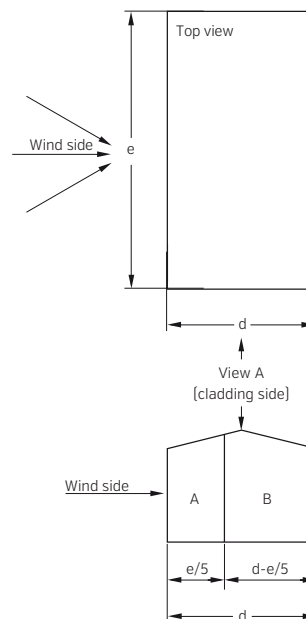
According to DIN 1055, Part 4, the increased wind suction at the edge areas of the building walls must be considered when planning the sub-framework.

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

Example:

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



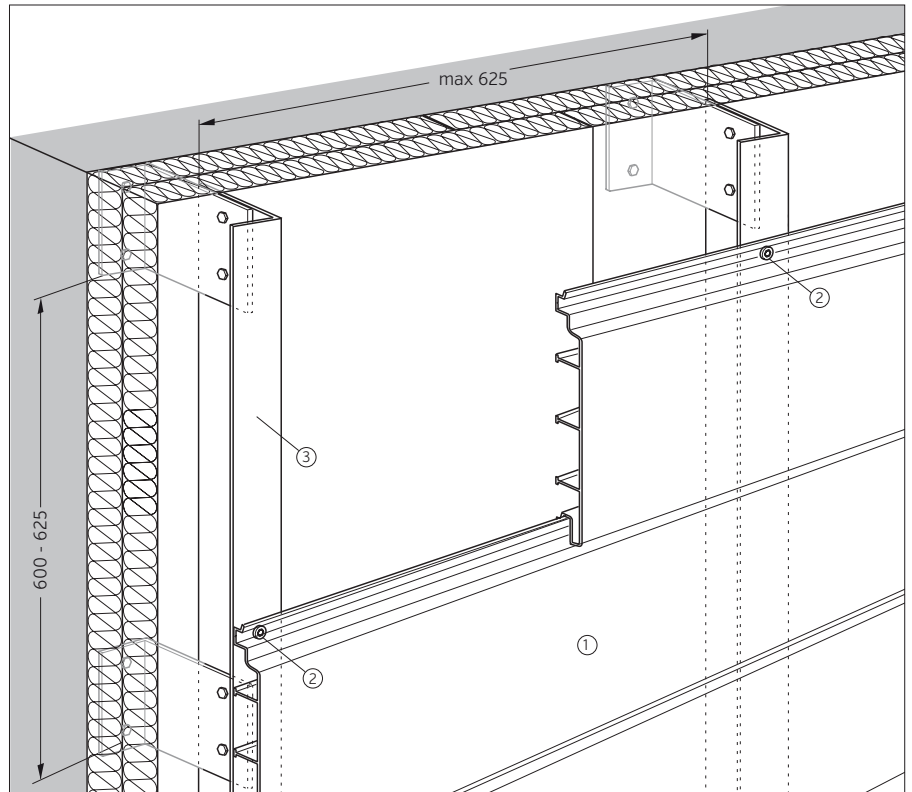
The DIN requirements are presented here in a simplified form as a general rule of thumb. Precise information on this topic must be taken from DIN 1055, Part 4 from March 2006. The building dimensions are naturally of primary importance for determining the size of area A with increased wind suction (exterior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

Fire protection

Alu Seleкта is considered to be non-combustible in accordance with Clause C1.12(e) of the BCA and permitted to be used where the BCA nominates non-combustible material.

Horizontal installation only for Alu Seleкта

1. Alu Seleкта façade profiles
2. Self-drilling screw 3.9 x 16, stainless steel A2
3. Aluminium sub-framework, spacing approx. 625 mm, structural analysis to be performed by the customer

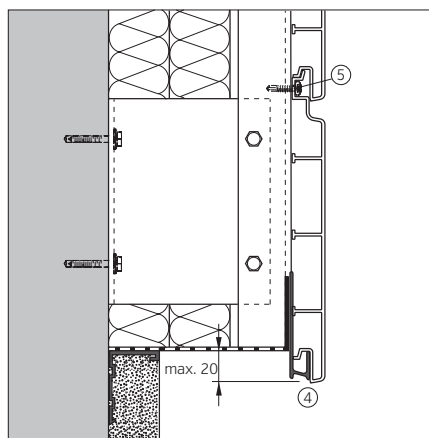
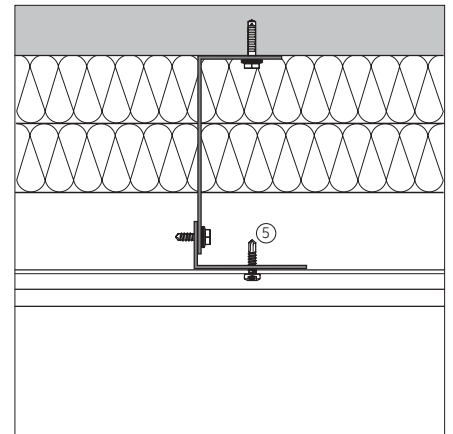
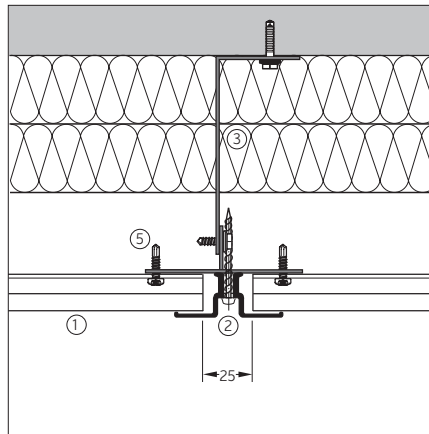


1. Alu Seleкта façade profiles
2. Self-drilling screw 3.9 x 16, stainless steel A2
3. Cover profile



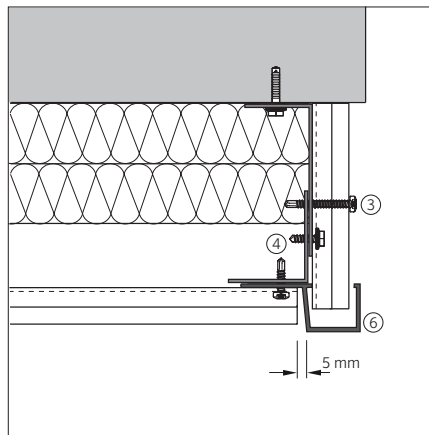
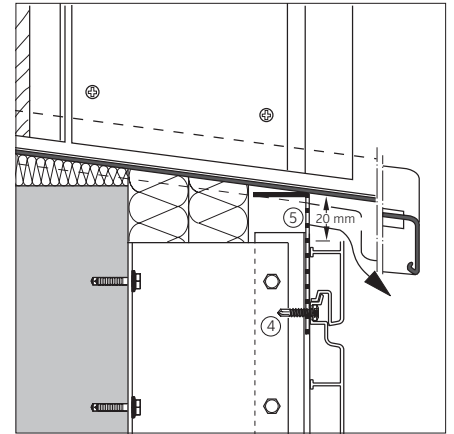
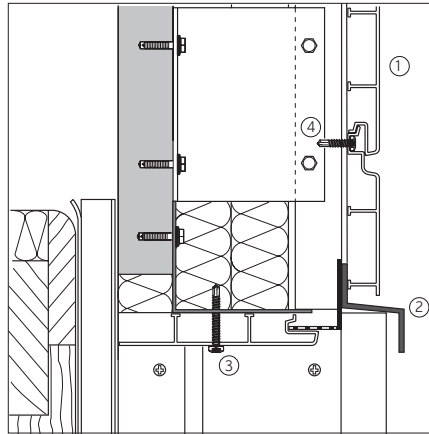
Horizontal installation only for Alu Selekt

1. Alu Selekt façade profiles
2. Cover profile
3. Aluminium sub-framework
4. Horizontal Starter profile
5. Self-drilling screw 3.9 x 16, stainless steel A2



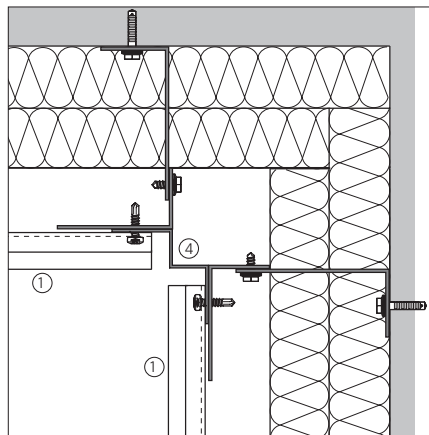
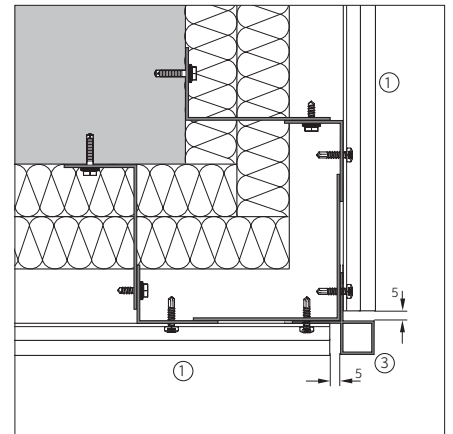
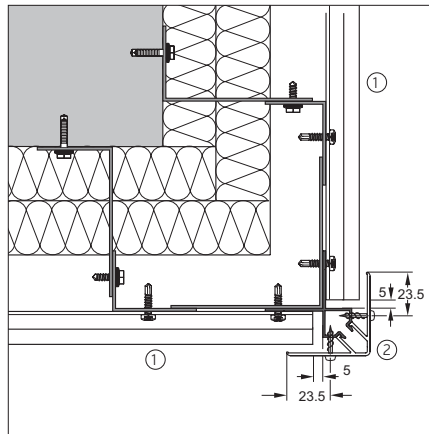
Horizontal installation only for Alu Seleкта

1. Alu Seleкта façade profiles
2. Z profile
3. Self-drilling screw 3.9 x 32, stainless steel A2
4. Self-drilling screw 3.9 x 16, stainless steel A2
5. Ventilation profile 30/90
6. Connection profile F



Horizontal installation only for Alu Selektta

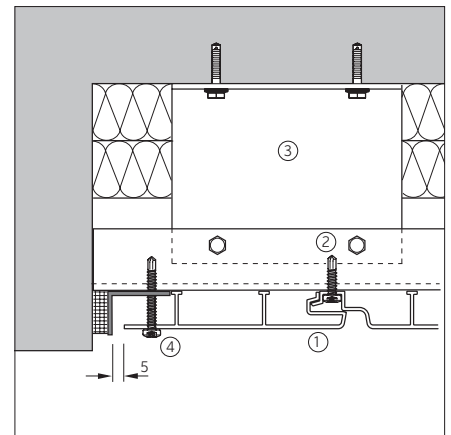
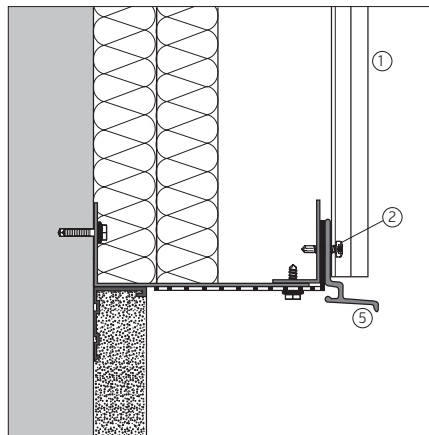
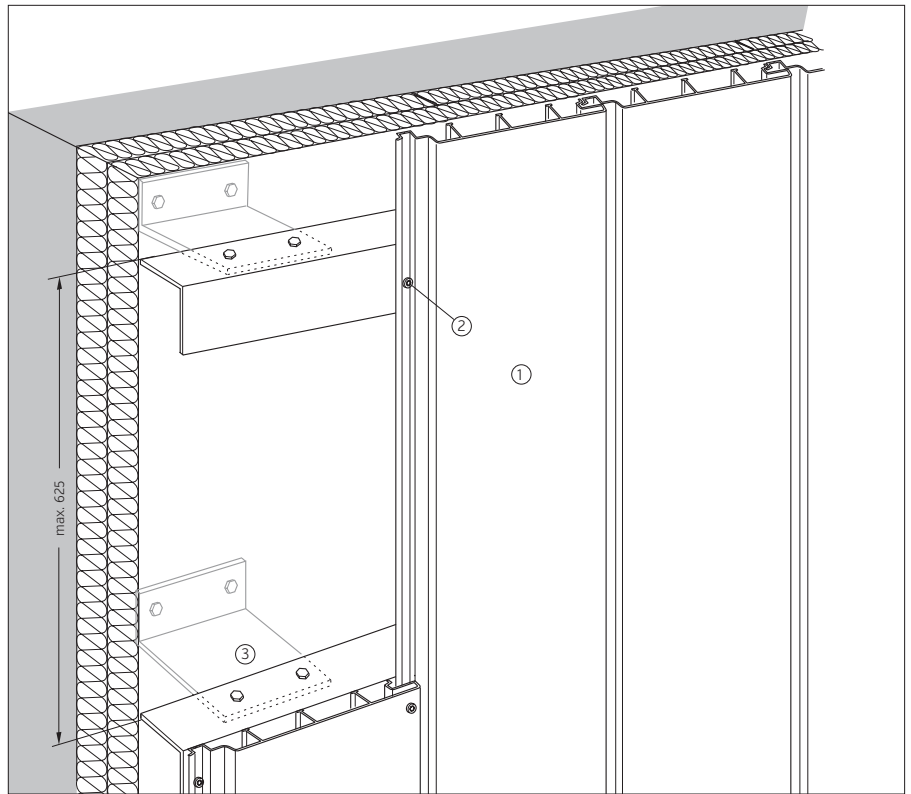
1. Alu Selektta façade profiles
2. External corner C
3. Aluminium external corner profile
4. Aluminium internal corner profile



Vertical installation only for Alu Seleкта

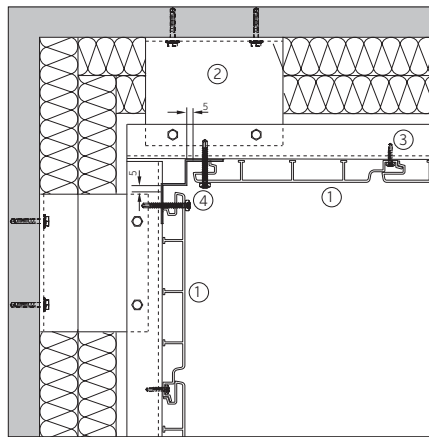
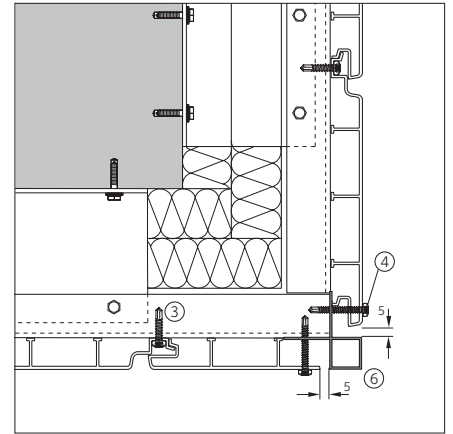
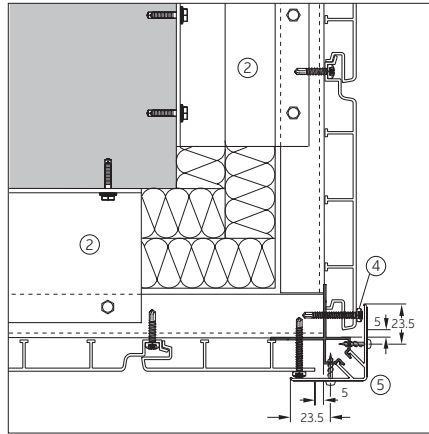
A Sub-framework

1. Alu Seleкта façade profiles
2. Self-drilling screw 3.9 x 16, stainless steel A2
3. Aluminium sub-framework, spacing approx. 625 mm, structural analysis to be performed by the customer
4. Self-drilling screw 3.9 x 32, stainless steel A2
5. Vertical starter profile



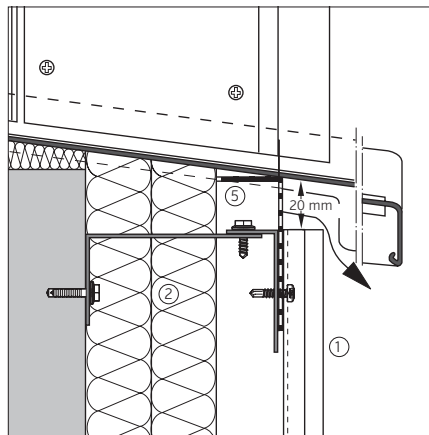
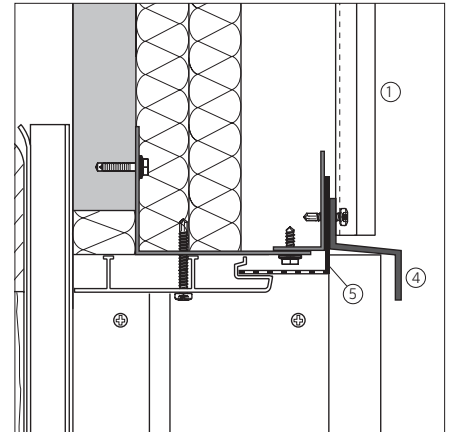
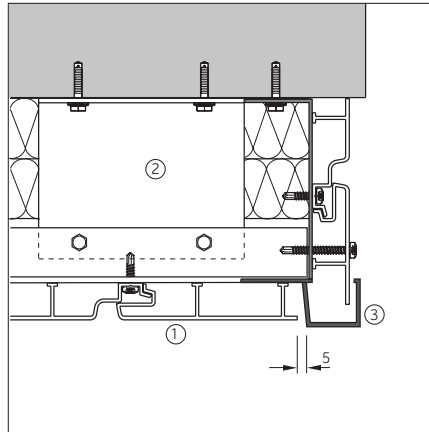
Vertical installation only for Alu Seleкта

1. Alu Seleкта façade profiles
2. Aluminium sub-framework
3. Self-drilling screw 3.9 x 16, stainless steel A2
4. Self-drilling screw 3.9 x 32, stainless steel A2
5. External corner C
6. Aluminium external corner profile
7. Aluminium internal corner profile



Vertical installation only for Alu Seleka

1. Alu Seleka façade profiles
2. Aluminium sub-framework
3. Connection profile F
4. Z profile
5. Ventilation profile 30/90



General guidelines

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

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

Handling

The seleкта 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 x 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.

Hole ø 9 mm, (due to the possible length change of the façade profiles)

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.

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 to Australian Building Codes.
- b) The sub-framework must be fastened using dowels and screws with building authority approval and in accordance with the instructions of the manufacturer.
- c) 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, or as per Australian Building Codes.
- d) The sub-framework must be level and plumb.

Back ventilation

The back ventilation spacing must be at least 20 mm.

Sealing cut edges

Cut edges must be sealed free of pores with Werzalit edge sealant.

Exception: Sufficiently covered cut edges under the roof overhang.

Cut edges

In coastal regions (up to approximately 50 km inland), all cut edges must be protected against filiform corrosion.

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.

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